

# DataSpeak

Thank you for your interest in today's program,  
**Findings from the 2016 National Survey of  
Children's Health.**

The program will begin at approximately 2:00pm ET.

Audio will be available through your computer speakers,  
or you may dial in to listen to the event:

Dial: **1-877-407-9036**

*(Note: Your line will be muted upon entry and you will hear hold music  
until the program starts.)*

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# DataSpeak

**Findings from the 2016 National  
Survey of Children's Health.**

October 30, 2017

# Today's Presenters

- **Christina Bethell, PhD, MBA, MPH**, Dr. Bethell is a Professor in the Bloomberg School of Public Health University, where she serves as the founding director of the Child and Adolescent Health Measurement Initiative (CAHMI) within the Department of Population, Family and Reproductive Health.
- **Reem M. Ghandour, DrPH, MPA**, Dr. Reem M. Ghandour directs the Division of Epidemiology in HRSA MCHB's Office of Epidemiology and Research. Dr. Ghandour oversees a range of programmatic investments designed to extend and enhance data and analytic capacity at both the state and national levels.
- **Jason M. Fields, PhD, MPH**, Dr. Jason Fields is the Survey Director for the Survey of Income and Program Participation (SIPP), the National Survey of Children's Health (NSCH), and the National Sample Survey of Registered Nurses (NSSRN) at the U.S. Census Bureau.

# Previous Events

[Click here to access archives:](#)

## **2016 Series:**

- Utilizing the Title V Information System Data and the Federally Available Data Resource Document
- Disparities in the Health and Well-Being of Children and Youth in Rural Areas of the United States

# How To Ask A Question

- **To ask a question on the Web:**
  - Enter your question in the field at the bottom of the “QUESTIONS” box at the bottom of your screen and hit enter. Your question will be sent directly to the moderator.

# Results from the 2016 National Survey of Children's Health

Office of Epidemiology and Research  
U.S. Department of Health and Human Services  
Health Resources and Services Administration | Maternal and Child Health Bureau

October 30, 2017



# Outline

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- |   |                               |
|---|-------------------------------|
| <b>1. Survey Background and Redesign</b>  | <b>Reem Ghandour, MCHB</b>    |
| <b>2. Implementation of the 2016 NSCH</b> | <b>Jason Fields, Census</b>   |
| <b>3. Content and Key Findings</b>        | <b>Reem Ghandour, MCHB</b>    |
| <b>4. Accessing Data and Resources</b>    | <b>Christina Bethell, JHU</b> |
| <b>5. Wrap Up and Questions</b>           | <b>Reem Ghandour, MCHB</b>    |



# Overview

**National Survey of Children's Health (NSCH)**

**National Survey of Children with Special Health Care Needs (NS-CSHCN)**



# NSCH/NS-CSHCN

## History and Purpose

### National Survey of Children's Health

- Produce national and state-based estimates of the **health and well-being of children**, their families, and their communities.
- 2003, 2007, 2011-12

### National Survey of Children with Special Health Care Needs

- Assess the **prevalence and impact of special health care needs** at both national and state levels and evaluate change over time.
- 2001, 2005-06, 2009-10

#### Common Elements:

- Historically directed and funded by HRSA MCHB and fielded by the CDC/NCHS as a module of SLAITS as a RDD telephone survey (landline + cell-phone samples);
- Produced both national and state-level estimates;
- Representative of children ages 0-17 years;
- All data are parent/caregiver reported.



# NSCH/NS-CSHCN

## History and Uses

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- **Title V Maternal and Child Health Services Block Grant needs assessments and funding applications**
  - 18 National Performance and Outcome Measures
- **State-level planning and program development**
- **Federal policy and program development**
- **Healthy People 2010/2020/2030 Objectives**
  - 15+ measures
- **Scientific Research**
  - Conditions; Systems; State & Regional Analyses; Special Populations



# NSCH/NS-CSHCN

## History and Uses: Scientific Research

### Physical and Emotional Health:

- Kogan MD, Strickland BB, Blumberg SJ, Singh GK, Perrin JM, van Dyck PC. **A national profile of the health care experiences and family impact of autism spectrum disorder among children in the United States, 2005-2006.** Pediatrics. 2008 Dec;122(6):e1149-58
- Bethell CD, Newacheck P, Hawes E, Halfon N. **Adverse childhood experiences: assessing the impact on health and school engagement and the mitigating role of resilience.** Health Aff (Millwood). 2014 Dec;33(12):2106-15

### Systems Indicators:

- Kogan MD, Newacheck PW, Blumberg SJ, Ghandour RM, Singh GK, Strickland BB, van Dyck PC. **Underinsurance among children in the United States.** N Engl J Med. 2010 Aug 26;363(9):841-51.

