FEDERALLY AVAILABLE DATA (FAD) RESOURCE DOCUMENT FOR FY 2026/FY 2024

Release Version
May 19, 2025

This document provides detailed data notes, FAD availability, stratifier information, the ***complete FAD excel file***, and SAS code as available for each National Outcome Measure and National Performance Measure. It is designed to issue any clarifications, enable states to make comparisons to U.S. and other state data, and to provide statistical code for states to examine their own indicator data on a timelier or more granular basis than available federally. It is a living document that will be updated as new data notes or clarifications become available.

Suggested Citation:
Maternal and Child Health Bureau. Federally Available Data (FAD) Resource Document. May 19, 2025; Rockville, MD: Health Resources and Services Administration. Available at: https://mchb.tvisdata.hrsa.gov/Home/Resources

Table of Contents

Attachments – Descriptions and Instructions for Retrieving

There are three excel files that can be accessed on the FAD Resources Document page. They are no longer attached to this pdf due to file size constraints.

1) All FAD Data Files – These excel files contain all Federally Available Data (FAD) for National Outcome Measures, National Performance Measures, and Standardized Measures for all states/jurisdictions, HHS regions, and the U.S. Data are generally available by year (to monitor trends and set objectives) and by various demographic stratifiers (to identify and monitor disparities and target programmatic efforts accordingly). Standard errors (SEs) and 95% confidence intervals (CIs) are provided to facilitate analytic comparisons both within and across states/jurisdictions. Numerators and denominators (weighted if from surveys) are also provided to quantify and communicate impact and numbers affected. Data can be filtered (e.g. by measure, data source, data year, state, region, or stratifier of interest) and sorted (e.g., highest to lowest estimate rankings) to facilitate comparisons. Data notes and alerts for each measure are provided within separate worksheets of the file; available definitions and notes on the stratifiers are contained within the measure details of this PDF.

   An additional FAD Analysis Spreadsheet file provides some basic analyses to assess state performance over time and compared with the US overall. Data for each measure are presented beginning with a base year of ~2015 (adjusted as needed by data source), which represents the year prior to the Title V transformation and introduction of the Title V Performance Measure framework, through the most recent (i.e. current) year available. Comparisons are made between the current year and the base year, the current year and the last year (or the last year with non-overlapping data periods), and the current year to the current year US estimate. Z-tests were used to assess statistical significant differences ($p<0.05$). For within state, across time comparisons, Z equals the difference between estimates (X) divided by the square root of the sum of the squared standard errors (SE) for each estimate (Equation 1). For comparisons between the current state estimate and the current US estimate, the nested Z equals the difference between the state estimate and the US estimate divided by the square root of the sum of the squared standard errors for the state estimate and the US estimate minus the product of 2 times the squared standard error for the state estimate times the state weighted denominator (d) divided by US weighted denominator (Equation 2).

Comparison	Equation	Equation Number
Within state, across time	$Z = \frac{\bar{X}_i - \bar{X}_j}{\sqrt{SE_i^2 + SE_j^2}}$	(1)
State compared to US	$Z = \frac{\bar{X}_i - \overline{X_{US}}}{\sqrt{SE_i^2 + SE_{US}^2 - 2SE_i^2 * \frac{d_i}{d_{US}}}}$	(2)

   Within the spreadsheet, absolute differences for each of these comparisons are provided and shaded to represent the result of the corresponding Z-test. Differences shaded green represent a significant improvement over time or higher performance than the US. Differences shaded orange represent a significant worsening over time or lower performance than the US. Differences shaded grey represent no significant difference over time or compared to the US. NEW: An additional comparison with accompanying statistical test was added to compare current year to a second base year of ~2020, which represents the baseline for the most recently completed five-year cycle to assess progress since the last set of NPMs were selected. Additionally, relative differences for each comparison are now provided.

   State rankings for the base year (~2015 for most measures), second base year (~2020), last year, and current year are also provided as well as the change in rankings. States are ranked

from 1 (highest performance) to 51 (lowest performance). Jurisdictions (except DC) are excluded from rankings.

2) Form 11 – This excel file contains Other State Data that may be helpful for states/jurisdictions to monitor and review. Specific data elements are noted below. Standard errors (SEs) and 95% confidence intervals (CIs) are provided to facilitate analytic comparisons both within and across states/jurisdictions. Numerators and denominators (weighted if from surveys) are also provided to quantify and communicate impact and numbers affected. Data can be filtered (e.g. by measure, data source, data year, state, or stratifier of interest) and sorted (e.g., highest to lowest estimate rankings) to facilitate comparisons. Data notes are provided within a separate worksheet of the file. Please see the Block Grant guidance for more information on this form.

   #1: Infant mortality rate, low birth weight, and preterm birth by race/ethnicity (already provided as NOMs)
   #2: Infant mortality rate, low birth weight, and preterm birth by county
   #3: State MCH Workforce (counts and rate per 100,000 population)
      Obstetricians
      Family medicine physicians
      Certified family nurse practitioners – not available
      Certified nurse midwives
      Pediatricians
      Certified pediatric nurse practitioners – not available
   #4: CSHCN, Autism, and ADD/ADHD by various demographic stratifiers

3) All FAD – Jurisdications Data File – This excel file contains all Federally Available Data (FAD) for the National Performance and Outcome Measures derived from the Maternal and Child Health Jurisdictional Survey (MCH-JS) conducted in all 8 jurisdictions. Data are formatted similarly to the All FAD Data File, but data are not provided by any demographic stratifiers. Standard errors (SEs) and 95% confidence intervals (CIs) are provided to facilitate analytic comparisons both within and across jurisdictions. Weighted numerators and denominators are also provided to quantify and communicate impact and numbers affected. Data can be filtered (e.g. by measure and jurisdiction) and sorted (e.g., highest to lowest estimate rankings) to facilitate comparisons. Measure definitions, data notes and sas code for each measure are provided within separate worksheets of the file.

Table 1: Evidence-based/informed National Performance and Outcome Measure Linkages

National Outcome Measures	National Performance Measures																			
	Postpartum Visit	Postpartum Mental Health Screening	Postpartum Contraceptive Use	Perinatal Care Discrimination	Risk Appropriate Perinatal Care	Breastfeeding	Safe Sleep	Housing Instability	Developmental Screening	Childhood Vaccination	Preventive Dental Visit	Physical Activity	Food Sufficiency	Adolescent Well-Visit	Mental Health Treatment	Tobacco Use	Adult Mentor	Medical Home	Transition To Adult Health Care	Bullying
Severe Maternal Morbidity			X	X				X												
Maternal Mortality	X	X	X	X				X												
Teen Birth														X						
Low Birth Weight			X	X				X												
Preterm Birth			X	X				X												
Stillbirth				X	X			X												
Perinatal Mortality				X	X			X												
Infant Mortality		X	X	X	X	X	X	X		X										
Neonatal Mortality				X	X															
Postneonatal Mortality					X	X	X			X										
Preterm-Related Mortality				X	X															
SUID Mortality		X				X	X	X		X										
Neonatal Abstinence Syndrome	X	X	X					X												
School Readiness								X	X				X							
Tooth Decay/Cavities											X									
Child Mortality								X		X										
Adolescent Mortality														X	X					X
Adolescent Motor Vehicle Death														X						
Adolescent Suicide														X	X					X
Adolescent Firearm Death														X	X					X
Child Injury Hospitalization		X						X												
Adolescent Injury Hospitalization														X	X					X
Women's Health Status	X	X									X									
Children's Health Status								X	X	X	X	X	X	X	X	X		X		
Obesity												X		X						
Postpartum Depression	X	X		X				X												
Postpartum Anxiety	X	X		X				X												
Behavioral/Conduct Disorder								X					X							
Adolescent Depression/Anxiety														X	X		X			X
CSHCN Systems of Care											X			X	X			X	X	
Flourishing								X				X	X	X	X		X	X		
Adverse Childhood Experiences								X					X							X

Includes linkages based on expert opinion or theory in the absence of empirical scientific evidence. Associations with available empirical scientific evidence that is mixed or inconclusive are not included. This table is subject to revision as new scientific evidence becomes available. By definition, NPMs must be linked to at least one NOM.

Table 2: National Outcome Measures (NOMs)

Short Title	Full Title
Several Maternal Morbidity	Rate of severe maternal morbidity per 10,000 delivery hospitalizations
Maternal Mortality	Maternal mortality rate per 100,000 live births
Teen Births	Teen birth rate, ages 15 through 19, per 1,000 females
Low Birth Weight	Percent of low birth weight deliveries (<2,500 grams)
Preterm Birth	Percent of preterm births (<37 weeks gestation)
Stillbirth	Stillbirth rate per 1,000 live births plus fetal deaths
Perinatal Mortality	Perinatal mortality rate per 1,000 live births plus fetal deaths
Infant Mortality	Infant mortality rate per 1,000 live births
Neonatal Mortality	Neonatal mortality rate per 1,000 live births
Postneonatal Mortality	Postneonatal mortality rate per 1,000 live births
Preterm-Related Mortality	Preterm-related mortality rate per 100,000 live births
SUID Mortality	Sudden Unexpected Infant Death (SUID) rate per 100,000 live births
Neonatal Abstinence Syndrome	Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations
School Readiness	Percent of children meeting the criteria developed for school readiness
Tooth Decay/Cavities	Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year
Child Mortality	Child mortality rate, ages 1 through 9, per 100,000
Adolescent Mortality	Adolescent mortality rate, ages 10 through 19, per 100,000
Adolescent Motor Vehicle Death	Adolescent motor vehicle mortality rate, ages 15 through 19 per 100,000
Adolescent Suicide	Adolescent suicide rate, ages 10 through 19 per 100,000
Adolescent Firearm Death	Adolescent firearm mortality rate, ages 10 through 19 per 100,000
Injury Hospitalization - Child	Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9
Injury Hospitalization - Adolescent	Rate of hospitalization for non-fatal injury per 100,000 adolescents, ages 10 through 19
Women's Health Status	Percent of women, ages 18 through 44, in excellent or very good health
Overall Health Status	Percent of children, ages 0 through 17, in excellent or very good health
Obesity	Percent of children, ages 2 through 4, and adolescents, ages 6 through 17, who are obese (BMI at or above the 95th percentile)
Postpartum Depression	Percent of women who experience postpartum depressive symptoms
Postpartum Anxiety	Percent of women who experience postpartum anxiety symptoms
Behavioral/ Conduct Disorders	Percent of children, ages 6 through 11, who have a behavioral or conduct disorder
Adolescent Depression/ Anxiety	Percent of adolescents, ages 12 through 17, who have depression or anxiety
CSHCN Systems of Care	Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system
Flourishing – Young Child	Percent of children, ages 6 months through 5, who are flourishing
Flourishing – Child Adolescent	Percent of children with and without special health care needs, ages 6 through 17, who are flourishing
Adverse Childhood Experiences	Percent of children, ages 0 through 17, who have experienced 2 or more Adverse Childhood Experiences

Severe Maternal Morbidity

Rate of severe maternal morbidity per 10,000 delivery hospitalizations

GOAL

To reduce life-threatening maternal illness and complications.

DEFINITION

Numerator: Number of delivery hospitalizations with an indication of severe morbidity from diagnosis or procedure codes (e.g. heart or kidney failure, stroke, embolism, hemorrhage).

Denominator: Number of delivery hospitalizations

Units: 10,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) 05 Objective: Reduce severe maternal complications identified during delivery hospitalizations. (Baseline: 68.7 per 10,000 delivery hospitalizations in 2017, Target: 61.8 per 10,000 delivery hospitalizations)

DATA SOURCES and DATA ISSUES

Healthcare Cost and Utilization Project (HCUP) - State Inpatient Database (SID)

POPULATION HEALTH SIGNIFICANCE

Over 30,000 women experience severe maternal morbidity during delivery hospitalizations every year.[1] This includes significant life-threatening complications, such as hemorrhage, infection, and cardiac events, that may require lengthy hospital stays with long-term health consequences.[2,3] Many more women require blood transfusions but there is significant under-reporting with the transition to ICD-10 coding and it may not reflect severe morbidity in the absence of other indicators. Rises in chronic conditions, including obesity, diabetes, hypertension, and cardiovascular disease, are likely to have contributed to rises in severe maternal morbidity.[2]

(1) Agency for Healthcare Research and Quality. Healthcare Cost and Utilization Project (HCUP) FastStats. https://dataviz.ahrq.gov/views/HCUP_FastStats_SMM_AHRQ_DTPDM_v2_1/Trend

(2) Centers for Disease Control and Prevention. Reproductive Health: Severe Maternal Morbidity in the United States. 2021 February 2. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html

FAD Availability by Year

Year	Data Not Available
2022	AL, ID, NV, AS, FM, GU, MH, MP, PW, PR, VI
2021	AL, ID, NV, AS, FM, GU, MH, MP, PW, PR, VI
2020	AL, ID, AS, FM, GU, MH, MP, PW, PR, VI
2019	AL, ID, AS, FM, GU, MH, MP, PW, PR, VI
2018	AL, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2017	AL, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2016	AL, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2015 Q1-Q3	AL, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2014	AK, AL, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2013	AK, AL, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2012	AL, DC, DE, ID, MS, NH, AS, FM, GU, MH, MP, PW, PR, VI
2011	AL, DC, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2010	AL, DC, DE, ID, ND, NH, AS, FM, GU, MH, MP, PW, PR, VI
2009	AK, AL, DC, DE, ID, MS, ND, AS, FM, GU, MH, MP, PW, PR, VI
2008	AK, AL, DC, DE, ID, MS, MT, ND, AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

This measure continues to apply a 2021 revised SMM code set which helps to bridge the ICD-10-CM/PCS transition and which excludes blood transfusion due to poor specificity in the absence of other SMM indicators. A total of 23 codes were added to ICD-9-CM and 83 codes were added to ICD-10-CM/PCS while 11 codes were dropped in ICD-9-CM and 16 codes were dropped in ICD-10-CM/PCS that were either conceptually inconsistent or implausible at delivery (e.g., first trimester). In addition, shock codes involving sepsis and anesthesia were moved to those respective indicator categories as the primary cause. Data for 2016 and onward are based on ICD-10-CM/PCS and may not be comparable to previous ICD-9-CM estimates. Data for 2015 represents only three quarters of the year (January through September) due to the transition to ICD-10-CM/PCS in the last quarter of 2015; thus the rate should be interpreted with caution as it does not represent a full year of change relative to 2014. This measure is based on the CDC-developed definition of severe maternal morbidity identified from hospital discharge procedure and diagnosis codes that indicate a potentially life-threatening condition or maternal complication (Callaghan et al, 2012): http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/SevereMaternalMorbidity.html Delivery hospitalizations were identified by diagnosis codes for an outcome of delivery, diagnosis-related group delivery codes, and procedure codes for selected delivery-related procedures (Kuklina et al, 2008). Re-classification based on short length of stay in cases of diagnosis codes without in-hospital mortality, transfer, or severe complications identified by procedure codes (e.g., hysterectomy, ventilation) is no longer applied. State-level estimates include inpatient stays for state residents treated in their home state and state residents treated in other states that provide data to the Healthcare Cost and Utilization Project (HCUP). For information on the HCUP Partner organizations, please visit https://www.hcup-us.ahrq.gov/partners.jsp

This analysis is limited to community, non-rehabilitation, non-long term acute care hospitals, which are defined as short-term, non-Federal hospitals. Community hospitals include obstetrics and gynecology, otolaryngology, orthopedic, cancer, pediatric, public, and academic medical hospitals. Excluded are long-term care facilities such as rehabilitation, psychiatric, and alcoholism and chemical dependency hospitals. U.S. estimates are calculated using the available State data and are not nationally weighted; therefore, U.S. estimates may not be comparable across years due to the different states included in any given year. In addition, certain states did not provide reliable race and/or ethnicity data and are excluded from totals by race/ethnicity. For more information about the HCUP State Inpatient Databases (SID), please visit https://www.hcup-us.ahrq.gov/sidoverview.jsp

(1) Callaghan WM, Creanga AA, Kuklina EV. Severe maternal morbidity among delivery and postpartum hospitalizations in the United States. Obstet Gynecol. 2012 Nov;120(5):1029-36.
(2) Kuklina EV, Whiteman MK, Hillis SD, Jamieson DJ, Meikle SF, Posner SF, et al. An enhanced method for identifying obstetric deliveries: implications for estimating maternal morbidity. Matern Child Health J 2008;12:469–77.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Total	Hemorrhage Complications Respiratory Complications Cardiac Complications Renal Complications Sepsis Complications Other Obstetric Complications Other Medical Complications	These are complication groupings to monitor and potentially inform action; they are not mutually exclusive and may not reflect underlying causes. See SAS code for indicators within each group.
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Females ages <12 or >55 were excluded as implausible
Health Insurance	Private Medicaid Other Public Uninsured	Refers to expected primary payer. Medicaid may include CHIP and Medicare. Other Public includes military insurance, Indian Health Service, and other federal, state, or local government payment source. For more information, please see https://www.hcup-

Stratifier	Subcategory	Special Notes
		us.ahrq.gov/reports/methods/2014-03.pdf
Race/Ethnicity	Hispanic Non-Hispanic Black Alone Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian/Pacific Islander Alone Non-Hispanic White Alone Other	Other includes other and multiple race. Not available for all states.
Urban-Rural Residence	Large Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Large metro is defined as metropolitan areas with at least 1 million residents. Small/ medium metro is defined as metropolitan areas of less than 1 million residents. Non-metro is defined as micropolitan and non-metropolitan, non-micropolitan areas.
Median ZIP Code Income	Quartile 1 Quartile 2 Quartile 3 Quartile 4	Quartiles (poorest to wealthiest) based on current year median household income obtained from Claritas.

SAS Code

```
DATA ;
IF COMMUNITY_NONREHAB =1; * restrict to non-federal, non-rehab facilities;

LENGTH  DELIVERY_DRG CESAREAN_DRG CESAREAN_DX CESAREAN_PR DELIVERY_650
        DELIVERY_PR DELIVERY_V27 ABORT_DX ABORT_PR 3.;

ARRAY DX{*} INSERT DIAGNOSIS CODES ;
ARRAY PR{*} INSERT PROCEDURE CODES ;

DO I=1 TO DIM(DX) ;

  /*BEGIN ICD-9-CM DIAGNOSIS*/

  IF YEAR<=2015 THEN DO;

    /*ANY V27 DELIVERY CODES*/
    IF DX[I]=:'V27' THEN DELIVERY_V27=1;

    /*NORMAL DELIVERY*/
    ELSE IF DX[I]=:'650' THEN DELIVERY_650=1;

    /*IDENTIFY ABORTIONS, ECTOPIC, HYDATIDIFORM MOLE FOR EXCLUSION*/
    IF DX[I] IN: ('630','631','632','633','634','635','636','637','638','639') THEN
      ABORT_DX=1;

    /*C-SECTION DELIVERY*/
    IF DX(I) IN: ('66970','66971') THEN CESAREAN_DX=1;


    /*SEVERE MATERNAL MORBIDITY INDICATORS*/
```

```
  /*AMI*/
  IF DX(I) IN: ('410') THEN SMM1=1;

    /*ANEURYSM*/
  IF DX(I) IN: ('441') THEN SMM2=1;

    /* ACUTE RENAL FAILURE */
  IF DX(I) IN: ('5845','5846','5847','5848','5849','6693')
       THEN SMM3=1;

    /*ACUTE RESP DISTRESS SYNDROME*/
  IF DX(I) IN: ('5185','51881','51882','51884','7991') THEN SMM4=1;

    /*AMNIOTIC FLUID EMBOLISM */
  IF DX(I) EQ: '6731' THEN SMM5=1;

    /*CARDIAC ARREST/VENTRICULAR FIBRILLATION*/
  IF DX(I) IN: ('42741','42742','4275') THEN SMM6=1;

    /*DISSEMINATED INTRAVASCULAR COAGULATION*/
  IF DX(I) IN: ('2866','2869','6413','6663') THEN SMM8=1;

  /* ECLAMPSIA */
  IF DX(I) IN: ('6426') THEN SMM9 =1;

  /* HEART FAILURE/ARREST DURING PROCEDURE*/
  IF DX(I) IN: ('9971') THEN SMM10=1;

    /* PUERPERAL CEREBROVASCULAR DISORDERS*/
  IF DX(I) IN: ('0463','34839','36234','430','431','432','433','434','436','437',
       '6715','6740','99702','435') THEN SMM11=1;

  /*PULMONARY EDEMA*/
  IF DX(I) IN: ('5184') THEN SMM12=1;

  /*ACUTE HEART FAILURE*/
  IF DX(I) IN: ('4280','4281','42820','42821','42823','42830','42831','42833',
       '42840','42841','42843','4289') THEN SMM12=1;

    /*SEVERE ANESTHESIA COMPLICATIONS */
  IF DX(I) IN: ('6680','6681','6682','9954','99586') THEN SMM13=1;

    /*SEPSIS*/
  IF DX(I) IN: ('038','449','6702','78552','99591','99592','99802') THEN SMM14=1;

    /*SHOCK*/
  IF DX(I) IN: '6691','78550','78551','78559','9950',/*9980,*/'99800',
    '99801','99809') THEN SMM15=1;

  /*SICKLE CELL DISEASE WITH CRISIS*/
  IF DX(I) IN: ('28242','28262','28264','28269','28952') THEN SMM16=1;

    /*AIR AND THROMBOTIC EMBOLISM */
  IF DX(I) IN: ('4150','4151','6730','6732','6733','6738') THEN SMM17=1;

END;
/* END OF ICD-9-CM DIAGNOSIS*/

/* BEGIN ICD-10-CM DIAGNOSIS*/
```

```
ELSE DO;

  /*ANY Z37 DELIVERY CODES*/
  IF DX(I) IN: ('Z37') THEN DELIVERY_V27 =1;


  ELSE IF DX(I) IN: ('O80','O82','O7582') THEN DO;

      /*NORMAL DELIVERY*/
      DELIVERY_650 =1;

      /*C-SECTION DELIVERY*/
      IF DX(I) IN: ('O82','O7582') THEN CESAREAN_DX=1;
  END;

  /*IDENTIFY ABORTIONS, ECTOPIC, HYDATIDIFORM MOLE FOR EXCLUSION*/
  IF DX(I) IN: ('O00','O01','O02','O03','O04','O07','O08')
      THEN ABORT_DX =1;


  /*SEVERE MATERNAL MORBIDITY INDICATORS*/

  /*ACUTE MYOCARDIAL INFARCTION*/
  IF DX(I) IN: ('I21','I22') THEN SMM1=1;

    /*ANEURYSM*/
  IF DX(I) IN: ('I71','I790') THEN SMM2=1;

  /* ACUTE RENAL FAILURE */
  IF DX(I) IN: ('N17','O904') THEN SMM3 =1;

    /*ACUTE RESP DISTRESS SYNDROME*/
  IF DX(I) IN: ('J80','J951','J952','J953','J9582','J960',
      'J962','J969','R0603','R092') THEN SMM4=1;

    /*AMNIOTIC FLUID EMBOLISM */
  IF DX(I) IN: ('O88112','O88113','O88119','O8812','O8813')  THEN SMM5=1;

    /*CARDIAC ARREST/VENTRICULAR FIBRILLATION*/
  IF DX(I) IN: ('I46','I490') THEN SMM6=1;

  /*DISSEMINATED INTRAVASCULAR COAGULATION*/
  IF DX(I) IN: ('D65','D688','D689','O45002','O45003','O45009','O45012','O45013',
  'O45019','O45022','O45023','O45029','O45092','O45093','O45099','O46002',
  'O46003','O46009','O46012','O46013','O46019','O46022','O46023','O46029',
  'O46092','O46093','O46099','O670','O723') THEN SMM8=1;

  /* ECLAMPSIA */
  IF DX(I) IN: ('O15') THEN SMM9 =1;

    /* HEART FAILURE/ARREST DURING PROCEDURE*/
  IF DX(I) IN: ('I9712','I9713','I9771') THEN SMM10=1;

  /* PUERPERAL CEREBROVASCULAR DISORDERS*/

   IF DX(I) IN: ('A812','G45','G46','G9349','H340','I60','I61','I62','I6300',
  'I6301','I631', 'I632','I633','I634','I635','I636','I638','I639','I65','I66',
  'I67','I68','O2250','O2252','O2253','I9781','I9782','O873') THEN SMM11=1;
```

```
    /*PULMONARY EDEMA*/
    IF DX(I) IN: ('J810') THEN SMM12=1;

    /*ACUTE HEART FAILURE*/
    IF DX(I) IN: ('I501','I5020','I5021','I5023','I5030','I5031','I5033',
        'I5040','I5041','I5043','I50810','I50811','I50813','I50814',
            'I5082','I5083','I5084','I5089','I509') THEN SMM12=1;

    /*SEVERE ANESTHESIA COMPLICATIONS */
    IF DX(I) IN: ('O29112','O29113','O29119','O29122','O29123','O29129','O29192',
    'O29193','O29199','O29212','O29213','O29219','O29292','O29293','O29299',
    'O740','O741','O742','O743','O8901','O8909','O891','O892','T882XXA','T883XXA')
            THEN SMM13=1;

    /*SEPSIS*/
    IF DX(I) IN: ('A327','A40','A41','I76','O85','O8604','R6520','R6521',
      'T8112XA','T8144XA') THEN SMM14=1;

      /*SHOCK*/
    IF DX(I) IN: ('O751','R57','T782XXA','T8110XA','T8111XA','T8119XA','T886XXA')
            THEN SMM15=1;

    /*SICKLE CELL DISEASE WITH CRISIS*/
    IF DX(I) IN: ('D5700','D5701','D5702','D57211','D57212','D57219','D57411',
    'D57412','D57419','D57811','D57812','D57819') THEN SMM16=1;

      /*AIR AND THROMBOTIC EMBOLISM */
    IF DX(I) IN: ('I2601','I2602','I2609','I2690','I2692','I2693','I2694','I2699',
      'O88012','O88013','O88019','O8802','O8803','O88212','O88213','O88219',
      'O8822','O8823','O88312','O88313','O88319','O8832','O8833','O88812','O88813',
      'O88819','O8882','O8883','T800XXA')
        THEN SMM17=1;

  END;

  /* END OF ICD-10-CM DIAGNOSIS */

END;



DO I=1 TO DIM(PR) ;

  /* BEGIN ICD-9-CM PROCEDURES */

  IF YEAR<=2015 THEN DO;


    /*ANY DELIVERY */
    IF PR[I] IN ('720','721','7221','7229','7231','7239','724','7251','7252',
       '7253','7254','726','7271','7279','728','729','7322','7359',
       '736','740','741','742','744','7499') THEN DELIVERY_PR=1;

    /* IDENTIFY ABORTIONS FOR EXCLUSION*/
    IF PR[I] IN ('6901','6951','7491','750') THEN ABORT_PR=1;

    /*C-SECTION DELIVERY*/
```

```
    IF PR(I) IN ('740','741','742','744','7499') THEN CESAREAN_PR=1;

    /*CONVERSION OF CARDIAC RHYTHM */
    IF PR(I) IN: ('996') THEN SMM7=1;

      /*BLOOD TRANSFUSIONS - Excluded but could be examined
      IF PR(I) IN: ('990') THEN SMM18=1; */

     /*HYSTERECTOMY*/
    IF PR(I) IN
('683','684','685','686','687','6839','6849','6859','6869','6879','689') THEN
SMM19=1;

      /*TEMPORARY TRACHEOSTOMY*/
    IF PR(I) IN: ('311') THEN SMM20=1;

    /*VENTILATION*/
    IF PR(I) IN: ('9670','9671','9672') THEN SMM21=1;

  END;

  /* END OF ICD-9-CM PROCEDURES*/

  /* BEGIN ICD-10-PCS PROCEDURES*/

  ELSE DO;

    /*ANY DELIVERY */
    IF '10D00Z0' LE PR(I) LE: '10D00Z2' OR '10D07Z3' LE PR(I) LE: '10D07Z8'
       OR PR(I) IN : ('10E0XZZ') THEN DO;

       DELIVERY_PR =1;

       /*C-SECTION DELIVERY*/
       IF '10D00Z0' LE PR(I) LE: '10D00Z2' THEN CESAREAN_PR=1;

    END;

    /* IDENTIFY ABORTIONS FOR EXCLUSION*/
    IF PR(I) IN: ('10A0') THEN ABORT_PR =1;


/*CONVERSION OF CARDIAC RHYTHM */
    IF PR(I) IN: ('5A12012','5A2204Z') THEN SMM7=1;

/*HYSTERECTOMY*/
    IF PR(I) IN: ('0UT90ZL','0UT90ZZ','0UT97ZL','0UT97ZZ') THEN SMM19=1;

/*TEMPORARY TRACHEOSTOMY*/
    IF PR(I) IN: ('0B110F4','0B113F4','0B114F4') THEN SMM20=1;

/*VENTILATION*/
    IF PR(I) IN: ('5A1935Z', '5A1945Z', '5A1955Z') THEN SMM21=1;

   END;
  /* END OF ICD-10-PCS PROCEDURES*/

END;
```

```
/*BEGIN MS-DRG*/
/* ANY DELIVERY*/
IF DRG IN (765:768,774,775,783:788,796:798,805:807) THEN DELIVERY_DRG=1; ELSE
DELIVERY_DRG=0;

/* C-SECTION DELIVERY*/
IF DRG IN (765,766,783:788) THEN CESAREAN_DRG=1;

/*END MS-DRG*/

/*ANY ABORTION - DIAGNOSIS OR PROCEDURE*/
IF ABORT_DX=1 OR ABORT_PR=1 THEN ABORT=1; ELSE ABORT=0;

/*DENOMINATOR: ANY DELIVERY EXCLUDING ABORTION*/

ARRAY SMMVARS{*} SMM1-SMM17 SMM19-SMM21;

IF (DELIVERY_V27=1 OR DELIVERY_650=1 OR DELIVERY_DRG=1 OR DELIVERY_PR=1 OR
CESAREAN_DX=1) AND ABORT=0
            AND FEMALE=1 AND 12 LE AGE LE 55 THEN DO;
      SMM=0;
    DO I=1 TO DIM(SMMVARS);
      IF SMMVARS(I)=1 THEN SMM=1;
    END;
    DELI_FLAG=1;

/* Complication Grouping */

* Hemmorhage = DIC, Shock, Hysterectomy;
IF SMM8=1 OR SMM15=1 OR SMM19=1 then SMM_GROUP1=1; ELSE SMM_GROUP1=0;

* Respiratory = Acute Respiratory Distress Syndrome, Temporary Tracheostomy,
Ventilation;
IF SMM4=1 OR SMM20=1 OR SMM21=1 then SMM_GROUP2=1; ELSE SMM_GROUP2=0;

* Cardiac = Acute Myocardial Infarction, Aneurysm, Cardiac Arrest, Conversion of
Cardiac Rhythm, Heart Failure Arrest During Surgery, Acute Heart Failure, Pulmonary
Edema;
IF SMM1=1 OR SMM2=1 OR SMM6=1 OR SMM7=1 OR SMM10=1 OR SMM12=1 then SMM_GROUP3=1;
ELSE SMM_GROUP3=0;

* Renal = Acute Renal Failure;
IF SMM3=1 then SMM_GROUP4=1; ELSE SMM_GROUP4=0;

* Sepsis;
IF SMM14=1 then SMM_GROUP5=1; ELSE SMM_GROUP5=0;

* Other obstetrical = Amniotic Fluid Embolism, Eclampsia, Severe Anesthesia
Complication, Air & Thrombotic Embolism;
IF SMM5=1 OR SMM9=1 OR SMM13=1 OR SMM17=1 then SMM_GROUP6=1; ELSE SMM_GROUP6=0;

* Other medical = Puerperal Cerebrovascular Disorder, Sickle Cell Disease with
Crisis;
IF SMM11=1 OR SMM16=1 then SMM_GROUP7=1; ELSE SMM_GROUP7=0;
END;

*PATIENT STATE RESIDENCE;
LENGTH PSTATE $2; if not missing(pstco2) then PSTATE = fipstate(int(pstco2/1000));
```

```
LABEL       SMM="SEVERE MATERNAL MORBIDITY"
            SMM_GROUP1="Hemmorhage Complications"
            SMM_GROUP2="Respiratory Complications"
            SMM_GROUP3="Cardiac Complications"
            SMM_GROUP4="Renal Complications"
            SMM_GROUP5="Sepsis Complications"
            SMM_GROUP6="Other Obstetric Complications"
            SMM_GROUP7="Other Medical Complications"
            PSTATE="PATIENT RESIDENCE STATE";
```

Maternal Mortality

Maternal mortality rate per 100,000 live births

GOAL

To reduce the maternal mortality rate.

DEFINITION

Numerator: Number of deaths related to or aggravated by pregnancy, but not due to accidental or incidental causes, and occurring within 42 days of the end of a pregnancy (follows WHO definition)

Denominator: Number of live births

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) 04 Objective: Reduce maternal deaths (Baseline: 17.4 maternal deaths per 100,000 live births in 2018, Target: 15.7 maternal deaths per 100,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

POPULATION HEALTH SIGNIFICANCE

Maternal mortality is a sentinel indicator of health and health care quality worldwide. Each year, more than 800 women die of maternal causes. In 2023, the U.S. maternal mortality rate was 18.6 per 100,000 live births compared to 22.3 in 2022 and 32.9 in 2021.[1,2] Maternal deaths can be prevented or reduced both by improving underlying maternal health as well as health care quality for leading causes of maternal death, such as hemorrhage and preeclampsia.[3]

(1) Hoyert DL. Maternal mortality rates in the United States, 2023. NCHS Health E-Stats. 2025. DOI: https://dx.doi.org/10.15620/cdc/174577.

(2) Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Mortality 2018-2023 on CDC WONDER Online Database, released in 2024. Data are from the Multiple Cause of Death Files, 2018-2023, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10-expanded.html on Mar 17, 2025 6:30:55 PM

(3) Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Natality on CDC WONDER Online Database. Data are from the Natality Records 2016-2023, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/natality-expanded-current.html on Mar 17, 2025 6:32:06 PM

(4) Hoyert DL. Maternal mortality rates in the United States, 2020. NCHS Health E-Stats. 2022. DOI: https://dx.doi.org/10.15620/cdc:113967

FAD Availability by Year

Year	Data Not Available
2019-2023	AS, FM, MH, PW, VI
2018-2022	AS, FM, MH, PW, VI
2017-2021	AS, MH, PW, VI
2016-2020	AS, MH, PW, VI
2015-2019	AS, MH, PW, VI
2014-2018	AS, GU, MP, MH, PW, PR, VI

Data Notes

Ascertainment of maternal deaths was modified by a pregnancy checkbox in the 2003 revision of the U.S. Standard Certificate of Death. These estimates based on state of residence were furnished by NCHS and follow the 2018 coding method in which the pregnancy checkbox is not used for women 45 and over due to significant

error rates in this age group (not applied to territories). Five-year estimates are provided to improve precision and reportability. Changes are mitigated with five-year data where each estimate shares 80% (4/5) of the data with the next estimate. Standard statistical tests that assume independence should not be used when comparing overlapping 5-year estimates. Rates may be underestimated in states that had not implemented the standard pregnancy checkbox as of January 1, 2016 (CA, WV). In addition, it is likely that some of the variation in state rates is due to the marked differences in the quality of state maternal mortality data. Variation in the quality of reporting maternal deaths may be due to differences in electronic registration systems and differences in policies and programs designed to verify the pregnancy status of female decedents of reproductive age. These differences may result in underestimates of maternal deaths in some cases, and overestimates in others. For more information about the new maternal mortality release and changes in coding, please see https://www.cdc.gov/nchs/maternal-mortality/index.htm
Marital status is not available for California. As of 2020, race categories are no longer being reported by bridged race and will only be reported by single race from 2018-2022 onward. Urban/rural residence is not available for territories.
Estimates for FM were available from the United Nations Maternal Mortality Estimation Interagency Group https://www.who.int/reproductivehealth/publications/maternal-mortality-2000-2017/en/

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	
Educational Attainment	Less than high school High school graduate Some college College graduate	
Marital Status	Married Unmarried	
Nativity	Born in U.S. Born outside U.S.	
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

SAS Code

```
IF RESTATUS NE 4; * restrict to resident deaths;
IF substr(ICD,1,3)='A34' OR 'O00'<=substr(ICD,1,3)<='O95' OR 'O98'<=substr(ICD,1,3)<='O99' THEN
MATERNAL=1;  * ICD = underlying cause of death;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Teen Births

Teen birth rate, ages 15 through 19, per 1,000 females

GOAL

To reduce pregnancies to teenagers.

DEFINITION

Numerator: Number of births to adolescents, ages 15 through 19 years

Denominator: Number of adolescent females, ages 15 through 19 years

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Family Planning (FP) 03: Reduce pregnancies among adolescent females. (Baseline: 43.4 pregnancies per 1,000 females aged 15 to 19 years occurred in 2013, Target 31.4 pregnancies per 1,000 females)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS) for states and territories
Population estimates come from the U.S. Census Bureau
United Nations Population Division for the Freely Associated States in the Pacific Basin

POPULATION HEALTH SIGNIFICANCE

Teen pregnancy and childbearing have substantial social and economic costs for both teens and their children. Teen mothers are less likely to complete high school and further education which may reduce earning potential and contribute to intergenerational poverty. Although teen pregnancy and birth rates have declined substantially over the past two decades, rates are still higher than in many other industrialized countries.

(1) Centers for Disease Control and Prevention. Reproductive Health: Teen Pregnancy. 2019 March 1. https://www.cdc.gov/teenpregnancy/about/index.htm

FAD Availability by Year

Year	Data Not Available
2023	AS, FM, MH, PW
2022	AS, FM, MH, PW
2021	AS, FM, MH, PW
2020	AS, MH, PW
2019	AS, MH, PW, VI
2018	AS, MH, PW, VI
2017	MH, PW, VI
2016	MH, PW
2015	MH, PW
2014	MH, PW
2013	MH, PW
2012	MH, PW
2011	MH, PW
2010	MH, PW
2009	MH, PW

Data Notes

Population denominators for 2009 are from revised intercensal July 1 estimates. Population denominators for 2010 are from Census April 1 estimates. Population denominators for 2011 through 2023 are from postcensal July 1 estimates for each vintage year. Population denominators for territories are from the Census International Data Base. Unstated Hispanic ethnicity is included in non-Hispanic categories for birth rates; denominators by race/ethnicity are not available for territories. Urban/rural residence is not available for CT in 2022-2023 or territories. For more information about the birth file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Data for FM comes from the United Nations Population Division's World Population Prospects accessed from the World Bank http://databank.worldbank.org/data/reports.aspx?source=health-nutrition-and-population-statistics

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	15-17 Years 18-19 Years	Includes imputed age
Race/Ethnicity	Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Refers to maternal race/ethnicity. Includes imputed race. Not available for territories.
Urban/Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

SAS Code

```
IF 20estates NE 4; * restrict to resident births;
if 15<=mager<=19 then teen=1;
```

Data Alert

2022 and 2023 urban/rural residence is not available for CT due to lack of a population denominator. US and Region 1 urban/rural estimates have been updated to exclude CT.

Low Birth Weight

Percent of low birth weight deliveries (<2,500 grams)

GOAL

To reduce the percent of low birth weight deliveries

DEFINITION

Numerator: Number of live births weighing less than 2,500 grams

Denominator: Number of live births

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) 07 Objective: Reduce preterm births. (Baseline: 10% of live births were preterm in 2018, Target: 9.4%)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

POPULATION HEALTH SIGNIFICANCE

Low birth weight infants include preterm infants and infants with intrauterine growth retardation[1]. Some risk factors for low birth weight babies include: chronic health conditions, inadequate weight gain, both young and old maternal age, poverty, smoking, substance abuse, and multiple births.[1] Low birth weight infants are more likely than normal weight infants to die in the first year of life and to experience long- range physical and developmental health problems.[1] Low Birth Weight is part of the Core Set of Maternal and Perinatal Health Measures for Medicaid and CHIP.

(1) March of Dimes. Low Birthweight. 2021 June. https://www.marchofdimes.org/find-support/topics/birth/low-birthweight#:~:text=is%20low%20birthweight%3F,Low%20birthweight%20is%20when%20a%20baby%20is%20born,than%205%20pounds%2C%208%20ounces21 June

FAD Availability by Year

Year	Data Not Available
2023	AS, FM, MH, PW
2022	AS, FM, MH, PW
2021	AS, FM, MH, PW
2020	AS, FM, MH, PW
2019	AS, FM, MH, PW, VI
2018	AS, FM, MH, PW, VI
2017	FM, MH, PW, VI
2016	FM, MH, PW
2015	FM, MH, PW
2014	FM, MH, PW, VI
2013	FM, MH, PW, VI
2012	FM, MH, PW
2011	FM, MH, PW
2010	FM, MH, PW
2009	FM, MH, PW

Data Notes

Follows NCHS birth weight edits to replace as unknown if outside of 227-8165 grams or grossly incompatible with both the obstetric estimate and LMP-based estimate of gestational age. Marital status is not available for

California. Urban/rural residence is not available for territories. For more information about the birth file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Total	Very Low Birth Weight, <1,500 grams Moderately Low Birth Weight, 1,500-2,499 grams	
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only.
Plurality	Singleton Multiple Birth	Includes imputed plurality
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.
WIC Participation	Yes No	Refers to prenatal WIC participation.

SAS Code

```
IF RESTATUS NE 4; * restrict to resident births;
if dbwt<9999 then do; * dbwt = birth weight;
```

```
if dbwt<2500 then lbw=1; else lbw=0;
if dbwt<1500 then vlbw=1; else vlbw=0;
if 1500<=dbwt<2500 then mlbw=1; else mlbw=0; end;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Preterm Birth

Percent of preterm births (<37 weeks)

GOAL

To reduce the percent of all preterm, early term, and early elective deliveries.

DEFINITION

Numerator: Number of live births before 37 completed weeks of gestation

Denominator: Number of live births

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) 07 Objective: Reduce preterm births. (Baseline: 10% of live births were preterm in 2018, Target: 9.4%)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

POPULATION HEALTH SIGNIFICANCE

Babies born preterm, before 37 completed weeks of gestation, are at greater risk of immediate life- threatening health problems, as well as long-term complications and developmental delays.[1] Currently, about 1 in every 10 infants are born prematurely.[1] Preterm birth is a leading cause of infant death and childhood disability.[1] Risk factors include medical and pregnancy conditions, behavioral factors, and social, personal, and economic characteristics.[1]

(1) Centers for Disease Control and Prevention. Preterm birth. 2022 November. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm

FAD Availability by Year

Year	Data Not Available
2023	AS, FM, MH, PW
2022	AS, FM, MH, PW
2021	AS, FM, MH, PW
2020	AS, FM, MH, PW
2019	AS, FM, MH, PW, VI
2018	AS, FM, MH, PW, VI
2017	AS, FM, MH, PW, VI
2016	AS, FM, MH, PW
2015	AS, FM, MH, PW
2014	AS, FM, MH, PW, VI
2013	AS, FM, MH, PW, VI
2012	AS, FM, MH, PW
2011	AS, FM, MH, PW
2010	AS, FM, MH, PW
2009	AS, FM, MH, PW

Data Notes

Based on obstetric/clinical estimate of gestation, following NCHS edits to replace as unknown if outside of 17-47 weeks. Marital status is not available for California. Urban/rural residence is not available for territories. For

more information about the birth file, please see the User's Guide located at
http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Total	Early Preterm Birth, <34 weeks Late Preterm Birth, 34-36 weeks	
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only
Plurality	Singleton Multiple Birth	Includes imputed plurality
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.
WIC Participation	Yes No	Refers to prenatal WIC participation.