### State-level Analyses:

- Ghandour RM, Kogan MD, Blumberg SJ, Jones JR, Perrin JM. **Mental health conditions among school-aged children: geographic and sociodemographic patterns in prevalence and treatment.** J Dev Behav Pediatr. 2012 Jan;33(1):42-54.

### County and Regional Analyses:

- Kramer MR, Raskind IG, Van Dyke ME, Matthews SA, Cook-Smith JN. **Geography of Adolescent Obesity in the U.S., 2007-2011.** Am J Prev Med. 2016 Dec;51(6):898-909.

### Population-Specific Analyses:

- Kenney MK, Thierry J. **Chronic conditions, functional difficulties, and disease burden among American Indian/Alaska Native children with special health care needs, 2009-2010.** Matern Child Health J. 2014 Nov;18(9):2071-9



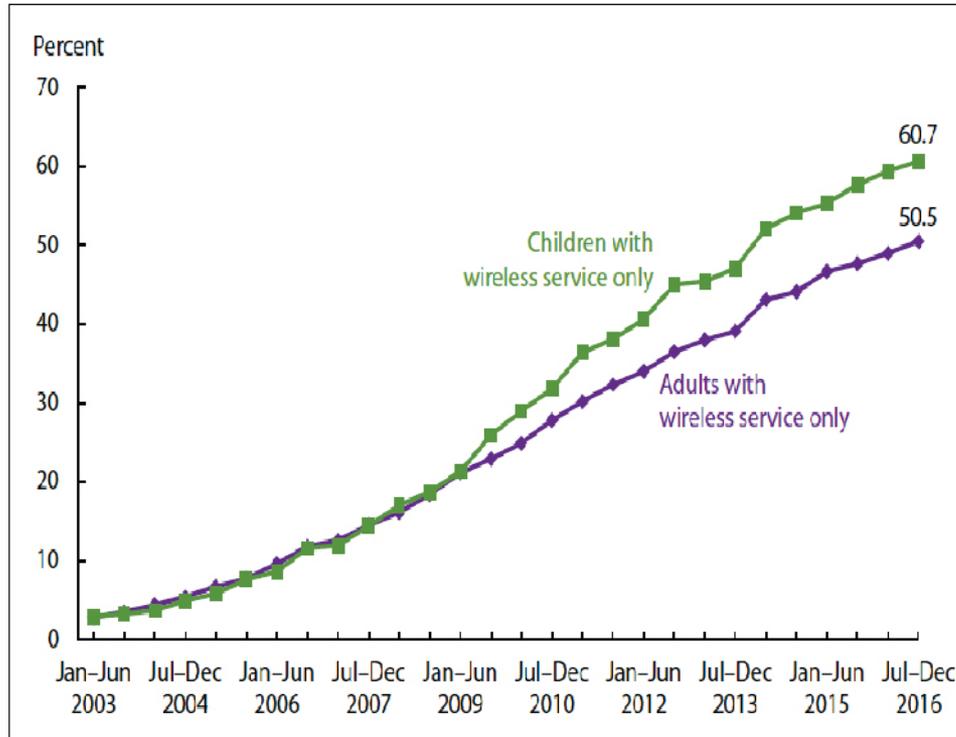
# Redesign of the National Survey of Children's Health



# 2016 NSCH Redesign:

## Rationale and Goals

Figure. Percentages of adults and children living in households with only wireless telephone service: United States, 2003–2016



NOTE: Adults are aged 18 and over; children are under age 18.  
DATA SOURCE: NCHS, National Health Interview Survey.

The purpose of the redesign was fourfold:

1. To shift the survey's sampling frame from landline and cell phone numbers to household addresses.
2. To shift mode of administration from an interviewer-administered survey via telephone to a self-administered survey via web and paper.
3. To combine the NSCH and NS-CSHCN into a single instrument.
4. To provide more timely data.

# 2016 NSCH Redesign:

## Key Decisions

**Summary: Retained as much content and functionality as possible, while dramatically changing sampling strategy and mode of administration.**

- **Retained a two-phase process:** A “Screener” to determine child demographics and SHCN status followed by an age-specific “Topical” survey.
- **Retained core content** on all CSHCN Core Outcomes and Title V NOMs/NPMs.
- **Added content** on a variety of topics, including aspects of being “Healthy and Ready to Learn”, food sufficiency, behavioral treatment for ADHD, etc.
- Shifted administration from National Center for Health Statistics to **US Census Bureau**.
- **Fielded a single, combined survey annually;** new state-level estimates available bi-annually (in most cases).
- Utilized an **Addressed-Based Sampling (ABS) frame** to improve efficiency and effectiveness of survey administration.
- Utilized a **self-directed response mode** (web-push + mail) for majority of surveys.



# Implementation of the 2016 National Survey of Children's Health



# 2016 NSCH Data Collection

## Overview

Activity	Details
Data Collection Period:	June 2016 - February 2017
Sample:	364,150 HH yielding 50,212 completed surveys
State Sample:	995 (average); 638 (Mississippi) – 1351 (Minnesota)
Weighted Response Rate:	40.7% (v. 23.0% in 2011/12)
Topical Conversion Rate:	69.7% (v. 54.1% landline and 41.2% cell phone in 2011/12)
Web v. Paper:	80.6% of surveys completed via web (19.4% via paper)
Data Release:	September 5, 2017 (state data release August 4, 2017)
Public Presentation:	End of October (Webinar)/Early November (APHA)



# NSCH 2016

## Design and Innovations

**Design:** Retained as much content and functionality as possible, while dramatically changing sampling strategy and mode of administration → *An address-based, self-administered survey completed via web or paper by a parent/caregiver knowledgeable about the health and health care of one randomly selected child in the household.*

### Innovations:

#### → Adaptive use of a new administrative flag to identify HH with children

- INNOVATION: A prototype linkage between children & parents based on administrative records
- GOAL: Improve efficiency by targeting households most likely to have children.
- IMPACT: Reduced the number of households contacted by approximately half.

#### → Adaptive design to differentially target “High” and “Low” Web HH

- INNOVATION: Customized survey recruitment based on likelihood of web response.
- GOAL: Reduce survey costs by customizing contact/recruitment to respondents.
- IMPACT: 80% of 2016 responses were obtained online; important lessons learned for 2017.



# NSCH 2016 Innovations

## Administrative Data

### Oversampling of households likely to have children based on linkages of children's Social Security Numbers to families and addresses

#### Motivation:

- Improved sampling efficiency and reduction of survey costs

#### Primary Information Sources:

- Numident: a list of Social Security Number applicants
- CARRA Kidlink file: a prototype linkage between children and parents based on Census and administrative records
- Master Address File Auxiliary Reference File (MAF-ARF): a file that links person identifiers with the latest location updates from a variety of administrative data