SAS Code

```
IF RESTATUS NE 4; * restrict to resident births;
if 17<=estgest<=47 then do; * estgest = obstetric/clinical estimate of gestational age;
if estgest<37 then ptb=1; else ptb=0;
if estgest<34 then eptb=1; else eptb=0;
if 34<=estgest<37 then lptb=1; else lptb=0;
if estgest in (37,38) then earlyterm=1; else earlyterm=0;end;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Stillbirth

Stillbirth rate per 1,000 live births plus fetal deaths

GOAL

To reduce the rate of stillbirths.

DEFINITION

Numerator: Number of fetal deaths 20 weeks or more gestation

Denominator: Number of live births plus fetal deaths at 20 weeks or more gestation

Units: 1,000

Text: Rate

HEALTHY PEOPLE 203O OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) 01 Objective: Reduce the rate of fetal deaths at 20 or more weeks of gestation. (Baseline: 5.9 fetal deaths at 20 or more weeks of gestation per 1,000 live births and fetal deaths in 2017, Target: 5.7 fetal deaths at 20 or more weeks of gestation per 1,000 live births and fetal deaths)

DATA SOURCES AND DATA ISSUES

National Vital Statistics System (NVSS)

POPULATION HEALTH SIGNIFICANCE

Fetal death at any gestational age is a significant public health problem. There are as many stillbirths, fetal deaths occurring at 20 weeks or more gestation, as infant deaths each year. Risk factors for stillbirth include older maternal age, smoking during pregnancy, maternal obesity, uncontrolled hypertension or diabetes, multiple pregnancies such as triplets and quadruplets, and previous poor pregnancy outcome.[1]

(1) Centers for Disease Control and Prevention (CDC). What is Stillbirth?. September 29, 2023. https://www.cdc.gov/ncbddd/stillbirth/facts.html

FAD Availability by Year

Year	Data Not Available
2022	AS, FM, MH, MP, PW, VI
2021	AS, FM, MH, MP, PW, VI
2020	AS, FM, MH, MP, PW, VI
2019	AS, FM, MH, PW, VI
2018	AS, FM, MH, PW, VI
2017	FM, MH, PW, VI
2016	FM, MH, PW
2015	FM, MH, PW
2014	FM, MH, PW, VI
2013	FM, MH, PW, VI
2012	FM, MH, PW
2011	FM, MH, PW
2010	FM, MH, PW
2009	FM, MH, PW

Data Notes

Includes fetal deaths with missing or not stated gestational age that were presumed to be 20+ weeks. In 2014, NCHS transitioned to the obstetric estimate for the tabulation flag of fetal deaths with stated or presumed gestation of 20 weeks or more. Prior year fetal mortality estimates rely on LMP-based gestational age. Estimates

by stratifiers are calculated with three-year data to improve precision and reportability. In 2019 the total number of fetal deaths in Connecticut were underreported by approximately one-third, and therefore all data should be interpreted with caution. Urban/rural residence is not available for territories. MP and VI were excluded from file due to small number of events. For more information about the fetal death files, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Total	20-27 weeks 28 weeks or more	The proportion of fetal deaths with not-stated gestational age are allocated to the 20–27 weeks and 28 weeks or more categories according to the proportion of fetal deaths with stated gestational age that fall into each category (proportional distribution).
Birthweight	<1,500 grams 1,500-2,499 grams 2,500+ grams	
Educational Attainment	Less than high school High school graduate Some college College graduate	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to maternal educational attainment.
Gestational age	<34 weeks 34-36 weeks 37,38 weeks 39+ weeks	Based on obstetric estimate
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only.
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.
Plurality	Singleton Multiple Birth	Includes imputed plurality
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

Stratifier	Subcategory	Special Notes
WIC Participation	Yes No	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to prenatal WIC participation.

SAS Code

```
/* Requires 2 files: fetal deaths and births */
IF RESTATUS NE 4 AND TABFLG=2; *restrict to resident fetal deaths with a stated or presumed gestational age of 20+ weeks;

/* birth file denominator - births */
IF RESTATUS NE 4;  * restrict to resident births;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Perinatal Mortality

Perinatal mortality rate per 1,000 live births plus fetal deaths

GOAL

To reduce the rate of perinatal deaths.

DEFINITION

Numerator: Number of fetal deaths 28 weeks or more gestation plus early neonatal deaths occurring under 7 days

Denominator: Number of live births plus fetal deaths at 28 weeks or more gestation

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) 01 Objective: Reduce the rate of fetal deaths at 20 or more weeks of gestation. (Baseline: 5.9 fetal deaths at 20 or more weeks of gestation per 1,000 live births and fetal deaths in 2017, Target: 5.7 fetal deaths at 20 or more weeks of gestation per 1,000 live births and fetal deaths)

Related to Maternal, Infant, and Child Health (MICH) Objective 02: Reduce the rate of infant deaths within 1 year of age. (Baseline: 5.8 infant deaths per 1,000 live births within the first year of life in 2017, Target: 5.0 infant deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

POPULATION HEALTH SIGNIFICANCE

Perinatal mortality is a reflection of the health of the pregnant woman and newborn as well as the quality of perinatal care. Risk factors for perinatal mortality include smoking during pregnancy, maternal obesity, uncontrolled hypertension or diabetes, infections and previous poor pregnancy outcome.[1] Late fetal deaths are just as common as early neonatal deaths with a rate similar to overall infant mortality.[1]

(1) MacDorman MF, Gregory EC. Fetal and Perinatal Mortality: United States, 2013. Natl Vital Stat Rep. 2015;64(8):1-24. https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_08.pdf

FAD Availability by Year

Year	Data Not Available
2022	AS, FM, MH, MP, PW, VI
2021	AS, FM, MH, MP, PW, VI
2020	AS, FM, MH, MP, PW, VI
2019	AS, FM, MH, PW, VI
2018	AS, FM, MH, PW, VI
2017	FM, MH, PW, VI
2016	FM, MH, PW
2015	FM, MH, PW
2014	FM, MH, PW, VI
2013	FM, MH, PW, VI
2012	FM, MH, PW
2011	FM, MH, PW
2010	FM, MH, PW

Year	Data Not Available
2009	FM, MH, PW

Data Notes

Fetal deaths with missing or not stated gestational age that were presumed to be 20+ weeks were proportionally distributed to <28 and 28+ weeks. In 2014, NCHS transitioned to the obstetric estimate for the tabulation flag of fetal deaths with stated or presumed gestation of 20 weeks or more. Prior year perinatal mortality estimates rely on LMP-based gestational age. Early neonatal deaths are weighted to account for deaths that were unable to be linked to a birth certificate in a given state or territory. Estimates by stratifiers are calculated with three-year data to improve precision and reportability. From 2018 to 2020, race categories were reported by both bridged race and single race. As of 2020, race categories are no longer being reported by bridged race and will only be reported by single race from 2018-2020 onward. In 2019 the total number of fetal deaths in Connecticut were underreported by approximately one-third, and therefore all data should be interpreted with caution. Urban/rural residence is not available for territories. MP and VI were excluded from file due to small number of events. For more information about the fetal death and linked birth/infant death files, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Birthweight	<1,500 grams 1,500-2,499 grams 2,500+ grams	
Educational Attainment	Less than high school High school graduate Some college College graduate	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to maternal educational attainment.
Gestational age	<34 weeks 34-36 weeks 37,38 weeks 39+ weeks	Based on obstetric estimate
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only.
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.
Plurality	Singleton Multiple Birth	Includes imputed plurality
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

Stratifier	Subcategory	Special Notes
WIC Participation	Yes No	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to prenatal WIC participation.

SAS Code

```
/* Requires 2 files: fetal deaths and linked birth/infant deaths */
IF RESTATUS NE 4 AND TABFLG=2; *restrict to resident fetal deaths with a stated or presumed gestational age of 20+ weeks;
IF OEGest_Comb<28 THEN FETAL28=0;
IF 28<=OEGest_Comb<99 THEN FETAL28=1;
IF OEGest_Comb=99 THEN FETAL28=.;  * proportionally distribute missing to <28, 28+ weeks in excel;

/* linked file numerator - deaths */
IF RESTATUS NE 4 AND AGED<7;  * restrict to resident, early neonatal deaths;

/* linked file denominator - births */
IF RESTATUS NE 4;  * restrict to resident births;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Infant Mortality

Infant mortality rate per 1,000 live births

GOAL

To reduce the rate of infant death.

DEFINITION

Numerator: Number of deaths to infants from birth up to 1 year of age

Denominator: Number of live births

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 02: Reduce the rate of infant deaths within 1 year of age. (Baseline: 5.8 infant deaths per 1,000 live births within the first year of life in 2017, Target: 5.0 infant deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS) for states and territories
United Nations Interagency Group for Child Mortality Estimation for the Freely Associated States in the Pacific Basin

POPULATION HEALTH SIGNIFICANCE

Infant mortality, or the death of a child within the first year of life, is a sentinel measure of population health that reflects the underlying well-being of mothers and families, as well as the broader community and social environment that cultivate health and access to health-promoting resources.[1] Leading causes of infant mortality include birth defects, prematurity, and sudden unexpected infant deaths.[2] Infant mortality continues to be an extremely complex health issue with many medical, social, and economic determinants.

(1) Reno R, Hyder A. The Evidence Base for Social Determinants of Health as Risk Factors for Infant Mortality: A Systematic Scoping Review. J Health Care Poor Underserved. 2018;29(4):1188-1208. doi:10.1353/hpu.2018.0091. https://muse.jhu.edu/article/708237

(2) Ely DM, Driscoll AK. Infant mortality in the United States, 2022: Data from the period linked birth/infant death file. National Vital Statistics Reports; vol 73 no 5. Hyattsville, MD: National Center for Health Statistics. 2024. https://www.cdc.gov/nchs/data/nvsr/nvsr73/nvsr73-05.pdf

FAD Availability by Year

Year	Data Not Available
2022	AS
2021	AS
2020	AS
2019	AS, VI
2018	AS, VI
2017	VI
2016	
2015	
2014	VI
2013	VI
2012	
2011	
2010	
2009	

Data Notes

Infant deaths are weighted to account for deaths that were unable to be linked to a birth certificate in a given state. Estimates by stratifiers are calculated with three-year data to improve precision and reportability. Marital status is not available for California. From 2018 to 2020, race categories were reported by both bridged race and single race. As of 2020, race categories are no longer being reported by bridged race and will only be reported by single race. Therefore, three-year estimates by single race are included only for 2018-2020 onward because the 2017-2019 estimate was only reported by bridged race. Urban/rural residence is not available for territories. Unlinked data are used for Northern Marianas Islands and US Virgin Islands since linked data are unavailable; therefore no stratifiers are available. For more information about the linked birth/infant death file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm
Data for the Freely Associated States are from the United Nations Interagency Group for Child Mortality Estimation available at www.childmortality.org

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Birthweight	<1,500 grams 1,500-2,499 grams 2,500+ grams	
Gestational age	<34 weeks 34-36 weeks 37,38 weeks 39+ weeks	Based on obstetric estimate
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only.
Plurality	Singleton Multiple Birth	Includes imputed plurality
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.

Stratifier	Subcategory	Special Notes
	Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.
WIC Participation	Yes No	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to prenatal WIC participation.

SAS Code

```
IF RESTATUS NE 4;  *restrict to resident births;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Neonatal Mortality

Neonatal mortality rate per 1,000 live births

GOAL

To reduce the rate of neonatal deaths.

DEFINITION

Numerator: Number of deaths to infants under 28 days

Denominator: Number of live births

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 02: Reduce the rate of infant deaths within 1 year of age. (Baseline: 5.8 infant deaths per 1,000 live births within the first year of life in 2017, Target: 5.0 infant deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS) for states and territories
United Nations Interagency Group for Child Mortality Estimation for the Freely Associated States in the Pacific Basin

POPULATION HEALTH SIGNIFICANCE

Neonatal deaths, within the first month of life, account for approximately two-thirds of all infant deaths in the U.S.[1] Neonatal mortality is related to gestational age, low birth weight, congenital malformations and health problems originating in the perinatal period, such as infections or birth trauma.[2]

(1) Ely DM, Driscoll AK. Infant mortality in the United States, 2022: Data from the period linked birth/infant death file. National Vital Statistics Reports; vol 73 no 5. Hyattsville, MD: National Center for Health Statistics. 2024. https://www.cdc.gov/nchs/data/nvsr/nvsr73/nvsr73-05.pdf

(2) Ely DM, Driscoll AK, Matthews TJ. Infant Mortality by Age at Death in the United States, 2016. NCHS Data Brief. 2018;(326):1-8. https://www.cdc.gov/nchs/products/databriefs/db326.htm

FAD Availability by Year

Year	Data Not Available
2022	AS
2021	AS
2020	AS
2019	AS, VI
2018	AS, VI
2017	VI
2016	
2015	
2014	VI
2013	VI
2012	
2011	
2010	
2009	

Data Notes

Infant deaths are weighted to account for deaths that were unable to be linked to a birth certificate in a given state. Estimates by stratifiers are calculated with three-year data to improve precision and reportability. Marital status is not available for California. From 2018 to 2020, race categories were reported by both bridged race and single race. As of 2020, race categories are no longer being reported by bridged race and will only be reported by single race. Therefore, three-year estimates by single race are included only for 2018-2020 onward because the 2017-2019 estimate was only reported by bridged race. Urban/rural residence is not available for territories. Unlinked data are used for Northern Marianas Islands and US Virgin Islands since linked data are unavailable; therefore no stratifiers are available. For more information about the linked birth/infant death file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm
Data for the Freely Associated States are from the United Nations Interagency Group for Child Mortality Estimation available at www.childmortality.org

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Birthweight	<1,500 grams 1,500-2,499 grams 2,500+ grams	
Gestational age	<34 weeks 34-36 weeks 37,38 weeks 39+ weeks	Based on obstetric estimate
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only.
Plurality	Singleton Multiple Birth	Includes imputed plurality
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.

Stratifier	Subcategory	Special Notes
	Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.
WIC Participation	Yes No	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to prenatal WIC participation.

SAS Code

```
IF RESTATUS NE 4;  *restrict to resident births;
IF AGED<28 THEN NEONATAL=1;  * age at death < 28 days;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Postneonatal Mortality

Postneonatal mortality rate per 1,000 live births

GOAL

To reduce the rate of postneonatal deaths.

DEFINITION

Numerator: Number of deaths to infants from 28 days up to 1 year of age

Denominator: Number of live births

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 02: Reduce the rate of infant deaths within 1 year of age. (Baseline: 5.8 infant deaths per 1,000 live births within the first year of life in 2017, Target: 5.0 infant deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

POPULATION HEALTH SIGNIFICANCE

Postneonatal deaths, which occur from one month up to one year after birth, account for approximately one-third of all infant deaths in the U.S.[1] Postneonatal mortality is generally related to Sudden Unexpected Infant Death (SUID)/Sudden Infant Death Syndrome (SIDS), unintentional injuries and congenital malformations.[2]

(1) Ely DM, Driscoll AK. Infant mortality in the United States, 2022: Data from the period linked birth/infant death file. National Vital Statistics Reports; vol 73 no 5. Hyattsville, MD: National Center for Health Statistics. 2024. https://www.cdc.gov/nchs/data/nvsr/nvsr73/nvsr73-05.pdf

(2) Ely DM, Driscoll AK, Matthews TJ. Infant Mortality by Age at Death in the United States, 2016. NCHS Data Brief. 2018;(326):1-8. https://www.cdc.gov/nchs/products/databriefs/db326.htm

FAD Availability by Year

Year	Data Not Available
2022	AS, FM, MH, PW
2021	AS, FM, MH, PW
2020	AS, FM, MH, PW
2019	AS, FM, MH, PW, VI
2018	AS, FM, MH, PW, VI
2017	FM, MH, PW, VI
2016	FM, MH, PW
2015	FM, MH, PW
2014	FM, MH, PW, VI
2013	FM, MH, PW, VI
2012	FM, MH, PW
2011	FM, MH, PW
2010	FM, MH, PW
2009	FM, MH, PW

Data Notes

Infant deaths are weighted to account for deaths that were unable to be linked to a birth certificate in a given state. Estimates by stratifiers are calculated with three-year data to improve precision and reportability. Marital status is not available for California. From 2018 to 2020, race categories were reported by both bridged race and

single race. As of 2020, race categories are no longer being reported by bridged race and will only be reported by single race. Therefore, three-year estimates by single race are included only for 2018-2020 onward because the 2017-2019 estimate was only reported by bridged race. Urban/rural residence is not available for territories. Unlinked data are used for Northern Marianas Islands and US Virgin Islands since linked data are unavailable; therefore no stratifiers are available. For more information about the linked birth/infant death file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Birthweight	<1,500 grams 1,500-2,499 grams 2,500+ grams	
Gestational age	<34 weeks 34-36 weeks 37,38 weeks 39+ weeks	Based on obstetric estimate
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only.
Plurality	Singleton Multiple Birth	Includes imputed plurality
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

Stratifier	Subcategory	Special Notes
	Non-Metro	
WIC Participation	Yes No	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to prenatal WIC participation.

SAS Code

```
IF RESTATUS NE 4;  *restrict to resident births;
IF AGED>=28 THEN POSTNEONATAL=1; * age at death 28-364 days;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Preterm-Related Mortality

Preterm-related mortality rate per 100,000 live births

GOAL

To reduce the rate of preterm-related death.

DEFINITION

Numerator: Number of deaths due to preterm-related causes, following the CDC definition of underlying causes where 75% or more of total infant deaths attributed to that cause were deaths of infants born preterm (<37 weeks of gestation) and the cause of death was a direct consequence of preterm birth based on a clinical evaluation and review of the literature

Denominator: Number of live births

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 02: Reduce the rate of infant deaths within 1 year of age. (Baseline: 5.8 infant deaths per 1,000 live births within the first year of life in 2017, Target: 5.0 infant deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

POPULATION HEALTH SIGNIFICANCE

Preterm birth is a leading cause of infant mortality.[1] Preterm-related mortality can be prevented both by reducing preterm birth as well as improving access to risk-appropriate perinatal care for infants born prematurely.[2]

(1) Ely DM, Driscoll AK. Infant mortality in the United States, 2022: Data from the period linked birth/infant death file. National Vital Statistics Reports; vol 73 no 5. Hyattsville, MD: National Center for Health Statistics. 2024. https://www.cdc.gov/nchs/data/nvsr/nvsr73/nvsr73-05.pdf

(2) American Academy of Pediatrics Committee on Fetus And Newborn. Levels of neonatal care. Pediatrics. 2012;130(3):587-597. doi:10.1542/peds.2012-1999 https://publications.aap.org/pediatrics/article/130/3/587/30212/Levels-of-Neonatal-Care?autologincheck=redirected

FAD Availability by Year

Year	Data Not Available
2022	AS, FM, MH, MP, PW, VI
2021	AS, FM, MH, MP, PW, VI
2020	AS, FM, MH, MP, PW, VI
2019	AS, FM, MH, MP, PW, VI
2018	AS, FM, MH, MP, PW, VI
2017	AS, FM, MH, MP, PW, VI
2016	AS, FM, MH, MP, PW, VI
2015	AS, FM, MH, MP, PW, VI
2014	AS, FM, MH, MP, PW, VI
2013	AS, FM, MH, MP, PW, VI
2012	AS, FM, MH, MP, PW
2011	AS, FM, MH, MP, PW
2010	AS, FM, MH, MP, PW
2009	AS, FM, MH, MP, PW

Data Notes

Follows the CDC definition of preterm-related cause if 75% or more of infants whose deaths were attributed to a cause were born at less than 37 weeks of gestation, and the cause of death was a direct consequence of preterm birth based on a clinical evaluation and review of the literature. Preterm-related causes of death are further restricted to preterm infants when determining preterm-related deaths. Gestational age was based on the obstetric/clinical estimate. This measure provides a conservative estimate of the preterm contribution as indirect causes are not included and many non-specific causes of death (e.g. other perinatal conditions) have a high percentage of deaths to preterm infants but lack etiologic specificity. Infant deaths are weighted to account for deaths that were unable to be linked to a birth certificate in a given state. Estimates by stratifiers are calculated with three-year data to improve precision and reportability. Marital status is not available for California. As of 2020, race categories are no longer being reported by bridged race and will only be reported by single race. Therefore, three-year estimates by single race are included only for 2018-2020 onward because the 2017-2019 estimate was only reported by bridged race. Urban/rural residence is not available for territories. For more information about the linked birth/infant death file, please see the User's Guide located at **http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm**

Callaghan WD, MacDorman MF, Rasmussen SA, Qin C, Lackritz EM, et al. The contribution of preterm birth to infant mortality rates in the United States. Pediatrics 118(4):1566–73. 2006.

Mathews TJ, MacDorman MF. Infant mortality statistics from the 2010 period linked birth/infant death data set. National vital statistics reports; vol 62 no 8. Hyattsville, MD: National Center for Health Statistics. 2013.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only.
Plurality	Singleton Multiple Birth	Includes imputed plurality
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.

Stratifier	Subcategory	Special Notes
	Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.
WIC Participation	Yes No	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to prenatal WIC participation.

SAS Code

```
IF RESTATUS NE 4;  *restrict to resident births;
if (substr(ICD,1,3) in ('P22','P36','P77') or substr(ICD,1,4) in ('K550', 'P000', 'P010', 'P011', 'P015', 'P020', 'P021', 'P027', 'P102', 'P280', 'P281') or 'P070'<=substr(ICD,1,4)<='P073' or 'P250'<=substr(ICD,1,4)<='P279'  or 'P520'<=substr(ICD,1,4)<='P523') and 17<=estgest<37 then preterm_related=1;   * ICD = underlying cause of death, estgest = obstetric/clinical estimate of gestational age;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

SUID Mortality

Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

GOAL

To reduce the rate sleep-related SUIDs

DEFINITION

Numerator: Number of SUID deaths, including SIDS (R95), unknown cause (R99), and accidental suffocation and strangulation in bed (W75)

Denominator: Number of live births

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 02: Reduce the rate of infant deaths within 1 year of age. (Baseline: 5.8 infant deaths per 1,000 live births within the first year of life in 2017, Target: 5.0 infant deaths per 1,000 live births)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

POPULATION HEALTH SIGNIFICANCE

Sleep-related infant deaths, also called Sudden Unexpected Infant Deaths (SUID) account for the largest share of infant deaths from one month up to one year (postneonatal deaths).[1,2] To reduce SUIDs, the American Academy of Pediatrics recommends safe sleep practices, such as placing babies to sleep on their backs on a separate firm sleep surface without soft objects or loose bedding, as well as other protective practices such as breastfeeding and smoking cessation.[1]

(1) Moon RY, Carlin RF, Hand I; Task Force on Sudden Infant Death Syndrome and the Committee on Fetus And Newborn. Sleep-Related Infant Deaths: Updated 2022 Recommendations for Reducing Infant Deaths in the Sleep Environment. Pediatrics. 2022;150(1):e2022057990. doi:10.1542/peds.2022-057990. https://publications.aap.org/pediatrics/article/150/1/e2022057990/188304/Sleep-Related-Infant-Deaths-Updated-2022

(2) Centers for Disease Control and Prevention. Sudden Unexpected Infant Deaths and Sudden Infant Death Syndrome: Data and Statistics. https://www.cdc.gov/sids/data.htm

FAD Availability by Year

Year	Data Not Available
2022	AS, FM, MH, PW
2021	AS, FM, MH, PW
2020	AS, FM, MH, PW
2019	AS, FM, MH, PW, VI
2018	AS, FM, MH, PW, VI
2017	FM, MH, PW, VI
2016	FM, MH, PW
2015	FM, MH, PW
2014	FM, MH, PW, VI
2013	FM, MH, PW, VI
2012	FM, MH, PW
2011	FM, MH, PW
2010	FM, MH, PW
2009	FM, MH, PW

Data Notes

Infant deaths are weighted to account for deaths that were unable to be linked to a birth certificate in a given state. Estimates by stratifiers are calculated with three-year data to improve precision and reportability. Marital status is not available for California. From 2018 to 2020, race categories were reported by both bridged race and single race. As of 2020, race categories are no longer being reported by bridged race and will only be reported by single race. Therefore, three-year estimates by single race are included only for 2018-2020 onward because the 2017-2019 estimate was only reported by bridged race. Urban/rural residence is not available for territories. Unlinked data are used for Northern Marianas Islands and US Virgin Islands since linked data are unavailable; therefore no stratifiers are available. For more information about the linked birth/infant death file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Birthweight	<1,500 grams 1,500-2,499 grams 2,500+ grams	
Gestational age	<34 weeks 34-36 weeks 37,38 weeks 39+ weeks	Based on obstetric estimate
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only.
Plurality	Singleton Multiple Birth	Includes imputed plurality
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone	Refers to maternal race/ethnicity. Includes imputed race.

Stratifier	Subcategory	Special Notes
	Non-Hispanic White Alone	
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.
WIC Participation	Yes No	From the 2003 revision to the U.S. Certificate of Live Birth. Refers to prenatal WIC participation.

SAS Code

```
IF RESTATUS NE 4;  *restrict to resident births;
IF substr(ICD,1,3) in ('R95','R99','W75') then SUID=1;  * ICD = underlying cause of death;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Neonatal Abstinence Syndrome

Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations

GOAL

To reduce the rate of infants born with drug dependency

DEFINITION

Numerator: Number of birth hospitalizations with a diagnosis code of neonatal abstinence syndrome

Denominator: Number of birth hospitalizations

Units: 1,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health Objective 11: Increase abstinence from illicit drugs among pregnant women. (Baseline: 93.0% in 2017-18; Target: 95.3%)

DATA SOURCES and DATA ISSUES

Healthcare Cost and Utilization Project (HCUP) - State Inpatient Database (SID)

POPULATION HEALTH SIGNIFICANCE

Neonatal drug dependency or withdrawal symptoms, known as neonatal abstinence syndrome (NAS), predominantly occur from maternal use of opiates such as heroin, methadone, and prescription pain medications. Symptoms of NAS include fever, gastrointestinal dysfunction, high-pitched continuous crying, tremors, and feeding difficulties.[1] From 2000 to 2017, the incidence of NAS increased more than five-fold, from 1.2 to 7.3 per 1,000 birth hospitalizations, with the largest increases among rural and Medicaid-financed births.[2,3] Prevention strategies exist along the continuum from preconception, prenatal, postpartum, and infant/childhood stages to help avert substance-exposed pregnancies and improve outcomes for infants born with NAS.[1]

(1) Ko JY, Wolicki S, Barfield WD, et al. CDC Grand Rounds: Public Health Strategies to Prevent Neonatal Abstinence Syndrome. MMWR Morb Mortal Wkly Rep. 2017;66(9):242-245. Published 2017 Mar 10. doi:10.15585/mmwr.mm6609a2 https://www.cdc.gov/mmwr/volumes/66/wr/mm6609a2.htm

(2) Patrick SW, Schumacher RE, Benneyworth BD, Krans EE, McAllister JM, Davis MM. Neonatal abstinence syndrome and associated health care expenditures: United States, 2000-2009. JAMA. 2012 May 9;307(18):1934-40. doi: 10.1001/jama.2012.3951. https://jamanetwork.com/journals/jama/fullarticle/1151530

(3) Hirai AH, Ko JY, Owens PL, Stocks C, Patrick SW. Neonatal Abstinence Syndrome and Maternal Opioid-Related Diagnoses in the US, 2010-2017. JAMA. 2021 Jan 12;325(2):146-155. doi: 10.1001/jama.2020.24991. https://jamanetwork.com/journals/jama/fullarticle/2774834

FAD Availability by Year

Year	Data Not Available
2022	AL, ID, NV, AS, FM, GU, MH, MP, PW, PR, VI
2021	AL, ID, NV, AS, FM, GU, MH, MP, PW, PR, VI
2020	AL, ID, AS, FM, GU, MH, MP. PW, PR, VI
2019	AL, ID, AS, FM, GU, MH, MP. PW, PR, VI
2018	AL, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2017	AL, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2016	AL, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2015 Q1-Q3	AL, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2014	AK, AL, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2013	AK, AL, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2012	AL, DC, DE, ID, MS, NH, AS, FM, GU, MH, MP, PW, PR, VI
2011	AL, DC, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2010	AL, DC, DE, ID, ND, NH, AS, FM, GU, MH, MP, PW, PR, VI
2009	AK, AL, DC, DE, ID, MS, ND, AS, FM, GU, MH, MP, PW, PR, VI
2008	AK, AL, DC, DE, ID, MT, ND, NH, AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

Data for 2016 and onward are based on ICD-10-CM and may not be comparable to previous ICD-9-CM estimates. Data for 2015 represents only three quarters of the year (January through September) due to the transition to ICD-10 in the last quarter of 2015; thus the rate should be interpreted with caution as it does not represent a full year of change relative to 2014. Cases of neonatal abstinence syndrome (on the birth record) were identified by ICD-9-CM diagnosis code 779.5 (drug withdrawal syndrome in newborn) and ICD-10-CM diagnosis code P96.1 (neonatal withdrawal symptoms from maternal use of drugs of addiction). Possible iatrogenic cases, identified by ICD-9-CM diagnosis codes 765.00-765.05, 770.7, 772.1x, 777.5x, 777.6 and 779.7, were excluded from the numerator; iatrogenic exclusion is no longer necessary in ICD-10-CM with the introduction of P96.2 (withdrawal symptoms from therapeutic use of drugs in newborn). Birth hospitalizations were identified by ICD-9-CM diagnosis codes V30.xx-V39.xx, where the 4th and 5th digit is either 00, 01, 10 or 11, and ICD-10-CM diagnosis codes of Z38.00, Z38.01, Z38.1, Z38.2, Z38.30, Z38.31, Z38.4, Z38.5, Z38.61, Z38.62, Z38.63, Z38.64, Z38.65, Z38.66, Z38.68, Z38.69, Z38.7, or Z38.8. Those with an indication of transfer from another hospital were excluded to avoid duplication. State-level estimates include inpatient stays for state residents treated in their home state and state residents treated in other states that provide data to the Healthcare Cost and Utilization Project (HCUP). For information on the HCUP Partner organizations, please visit https://www.hcup-us.ahrq.gov/partners.jsp

This analysis is limited to community, non-rehabilitation, non-long term acute care hospitals, which are defined as short-term, non-Federal hospitals. Community hospitals include obstetrics and gynecology, otolaryngology, orthopedic, cancer, pediatric, public, and academic medical hospitals. Excluded are long-term care facilities such as rehabilitation, psychiatric, and alcoholism and chemical dependency hospitals. U.S. estimates are calculated using the available State data and are not nationally weighted; therefore, U.S. estimates may not be comparable across years due to the different states included in any given year. In addition, certain states did not provide reliable race and/or ethnicity data and are excluded from totals by race/ethnicity. For more information about the HCUP State Inpatient Databases (SID), please visit https://www.hcup-us.ahrq.gov/sidoverview.jsp

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Health Insurance	Private Medicaid Other Public Uninsured	Refers to expected primary payer. Medicaid may include CHIP and Medicare. Other Public includes military insurance, Indian Health Service, and other federal, state, or local government payment source. For more information, please see https://www.hcup-us.ahrq.gov/reports/methods/2014-03.pdf
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian/Pacific Islander Alone Non-Hispanic White Alone Non-Hispanic Black Alone Other	Other includes other and multiple race. Not available for all states.
Urban-Rural Residence	Large Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Large metro is defined as metropolitan areas with at least 1 million residents. Small/ medium metro is defined as metropolitan

Stratifier	Subcategory	Special Notes
		areas of less than 1 million residents. Non-metro is defined as micropolitan and non-metropolitan, non-micropolitan areas.
Median ZIP Code Income	Quartile 1 Quartile 2 Quartile 3 Quartile 4	Quartiles (poorest to wealthiest) based on current year median household income obtained from Claritas.

SAS Code

```
IF COMMUNITY_NONREHAB =1; * restrict to non-federal, non-rehab facilities;

ARRAY DX (&MAXDX) DX1-DX&MAXDX; * diagnosis codes;

*DENOMINATOR;
births=0;
DO I=1 TO &MAXDX;
IF DX(I) in:
('Z3800','Z3801','Z381','Z382','Z3830','Z3831','Z384','Z385','Z3861','Z3862','Z3863
','Z3864','Z3865','Z3866','Z3868','Z3869','Z387','Z388') then births=1; *ICD-10;
IF 'V30'<=:DX(I)<=:'V39' AND SUBSTR(DX(I),4,2) IN ('00','01','10','11') then
births=1;  *ICD-9;
 END;
DROP I;
IF ASOURCE in (2,3) then births=0;  * exclude transfers from another facility to
avoid duplication;
IF PointOfOriginUB04 in ('4','B','D','E','F') then births=0;
IF PointOfOriginUB04 in ('5','6') and ATYPE ne 4 then births=0;

*NUMERATOR;
if births=1 then do;
NAS=0;
DO I=1 TO &MAXDX;
IF DX(I)=:'P961' THEN NAS=1; *ICD-10;
IF DX(I)=:'7795' THEN NAS=1; *ICD-9;
IF DX(I) IN: ('76500'-'76505','7707','7721','7775','7776', '7797') THEN NAS=0; *
reclassify possibly iatrogenic cases in ICD-9 only;
 END;
END;
DROP I;

*PATIENT STATE RESIDENCE;
LENGTH PSTATE $2;
if not missing(pstco2) then PSTATE = fipstate(int(pstco2/1000));
LABEL NAS="INFANT WITH ABSTINENCE SYNDROME"
PSTATE="PATIENT RESIDENCE STATE";
```

School Readiness

Percent of children meeting the criteria developed for school readiness

GOAL

To increase the percent of children who are developmentally on track and ready for school.

DEFINITION

Numerator: Number of children, ages 3 through 5, who are reported by a parent to meet age-appropriate developmental expectations in 4 of 5 domains (early learning skills, social-emotional development, self-regulation, motor development, health) without needing support in any domain

Denominator: Number of children, ages 3 through 5

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Early and Middle Childhood (EMC) Objective D01: Increase the proportion of children who are developmentally on track and ready for school. (Developmental)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH).

POPULATION HEALTH SIGNIFICANCE

Early childhood is a critical period where experiences impact the structural development of the brain and neurobiological pathways for functional development. Studies have shown that children's early learning skills, self-regulation, social emotional development and motor skills at school entry are good predictors of later academic achievement, high levels of education and secure employment. Social gradients in language and literacy, communication and socioemotional functioning emerge early for children across socioeconomic backgrounds, and these differences persist into the school years. Interventions such as home visiting or high-quality preschool may help reduce these gaps, and act as a protective factor against the future onset of adult disease and disability. However, differences persist in children's access to supportive, nurturing environments and experiences that can optimize development and mitigate risk factors. Efforts to expand receipt of high-quality early childhood programs may increase development of school readiness skills among young children, setting the stage for optimal learning later in life.

(1) Centers for Disease Control and Prevention. Early Care and Education Portal. 2022 September 21. https://www.cdc.gov/earlycare/index.html

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical SIGNIFICANCE with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than

2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Total	Early Learning Skills Social-Emotional Development Self-Regulation Motor Development Health	
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficultiesor expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language

Stratifier	Subcategory	Special Notes
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NOM_School Readiness***/

*****************************************************************
****** Reverse coding so most desirable response is higher *******
*****************************************************************;
      array recode (*) RECOGBEGIN SAMESOUND READONEDIGIT SIMPLEADDITION
GROUPOFOBJECTS RECOGABC WRITENAME
            NAMEEMOTIONS SHARETOYS PLAYWELL HURTSAD CLEAREXP FOCUSON
            K2Q01 K2Q01_D HCABILITY ;
      array newname (*) EL_beginsound EL_samesound EL_onedigit EL_simpleadd
EL_groupmore EL_letters EL_writename
            SE_recogemotions SE_sharetoys SE_playwell SE_showconcern
SE_explainthings SE_focustask
             H_generalhealth H_conditionteeth H_howoften;
      do i=1 to dim(newname);
      if recode(i) in (1,2,3,4,5) then newname(i)=6-recode(i); else
newname(i)=recode(i);
      end;

      if HCEXTENT in (1,2,3) then H_extent=4-HCEXTENT; else H_extent=HCEXTENT;

      EL_wordsrhyme=RHYMEWORD_R;
      EL_count=COUNTTO_R;
      SR_endstartactivity=STARTNEWACT;
      SR_calmdown=CALMDOWN_R;
      SR_waitturn=WAITFORTURN;
      SR_distracted=DISTRACTED;
```

```
      SR_temper=TEMPER_R;
      M_circle=DRAWACIRCLE;
      M_face=DRAWAFACE;
      M_person=DRAWAPERSON;
      M_bounceball=BOUNCEABALL;

      *Create combined variable on health conditions and impact;
            if H_howoften = .M or H_extent = .M then H_healthconds = .M ;
            if H_howoften = 5 then H_healthconds = 4 ;
            if H_howoften = 4 then H_healthconds = 3 ;
            if H_howoften = 3 or (H_extent = 2 or H_extent = 3) then H_healthconds
= 2 ;
            if H_howoften in (1,2) then H_healthconds = 1 ;
            if H_extent = 1 then H_healthconds = 1;


**********************************************
****** Coding individual items by domain *******
**********************************************

********Early Learning Skills********
* 1. How often can this child recognize the beginning sound of a word? For example,
the word "ball" starts with the "buh" sound? ;
            if sc_age_Years=3 then do;
            if EL_beginsound=1 then EL_beginsound_index=2 ;
            if EL_beginsound in (2,3,4,5) then EL_beginsound_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if EL_beginsound=1 then EL_beginsound_index=1 ;
            if EL_beginsound=2 then EL_beginsound_index=2 ;
            if EL_beginsound in (3,4,5) then EL_beginsound_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if EL_beginsound in (1,2) then EL_beginsound_index=1 ;
            if EL_beginsound=3 then EL_beginsound_index=2 ;
            if EL_beginsound in (4,5) then EL_beginsound_index=3 ;
            end;

* 2. How often can this child come up with words that start with the same sound?
For example, "sock" and "sun?" ;
            if sc_age_Years=3 then do;
            if EL_samesound=1 then EL_samesound_index=2 ;
            if EL_samesound in (2,3,4,5) then EL_samesound_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if EL_samesound=1 then EL_samesound_index=1 ;
            if EL_samesound=2 then EL_samesound_index=2 ;
            if EL_samesound in (3,4,5) then EL_samesound_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if EL_samesound in (1,2) then EL_samesound_index=1 ;
            if EL_samesound=3 then EL_samesound_index=2 ;
            if EL_samesound in (4,5) then EL_samesound_index=3 ;
            end;

* 3. How often can this child come up with words that rhyme? For example, "cat" and
"mat?" ;
            if sc_age_Years in (3,4) then do;
            if EL_wordsrhyme=1  then EL_wordsrhyme_index=2 ;
```

```
            if EL_wordsrhyme in (2,3,4) then EL_wordsrhyme_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if EL_wordsrhyme=1 then EL_wordsrhyme_index=1 ;
            if EL_wordsrhyme=2 then EL_wordsrhyme_index=2 ;
            if EL_wordsrhyme in (3,4) then EL_wordsrhyme_index=3 ;
            end;

* 4. How many letters of the alphabet can this child recognize? ;
            if sc_age_Years=3 then do;
            if EL_letters=1 then EL_letters_index=1 ;
            if EL_letters=2 then EL_letters_index=2 ;
            if EL_letters in (3,4,5) then EL_letters_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if EL_letters=1 then EL_letters_index=1 ;
            if EL_letters in (2,3) then EL_letters_index=2 ;
            if EL_letters in (4,5) then EL_letters_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if EL_letters in (1,2) then EL_letters_index=1 ;
            if EL_letters in (3,4) then EL_letters_index=2 ;
            if EL_letters=5 then EL_letters_index=3 ;
            end;

* 5. How often can this child write his or her first name, even if some of the
letters are not quite right or are backwards? ;
            if sc_age_Years=3 then do;
            if EL_writename=1 then EL_writename_index=2 ;
            if EL_writename in (2,3,4,5) then EL_writename_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if EL_writename=1 then EL_writename_index=1 ;
            if EL_writename=2 then EL_writename_index=2 ;
            if EL_writename in (3,4,5) then EL_writename_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if EL_writename in (1,2) then EL_writename_index=1 ;
            if EL_writename in (3,4) then EL_writename_index=2 ;
            if EL_writename=5 then EL_writename_index=3 ;
            end;

* 6. How often can this child read one-digit numbers? For example, 2 or 8? ;
            if sc_age_Years=3 then do;
            if EL_onedigit=1 then EL_onedigit_index=2 ;
            if EL_onedigit in (2,3,4,5) then EL_onedigit_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if EL_onedigit=1 then EL_onedigit_index=1 ;
            if EL_onedigit in (2,3) then EL_onedigit_index=2 ;
            if EL_onedigit in (4,5) then EL_onedigit_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if EL_onedigit in (1,2,3) then EL_onedigit_index=1 ;
            if EL_onedigit=4 then EL_onedigit_index=2 ;
            if EL_onedigit=5 then EL_onedigit_index=3 ;
            end;

* 7. If asked to count objects, how high could this child count correctly? ;
```

```
            if sc_age_Years=3 then do;
            if EL_count=1 then EL_count_index=1 ;
            if EL_count=2 then EL_count_index=2 ;
            if EL_count in (3,4,5) then EL_count_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if EL_count in (1,2) then EL_count_index=1 ;
            if EL_count=3 then EL_count_index=2 ;
            if EL_count in (4,5) then EL_count_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if EL_count in (1,2,3) then EL_count_index=1;
            if EL_count=4 then EL_count_index=2 ;
            if EL_count=5 then EL_count_index=3 ;
            end;

* 8. How often can this child tell which group of objects has more? For example, a
group of SEven blocks has more than a group of four blocks? ;
            if sc_age_Years=3 then do;
            if EL_groupmore=1 then EL_groupmore_index=1 ;
            if EL_groupmore=2 then EL_groupmore_index=2 ;
            if EL_groupmore in (3,4,5) then EL_groupmore_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if EL_groupmore in (1,2) then EL_groupmore_index=1 ;
            if EL_groupmore=3 then EL_groupmore_index=2 ;
            if EL_groupmore in (4,5) then EL_groupmore_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if EL_groupmore in (1,2,3) then EL_groupmore_index=1 ;
            if EL_groupmore=4 then EL_groupmore_index=2 ;
            if EL_groupmore=5 then EL_groupmore_index=3 ;
            end;

* 9. How often can this child correctly do simple addition? For example, two blocks
and three blocks add to a total of five blocks? ;
            if sc_age_Years=3 then do;
            if EL_simpleadd=1 then EL_simpleadd_index=2 ;
            if EL_simpleadd in (2,3,4,5) then EL_simpleadd_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if EL_simpleadd=1 then EL_simpleadd_index=1 ;
            if EL_simpleadd=2 then EL_simpleadd_index=2 ;
            if EL_simpleadd in (3,4,5) then EL_simpleadd_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if EL_simpleadd in (1,2) then EL_simpleadd_index=1 ;
            if EL_simpleadd=3 then EL_simpleadd_index=2 ;
            if EL_simpleadd in (4,5) then EL_simpleadd_index=3 ;
            end;

*****Social Emotional *******
* 10. How often does this child explain things they have SEen or done so that you
know what happened? ;
            if sc_age_Years=3 then do;
            if SE_explainthings=1 then SE_explainthings_index=1 ;
            if SE_explainthings in (2,3) then SE_explainthings_index=2 ;
            if SE_explainthings in (4,5) then SE_explainthings_index=3 ;
            end;
```

```
            if sc_age_Years=4 then do;
            if SE_explainthings in (1,2) then SE_explainthings_index=1 ;
            if SE_explainthings=3 then SE_explainthings_index=2 ;
            if SE_explainthings in (4,5) then SE_explainthings_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if SE_explainthings in (1,2,3) then SE_explainthings_index=1 ;
            if SE_explainthings=4 then SE_explainthings_index=2 ;
            if SE_explainthings=5 then SE_explainthings_index=3 ;
            end;