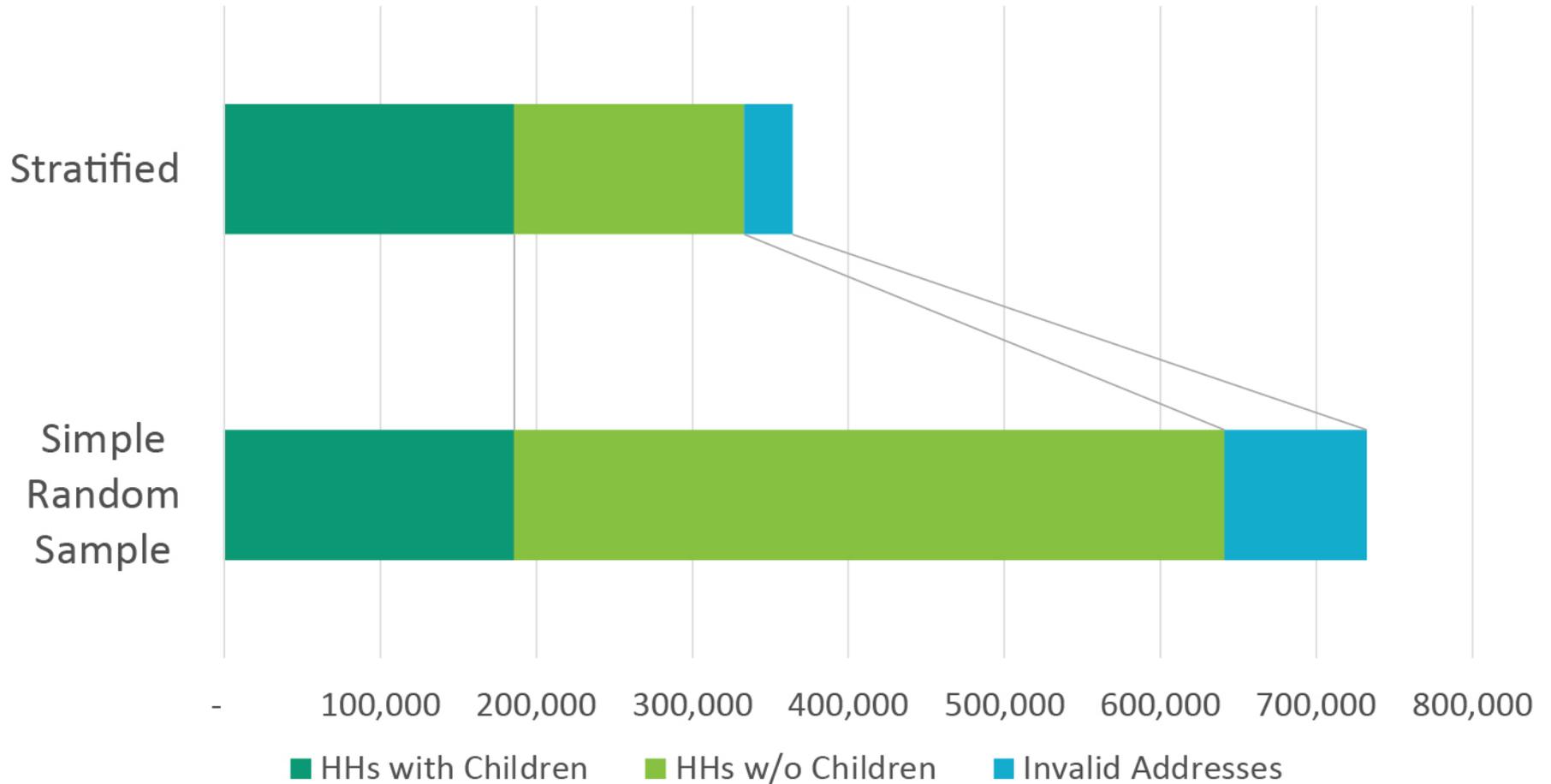
#### Method:

- Utilize the Title 13 Census Master Address File (MAF) as a sampling foundation and leverage administrative records to indicate the presence of children at a MAF-ID
- Define separate strata based on the child-present:
  - Stratum 1 where the child-present flag = yes, and
  - Stratum 2 where the child-present flag = no



# NSCH 2016

## Estimated Necessary Sample Size, Stratified Sample versus Simple Random Sample



# NSCH 2016 Innovations

## Administrative Data (continued)

### Customized survey recruitment based on Census tract-level information on likelihood of web response

#### Motivation:

- Tailor contact and recruitment strategies based on likelihood of internet response and reduce survey cost and burden

#### Primary Information Sources: (Two data sources)

- ACS paradata on whether respondents used Internet submission (tract-level, 2013-2014 survey years)
- IRS 1040 data on whether households file electronically but without a paid preparer (block-level, 2014 tax year)