* 11. How often can this child recognize and name their own emotions? ;
            if sc_age_Years=3 then do;
            if SE_recogemotions=1 then SE_recogemotions_index=1 ;
            if SE_recogemotions=2 then SE_recogemotions_index=2 ;
            if SE_recogemotions in (3,4,5) then SE_recogemotions_index=3 ;
            end;
            if sc_age_Years in (4,5) then do;
            if SE_recogemotions in (1,2) then SE_recogemotions_index=1 ;
            if SE_recogemotions=3 then SE_recogemotions_index=2 ;
            if SE_recogemotions in (4,5) then SE_recogemotions_index=3 ;
            end;

* 12. How often does this child share toys or games with others? ;
            if sc_age_Years in (3,4) then do;
            if SE_sharetoys=1 then SE_sharetoys_index=1 ;
            if SE_sharetoys in (2,3) then SE_sharetoys_index=2 ;
            if SE_sharetoys in (4,5) then SE_sharetoys_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if SE_sharetoys in (1,2) then SE_sharetoys_index=1 ;
            if SE_sharetoys=3 then SE_sharetoys_index=2 ;
            if SE_sharetoys in (4,5) then SE_sharetoys_index=3 ;
            end;

* 13. How often does this child play well with others? ;
            if sc_age_Years in (3,4,5) then do;
            if SE_playwell in (1,2) then SE_playwell_index=1 ;
            if SE_playwell=3 then SE_playwell_index=2 ;
            if SE_playwell in (4,5) then SE_playwell_index=3 ;
            end;

* 14. How often does this child show concern when they SEe others are hurt or
unhappy? ;
            if sc_age_Years in (3,4,5) then do;
            if SE_showconcern in (1,2) then SE_showconcern_index=1 ;
            if SE_showconcern=3 then SE_showconcern_index=2 ;
            if SE_showconcern in (4,5) then SE_showconcern_index=3 ;
            end;

* 15. How often can this child focus on a task you give them for at least five
minutes? For example, simple chores? ;
            if sc_age_Years=3 then do;
            if SE_focustask=1 then SE_focustask_index=1 ;
            if SE_focustask=2 then SE_focustask_index=2 ;
            if SE_focustask in (3,4,5) then SE_focustask_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if SE_focustask=1 then SE_focustask_index=1 ;
```

```
            if SE_focustask in (2,3) then SE_focustask_index=2 ;
            if SE_focustask in (4,5) then SE_focustask_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if SE_focustask in (1,2) then SE_focustask_index=1 ;
            if SE_focustask=3 then SE_focustask_index=2 ;
            if SE_focustask in (4,5) then SE_focustask_index=3 ;
            end;

*****SElf-Regulation *******
* 16. How often does this child have difficulty when asked to end one activity and
start a new activity? ;
            if sc_age_Years in (3,4,5) then do;
            if SR_endstartactivity in (1,2) then SR_endstartactivity_index=1 ;
            if SR_endstartactivity=3 then SR_endstartactivity_index=2 ;
            if SR_endstartactivity in (4,5) then SR_endstartactivity_index=3 ;
            end;

* 17. How often does this child have trouble calming down? ;
            if sc_age_Years in (3,4,5) then do;
            if SR_calmdown in (1,2) then SR_calmdown_index=1 ;
            if SR_calmdown=3 then SR_calmdown_index=2 ;
            if SR_calmdown in (4,5) then SR_calmdown_index=3 ;
            end;

* 18. How often does this child have difficulty waiting for their turn? ;
            if sc_age_Years in (3,4,5) then do;
            if SR_waitturn in (1,2) then SR_waitturn_index=1 ;
            if SR_waitturn=3 then SR_waitturn_index=2 ;
            if SR_waitturn in (4,5) then SR_waitturn_index=3 ;
            end;

* 19. How often does this child get easily distracted? ;
            if sc_age_Years in (3,4,5) then do;
            if SR_distracted in (1,2) then SR_distracted_index=1 ;
            if SR_distracted=3 then SR_distracted_index=2 ;
            if SR_distracted in (4,5) then SR_distracted_index=3 ;
            end;

* 20. How often does this child loSE their temper? ;
            if sc_age_Years in (3,4,5) then do;
            if SR_temper in (1,2) then SR_temper_index=1 ;
            if SR_temper=3 then SR_temper_index=2 ;
            if SR_temper in (4,5) then SR_temper_index=3 ;
            end;

*****Motor*****
* 21. How well can this child draw a circle? ;
            if sc_age_Years=3 then do;
            if M_circle=1 then M_circle_index=1 ;
            if M_circle=2 then M_circle_index=2 ;
            if M_circle in (3,4) then M_circle_index=3 ;
            end;
            if sc_age_Years in (4,5) then do;
            if M_circle in (1,2) then M_circle_index=1 ;
            if M_circle=3 then M_circle_index=2 ;
            if M_circle=4 then M_circle_index=3 ;
            end;
```

```
* 22. How well can this child draw a face with eyes and mouth? ;
            if sc_age_Years=3 then do;
            if M_face=1 then M_face_index=1 ;
            if M_face=2 then M_face_index=2 ;
            if M_face in (3,4) then M_face_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if M_face=1 then M_face_index=1 ;
            if M_face in (2,3) then M_face_index=2 ;
            if M_face=4 then M_face_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if M_face in (1,2) then M_face_index=1 ;
            if M_face=3 then M_face_index=2 ;
            if M_face=4 then M_face_index=3 ;
            end;

* 23. How well can this child draw a person with a head, body, arms, and legs? ;
            if sc_age_Years=3 then do;
            if M_person=1 then M_person_index=2 ;
            if M_person in (2,3,4) then M_person_index=3 ;
            end;
            if sc_age_Years=4 then do;
            if M_person=1 then M_person_index=1 ;
            if M_person=2 then M_person_index=2 ;
            if M_person in (3,4) then M_person_index=3 ;
            end;
            if sc_age_Years=5 then do;
            if M_person in (1,2) then M_person_index=1 ;
            if M_person=3 then M_person_index=2 ;
            if M_person=4 then M_person_index=3 ;
            end;

* 24. How well can this child bounce a ball for SEveral SEconds? ;
            if sc_age_Years=3 then do;
            if M_bounceball=1 then M_bounceball_index=2 ;
            if M_bounceball in (2,3,4) then M_bounceball_index=3 ;
            end;
            if sc_age_Years in (4,5) then do;
            if M_bounceball=1 then M_bounceball_index=1 ;
            if M_bounceball=2 then M_bounceball_index=2 ;
            if M_bounceball in (3,4) then M_bounceball_index=3 ;
            end;

*****Health*****
* 25. In general, how would you describe this child's health? ;
            if sc_age_Years in (3,4,5) then do;
            if H_generalhealth in (1,2) then H_generalhealth_index=1 ;
            if H_generalhealth=3 then H_generalhealth_index=2 ;
            if H_generalhealth in (4,5) then H_generalhealth_index=3 ;
            end;

* 26. How would you describe the condition of this child's teeth ;
            if sc_age_Years in (3,4,5) then do;
            if H_conditionteeth in (1,2) then H_conditionteeth_index=1 ;
            if H_conditionteeth=3 then H_conditionteeth_index=2 ;
            if H_conditionteeth in (4,5) then H_conditionteeth_index=3 ;
            end;
```

```
* 27. Health Conditions and impacts;
            if sc_age_Years in (3,4,5) then do;
            if H_healthconds = 1 then H_healthconds_index = 1 ;
            if H_healthconds = 2 then H_healthconds_index = 2 ;
            if H_healthconds in (3,4) then H_healthconds_index= 3 ;
            end;

*********************************************
****** Domain and Overall Scoring *******
*********************************************;
EL_mean=mean(EL_beginsound_index, EL_wordsrhyme_index, EL_samesound_index,
EL_letters_index, EL_simpleadd_index, EL_onedigit_index, EL_count_index,
EL_groupmore_index, EL_writename_index);
SE_mean=mean(SE_showconcern_index, SE_recogemotions_index, SE_playwell_index,
SE_sharetoys_index, SE_explainthings_index, SE_focustask_index);
SR_mean=mean(SR_calmdown_index, SR_waitturn_index, SR_distracted_index,
SR_endstartactivity_index, SR_temper_index);
M_mean=mean(M_circle_index, M_face_index, M_person_index, M_bounceball_index);
H_mean=mean(H_generalhealth_index, H_conditionteeth_index, H_healthconds_index);

array d_mean(5) EL_mean SE_mean SR_mean M_mean H_mean;
array d_score(5) EL_domain SE_domain SR_domain M_domain H_domain;
array d_OT(5) EL_OT SE_OT SR_OT M_OT H_OT;
do i=1 to 5;
if .<d_mean[i]<2 then d_score[i]=1; * Needs Support;
if 2<=d_mean[i]<2.5 then d_score[i]=2; * Emerging;
if d_mean[i]>=2.5 then d_score[i]=3; * On Track;
end;
domain_n=N(of d_score[*]);
label EL_domain = "Early Learning Skills Index";
label SE_domain = "Social Emotional Development Index";
label SR_domain = "SElf-Regulation Index";
label M_domain  = "Motor Development Index";
label H_domain  = "Health Index";
label domain_n = "Number of non-missing domains";
domain_NS=0; domain_E=0; domain_OT=0;
do i=1 to 5;
      if d_score[i]=1 then domain_NS + 1;
      if d_score[i]=2 then domain_E + 1;
      if d_score[i]=3 then domain_OT + 1;
      if d_score[i]=3 then d_OT[i]=1; if d_score[i] in (1,2) then d_OT[i]=2;
end;
label domain_NS = "Number of Needs Support Domains";
label domain_E = "Number of Emerging Domains";
label domain_OT = "Number of On Track Domains";
label EL_OT = "Early Learning Skills - On Track";
label SE_OT = "Social Emotional Development - On Track";
label SR_OT = "SElf-Regulation - On Track";
label M_OT  = "Motor Development - On Track";
label H_OT = "Health - On Track";
/* Overall Measure */
if domain_n=5 then do;
if domain_NS>=2 then HRTL_index=1; * Needs Support in multiple domains;
if domain_OT<=4 and domain_NS<=1 then HRTL_index=2; * Emerging - less than 5 On
Track domains and no more than 1 Needs Support;
if domain_OT in (4,5) and domain_NS=0 then HRTL_index=3; * On Track - 4 or 5
domains On Track and 0 Needs Support;
end;
if 1<=domain_n<5 then do;  * include available data;
```

```
if domain_n=domain_OT then hrtl_index=3;
else if domain_NS>=1 then hrtl_index=1;
else hrtl_index=2;
end;
if HRTL_index=3 then HRTL_3to5=1; *Yes, Needs no supports;
if HRTL_index in (1,2) then HRTL_3to5=2; *No, Needs supports;
label HRTL_index = "Healthy and Ready to Learn Index";
label HRTL_3to5 = "NOM_School Readiness";
/* incorporate .L legitimate skip and .M missing */
array missing [*] EL_domain EL_mean EL_beginsound_index EL_wordsrhyme_index
EL_samesound_index EL_letters_index EL_simpleadd_index EL_onedigit_index
EL_count_index EL_groupmore_index EL_writename_index
                          SE_domain SE_mean SE_showconcern_index
SE_recogemotions_index SE_playwell_index SE_sharetoys_index SE_explainthings_index
SE_focustask_index
                          SR_domain SR_mean SR_calmdown_index SR_waitturn_index
SR_distracted_index SR_endstartactivity_index SR_temper_index
                          M_domain M_mean M_circle_index M_face_index
M_person_index M_bounceball_index
                        H_domain H_mean H_generalhealth_index
H_conditionteeth_index H_healthconds_index
                          HRTL_3to5 HRTL_index domain_NS domain_E domain_OT
domain_n EL_OT SE_OT SR_OT M_OT H_OT;
do i=1 to dim(missing);
if missing[i]=. and sc_age_Years in (3,4,5) then missing[i]=.M;
if sc_age_Years not in (3,4,5) then missing[i]=.L;
end;
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Tooth Decay/Cavities

Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year

GOAL

To reduce the percent of children and adolescents who have dental caries or decayed teeth.

DEFINITION

Numerator: Number of children, ages 1 through 17, who are reported by a parent to have frequent or chronic difficulty with decayed teeth or cavities in the past year
Denominator: Number of children, ages 1 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Oral Health of Children and Adolescents (OH) Objective 01: Reduce the proportion of children and adolescents with lifetime tooth decay experience in their primary or permanent teeth. (Baseline: 48.4% in 2013-16, Target: 42.9%)

Related to Oral Health of Children and Adolescents (OH) Objective 02: Reduce the proportion of children and adolescents with active and currently untreated tooth decay in their primary or permanent teeth. (Baseline 13.4% in 2013-16, Target: 10.2%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

Tooth decay (cavities) is among the most common chronic conditions of childhood. Untreated tooth decay can lead to pain and infections which may result in problems with eating, speaking, learning and playing. Children with poor oral health tend to miss more school and get lower grades than those who do not. Tooth decay can be prevented through recommended preventive dental care, including fluoride varnish and dental sealants, community water fluoridation, and oral hygiene practices, including brushing and flossing.

(1) Centers for Disease Control and Prevention. Children's Oral Health. 2022 April 66. https://www.cdc.gov/oralhealth/basics/childrens-oral-health/index.html

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System

(DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical SIGNIFICANCE with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	1-5 Years 6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language

Stratifier	Subcategory	Special Notes
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/*** Tooth decay/cavities, age 1-17 years***/

NOM14 = CAVITIES; /*Decayed teeth or cavities*/
if SC_AGE_YEARS < 1 then NOM14 = .L;
label NOM14 = "NOM-14: Tooth decay/cavities";

/* 1= Yes,  2= No */
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Child Mortality

Child mortality rate, ages 1 through 9, per 100,000

GOAL

To reduce the death rate of children, ages 1 through 9.

DEFINITION

Numerator: Number of deaths among children, ages 1 through 9 years

Denominator: Number of children, ages 1 through 9 years

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 03: Reduce the rate of deaths among children and adolescents aged 1 to 19 years. (Baseline: 25.2 deaths among children and adolescents aged 1 to 19 years per 100,000 population occurred in 2018, Target: 18.4 deaths per 100,000 population)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)
Population estimates come from the U.S. Census Bureau

POPULATION HEALTH SIGNIFICANCE

Although the risk of death for children declines sharply beyond infancy, there were still over 6,000 deaths among U.S. children ages 1 through 9 in 2022. Unintentional injury continues to be the leading cause of death in children 1 to 9 years. Other leading causes include congenital malformations, cancer, and homicide.

(1) Curtin SC, Tejada-Vera B, Bastian BA. Deaths: Leading causes for 2022. National Vital Statistics Reports; vol 73 no 10. Hyattsville, MD: National Center for Health Statistics. 2024. DOI: https://dx.doi.org/10.15620/cdc/164020.

FAD Availability by Year

Year	Data Not Available
2023	AS, FM, MH, PW
2022	AS, FM, MH, PW
2021	AS, FM, MH, PW
2020	AS, FM, MH, PW
2019	AS, FM, MH, PW, VI
2018	FM, MH, PW, VI
2017	FM, MH, PW
2016	FM, MH, PW
2015	FM, MH, PW
2014	FM, MH, PW, VI
2013	FM, MH, PW, VI
2012	FM, MH, PW
2011	FM, MH, PW
2010	FM, MH, PW
2009	FM, MH, PW

Data Notes

Population denominators for 2009 are from revised intercensal July 1 estimates. Population denominators for 2010 are from Census April 1 estimates. Population denominators for 2011 through 2023 are from postcensal July 1 estimates for each vintage year. Population denominators for territories are from the Census International Data Base. Estimates by stratifiers are calculated with three-year data to improve precision and reportability.

Race categories are no longer being reported by bridged race and will only be reported by single race from 2018-2020 onward. Urban/rural residence is not available for CT in 2020-2022 and 2021-2023. Urban/rural residence and race/ethnicity denominators are not available for territories. For more information about the mortality file, please see the User's Guide located at **http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm**

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Child Age	1-4 Years 5-9 Years	
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Includes imputed race. Not available for territories.
Sex	Female Male	
Urban/Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

SAS Code

```
IF RESTATUS NE 4; * restrict to resident deaths;
IF 3<=AGE<=7 THEN CHILD_DEATH=1; * age = age recode 27, restrict to age 1-9;
```

Data Alert

2020-2022 and 2021-2023 urban/rural residence is not available for CT due to lack of population denominators. US and Region 1 urban/rural estimates have been updated to exclude CT.

Adolescent Mortality

Adolescent mortality rate, ages 10 through 19, per 100,000

GOAL

To reduce the death rate of adolescents, ages 10 through 19.

DEFINITION

Numerator: Number of deaths among adolescents, ages 10 through 19 years

Denominator: Number of adolescents, ages 10 through 19 years

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 03: Reduce the rate of deaths among children and adolescents aged 1 to 19 years. (Baseline: 25.2 deaths among children and adolescents aged 1 to 19 years per 100,000 population occurred in 2018, Target: 18.4 deaths per 100,000 population)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)
Population estimates come from the U.S. Census Bureau

POPULATION HEALTH SIGNIFICANCE

Although the risk of death declines sharply in early childhood, mortality rates begin to increase again in adolescence. Over 13,000 deaths occurred among U.S. children ages 10 through 19 in 2019. The leading causes of illness and death among adolescents and young adults are largely preventable. Unintentional injury continues to be the leading cause of death in adolescents 10 to 19 years, followed by suicide, homicide, and malignant neoplasms.

(1) Heron M. Deaths: Leading Causes for 2019. Natl Vital Stat Rep. 2021;70(9):1-114. https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-09-508.pdf
(2)

FAD Availability by Year

Year	Data Not Available
2023	AS, FM, MH, PW
2022	AS, FM, MH, PW
2021	AS, FM, MH, PW
2020	AS, FM, MH, PW
2019	AS, FM, MH, PW, VI
2018	FM, MH, PW, VI
2017	FM, MH, PW
2016	FM, MH, PW
2015	FM, MH, PW
2014	FM, MH, PW, VI
2013	FM, MH, PW, VI
2012	FM, MH, PW
2011	FM, MH, PW
2010	FM, MH, PW
2009	FM, MH, PW

Data Notes

Population denominators for 2009 are from revised intercensal July 1 estimates. Population denominators for 2010 are from Census April 1 estimates. Population denominators for 2011 through 2023 are from postcensal July 1 estimates for each vintage year. Population denominators for territories are from the Census International Data Base. Estimates by stratifiers are calculated with three-year data to improve precision and reportability. Race categories are no longer being reported by bridged race and will only be reported by single race from 2018-2020 onward. Urban/rural residence is not available for CT in 2020-2022 and 2021-2023. Urban/rural residence and race/ethnicity denominators are not available for territories. For more information about the mortality file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Child Age	10-14 Years 15-19 Years	
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Includes imputed race. Not available for territories.
Sex	Female Male	
Urban/Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

SAS Code

```
IF RESTATUS NE 4; * restrict to resident deaths;
IF AGE in (8,9) THEN AD_DEATH=1; * age = age recode 27, restrict to age 10-19;
```

Data Alert

2020-2022 and 2021-2023 urban/rural residence is not available for CT due to lack of population denominators. US and Region 1 urban/rural estimates have been updated to exclude CT.

Adolescent Motor Vehicle Death

Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000

GOAL

To reduce the death rate of adolescents, ages 15 through 19, from motor vehicle crashes

DEFINITION

Numerator: Number of deaths to adolescents ages 15 through 19 years caused by motor vehicle crashes. This includes all occupant, pedestrian, motorcycle, bicycle, etc. deaths caused by motor vehicles.

Denominator: Number of adolescents, ages 15 through 19 years

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Objective Injury and Violence Prevention (IVP) 06: Reduce motor vehicle crash-related deaths. (Baseline: 11.2 motor vehicle traffic-related deaths per 100,000 population occurred in 2018 (age adjusted to the year 2000 standard population), Target: 10.1 per 100,000 population)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)
Population estimates come from the U.S. Census Bureau

POPULATION HEALTH SIGNIFICANCE

Motor vehicle accidents account for over half of all unintentional injury deaths among teenagers.[1] Teenage drivers have crash rates that are nearly three times those of drivers older than 20 years.[2] Factors related to lack of driving experience and maturity contribute to motor vehicle mortality, such as speeding, distracted driving, reckless driving, impaired driving, not wearing seatbelts, and presence of other teenage passengers.[2] Males ages 16-19 are three times as likely to die in motor vehicle accidents as females the same age.[2]

(1) Centers for Disease Control and Prevention. WISQARS—Web-based Injury Statistics Query and Reporting System. 2021 December. https://www.cdc.gov/injury/wisqars/index.html
(2) Centers for Disease Control and Prevention. Teen Drivers: Get the Facts. 2022 November. https://www.cdc.gov/motorvehiclesafety/teen_drivers/teendrivers_factsheet.html

FAD Availability by Year

Year	Data Not Available
2021-2023	AS, FM, MH, PW
2020-2022	AS, FM, MH, PW
2019-2021	AS, FM, MH, PW
2018-2020	AS, FM, MH, PW
2017-2019	AS, FM, MH, PW, VI
2016-2018	FM, MH, PW, VI
2015-2017	FM, MH, PW
2014-2016	FM, MH, PW, VI
2013-2015	FM, MH, PW, VI
2012-2014	FM, MH, PW, VI
2011-2013	FM, MH, PW, VI
2010-2012	FM, MH, PW
2009-2011	FM, MH, PW
2008-2010	FM, MH, PW
2007-2009	FM, MH, PW

Data Notes

Population denominators for 2009 are from revised intercensal July 1 estimates. Population denominators for 2010 are from Census April 1 estimates. Population denominators for 2011 through 2023 are from postcensal July 1 estimates for each vintage year. Population denominators for territories are from the Census International Data Base. Due to the relatively small number of deaths, three-year data estimates are provided to improve precision and reportability. However, trends are mitigated with three-year data where each estimate shares 67% (2/3) of the data with the next estimate. Standard statistical tests that assume independence should not be used when comparing overlapping 3-year estimates. Estimates by stratifiers are calculated with five-year data to improve precision and reportability. Race categories are no longer being reported by bridged race and will only be reported by single race from 2018-2022 onward. Urban/rural residence is not available for CT in 2018-2022 and 2019-2023. Urban/rural residence and race/ethnicity denominators are not available for territories. For more information about the mortality file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Includes imputed race. Not available for territories.
Sex	Female Male	
Urban/Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

SAS Code

```
IF RESTATUS NE 4; * restrict to resident deaths;
IF (('V30'<=substr(ICD,1,3)<='V79' AND '4'<=substr(ICD,4,1)<='9') OR
 ('V81'<=substr(ICD,1,3)<='V82' AND substr(ICD,4,1)='1') OR ('V83'<=substr(ICD,1,3)<='V86'
 AND '0'<=substr(ICD,4,1)<='3')) OR
 (('V20'<=substr(ICD,1,3)<='V28' AND '3'<=substr(ICD,4,1)<='9') OR
 (substr(ICD,1,3)='V29' AND ('4'<=substr(ICD,4,1)<='9'))) OR
 (('V12'<=substr(ICD,1,3)<='V14' AND '3'<=substr(ICD,4,1)<='9') OR
 (substr(ICD,1,3)='V19' AND ('4'<=substr(ICD,4,1)<='6' ))) OR
 (('V02'<=substr(ICD,1,3)<='V04' AND substr(ICD,4,1) IN ('1','9')) OR
 substr(ICD,1,4)='V092') OR
 (substr(ICD,1,3)='V80' AND '3'<=substr(ICD,4,1)<='5') OR
 ((substr(ICD,1,3)='V87' AND '0'<=substr(ICD,4,1)<='8') OR substr(ICD,1,4)='V892')  AND AGE IN (8,9) THEN
AD_MVT=1; *ICD = underlying cause of death, age = age recode 27, restrict to age 15-19;
```

Data Alert

2018-2022 and 2019-2023 urban/rural residence is not available for CT due to lack of population denominators. US and Region 1 urban/rural estimates have been updated to exclude CT.

Adolescent Suicide

Adolescent suicide rate, ages 10 through 19, per 100,000

GOAL

To eliminate self-induced, preventable morbidity and mortality.

DEFINITION

Numerator: Number of deaths attributed to suicide among adolescents, ages 15 through 19 years

Denominator: Number of adolescents, ages 15 through 19 years

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Mental Health and Mental Disorders (MHMD) Objective 01: Reduce the suicide rate. (Baseline: 14.2 suicides per 100,000 population occurred in 2018 (age adjusted to the year 2000 standard population), Target: 12.8 suicides per 100,000 population)

Related to MHMD Objective 02: Reduce suicide attempts by adolescents. (Baseline: 2.4 suicide attempts per 100 population of students in grades 9 through 12 occurred in the past 12 months, as reported in 2017, Target: 1.8 suicide attempts per 100)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)
Population estimates come from the U.S. Census Bureau

POPULATION HEALTH SIGNIFICANCE

Suicide is in the top three leading causes of death for adolescents ages 10 through 19 years.[1] Adolescent suicide increased 63% between 2007 and 2021 for 15–19-year-olds and more than tripled for 10- 14-year olds.[2] Suicide and suicidal ideation is often indicative of mental health problems and stressful or traumatic life events. In 2019,18.8 percent of high school students reported they had thought seriously about committing suicide in the past year.[3] While females are more likely to report considering suicide,[3] males are more likely to die by suicide.[1] The suicide mortality rate for males is nearly three times that of females.[1]

(1) Heron M. Deaths: Leading Causes for 2019. Natl Vital Stat Rep. 2021;70(9):1-114. https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-09-508.pdf

(2) Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Mortality 1999-2020 on CDC WONDER Online Database, released in 2021. Data are from the Multiple Cause of Death Files, 1999-2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on Sep 18, 2023 10:51:43 AM

(3) Centers for Disease Control, Division of Adolescent and School Health. Youth Risk Behavior Survey: Data Summary and Trends Report, 2009-2019. Mental Health and Suicide. (pp 57-69) https://www.cdc.gov/healthyyouth/data/yrbs/pdf/YRBSDataSummaryTrendsReport2019-508.pdf

FAD Availability by Year

Year	Data Not Available
2021-2023	AS, FM, MH, PW
2020-2022	AS, FM, MH, PW
2019-2021	AS, FM, MH, PW
2018-2020	AS, FM, MH, PW
2017-2019	AS, FM, MH, PW, VI
2016-2018	FM, MH, PW, VI
2015-2017	FM, MH, PW

Year	Data Not Available
2014-2016	FM, MH, PW, VI
2013-2015	FM, MH, PW, VI
2012-2014	FM, MH, PW, VI
2011-2013	FM, MH, PW, VI
2010-2012	FM, MH, PW
2009-2011	FM, MH, PW

Data Notes

Population denominators for 2009 are from revised intercensal July 1 estimates. Population denominators for 2010 are from Census April 1 estimates. Population denominators for 2011 through 2023 are from postcensal July 1 estimates for each vintage year. Population denominators for territories are from the Census International Data Base. Due to the relatively small number of deaths, total estimates are shown with three-year data while estimates by stratifiers are shown with five-year data to improve precision and reportability. However, trends are mitigated with three-year data where each estimate shares 67% (2/3) of the data with the next estimate. Standard statistical tests that assume independence should not be used when comparing overlapping 3-year estimates. Race categories are no longer being reported by bridged race and will only be reported by single race from 2018-2022 onward. Urban/rural residence is not available for CT in 2018-2022 and 2019-2023. Urban/rural residence and race/ethnicity denominators are not available for territories. For more information about the mortality file, please see the User's Guide located at
http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Child Age	10-14 Years 15-19 Years	
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Includes imputed race. Not available for territories..
Sex	Female Male	
Urban/Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

SAS Code

```
IF RESTATUS NE 4; * restrict to resident deaths;
IF ('X60'<=substr(ICD,1,3)<='X84' OR substr(ICD,1,3)='U03' OR substr(ICD,1,4)='Y870') AND AGE in (8,9) THEN AD_SUICIDE=1; *age = age recode 27, restrict to age 10-19;
```

Data Alert

2018-2022 and 2019-2023 urban/rural residence is not available for CT due to lack of population denominators. US and Region 1 urban/rural estimates have been updated to exclude CT.

Adolescent Firearm Death

Adolescent firearm death rate, ages 10 through 19, per 100,000

GOAL

To reduce the death rate of adolescents, ages 10 through 19, from firearms.

DEFINITION

Numerator: Number of deaths to adolescents, ages 10 through 19 years, caused by firearms.

Denominator: Number of adolescents, ages 10 through 19

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Injury and Violence Prevention (IVP) Objective 13: Reduce firearm-related deaths. (Baseline: 11.9 firearm-related deaths per 100,000 population occurred in 2018, Target: 10.7 per 100,000 population).

DATA SOURCES AND DATA ISSUES

National Vital Statistics System (NVSS)
Population estimates come from the U.S. Census Bureau

POPULATION HEALTH SIGNIFICANCE

More child and adolescent deaths occur from firearm-related injuries than by any other means.[1] Firearm-related deaths include suicide, homicide, unintentional, and undetermined deaths. Firearm-related deaths are involved in nearly 8 in 10 homicides and half of all suicides.[2] From 2019 to 2020, the firearm-related mortality rate increased by 26% for adolescents aged 15 through 19 years, and 50% for adolescents aged 10 through 14 years.[3] Among adolescents aged 15 through 19 years, the vast majority of the increase was due to homicide deaths (90%). Among younger adolescents aged 10 through 14 years, half of the increase was due to homicide deaths and 40% was due to suicide deaths.

(1) Lee LK, Fleegler EW, Goyal MK, et al. Firearm-Related Injuries and Deaths in Children and Youth [published online ahead of print, 2022 Oct 8]. Pediatrics. 2022;10.1542/peds.2022-060071. doi:10.1542/peds.2022-060071 https://publications.aap.org/pediatrics/article/150/6/e2022060071/189687/Firearm-Related-Injuries-and-Deaths-in-Children

(2) CDC Vital Signs: Firearm Deaths Grow, Disparities Widen. 6 June 2022. https://www.cdc.gov/vitalsigns/firearm-deaths/index.html

(3) Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Mortality 2018-2021 on CDC WONDER Online Database, released in 2021. Data are from the Multiple Cause of Death Files, 2018-2021, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10-expanded.html on Sep 18, 2023 3:00:50 PM

FAD Availability by Year

Year	Data Not Available
2021-2023	AS, FM, MH, PW
2020-2022	AS, FM, MH, PW
2019-2021	AS, FM, MH, PW
2018-2020	AS, FM, MH, PW
2017-2019	AS, FM, MH, PW, VI
2016-2018	FM, MH, PW, VI
2015-2017	FM, MH, PW
2014-2016	FM, MH, PW, VI
2013-2015	FM, MH, PW, VI
2012-2014	FM, MH, PW, VI
2011-2013	FM, MH, PW, VI
2010-2012	FM, MH, PW
2009-2011	FM, MH, PW

Year	Data Not Available
2008-2010	FM, MH, PW
2007-2009	FM, MH, PW

Data Notes

Population denominators for 2009 are from revised intercensal July 1 estimates. Population denominators for 2010 are from Census April 1 estimates. Population denominators for 2011 through 2023 are from postcensal July 1 estimates for each vintage year. Population denominators for territories are from the Census International Data Base. Due to the relatively small number of deaths, total estimates are shown with three-year data while estimates by stratifiers are shown with five-year data to improve precision and reportability. However, trends are mitigated with three-year data where each estimate shares 67% (2/3) of the data with the next estimate. Standard statistical tests that assume independence should not be used when comparing overlapping 3-year estimates. Race categories are no longer being reported by bridged race and will only be reported by single race from 2018-2022 onward. Urban/rural residence is not available for CT in 2018-2022 and 2019-2023. Urban/rural residence and race/ethnicity denominators are not available for territories. For more information about the mortality file, please see the User's Guide located at
http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Child Age	10-14 Years 15-19 Years	
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Includes imputed race. Not available for territories.
Urban/Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

SAS Code

```
IF RESTATUS NE 4; * restrict to resident deaths;
IF 'W32'<=substr(ICD,1,3)<='W34' OR 'X72'<=substr(ICD,1,3)<='X74' OR 'X93'<=substr(ICD,1,3)<='X95'
OR 'Y22'<=substr(ICD,1,3)<='Y24' OR substr(ICD,1,4)='Y350' OR substr(ICD,1,4)='U014' OR
substr(ICD,1,4)='Y890' AND AGE in (8,9) THEN FIREARM=1; *age = age recode 27, restrict to age 10-19;
```

Data Alert

2018-2022 and 2019-2023 urban/rural residence is not available for CT due to lack of population denominators. US and Region 1 urban/rural estimates have been updated to exclude CT.

Injury Hospitalization

Rate of hospitalization for non-fatal injury per 100,000 children, ages 0 through 9
Rate of hospitalization for non-fatal injury per 100,000 adolescents, ages 10 through 19

GOAL

To decrease the number of hospital admissions for non-fatal injury among children ages 0 through 19.

DEFINITION

Numerators:
Number of hospital admissions with a primary diagnosis of unintentional or intentional injury among children ages 0 through 9 (excludes in-hospital deaths)
Number of hospital admissions with a primary diagnosis of unintentional or intentional injury among adolescents, ages 10 through 19 (excludes in-hospital deaths)

Denominators:
Number of children, ages 0 through 9
Number of adolescents, ages 10 through 19

Units: 100,000

Text: Rate

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Injury and Violence Prevention (IVP) Objective 02: Reduce emergency department (ED) visits for nonfatal injuries. (Baseline: 9,349.5 ED visits per 100,000 population occurred in 2017 (age adjusted to the year 2000 standard population), Target: 7,738.2 ED visits per 100,000 population)

DATA SOURCES and DATA ISSUES

Healthcare Cost and Utilization Project (HCUP) – State Inpatient Database (SID)
Population estimates come from the U.S. Census Bureau

POPULATION HEALTH SIGNIFICANCE

Unintentional injury is the leading cause of child and adolescent mortality, from age 1 through 19.[1] Yet for every child death, there are an estimated 25 non-fatal hospitalizations,[2] representing a significant source of disability with lifelong mental, physical, and financial impact.[1,3] Effective interventions to reduce injury exist but are not fully implemented in systems of care that serve children and their families.[2] Reducing the burden of nonfatal injury can greatly improve the life course trajectory of infants, children, and adolescents resulting in improved quality of life and cost savings.

(1) CDC. Key Injury and Violence Data. 2017 May 8. https://www.cdc.gov/injury/wisqars/overview/key_data.html
(2) CDC. Child Injury, Vital Signs. 2020 January 6. https://www.cdc.gov/vitalsigns/childinjury/index.html
(3) CDC. WISQARS Cost of Injury. 2020. https://wisqars.cdc.gov/cost/

FAD Availability by Year

Year	Data Not Available
2022	AL, ID, NV, AS, FM, GU, MH, MP, PW, PR, VI
2021	AL, ID, NV, AS, FM, GU, MH, MP, PW, PR, VI
2020	AL, ID, AS, FM, GU, MH, MP, PW, PR, VI
2019	AL, ID, AS, FM, GU, MH, MP, PW, PR, VI
2018	AL, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2017	AL, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2016	AL, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2015 Q1-Q3	AL, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2014	AK, AL, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2013	AK, AL, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2012	AL, DC, DE, ID, MS, NH, AS, FM, GU, MH, MP, PW, PR, VI
2011	AL, DC, DE, ID, NH, AS, FM, GU, MH, MP, PW, PR, VI
2010	AL, DC, DE, ID, ND, NH, AS, FM, GU, MH, MP, PW, PR, VI
2009	AK, AL, DC, DE, ID, MS, ND, AS, FM, GU, MH, MP, PW, PR, VI
2008	AK, AL, DC, DE, ID, MS, MT, ND, AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

There are no 2021 data for NV because their HCUP partnership is paused. Data for 2019 and 2020 were updated to correct for a coding error that did not exclude patients that died in the hospital. Thus, previous counts included both non-fatal and fatal injuries. The corrected 2019-2020 injury counts included here are on average about 2 percent lower. Data for 2016 and onward are based on ICD-10-CM and may not be comparable to previous ICD-9-CM estimates. Data for 2015 represents only three quarters of the year (January through September) due to the transition to ICD-10-CM in the last quarter of 2015; thus the rate should be interpreted with caution as it does not represent a full year of change relative to 2014 and injury may be seasonal. A final report on ICD-10-CM case definitions for injury hospitalization is available at https://www.cdc.gov/nchs/data/nhsr/nhsr150-508.pdf State-level estimates include inpatient stays for state residents treated in their home state and state residents treated in other states that provide data to the Healthcare Cost and Utilization Project (HCUP). For information on the HCUP Partner organizations, please visit https://www.hcup-us.ahrq.gov/partners.jsp

This analysis is limited to community non-rehabilitation hospitals, which are defined as short-term, non-Federal hospitals. Community hospitals include obstetrics and gynecology, otolaryngology, orthopedic, cancer, pediatric, public, and academic medical hospitals. Excluded are long-term care facilities such as rehabilitation, psychiatric, and alcoholism and chemical dependency hospitals. U.S. estimates are calculated using the available State data and are not nationally weighted; therefore, U.S. estimates may not be comparable across years due to the different states included in any given year. In addition, certain states did not provide reliable race and/or ethnicity data and are excluded from totals by race/ethnicity. For more information about the HCUP State Inpatient Databases (SID), please visit https://www.hcup-us.ahrq.gov/sidoverview.jsp Population denominators are produced by the U.S. Census Bureau Population Estimates Program.

Population denominators are produced by the U.S. Census Bureau Population Estimates Program. Intercensal estimates are used for data years prior to 2010 (July 1), Census counts are used for the 2010 data year (April 1), and postcensal estimates for each respective vintage year are used for data years after 2010 (July 1). Population denominators are not available for health insurance type or median ZIP code income; numerators can be examined as a percentage of all non-fatal injury hospitalization. Urban-Rural residence is not available for CT in 2022 due to lack of population denominators.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Child Age	<1 Year 1-4 Years 5-9 Years 10-14 Years 15-19 Years	
Health Insurance	Private Medicaid Other Public Uninsured	Refers to expected primary payer. Medicaid may include CHIP and Medicare. Other Public includes military insurance, Indian Health Service, and other federal, state, or local government payment source. For more information, please see https://www.hcup-us.ahrq.gov/reports/methods/2014-03.pdf Only numerators are available, which can be examined as a percentage of all non-fatal injury hospitalizations.

Stratifier	Subcategory	Special Notes
Injury Intent	Intentional, assault Intentional, self-harm Unintentional Other/Unknown	Denominators are total population to calculate rates per 100,000 children, ages 0 through 9 years or rates per 100,000 adolescents, aged 10-19.
Mechanism of Injury	Fall Poisoning Motor Vehicle Traffic (MVT) Other/Unknown Struck by or against Transportation (not MVT) Fire, flame, hot object, or hot substance Firearm Cut or pierce Natural or environment, including bites Suffocation Drowning or submersion Overexertion Machinery	Denominators are total population to calculate rates per 100,000 children, ages 0 through 9 years or rates per 100,000 adolescents, aged 10-19.
Race/Ethnicity	Hispanic Non-Hispanic Black Alone Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian/Pacific Islander Alone Non-Hispanic White Alone Other	Other includes other and multiple race. Not available for all states.
Sex	Female Male	
Urban-Rural Residence	Large Metro Small/Medium Metro Non-Metro	Based on 2003 Urban Influence Codes. Large metro is defined as metropolitan areas with at least 1 million residents. Small/ medium metro is defined as metropolitan areas of less than 1 million residents. Non-metro is defined as micropolitan and non-metropolitan, non-micropolitan areas.
Median ZIP Code Income	Quartile 1 Quartile 2 Quartile 3 Quartile 4	Quartiles (poorest to wealthiest) based on current year median household income obtained from Claritas.

SAS Code

```
INJURY=0;

IF DIED NE 1 and substr(DX1,7,1) in (' ','A','B','C') /* initial encounter only */
and
        /* injury codes */
        (DX1 in: ('S','T79','T8404','M97')
        OR 'T07' LE DX1 LE: 'T34'
        OR ('T36' LE DX1 LE: 'T50' AND SUBSTR(DX1,6,1) IN ('1','2','3','4'))
        OR (DX1 IN:
('T369','T379','T399','T414','T427','T439','T459','T479','T499')
                AND SUBSTR(DX1,5,1) IN ('1','2','3','4') )
        OR 'T51' LE DX1 LE: 'T65'
        OR 'T66' LE DX1 LE: 'T76'
```

```
        OR 'O9A2' LE DX1 LE: 'O9A5' )
        THEN INJURY=1;   * ICD-10 ;

IF DIED NE 1 AND ('8000'<=substr(DX1,1,4)<='9092' OR substr(DX1,1,4) IN
('9094','9955') OR '9099'<=substr(DX1,1,4)<='9949' OR
'99580'<=substr(DX1,1,5)<='99585') THEN INJURY=1; * ICD-9 ;

IF 0 LE AGE LE 19 AND COMMUNITY_NONREHAB =1; *only include community, non-rehab
hospitals;
IF HOSP_SERVICE=22 THEN DELETE; * exclude psychiatric facilities;

* ASSIGN PATIENT STATE RESIDENCE FROM COUNTY OF PATIENT RESIDENCE PSTCO2;
LENGTH PSTATE $2;if not missing(pstco2) then PSTATE = fipstate(int(pstco2/1000));
```

Data Alert

Urban-Rural residence is not available for CT in 2022 due to lack of population denominators.

Women's Health Status

Percent of women, ages 18 through 44, in excellent or very good health

GOAL

To improve the health status of women of reproductive age.

DEFINITION

Numerator: Number of women, ages 18 through 44, who report to be in excellent or very good health

Denominator: Number of women, ages 18 through 44

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES AND ISSUES

Behavioral Risk Factor Surveillance System (BRFSS)

POPULATION HEALTH SIGNIFICANCE

Self or proxy-reported health status is an indicator of health-related quality of life that is often more predictive of morbidity and mortality than objective measures of health.[1] Among US adults, self-rated health is positively associated with healthier behaviors such as never smoking, non-poor diet, meeting physical activity recommendations, and moderate alcohol consumption.[2] Self-rated good, very good, or excellent health among women ages 18-44 is a core state preconception health indicator.[1]

(1) Council of State and Territorial Epidemiologists. Core State Preconception Health Care Indicators. Accessed 2022 January 6. https://cdn.ymaws.com/www.cste.org/resource/resmgr/MCHIndicators/GeneralHealthStatus.pdf

(2) Ware D, Landy DC, Rabil A, Hennekens CH, Hecht EM. Interrelationships between self reported physical health and health behaviors among healthy US adults: From the NHANES 2009-2016. Public Health Pract (Oxf). 2022;4:100277. Published 2022 May 31. doi:10.1016/j.puhip.2022.100277 https://www.sciencedirect.com/science/article/pii/S2666535222000532

FAD Availability by Year

Year	Data Not Available
2023	KY, PA, AS, FM, MH, MP, PW
2022	AS, FM, MH, MP, PW
2021	FL, AS, FM, MH, MP, PW, VI
2020	AS, FM, MH, MP, PW, VI
2019	NJ, AS, FM, MH, MP, PW, VI
2018	AS, FM, MH, MP, PW, VI
2017	AS, FM, MH, MP, PW, VI
2016	AS, FM, MH, MP, PW
2015	AS, FM, MH, MP, PW, VI
2014	AS, FM, MH, MP, PW, VI
2013	AS, FM, MH, MP, PW, VI
2012	AS, FM, MH, MP, PW, VI

Data Notes

Kentucky and Pennsylvania were unable to collect enough data to meet the minimum requirements to be included in the 2023 public data set. The estimates, numerators, and denominators presented are weighted to account for non-response and to reflect state population totals by various demographic characteristics. Standard errors

account for the complex survey design. Urban/rural residence is not available for territories. For more information on the BRFSS methodology, visit http://www.cdc.gov/brfss/.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Age	18-24 Years 25-34 Years 35-44 Years	Includes imputed age. This is labeled as "Maternal Age" in TVIS but more accurately reflects a woman's age regardless of childbearing status.
Educational Attainment	Less than high school High school graduate Some college College graduate	
Health Insurance	Insured Uninsured	Refers to current health insurance status
Household Income/Poverty	<$25,000 $25,000-$49,999 $50,000-$74,999 ≥$75,000	Missing data exceeded 10%; interpret with caution.
Language	English Non-English	Refers to language of survey administration
Marital Status	Married Unmarried	
Race/ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Urban/Rural Residence	Metro Non-Metro	Refers to county metropolitan status. Not available for territories.

SAS Code

```
/* Women's Health Status */

WHS = .;
if GENHLTH in (1,2,3,4,5) and (1<=_AGE_G <=3) and SEXVAR = 2 then do;
if GENHLTH in (1,2) then WHS = 1;
if GENHLTH in (3,4,5) then WHS = 2;
end;
/* 1= Yes,  2= No */
```

Data Alert

Kentucky and Pennsylvania were unable to collect enough data to meet the minimum requirements to be included in the 2023 public data set.

Children's Health Status

Percent of children, ages 0 through 17, in excellent or very good health

GOAL

To improve the health status of children.

DEFINITION

Numerator: Number of children, ages 0 through 17, who are reported by a parent to be in excellent or very good health

Denominator: Number of children, ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

Overall health status for children provides a global, summary measure of children's health and well- being. Children reported to be in excellent or very good health are more likely to thrive in a variety of health dimensions, including physical and mental health. Self or proxy-reported health status is an indicator of health-related quality of life that is often more predictive of morbidity and mortality than objective measures of health.[1]

(1) Centers for Disease Control and Prevention. Health-Related Quality of Life. 2018 October 31. https://www.cdc.gov/hrqol/concept.htm

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	0-5 Years 6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside

Stratifier	Subcategory	Special Notes
		U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NOM_Children's Health Status: Excellent/Very good health***/

HealthStatus = .;
if K2Q01 in (1,2) then HealthStatus = 1;
if K2Q01 in (3,4,5) then HealthStatus = 2;
if K2Q01 = .M then HealthStatus = .M;
label HealthStatus = "NOM_Children's Health Status: Percent of children, ages 0
through 17, in excellent or very good health";
/* 1= Yes,  2= No */
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Child Obesity

Percent of children, ages 2 through 4, and children, ages 6 through 17, who are obese (BMI at or above the 95th percentile)

GOAL

To reduce the percent of children and adolescents with obesity.

DEFINITION

Numerators:

Number of children, ages 2 through 4, with a body mass index (BMI) at or above the sex-and age-specific 95th percentile from the CDC Growth Charts based on measured height and weight (WIC)

Number of children, ages 6 through 17, with a body mass index (BMI) at or above the sex-and age-specific 95th percentile from the CDC Growth Charts based on parent-reported height and weight (NSCH)

Denominators:

Number of children, ages 2 through 4 (WIC)

Number of children, ages 6 through 17 (NSCH)

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Nutrition and Weight Status (NWS) Objective 04: Reduce the proportion of children and adolescents with obesity. (Baseline: 17.8% of children and adolescents aged 2 to 19 years had obesity in 2013-16, Target: 15.5%)

DATA SOURCES and DATA ISSUES

Children 2 through 4 years: Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

Children 6 through 17 years (parent report): National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

Childhood obesity is a serious health problem in the United States, putting children and adolescents at risk for poor health. Currently, about 1 in 5 school-aged children have obesity. Childhood obesity is associated with a variety of adverse consequences, including an increased risk of cardiovascular disease, type 2 diabetes, asthma, social stigmatization, low self- esteem, and adult obesity. Obesity in adulthood is linked to cardiovascular disease, type 2 diabetes, and cancer, and children with obesity are likely to have more severe obesity and attendant health problems in adulthood. A variety of behavioral, genetic, and environmental factors contribute to obesity including school environments, neighborhood design, access to healthy foods, and access to safe places for physical activity.

(1) Centers for Disease Control and Prevention. Childhood Overweight and Obesity. 2022 April 1. https://www.cdc.gov/obesity/childhood/index.html

FAD Availability by Year – WIC

Year	Data Not Available
2020	FM, MH, PW
2018	FM, MH, PW
2016	FM, MH, PW
2014	FM, MH, PW
2012	FM, MH, PW
2010	FM, MH, PW
2008	FM, MH, MP, PW

Data Notes – WIC

Data are from the Women Infants and Children Participant and Program Characteristics file (WIC PC). WIC PC is a biennial census that includes participants who are certified to receive WIC benefits between April 1 and April 30 of the reporting year. Due to the COVID-19 pandemic, children with anthropometric data examined in March and April 2020 were excluded from 2020 estimates. Children's anthropometric measurements were taken by trained staff during required routine clinic visits. Weight was reported to the nearest 1/4 pound and height to the nearest 1/8 inch. This measure reflects sex-specific BMI-for-age ≥ the 95th percentile on the CDC growth charts among WIC participants ages 2-4. Children with missing or biologically implausible height, weight, and BMI were excluded. Biologically implausible z-scores are defined as height-for-age <-5.0 or >4.0, weight-for-age <-5.0 or >8.0, and BMI-for-age <-4.0 or >8.0. Data were analyzed by the Epidemiology and Surveillance Team of CDC's Obesity Prevention and Control Branch. For more information about WIC Participant and Program Characteristics, please visit https://www.fns.usda.gov/wic/wic-participant-and-program-characteristics-2018.

Available Stratifiers and Notes – WIC

Stratifier	Subcategory	Special Notes
Age	2 Years 3 Years 4 Years	
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Non-Hispanic White Alone	Refers to child race/ethnicity
Sex	Female Male	

SAS Code – WIC

Not available

FAD Availability by Year – NSCH

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes – NSCH

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes – NSCH

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.

Stratifier	Subcategory	Special Notes
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code – NSCH

```
/***NOM_Child-Adolescent Obesity: age 6-17 Years***/

ChAdolBMI = .;
if BMICLASS = 4 then ChAdolBMI = 1; *4:
if BMICLASS in (1,2,3) then ChAdolBMI = 2;
if BMICLASS = .M then ChAdolBMI = .M;
if SC_AGE_YEARS < 6 then ChAdolBMI = .L;
label ChAdolBMI = "NOM_Child-Adolescent Obesity: Percent of children and
adolescents, ages 6 through 17, who are obese (BMI at or above the 95th
percentile)";
/* 1= Yes,  2= No */
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Postpartum Depression/Anxiety

Percent of women who experience postpartum depressive symptoms following a recent live birth
Percent of women who experience postpartum anxiety symptoms

GOAL

To reduce the prevalence of postpartum depression and anxiety

DEFINITION

Numerators:
Number of women who report postpartum depressive symptoms following a recent live birth (defined as reporting always/often feeling down, depressed, hopeless or always/often having little interest or little pleasure in doing things)
Number of women who reported postpartum anxiety symptoms (defined as always/often feeling nervous, anxious, on edge or always/often not being able to stop or control worrying

Denominator: Number of women with a recent live birth

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES and DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)

POPULATION HEALTH SIGNIFICANCE

Mental health conditions, including depression and anxiety, are common during the postpartum period. One in eight women report experiencing depressive symptoms following a live birth.[1] While data are limited on the prevalence of postpartum anxiety, it is estimated that 11.5% of pregnant and postpartum women experience perinatal mood and anxiety disorders.[2] Mental health conditions are associated with several adverse health behaviors and outcomes, including poorer maternal and infant bonding, decreased breastfeeding initiation, and delayed infant development.[3] They are also the leading underlying causes of pregnancy-related deaths.[4]

(1) Bauman BL, Ko JY, Cox S, et al. Vital Signs: Postpartum Depressive Symptoms and Provider Discussions About Perinatal Depression - United States, 2018. MMWR Morb Mortal Wkly Rep. 2020;69(19):575-581. Published 2020 May 15. doi:10.15585/mmwr.mm6919a2 https://www.cdc.gov/mmwr/volumes/69/wr/mm6919a2.htm

(2) Slomian J, Honvo G, Emonts P, Reginster JY, Bruyère O. Consequences of maternal postpartum depression: A systematic review of maternal and infant outcomes [published correction appears in Womens Health (Lond). 2019 Jan-Dec;15:1745506519854864]. Womens Health (Lond). 2019;15:1745506519844044. doi:10.1177/1745506519844044 https://journals.sagepub.com/doi/pdf/10.1177/1745506519844044

(3) Trost SL, Beauregard J, Njie F, et al. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017–2019. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services; 2022. https://www.cdc.gov/reproductivehealth/maternal-mortality/docs/pdf/Pregnancy-Related-Deaths-Data-MMRCs-2017-2019-H.pdf

FAD Availability by Year

Year	Data Not Available
2023	CA, ID, NC, OH, AS, FM, GU, MH, PW, VI
2022	CA, ID, NC, OH, OR, AS, FM, GU, MH, PW, VI
2021	CA, ID, NC, OH, AS, FM, GU, MH, MP, PW, VI
2020	CA, ID, OH, AS, FM, GU, MH, MP, PW, VI
2019	AZ*, CA, ID, IN*, NV*, OH, OK*, SC*, TX*, WV*, AS, FM, GU, MH, MP, PW, VI
2018	AZ*, CA, FL*, HI*, ID, NV*, OH, SC*, TN*, TX*, AS, FM, GU, MH, MP, PW, VI

Year	Data Not Available
2017	AZ*, AR*, CA, DC*, FL*, HI*, ID, IN*, MN*, MS*, NE*, NV*, OH, OR*, SC*, TN*, TX*, AS, FM, GU, MH, MP, PW, VI
2016	AL*, AZ, CA, DC, FL*, GA*, HI*, ID, IN, KS, KY, MN*, MS*, MT, NV, NC*, ND, OH, OR*, SC*, SD, TN*, AS, FM, GU, MH, MP, PW, PR, VI
2015	AZ, CA, DC, FL*, GA*, IN, ID, KS, KY, MN*, MS*, MT, NC*, ND, NV, RI*, SC*, SD, AS, FM, GU, MH, MP, PW, PR, VI
2014	AZ, AR*, CA, CO*, DC, FL*, GA*, IN, ID, KS, KY, LA*, MI*, MN*, MS*, MT, NC*, ND, NV, OR*, SC*, SD, TX*, VA*, AS, FM, GU, MH, MP, PW, PR, VI
2013	AL*, AZ, CA, CT*, DC, FL*, IN, ID, KS, KY, LA*, MS*, MT, NC*, ND, NV, OH*, SC*, SD, TX*, VA*, AS, FM, GU, MH, MP, PW, PR, VI, NYC*
2012	AL*, AZ, CA, CT, DC, FL*, IA, IN, ID, KS, KY, LA*, MS*, MT, NC*, ND, NH, NV, NY*, SC*, SD, TX*, VA*, WV^, AS, FM, GU, MH, MP, PW, PR, VI

*PRAMS data are available to be reported by the state/jurisdiction; did not meet response rate threshold required for reporting by CDC PRAMS but MCHB does not use a response rate criteria for TVIS as long as data are appropriately weighted to account for non-response bias.

Data Notes

The question on postpartum anxiety questions was added in 2023 with PRAMS Phase 9. The CDC eliminated the response rate threshold requirement for data release. All sites are now included and data from previously excluded sites have been added back from 2020 to present. Consistent with vital statistics, overall U.S. estimates do not include territories. For NY, 2013 estimates do not include NYC, while 2012 and 2020 estimates only include NYC. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-response, and non-coverage. Standard errors account for the complex survey design. For more information on the PRAMS methodology, visit http://www.cdc.gov/prams/

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	From the birth certificate
Educational Attainment	Less than high school High school graduate Some college College graduate	From the birth certificate.
Health Insurance	Private Medicaid Other Public Uninsured	From the birth certificate. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	From the birth certificate
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone	From the birth certificate. Subcategories are not mutually exclusive.

Stratifier	Subcategory	Special Notes
	Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
WIC Participation	Yes No	From the birth certificate. Refers to prenatal WIC participation.

SAS Code

```
label pp_depress = 'Postpartum Depressive Symptoms';
label pp_anxiety = 'Postpartum Anxiety Symptoms';

**(NEW) Postpartum Anxiety Symptoms – use indicator as is;
keep pp_anxiety;
label pp_anxiety = 'Postpartum Anxiety Symptoms';
```

Data Alert

The CDC eliminated the response rate threshold requirement for data release. All sites are now included and postpartum depression symptoms data from previously excluded sites have been added back from 2020 to present. Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically for Postpartum Depression.

Behavioral/Conduct Disorders

Percent of children, ages 6 through 11, who have a behavioral or conduct disorder

GOAL

To reduce the prevalence of behavioral and conduct problems among children ages 6 through 11.

DEFINITION

Numerator: Number of children, ages 6 through 11 years, who are reported by a parent to have ever been told they have a behavioral or conduct problem by a health care provider or educator and currently have the condition

Denominator: Number of children, ages 6 through 11 years.

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES AND DATA ISSUES

National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

Behavioral and conduct problems include oppositional, inappropriate, negative, or defiant behaviors as well as conduct problems.[1] In 2020-2021, approximately 10% of children ages 6 through 11 were reported by a parent to have ever been told they have a behavioral or conduct problem by a health care provider or educator; 8.9% were reported to currently have a behavioral or conduct problem.[2] These problems are associated with increased risk of substance use, mental disorders, injury, delinquency, and decreased life expectancy.[3,4]

(1) American Psychiatric Association. Diagnostic and statistical manual of mental disorders (DSM-5). 5th ed. Arlington, VA: American Psychiatric Association; 2013.

(2) Child and Adolescent Health Measurement Initiative. 2020-2021 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved 01/30/23 from https://www.childhealthdata.org/browse/survey/results?q=9271&r=1&g=1005

(3) Erskine HE, Norman RE, Ferrari AJ, et al. Long-Term Outcomes of Attention-Deficit/Hyperactivity Disorder and Conduct Disorder: A Systematic Review and Meta-Analysis. J Am Acad Child Adolesc Psychiatry. 2016;55(10):841-850. doi:10.1016/j.jaac.2016.06.016 https://www.jaacap.org/article/S0890-8567(16)31157-1/fulltext

(4) Scott JG, Giørtz Pedersen M, Erskine HE, et al. Mortality in individuals with disruptive behavior disorders diagnosed by specialist services - A nationwide cohort study. Psychiatry Res. 2017;251:255-260. doi:10.1016/j.psychres.2017.02.029 https://www.sciencedirect.com/science/article/abs/pii/S0165178116314159?via%3Dihub

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that

lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language

Stratifier	Subcategory	Special Notes
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NOM_Behavioral/Conduct Disorder: 6-11 Years***/
if K2Q34B=1 then BehConduct_6to11 = 1;
if K2Q34B in (.L,2) then BehConduct_6to11 = 2;
if K2Q34B=.M then BehConduct_6to11 = .M;
if SC_AGE_YEARS < 6 or SC_AGE_YEARS > 11 then BehConduct_6to11 = .L;
label BehConduct_6to11 = "Percent of children, ages 6 through 11, who have a
behavioral or conduct disorder";
```

Data Alert

Adverse Childhood Experiences stratifier was updated historically. CSHCN Status, CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Adolescent Depression/Anxiety

Percent of adolescents, ages 12 through 17, who have depression or anxiety

GOAL

To reduce the prevalence of depression and anxiety among adolescents.

DEFINITION

Numerator: Number of adolescents, ages 12 through 17, who are reported by a parent to have ever been told they have depression or anxiety problems by a health care provider and currently have the condition

Denominator: Number of adolescents, ages 12 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES AND DATA ISSUES

National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

In 2020-2021, 8.4% of adolescents ages 12 through 17 were reported by a parent to currently have depression and 14.5% were reported to have current anxiety problems.[1] Further, the prevalence of depression and anxiety problems have increased significantly between 2016 and 2020,[2] Children and adolescents with depression or anxiety are at increased risk other mental disorders and problems in school, and those with depression are at increased risk for self-harm and suicide.[3,4]

(1) Child and Adolescent Health Measurement Initiative. 2020-2021 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved 01/26/23 from www.childhealthdata.org.

(2) Lebrun-Harris LA, Ghandour RM, Kogan MD, Warren MD. Five-Year Trends in US Children's Health and Well-being, 2016-2020 [published correction appears in JAMA Pediatr. 2022 Apr 4;:null] [published correction appears in JAMA Pediatr. 2023 Jan 9;:]. JAMA Pediatr. 2022;176(7):e220056. doi:10.1001/jamapediatrics.2022.0056 https://jamanetwork.com/journals/jamapediatrics/fullarticle/2789946

(3) Bitsko RH, Holbrook JR, Ghandour RM, et al. Epidemiology and Impact of Health Care Provider-Diagnosed Anxiety and Depression Among US Children. J Dev Behav Pediatr. 2018;39(5):395-403. doi:10.1097/DBP.0000000000000571 https://journals.lww.com/jrnldbp/Abstract/2018/06000/Epidemiology_and_Impact_of_Health_Care.6.aspx

(4) Merikangas KR, He JP, Burstein M, et al. Lifetime prevalence of mental disorders in U.S. adolescents: results from the National Comorbidity Survey Replication--Adolescent Supplement (NCS-A). J Am Acad Child Adolesc Psychiatry. 2010;49(10):980-989. doi:10.1016/j.jaac.2010.05.017 https://www.jaacap.org/article/S0890-8567(10)00476-4/fulltext

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138).Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the

Stratifier	Subcategory	Special Notes
		household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NOM_Adolescent Depression/Anxiety: 12-17 Years***/
if K2Q33B = 1 then anxiety = 1;
if K2Q33B in (.L,2) then anxiety = 2;
if K2Q33B = .M then anxiety = .M;
if SC_AGE_YEARS < 12 then anxiety = .L;
label anxiety = "Children who currently have anxiety problems, age 12-17 Years";
if K2Q32B = 1 then depress = 1;
if K2Q32B in (.L,2) then depress = 2;
if K2Q32B = .M then depress = .M;
if SC_AGE_YEARS < 12 then depress = .L;
label depress = "Children who currently have depression, age 12-17 Years";
if anxiety=1 or depress=1 then DepAnx_12to17=1;
if anxiety in (2,.M) and depress in (2,.M) then DepAnx_12to17=2;
if anxiety = .M and depress = .M then DepAnx_12to17=.M;
if SC_AGE_YEARS < 12 then DepAnx_12to17 = .L;
label DepAnx_12to17="NOM_Adolescent Depression/Anxiety: Percent of adolescents,
ages 12 through 17, who have depression or anxiety";
```

Data Alert

Adverse Childhood Experiences stratifier was updated historically. CSHCN Status, CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

CSHCN Systems of Care

Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

GOAL

To ensure access to needed and continuous systems of care for children and youth with special health care needs.

DEFINITION

Numerator: Number of CSHCN, ages 0 through 17, who are reported by a parent to receive all components of a well-functioning system of care (families partner in decision-making if needed, medical home, preventive medical and dental care, continuous and adequate insurance, easy access to services, and preparation for transition to adult health care among adolescents)

Denominator: Number of CSHCN, ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 20: Increase the proportion of children and adolescents with special health care needs who receive care in a family-centered, comprehensive, and coordinated system. (Baseline: 15.7% in 2016-17, Target: 19.5%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

According to the 2020-2021 NSCH, only 13.7% of CSHCN receive services in a well-functioning system of services.[1] The Omnibus Budget Reconciliation Act of 1989 requires Title V to provide and promote family-centered, community-based, coordinated care and facilitate the development of community-based systems of services for children with special health care needs and their families. To address this requirement a minimum of 30 percent of the Title V Block Grant funding is allocated for this purpose, and HP 2030 Objective MICH-20 establishes the goal to increase the proportion of children with special health care needs who receive their care in family-centered, comprehensive, and coordinated systems.

(1) Child and Adolescent Health Measurement Initiative. 2020-2021 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved 01/26/23 from www.childhealthdata.org.

(2) Strickland BB, Jones JR, Newacheck PW, Bethell CD, Blumberg SJ, Kogan MD. Assessing systems quality in a changing health care environment: the 2009-10 national survey of children with special health care needs. Matern Child Health J. 2015;19(2):353-361. doi:10.1007/s10995-014-1517-9 https://link.springer.com/article/10.1007/s10995-014-1517-9

(3) Ghandour RM, Hirai AH, Kenney MK. Children and Youth With Special Health Care Needs: A Profile. Pediatrics. 2022;149(Suppl 7):e2021056150D. doi:10.1542/peds.2021-056150D https://publications.aap.org/pediatrics/article/149/Supplement%207/e2021056150D/188226/Children-and-Youth-With-Special-Health-Care-Needs

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. The 'preventive medical and dental care' component of systems of care was affected by a 2018 wording change in the item assessing receipt of medical care in the past year that resulted in a decrease and may have affected the overall measure; the previous wording is restored in 2019. The item determining the denominator for those needing the 'shared decision-making' component of systems of care also changed in 2018; however, the assessment of shared decision-making among those with needed decisions did not change. Additional 2018 changes in subcomponents within medical home ('difficulty receiving referrals') and transition to adult health care among adolescents ('time alone with provider' and 'anticipatory guidance') did not appear to affect the overall components for systems of care. In 2023, the 'shared decision making' component question changed wording, but did not affect the component or overall component measure. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Total	Component: Shared Decision-Making if needed Component: Medical Home Component: Continuous and Adequate Insurance Component: Preventive Medical and Dental Care Component: Ease of Access Component: Transition To Adult Health Care among Adolescents	
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	0-5 Years 6-11 Years 12-17 Years	
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use

Stratifier	Subcategory	Special Notes
		refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NOM_CSHCN Systems of Care***/ /*********6 Subcomponents********/

/*System of care subcomponent 1: Children whose families are partners in shared
decision-making*/
ShareDec = .;
if DECISIONS in (.L,2)  then ShareDec = .L;
if DISCUSSOPT in (1,2,.M) and RAISECONC in (1,2,.M) and BESTFORCHILD in (1,2,.M)
then ShareDec = 1;
else if DISCUSSOPT in (3,4,.M) or RAISECONC in (3,4,.M) or BESTFORCHILD in (3,4,.M)
then ShareDec = 2;
if DISCUSSOPT = .M and RAISECONC = .M and BESTFORCHILD = .M then ShareDec = .M;
label  ShareDec = "Children whoSE families are partners in shared decision-making
for their optimal health";

            /*System of care subcomponent 2: NPM_Medical Home, All Children*/
/** NPM_Medical Home Component1**/
PerDrNs = .;
if K4Q04_R in (1,2) then PerDrNs = 1;
else if K4Q04_R = 3 then PerDrNs = 2;
else if K4Q04_R = .M then PerDrNs = .M;
label PerDrNs = "NPM_Personal Dr/NurSE, All Kids: Percent of children, ages 0
through 17, who have a personal doctor or nurSE";

if SC_CSHCN=1 then PerDrNs_1=PerDrNs; if SC_CSHCN=2 then PerDrNs_1=.L;
label PerDrNs_1 = "NPM_Personal Dr/NurSE, CSHCN: Percent of children with SHCN,
ages 0 through 17, who have a personal doctor or nurSE";

/***NPM_Usual Source of Sick Care: All Kids***/ /** NPM_Medical Home Component2**/
UsualSck = .;
if K4Q01 = 1 and K4Q02_R in (1,3,4,5,6,7,8) then UsualSck = 1;
else if K4Q01 = 2 or K4Q02_R = 2 then UsualSck = 2;
else if K4Q01 = .M or K4Q02_R = .M then UsualSck = .M;
label UsualSck = "NPM_Usual Source of Sick Care, All Kids: Percent of children,
ages 0 through 17, who have a usual source of sick care";

/***NPM_Family Centered Care: All Children***//** NPM_Medical Home Component3**/
time = .;
if K5Q40 = .M then time = .M;
else if K5Q40 = .L then time = 0;
else if K5Q40 = 1 then time = 1;
else if K5Q40 = 2 then time = 2;
else if K5Q40 in (3,4) then time = 3;
label time = "Doctors spent enough time with children";
listen = .;
if K5Q41 =.M then listen = .M;
else if K5Q41 = .L then listen = 0;
else if K5Q41 = 1 then listen = 1;
else if K5Q41 = 2 then listen = 2;
else if K5Q41 in (3,4) then listen = 3;
label listen = "Doctors listened carefully to children's parents";
SEnsitiv = .;
if K5Q42 = .M then SEnsitiv = .M;
else if K5Q42 = .L then SEnsitiv = 0;
else if K5Q42 = 1 then SEnsitiv = 1;
else if K5Q42 = 2 then SEnsitiv = 2;
else if K5Q42 in (3,4) then SEnsitiv = 3;
label SEnsitiv = "Doctors showed SEnsitivity to children's family's values and
customs";
```

```
info = .;
if K5Q43 = .M then info = .M;
else if K5Q43 = .L then info = 0;
else if K5Q43 = 1 then info = 1;
else if K5Q43 = 2 then info = 2;
else if K5Q43 in (3,4) then info = 3;
label info = "Doctors provided information specific to parents' concerns";
partner = .;
if K5Q44 = .M then partner = .M;
else if K5Q44 = .L then partner = 0;
else if K5Q44 = 1 then partner = 1;
else if K5Q44 = 2 then partner = 2;
else if K5Q44 in (3,4) then partner = 3;
label partner = "Doctors helped parents to feel like partners in child's care";

FamCentCare = .;
if time = .M and listen = .M and SEnsitiv = .M and info = .M and partner = .M then
FamCentCare = .M;
else if time = 0 then FamCentCare = .L;
else if time in (1,2,.M) and listen in (1,2,.M) and SEnsitiv in (1,2,.M) and info
in (1,2,.M) and
     partner in (1,2,.M) then FamCentCare = 1;
else if time in (3,.M) or listen in (3,.M) or SEnsitiv in (3,.M) or info in (3,.M)
or partner in (3,.M) then FamCentCare = 2;
label FamCentCare = "NPM_Family Centered Care, All Children: Percent of children,
ages 0 through 17, who have family centered care";

/***NPM_Referrals: All Kids***/ /**NPM_Medical Home Component4**/
NoRefPrb = .;
if K5Q10 = 2 then NoRefPrb = .L;
else if K5Q10 = .M then NoRefPrb = .M;
else if K5Q11 in (2,3,4) then NoRefPrb = 2; *somewhat/very difficult or not
possible;
else if K5Q11 = 1 then NoRefPrb = 1; *not difficult;
else if K5Q11 = .M then NoRefPrb = .M;
label NoRefPrb = "NPM_Referrals, All Kids: Percent of children, ages 0 through 17,
who receive needed referrals";

/***NPM_Care Coordination: All Children***/ /**NPM_Medical Home Component5**/
DrComm = .;
if K5Q20_R = 3 or S4Q01 = 2 then DrComm = 0;
else if K5Q30 = .M then DrComm = .M;
else if K5Q30 = 1 then DrComm = 1;
else if K5Q30 = 2 then DrComm = 2;
else if K5Q30 in (3,4) then DrComm = 3;
else if K5Q30 = .L then DrComm = 0;
label DrComm = "Satisfaction with communication among child's doctor and other
health care provider";
CareHelp = .;
if S4Q01 = .M then CareHelp = .M;
else if K5Q20_R = 3 or S4Q01 = 2 then CareHelp = 0;
else if K5Q20_R = 2 and K5Q21 = 2 then CareHelp = 0;
else if K5Q20_R = .M and K5Q21 = 2 then CareHelp = .M;
else if K5Q20_R = .M then CareHelp = .M;
else if K5Q21 = .M then CareHelp = .M;
else if K5Q22 = .M then CareHelp = .M;
else if K5Q20_R = 1 and K5Q21 = 2 then CareHelp = 1;
else if K5Q22 = 1 then CareHelp = 1;
else if K5Q22 in (2,3) then CareHelp = 2;
```

```
label CareHelp = "Got all needed extra help with care coordination when needed";
OthComm = .;
if K5Q31_R in (2,3) then OthComm = 0;
else if K5Q31_R = .M then OthComm = .M;
else if K5Q32 = 1 then OthComm = 1;
else if K5Q32 in (2,3,4) then OthComm = 2;
else if K5Q32 = .M then OthComm = .M;
else if K5Q32 = .L then OthComm = 0;
label OthComm = "Satisfaction with communication among child's doctors and school,
child care provider, or special education program";

CareCoor = .;
if CareHelp = .M and DrComm = .M and OthComm = .M then CareCoor = .M;
else if CareHelp in (0,.M) and DrComm in (0,.M) and OthComm in (0,.M) then CareCoor
= .L;
else if CareHelp in (1,0,.M) and DrComm in (1,0,.M) and OthComm in (1,0,.M) then
CareCoor = 1;
else if CareHelp in (2,.M) or DrComm in (2,3,.M) or OthComm in (2,.M) then CareCoor
= 2;
label CareCoor = "NPM_Care Coordination, All Kids: Medical Home Component: Percent
of children, ages 0 through 17, who receive needed care coordination";

/***NPM_Medical Home: All Children***/
MedicalHome = .; /*Composite Measure*/
if PerDrNs in (1,.M) and UsualSck in (1,.M) and FamCentCare in (1,.L,.M) and
NoRefPrb in (1,.L,.M) and CareCoor in (1,.L,.M) then MedicalHome = 1;
if PerDrNs = 2 or UsualSck = 2 or FamCentCare = 2 or NoRefPrb = 2 or CareCoor = 2
then MedicalHome = 2;
if PerDrNs = .M and UsualSck = .M and FamCentCare in (.L,.M)and NoRefPrb in (.L,.M)
and CareCoor in (.L,.M) then MedicalHome = .M;
label MedicalHome = "NPM_Medical Home, All Children: Percent of children, ages 0
through 17, who have a medical home";

/*System of care subcomponent 3 and SM_AdeqIns: Insurance - insured, no gap,
adequate insurance**/
benefits = .;
if K3Q20 = 1 then benefits = 1;
if K3Q20 = 2 then benefits = 2;
if K3Q20 in (3,4) then benefits = 3;
if K3Q20 = .M then benefits = .M;
if CURRINS = .M then benefits = .M;
if CURRINS = 2 then benefits = .L;
label benefits = "Current insurance benefits meet child's needs";
allows = .;
if K3Q22 = 1 then allows = 1;
if K3Q22 = 2 then allows = 2;
if K3Q22 in (3,4) then allows = 3;
if K3Q22 = .M then allows = .M;
if CURRINS = .M then allows = .M;
if CURRINS = 2 then allows = .L;
label allows = "Current insurance coverage allows to SEe needed providers";
expenSE = .;
if K3Q21B = 1 then expenSE = 1;
if K3Q21B = 2 then expenSE = 2;
if K3Q21B in (3,4) then expenSE = 3;
if K3Q21B = .M then expenSE = .M;
if HOWMUCH = 1 then expenSE = 4;
if CURRINS = .M then expenSE = .M;
if CURRINS = 2 then expenSE = .L;
```

```
label expenSE = "Current insurance out-of-pocket expenSEs are reasonable";
InsAdeq = .;
if benefits in (1,2,.M) and allows in (1,2,.M) and expenSE in (1,2,4,.M) then
InsAdeq = 1;
if benefits = 3 or allows = 3 or expenSE = 3 then InsAdeq = 2;
if benefits = .M and allows = .M and expenSE = .M then InsAdeq = .M;
if CURRINS = 2 then InsAdeq = .L;
label InsAdeq = "Adequate Insurance";

InsCurr = CURRINS;
label InsCurr = "Health insurance status at time of survey";

GapIns = .;
if INSGAP = 1 then GapIns = 1;
if INSGAP in (2,3) then GapIns = 2;
if InsCurr = 2 then GapIns = 2;
if INSGAP = .M then GapIns = .M;
label GapIns = "Children without insurance at some point during the past Year";

SysCare3 = .; /**Systems of Care sub component 3 and SM_Adequate Insurance**/
if GapIns in (1,.M) and InsAdeq in (1,.M) then SysCare3 = 1;
if InsCurr = 2 or GapIns = 2 or InsAdeq = 2 then SysCare3 = 2;
if GapIns = .M and InsAdeq = .M then SysCare3 = .M;
label SysCare3 = "Children who are continuously and adequately insured";

/*System of care subcomponent 4: Received both preventive medical and dental
care***/
MedDentCare = .;
if PrevMed = .M and PrevDent in (.L,.M) then  MedDentCare = .M;
else if PrevMed in (1,.M) and PrevDent in (1,.L,.M) then  MedDentCare = 1;
else if PrevMed = 2 or PrevDent = 2 then  MedDentCare = 2;
label  MedDentCare = "Children who received both preventive medical and dental care
during the past 12 months";

/*System of care subcomponent 5: Had difficulties in accessing care and always or
usually frustrated in effort getting SErvices */
frustrated=.;
if C4Q04 = .M then frustrated = .M;
else if C4Q04 = 1 then frustrated = 0;
else if C4Q04 = 2 then frustrated = 1;
else if C4Q04 in (3,4) then frustrated = 2;
label frustrated = "Family frustrated in efforts to get SErvices during the past 12
months";

UnmetFrust = .;
if K4Q27 = .M and frustrated = .M then UnmetFrust = .M;
else if K4Q27 in (2,.M) and frustrated in (0,1,.M) then UnmetFrust = 1;
else if K4Q27 = 1 or frustrated = 2 then UnmetFrust = 2;
label UnmetFrust = "Children whoSE parents had difficulties in accessing care and
always or usually frustrated in effort getting SErvices for their children";

            /*System of care subcomponent 6: NPM_Transition, All Children*/
/***NPM_Transition: Transition to adult health care, All Children, age 12-17
Years***/
/*Transition Part A: Time alone with health care provider*/
if Year<=2017 then do;
TimeAlone = .;
if DOCPRIVATE = 1 then TimeAlone = 1;
if DOCPRIVATE = 2 then TimeAlone = 2;
```

```
if S4Q01 = 2 or K4Q20R = 1 then TimeAlone = 2;
if DOCPRIVATE = .M then TimeAlone = .M;
if S4Q01 =.M or K4Q20R = .M then TimeAlone = .M;
if SC_AGE_YearS < 12 then TimeAlone = .N;
end;
if Year>=2018 then do;
TimeAlone = .;
if DOCPRIVATE = 1 then TimeAlone = 1;
if DOCPRIVATE = 2 then TimeAlone = 2;
if S4Q01 = 2 then TimeAlone = 2;
if DOCPRIVATE = .M then TimeAlone = .M;
if S4Q01 =.M then TimeAlone = .M;
if SC_AGE_YearS < 12 then TimeAlone = .N;
end;
label TimeAlone = "Children who had time alone with health care provider at last
check-up, age 12-17 Years";

/*Transition Part B: Active work with child*/
ActiveWork = .;
if CHANGEAGE = 1 or GAINSKILLS = 1 then ActiveWork = 1;
else if CHANGEAGE = 2 or GAINSKILLS = 2 then ActiveWork = 2;
else if CHANGEAGE in (3,.M) and GAINSKILLS in (3,.M) then ActiveWork = .M;
else if SC_AGE_YearS < 12 then ActiveWork = .N;
label ActiveWork = "Provider worked with child to gain skills to manage
health/health care and understand health care changes at age 18, age 12-17 Years";

/*Transition Part C: Anticipatory guidance*/
TrtAdult = .;
if TREATCHILD = 1 and TREATADULT = 1 then TrtAdult = 1;
else if TREATCHILD = 1 and TREATADULT = 2 then TrtAdult = 2;
else if TREATCHILD = 2 then TrtAdult = .L;
else if TREATCHILD = .M or TREATADULT = .M then TrtAdult = .M;
if SC_AGE_YearS < 12 then TrtAdult = .N;
label TrtAdult = "Provider discusSEd shift to adult health care providers (if
needed), age 12-17 Years";

/*Transition to adult health care composite measure*/
Transition = .;
if TimeAlone in (1,.M) and ActiveWork in (1,.M) and TrtAdult in (1,.M,.L) then
Transition = 1;
if TimeAlone = 2 or ActiveWork = 2 or TrtAdult = 2 then Transition = 2;
if TimeAlone = .M and ActiveWork = .M and TrtAdult = .M then Transition = .M;
if SC_AGE_YearS < 12 then Transition = .N;
label Transition = "NPM_Transition, All Kids: Percent of adolescents, ages 12
through 17, who received SErvices to prepare for the transition to adult health
care";

/*NOM_CSHCN Systems of Care composite*/
SystCare = .;
if SC_AGE_YearS <=11 then do;
if ShareDec in (.L,1,.M) and MedicalHome in (1,.M) and SysCare3 in (1,.M) and
MedDentCare in (1,.M) and UnmetFrust in (1,.M)  then SystCare = 1;
if ShareDec = 2 or MedicalHome = 2 or SysCare3 = 2 or MedDentCare = 2 or UnmetFrust
= 2  then SystCare = 2;
if ShareDec in (.L,.M) and MedicalHome = .M and SysCare3 = .M and MedDentCare =.M
and UnmetFrust = .M then SystCare = .M;
end;
if SC_AGE_YearS >=12 then do;
```

```
if ShareDec in (.L,1,.M) and MedicalHome in (1,.M) and SysCare3 in (1,.M) and
MedDentCare in (1,.M) and UnmetFrust in (1,.M) and Transition in (1,.M) then
SystCare = 1;
if ShareDec = 2 or MedicalHome = 2 or SysCare3 = 2 or MedDentCare = 2 or UnmetFrust
= 2 or Transition = 2 then SystCare = 2;
if ShareDec in (.L,.M) and MedicalHome = .M and SysCare3 = .M and MedDentCare =.M
and UnmetFrust = .M and Transition = .M then SystCare = .M;
end;

if CSHCN_exp=1 then SystCare_1=SystCare;
if CSHCN_exp=2 then SystCare_1=.L;
label SystCare_1="NOM_CSHCN Systems of Care: Percent of CSHCN, ages 0 through 17,
who receive care in a well-functioning system";

/* 1= Yes,  2= No */
```

Data Alert

The definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the screener as this group of children has similar impacts as CSHCN identified by the screener. All data for this measure have been revised. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. Adverse Childhood Experiences stratifier was updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically. In 2023, the 'shared decision making' component question changed wording, but did not affect the component or overall component measure.

Flourishing

Percent of children, ages 6 months through 5 years, who are flourishing
Percent of children with and without special health care needs, ages 6 through 17, who are flourishing

GOAL

To increase the percent of children and adolescents who are flourishing.

DEFINITION

Numerators:
Number of children, ages 6 months through 5 years, who are reported by a parent to be flourishing (defined as parental response of always or usually to (1) This child is affectionate and tender with you; (2) This child bounces back quickly when things don't go his/her way; (3) This child shows interest and curiosity in learning new things; and (4) This child smiles and laughs a lot)
Number of children with and without special health care needs, ages 6 years through 17 years, who are flourishing (defined as parental response of always or usually to (1) show interest and curiosity in learning new things, (2) work to finish tasks they start, and (3) stay calm and in control when faced with a challenge")

Denominators:
Number of children ages 6 months through 5 years
Number of children ages 6 through 17 years

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Early and Middle Childhood (EMC) D07: Increase the proportion of children and adolescents who show resilience to challenges and stress (Developmental)

DATA SOURCES AND DATA ISSUES

National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

Improving child health requires supporting efforts that increase flourishing. Flourishing captures a child's ability to cope with stressors and form healthy relationships.[1] In children less than five years, characteristics of flourishing reflect curiosity, resilience, attachment to caregivers, and contentment with life. In youth 6 to 17 years, characteristics of flourishing reflect interest in learning, resilience and self-regulation. Based on 2020-2021 National Survey of Child Health Data, only 80.8% of children ages 6 months - 5 years were flourishing.[2] The percent of youth flourishing is lower in the older age groups, with only 62.1% of 6-11 year olds and 58.7% of 12-17 year olds flourishing.[2] Additionally, there are markedly lower rates of flourishing for youth ages 6-17 years with special health care needs (35.2%) compared to those without special health care needs (69.2%).[2] Supporting programming that promotes characteristics of flourishing in children is essential to ensuring children are well-equipped to navigate and overcome every day and unexpected challenges.[1]

(1) Donney JF, Ghandour RM, Kogan MD, Lewin A. Family-Centered Care and Flourishing in Early Childhood. Am J Prev Med. 2022;63(5):743-750. doi:10.1016/j.amepre.2022.06.015 https://www.sciencedirect.com/science/article/abs/pii/S0749379722003452#:~:text=Flourishing%20reflects%20a%20child's%20ability,child%20needs%20and%20family%20circumstances.

(2) Child and Adolescent Health Measurement Initiative. 2020-2021 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved 01/26/23 from www.childhealthdata.org.