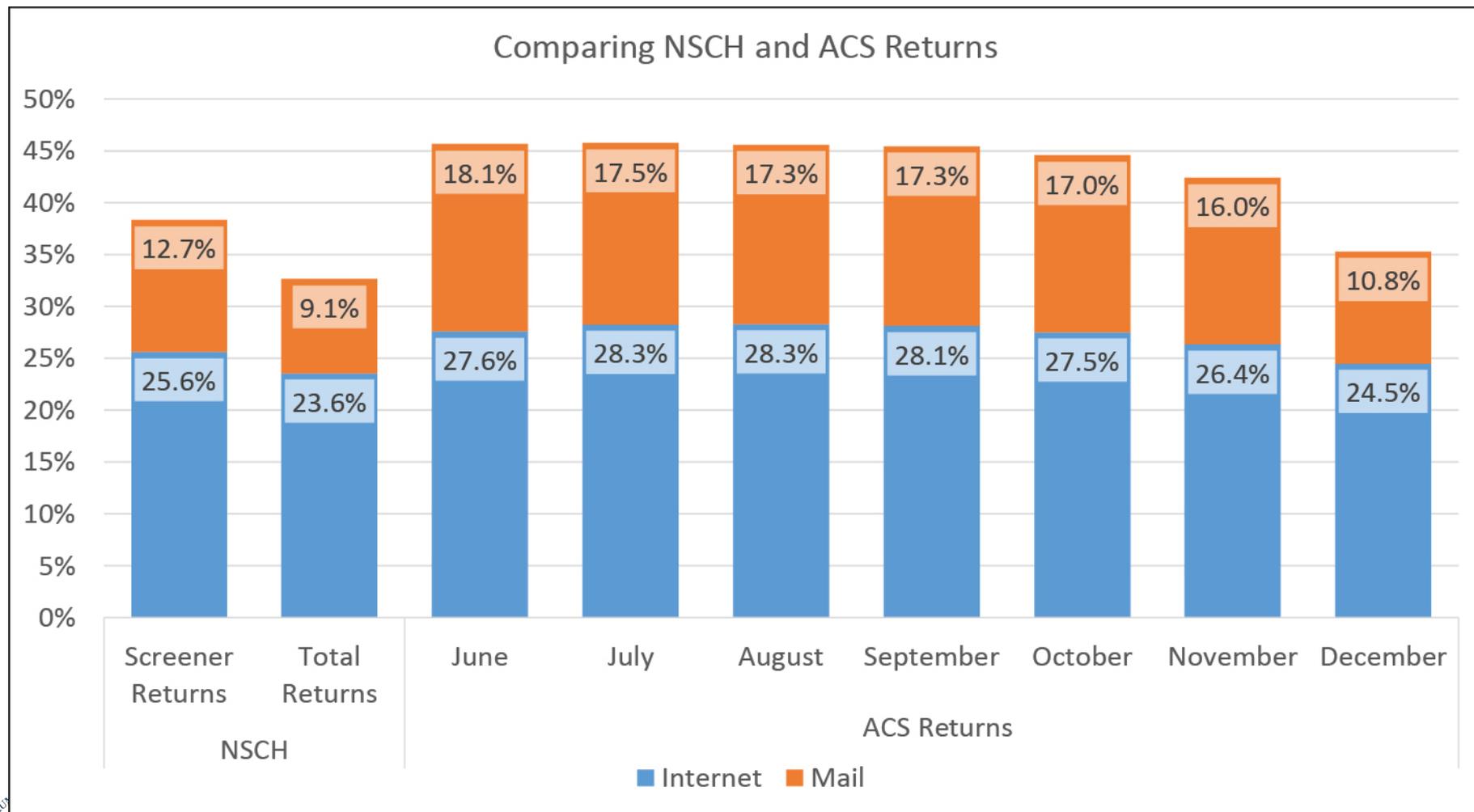
#### Method:

- **Create a low-Internet-accessibility flag**
  - Use principal components analysis
  - Find the (standardized) scalar variable that maximizes the variation of linear combinations of the two data sources
- Census blocks with access index below 30th percentile of the access index distribution