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based

Stratifier	Subcategory	Special Notes
		coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NOM_Floursing, Young Child: 6mo-5yrs***/
tender = K6Q70_R;
if SC_AGE_LT6 = 1 then tender = .L;
if SC_AGE_YearS > 5 then tender =.N;
label tender = "Children are affectionate and tender with parent, age 6 months-5
Years";
resil0to5 = K6Q73_R;
```

```
if SC_AGE_LT6 = 1 then resil0to5 = .L;
if SC_AGE_YearS > 5 then resil0to5 =.N;
label resil0to5 = "Children who bounce back quickly when things don't go his/her
way, age 6 months-5 Years";
curious0to5 = K6Q71_R;
if SC_AGE_LT6 = 1 then curious0to5 = .L;
if SC_AGE_YearS > 5 then curious0to5 =.N;
label curious0to5 = "Children who show interest and curiosity in learning new
things, age 6months-5 Years";
smile = K6Q72_R;
if SC_AGE_LT6 = 1 then smile = .L;
if SC_AGE_YearS > 5 then smile =.N;
label smile = "Children who smile and laugh, age 6 months-5 Years";
flrsh0to5ct = 0;
if smile in (1,2) then flrsh0to5ct + 1;
if curious0to5 in (1,2) then flrsh0to5ct + 1;
if resil0to5 in (1,2) then flrsh0to5ct + 1;
if tender in (1,2) then flrsh0to5ct + 1;
if smile = .M and curious0to5 = .M and resil0to5 = .M and tender = .M then
flrsh0to5ct= .M;
if SC_AGE_LT6 = 1 then flrsh0to5ct = .L;
if SC_AGE_YearS > 5 then flrsh0to5ct =.N;
label flrsh0to5ct = "Count of always or usually responSEs to flourishing items, age
6 months-5 Years";
flrish0to5 = .;
if flrsh0to5ct in (0,1,2) then flrish0to5 = 1;
if flrsh0to5ct = 3 then flrish0to5 = 2;
if flrsh0to5ct = 4 then flrish0to5 = 3;
if smile = .M and curious0to5 = .M and resil0to5 = .M and tender = .M then
flrish0to5= .M;
if SC_AGE_LT6 = 1 then flrish0to5 = .L;
if SC_AGE_YearS > 5 then flrish0to5 =.N;
label flrish0to5 = "Flourishing for young children, age 6 months-5 Years";

FlrshYoung=.;
flrsh0to5_n=n(smile,curious0to5,resil0to5,tender);
if flrsh0to5_n>0 then do;
if flrsh0to5_n=flrsh0to5ct then FlrshYoung = 1;
else FlrshYoung = 2;
end;
if flrish0to5 = .M then FlrshYoung = .M;
if SC_AGE_LT6 = 1 then FlrshYoung = .L;
if SC_AGE_YearS > 5 then FlrshYoung =.N;
label FlrshYoung = "NOM_Flourishing, Young Child: Percent of children, ages 6
months through 5, who are flourishing";
```

Data Alert

In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. Adverse Childhood Experiences stratifier was updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Adverse Childhood Experiences

Percent of children, ages 0 through 17, who have experienced 2 or more Adverse Childhood Experiences

GOAL

To reduce the percent of children and adolescents who experience Adverse Childhood Experiences.

DEFINITION

Numerator: Number of children, ages 0 through 17, who are reported by a parent to have experienced 2 or more Adverse Childhood Experiences (hard to cover basics on family's income; parent/guardian divorced or separated; parent/guardian died; parent/guardian served time in jail; saw or hear parents or adults slap, hit, kick, punch one another in the home; was a victim of violence or witnessed violence in his or her neighborhood; lived with anyone who was mentally ill; suicidal or several depressed; lived with anyone who had a problem with alcohol or drugs; or was treated or judged unfairly because of his or her race or ethnic group).

Denominator: Number of children, ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Injury and Violence Prevention (IVP) D03: Reduce the number of young adults who report 3 or more adverse childhood experiences (Developmental)

DATA SOURCES AND DATA ISSUES

National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

Adverse childhood experiences (ACEs) are a serious public health problem that are associated with poor health outcomes across the lifespan.[1] ACEs consist of potentially traumatic events that can result in chronic toxic stress; examples of ACEs include physical or emotional neglect, exposure to violence, or having a family member attempt suicide.[1,2] Research has shown a strong relationship between increasing number of ACEs and poor health outcomes in childhood and adulthood.[1] Preventing ACES can reduce many chronic health conditions, including depression in adults by as much as 44% and chronic obstructive pulmonary disease by 27%.[3]

(1) Centers for Disease Control and Prevention (2019). Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf

(2) Maternal and Child Health Bureau. NSCH Data Brief: Adverse Childhood Experiences. 2020 June. https://mchb.hrsa.gov/sites/default/files/mchb/data-research/nsch-ace-databrief.pdf

(3) Centers for Disease Control and Prevention. Vital Signs | Adverse Childhood Experiences (ACEs). 2021 August 23. https://www.cdc.gov/vitalsigns/aces/index.html#:~:text=1%20Change%20how%20people%20think%20about%20the%20causes,and%20environments%20where%20children%20live%2C%20learn%2C%20and%20play.

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

Adverse Childhood Experiences were updated and revised from 2019-2020 forward. NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. This composite measure includes 10 survey items from the NSCH. In 2021, a new item was added that asked if the child was EVER treated or judged unfairly because of a health condition or disability. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Child Age	0-5 Years 6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.

Stratifier	Subcategory	Special Notes
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NOM_Adverse Childhood Experiences: 2+ Adverse Childhood Experiences***/
ACEct = 0;
if ACE1 in (3,4) then ACEct + 1; *cover basics;
if ACE3 = 1 then ACEct + 1; *divorce;
if ACE4 = 1 then ACEct + 1; *parent/guardian death;
if ACE5 = 1 then ACEct + 1; *parent/guardian jail or prison
if ACE6 = 1 then ACEct + 1; *adults abuse others;
if ACE7 = 1 then ACEct + 1; *victim of violence;
if ACE8 = 1 then ACEct + 1; *lived w/mentally ill;
if ACE9 = 1 then ACEct + 1; *lived with drug/alcohol abuSE;
if ACE10 = 1 then ACEct + 1; *treated unfairly bc of race;
if ACE11 = 1 then ACEct + 1; *treated unfairly bc of their health;
if ACE1 = .M and ACE3 = .M and ACE4 = .M and ACE5 = .M and ACE6 = .M and ACE7 = .M
and ACE8 = .M and ACE9 = .M and ACE10 = .M and ACE11 in (.,.M) then ACEct = .M;
label ACEct = "Number of Adverse Childhood Experiences for child, of 10 asked
about";
```

```
ACE2 = .;
if ACE = 3 then ACE2 = 1; *2+ ACEs;
if ACE in (1,2) then ACE2 = 2; *0-1 ACE;
if ACE = .M then ACE2 = .M;
label ACE2 = "NOM_Adverse Childhood Experiences: Percent of children, ages 0
through 17, who have experienced 2 or more ACEs";
```

Data Alert

Adverse Childhood Experiences were updated and revised from 2019-2020 forward. CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Table 3: National Performance Measures (NPMs)

Short Title	Full Title
Postpartum Visit	A) Percent of women who attended a postpartum checkup within 12 weeks after giving birth and B) Percent of women who attended a postpartum checkup and received recommended care components
Postpartum Mental Health Screening	Percent of women screened for depression or anxiety following a recent live birth
Postpartum Contraception Use	Percent of women using a most or moderately effective contraceptive following a recent live birth
Perinatal Care Discrimination	Percent of women with a recent live birth who experienced racial/ethnic discrimination while getting healthcare during pregnancy, delivery, or at postpartum care
Risk-Appropriate Perinatal Care	Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)
Breastfeeding	A) Percent of infants who are ever breastfed and B) Percent of children, ages 6 month through 2 years, who were breastfed exclusively for 6 months
Safe Sleep	A) Percent of infants placed to sleep on their backs, B) Percent of infants placed to sleep on a separate approved sleep surface, C) Percent of infants placed to sleep without soft objects or loose bedding, D) Percent of infants room-sharing with an adult
Housing Instability – Pregnancy Housing Instability - Child	Percent of women with a recent live birth who experienced housing instability in the 12 months before a recent live birth Percent of children, ages 0 through 11, who experienced housing instability in the past year
Developmental Screening	Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year
Childhood Vaccination	Percent of children who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) by age 24 months
Preventive Dental Visit – Pregnancy Preventive Dental Visit – Child	Percent of women who had a preventive dental visit during pregnancy Percent of children, ages 1 through 17, who had a preventive dental visit in the past year
Physical Activity	Percent of children, ages 6 through 11, who are physically active at least 60 minutes per day
Food Sufficiency	Percent of children, ages 0 through 11, whose households were food sufficient in the past year
Adolescent Well-Visit	Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year
Mental Health Treatment	Percent of adolescents, ages 12 through 17, who receive needed mental health treatment or counseling
Tobacco Use	Percent of adolescents, grades 9 through 12, who currently use tobacco products
Adult Mentor	Percent of adolescents, ages 12 through 17, who have one or more adults outside the home who they can rely on for advice or guidance
Medical Home – Overall Medical Home – Personal Doctor Medical Home – Usual Source of Sick Care Medical Home – Family Centered Care Medical Home – Referrals Medical Home – Care Coordination	Percent of children with and without special health care needs, ages 0 through 17, who have a medical home Percent of children with and without special health care needs, ages 0 through 17, who have a personal doctor or nurse Percent of children with and without special health care needs, ages 0 through 17, who have a usual source of sick care Percent of children with and without special health care needs, ages 0 through 17, who have family centered care Percent of children with and without special health care needs, ages 0 through 17, who receive needed referrals Percent of children with and without special health care needs, ages 0 through 17, who receive needed care coordination
Transition	Percent of adolescents with and without special health care needs, ages 12 through 17, who received services to prepare for the transition to adult health care
Bullying	Percent of adolescents with and without special health care needs, ages 12 through 17, who are bullied or who bully others

Postpartum Visit

A) Percent of women who attended a postpartum checkup within 12 weeks after giving birth
B) Percent of women who attended a postpartum checkup and received recommended care components

GOAL

To increase the percent of women who have a postpartum visit within 12 weeks after giving birth and received recommended care components.

DEFINITION

Numerators:
A) Number of women who reported attending a postpartum checkup within 12 weeks after giving birth
B) Number of women who reported attending a postpartum checkup within 12 weeks after giving birth and that a healthcare provider talked to them about birth control methods and what to do if they felt depressed or anxious

Denominators:
A) Number of women with a recent live birth
B) Number of women with a recent live birth who reported attending a postpartum checkup within 12 weeks after giving birth

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Pregnancy and Childbirth (MICH) Objective D01: Increase the proportion of women who get screened for postpartum depression (Developmental)

DATA SOURCES AND DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)

MCH POPULATION DOMAIN

Women/Maternal Health

MEASURE DOMAIN

Clinical Health Systems

POPULATION HEALTH SIGNIFICANCE

The postpartum period is an important time for maternal health and well-being. Untreated chronic conditions and pregnancy-related complications increase the risk of adverse health outcomes in the weeks and months following delivery. Data from Maternal Mortality Review Committees in 36 states suggest that more than half of pregnancy-related deaths occur from 7 to 365 days postpartum.[1] A comprehensive postpartum visit is an opportunity to improve maternal health by providing recommended clinical services, including screening, counseling, and management of health issues.[2] Anticipatory guidance and screening for mental health conditions and contraceptive counseling are key components of postpartum care that are recommended by national quality standards and professional organizations.[2,3,4] The American College of Obstetricians and Gynecologists (ACOG) recommends that all women have contact with their obstetrician-gynecologists or other obstetric providers within the first three weeks postpartum followed by a comprehensive postpartum visit within 12 weeks after birth.[2]

(1) Trost SL, Beauregard J, Njie F, et al. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017–2019. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services; 2022.
(2) ACOG Committee Opinion No. 736: Optimizing Postpartum Care. Obstet Gynecol. 2018 Sept; 132(3): 784-785. doi: 10.1097/AOG.0000000000002849.
(3) Interrante JD, Admon LK, Caroll C, et al. Association of health insurance, geography, and race and ethnicity with disparities in receipt of recommended postpartum care in the US. JAMA Health Forum. 2022; 3(10): e223292.

doi:10.1001/jamahealthforum.2022.3292
(4) Centers for Medicare & Medicaid Services. 2023 and 2024 Core Set of Maternal and Perinatal Health Measures for Medicaid and CHIP (Maternity Core Set). 2023.

FAD Availability by Year

Year	Data Not Available
2023	CA, ID, NC, OH, AS, FM, GU, MH, PW, VI
2022	CA, ID, NC, OH, OR, AS, FM, GU, MH, PW, VI
2021	CA, ID, NC, OH, AS, FM, GU, MH, MP, PW, VI
2020	CA, NC, OH, AS, FM, GU, MH, MP, PW, PR, VI

*PRAMS data are available to be reported by the state/jurisdiction; did not meet response rate threshold required for reporting by CDC PRAMS, but MCHB does not use a response rate criteria for TVIS as long as data are appropriately weighted to account for non-response bias.

Data Notes

There were substantive changes to the postpartum visit questions for PRAMS Phase 9 (beginning 2023) where the time frame changed from 4-6 weeks to up to 12 weeks and the wording about mental health changed from did the provider "Ask me if I was feeling down or depressed" to did the provider talk to you about "What to do if I feel depressed or anxious". Only the estimate for Postpartum Visit – B Recommended Care Components was affected. Data from prior years are not comparable for that measure; thus, only 2023 data are provided. The CDC eliminated the response rate threshold requirement for data release. All sites are now included, and data from previously excluded sites have been added back from 2020 to present for Postpartum Visit – A Attendance. Consistent with vital statistics, overall U.S. estimates do not include territories. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-response, and non-coverage. Standard errors account for the complex survey design. For more information on the PRAMS methodology, visit http://www.cdc.gov/prams/.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	From the birth certificate
Educational Attainment	Less than high school High school graduate Some college College graduate	From the birth certificate.
Health Insurance	Private Medicaid Other Public Uninsured	From the birth certificate. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	From the birth certificate
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone	From the birth certificate. Subcategories are not mutually exclusive.

Stratifier	Subcategory	Special Notes
	Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
WIC Participation	Yes No	From the birth certificate. Refers to prenatal WIC participation.

SAS Code

```
*** Postpartum visit and postpartum visit recommended care components;
*** Per HRSA recommendation, treat any missing as missing;
*** Postpartum Visit uses variable PPV_CHK , no recoding needed;

*** Phase 8***
If ppv_chk =2 and vpp_bcm =2 and vpp_depr= 2 then ppv_rec_care = 2; *yes;
else if ppv_chk =2 and (vpp_bcm <= 0 or vpp_depr <= 0) then ppv_rec_care = .; *any
missing coded as missing;
else if ppv_chk =2 and (vpp_bcm = 1 or vpp_depr = 1) then ppv_rec_care = 1; * no;
If ppv_chk <=1 then  ppv_rec_care = .;  *missing and not part of denominator;
```

*** Updated for Phase 9 - Recommended care component - VPP_BCM and VPP_DPRANX;
If ppv_chk =**2** and vpp_bcm =**2** and vpp_dpranx= **2** then ppv_rec_care = **2**; *yes;
else if ppv_chk =**2** and (vpp_bcm <= **0** or vpp_dpranx <= **0**) then ppv_rec_care = **.**; *any missing coded as missing;
else if ppv_chk =**2** and (vpp_bcm = **1** or vpp_dpranx = **1**) then ppv_rec_care = **1**; * no;
If ppv_chk <=**1** then ppv_rec_care = **.**; *missing and not part of denominator;
keep ppv_chk ppv_rec_care vpp_dpranx vpp_bcm;
format ppv_rec_care ny1f.;
label ppv_rec_care='Received Postpartum Visit Recommended Care';

Data Alert

Wording changes in PRAMS Phase 9 impacted Postpartum Visit – B Recommended Care Components. Only 2023 data are provided. The CDC eliminated the response rate threshold requirement for data release. All sites are now included, and data from previously excluded sites have been added back from 2020 to present for Postpartum Visit A - Attendance. Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Postpartum Mental Health Screening

Percent of women who were screened for depression or anxiety following a recent live birth

GOAL

To increase the percent of women who receive postpartum depression or anxiety screening.

DEFINITION

Numerator: Number of women who reported that a healthcare provider asked a series of questions, in person or on a form, to know if they were feeling down, depressed, anxious, or irritable since their new baby was born

Denominator: Number of women with a recent live birth

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Pregnancy and Childbirth (MICH) Objective D01: Increase the proportion of women who get screened for postpartum depression (Developmental)

DATA SOURCES AND DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)

MCH POPULATION DOMAIN

Women/Maternal Health

MEASURE DOMAIN

Clinical Health Systems

POPULATION HEALTH SIGNIFICANCE

Mental health conditions are common complications during the postpartum period with approximately 1 in 8 women experiencing depressive symptoms following a live birth.[1] Mental health conditions are associated with several adverse health behaviors and outcomes, including poorer maternal and infant bonding, decreased breastfeeding initiation, and delayed infant development.[2] They are also the leading underlying causes of pregnancy-related deaths.[3] Screening for mental health conditions can identify those at risk for depression and increase the provision of treatment or referrals with the potential to reduce other adverse health consequences. Several professional and clinical organizations such as the U.S. Preventive Services Task Force, the American College of Obstetricians and Gynecologists (ACOG), and the American Academy of Pediatrics recommend screening for postpartum depression; ACOG also recommends screening for anxiety symptoms during the postpartum visit.

(1) Bauman BL, Ko JY, Cox S, et al. Vital Signs: Postpartum Depressive Symptoms and Provider Discussions About Perinatal Depression - United States, 2018. MMWR Morb Mortal Wkly Rep. 2020;69(19):575-581. Published 2020 May 15. doi:10.15585/mmwr.mm6919a2. https://www.cdc.gov/mmwr/volumes/69/wr/mm6919a2.htm

(2) Slomian J, Honvo G, Emonts P, Reginster JY, Bruyère O. Consequences of maternal postpartum depression: A systematic review of maternal and infant outcomes [published correction appears in Womens Health (Lond). 2019 Jan-Dec;15:1745506519854864]. Womens Health (Lond). 2019;15:1745506519844044. doi:10.1177/1745506519844044 https://journals.sagepub.com/doi/pdf/10.1177/1745506519844044

(3) Trost SL, Beauregard J, Njie F, et al. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017–2019. Atlanta, GA: Centers for Disease Control and Prevention, US Department of Health and Human Services; 2022. https://www.cdc.gov/reproductivehealth/maternal-mortality/docs/pdf/Pregnancy-Related-Deaths-Data-MMRCs-2017-2019-H.pdf

FAD Availability by Year

Year	Data Not Available
2023	CA, ID, NC, OH, AS, FM, GU, MH, PW, VI

Data Notes

Data for this measure began in 2023 (PRAMS Phase 9). Consistent with vital statistics, overall U.S. estimates do not include territories. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-response, and non-coverage. Standard errors account for the complex survey design. For more information on the PRAMS methodology, visit http://www.cdc.gov/prams/

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	From the birth certificate
Educational Attainment	Less than high school High school graduate Some college College graduate	From the birth certificate.
Health Insurance	Private Medicaid Other Public Uninsured	From the birth certificate. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	From the birth certificate
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	From the birth certificate. Subcategories are not mutually exclusive.
WIC Participation	Yes No	From the birth certificate. Refers to prenatal WIC participation.

SAS Code

```
*** Use variable MH_SCREENAP as is;
keep mh_screenap;
label mh_screenap = 'Postpartum Mental Health Screening';
```

Postpartum Contraception Use

Percent of women who are using a most or moderately effective contraceptive following a recent live birth

GOAL

To increase the percent of women who are using postpartum contraception.

DEFINITION

Numerator: Number of women who reported they are using a most effective (long-acting reversible contraceptive such as contraceptive implants and intrauterine devices or systems as well as irreversible surgical contraception) or moderately effective (injectables, oral pills, patches, rings, or diaphragms) method of contraception

Denominator: Number of women with a recent live birth

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Family Planning (FP) Objective 10: Increase the proportion of women at risk for unintended pregnancy who use effective birth control. (Baseline: 60.3% in 2015-17, Target: 65.1%)

DATA SOURCES AND DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)

MCH POPULATION DOMAIN

Women/Maternal Health

MEASURE DOMAIN

Health Behavior

POPULATION HEALTH SIGNIFICANCE

Contraception is recognized as an effective strategy for reducing unintended pregnancies and achieving healthy birth spacing thereby improving maternal and child health outcomes. In the United States, nearly two-thirds of reproductive-aged women report currently using contraception.[1] However, those at greatest need for contraception may not be accessing or using it. In 2017-2019, 3 in 5 reproductive-aged women from 45 U.S. jurisdictions had an ongoing or potential need for contraceptive services; nearly one-third were not using a method of contraception at last sexual encounter.[2] Long-acting reversible contraception methods are considered the most effective at preventing pregnancy, while short-acting reversible methods are moderately effective. Improving the uptake and use of these effective contraception methods in the postpartum period can prevent unintended pregnancies and improve health outcomes. Contraceptive care for postpartum women is part of the Core Set of Maternal and Perinatal Health Measures for Medicaid and CHIP.

(1) Daniels K, Abma JC. Current Contraceptive Status Among Women Aged 15-49: United States, 2017-2019. NCHS Data Brief. 2020;(388):1-8. https://www.cdc.gov/nchs/data/databriefs/db327-h.pdf

(2) Zapata LB, Pazol K, Curtis KM, et al. Need for Contraceptive Services Among Women of Reproductive Age - 45 Jurisdictions, United States, 2017-2019. MMWR Morb Mortal Wkly Rep. 2021;70(25):910-915. Published 2021 Jun 25. doi:10.15585/mmwr.mm7025a2 https://www.cdc.gov/mmwr/volumes/70/wr/mm7025a2.htm#:~:text=During%202017%E2%80%932019%2C%20in%20the,45.3%25%20(Puerto%20Rico)%20to

FAD Availability by Year

Year	Data Not Available
2023	CA, ID, NC, OH, AS, FM, GU, MH, PW, VI
2022	CA, ID, NC, OH, AS, FM, GU, MH, PW, VI

Year	Data Not Available
2021	CA, ID, NC, OH, OR, AS, FM, GU, MH, MP, PW, PR, VI
2020	CA, ID, OH, AS, FM, GU, MH, MP, PW, PR, VI
2019	CA, ID, OH, AS, FM, GU, MH, MP, PW, PR, VI
2018	CA, HI, ID, OH, AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

The CDC eliminated the response rate threshold requirement for data release. All sites are now included, and data from previously excluded sites have been added back from 2018 to present. Consistent with vital statistics, overall U.S. estimates do not include territories. For NY, 2020 estimates only include NYC. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-response, and non-coverage. Standard errors account for the complex survey design. For more information on the PRAMS methodology, visit http://www.cdc.gov/prams/

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	From the birth certificate
Educational Attainment	Less than high school High school graduate Some college College graduate	From the birth certificate.
Health Insurance	Private Medicaid Other Public Uninsured	From the birth certificate. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	From the birth certificate
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	From the birth certificate. Subcategories are not mutually exclusive.
WIC Participation	Yes No	From the birth certificate. Refers to prenatal WIC participation.

SAS Code

```
*CODING SPECIFIC CONTRACEPTIVE METHODS PHASE 8;
```

```
if bc_now4 = 1 and BCB_PNOW = 2 then eff_method = .;  *Exclude if pregnant now;
else if bc_now4 = 1 AND BCB_TUBE = 2      then eff_method=2;      *female sterilization; *No to
screener (#51) but indicated a method in #52;
else if bc_now4 = 1                       then eff_method=1;      *no method (defer to screener);
else if bc_now4 = .B or bc_now4 = .S      then eff_method=.;      *missing on screener (#51);
else if bcp_tube=2                        then eff_method=2;      *female sterilization;
else if bcp_vase=2                        then eff_method=2;      *male sterilization;
else if bcp_impl=2                        then eff_method=2;      *implant;
else if bcp_iud=2                         then eff_method=2;      *IUD;
else if bcp_sht3=2                        then eff_method=2;      *DMPA;
else if bcp_pill=2                        then eff_method=2;      *pills;
else if bcp_ptrg=2                        then eff_method=2;      *patch/ring;
else if bcp_cond=2                        then eff_method=1;      *condoms;
else if bcp_rhyt=2                        then eff_method=1;      *NFP/rhythm method;
else if bcp_pull=2                        then eff_method=1;      *withdrawal;
else if bcp_nsex=2                        then eff_method=1;      *No method;   *Indicated abstinence in
#53;
else if bcp_oth=2                         then eff_method=.; *other;
else if bc_now4=2                         then eff_method=.; *yes, no method specified;
keep eff_method;
format eff_method ny1f.;
label eff_method='Postpartum Contraception Use';

***  NEW coding in Phase 9 - Postpartum contraception use.  All most- and moderately- effective methods
included;
***  Denominator excludes those already pregnant;

if bc_now9 = 3 then eff_method = .;  *Exclude if pregnant now;
else if bc_now9 = 1 AND BCB_TUBE = 2    then eff_method=2;   *female sterilization; *No to screener (#51) but
indicated a method in #52;
else if bc_now9 = 1 AND BCB_VASE = 2    then eff_method=2;   *male sterilization;        *No to screener (#51)
but indicated a method in #52;
else if bc_now9 = 1                                          then eff_method=1; *no method (defer to
screener);
else if bc_now9 = .B or bc_now4 = .S     then eff_method=.;      *missing on screener (#51);
else if bcp_tube=2                                           then eff_method=2;      *female sterilization;
else if bcp_vase=2                                           then eff_method=2;      *male sterilization;
else if bcp_impl=2                                           then eff_method=2;      *implant;
else if bcp_iud=2                                            then eff_method=2;      *IUD;
else if bcp_sht3=2                                           then eff_method=2;      *DMPA;
else if bcp_pill=2                                           then eff_method=2;      *pills;
else if bcp_ptrg=2                                           then eff_method=2;      *patch/ring;
else if bcp_cond=2                                           then eff_method=1;      *condoms;
else if bcp_rhyt=2                                           then eff_method=1;      *NFP/rhythm method;
else if bcp_pull=2                                           then eff_method=1; *withdrawal;
else if bcp_lam=2                                            then eff_method=1; *lactational amenorrhea;
else if bcp_oth=2                                            then eff_method=.; *other;
else if bc_now9=2                                            then eff_method=.; *yes, no method specified;
keep eff_method bc_now9;
format eff_method ny1f.;
label eff_method='Postpartum Contraception Use';
```

Perinatal Care Discrimination

Percent of women with a recent live birth who experienced racial/ethnic discrimination while getting healthcare during pregnancy, delivery, or at postpartum care

GOAL

To reduce the percent of women who experience racial/ethnic discrimination while getting healthcare during pregnancy, delivery, or postpartum.

DEFINITION

Numerator: Number of women who reported experiencing discrimination or were prevented from doing something, hassled, or made to feel inferior while getting healthcare during their pregnancy, at delivery, or at postpartum care because of their race, ethnicity or skin color.

Denominator: Number of women with a recent live birth

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES AND DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)

MCH POPULATION DOMAIN

Women/Maternal Health or Perinatal/Infant Health

MEASURE DOMAIN

Social Determinants of Health

POPULATION HEALTH SIGNIFICANCE

Discrimination has been found to be associated with poor mental health, adverse physical health outcomes (e.g., hypertension, obesity, cardiovascular disease), and other poor health behaviors and outcomes.[1] As a key risk factor for maternal mortality and morbidity, it is important to understand the experiences of discrimination, particularly in healthcare settings where pregnant and postpartum women seek care, to more effectively address its impact on maternal health outcomes.[2]

(1) Williams DR, Lawrence JA, Davis BA, Vu C. Understanding how discrimination can affect health. Health Serv Res. 2019;54 Suppl 2(Suppl 2):1374-1388. doi:10.1111/1475-6773.13222 https://pmc.ncbi.nlm.nih.gov/articles/PMC6864381/#hesr13222-sec-0010

(2) Centers for Disease Control and Prevention. Circumstances Contributing to Pregnancy-Related Deaths: Data From Maternal Mortality Review Committees in 38 U.S. States, 2020. https://www.cdc.gov/maternal-mortality/php/report/index.html

FAD Availability by Year

Year	Data Not Available
2023	CA, ID, NC, OH, AS, FM, GU, MH, PW, VI

Data Notes

Data for this measure began in 2023 (PRAMS Phase 9). Consistent with vital statistics, overall U.S. estimates do not include territories. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-response, and non-coverage. Standard errors account for the complex survey design. For more information on the PRAMS methodology, visit http://www.cdc.gov/prams/

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	From the birth certificate
Educational Attainment	Less than high school High school graduate Some college College graduate	From the birth certificate.
Health Insurance	Private Medicaid Other Public Uninsured	From the birth certificate. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	From the birth certificate
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	From the birth certificate. Subcategories are not mutually exclusive.
WIC Participation	Yes No	From the birth certificate. Refers to prenatal WIC participation.

SAS Code

```
***(NEW) - Perinatal Care Discrimination;
***Variable DISCR_RACETHN used as is;
keep discr_racethn;
label discr_racethn ='Perinatal Care Discrimination';
```

Risk-Appropriate Perinatal Care

Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

GOAL

To ensure that higher risk mothers and newborns deliver at appropriate level hospitals.

DEFINITION

Numerator: Number of VLBW infants born in a hospital with a level III or higher NICU

Denominator: Number of VLBW infants (< 1500 grams)

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES and DATA ISSUES

Linked birth hospitalization data from the Healthcare Cost and Utilization Project (HCUP) and hospital data on NICU levels from American Hospital Association survey; linked birth certificate and hospital data on NICU levels from CDC Levels of Care Assessment Tool (LOCATe), or state certifications/ designations

MCH POPULATION DOMAIN

Perinatal/Infant Health

MEASURE DOMAIN

Perinatal/Infant Health

POPULATION HEALTH SIGNIFICANCE

Very low birth weight infants (<1,500 grams or 3.25 pounds) are the most fragile newborns with a risk of death 100 times higher than that of normal birth weight infants (≥2,500 grams or 5.5 pounds).[1] VLBW infants are significantly more likely to survive and thrive when born in a facility with a level-III Neonatal Intensive Care Unit (NICU), a subspecialty facility equipped to handle high-risk neonates. In 2012, the AAP provided updated guidelines on the definitions of neonatal levels of care to include Level I (basic care), Level II (specialty care), and Levels III and IV (subspecialty intensive care) based on the availability of appropriate personnel, physical space, equipment, and organization.[2] Given overwhelming evidence of improved outcomes, the AAP recommends that VLBW and/or very preterm infants (<32 weeks' gestation) be born in only level III or IV facilities.[2]

(1) Ely DM, Driscoll AK. Infant Mortality in the United States, 2020: Data From the Period Linked Birth/Infant Death File. Natl Vital Stat Rep. 2022;71(5):1-18. https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_10-508.pdf

(2) American Academy of Pediatrics Committee on Fetus And Newborn. Levels of neonatal care. Pediatrics. 2012;130(3):587-597. doi:10.1542/peds.2012-1999 https://publications.aap.org/pediatrics/article/130/3/587/30212/Levels-of-Neonatal-Care

Breastfeeding

A) Percent of infants who are ever breastfed
B) Percent of children, ages 6 months through 2 years, who were breastfed exclusively for 6 months

GOAL

To increase the percent of infants who are breastfed and who are breastfed exclusively for six months.

DEFINITION

Numerator:

(1) Number of infants for whom breastfeeding was initiated by hospital discharge (NVSS)
(2) Number of children, ages 6 months through 2 years, who are reported by a parent to have been breastfed or fed breast milk exclusively for 6 months (NSCH)

Denominator:

A) Number of live births, excluding those transferred to another facility within 24 hours and who died before completion of the report (NVSS)
B) Number of children, ages 6 months through 2 years (NSCH)

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 15: Increase the proportion of infants who are breastfed exclusively through 6 months (Baseline: 24.9% of infants born in 2015, Target: 42.4%)
Related to MICH Objective 16: Increase the proportion of infants who are breastfed at 1 year (Baseline: 35.9% of infants born in 2015, Target: 54.1%)

DATA SOURCES and DATA ISSUES

A) National Vital Statistics System (NVSS) for states and territories
B) National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Perinatal/Infant Health

MEASURE DOMAIN

Health Behavior

POPULATION HEALTH SIGNIFICANCE

The American Academy of Pediatrics (AAP) recommends all infants (including premature and sick newborns) exclusively breastfeed for about six months, followed by continued breastfeeding as complementary foods are introduced for 2 years or longer. However, significant differences in breastfeeding initiation and duration persist by socioeconomic status and race/ethnicity. Breastfeeding supports optimal growth and development, strengthens the immune system, reduces respiratory infections, gastrointestinal illness, and SIDS, and promotes neurodevelopment. Breastfed children may also be less likely to develop diabetes, childhood obesity, and asthma. Maternal benefits include reduced postpartum blood loss due to oxytocin release and possible protective effects against breast and ovarian cancer, diabetes, hypertension, and heart disease.

(1) Meek JY, Noble L; Section on Breastfeeding. Policy Statement: Breastfeeding and the Use of Human Milk. Pediatrics. 2022;150(1):e2022057988. doi:10.1542/peds.2022-057988. https://publications.aap.org/pediatrics/article/150/1/e2022057988/188347/Policy-Statement-Breastfeeding-and-the-Use-of

FAD Availability by Year - NVSS

Year	Data Not Available
2023	CA, AS, FM, MH, PW
2022	CA, AS, FM, MH, PW
2021	CA, AS, FM, MH, PW
2020	CA, MI, AS, FM, MH, PW, VI
2019	CA, MI, AS, FM, MH, PW, VI
2018	CA, MI, AS, FM, MH, PW, VI
2017	CA, MI, AS, FM, MH, PW, VI
2016	CA, MI, AS, FM, MH, PW
2015	CA, CT, MI, NJ, AS, FM, MH, PW

Data Notes – NVSS

Breastfeeding was modified in the 2003 revision of the U.S. Standard Certificate of Live Birth and is only available for the states/jurisdictions that had implemented the 2003 revision as of January 1 of the data year. Overall U.S. estimates prior to 2016 are not comparable due to the addition of states over time that have implemented the 2003 revision. Trends within a state after the 2003 revision are comparable. California does not report breastfeeding initiation data to NVSS. Michigan began standard collection in 2021. Urban/rural residence is not available for territories. For more information about the birth file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes – NVSS

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only
Plurality	Singleton Multiple Birth	Includes imputed plurality
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.

Stratifier	Subcategory	Special Notes
	Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.
WIC Participation	Yes No	Refers to prenatal WIC participation.

SAS Code – NVSS

IF RESTATUS NE 4; * restrict to resident births;

```
if bf_flag=1 and itran='N' and ilive='Y' then do;
if bf='Y' then bfed=1;
if bf='N' then bfed=0;end;
```

FAD Availability by Year - NSCH

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes - NSCH

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes - NSCH

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties.
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based

Stratifier	Subcategory	Special Notes
	RxMeds only Non-CSHCN	on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau;

Stratifier	Subcategory	Special Notes
		obtained from restricted access files

SAS Code - NSCH

```
/***NPM_Breastfeeding: Exclusivity at 6 months, Children 6 months-2 Years***/
BrstStop = .;
if BREASTFEDEND_MO_S < 6 then BrstStop = 1;
if BREASTFEDEND_MO_S >= 6 OR K6Q41R_STILL = 1 then BrstStop = 2;
if BREASTFEDEND_MO_S = .M then BrstStop = .M;
if SC_AGE_YearS > 2 then BrstStop =.N;
label BrstStop = "Age in months when stopped breastfeeding";
FedForm = .;
if FRSTFORMULA_MO_S < 6 then FedForm = 1;
if FRSTFORMULA_MO_S >= 6 then FedForm = 2;
if K6Q42R_NEVER = 1 then FedForm = 2;
if FRSTFORMULA_MO_S = .M then FedForm = .M;
if SC_AGE_YearS > 2 then FedForm =.N;
label FedForm = "Age in months when first fed formula";
FedOther = .;
if FRSTSOLIDS_MO_S < 6 then FedOther = 1;
if FRSTSOLIDS_MO_S >= 6 then FedOther = 2;
if K6Q43R_NEVER = 1 then FedOther = 2;
if FRSTSOLIDS_MO_S = .M then FedOther = .M;
if SC_AGE_YearS > 2 then FedOther =.N;
label FedOther = "Age in months when first fed other food";
ExBrstFd = .;
if K6Q40 = 2 then ExBrstFd = 1;
else if BrstStop = 1 then ExBrstFd = 2;
else if BrstStop = 2 and (FedForm = 1 or FedOther = 1) then ExBrstFd = 3;
else if BrstStop = 2 and (FedForm = 2 or FedOther = 2) then ExBrstFd = 4;
else if K6Q40 in (1,.M) then ExBrstFd = .M;

if SC_AGE_LT6 = 1 then ExBrstFd = .L;
if SC_AGE_YearS > 2 then ExBrstFd =.N;
label ExBrstFd = "Exclusively breastfed or given breast milk for first 6 months,
age 6 months-2 Years";

Ex6BrstFd=.;
if ExBrstFd = 4 then Ex6BrstFd = 1;
if ExBrstFd in (1,2,3) then Ex6BrstFd = 2;
if ExBrstFd=.M then Ex6BrstFd = .M;
if SC_AGE_LT6 = 1 then Ex6BrstFd = .L;
if SC_AGE_YearS > 2 then Ex6BrstFd =.N;
label Ex6BrstFd="NPM_Breastfeeding: Percent of children, ages 6 months through 2
Years, who were breastfed exclusively for 6 months";
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Safe Sleep

A) Percent of infants placed to sleep on their backs
B) Percent of infants placed to sleep on a separate approved sleep surface
C) Percent of infants placed to sleep without soft objects or loose bedding
D) Percent of infants room-sharing with an adult during sleep

GOAL

To increase the percent of infants placed to sleep on their backs and in a safe sleep environment.

DEFINITION

Numerators:

A) Number of women who reported that they placed their infant to sleep only on their backs (not stomach or side) in the past two weeks
B) Number of women who reported that their infant always slept alone in their own crib or bed while they themselves were sleeping in the past two weeks. Cribs or beds include a crib, portable crib, or bassinet, and *not* a twin or larger mattress or bed, couch, sofa, armchair, car seat, swing, rocker, or other inclined sleeper.
C) Number of women who reported that their infant was *not* placed to sleep with comforters, quilts, blankets, non-fitted sheets, soft toys, cushions, pillows (including nursing pillows), or crib bumper pads (mesh or non-mesh) in the past two weeks
D) Number of women who reported that their infant's crib or bed was in the same room where they or another adult slept in the past two weeks

Denominators:

A-D) Number of women with a recent live birth, excluding those whose infant has died or is not currently living with them

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 14: Increase the proportion of infants placed to sleep on their backs (Baseline: 78.7% of infants born in 2016; Target: 88.9%);

Related to MICH Objective D3: Increase the proportion of infants who are put to sleep in a safe sleep environment. (Developmental)

DATA SOURCES and DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)

MCH POPULATION DOMAIN

Perinatal/Infant Health

MEASURE DOMAIN

Health Behavior

POPULATION HEALTH SIGNIFICANCE

Sleep-related infant deaths, also called Sudden Unexpected Infant Deaths (SUID), account for the largest share of infant deaths after the first month of life.[1] SUID includes Sudden Infant Death Syndrome (SIDS), ill-defined deaths, and accidental suffocation and strangulation in bed. Due to heightened risk of SIDS when infants are placed to sleep in side (lateral) or stomach (prone) sleep positions, the American Academy of Pediatrics (AAP) has long recommended the back (supine) sleep position. To further reduce SUID, the AAP has several other recommendations for a safe sleep environment that include using a firm non-inclined sleep surface (e.g., crib or bassinet), room-sharing without bed-sharing, and avoiding soft bedding and overheating.[2]

(1) Moon RY, Carlin RF, Hand I; Task Force on Sudden Infant Death Syndrome and the Committee on Fetus And Newborn. Evidence Base for 2022 Updated Recommendations for a Safe Infant Sleeping Environment to Reduce the Risk of Sleep-Related Infant Deaths. Pediatrics. 2022;150(1):e2022057991. https://publications.aap.org/pediatrics/article/150/1/e2022057990/188304/Sleep-Related-Infant-Deaths-Updated-2022
(2) Moon RY, Carlin RF, Hand I; Task Force on Sudden Infant Death Syndrome and the Committee on Fetus And Newborn. Sleep-Related Infant Deaths: Updated 2022 Recommendations for Reducing Infant Deaths in the Sleep Environment. Pediatrics. 2022;150(1):e2022057990. doi:10.1542/peds.2022-057990. https://publications.aap.org/pediatrics/article/150/1/e2022057991/188305/Evidence-Base-for-2022-Updated-Recommendations-for

FAD Availability by Year

Year	Data Not Available
2023	CA, ID, NC, OR, AS, FM, GU, MH, PW, VI
2022	CA, ID, NC, OH, OR, AS, FM, GU, MH, PW, VI
2021	CA, ID, NC, OH, AS, FM, GU, MH, MP, PW, VI
2020	CA, ID, OH, AS, FM, GU, MH, MP, PW, VI
2019	AZ*, CA, ID, IN*, NV*, OH, OK*, SC*, TX*, WV*, AS, FM, GU, MH, MP, PW, VI
2018	AZ*, CA, FL*, HI*, ID, NV*, OH, SC*, TN*, TX*, AS, FM, GU, MH, MP, PW, VI
2017	AZ*, AR*, CA, DC*, FL*, HI*, ID, IN*, MN*, MS*, NE*, NV*, OH, OR*, SC*, TN*, TX*, AS, FM, GU, MH, MP, PW, VI
2016	AL*, AZ, CA, DC, FL*, GA*, HI*, ID, IN, KS, KY, MN*, MS*, MT, NV, NC*, ND, OH, OR*, SC*, SD, TN*, AS, FM, GU, MH, MP, PW, PR, VI
2015	AZ, CA, DC, FL*, GA*, IN, ID, KS, KY, MN*, MS*, MT, NC*, ND, NV, RI*, SC*, SD, AS, FM, GU, MH, MP, PW, PR, VI
2014	AZ, AR*, CA, CO*, DC, FL*, GA*, IN, ID, KS, KY, LA*, MI*, MN*, MS*, MT, NC*, ND, NV, OR*, SC*, SD, TX*, VA*, AS, FM, GU, MH, MP, PW, PR, VI
2013	AL*, AZ, CA, CT*, DC, FL*, IN, ID, KS, KY, LA*, MS*, MT, NC*, ND, NV, OH*, SC*, SD, TX*, VA*, AS, FM, GU, MH, MP, PW, PR, VI, NYC*
2012	AL*, AZ, CA, CT, DC, FL*, IA, IN, ID, KS, KY, LA*, MS*, MT, NC*, ND, NH, NV, NY*, SC*, SD, TX*, VA*, WV^, AS, FM, GU, MH, MP, PW, PR, VI
2011	AL*, AK*, AZ, CA, CT, DC, FL*, IA, IL*, IN, ID, KS, KY, LA*, MS*, MT, NC*, ND, NH, NV, OH*, SC*, SD, TN*, TX*, VA*, AS, FM, GU, MH, MP, PW, PR, VI
2010	AL*, AZ, CA, CT, DC, FL*, IA, IN, ID, KS, KY, LA*, MS*, MT, NC*, ND, NH, NM*, NV, SC*, SD, TN*, VA*, WI*, AS, FM, GU, MH, MP, PW, PR, VI
2009	AL*, AZ, CA, CT, DC, FL*, IA, IN, ID, KS, KY, LA*, MT, NC*, ND, NH, NM*, NV, NY*, NYC*, SC*, SD, VA*, AS, FM, GU, MH, MP, PW, PR, VI
2008	AL*, AZ, CA, CT, DC, FL*, IA, IN, ID, KS, KY, LA*, MO*, MT, ND, NH, NM*, NV, NYC*, SC*, SD, TX*, VA*, AS, FM, GU, MH, MP, PW, PR, VI, NYC*
2007	AL*, AZ, CA, CT, DC, FL*, IA, IN, ID, KS, KY, LA*, MS*, MT, ND, NH, NM*, NV, SD, TN*, TX*, VA*, AS, FM, GU, MH, MP, PW, PR, VI

*PRAMS data are available to be reported by the state/jurisdiction; did not meet response rate threshold required for reporting by CDC PRAMS but MCHB does not use a response rate criteria for TVIS as long as data are appropriately weighted to account for non-response bias.

Data Notes

PRAMS Phase 9 (beginning 2023) wording changes to safe sleep questions impacted the safe sleep measures. The question about sleep position changed from checking one most often position to checking all positions in the past 2 weeks. The questions for the separate approved sleep surface added the phase 'when you were sleeping' to denote when an infant is sleeping at the same time as the mother, and the stem question about surfaces changed as well as adding additional response options. The question for no soft bedding was separated from the surface question, and the response option 'with a blanket' was split into two response options, separating 'in a swaddled blanket' and 'comforters, quilts, blankets, or non-fitted sheets'. Data from prior years are not comparable; thus, only 2023 data are provided. The room sharing question was added with Phase 9 in 2023. Consistent with vital statistics, overall U.S. estimates do not include territories. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-response, and non-coverage. Standard errors account for the complex survey design. For more information on the PRAMS methodology, visit http://www.cdc.gov/prams/.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	From the birth certificate.
Educational Attainment	Less than high school High school graduate Some college College graduate	From the birth certificate.
Health Insurance	Private Medicaid Other Public Uninsured	From the birth certificate. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	From the birth certificate
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	From the birth certificate. Subcategories are not mutually exclusive.
WIC Participation	Yes No	From the birth certificate. Refers to prenatal WIC participation.

SAS Code

```
if (sleeppos=2) then infant_sleeping_position=2; *back only;
else if (1 le sleeppos le 7) then infant_sleeping_position=1; *other or
combination;

if (sleepown in (1,2)) and (slp_crb8=2) and (slp_mat8=1 and slp_chr=1 and
slp_swg=1) then approved_surface=2; *yes;
else if (sleepown in (3,4,5)) or (slp_crb8=1) or (slp_mat8=2 or slp_chr=2 or
slp_swg=2) then approved_surface=1; *no ;
if (sleepown <= 0) or  (slp_crb8<=0) or  (slp_mat8<=0 or  slp_chr<=0 or
slp_swg<=0) then approved_surface=.; *missing;


if (slp_nblk=1 and slp_toypil=1 and slp_npad=1) then no_softbed=2; *no soft
bedding;
else if (slp_nblk=2 or  slp_toypil=2 or  slp_npad=2) then no_softbed=1; *soft
bedding;
if (slp_nblk<=0 or  slp_toypil<=0 or  slp_npad<=0) then no_softbed=.; *missing;
```

```
**(New coding for Phase 9) Infant Sleep Position;
if (sleep_back=2 and sleep_side=1 and sleep_stomach=1) then infant_sleeping_position=2; *back only;
else if (sleep_back=1 or sleep_side=2 or sleep_stomach=2) then infant_sleeping_position=1;*other or
combination;
if (sleep_back<=0 or sleep_side<=0 or sleep_stomach<=0) then infant_sleeping_position=.; *missing, skipped;
keep infant_sleeping_position             ;
format infant_sleeping_position sleeppos2f.;
label infant_sleeping_position = 'Infant Sleeping Position';

** (New coding for Phase 9) No soft bedding;
      if (slp_com9 =1 and slp_toypil9 =1 and slp_bpad9 =1) then no_softbed=2; *yes, no  soft bedding;
  else if (slp_com9 =2 or  slp_toypil9 =2 or  slp_bpad9 =2) then no_softbed=1; *no , any soft bedding;
      if (slp_com9<=0 or  slp_toypil9<=0 or  slp_bpad9<=0) then no_softbed=.; *missing;
  keep   no_softbed;
  format no_softbed ny1f.;
  label  no_softbed = 'No Soft Bedding';

  ** (New coding for Phase 9) Separate Approved Sleep Surface;
      if (sleepown9 in (1  )) and (slp_crb9 =2) and (slp_mat9 =1 and slp_chr9 =1 and slp_cst9 =1 and slp_swg9 =1)
then approved_surface=2; *yes;
  else if (sleepown9 in (2,3,4,5)) or  (slp_crb9 =1) or  (slp_mat9 =2 or  slp_chr9 =2 or  slp_cst9 =2 or slp_swg9 =2)
then approved_surface=1; *no ;
      if (sleepown9 <= 0      ) or  (slp_crb9<=0) or  (slp_mat9<=0 or  slp_chr9 <=0 or slp_cst9 <=0 or slp_swg9
<=0) then approved_surface=.; *missing;
  keep   approved_surface;
  format approved_surface ny1f.;
  label  approved_surface = 'Separate Approved Sleep Surface';

*** (New coding for Phase 9) Sleeping in room with adult ;
  room_share =slp_room9;
if sleepown9 = 5 then room_share = 1;  **code as NO for those skipping question due to infant never in their own
crib;
  keep room_share;
  format room_share ny1f.;
  label room_share = 'Roomsharing with Adult';
```

Data Alert

Wording changes in PRAMS Phase 9 impacted the safe sleep measures, and data from prior years are not comparable. Only 2023 data are provided.

Housing Instability

Percent of women with a recent live birth who experienced housing instability in the 12 months before a recent live birth
Percent of children, ages 0 through 11, who experienced housing instability in the past year

GOAL

To reduce the percent of pregnant women and children experiencing housing instability.

DEFINITION

Numerators:
Number of women who reported being evicted, homeless, or lacking a regular place to sleep in the 12 months prior to delivering an infant (PRAMS)
Number of children, ages 0 through 11, whose parents reported being behind on a housing payment in the past year, that the child had lived in three or more places in the past year, or that they had ever been homeless (NSCH)

Denominators:
Number of women with a recent live birth (PRAMS)
Number of children ages 0 through 11 (NSCH)

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Social Determinants of Health (SDOH) Objective 4: Reduce the proportion of families that spend more than 30 percent of income on housing (Baseline: 34.6% in 2017, Target: 25.5%)

DATA SOURCES AND DATA ISSUES

Pregnancy Risk Assessment Monitoring SysteM (PRAMS)
National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Perinatal/Infant Health and/or Child Health

MEASURE DOMAIN

Social Determinants of Health

POPULATION HEALTH SIGNIFICANCE

Safe and secure housing is fundamental to health and well-being. Housing instability can include a variety of challenges, such as difficulty making housing payments, overcrowding, moving frequently, eviction, and homelessness.[1] In pregnancy, housing instability is associated with inadequate prenatal care and adverse birth outcomes, including low birthweight and preterm birth.[2] Housing instability, particularly in early childhood, is linked to poor health and development.[1,3] Homelessness is the most extreme form of housing instability. The highest risk period for sheltered homelessness is the first year of life and families with children comprise a third of all sheltered homeless people.[4] Housing instability disproportionately burdens those with lower income and Black and Hispanic populations.[1-4]

(1) Healthy People 2030. Housing instability. https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/housing-instability
(2) DiTosto JD, Holder K, Soyemi E, Beestrum M, Yee LM. Housing instability and adverse perinatal outcomes: a systematic review. Am J Obstet Gynecol MFM. 2021;3(6):100477. doi:10.1016/j.ajogmf.2021.100477. https://www.sciencedirect.com/science/article/abs/pii/S2589933321001725
(3) Bess KD, Miller AL, Mehdipanah R. The effects of housing insecurity on children's health: a scoping review [published online ahead of print, 2022 Feb 4]. Health Promot Int. 2022;daac006. doi:10.1093/heapro/daac006 https://academic.oup.com/heapro/advance-article-abstract/doi/10.1093/heapro/daac006/6522744

(4) U.S. Department of Housing and Urban Development. The 2017 Annual Homeless Assessment Report (AHAR) to Congress, Part 2: Estimates of Homelessness in the United States. https://www.huduser.gov/portal/datasets/ahar/2017-ahar-part-2-estimates-of-homelessness-in-the-us.html

FAD Availability by Year - PRAMS

Year	Data Not Available
2023	CA, ID, NC, OH, AS, FM, GU, MH, PW, VI

Data Notes - PRAMS

Data for this measure began in 2023 (PRAMS Phase 9). Consistent with vital statistics, overall U.S. estimates do not include territories. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-response, and non-coverage. Standard errors account for the complex survey design. For more information on the PRAMS methodology, visit http://www.cdc.gov/prams/

Available Stratifiers and Notes - PRAM

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	From the birth certificate
Educational Attainment	Less than high school High school graduate Some college College graduate	From the birth certificate.
Health Insurance	Private Medicaid Other Public Uninsured	From the birth certificate. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	From the birth certificate
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	From the birth certificate. Subcategories are not mutually exclusive.
WIC Participation	Yes No	From the birth certificate. Refers to prenatal WIC participation.

SAS Code - PRAMS

```
*** (NEW) Housing instability;
    if (strs_evict =2 or strs_norps = 2 or strshome = 2) then housing_instab = 2; *housing instability;
else if (strs_evict =1 and strs_norps = 1 and strshome = 1) then housing_instab = 1; *no housing instability;
```

```
    if (strs_evict<=0 or strs_norps <=0 or strshome<=0) then housing_instab = .;  *missing;
keep housing_instab;
format housing_instab ny1f.;
label housing_instab = 'Housing Instability';
```

FAD Availability by Year – NSCH

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes – NSCH

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes – NSCH

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	0-5 Years 6-11 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs

Stratifier	Subcategory	Special Notes
		for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code - NSCH

```
/***NPM_Housing Instability: Children 0-11 Years***/
Housing_0to11=.;
if EVERHOMELESS=1 OR MISSMORTGAGE=1 OR PLACESLIVED=2 then Housing_0to11=1;
if EVERHOMELESS in (2,3,.M) and MISSMORTGAGE in (2,3,.M) and PLACESLIVED in (1,.M)
then Housing_0to11=2;
if EVERHOMELESS IN (3,.M) AND MISSMORTGAGE IN (3,.M) AND PLACESLIVED=.M then
Housing_0to11=.M;
if SC_AGE_YearS > 11 then Housing_0to11=.N;
label Housing_0to11="NPM_Housing Instability: Percent of children, ages 0 through
11, who experienced housing instability in the past Year";
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Developmental Screening

Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year

GOAL

To increase the percent of children who receive a developmental screening.

DEFINITION

Numerator: Number of children, ages 9 through 35 months (2 years), whose parents reported completing a standardized developmental screening questionnaire from a health care provider in the past year with age-specific content on language development and social behavior

Denominator: Number of children, ages 9 through 35 months

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 17: Increase the proportion of children who receive a developmental screening. (Baseline: 31.1% in 2016-17, Target: 35.8%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Child Health

MEASURE DOMAIN

Clinical Health Systems

POPULATION HEALTH SIGNIFICANCE

Early identification of developmental delays and disabilities is critical to provide referrals to services that can promote health and educational success.[1] It is an integral function of the primary care medical home. The American Academy of Pediatrics (AAP) recommends developmental screening at the 9, 18, and 24 or 30 month visit.[1] Developmental screening is part of the Core Set of Children's Health Care Quality Measures for Medicaid and CHIP. Systems-level quality improvement efforts that build on the medical home are needed to improve rates of developmental screening and surveillance.[2]

(1) Council on Children With Disabilities; Section on Developmental Behavioral Pediatrics; Bright Futures Steering Committee; Medical Home Initiatives for Children With Special Needs Project Advisory Committee. Identifying infants and young children with developmental disorders in the medical home: an algorithm for developmental surveillance and screening [published correction appears in Pediatrics. 2006 Oct;118(4):1808-9]. Pediatrics. 2006;118(1):405-420. doi:10.1542/peds.2006-1231 https://publications.aap.org/pediatrics/article/118/1/405/69580/Identifying-Infants-and-Young-Children-With

(2) Hirai AH, Kogan MD, Kandasamy V, Reuland C, Bethell C. Prevalence and Variation of Developmental Screening and Surveillance in Early Childhood. JAMA Pediatr. 2018 Sep 1;172(9):857-866. doi: 10.1001/jamapediatrics.2018.1524. https://jamanetwork.com/journals/jamapediatrics/fullarticle/2686728

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.

Stratifier	Subcategory	Special Notes
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***Developmental screening***/

both_9to23= .;
if K6Q12 = 2 and SC_AGE_YEARS < 2 then both_9to23 = 2;
if K6Q13A = 2 or K6Q13B = 2 then both_9to23= 2
if K6Q13A in (1,.M) and K6Q13B in (1,.M) then both_9to23 = 1;
if K6Q13A = .M and K6Q13B = .M then both_9to23= .M;
if SC_AGE_YEARS = 2 then both_9to23= .L;
if SC_AGE_YEARS >= 3 then both_9to23= .N;
if SC_AGE_LT9 = 1 then both_9to23= .L;
label both_9to23 = "Yes/screening occurred group – age 9-23 months";

both_24to35= .;
if K6Q12 = 2 and SC_AGE_YEARS = 2 then both_24to35 = 2;
if K6Q14A = 2 or K6Q14B = 2 then both_24to35= 2;
if K6Q14A in (1,.M) and K6Q14B in (1,.M) then both_24to35= 1;
if K6Q14A =.M and K6Q14B = .M then both_24to35= .M;
if SC_AGE_YEARS >= 3 then  both_24to35= .N;
```

```
if SC_AGE_YEARS < 2 then  both_24to35= .L;
label both_24to35 = " Yes/screening occurred group – age 24-35 months";

NPM6 = .;
if both_9to23 = 1 or both_24to35 = 1 then NPM6 = 1;
if both_9to23 = 2 or both_24to35 = 2 then NPM6 = 2;
if both_9to23 = .M or both_24to35= .M then NPM6 = .M;
if SC_AGE_LT9 = 1 then NPM6 = .L;
if SC_AGE_YEARS >= 3 then NPM6 = .N;
label NPM6 = "NPM-6: Developmental Screening";
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Childhood Vaccination

Percent of children who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) by age 24 months

GOAL

To increase the percent of children and adolescents who have completed recommended vaccines.

DEFINITION

Numerator: Number of children who have completed the combined 7-vaccine series of routinely recommended vaccinations (4:3:1:3*:3:1:4 or ≥4 doses of diphtheria and tetanus toxoids and acellular pertussis vaccine; ≥3 doses of poliovirus vaccine; ≥1 dose of measles-containing vaccine; ≥3 or ≥4 doses (depending upon product type) of Haemophilus influenzae type b conjugate vaccine; ≥3 doses of hepatitis B vaccine; ≥1 dose of varicella vaccine; and ≥4 doses of pneumococcal conjugate vaccine) by age 24 months

Denominator: Number of children born in a calendar year

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Immunization and Infectious Disease (IID) Objective 06: Increase the vaccination coverage level of 4 doses of the diphtheria-tetanus-acellular pertussis (DtaP) vaccine among children by age 2 years. (Baseline: 80.7% of children born in 2015 received 4 or more doses of DtaP by their 2nd birthday, Target: 90.0%)

Related to IID Objective 03: Maintain the vaccination coverage level of 1 doses of the measles-mumps-rubella (MMR) vaccine among children by age 2 years. (Baseline: 90.8% of children born in 2015 received at least 1 does of MMR by their 2nd birthday, Target: 90.8%)

Related to IID Objective 02: Reduce the proportion of children who receive 0 doses of recommended vaccines by age 2 years. (Baseline: 1.3% of children born in 2015 had received 0 doses of recommended vaccines by their 2nd birthday, Target: 1.3%)

DATA SOURCES and DATA ISSUES

National Immunization Survey (NIS)

MCH POPULATION DOMAIN

Child Health

MEASURE DOMAIN

Clinical Health Systems/Health Behavior

POPULATION HEALTH SIGNIFICANCE

Vaccination is one of the greatest public health achievements of the 20th century, resulting in dramatic declines in morbidity and mortality for many infectious diseases.[1] Childhood vaccination in particular is considered among the most cost-effective preventive services available, as it averts a potential lifetime lost to death and disability.[2] Currently, there are 15 different vaccines recommended by the Centers for Disease Control and Prevention from birth through age 18, many of which require multiple doses for optimal immunity.[33] The childhood immunization status measure for health plans is part of the Core Set of Children's Health Care Quality Measures for Medicaid and CHIP and the National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set.

(1) Centers for Disease Control and Prevention (CDC). Ten great public health achievements--United States, 1900-1999. MMWR Morb Mortal Wkly Rep. 1999;48(12):241-243. https://www.cdc.gov/mmwr/preview/mmwrhtml/00056796.htm

(2) Maciosek MV, LaFrance AB, Dehmer SP, et al. Updated Priorities Among Effective Clinical Preventive Services [published correction appears in Ann Fam Med. 2017 Mar;15(2):104]. Ann Fam Med. 2017;15(1):14-22. doi:10.1370/afm.2017. https://www.annfammed.org/content/15/1/14

(3) Centers for Disease Control and Prevention. Immunization Schedules. 2020 February 3. https://www.cdc.gov/vaccines/schedules/

FAD Availability by Year

Year	Data Not Available
2020	AS, FM, MH, MP, PW
2019	AS, FM, MH, MP, PW, VI
2018	AS, FM, MH, MP, PW, VI
2017	AS, FM, MH, MP, PR, PW, VI
2016	AS, FM, MH, MP, PR, PW, VI
2015	AS, FM, MH, MP, PR, PW, VI
2014	AS, FM, MH, MP, PW
2013	AS, FM, GU, MH, MP, PW, VI
2012	AS, FM, GU, MH, MP, PW, PR, VI
2011	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

Vaccination coverage estimates are presented by birth year (birth cohort) rather than survey year. Because of the survey age eligibility range of 19 to 35 months, children born in three different calendar years appear in the data for each year of the survey. To estimate vaccination coverage among children born in a particular year, three years of survey data are combined and then stratified by birth year. Territories are not included in single-year cohort (or stratifier) estimates if they were not sampled for one or more of the included survey years. Insurance and urban-rural residence are not available for all territories. In 2018, the NIS shifted from a dual-frame landline and cell-phone survey to a single frame cell-phone only survey. As a result, estimates that include the data year 2018 and beyond may not be directly comparable to those published with prior data years. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-coverage, non-response, and adjusted to reflect the non-institutionalized population of U.S. children. Standard errors account for the complex survey design. Estimates by demographic stratifiers rely on three years of data to improve precision and reportability. See NIS Public Use File Data Users Guide for more details at: https://www.cdc.gov/vaccines/imz-managers/nis/datasets.html

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Health Insurance	Private Medicaid Other Public Uninsured	Other Public includes Indian Health Service and Military insurance (except in territories); missing data were imputed.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household; missing data were imputed.
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Missing data were imputed
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; missing data were imputed.

Stratifier	Subcategory	Special Notes
WIC Participation	Yes No	Current WIC participation

SAS Code

Variable name for the complete infant series is P_UTD431H314_ROUT_S
See Data User's Guide for more SAS, SUDAAN, and R code examples
http://www.cdc.gov/nchs/nis/data_files.htm

Preventive Dental Visit

Percent of women who had a preventive dental visit during pregnancy
Percent of children, ages 1 through 17, who had a preventive dental visit in the past year

GOAL

To increase the percentage of pregnant women and children who receive preventive dental visits.

DEFINITION

Numerators:
Number of women who had a preventive dental visit during pregnancy (PRAMS)
Number of infant or child, ages 1 through 17, who had a preventive dental visit in the past year (NSCH)

Denominators:
Number of women with a recent live birth (PRAMS)
Number of children, ages 1 through 17 (NSCH)

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Oral Health (OH) Objective 08: Increase the proportion of children, adolescents, and adults who use the oral health care system. (Baseline: 43.3% in 2016 (age adjusted to the year 2000 standard population), Target: 45.0%)

Related to Oral Health (OH) Objective 09. Increase the proportion of low income youth who have a preventive dental visit. (Baseline: 78.8% in 2016-17, Target: 82.7%)

DATA SOURCES and DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)
National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Women/Maternal Health, Child Health, and/or Adolescent Heath

MEASURE DOMAIN

Clinical Health System

POPULATION HEALTH SIGNIFICANCE

Oral health is a vital component of overall health and oral health care remains the greatest unmet health need for children. Insufficient access to oral health care and effective preventive services affects children's health, education, and ability to prosper. To prevent tooth decay and oral infection, the American Academy of Pediatric Dentistry (AAPD) recommends preventive dental care for all children after the eruption of the first tooth or by 12 months of age, usually at intervals of every 6 months.1 Oral Evaluation Dental Services is part of the Core Set of Children's Health Care Quality Measures for Medicaid and CHIP.

(1) Periodicity of Examination, Preventive Dental Services, Anticipatory Guidance/Counseling, and Oral Treatment for Infants, Children, and Adolescents. Pediatr Dent. 2017;39(6):188-196. https://www.aapd.org/research/oral-health-policies--recommendations/periodicity-of-examination-preventive-dental-services-anticipatory-guidance-counseling-and-oral-treatment-for-infants-children-and-adolescents/

(2) Committee Opinion No. 569: oral health care during pregnancy and through the lifespan. Obstet Gynecol. 2013;122(2 Pt 1):417-422. doi:10.1097/01.AOG.0000433007.16843.10 https://journals.lww.com/greenjournal/Fulltext/2013/08000/Committee_Opinion_No__569__Oral_Health_Care_During.47.aspx#:~:text=Oral%20health%20is%20an%20important,%2C%20diabetes%2C%20and%20other%20disorders

FAD Availability by Year – PRAMS

Year	Data Not Available
2023	CA, ID, NC, OH, AS, FM, GU, MH, PW, VI
2022	CA, ID, NC, OH, OR, AS, FM, GU, MH, PW, VI
2021	CA, ID, NC, OH, AS, FM, GU, MH, MP, PW, VI
2020	CA, ID, OH, AS, FM, GU, MH, MP, PW, VI
2019	AZ*, CA, ID, IN*, NV*, OH, OK*, SC*, TX*, WV*, AS, FM, GU, MH, MP, PW, VI
2018	AZ*, CA, FL*, HI*, ID, NV*, OH, SC*, TN*, TX*, AS, FM, GU, MH, MP, PW, VI
2017	AZ*, AR*, CA, DC*, FL*, HI*, ID, IN*, MN*, MS*, NE*, NV*, OH, OR*, SC*, TN*, TX*, AS, FM, GU, MH, MP, PW, VI
2016	AL*, AZ, CA, DC, FL*, GA*, HI*, ID, IN, KS, KY, MN*, MS*, MT, NV, NC*, ND, OH, OR*, SC*, SD, TN*, AS, FM, GU, MH, MP, PW, PR, VI
2015	AZ, CA, DC, FL*, GA*, IN, ID, KS, KY, MN*, MS*, MT, NC*, ND, NV, RI*, SC*, SD, AS, FM, GU, MH, MP, PW, PR, VI
2014	AZ, AR*, CA, CO*, DC, FL*, GA*, IN, ID, KS, KY, LA*, MI*, MN*, MS*, MT, NC*, ND, NV, OR*, SC*, SD, TX*, VA*, AS, FM, GU, MH, MP, PW, PR, VI
2013	AL*, AZ, CA, CT*, DC, FL*, IN, ID, KS, KY, LA*, MS*, MT, NC*, ND, NV, OH*, SC*, SD, TX*, VA*, AS, FM, GU, MH, MP, PW, PR, VI
2012	AL*, AZ, CA, CT, DC, FL*, IA, IN, ID, KS, KY, LA*, MS*, MT, NC*, ND, NH, NV, NY*, SC*, SD, TX*, VA*, WV^, AS, FM, GU, MH, MP, PW, PR, VI
2011	AL*, AK*, AZ, AR, CA, CO, CT, DE, DC, FL, GA, IA, IL, IN, ID, KS, KY, LA, MD, MI, MN, MS, MT, NM, NC, ND, NH, NV, OH, OK, OR, PA, RI, SC, SD, TN, TX*, UT, VA, VT, WI, WY, AS, FM, GU, MH, MP, PW, VI, PR, NYC
2010	AL*, AZ, AR, CA, CO, CT, DE, DC, FL, GA, IA, IL, IN, ID, KS, KY, LA, MD, MI, MN, MS, MT, NC, ND, NH, NM, NV, OH, OK, OR, PA, RI, SC, SD, TN, UT, VA, VT, WI, WY, AS, FM, GU, MH, MP, PW, VI, PR, NYC
2009	AL*, AZ, AR, CA, CO, CT, DE, DC, FL, GA, IA, IL, IN, ID, KS, KY, LA, MD, MI, MN, MS, MT, NC, ND, NH, NM, NV, NY*, OH, OK, OR, PA, RI, SC, SD, TN, UT, VA, VT, WI, WY, AS, FM, GU, MH, MP, PW, VI, PR, NYC
2008	AL*, AZ, CA, CT, DE, DC, FL, GA, HI, IA, IL, IN, ID, KS, KY, LA, MN, MO*, MT, NC, ND, NH, NM, NV, OK, OR, PA, RI, SC*, SD, TX, VA, WI, WY, AS, FM, GU, MH, MP, PW, PR, VI, NYC

*PRAMS data for this item are available to be reported by the state; did not meet response rate threshold required for reporting by CDC PRAMS but MCHB does not use a response rate criteria for TVIS as long as data are appropriately weighted to account for non-response bias.

Data Notes – PRAMS

This measure refers to receipt of a preventive dental visit (i.e. teeth cleaning) during pregnancy. The item became a core question in 2012 (Phase 7 PRAMS) and is available for certain states that selected this standard question in prior years. Slight differences in the survey item and skip pattern over different PRAMS phases may affect trending. The CDC eliminated the response rate threshold requirement for data release. All sites are now included, and data from previously excluded sites have been added back from 2020 to present. Consistent with vital statistics, overall U.S. estimates do not include territories. Only back sleep position is available prior to 2016 (Phase 8). For NY, 2008 and 2013 estimates do not include NYC while 2012 and 2020 estimates only include NYC. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-response, and non-coverage. Standard errors account for the complex survey design. For more information on the PRAMS methodology, visit http://www.cdc.gov/prams/.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	From the birth certificate.
Educational Attainment	Less than high school High school graduate	From the birth certificate.

Stratifier	Subcategory	Special Notes
	Some college College graduate	
Health Insurance	Private Medicaid Other Public Uninsured	From the birth certificate. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	From the birth certificate.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	From the birth certificate. Subcategories are not mutually exclusive.
WIC Participation	Yes No	From the birth certificate. Refers to prenatal WIC participation.

SAS Code – PRAMS

```
if (qx_phase in (7,8,9)) then do;
  teeth_cleaned = dds_cln;
end;
if (qx_phase in (5,6)) then do;
  if (dds_preg=.S) then teeth_cleaned = 1; *no -- dds_ever=1 -- never had teeth cleaned at any time;
  else teeth_cleaned = max(dds_preg,ddsxpreg);
end;
label teeth_cleaned = 'Teeth Cleaned During Pregnancy';

value teeth_cleaned
1=’No’
2=’Yes’;
```

Data Alert

The CDC eliminated the response rate threshold requirement for data release. All sites are now included, and data from previously excluded sites have been added back from 2020 to present. Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

FAD Availability by Year - NSCH

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes - NSCH

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes – NSCH

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	1-5 Years 6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if

Stratifier	Subcategory	Special Notes
		they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code - NSCH

```
/*** NPM_Preventive dental visit, age 1-17 years***/
PrevDent = .;
if DENTISTVISIT in (2,3) then PrevDent = 1;
if DENTISTVISIT = 1 then PrevDent = 2;
if DENTISTVISIT = .M then PrevDent = .M;
if K4Q30_R = 3 or K4Q30_R_3 = 1 then PrevDent = 2;
*if K4Q30_R = .M or K4Q30_R_3 = .M then PrevDent = 2;
if SC_AGE_YEARS < 1 then PrevDent = .L;
label PrevDent = "Children, ages 1 through 17, who had a preventive dental visit in
the past Year";

PrevDent_1to17 = PrevDent;
if SC_AGE_YEARS < 1 then PrevDent_1to17 = .L;
label PrevDent_1to17 = "NPM_Preventive Dental Visit: Percent of children, ages 1
through 17, who had a preventive dental visit in the past Year";
```

```
/* 1= Yes,  2= No */
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Physical Activity - Child

Percent of children, ages 6 through 11, who are physically active at least 60 minutes per day

GOAL

To increase the number of children who are physically active.

DEFINITION

Numerator: Number of children, ages 6 through 11, who are reported by a parent to be physically active at least 60 minutes per day in the past week
Denominator: Number of children ages 6 through 11

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Physical Activity Objective 09: Increase the proportion of children who meet the current aerobic physical activity guideline. (Baseline: 25.9% of children aged 6 to 13 years met the current aerobic physical activity guideline in 2016-17, Target: 30.4%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Child Health

POPULATION HEALTH SIGNIFICANCE

Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. Physical activity in children improves bone health, weight status, cardiorespiratory and cardiometabolic health, and brain health, including improved cognition and reduced depressive symptoms. Physical activity reduces the risk of early life risk factors for cardiovascular disease, hypertension, Type II diabetes, and osteoporosis. In addition to aerobic and muscle-strengthening activities, bone-strengthening activities are especially important for children and young adolescents because the majority of peak bone mass is obtained by the end of adolescence.

(1) U.S. Department of Health and Human Services. *Physical Activity Guidelines for Americans, 2nd edition*. Washington, DC: U.S. Department of Health and Human Services; 2018. https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access

files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried	

Stratifier	Subcategory	Special Notes
	Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NPM_Physical Activity: Children 6-11 Years***/

Physactiv_6to11 = .;
if PHYSACTIV=4 then Physactiv_6to11=1;
if PHYSACTIV in (1,2,3) then Physactiv_6to11=2;
if SC_AGE_YEARS < 6 then Physactiv_6to11 = .L;
if SC_AGE_YEARS > 11 then Physactiv_6to11 = .L;
label Physactiv_6to11 = "NPM_Physical Activity: Percent of children, ages 6 through
11, who are physically active at least 60 minutes per day";
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Food Sufficiency

Percent of children, ages 0 through 11, whose households were food sufficient in the past year

GOAL

To increase the percent of children whose households are always able to afford to eat good nutritious food.

DEFINITION

Numerator: Number of children, ages 0 through 11, whose households are reported by a parent to have always been able to afford to eat good nutritious food in the past year.

Denominator: Number of children, ages 0 through 11

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVES

Related to Nutrition and Weight Status Objective 01: Reduce household food insecurity and hunger (Baseline: 11.1% of households were food insecure in 2018, Target: 6.0%)

Related to Nutrition and Weight Status Objective 02: Eliminate very low food security in children (Baseline: 0.59% of households with children under 18 years had very low food security among children in 2018, Target: 0.0%)

DATA SOURCES AND DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Child Health

MEASURE DOMAIN

Social Determinants of Health

POPULATION HEALTH SIGNIFICANCE

Food insecurity among children is associated with poor health status, mental health problems, behavioral and socio-emotional problems, and poor educational performance and academic outcomes.[1] In 2023, 17.9 percent of households with children were food insecure at some time that year.[2]

(1) Food Research and Action Center (FRAC). The impact of poverty, food insecurity, and poor nutrition on health and well-being. 2017 December. https://frac.org/wp-content/uploads/hunger-health-impact-poverty-food-insecurity-health-well-being.pdf

(2) Rabbitt, M. P., Reed-Jones, M., Hales, L. J., & Burke, M. P. (2024). Household food security in the United States in 2023 (Report No. ERR-337). U.S. Department of Agriculture, Economic Research Service. https://doi.org/10.32747/2024.8583175.ers

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	0-5 Years 6-11 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399%	Ratio of self-reported family income to the federal poverty threshold

Stratifier	Subcategory	Special Notes
	≥400%	value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NPM_Food Sufficiency: Children 0-11 Years***/
Food_0to11 = .;
If FOODSIT=1 then Food_0to11=1;
if FOODSIT in (2,3,4) then Food_0to11=2;
if FOODSIT = .M then Food_0to11 = .M;
if SC_AGE_YEARS > 11 then Food_0to11 = .L;
label Food_0to11 = "NPM_Food Sufficiency: Percent of children, ages 0 through 11,
whose households were food sufficient in the past Year";
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Adolescent Well Visit

Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year

GOAL

To increase the percent of adolescents who have a preventive medical visit.

DEFINITION

Numerator: Number of adolescents, ages 12 through 17, who are reported by a parent to have had a preventive medical check-up with a health care provider in the past year

Denominator: Number of adolescents, ages 12 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Identical to Adolescent Health (AH) Objective 01: Increase the proportion of adolescents who received a preventive health care visit in the past year. (Baseline: 78.7% in 2016-17, Target: 82%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Adolescent Health

MEASURE DOMAIN

Clinical Health System

POPULATION HEALTH SIGNIFICANCE

Adolescence is a period of major physical, psychological, and social development. As adolescents move from childhood to adulthood, they assume individual responsibility for health habits, and those who have chronic health problems take on a greater role in managing those conditions. Initiation of risky behaviors, such as unsafe sexual activity, unsafe driving, and substance use, is a critical health issue during adolescence, as adolescents try on adult roles and behaviors. An annual preventive well visit may help adolescents adopt or maintain healthy habits and behaviors, avoid health-damaging behaviors, manage chronic conditions, and prevent disease. The Bright Futures guidelines recommends that adolescents have an annual checkup from age 11 through 21. The visit should cover a comprehensive set of preventive services, such as a physical examination, immunizations, and discussion of health-related behaviors. The adolescent well-care visit measure for health plans is part of the Core Set of Children's Health Care Quality Measures for Medicaid and CHIP and the National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set.

(1) Hagan JF, Shaw JS, Duncan PM, eds. Adolescence Visits 11 Through 21 Years. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. 4th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2017. https://brightfutures.aap.org/Bright%20Futures%20Documents/BF4_AdolescenceVisits.pdf

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. This measure was affected by a 2018 wording change to the item assessing receipt of medical care in the past year with the previous wording restored in 2019; thus, 2018 data are not provided and there is a gap between 2016-2017 and 2019-2020 data. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates. For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the

Stratifier	Subcategory	Special Notes
		household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	Single parent refers to single mother only
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***Adolescent well visit, age 12-17 years***/

PrevMed = .;
if K4Q20R in (2,3) then PrevMed = 1; *1+ visits;
if K4Q20R = 1 then PrevMed = 2;
if K4Q20R = .M then PrevMed = .M;
if S4Q01 = 2 then PrevMed = 2;
*if S4Q01 = .M then PrevMed = .M;
label PrevMed = "Children who had one or more preventive medical care visits during
past 12 months";

WellVisit_12to17 = PrevMed;
if SC_AGE_YearS < 12 then WellVisit_12to17 = .L;
label WellVisit_12to17 = "NPM_Adolescent Well-Visit: Percent of adolescents, ages
12 through 17, with a preventive medical visit in the past Year";
```

Mental Health Treatment

Percent of adolescents, ages 12 through 17, who receive needed mental health treatment or counseling

GOAL

To increase the percent of adolescents who receive needed mental health treatment or counseling.

DEFINITION

Numerator: Number of adolescents, ages 12 through 17, who are reported by a parent to have received treatment or counseling from a mental health professional during the past 12 months

Denominator: Number of adolescents, ages 12 through 17, who are reported by a parent to have either 1) received treatment or counseling from a mental health professional during the past 12 months or 2) did not receive treatment or counseling but needed to see a mental health professional

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Mental Health and Mental Disorders (MHMD) Objective 03: Increase the proportion of children with mental health problems who get treatment. (Baseline: 73.3% of children aged 4 to 17 years with mental health problems received treatment in 2018, Target: 82.4%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Adolescent Health

MEASURE DOMAIN

Clinical Health System

POPULATION HEALTH SIGNIFICANCE

Mental disorders among children are described as serious changes in the way children typically learn, behave, or handle their emotions, which cause distress and problems getting through the day.[1] The prevalence of mental/behavioral health conditions has been increasing among children and has been found to vary by geographic and sociodemographic factors.[2] However, a significant portion of children diagnosed with a mental health condition do not receive treatment.[2] Further, the receipt of treatment is generally dependent on sociodemographic and health-related factors.[2] Adequate insurance and access to a patient-centered medical home may improve mental health treatment.

(1) Centers for Disease Control and Prevention. Children's Mental Health. 2020 February 10. https://www.cdc.gov/childrensmentalhealth/index.html

(2) Ghandour RM, Sherman LJ, Vladutiu CJ, et al. Prevalence and Treatment of Depression, Anxiety, and Conduct Problems in US Children. J Pediatr. 2019;206:256-267.e3. doi:10.1016/j.jpeds.2018.09.021. https://www.jpeds.com/article/S0022-3476(18)31292-7/fulltext

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.

Stratifier	Subcategory	Special Notes
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NPM_Mental Health Tx: 12-17 year olds***/

MHTx_12to17 = .;
if K4Q22_R in (1,2) then MHTx_12to17=K4Q22_R;
if K4Q22_R = 3 then MHTx_12to17 = .L;
if K4Q22_R = .M then MHTx_12to17 = .M;
if SC_AGE_YEARS < 12 then MHTx_12to17 = .L;
label MHTx_12to17 = "NPM_Mental Health Treatment: Percent of adolescents, ages 12 through 17, who receive needed mental health treatment or counseling";
```

Data Alert

Adverse Childhood Experiences stratifier was updated historically. CSHCN Status, CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Tobacco Use

Percent of adolescents, grades 9 through 12, who currently use tobacco products

GOAL

To reduce the percent of adolescents who currently use tobacco or nicotine containing products.

DEFINITION

Numerator: Number of adolescents in grades 9 through 12 who reported any use of tobacco or nicotine containing products (including electronic vapor products, cigarettes, cigars, or smokeless tobacco) in the past 30 days

Denominator: Number of adolescents in grades 9 through 12

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Tobacco Use (TU) Objective 04: Reduce current tobacco use in adolescents. (Baseline: 18.3% of students in grades 6 through 12 used cigarettes, e-cigarettes, cigars, smokeless tobacco, hookah, pipe tobacco, and/or bidis in the past 30 days in 2018, Target: 11.3%)

DATA SOURCES AND DATA ISSUES

Youth Risk Behavior Surveillance System (YRBSS)

MCH POPULATION DOMAIN

Adolescent Health

MEASURE DOMAIN

Health Behavior

POPULATION HEALTH SIGNIFICANCE

Tobacco product use in any form is unsafe, and tobacco product use is typically established during adolescence. Tobacco product use in youths is associated with depression, anxiety, and stress.[1] Tobacco use during adolescence is a risk factor for future use of other substances including alcohol.[2]

(1) Centers for Disease Control and Prevention. Youth and Tobacco Use. 2022 November 10. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/youth_data/tobacco_use/index.htm

(2) National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health. Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention (US); 2012. Available from: https://www.ncbi.nlm.nih.gov/books/NBK99237/

FAD Availability by Year

Year	Data Not Available
2023	AL, AZ, CA, CO, FL, GA, ID, IA, KS, MN, OR, SC, WA, WY, FM, MH, VI
2021	AK, CA, MN, OR, WA, WY, AS, FM, GU, MH, VI
2019	DE, IN, MN, OR, WA, WY, AS, FM, MH, PW, VI
2017	AL, GA, IN, MN, MS, NJ, OH, OR, SD, WA, WY, AS, FM, MH, PW, VI
2015	CO, GA, IA, KS, LA, MN, NJ, OH, OR, TX, UT, WA, WI, AS, FM, MH, VI
2013	CA, CO, IN, IA, MN, OR, PA, VT, WA, FM, MH, VI
2011	CA, DC, MN, MO, NV, OR, PA, WA, FM, MH, VI
2009	CA, DC, IA, MN, NE, OH, OR, VA, WA, AS, FM, GU, MH, PR, VI
2007	AL, CA, CO, MN, NE, NJ, OR, PA, VA, WA, FM, PR, VI
2005	AK, CA, DC, IL, LA, MN, MS, OR, PA, VA, WA, AS, FM, GU, MH, VI

Data Notes

States have the option to not include all tobacco product questions, and therefore only states that ask the same questions should be compared to one another. For years 2017-2023 HI, IN, MA, NJ, and NC asked only about cigarettes, electronic vapor products, and smokeless tobacco products; and NH only asked about electronic vapor products. For years 2017-2021, FL only asked about cigarettes. States who ask a subset of questions should not be compared to the US estimate. YRBSS data are self-reported by students in grades 9 through 12. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and are adjusted to reflect the total population of high school students by sex, grade, and race/ethnicity for the United States and for each state. Standard errors account for the complex survey design. National estimates are based on a national sample of all 50 states and DC. Sexual orientation is not available for all states. See "Methodology of the YRBSS" and "Software for Analyzing YRBS Data" on the YRBS web site at www.cdc.gov/yrbss for more information.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Grade	9th grade 10th grade 11th grade 12th grade	
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Sex	Female Male	
Sexual Orientation	Heterosexual Lesbian, Gay, Bisexual Other, Questioning	Not available for all states

SAS Code

```
  * 2021 - define TOBA (components: Q32, Q35, Q37, Q38)
        currently either smoked cigarettes or cigars or used smokeless tobacco or electronic vapor products
        (on at least 1 day during the 30 days before the survey);
  if q32 in ('1', '2', '3', '4', '5', '6', '7') or q35 in ('1', '2', '3', '4', '5', '6', '7') or
    q37 in ('1', '2', '3', '4', '5', '6', '7') or q38 in ('1', '2', '3', '4', '5', '6', '7') then TOBA=2;
  if q32 in ('2', '3', '4', '5', '6', '7') or q35 in ('2', '3', '4', '5', '6', '7') or
    q37 in ('2', '3', '4', '5', '6', '7') or q38 in ('2', '3', '4', '5', '6', '7') then TOBA=1;
  if q32 in (' ') and q35 in (' ') and q37 in (' ') and q38 in (' ') then TOBA=.;

*2023
if q33 in ('1', '2', '3', '4', '5', '6', '7') or q36 in ('1', '2', '3', '4', '5', '6', '7') or
    q38 in ('1', '2', '3', '4', '5', '6', '7') or q39 in ('1', '2', '3', '4', '5', '6', '7') then TOBA=2;
  if q33 in ('2', '3', '4', '5', '6', '7') or q36 in ('2', '3', '4', '5', '6', '7') or
    q38 in ('2', '3', '4', '5', '6', '7') or q39 in ('2', '3', '4', '5', '6', '7') then TOBA=1;
  if q33 in (' ') and q36 in (' ') and q38 in (' ') and q39 in (' ') then TOBA=.;
```

Adult Mentor

Percent of adolescents, ages 12 through 17, who have one or more adults outside the home who they can rely on for advice or guidance

GOAL

To increase the percent of adolescents with an adult mentor.

DEFINITION

Numerators:

Number of adolescents, ages 12 through 17, who are reported by a parent to have at least one other adult in their school, neighborhood, or community who knows them well and who they can rely on for advice or guidance (NSCH)

Number of adolescents, ages 12 through 17, who report that they have some other adult they can talk to about a serious problem (NSDUH)

Denominators:

Number of adolescents, ages 12 through 17 (NSCH)

Number of adolescents, ages 12 through 17 (NSDUH)

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Adolescent Health (AH) 03: Increase the proportion of adolescents who have an adult they can talk to about serious problems (Baseline: 79.0 adolescents aged 12 to 17 years had an adult in their lives with whom they could talk about serious problems in 2018, Target: 82.9%)

DATA SOURCES AND DATA ISSUES

National Survey of Children's Health (NSCH) (parent-reported)

National Survey of Drug Use and Health (NSDUH) (adolescent reported): used for overall state-level estimates only

MCH POPULATION DOMAIN

Adolescent Health

MEASURE DOMAIN

Social Determinants of Health

POPULATION HEALTH SIGNIFICANCE

Having a connection to a caring adult is one of several Positive Youth Experiences and is a protective factor that has been associated with several measures of child well-being, including markers of flourishing, physical activity, participation in activities, talking with parents as well as decreased likelihood of bullying and depression.[1] Furthermore, a growing evidence base demonstrates the effectiveness of programs to foster youth-adult partnerships in wide variety of settings (ex. after school programming[2]).

(1) Murphey D, Bandy T, Schmitz H, Moore KA. Caring Adults: Important for Positive Child Well-Being. Child Trends, Publication #2013-54. 2013 December. https://www.childtrends.org/wp-content/uploads/2013/12/2013-54CaringAdults.pdf

(2) Marttinen R, Johnston K, Phillips S, Fredrick RN, Meza B. REACH Harlem: young urban boys' experiences in an after-school PA positive youth development program, Physical Education and Sport Pedagogy. 2019;24:4, 373-389, doi: 10.1080/17408989.2019.1592147. https://www.tandfonline.com/journals/cpes20

FAD Availability by Year – NSCH

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes - NSCH

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes - NSCH

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were

Stratifier	Subcategory	Special Notes
		classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code - NSCH

```
/***NPM_Adult Mentor: Adolescents 12-17 Years***/
Mentor_12to17 = K9Q96; /*1=yes, 2=No*/
if SC_AGE_YearS < 12 then Mentor_12to17 = .N;
label Mentor_12to17 = "NPM_Adult Mentor: Percent of adolescents, ages 12 through
17, who have one or more adults outside the home who they can rely on for advice or
guidance";
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

FAD Availability by Year - NSDUH

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes – NSDUH

All estimates, numerators, and denominators presented are weighted to reduce bias due to non-response and differing survey modes (i.e., survey completion in-person versus online), and were adjusted to reflect the civilian, non-institutionalized population aged 12 years or older in the US. In addition, state samples were weighted to be representative of their respective state populations. Numerators and denominators are rounded to the nearest thousand. Standard errors account for the complex survey design. For more details visit: https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health

SAS Code - NSDUH

Not available

Medical Home

Percent of children with and without special health care needs, ages 0 through 17, who have a medical home
Percent of children with and without special health care needs, ages 0 through 17, who have a personal doctor or nurse
Percent of children with and without special health care needs, ages 0 through 17, who have a usual source of sick care
Percent of children with and without special health care needs, ages 0 through 17, who have family centered care
Percent of children with and without special health care needs, ages 0 through 17, who have no problem getting needed referrals
Percent of children with and without special health care needs, ages 0 through 17, who receive needed care coordination

GOAL

To increase the percent of children with and without special health care needs who have a medical home

DEFINITION

Numerators:
Number of children with and without special health care needs, ages 0 through 17, who are reported by a parent to meet the criteria for having a medical home (personal doctor or nurse, usual source for care, family-centered care, referrals if needed, and care coordination if needed)
Number of children with and without special health care needs, ages 0 through 17, who have a personal doctor or nurse
Number of children with and without special health care needs, ages 0 through 17, who are reported by a parent to have a place they usually go when the child is sick or needs advice about their health (excluding the hospital emergency room)
Number of children with and without special health care needs, ages 0 through 17, who are reported by a parent that the child's doctor or other health care provider always/usually 1) spent enough time with the child, 2) listened carefully to the child, 3) showed sensitivity to family values, 4) provided the specific information needed concerning the child, and 5) helped the family feel like a partner in the child's care
Number of children with and without special health care needs, ages 0 through 17, who are reported by a parent to have no problem getting needed referrals
Number of children with and without special health care needs, ages 0 through 17, who are reported by a parent to have received all needed help with care coordination

Denominators:
Number of children with and without special health care needs, ages 0 through 17
Number of children with and without special health care needs, ages 0 through 17
Number of children with and without special health care needs, ages 0 through 17
Number of children with and without special health care needs, ages 0 through 17, who are reported by a parent to have had a visit with a health care professional in the past 12 months
Number of children with and without special health care needs, ages 0 through 17, who are reported by a parent to have needed a referral to see any doctors or receive any services in the past 12 months
Number of children with and without special health care needs, ages 0 through 17, who are reported by a parent to have needed care coordination past 12 months

Units: 100
Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) Objective 19: Increase the proportion of children and adolescents who receive care in a medical home. (Baseline: 48.6% in 2016-17, Target: 53.6%)

DATA SOURCES and DATA ISSUES
National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN
Children with Special Health Care Needs or All Children (CSHCN and non-CSHCN)

MEASURE DOMAIN
Clinical Health Systems

POPULATION HEALTH SIGNIFICANCE
A medical home is an approach to providing comprehensive primary care that facilitates partnerships between patients, clinicians, medical staff, and families. A medical home extends beyond the four walls of a clinical practice. It includes specialty care, educational services, family support and more. Providing comprehensive and coordinated care to children in a medical home is the standard of pediatric practice. Research indicates that children with a stable and continuous source of health care are more likely to receive appropriate preventive care, are less likely to be hospitalized for preventable conditions, and are more likely to be diagnosed early for chronic or disabling conditions.