# 2016 NSCH Production Survey

## Mail and Internet Returns Compared with ACS (Through December 2017)



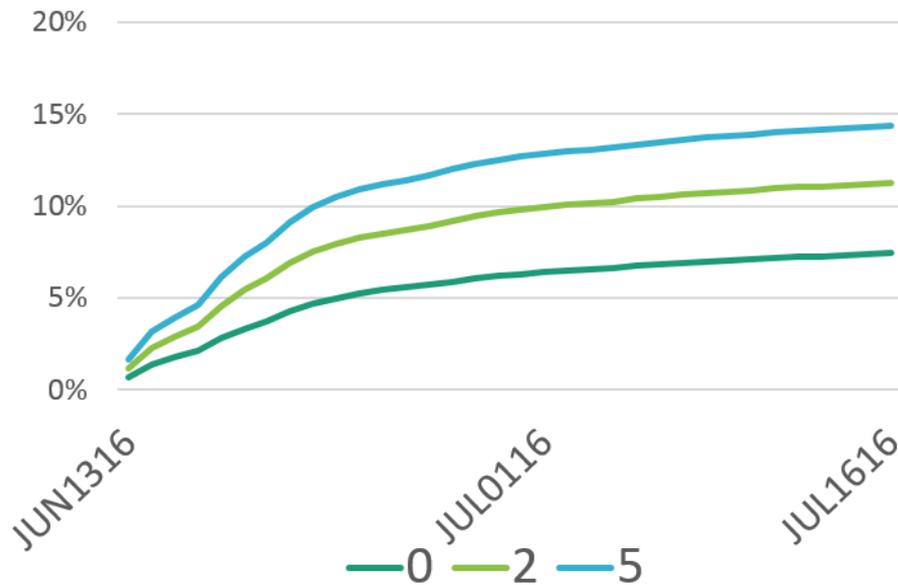
# NSCH 2016 Production Survey

## Incentive Effect

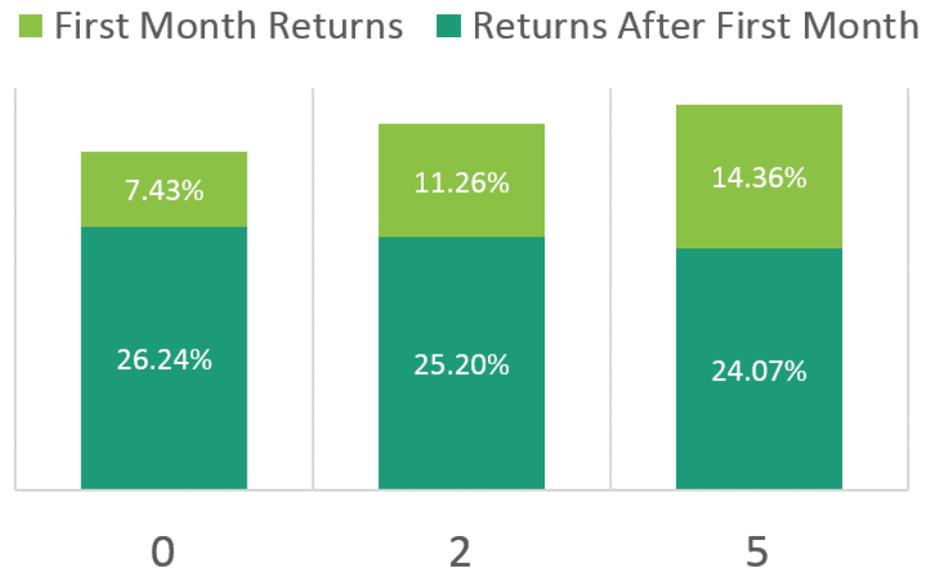
	\$0	\$2	\$5
Sample Size	121,346	121,420	121,384
Screener Returns	42,621	46,465	48,923
Screener Completion Rate	45.1%	48.7%	50.9%

These are SCRs are unweighted. Weighted SCRs are 50.3%, 53.2%, 55.3%

Screener Returns from Incentive Mailing  
(First Month)



Screener Returns  
Before and After First Month



# NSCH 2016

## Reflections

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- **Sample**

- Increase efficiency to allow more households with children for the budget

- **Response Rate**

- Lower than expected
- Need to adjust for state differentials in likelihood of response

- **Contact Strategy**

- Paper sooner for areas where its needed
- More frequent contacts
- More rapid transition to topicals for screened households
- Implement reminder

- **Incentives**

- Both \$2 and \$5 offer improved response and timeliness over no incentive
- Program budget suggested \$2
- Consider topical incentive test