(1) American Academy of Pediatrics. National Resource Center for Patient/Family-Centered Medical Home. (n.d.) https://medicalhomeinfo.aap.org

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018*	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017*	AS, FM, GU, MH, MP, PW, PR, VI

*Medical Home – Referrals data are not available due to wording changes that make it not comparable to later years.

Data Notes
NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. The 'difficulty receiving referrals' component of the medical home was changed in 2018. In 2016 and 2017, the question asked "how much of problem was it to get referrals?" In 2018, the question was changed to "how difficult was it to get referrals?" with new response options. While this component may not be comparable over time, the overall medical home measure did not appear to be affected. In 2023, there were minor changes to the response ordering and wording for usual source of sick care that did not affect the component or overall composite measure. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than

2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Total	Component: Usual Source of Care Component: Personal Doctor or Nurse Component: Family-Centered Care Component: Referrals if needed Component: Care Coordination if needed	
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	0-5 Years 6-11 Years 12-17 Years	
CSHCN	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.

Stratifier	Subcategory	Special Notes
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***NPM_Personal Dr/Nurse: CSHCN and All Children***/ /**NPM_Medical Home
Component1**/
PerDrNs = .;
if K4Q04_R in (1,2) then PerDrNs = 1;
else if K4Q04_R = 3 then PerDrNs = 2;
else if K4Q04_R = .M then PerDrNs = .M;
label PerDrNs = "NPM_Personal Dr/Nurse, All Children: Percent of children, ages 0
through 17, who have a personal doctor or nurse";

if SC_CSHCN=1 then PerDrNs_1=PerDrNs; if SC_CSHCN=2 then PerDrNs_1=.L;
label PerDrNs_1 = "NPM_Personal Dr/Nurse, CSHCN: Percent of children with SHCN,
ages 0 through 17, who have a personal doctor or nurse";

/***NPM_Usual Source of Sick Care: CSHCN and All Kids***/ /**NPM_Medical Home
Component2**/
UsualSck = .;
if K4Q01 = 1 and K4Q02_R in (1,3,4,5,6,7,8) then UsualSck = 1;
else if K4Q01 = 2 or K4Q02_R = 2 then UsualSck = 2;
else if K4Q01 = .M or K4Q02_R = .M then UsualSck = .M;
label UsualSck = "NPM_Usual Source of Sick Care, All Children: Percent of children,
ages 0 through 17, who have a usual source of sick care";

if SC_CSHCN=1 then UsualSck_1=UsualSck; if SC_CSHCN=2 then UsualSck_1=.L;
label UsualSck_1 = "NPM_Usual Source of Sick Care, CSHCN: Percent of children with
SHCN, ages 0 through 17, who have a usual source of sick care";
```

```
/***NPM_Family Centered Care: CSHCN and All Children***//** NPM_Medical Home
Component3**/
time = .;
if K5Q40 = .M then time = .M;
else if K5Q40 = .L then time = 0;
else if K5Q40 = 1 then time = 1;
else if K5Q40 = 2 then time = 2;
else if K5Q40 in (3,4) then time = 3;
label time = "Doctors spent enough time with children";
listen = .;
if K5Q41 =.M then listen = .M;
else if K5Q41 = .L then listen = 0;
else if K5Q41 = 1 then listen = 1;
else if K5Q41 = 2 then listen = 2;
else if K5Q41 in (3,4) then listen = 3;
label listen = "Doctors listened carefully to children's parents";
SEnsitiv = .;
if K5Q42 = .M then SEnsitiv = .M;
else if K5Q42 = .L then SEnsitiv = 0;
else if K5Q42 = 1 then SEnsitiv = 1;
else if K5Q42 = 2 then SEnsitiv = 2;
else if K5Q42 in (3,4) then SEnsitiv = 3;
label SEnsitiv = "Doctors showed sensitivity to children's family's values and
customs";
info = .;
if K5Q43 = .M then info = .M;
else if K5Q43 = .L then info = 0;
else if K5Q43 = 1 then info = 1;
else if K5Q43 = 2 then info = 2;
else if K5Q43 in (3,4) then info = 3;
label info = "Doctors provided information specific to parents' concerns";
partner = .;
if K5Q44 = .M then partner = .M;
else if K5Q44 = .L then partner = 0;
else if K5Q44 = 1 then partner = 1;
else if K5Q44 = 2 then partner = 2;
else if K5Q44 in (3,4) then partner = 3;
label partner = "Doctors helped parents to feel like partners in child's care";

FamCentCare = .;
if time = .M and listen = .M and sensitiv = .M and info = .M and partner = .M then
FamCentCare = .M;
else if time = 0 then FamCentCare = .L;
else if time in (1,2,.M) and listen in (1,2,.M) and sensitiv in (1,2,.M) and info
in (1,2,.M) and
     partner in (1,2,.M) then FamCentCare = 1;
else if time in (3,.M) or listen in (3,.M) or sensitiv in (3,.M) or info in (3,.M)
or partner in (3,.M) then FamCentCare = 2;
label FamCentCare = "NPM_Family Centered Care, All Children: Percent of children,
ages 0 through 17, who have family centered care";

if SC_CSHCN=1 then FamCentCare_1=FamCentCare; if SC_CSHCN=2 then FamCentCare_1=.L;
label FamCentCare_1 = "NPM_Family Centered Care, CSHCN: Percent of children with
SHCN, ages 0 through 17, who have family centered care";

/***NPM_Referrals: CSHCN and All Children***//**NPM_Medical Home Component4**/
NoRefPrb = .;
if K5Q10 = 2 then NoRefPrb = .L;
```

```
else if K5Q10 = .M then NoRefPrb = .M;
else if K5Q11 in (2,3,4) then NoRefPrb = 2;
else if K5Q11 = 1 then NoRefPrb = 1;
else if K5Q11 = .M then NoRefPrb = .M;
label NoRefPrb = "NPM_Referrals, All Children: Percent of children, ages 0 through
17, who receive needed referrals";

if SC_CSHCN=1 then NoRefPrb_1=NoRefPrb; if SC_CSHCN=2 then NoRefPrb_1=.L;
label NoRefPrb_1 = "NPM_Referrals, CSHCN: Percent of children with SHCN, ages 0
through 17, who receive needed referrals";

/***NPM_Care Coordination: CSHCN and All Children***//**NPM_Medical Home
Component5**/
DrComm = .;
if K5Q20_R = 3 or S4Q01 = 2 then DrComm = 0;
else if K5Q30 = .M then DrComm = .M;
else if K5Q30 = 1 then DrComm = 1;
else if K5Q30 = 2 then DrComm = 2;
else if K5Q30 in (3,4) then DrComm = 3;
else if K5Q30 = .L then DrComm = 0;
label DrComm = "Satisfaction with communication among child's doctor and other
health care provider";
CareHelp = .;
if S4Q01 = .M then CareHelp = .M;
else if K5Q20_R = 3 or S4Q01 = 2 then CareHelp = 0;
else if K5Q20_R = 2 and K5Q21 = 2 then CareHelp = 0;
else if K5Q20_R = .M and K5Q21 = 2 then CareHelp = .M;
else if K5Q20_R = .M then CareHelp = .M;
else if K5Q21 = .M then CareHelp = .M;
else if K5Q22 = .M then CareHelp = .M;
else if K5Q20_R = 1 and K5Q21 = 2 then CareHelp = 1;
else if K5Q22 = 1 then CareHelp = 1;
else if K5Q22 in (2,3) then CareHelp = 2;
label CareHelp = "Got all needed extra help with care coordination when needed";
OthComm = .;
if K5Q31_R in (2,3) then OthComm = 0;
else if K5Q31_R = .M then OthComm = .M;
else if K5Q32 = 1 then OthComm = 1;
else if K5Q32 in (2,3,4) then OthComm = 2;
else if K5Q32 = .M then OthComm = .M;
else if K5Q32 = .L then OthComm = 0;
label OthComm = "Satisfaction with communication among child's doctors and school,
child care provider, or special education program";

CareCoor = .;
if CareHelp = .M and DrComm = .M and OthComm = .M then CareCoor = .M;
else if CareHelp in (0,.M) and DrComm in (0,.M) and OthComm in (0,.M) then CareCoor
= .L;
else if CareHelp in (1,0,.M) and DrComm in (1,0,.M) and OthComm in (1,0,.M) then
CareCoor = 1;
else if CareHelp in (2,.M) or DrComm in (2,3,.M) or OthComm in (2,.M) then CareCoor
= 2;
label CareCoor = "NPM_Care Coordination, All Children: Percent of children, ages 0
through 17, who receive needed care coordination";

if SC_CSHCN=1 then CareCoor_1=CareCoor; if SC_CSHCN=2 then CareCoor_1=.L;
label CareCoor_1 = "NPM_Care Coordination, CSHCN: Percent of children with SHCN,
ages 0 through 17, who receive needed care coordination";
```

```
/***NPM_Medical Home: Medical Home - CSHCN and All Children***/
MedicalHome = .; /*Composite Measure*/
if PerDrNs in (1,.M) and UsualSck in (1,.M) and FamCentCare in (1,.L,.M) and
NoRefPrb in (1,.L,.M) and CareCoor in (1,.L,.M) then MedicalHome = 1;
if PerDrNs = 2 or UsualSck = 2 or FamCentCare = 2 or NoRefPrb = 2 or CareCoor = 2
then MedicalHome = 2;
if PerDrNs = .M and UsualSck = .M and FamCentCare in (.L,.M)and NoRefPrb in (.L,.M)
and CareCoor in (.L,.M) then MedicalHome = .M;
label MedicalHome = "NPM_Medical Home, All Children: Percent of children, ages 0
through 17, who have a medical home";

if SC_CSHCN=1 then MedicalHome_1=MedicalHome; if SC_CSHCN=2 then MedicalHome_1=.L;
label MedicalHome_1= "NPM_Medical Home, CSHCN: Percent of children with SHCN, ages
0 through 17, who have a medical home";

/* 1= Yes,  2= No */
```

Data Alert

In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. Adverse Childhood Experiences stratifier was updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Transition To Adult Health Care

Percent of adolescents with and without special health care needs, ages 12 through 17, who received services to prepare for the transitions to adult health care

GOAL

To increase the percent of adolescents with and without special health care needs who have received services to prepare for the transitions to adult health care.

DEFINITION

Numerator: Number of adolescents with and without special health care needs, ages 12 through 17, who are reported by a parent to have received services to prepare for the transition to adult health care (time alone with a health care provider, active work to gain skills to manage health/health care or understand changes in health care at age 18, discussed shift to adult providers if needed)

Denominator: Number of adolescents, ages 12 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Adolescent Health (AH) Objective R01: Increase the proportion of adolescents (aged 12 to 17 years) with and without special health care needs who receive services to support their transition to adult health care. (Research)

Related to AH Objective 02: Increase the proportion of adolescents who speak privately with a physician or other health care provider during a preventive medical visit. (Baseline: 38.4% in 2016-17, Target: 43.3%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Children with Special Health Care Needs or All Adolescents (CSHCN and All)

MEASURE DOMAIN

Clinical Health Systems

POPULATION HEALTH SIGNIFICANCE

The transition of youth to an adult model of healthcare, has become a priority issue nationwide as evidenced by the 2011 clinical report and algorithm developed jointly by the AAP, American Academy of Family Physicians and American College of Physicians to improve transitions to adult health care for all youth and families. Poor health has the potential to impact negatively the youth and young adults' academic and vocational outcomes. Over 90 percent of children with special health care needs now live to adulthood but are less likely than their non-disabled peers to complete high school, attend college or to be employed. Health and health care are cited as two of the major barriers to making successful transitions to adulthood.

(1) White PH, Cooley WC; Transitions Clinical Report Authoring Group; American Academy of Pediatrics; American Academy of Family Physicians; American College of Physicians. Supporting the Health Care Transition From Adolescence to Adulthood in the Medical Home. Pediatrics. 2018;142(5):e20182587. Pediatrics. 2019;143(2):e20183610. doi:10.1542/peds.2018-3610. https://publications.aap.org/pediatrics/article/142/5/e20182587/38577/Supporting-the-Health-Care-Transition-From

(2) American Academy of Pediatrics; American Academy of Family Physicians; American College of Physicians-American Society of Internal Medicine. A consensus statement on health care transitions for young adults with special health care needs. Pediatrics. 2002;110(6 Pt 2):1304-1306. https://publications.aap.org/pediatrics/article-

abstract/110/Supplement_3/1304/28819/A-Consensus-Statement-on-Health-Care-Transitions?redirectedFrom=fulltext

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. The 'time alone with a provider' component of transition to adult health care changed in 2018 to refer to the last medical visit rather than preventive visit. The 'anticipatory guidance' component of transition to adult health care also changed in 2018. In 2016 and 2017, the question asked, "Have they talked with you about having this child eventually see doctors or other health providers who treat adults?" In 2018, this question changed to, "Have they talked with you about when this child will need to see doctors or other health providers who treat adults?" While these components may not be comparable over time, the overall measure did not appear to be affected and the concept of transition to adult health care remains the same. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Total	Component: Time Alone with Provider Component: Active Work with Child Component: Anticipatory Guidance if needed	
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener	Any functional limitation, elevated service need/use (with or without RxMeds),

Stratifier	Subcategory	Special Notes
	criteria RxMeds only Non-CSHCN	and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	

Stratifier	Subcategory	Special Notes
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***Transition to adult health care, children with and without special health care
needs, age 12 -17 years***/

if year<2018 then do;
TimeAlone = .;
if DOCPRIVATE = 1 then TimeAlone = 1;
if DOCPRIVATE = 2 then TimeAlone = 2;
if S4Q01 = 2 or K4Q20R = 1 then TimeAlone = 2;
if DOCPRIVATE = .M then TimeAlone = .M;
if S4Q01 =.M or K4Q20R = .M then TimeAlone = .M;
if SC_AGE_YEARS < 12 then TimeAlone = .N;
end;
if year>=2018 then do;
TimeAlone = .;
if DOCPRIVATE = 1 then TimeAlone = 1;
if DOCPRIVATE = 2 then TimeAlone = 2;
if S4Q01 = 2 then TimeAlone = 2;
if DOCPRIVATE = .M then TimeAlone = .M;
if S4Q01 =.M then TimeAlone = .M;
if SC_AGE_YEARS < 12 then TimeAlone = .N;
end;
label TimeAlone = "Children who had time alone with health care provider at last
check-up, age 12-17 years";

/*Transition To Adult Health Care Part B: Active work with child*/
ActiveWork = .;
if CHANGEAGE = 1 or GAINSKILLS = 1 then ActiveWork = 1;
else if CHANGEAGE = 2 or GAINSKILLS = 2 then ActiveWork = 2;
else if CHANGEAGE in (3,.M) and GAINSKILLS in (3,.M) then ActiveWork = .M;
else if SC_AGE_YEARS < 12 then ActiveWork = .N;
label ActiveWork = "Provider worked with child to gain skills to manage
health/health care and understand health care changes at age 18, age 12-17 years";

/*Transition To Adult Health Care Part C: Anticipatory guidance*/
TrtAdult = .;
if TREATCHILD = 1 and TREATADULT = 1 then TrtAdult = 1;
else if TREATCHILD = 1 and TREATADULT = 2 then TrtAdult = 2;
else if TREATCHILD = 2 then TrtAdult = .L;
else if TREATCHILD = .M or TREATADULT = .M then TrtAdult = .M;
if SC_AGE_YEARS < 12 then TrtAdult = .N;
label TrtAdult = "Provider discussed shift to adult health care providers (if
needed), age 12-17 years";

/*Transition to adult health care composite measure; only excludes missing on all
subcomponents consistent with adequate insurance*/
TAHC = .;
if TimeAlone in (1,.M) and ActiveWork in (1,.M) and TrtAdult in (1,.M,.L) then TAHC
= 1;
if TimeAlone = 2 or ActiveWork = 2 or TrtAdult = 2 then TAHC = 2;
if TimeAlone = .M and ActiveWork = .M and TrtAdult = .M then TAHC = .M;
if SC_AGE_YearS < 12 then TAHC = .N;
```

```
label TAHC = "NPM_Transition To Adult Health Care, All Children: Percent of
adolescents, ages 12 through 17, who received services to prepare for the
transition to adult health care";

if SC_CSHCN=1 then TAHC _1= TAHC; if SC_CSHCN=2 then TAHC_1=.L;
label TAHC_1 = "NPM_Transition To Adult Health Care, CSHCN: Percent of adolescents
with SHCN, ages 12 through 17, who received services to prepare for the transition
to adult health care";
/* 1= Yes,  2= No */
```

Data Alert

In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. Adverse Childhood Experiences stratifier was updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Bullying

Percent of adolescents with and without special health care needs, ages 12 through 17, who are bullied or who bully others

GOAL

To reduce the percent of adolescents with and without special health care needs who are bullied or who bully others.

DEFINITION

Numerators:
Number of adolescents in grades 9 through 12 who report that they are bullied on school property or electronically in the past year (YRBSS)
Number of adolescents, ages 12 through 17, with and without special health care needs, who are reported by a parent to have been bullied in the past year (NSCH)
Number of adolescents, ages 12 through 17, with and without special health care needs, who are reported by a parent to have bullied others in the past year (NSCH)
Denominators:
Number of adolescents in grades 9 through 12 (YRBSS)
Number of adolescents ages 12 through 17 (NSCH)

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES and DATA ISSUES

Youth Risk Behavior Surveillance System (YRBSS)
National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Children with Special Health Care Needs or All Adolescents (CSHCN and All)

MEASURE DOMAIN

Social Determinants of Health

POPULATION HEALTH SIGNIFICANCE

Bullying, particularly among school-age children, is a major public health problem that is associated with a number of behavioral, emotional, and physical adjustment problems. Adolescents who bully others tend to exhibit other defiant and delinquent behaviors, have poor school performance, be more likely to drop-out of school, and are more likely to bring weapons to school. Victims of bullying tend to report feelings of depression, anxiety, low self-esteem, and isolation; poor school performance; suicidal ideation; and suicide attempts. Bullying victims who also perpetrate bullying (i.e., bully-victims) may exhibit the poorest functioning, in comparison with either victims or bullies. Emotional and behavioral problems experienced by victims, bullies, and bully-victims may continue into adulthood and produce long-term negative outcomes, including low self-esteem and self-worth, depression, antisocial behavior, vandalism, drug use and abuse, criminal behavior, gang membership, and suicidal ideation.[1] Children with special health care needs are particularly vulnerable to bullying, with the prevalence of bullying over two times higher for children with special health care needs compared to children without special health care needs.[2] Dedicated support and prevention strategies are needed to support children and prevent bullying.

(1) U.S. Department of Health and Human Services. StopBullying.gov. (n.d.) https://www.stopbullying.gov.
(2) Child and Adolescent Health Measurement Initiative. 2020-2021 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health

FAD Availability by Year – NSCH

Year	Data Not Available
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes – NSCH

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. The bullying items changed in 2018 and cannot be combined with or compared to previous survey years; thus, only 2018 data and beyond are provided. In 2016 and 2017, the perpetration question asked parents/caregivers how well the phrase, "this child bullies others, picks on them, or excludes them," described the child. In 2018, the question asked "In the past 12 months, how often did this child bully others, pick on them, or exclude them?" The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes – NSCH

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid	Refers to current insurance. Private

Stratifier	Subcategory	Special Notes
	Uninsured	includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code – NSCH

```
/***NPM_Bullying: Bullied or bully others, age 12-17 years***/

BullyOthers = .;
if bully in (2,3,4,5) then BullyOthers = 1;
if bully = 1 then BullyOthers = 2;
if bully = .M then BullyOthers = .M;
```

```
if SC_AGE_YearS < 12 then BullyOthers = .L;
label BullyOthers = "NPM_Bully, All Children: Percent of adolescents, ages 12
through 17, who bully others";

if SC_CSHCN=1 then BullyOthers_1=BullyOthers; if SC_CSHCN=2 then BullyOthers_1=.L;
label BullyOthers_1 = "NPM_Bully, CSHCN: Percent of adolescents with SHCN, ages 12
through 17, who bully others";

AreBullied = .;
if BULLIED_R in (2,3,4,5) then AreBullied = 1;
if BULLIED_R = 1 then AreBullied = 2;
if BULLIED_R = .M then AreBullied = .M;
if SC_AGE_YearS < 12 then AreBullied = .L;
label AreBullied = "NPM_Bullied, Children: Percent of adolescents, with and without
special health care needs, ages 12 through 17, who are bullied";

if SC_CSHCN=1 then AreBullied_1=AreBullied; if SC_CSHCN=2 then AreBullied_1=.L;
label AreBullied_1 = "NPM_Bullied, CSHCN: Percent of adolescents, with SHCN, ages
12 through 17, who are bullied";
/* 1= Yes,  2= No */
```

Data Alert

In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. Adverse Childhood Experiences stratifier was updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

FAD Availability by Year – YRBSS

Year	Data Not Available
2023	AL, AZ, CA, CO, FL, GA, ID, IA, KS, MN, NV*, NJ*, NY*, OR, SC, VT*, WA, WY, FM, MH, VI
2021	AK, CA, GA*, MN, NV*, NJ*, OR, PA*, VT*, WA, AS, FM, GU, MH, VI
2019	DE, IN, MN, OR, VT*, WA, WY, AS, FM, MH, PW, VI
2017	AL, GA, IN, MN, MS, NJ, OH, OR, SD, VT*, WA, WY, AS, FM, MH, PW, VI
2015	AZ, CO, GA, IA, KS, LA, MN, NJ, OH, OR, TX, UT, VT*, WA, WI, AS, FM, MH, VI
2013	AZ, CA, CO, IA, IN, MN, MO*, OR, PA, VT*, WA, FM, MH, VI
2011	AZ, CA, DC, DE*, MA*, MN, MO, NV, OR, PA, WA, VT*, FM, MH, MP, VI

*These states have data available for one of the two bullying items and could report that item in TVIS.

Data Notes - YRBSS

This measure captures adolescents in grades 9 through 12 who report that they are bullied on school property or electronically in the past year (victimization). The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response and are adjusted to reflect the total population of high school students by sex, grade, and race/ethnicity for the United States and for each state. Standard errors account for the complex survey design. National estimates are based on a national sample of all 50 states and DC. Sexual orientation is not available for all states. See “Methodology of the YRBSS” and “Software for Analyzing YRBS Data” on the YRBS web site at www.cdc.gov/yrbss for more information.

Available Stratifiers and Notes – YRBSS

Stratifier	Subcategory	Special Notes
Grade	9th grade 10th grade 11th grade 12th grade	
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Sex	Female Male	
Sexual Orientation	Heterosexual Lesbian, Gay, Bisexual Not sure	Newly added in 2015; not available for all states

SAS Code – YRBSS

```
if QN24=1 or QN25=1 then BULLIED=1;  *Yes;
else if QN24=2 and QN25=2 then BULLIED=2;  *No;
```

Table 4. Standardized Measures (SMs)

Short Title	Full Title
Early Prenatal Care	Percent of pregnant women who receive prenatal care beginning in the first trimester
Well-Woman Visit	Percent of women, ages 18 through 44, with a preventive medical visit in the past year
Low-Risk Cesarean Delivery	Percent of cesarean deliveries among low-risk first births
Drinking During Pregnancy	A) Percent of women who drink any alcohol during pregnancy B) Percent of women who binge drink alcohol during pregnancy
Smoking – Pregnancy Smoking – Household	Percent of women who smoke during pregnancy Percent of children, ages 0 through 17, who live in households where someone smokes
Adolescent Physical Activity	Percent of adolescents, ages 12 through 17, who are physically active at least 60 minutes per day
Uninsured	Percent of children, ages 0 through 17, without health insurance
Adequate Insurance	Percent of children, ages 0 through 17, who are continuously and adequately insured
Forgone Health Care	Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year
MMR Vaccination	Percent of children in kindergarten who have received at least two doses of the MMR vaccine
Flu Vaccination	Percent of children, 6 months through 17 years, who are vaccinated annually against seasonal influenza
HPV Vaccination	Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine

Early Prenatal Care

Percent of pregnant women who receive prenatal care beginning in the first trimester

GOAL

To ensure early entrance into prenatal care to enhance pregnancy outcomes.

DEFINITION

Numerator: Number of live births with reported first prenatal visit during the first trimester (before 13 weeks' gestation)

Denominator: Number of live births

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) 08 Objective: Increase the proportion of pregnant women who receive early and adequate prenatal care. (Baseline: 76.4% of pregnant females received early and adequate prenatal care in 2018, Target: 80.5%)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS)

MCH POPULATION DOMAIN

Women/Maternal Health or Perinatal/Infant Health

MEASURE DOMAIN

Clinical Health Systems

POPULATION HEALTH SIGNIFICANCE

Early prenatal care is essential for identification of maternal disease and risks for complications of pregnancy or birth. This can help ensure that women with complex problems, chronic illness, or other risks are seen by specialists. Early prenatal care can also provide important education and counseling on modifiable risks in pregnancy, including smoking, drinking, and inadequate or excessive weight gain.[1] Although early high-quality prenatal care is essential, particularly for women with chronic conditions or other risk factors, it may not be sufficient to assure optimal pregnancy outcomes. Efforts to improve pregnancy outcomes and the health of mothers and infants should begin prior to conception, whether before a first or subsequent pregnancy[2]. As many women are not aware of being pregnant at first, it is important to establish healthy behaviors and achieve optimal health well before pregnancy.[2] The timeliness of prenatal care measure for health plans is part of the Core Set of Maternal and Perinatal Health Measures for Medicaid and CHIP and the National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set (HEDIS).

(1) National Institute of Child Health and Human Development. What is prenatal care and why is it important? 2017 January 31. https://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/prenatal-care

(2) Johnson K, Posner SF, Biermann J, et al. Recommendations to improve preconception health and health care--United States. A report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care. MMWR Recomm Rep. 2006;55(RR-6):1-23. https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5506a1.htm

FAD Availability by Year

Year	Data Not Available
2023	AS, FM, MH, PW
2022	AS, FM, MH, PW
2021	AS, FM, MH, PW
2020	AS, FM, MH, PW
2019	AS, FM, MH, PW, VI

Year	Data Not Available
2018	AS, FM, MH, PW, VI
2017	AS, FM, MH, PW, VI
2016	AS, FM, MH, PW
2015	CT, NJ, AS, FM, MH, PW
2014	CT, NJ, RI, AS, FM, MH, PW, VI
2013	AL, AZ, AR, CT, HI, ME, NJ, RI, WV, AS, FM, MH, PW, VI
2012	AL, AK, AZ, AR, CT, HI, ME, MS, NJ, RI, VA, WV, AS, FM, MH, PW, VI
2011	AL, AK, AZ, AR, CT, HI, ME, MS, MN, MS, NJ, RI, VA, WV, AS, FM, GU, MH, PW, VI
2010	AL, AK, AZ, AR, CT, HI, LA, ME, MA, MN, MS, NJ, NC, RI, VA, WV, WI, AS, FM, GU, MH, PW, VI
2009	AL, AK, AZ, AR, CT, DC, HI, IL, LA, ME, MD, MA, MN, MS, MO, NV, NJ, NC, OK, RI, VA, WV, WI, AS, FM, GU, MH, MP, PW, VI

Data Notes

Prenatal care utilization was modified in the 2003 revision of the U.S. Standard Certificate of Live Birth and is only available for the states/jurisdictions that had implemented the 2003 revision as of January 1 of the data year. Overall U.S. estimates prior to 2016 are not comparable due to the addition of states over time that have implemented the 2003 revision. Trends within a state after the 2003 revision are comparable. Marital status is not available for California. Urban/rural residence is not available for territories. For more information about the birth file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only
Plurality	Singleton Multiple Birth	Includes imputed plurality
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.

Stratifier	Subcategory	Special Notes
	Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.
WIC Participation	Yes No	Refers to prenatal WIC participation.

SAS Code

```
IF RESTATUS NE 4; * restrict to resident births;
if precare in (1,2,3) then first_tri_pnc=1;   * precare = month of prenatal care entry;
else if 0<=precare<=10 then first_tri_pnc=0;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Well-Woman Visit

Percent of women, ages 18 through 44, with a preventive medical visit in the past year

GOAL

To increase the percent of women who have an annual preventive medical visit.

DEFINITION

Numerator: Number of women, ages 18 through 44, who report visiting a doctor for a routine checkup in the past year

Denominator: Number of women, ages 18 through 44

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Access to Health Services (AHS) Objective 08: Increase the proportion of adults who receive appropriate evidence-based clinical preventive services. (Baseline: 8.0% in 2015, Target: 10.9%)

DATA SOURCES and DATA ISSUES

Behavioral Risk Factor Surveillance System (BRFSS)

MCH POPULATION DOMAIN

Women/Maternal Health

MEASURE DOMAIN

Clinical Health Systems

POPULATION HEALTH SIGNIFICANCE

An annual well-woman visit provides a critical opportunity to receive recommended clinical preventive services, including screening, counseling, and immunizations, which can lead to appropriate identification, treatment, and prevention of disease to optimize the health of women before, between, and beyond potential pregnancies.[1] For example, screening and management of chronic conditions such as diabetes, and counseling to achieve a healthy weight and smoking cessation, can be advanced within a well woman visit to promote women's health prior to and between pregnancies and improve subsequent maternal and perinatal outcomes.[1]

(1) ACOG Committee Opinion No. 755: Well-Woman Visit. Obstet Gynecol. 2018;132(4):e181-e186. doi:10.1097/AOG.0000000000002897. https://journals.lww.com/greenjournal/Fulltext/2018/10000/ACOG_Committee_Opinion_No__755__Well_Woman_Visit.61.aspx

FAD Availability by Year

Year	Data Not Available
2023	KY, PA, AS, FM, MH, MP, PW
2022	AS, FM, MH, MP, PW
2021	FL, AS, FM, MH, MP, PW, VI
2020	AS, FM, MH, MP, PW, VI
2019	NJ, AS, FM, MH, MP, PW, VI
2018	AS, FM, MH, MP, PW, VI

Data Notes

Kentucky and Pennsylvania were unable to collect enough data to meet the minimum requirements to be included in the 2023 public data set. The routine checkup item changed in 2018 and is not comparable to previous survey years; thus, only data since 2018 are provided. The definition of a routine checkup as a general physical exam, not an exam for a specific injury, illness, or condition is no longer part of the standard question and only provided

if a respondent asks for clarification: “About how long has it been since you last visited a doctor for a routine checkup?” The estimates, numerators, and denominators presented are weighted to account for non-response and to reflect state population totals by various demographic characteristics. Standard errors account for the complex survey design. Urban/rural residence is not available for territories. For more information on the BRFSS methodology, visit http://www.cdc.gov/brfss/.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Age	18-24 Years 25-34 Years 35-44 Years	Includes imputed age. This is labeled as “Maternal Age” in TVIS but more accurately reflects a woman’s age regardless of childbearing status.
Educational Attainment	Less than high school High school graduate Some college College graduate	
Health Insurance	Insured Uninsured	Refers to current health insurance status
Household Income/Poverty	<$25,000 $25,000-$49,999 $50,000-$74,999 ≥$75,000	Missing data exceeded 10%; interpret with caution.
Language	English Non-English	Refers to language of survey administration
Marital Status	Married Unmarried	
Race/ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Urban/Rural Residence	Metro Non-Metro	Refers to county metropolitan status. Not available for territories.

SAS Code

```
/* Well-Woman Visit */

WWV = .;
if CHECKUP1 in (1,2,3,4,8) and (1<=_AGE_G <=3) and SEXVAR = 2 then do;
if CHECKUP1 = 1 then WWV = 1;
if CHECKUP1 in (2,3,4,8) then WWV = 2;
end;
/* 1= Yes,  2= No */
```

Data Alert

Kentucky and Pennsylvania were unable to collect enough data to meet the minimum requirements to be included in the 2023 public data set.

Low-Risk Cesarean Delivery

Percent of cesarean deliveries among low-risk first births

GOAL

To reduce the percent of cesarean deliveries among low-risk first births.

DEFINITION

Numerator: Number of cesarean deliveries among term (37+ weeks), singleton, vertex births to nulliparous women

Denominator: Number of term (37+ weeks), singleton, vertex births to nulliparous women

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Identical to Maternal, Infant, and Child Health (MICH) Objective 06: Reduce cesarean births among low-risk women with no prior births (Baseline: 25.9% of low-risk females with no prior births had a cesarean birth in 2018, Target: 23.6%)

DATA SOURCES and DATA ISSUES

National Vital Statistics System (NVSS) – Birth File

MCH POPULATION DOMAIN

Women/Maternal Health

MEASURE DOMAIN

Clinical Health Systems

POPULATION HEALTH SIGNIFICANCE

Cesarean delivery can be a life-saving procedure for certain medical indications. However, for most low-risk pregnancies, cesarean delivery poses avoidable maternal risks of morbidity and mortality, including hemorrhage, infection, and blood clots—risks that compound with subsequent cesarean deliveries.[1] Much of the temporal increase in cesarean delivery (over 50% in the past decade), and wide variation across states, hospitals, and practitioners, can be attributed to first-birth cesareans.[1] Moreover, cesarean delivery in low-risk first births may be most amenable to intervention through quality improvement efforts.[1] This low-risk cesarean measure, also known as nulliparous term singleton vertex (NTSV) cesarean, is endorsed by the National Quality Forum (#0471) and included within The Joint Commission's National Quality Measures for hospitals (PC-02), and the Core Set of Maternal and Perinatal Health Measures for Medicaid and CHIP. An Alliance for Innovation on Maternal Health (AIM) patient safety bundle for Safe Reduction of Primary Cesarean Births was released in 2018.[2]

(1) American College of Obstetricians and Gynecologists (College); Society for Maternal-Fetal Medicine, Caughey AB, Cahill AG, Guise JM, Rouse DJ. Safe prevention of the primary cesarean delivery. Am J Obstet Gynecol. 2014;210(3):179-193. doi:10.1016/j.ajog.2014.01.026 https://www.acog.org/clinical/clinical-guidance/obstetric-care-consensus/articles/2014/03/safe-prevention-of-the-primary-cesarean-delivery

(2) Alliance for Innovation on Maternal Health. Safe Reduction of Primary Cesarean Birth. (n.d.) https://safehealthcareforeverywoman.org/patient-safety-bundles/safe-reduction-of-primary-cesarean-birth/

FAD Availability by Year

Year	Data Not Available
2023	AS, FM, MH, PW
2022	AS, FM, MH, PW
2021	AS, FM, MH, PW
2020	AS, FM, MH, PW
2019	AS, FM, MH, PW, VI

Year	Data Not Available
2018	AS, FM, MH, PW, VI
2017	AS, FM, MH, PW, VI
2016	AS, FM, MH, PW
2015	AS, FM, MH, PW
2014	AS, FM, MH, PW, VI
2013	AS, FM, MH, PW, VI
2012	AS, FM, MH, MP, PW
2011	AS, FM, MH, MP, PW
2010	AS, FM, MH, MP, PW
2009	AS, FM, MH, PW

Data Notes

Marital status is not available for California. Urban-rural residence is not available for territories. For more information about the birth file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.

Stratifier	Subcategory	Special Notes
WIC Participation	Yes No	Refers to prenatal WIC participation.

SAS Code

```
IF RESTATUS NE 4; * restrict to resident births;
if lbo_rec=1 and 37<=estgest<=47 and dplural=1 and me_pres=1 then do;
* nulliparous (first births), term, singleton, vertex/cephalic;
if dmeth_rec=1 then ntsv_cesarean=0;  *vaginal;
if dmeth_rec=2 then ntsv_cesarean=1;  *cesarean;
end;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Drinking During Pregnancy

A) Percent of women who drink any alcohol during pregnancy
B) Percent of women who binge drink alcohol during pregnancy

GOAL

To reduce the percent of infants born with fetal alcohol spectrum disorders.

DEFINITION

Numerators:

A) Number of women who reported having any alcoholic drinks during any trimester of pregnancy
B) Number of women who reported having 4 or more alcoholic drinks in a 2-hour timespan during any trimester of pregnancy

Denominator:
Number of women with a recent live birth

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Maternal, Infant, and Child Health (MICH) 09: Increase abstinence from alcohol among pregnant women. (Baseline: 89.3% of pregnant females aged 15 to 44 years reported abstaining from alcohol in the past 30 days in 2017-18, Target: 92.2%)

DATA SOURCES and DATA ISSUES

Pregnancy Risk Assessment Monitoring System (PRAMS)

POPULATION HEALTH SIGNIFICANCE

Fetal alcohol spectrum disorders (FASDs), which result in life-long physical and cognitive and/or behavioral problems, are caused by drinking during pregnancy.[1] Fetal alcohol syndrome (FAS) represents the severe end of FASDs, and is characterized by abnormal facial features (e.g., smooth ridge between nose and upper lip), lower than average height or weight, and central nervous system problems that create deficits in learning, memory, attention, communication, vision, and/or hearing.[1] While there is no known safe level of alcohol consumption in pregnancy, binge drinking and regular heavy drinking pose the greatest risks to fetal development.[2] In 2018-2020, 13.5% of pregnant adults reported drinking any alcohol in the past 30 days, and 5.2% reported binge drinking.[3]

(1) Centers for Disease Control and Prevention. Fetal Alcohol Spectrum Disorder (FASDs). 2022 November 4. https://www.cdc.gov/ncbddd/fasd/facts.html
(2) National Institute on Alcohol Abuse and Alcoholism. Fetal Alcohol Exposure. 2021 June. https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/fetal-alcohol-exposure
(3) Gosdin LK, Deputy NP, Kim SY, Dang EP, Denny CH. Alcohol Consumption and Binge Drinking During Pregnancy Among Adults Aged 18-49 Years - United States, 2018-2020 [published correction appears in MMWR Morb Mortal Wkly Rep. 2022 Jan 28;71(4):156]. MMWR Morb Mortal Wkly Rep. 2022;71(1):10-13. Published 2022 Jan 7. doi:10.15585/mmwr.mm7101a2 https://www.cdc.gov/mmwr/volumes/71/wr/mm7101a2.htm

FAD Availability by Year

Year	Data Not Available
2023	CA, ID, NC, OH, AS, FM, GU, MH, PW, VI

Data Notes

Data for this measure began in 2023 (PRAMS Phase 9). Consistent with vital statistics, overall U.S. estimates do not include territories. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-response, and non-coverage. Standard errors account for the complex survey design. For more information on the PRAMS methodology, visit http://www.cdc.gov/prams/

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	From the birth certificate
Educational Attainment	Less than high school High school graduate Some college College graduate	From the birth certificate.
Health Insurance	Private Medicaid Other Public Uninsured	From the birth certificate. Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	From the birth certificate
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	From the birth certificate. Subcategories are not mutually exclusive.
WIC Participation	Yes No	From the birth certificate. Refers to prenatal WIC participation.

SAS Code

```
**(New coding for Phase 9) Drinking during pregnancy;
    if (drkany_1sttrim =2 or drkany_2ndtrim =2 or drkany_3rdtrim = 2) then durpreg_drnk = 2; *any drinking during
preg;
else if (drkany_1sttrim =1 and drkany_2ndtrim =1 and drkany_3rdtrim = 1) then durpreg_drnk = 1; * no drinking
during preg;
    if (drkany_1sttrim<=0 or drkany_2ndtrim<=0 or drkany_3rdtrim<=0) then durpreg_drnk = .; *missing;

keep durpreg_drnk;
format durpreg_drnk ny1f.;
label durpreg_drnk='Any Drinking During Pregnancy';

***(NEW) Binge drinking during pregnancy;
if (drk4pl_1sttrim =2 or drk4pl_2ndtrim =2 or drk4pl_3rdtrim = 2) then durpreg_binge = 2; *any binge drinking
during preg;
else if durpreg_drnk = 1 or (drk4pl_1sttrim = 1 and drk4pl_2ndtrim = 1 and drk4pl_3rdtrim = 1) then
durpreg_binge = 1; * no binge drinking - includes those skipped due to no drinking dur preg;
   if (drk4pl_1sttrim<=0 or drk4pl_2ndtrim<=0 or drk4pl_3rdtrim<=0) then durpreg_binge = .; *missing;
```

```
keep durpreg_binge;
format durpreg_binge ny1f.;
label durpreg_binge ='Binge Drinking During Pregnancy';
```

Smoking

Percent of women who smoke during pregnancy
Percent of children, ages 0 through 17, who live in households where someone smokes

GOAL
To decrease the number of women who smoke during pregnancy and to decrease the number of households where someone smokes.

DEFINITION
Numerators:
Number of women who report smoking during pregnancy (NVSS)
Number of children, ages 0 through 17, who are reported by a parent to live in a household where there is household member who smokes (NSCH)

Denominators:
Number of live births (NVSS)
Number of children, ages 0 through 17 (NSCH)

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE
Related to Maternal, Infant, and Child Health (MICH) Objective 10: Increase abstinence from cigarette smoking among pregnant women. (Baseline: 93.5% in 2018, Target: 95.7%)
Related to Tobacco Use (TU) Objective 15: Increase smoking cessation success during pregnancy among females. (Baseline: 20.2% in 2018, Target 24.4%)
Related to TU Objective 19: Reduce the proportion of children, adolescents and adults exposed to secondhand smoke. (Baseline: 25.5% in 2013-16 (age adjusted to the year 2000 standard population), Target: 17.3%)

DATA SOURCES and DATA ISSUES
National Vital Statistics System (NVSS)
National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN
Women/Maternal Health, Perinatal/Infant Health, Child Health, and/or Adolescent Health

MEASURE DOMAIN
Health Behavior

POPULATION HEALTH SIGNIFICANCE
Women who smoke during pregnancy are more likely to experience a fetal death or deliver a low birth weight baby. Adverse effects of parental smoking on children have been a clinical and public health concern for decades. Children exposed to environmental tobacco smoke have an increased frequency of ear infections; acute respiratory illnesses and related hospital admissions during infancy; severe asthma and asthma-related problems; lower respiratory tract infections; and SIDS.