# 2017 NSCH Survey Summary

## New Directions – Design and Administration

- **Launch August 7, 2017 – Scheduled Conclusion January 26, 2018**
- **Goal Sample = 156,690 HH ⇒ 23,460 completed topicals**
- **Operations:**
  - **Improvement to identification of “High Paper” areas along with “High Web”**
    - 30% of households most likely to respond by paper will receive paper questionnaire with initial web invitation.
  - **Contact strategy: mail-out timing and pressure-sealed reminder use**
    - Decrease time between contacts and transition to topical questionnaire;
    - Utilize new capability to send pressure-sealed reminders.
  - **Revision to stratum for households without child flag to improve efficiency**
    - Increase resources targeted to households most likely to have a child.
- **Experiments:**
  - Infographic: 50% and 50% control
  - Incentives: \$2 for 90% of sample, \$0 for 10%



Public data available Spring 2018

# 2017 NSCH: Improving on 2016 NSCH

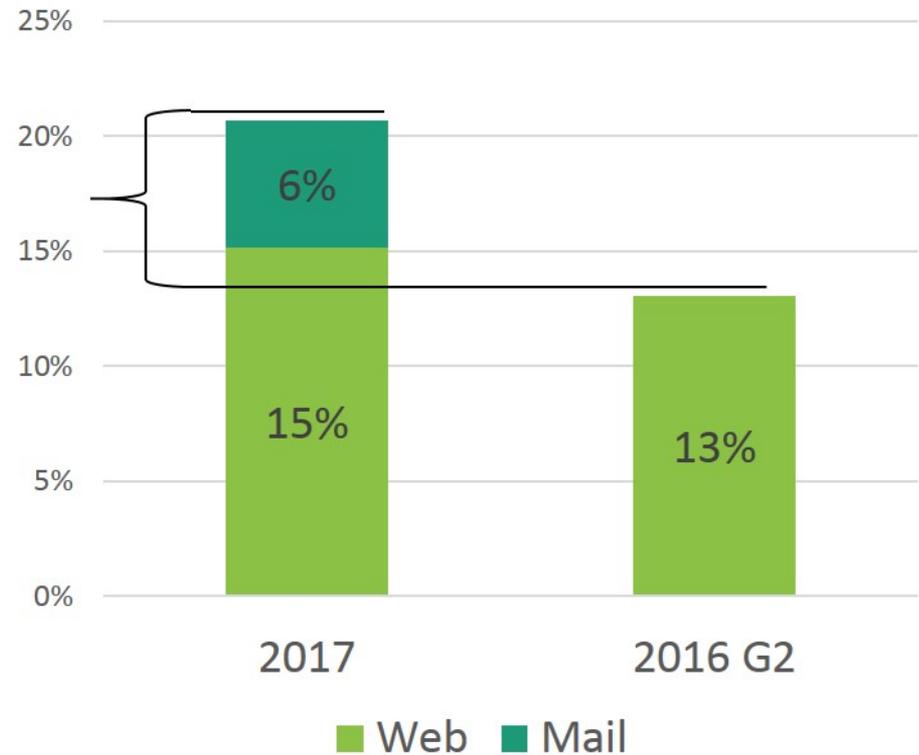
## Contacts

We identified households most likely to respond by mail and provided them that option in the first mailing. Response from this group is 50% greater than expected.

A reminder postcard one week after the first mailing boosted response by 25%.

The net result is 60% higher response to date, and we will send out about 80,000 fewer follow-up mailings than expected.

Returns by Mode  
2016 vs. 2017, Day 44



# 2016 and 2017 NSCH Surveys

## Summary & Next Steps

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1. 2016 was a “building” year to ensure the timely and accurate release of data for the nation and Title V partners
2. The 2016 response rate was not as expected, but we have identified a number of ways to improve and tighten the sampling and contact strategies that should drive response rates and representativeness in the right direction.
3. 2017 NSCH data collection in progress and currently exceeding 2016 NSCH response patterns