(1) National Center for Chronic Disease Prevention and Health Promotion (US) Office on Smoking and Health. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention (US); 2014. https://www.ncbi.nlm.nih.gov/books/NBK179276/

FAD Availability by Year – NVSS

Year	Data Not Available
2023	AS, FM, MH, PW
2022	AS, FM, MH, PW
2021	AS, FM, MH, PW

Year	Data Not Available
2020	AS, FM, MH, PW
2019	AS, FM, MH, PW, VI
2018	AS, FM, MH, PW, VI
2017	AS, FM, MH, PW, VI*
2016	AS, FM, MH, PW, VI*
2015	CT, NJ, AS, FM, MH, PW, VI*
2014	CT, HI*, NJ, RI, AS, FM, MH, PW, VI
2013	AL, AZ, AR, CT, HI, ME, MI*, NJ, RI, WV, AS, FM, MH, PW, VI
2012	AL, AK, AZ, AR, CT, HI, ME, MI*, MS, NJ, RI, VA, WV, AS, FM, MH, PW, VI
2011	AL, AK, AZ, AR, CT, HI, ME, MS, MI*, MN, MS, NJ, RI, VA, WV, AS, FM, GU, MH, PW, VI
2010	AL, AK, AZ, AR, CT, FL*, GA*, HI, LA, ME, MA, MI*, MN, MS, NJ, NC, RI, VA, WV, WI, AS, FM, GU, MH, PW, VI
2009	AL, AK, AZ, AR, CT, DC, FL*, GA*, HI, IL, LA, ME, MD, MA, MI*, MN, MS, MO, NV, NJ, NC, OK, RI, VA, WV, WI, AS, FM, GU, MH, MP, PW, VI

*Tobacco use data are not comparable or not reliable for these states/years despite implementation of the 2003 revision of the U.S. Standard Certificate of Live Birth

Data Notes – NVSS

Tobacco use in pregnancy was modified in the 2003 revision of the U.S. Standard Certificate of Live Birth and is only available for the states/jurisdictions that had implemented the 2003 revision as of January 1 of the data year. Overall U.S. estimates prior to 2016 are not comparable due to the addition of states over time that have implemented the 2003 revision. Trends within a state after the 2003 revision are comparable. Marital status is not available for California. Urban/rural residence is not available for territories. For more information about the birth file, please see the User's Guide located at http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm.

Available Stratifiers and Notes – NVSS

Stratifier	Subcategory	Special Notes
Maternal Age	<20 Years 20-24 Years 25-29 Years 30-34 Years ≥35 Years	Includes imputed age
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to maternal educational attainment.
Health Insurance	Private Medicaid Other Public Uninsured	Refers to principal source of payment for delivery. Other Public includes Indian Health Service, CHAMPUS/TRICARE, other government (federal, state, or local) payment source, or other payment source.
Marital Status	Married Unmarried	Includes imputed marital status. Not available for California.
Nativity	Born in U.S. Born outside U.S.	Refers to maternal nativity; territories are included in the U.S. for territory data only
Plurality	Singleton Multiple Birth	Includes imputed plurality
Race/ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination	Refers to maternal race/ethnicity. Includes imputed race. Subcategories are not mutually exclusive.

Stratifier	Subcategory	Special Notes
	Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Urban-Rural Residence	Large Central Metro Large Fringe Metro Small/Medium Metro Non-Metro	Based on 2013 NCHS Urban-Rural Classification Scheme for Counties. Not available for territories.
WIC Participation	Yes No	Refers to prenatal WIC participation.

SAS Code – NVSS

```
IF RESTATUS NE 4; * restrict to resident births;

/* Code from original variables */
/* cig_1= #cigarettes in 1st trimester */
/* cig_2= #cigarettes in 2nd trimester */
/* cig_3= #cigarettes in 3rd trimester */
IF 0<cig_1<99 | 0<cig_2<99 | 0<cig_3<99 THEN smoked=1;
IF cig_1=0 & cig_2=0 & cig_3=0 THEN smoked=0;

/* Code from NCHS recode */
if cig_rec='Y' then smoked=1;
if cig_rec='N' then smoked=0;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

FAD Availability by Year - NSCH

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes - NSCH

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes – NSCH

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	0-5 Years 6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside

Stratifier	Subcategory	Special Notes
		U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code - NSCH

```
/**SM_Smoking, Household**/
HHSmoking = K9Q40;
label HHSmoking = "SM_Smoking, Household: Percent of children, ages 0 through 17,
who live in houSEholds where someone smokes";
/* 1= Yes,  2= No */
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Physical Activity - Adolescent

Percent of adolescents, ages 12 through 17 who are physically active at least 60 minutes per day

GOAL

To increase the percent of children and adolescents who are physically active.

DEFINITION

Numerators:
Number of adolescents, ages 12 through 17, who are reported by a parent to be physically active at least 60 minutes per day in the past week (NSCH)
Number of adolescents in grades 9 through 12 who report being physically active at least 60 minutes per day in the past week (YRBSS)

Denominators:
Number of adolescents ages 12 through 17 (NSCH)
Number of adolescents in grades 9 through 12 (YRBSS)

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Identical (YRBSS) to PA Objective 06: Increase the proportion of adolescents who meet the current aerobic physical activity guideline. (Baseline: 26.1% of students in grades 9 through 12 were physically active for at least 60 minutes on all 7 days of the past week in 2017, Target: 30.6%)

DATA SOURCES AND DATA ISSUES

National Survey of Children's Health (NSCH)
Youth Risk Behavior Surveillance System (YRBSS)

MCH POPULATION DOMAIN

Adolescent Health

MEASURE DOMAIN

Health Behavior

POPULATION HEALTH SIGNIFICANCE

Regular physical activity can improve the health and quality of life of Americans of all ages, regardless of the presence of a chronic disease or disability. Physical activity in children and adolescents improves bone health, weight status, cardiorespiratory and cardiometabolic health, and brain health, including improved cognition and reduced depressive symptoms. Physical activity reduces the risk of early life risk factors for cardiovascular disease, hypertension, Type II diabetes, and osteoporosis. In addition to aerobic and muscle-strengthening activities, bone-strengthening activities are especially important for children and young adolescents because the majority of peak bone mass is obtained by the end of adolescence.

(1) U.S. Department of Health and Human Services. *Physical Activity Guidelines for Americans, 2nd edition*. Washington, DC: U.S. Department of Health and Human Services; 2018. https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf

FAD Availability by Year – NSCH

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes – NSCH

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys

Available Stratifiers and Notes – NSCH

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if

Stratifier	Subcategory	Special Notes
		they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code – NSCH

```
/**SM_Adolescent Physical Activity: 12-17 Years**/
PhysActiv_12to17 = .;
if PHYSACTIV=4 then PhysActiv_12to17=1;
if PHYSACTIV in (1,2,3) then PhysActiv_12to17=2;
if SC_AGE_YearS < 12 then PhysActiv_12to17 = .L;
label PhysActiv_12to17 = "SM_Adolescent Physical Activity: Percent of adolescents,
ages 12 through 17, who are physically active at least 60 minutes per day";
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

FAD Availability by Year – YRBSS

Year	Data Not Available
2023	AL, AZ, CA, CO, FL, GA, ID, IA, KS, MN, NH, OR, SC, WA, WY, FM, MH, VI
2021	AK, CA, MN, OR, WA, WY, AS, FM, GU, MH, VI
2019	DE, IN, MN, OR, WA, WY, AS, FM, MH, PW, VI
2017	AL, GA, IN, MN, MS, NJ, OH, OR, SD, WA, WY, AS, FM, MH, PW, VI
2015	CO, GA, IA, KS, LA, MN, NJ, OH, OR, TX, UT, WA, WI, AS, FM, MH, VI
2013	CA, CO, IA, IN, LA, MN, OR, PA, WA, FM, MH, VI
2011	AR, CA, DC, FL, MA, MD, MN, MO, ND, NH, NJ, NV, OR, PA, WA, FM, MH, MP, VI
2009	AR, CA, DC, FL, IA, LA, MA, MD, MN, ND, NE, NJ, OH, OR, UT, VA, WA, AS, GU, FM, MH, MP, PR, VI
2007	AL, AR, AZ, CA, CO, FL, ME, MD, MN, NE, NJ, OR, PA, VA, WA, WI, FM, MH, MP, PR, VI
2005	All except NC

Data Notes – YRBSS

YRBSS data are self-reported by students in grades 9 through 12. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and are adjusted to reflect the total population of high school students by sex, grade, and race/ethnicity for the United States and for each state. Standard errors account for the complex survey design. National estimates are based on a national sample of all 50 states and DC. Sexual orientation is not available for all states. See “Methodology of the YRBSS” and “Software for Analyzing YRBS Data” on the YRBS web site at www.cdc.gov/yrbss for more information.

Available Stratifiers and Notes – YRBSS

Stratifier	Subcategory	Special Notes
Grade	9th grade 10th grade 11th grade 12th grade	
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Sex	Female Male	
Sexual Orientation	Heterosexual Lesbian, Gay, Bisexual Not sure	Newly added in 2015; not available for all states

SAS Code – YRBSS

```
if q80='8' then QNPA7DAY=1;  *physically active 60+ minutes on all 7 of 7 previous days;
else if q80 in ('1','2','3','4','5','6','7') then QNPA7DAY=2;  *physically active 60+ minutes on 0-6 of previous 7 days;
else QNPA7DAY=.;
```

Uninsured

Percent of children, ages 0 through 17, without health insurance

GOAL

To ensure access to needed health care services for children.

DEFINITION

Numerator: Number of children, ages 0 through 17, who are reported by a parent to not be currently covered by any private or public health insurance

Denominator: Number of children, ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Access to Health Services (AHS) Objective 01: Increase the proportion of persons with medical insurance. (Baseline: 89.0% of persons under 65 years had medical insurance in 2018, Target: 92.1%)

DATA SOURCES and DATA ISSUES

American Community Survey (ACS)

MCH POPULATION DOMAIN

Child Health and/or Adolescent Health

MEASURE DOMAIN

Social Determinants of Health

POPULATION HEALTH SIGNIFICANCE

There is a well-documented benefit for children in having health insurance. Research has shown that children who acquire health insurance are more likely to have access to a usual source of care, receive well child care and immunizations, to have developmental milestones monitored, and receive prescriptions drugs, appropriate care for asthma and basic dental services.[1] Serious childhood problems are more likely to be identified early in children with insurance, and insured children with special health care needs are more likely to have access to specialists.[1] Insured children not only receive more timely diagnosis of serious health care conditions but experience fewer avoidable hospitalizations, improved asthma outcomes and fewer missed school days.[1]

(1) Institute of Medicine (US) Committee on Health Insurance Status and Its Consequences. America's Uninsured Crisis: Consequences for Health and Health Care. Washington (DC): National Academies Press (US); 2009. https://nap.nationalacademies.org/catalog/12511/americas-uninsured-crisis-consequences-for-health-and-health-care

FAD Availability by Year

Year	Data Not Available
2023	AS, FM, GU, MH, MP, PW, VI
2022	AS, FM, GU, MH, MP, PW, VI
2021	AS, FM, GU, MH, MP, PW, VI
2020	All states and jurisdictions
2019	AS, FM, GU, MH, MP, PW, VI
2018	AS, FM, GU, MH, MP, PW, VI
2017	AS, FM, GU, MH, MP, PW, VI
2016	AS, FM, GU, MH, MP, PW, VI
2015	AS, FM, GU, MH, MP, PW, VI
2014	AS, FM, GU, MH, MP, PW, VI
2013	AS, FM, GU, MH, MP, PW, VI

Year	Data Not Available
2012	AS, FM, GU, MH, MP, PW, VI
2011	AS, FM, GU, MH, MP, PW, VI
2010	AS, FM, GU, MH, MP, PW, VI
2009	AS, FM, GU, MH, MP, PW, VI

Data Notes

The numerators and denominators presented are weighted to account for the probability of selection, non-coverage, non-response, and adjusted to reflect the population of U.S. children by state. Standard errors were estimated with the replicate weight method recommended by the US Census Bureau. For more information on the ACS Public Use Microdata Sample (PUMS) methodology, visit https://www.census.gov/programs-surveys/acs/technical-documentation/pums/documentation.html

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Child Age	0-5 Years 6-11 Years 12-17 Years	
Disability	Activity Limitations No Activity Limitations	Refers to having at least 1 of 6 types of difficulties: hearing, vision, cognitive, ambulatory, self-care, and independent living.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household. Excludes children under the age of 18 who are also head of household or spouse of the head of household.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household.
Language	English Non-English	Refers to household language (English only versus other language spoken)
Marital Status	Married Unmarried	Refers to living in a two-parent married household versus unmarried, separated, cohabiting, other
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity among those living with child; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Native Hawaiian or Other Pacific Islander Alone or In Combination Hispanic	Refers to child race/ethnicity. Subcategories are not mutually exclusive.

Stratifier	Subcategory	Special Notes
	Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	
Sex	Female Male	

SAS Code

```
if 0 <=AGEP < 18 then do; * restrict to age 0-17;
if HICOV = 1 then INSURANCE = 0; * insured ;
if HICOV = 2 then INSURANCE = 1; * uninsured;
end;
```

Data Alert

Additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Adequate Insurance

Percent of children, ages 0 through 17, who are continuously and adequately insured

GOAL

To increase the percent of children who are adequately insured

DEFINITION

Numerator: Number of children, ages 0 through 17, who are reported by a parent to be were continuously insured in the past year with adequate coverage, based on 3 criteria: covers needed services, covers needed providers, and reasonably covers costs.

Denominator: Number of children, ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Access to Health Services (AHS) Objective 01: Increase the proportion of persons with medical insurance. (Baseline: 89.0% in 2018, Target: 92.1%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Child Health, Adolescent Health, and/or Children with Special Health Care Needs

MEASURE DOMAIN

Clinical Health Systems/Social Determinants of Health

POPULATION HEALTH SIGNIFICANCE

Inadequately insured children are more likely to have delayed or forgone care and are less likely to have a medical home and receive needed referrals, care coordination, and family-centered care.[1] Barriers include cost-sharing requirements that are too high, benefit limitations, and inadequate coverage of needed services.[2]

(1) Yu J, Perrin JM, Hagerman T, Houtrow AJ. Underinsurance Among Children in the United States. Pediatrics. 2022;149(1):e2021050353. doi:10.1542/peds.2021-050353. https://publications.aap.org/pediatrics/article/149/1/e2021050353/183780/Underinsurance-Among-Children-in-the-United-States?autologincheck=redirected

(2) Hudak ML, Helm ME, White PH; Committee on Child Health Financing. Principles of Child Health Care Financing. Pediatrics. 2017;140(3):e20172098. doi:10.1542/peds.2017-2098 https://publications.aap.org/pediatrics/article/140/3/e20172098/38435/Principles-of-Child-Health-Care-Financing

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	0-5 Years 6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399%	Ratio of self-reported family income to the federal poverty threshold

Stratifier	Subcategory	Special Notes
	≥400%	value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/***Adequate insurance***/

benefits = .;
if K3Q20 = 1 then benefits = 1;
if K3Q20 = 2 then benefits = 2;
if K3Q20 in (3,4) then benefits = 3;
if K3Q20 = .M then benefits = .M;
if CURRINS = .M then benefits = .M;
if CURRINS = 2 then benefits = .L;
label benefits = "Current insurance benefits meet child's needs";

allows = .;
if K3Q22 = 1 then allows = 1;
if K3Q22 = 2 then allows = 2;
if K3Q22 in (3,4) then allows = 3;
if K3Q22 = .M then allows = .M;
if CURRINS = .M then allows = .M;
if CURRINS = 2 then allows = .L;
label allows = "Current insurance coverage allows to see needed providers";

expense = .;
```

```
if K3Q21B = 1 then expense = 1;
if K3Q21B = 2 then expense = 2;
if K3Q21B in (3,4) then expense = 3;
if K3Q21B = .M then expense = .M;
if HOWMUCH = 1 then expense = 4;
if CURRINS = .M then expense = .M;
if CURRINS = 2 then expense = .L;
label expense = "Current insurance out-of-pocket expenses are reasonable";

InsAdeq = .;
if benefits in (1,2,.M) and allows in (1,2,.M) and expense in (1,2,4,.M) then
InsAdeq = 1;
if benefits = 3 or allows = 3 or expense = 3 then InsAdeq = 2;
if benefits = .M and allows = .M and expense = .M then InsAdeq = .M;
if CURRINS = 2 then InsAdeq = .L;
label InsAdeq = "Adequate Insurance";

CurrIns = CURRINS;
label CurrIns = "Indicator 3.1:Health insurance status at time of survey";

if InsGap in (2,3) then InsGap = 2;
label InsGap = "Indicator 3.2: Children without insurance at some point during the
past year";

/**SM_Adequate Insurance: Continuous-Adequate Insurance**/
AdqIns = .;
if InsGap in (1,.M) and InsAdeq in (1,.M) then AdqIns = 1;
if CURRINS = 2 or InsGap = 2 or InsAdeq = 2 then AdqIns = 2;
if InsGap = .M and InsAdeq = .M then AdqIns = .M;
label AdqIns = "SM_Adequate Insurance: Percent of children, ages 0 through 17, who
are continuously and adequately insured";
/* 1= Yes,  2= No */
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Forgone Health Care

Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

GOAL

To ensure access to needed health care services for children.

DEFINITION

Numerator: Number of children, ages 0 through 17 years, who are reported by a parent to be unable to obtain needed health care in the past year

Denominator: Number of children, ages 0 through 17 years

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Access to Health Services (AHS) Objective 04: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care. (Baseline 4.1% of persons unable to obtain or delayed in obtaining necessary medical care in 2017, Target 3.3%)
Related to AHS 05: Reduce the proportion of persons who are unable to obtain or delayed in obtaining necessary dental care. (Baseline 4.6% in 2017, Target 4.1%)
Related to AHS 06: Reduce the proportion of persons who are unable to obtain or delayed in obtaining necessary prescription medicines. (Baseline 3.4 % in 2017, Target 3.0%)

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

MCH POPULATION DOMAIN

Child Health and/or Adolescent Health

MEASURE DOMAIN

Clinical Health Systems

POPULATION HEALTH SIGNIFICANCE

Improving access to quality health services is essential for optimal health in both preventing and treating health conditions. When needed care is not received, health may suffer and conditions may not be prevented or may grow in severity. Common barriers to care include financial burden, insurance coverage, insurance type, language, and parental education.[2,3] Adequate insurance and access to a patient-centered medical home can reduce unmet needs for health care.[1]

(1) Strickland BB, Jones JR, Ghandour RM, Kogan MD, Newacheck PW. The medical home: health care access and impact for children and youth in the United States. Pediatrics. 2011;127(4):604-611. doi:10.1542/peds.2009-3555 https://publications.aap.org/pediatrics/article-abstract/127/4/604/65081/The-Medical-Home-Health-Care-Access-and-Impact-for?redirectedFrom=fulltext

(2) Lichstein JC, Ghandour RM, Mann MY. Access to the Medical Home Among Children With and Without Special Health Care Needs. Pediatrics. 2018;142(6):e20181795. doi:10.1542/peds.2018-1795. https://publications.aap.org/pediatrics/article/142/6/e20181795/76857/Access-to-the-Medical-Home-Among-Children-With-and

(3) Wisk LE, Witt WP. Predictors of delayed or forgone needed health care for families with children. Pediatrics. 2012;130(6):1027-1037. doi:10.1542/peds.2012-0668. https://publications.aap.org/pediatrics/article-abstract/130/6/1027/30328/Predictors-of-Delayed-or-Forgone-Needed-Health

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	0-5 Years 6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance

Stratifier	Subcategory	Special Notes
		programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/**SM_Forgone Health Care**/
ForgoneHlth = K4Q27
label ForgoneHlth = "SM_Forgone Health Care: Percent of children, ages 0 through
17, who were unable to obtain needed health care in the past Year";
/* 1= Yes,  2= No */
```

Data Alert

Adverse Childhood Experiences and CSHCN Status stratifiers were updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

MMR Vaccination

Percent of children in kindergarten who have received two or more doses of the MMR vaccine

GOAL

To increase the percent of children and adolescents who have completed recommended vaccines.

DEFINITION

Numerator: Number of children in kindergarten who have received two or more doses of the MMR vaccine

Denominator: Number of children in kindergarten

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Identical to Immunization and Infectious Disease (IID) Objective 04: Maintain the vaccination coverage level of 2 doses of the MMR vaccine for children in kindergarten. (Baseline of 95.2% of children enrolled in kindergarten received 2 or more doses of MMR for the 2018-2019 school year, Target: 95.0%)

DATA SOURCES AND DATA ISSUES

Annual School Assessment Reports (State Totals Only)

MCH POPULATION DOMAIN

Child Health

MEASURE DOMAIN

Clinical Health System/Health Behavior

POPULATION HEALTH SIGNIFICANCE

Vaccination requirements for children attending childcare facilities and schools help to maintain high vaccination coverage and low rates of vaccine-preventable diseases.[1] Childhood vaccination in particular is considered among the most cost-effective preventive services available, as it averts a potential lifetime lost to death and disability.[2] Measles is a highly contagious and serious respiratory disease that can spread quickly to children who are not vaccinated[3].

(1) Centers for Disease Control and Prevention. School Vaccination Requirements and Exemptions. 2017 October 12. https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/requirements/index.html

(2) Maciosek MV, LaFrance AB, Dehmer SP, et al. Updated Priorities Among Effective Clinical Preventive Services [published correction appears in Ann Fam Med. 2017 Mar;15(2):104]. Ann Fam Med. 2017;15(1):14-22. doi:10.1370/afm.2017 https://www.annfammed.org/content/15/1/14

(3) Centers for Disease Control and Prevention. Vaccine (Shot) for Measles. 2021 January 25. https://www.cdc.gov/vaccines/parents/diseases/measles.html

FAD Availability by Year

Year	Data Not Available
2023_2024	MT, AS, FM, MH, MP, PW, PR, VI
2022_2023	MT, AS, FM, MH, MP, PW, PR, VI
2021_2022	MT, AS, FM, MH, MP, PW, PR, VI
2020_2021	AS, FM, MH, MP, PW, PR, VI
2019_2020	DE, DC, AS, FM, GU, MH, MP, PW, PR, VI
2018_2019	AS, FM, GU, MH, MP, PW, PR, VI
2017_2018	WY, AS, FM, GU, MH, MP, PW, PR, VI
2016_2017	OK, WY, AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2015_2016	AS, FM, GU, MH, MP, PW, PR, VI
2014_2015	HI, AS, FM, GU, MH, MP, PW, PR, VI
2013_2014	DC, HI, NC, WY, AS, FM, GU, MH, MP, PW, PR, VI
2012_2013	AK, DC, HI, NH, NC, AS, FM, GU, MH, MP, PW, PR, VI
2011_2012	AK, DC, HI, NH, NJ, NC, WY, AS, FM, GU, MH, MP, PW, PR, VI
2010_2011	All States, DC, AS, FM, GU, MH, MP, PW, PR, VI
2009_2010	AK, CO, DC, HI, NH, NJ, NC, WY, AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

Federally funded immunization programs work with departments of education, local health departments, school nurses, and other school personnel to assess the vaccination and exemption status of children enrolled in public and private kindergartens and to report unweighted counts, aggregated by school type, to CDC via a questionnaire in the Secure Access Management System, a federal, web-based platform that provides authorized personnel with secure access to public health applications operated by CDC. CDC uses these data to produce state- and national-level estimates of vaccination coverage among children in kindergarten. Sampling methodology vary by state (e.g., some states selected a random sample of kindergarten children and others conducted a census of all kindergarten children). All states except Wyoming require 2 doses of a measles-containing vaccine. Seven states (Alaska, Georgia, New Jersey, New York, North Carolina, Oregon, and Virginia) require only 1 dose of rubella vaccine. Alaska, New Jersey, and Oregon require only 1 dose of mumps vaccine; mumps vaccine is not required in Iowa. Wyoming requires 1 dose of MMR for kindergarten entry, allowing students until the day before their seventh birthday to receive their second dose, but reported kindergarten coverage with 2 doses of MMR at the time of the assessment. Montana did not report school vaccination data for 2021-22, 2022-23, and 2023-24 school years. Utah changed the way data were reported between the 2021–22 and 2022–23 school years and is excluded from year-to-year comparisons. For more details see https://www.cdc.gov/vaccines/imz-managers/coverage/schoolvaxview/index.html

Flu Vaccination

Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza

GOAL

To increase the percent of children and adolescents who have completed recommended vaccines.

DEFINITION

Numerator: Number of children, ages 6 months through 17 years, who are reported by a parent to have received a seasonal influenza vaccine

Denominator: Number of children, ages 6 months through 17 years

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Immunization and Infectious Disease (IID) Objective 09: Increase the proportion of persons who are vaccinated annually against seasonal influenza. (Baseline of 49.2% of persons aged 6 months and over were vaccinated against seasonal influenza for the flu season 2017-18, Target: 70.0%)

DATA SOURCES and DATA ISSUES

National Immunization Survey – Flu (NIS-Flu)

MCH POPULATION DOMAIN

Child Health and/or Adolescent Health

MEASURE DOMAIN

Clinical Health System/Health Behavior

POPULATION HEALTH SIGNIFICANCE

Influenza (flu) is a contagious respiratory illness caused by influenza viruses.[1] Influenza can cause mild to severe illness.[1] Each year, millions of children get sick with seasonal flu; thousands of children are hospitalized, and some children die from the flu.[2] Possible complications from the flu include: pneumonia, dehydration, worsening long-term medical problems, brain dysfunction, sinus problems and ear infections, and death.[2] Annual flu vaccination helps prevent flu infection and risk of flu- associated hospitalization.[1]

(1) Centers for Disease Control and Prevention. Influenza (Flu). 2023 January 13. https://www.cdc.gov/flu/index.htm
(2) Centers for Disease Control and Prevention. Children and Influenza (Flu). 2022 November 30. https://www.cdc.gov/flu/highrisk/children.htm

FAD Availability by Year

Year	Data Not Available
2023_2024	AS, FM, MH, MP, PW, PR, VI
2022_2023	AS, FM, MH, MP, PW, PR, VI
2021_2022	AS, FM, MH, MP, PW, PR, VI
2020_2021	AS, FM, MH, MP, PW, PR, VI
2019_2020	AS, FM, MH, MP, PW, PR, VI
2018_2019	AS, FM, MH, MP, PW, PR, VI
2017_2018	AS, FM, MH, MP, PW, PR, VI
2016_2017	AS, FM, MH, MP, PW
2015_2016	AS, FM, MH, MP, PW
2014_2015	AS, FM, MH, MP, PW
2013_2014	AS, FM, GU, MH, MP, PW, PR, VI

Year	Data Not Available
2012_2013	AS, FM, GU, MH, MP, PW, PR, VI
2011_2012	AS, FM, GU, MH, MP, PW, PR, VI
2010_2011	AS, FM, GU, MH, MP, PW, PR, VI
2009_2010	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

Coverage estimates are for persons interviewed September through June for 2010-11 and 2011-12, and October through June for 2009-10, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024; and who reported being vaccinated August through May for 2009-10, 2010-11 and 2011-12, and July through May for 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-2023, 2023-2024. Kaplan-Meier survival analysis was used to determine the cumulative influenza vaccination coverage (≥1 dose). Proxy numerators were derived by multiplying the survival estimate by the denominator. Month of vaccination was imputed for respondents with missing month of vaccination data. The estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-coverage, non-response, and adjusted to reflect the non-institutionalized population of U.S. children. Standard errors account for the complex survey design. Household income, race/ethnicity, and urban-rural residence were not available for territories. See the corresponding final online reports for further data analysis description: http://www.cdc.gov/flu/fluvaxview/index.htm See NIS Public Use File Data Users Guide for more details at: http://www.cdc.gov/nchs/nis/data_files.htm

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Child Age	6-23 Months 2-4 Years 5-12 Years 13-17 Years	
Household Income/Poverty	Below Poverty <75K, Above Poverty >75K	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household; not available for territories
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Includes imputed race/ethnicity; not available for territories
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; not available for territories

SAS Code

Not Available – data files are not publicly available

HPV Vaccination

Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine

GOAL

To increase the percent of children and adolescents who have completed recommended vaccines.

DEFINITION

Numerator: Number of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine

Denominator: Number of adolescents, ages 13 through 17 years

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

Related to Immunization and Infectious Disease (IID) Objective 08: Increase the proportion of adolescents who receive recommended doses of human papillomavirus (HPV) vaccine. (Baseline 48.0% of adolescents aged 13 through 15 years received recommended doses of the HPV vaccine in 2018, Target: 80.0%)

DATA SOURCES and DATA ISSUES

National Immunization Survey – Teen (NIS-Teen)

POPULATION HEALTH SIGNIFICANCE

HPV (Human papillomavirus) vaccine can prevent infection with some types of human papillomavirus that are spread through intimate skin-to-skin or sexual contact. HPV vaccine prevents infection from HPV types that cause over 90% of the following cancers: cervical, vaginal and vulvar cancers in women; penile cancer in men; and anal cancers in both men and women. HPV is recommended for adolescents 11 or 12 years of age to ensure protection before exposure to the virus.

(1) Centers for Disease Control and Prevention. Vaccine Information Statements: HPV (Human Papillomavirus). 2021 August 6. https://www.cdc.gov/vaccines/hcp/vis/vis-statements/hpv.html

FAD Availability by Year

Year	Data Not Available
2023	AS, FM, MH, MP, PW
2022	AS, FM, MH, MP, PW, VI
2021	AS, FM, MH, MP, PW
2020	AS, FM, MH, MP, PW, PR, VI
2019	AS, FM, MH, MP, PW
2018	AS, FM, MH, MP, PW, PR, VI
2017	AS, FM, MH, MP, PW, PR, VI
2016	AS, FM, MH, MP, PW
2015	AS, FM, MH, MP, PW
2014	AS, FM, GU, MH, MP, PW, VI
2013	AS, FM, MH, MP, PW, PR
2012	AS, FM, GU, MH, MP, PW, PR
2011	AS, FM, GU, MH, MP, PW, PR
2010	AS, FM, GU, MH, MP, PW, PR
2009	AS, FM, GU, MH, MP, PW, PR

Data Notes

In 2018, the NIS-Teen shifted from a dual-frame landline and cell-phone survey to a single frame cell-phone only survey. As a result, NIS-Teen estimates for 2018 and beyond may not be directly comparable to those published for prior survey years. Estimates by demographic stratifiers rely on three years of data to improve precision and reportability. Urban-rural residence is not available for GU and VI; insurance is not available for VI. NIS-Teen is only conducted in VI every other year. All estimates, numerators, and denominators presented are weighted to account for the probability of selection, non-coverage, non-response, and adjusted to reflect the non-institutionalized population of U.S. children. Standard errors account for the complex survey design. See NIS-Teen Public Use File Data Users Guide for more details at: https://www.cdc.gov/vaccines/imz-managers/nis/datasets.html

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Health Insurance	Private Medicaid Other Public Uninsured	Other Public includes Indian Health Service and Military insurance (except in territories); missing data were imputed.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household; missing data were imputed.
Race/Ethnicity	Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic White Alone	Missing data were imputed
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; missing data were imputed.

SAS Code

Variable name for ≥1 dose of HPV vaccine is P_UTDHPV
See Data User's Guide for more SAS, SUDAAN, and R code examples
http://www.cdc.gov/nchs/nis/data_files_teen.htm

Table 5. Form 11 Measures

Short Title	Full Title
CSHCN	Percent of children with special health care needs (CSHCN), ages 0 through 17
Autism	Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder
ADD/ADHD	Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)

CSHCN

Percent of children with special health care needs (CSHCN), ages 0 through 17

GOAL

To track the percent of children and youth with special health care needs.

DEFINITION

Numerator: Number of children, ages 0 through 17, who are reported by a parent to meet the criteria for having a special health care need based on the CSHCN screener (need for or use of prescription medication, elevated need for or use of services, functional limitations, need for or use of specialized therapy, ongoing emotional, behavioral, or developmental problems for which treatment or counseling is needed) OR having one or more current health conditions and one or more functional difficulties.

Denominator: Number of children, ages 0 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

Children are considered to have a special health care need if, in addition to a chronic medical, behavioral, or developmental condition that has lasted or is expected to last 12 months or longer, they experience either service-related or functional consequences, including the need for or use of prescription medications and/or specialized therapies.[1] About 1 in 4 of all US children are considered to have special health care needs. However, they account for almost half of all health care expenditures for children.[2]

(1) U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *Child Health USA 2014.* Rockville, Maryland: U.S. Department of Health and Human Services, 2014. https://mchb.hrsa.gov/chusa14/population-characteristics/children-special-health-care-needs.html

(2) Davis, K. Health Care Expenses and Utilization for Children with Special Health Care Needs, 2008: Estimates for the U.S. Civilian Noninstitutionalized Population. Statistical Brief #343. October 2011. Agency for Healthcare Research and Quality, Rockville,MD http://www.meps.ahrq.gov/mepsweb/data_files/publications/st343/stat343.shtml

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health

Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Total	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	0-5 Years 6-11 Years 12-17 Years	
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried	

Stratifier	Subcategory	Special Notes
	Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/* Use derived variable SC_CSHCN: 1=CSHCN, 2=Non-CSHCN or follow code below */


rxmeds = 0;
if SC_K2Q10 = 1 and SC_K2Q11 = 1 and SC_K2Q12 = 1 then rxmeds = rxmeds + 1;
label rxmeds = "Children qualifying on the CSHCN Screener prescription medication
criteria";

serve = 0;
if SC_K2Q13 = 1 and SC_K2Q14 = 1 and SC_K2Q15 = 1 then serve = serve + 1;
label serve = "Children qualifying on the CSHCN Screener for elevated use of
services criteria";

func = 0;
if SC_K2Q16 = 1 and SC_K2Q17 = 1 and SC_K2Q18 = 1 then func = func + 1;
label func = "Children qualifying on the CSHCN Screener functional limitations
criteria";

therapy = 0;
if SC_K2Q19 = 1 and SC_K2Q20 = 1 and SC_K2Q21 = 1 then therapy = therapy + 1;
label therapy = "Children qualifying on the CSHCN Screener specialized therapy
criteria";

mhealth = 0;
if SC_K2Q22 = 1 and SC_K2Q23 = 1 then mhealth = mhealth + 1;
label mhealth = "Children qualifying on the CSHCN Screener ongoing emotional,
development or behavioral conditions criteria";

CSHCN_1 = 2;
```

```
if rxmeds = 1 or serve = 1 or func = 1 or therapy = 1 or mhealth = 1 then CSHCN_1
= 1;
label CSHCN_1 = "Percent of children with special health care needs from screener";

/*Difficulties*/
DiffCnt = 0;
array ndifficul {12} BREATHING SWALLOWING STOMACH PHYSICALPAIN HANDS COORDINATION
MEMORYCOND WALKSTAIRS DRESSING ERRANDALONE K2Q43B BLINDNESS;
do i = 1 to 12;
if ndifficul[i] = 1 then DiffCnt = DiffCnt + 1;
end; drop I;
label DiffCnt = "Number of difficulties";

/*Conditions*/
CondCnt = 0;
array nconda {*} AUTOIMMUNE ALLERGIES_CURR ARTHRITIS_CURR K2Q40B BLOOD K2Q61A
CystFib K2Q41B DIABETES_CURR DownSyn K2Q42B genetic HEART_CURR
HEADACHE_CURR K2Q38B K2Q33B K2Q32B K2Q34B K2Q36B K2Q60B K2Q37B K2Q30B K2Q35B K2Q31B
FASD;
do i = 1 to dim(nconda);
if nconda[i] = 1 then CondCnt = CondCnt + 1;
end; DROP I;
label CondCnt = "Number of current or lifelong health conditions";

* Expanded shcn variable;
if CSHCN_1 =1 or (CondCnt>=1 and DiffCnt>=1) then CSHCN_exp=1; else CSHCN_exp=2;
label CSHCN_exp = "Expanded CSHCN: Screener or Had 1+ Difficulty & 1+ Condition";
format CSHCN_exp yesno.;
/* 1= Yes,  2= No */
```

Data Alert

In 2025, the definition of CSHCN was expanded to include those reporting condition(s) and difficulty(s) when missed by the 5-item CSHCN screener as this group of children has similar impacts as CSHCN identified by the screener. Approximately 5% of the national population of children meet this expanded criteria and the data for this measure have been revised accordingly. While there are more children in the denominator for CSHCN measures, changes in NPM/NOM estimates among the CSHCN population are minimal. See Black LI, Ghandour RM, Brosco JP, et al. An Expanded Approach to the Ascertainment of Children and Youth With Special Health Care Needs. *Pediatrics*. 2024;153(6):e2023065131. https://doi.org/10.1542/peds.2023-065131. Adverse Childhood Experiences stratifier was updated historically. CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

Autism

Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder

GOAL

To track the percent of children and youth with autism spectrum disorder (ASD.

DEFINITION

Numerator: Number of children, ages 3 through 17, who are reported by a parent to have ever been told they have autism or ASD by a health care provider and to currently have the condition

Denominator: Number of children, ages 3 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

Autism spectrum disorder (ASD) is a developmental disability that can cause significant social, communication and behavioral challenges. The prevalence of ASD has risen sharply over the last two decades. Aproximately 1 in 54 8-year old children have ASD. ASD is 4 times more common among boys than girls. While ASD can be detected by 18 months or earlier, the average age at diagnosis for ASD is 4 years old.The American Academy of Pediatrics recommends screening for ASD at 18 and 24 months. Early intervention services can improve a child's development.

(1) Centers for Disease Control and Prevention. Autism Spectrum Disorder. 2019 August 27. https://www.cdc.gov/ncbddd/autism/index.html

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than 2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	3-5 Years 6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside

Stratifier	Subcategory	Special Notes
		U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/*** Current autism, age 3-17 years***/
Autism = .;
if K2Q35B = 1 then NOM17_3 = 1;
if K2Q35B in (.L,2) then NOM17_3 = 2;
if K2Q35B = .M then NOM17_3 = .M;
if SC_AGE_YEARS < 3 then NOM17_3 = .L;
label NOM17_3 = "NOM-17.3: Autism";

/* 1= Yes,  2= No */
```

Data Alert

Adverse Childhood Experiences stratifier was updated historically. CSHCN Status, CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.

ADD/ADHD

Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)

GOAL

To track the percent of children and youth with attention deficit disorder/attent deficit hyperactivity disorder (ADD/ADHD).

DEFINITION

Numerator: Number of children, ages 3 through 17, who are reported by a parent to have ever been told they have ADD or ADHD by a health care provider and to currently have the condition

Denominator: Number of children, ages 3 through 17

Units: 100

Text: Percent

HEALTHY PEOPLE 2030 OBJECTIVE

DATA SOURCES and DATA ISSUES

National Survey of Children's Health (NSCH)

POPULATION HEALTH SIGNIFICANCE

Attention-deficit/hyperactivity disorder (ADHD) is one of the most common neurobehavioral disorders of childhood. It is sometimes referred to as Attention Deficit Disorder (ADD). ADHD is usually first diagnosed in childhood and often lasts into adulthood. Children with ADHD may have trouble paying attention, controlling impulsive behaviors, or be overly active. Children with ADHD are at increased risk for mental, behavioral, and emotional concerns and disorders. In 2017-2018, over 5 million children 3-17 years (8.9%) were currently diagnosed with ADHD.

(1) Centers for Disease Control and Prevention. Attention-Deficit / Hyperactivity Disorder (ADHD). 2019 October 4. https://www.cdc.gov/ncbddd/adhd/index.html

FAD Availability by Year

Year	Data Not Available
2022-2023	AS, FM, GU, MH, MP, PW, PR, VI
2021-2022	AS, FM, GU, MH, MP, PW, PR, VI
2020-2021	AS, FM, GU, MH, MP, PW, PR, VI
2019-2020	AS, FM, GU, MH, MP, PW, PR, VI
2018-2019	AS, FM, GU, MH, MP, PW, PR, VI
2017-2018	AS, FM, GU, MH, MP, PW, PR, VI
2016-2017	AS, FM, GU, MH, MP, PW, PR, VI

Data Notes

NSCH data are reported by a parent or guardian with knowledge of the health and health care of the sampled child. The estimates, numerators, and denominators presented are weighted to account for the probability of selection and non-response, and adjusted to represent the non-institutionalized population of children in the U.S. and each state who live in housing units. Standard errors account for the complex survey design. For states that lacked complete information on the public use file, urban/rural residence was obtained from restricted access files. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7502891, Disclosure Review Board (DRB) approval number: CBDRB-FY25-0138). Change will be muted with two-year data where each estimate shares half of the data with the next estimate and it is best to examine statistical significance with non-overlapping estimates (e.g., 2016-2017 to 2018-2019 rather than

2017-2018 to 2018-2019). For more information on the NSCH methodology, visit https://mchb.hrsa.gov/data/national-surveys.

Available Stratifiers and Notes

Stratifier	Subcategory	Special Notes
Adverse Childhood Experiences	None 1 ACE 2+ ACEs	Based on sum of 10 Adverse Childhood Experiences
Child Age	3-5 Years 6-11 Years 12-17 Years	
CSHCN Status	CSHCN Non-CSHCN	Special Health Care Needs identified by validated 5-item screener or expanded criteria of 1 or more conditions and 1 or more difficulties
CSHCN Type	Any functional limitation Elevated service need/use (with or without RxMeds) 1+ Condition and 1+ Difficulty without screener criteria RxMeds only Non-CSHCN	Any functional limitation, elevated service need/use (with or without RxMeds), and RxMeds only subcategories are based on 5-item screener. Elevated service need/use refers to the 2nd, 4th, and 5th items in screener.
Educational Attainment	Less than high school High school graduate Some college College graduate	Refers to highest education of a parent/guardian in the household.
Health Insurance	Private Medicaid Uninsured	Refers to current insurance. Private includes employer-based coverage, directly purchased plans, and military insurance. Medicaid includes all public insurance programs for those with low incomes or a disability (may include Medicare); children were classified as Medicaid if they had any public coverage.
Household Income-Poverty Ratio	<100% 100%-199% 200%-399% ≥400%	Ratio of self-reported family income to the federal poverty threshold value depending on the number of people in the household. Includes imputed income data.
Language	English Non-English	Refers to primary household language
Household Structure	Two-parent married Two-parent unmarried Single parent Other	

Stratifier	Subcategory	Special Notes
Nativity	Born in U.S. Born outside U.S.	Refers to parental nativity; classified as born outside U.S. if either parent is born outside U.S.
Race/Ethnicity	American Indian or Alaska Native Alone or In Combination Hispanic Non-Hispanic American Indian or Alaska Native Alone Non-Hispanic Asian Alone Non-Hispanic Black Alone Non-Hispanic Multiple Race Non-Hispanic Native Hawaiian or Other Pacific Islander Alone Non-Hispanic Native Hawaiian or Other Pacific Islander Alone or In Combination Non-Hispanic White Alone	Refers to child race/ethnicity. Subcategories are not mutually exclusive.
Sex	Female Male	
Urban-Rural Residence	MSA, Principal City MSA, Non-Principal City Non-MSA	Metropolitan Statistical Area as defined by the U.S. Census Bureau; obtained from restricted access files

SAS Code

```
/*** Current ADD/ADHD***/
ADD_ADHD = .;
if K2Q31B = 1 then ADD_ADHD = 1;
if K2Q31B in (.L,2) then ADD_ADHD = 2;
if K2Q31B = .M then ADD_ADHD = .M;
if SC_AGE_YEARS < 3 then ADD_ADHD = .L;
label ADD_ADHD = "Current ADD/ADHD";


/* 1= Yes,  2= No *
```

Data Alert

Adverse Childhood Experiences stratifier was updated historically. CSHCN Status, CSHCN Type and additional racial/ethnic categories of American Indian or Alaska Native Alone or In Combination and Non-Hispanic Native Hawaiian or Other Pacific Island Alone or In Combination were added historically.