# Content & Key Estimates



# 2016 NSCH Content:

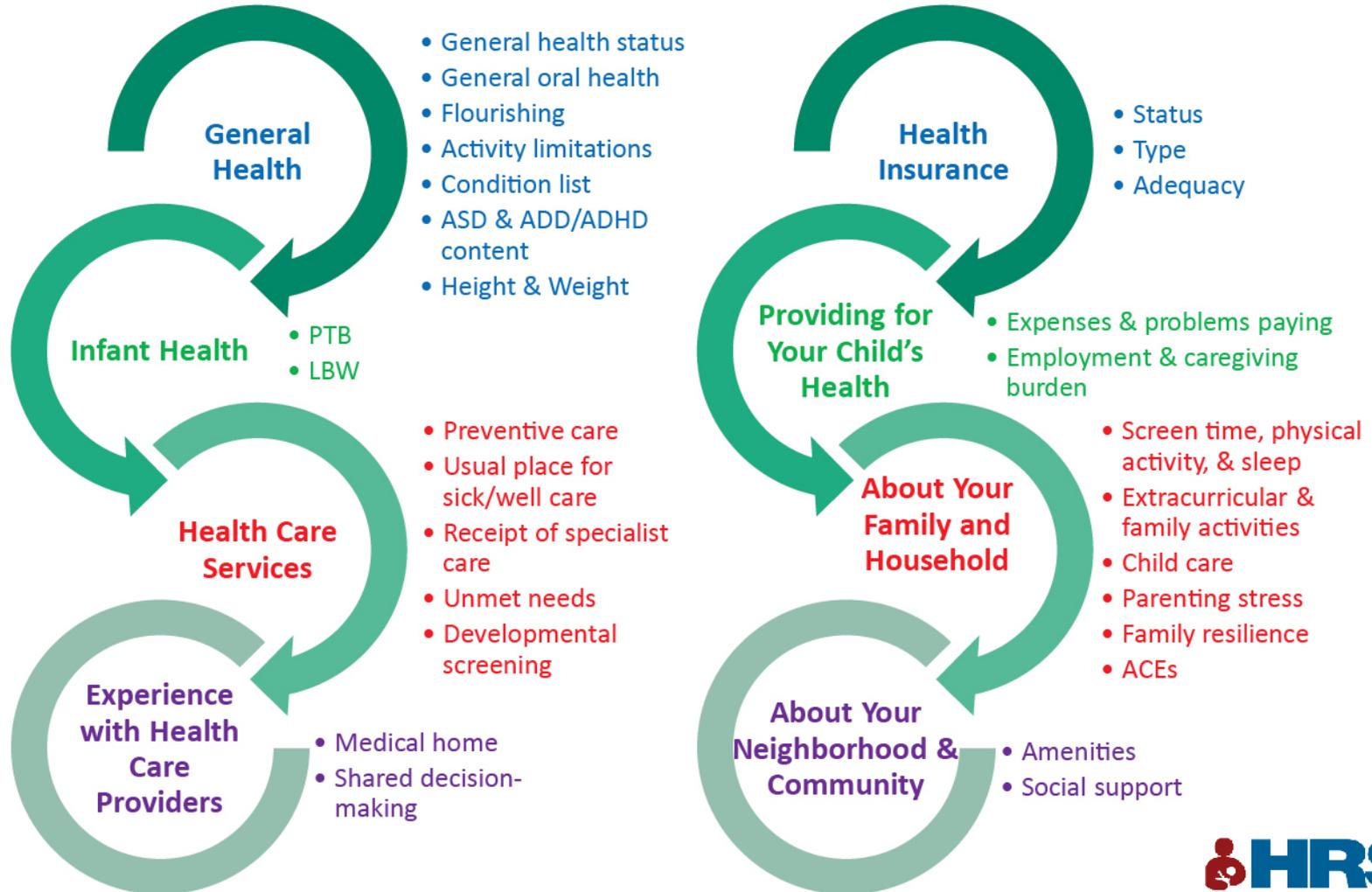
## Core Content Areas

Screener

0-5 Years

6-11 Years

12-17 Years



# Sociodemographic & Health Stratifiers

- **Child**

- Age
- Sex
- Race
- Ethnicity
- Nativity
- Special Health Care Need Status
- Disability Status (ACS-6)

- **Household**

- Poverty
- Educational attainment
- Primary language
- Family structure (marital status + relationship of adults to subject child)
- Federal program participation (cash assistance, food stamps, free/reduced cost meals, WIC)
- Food sufficiency
- Urban/Rural location

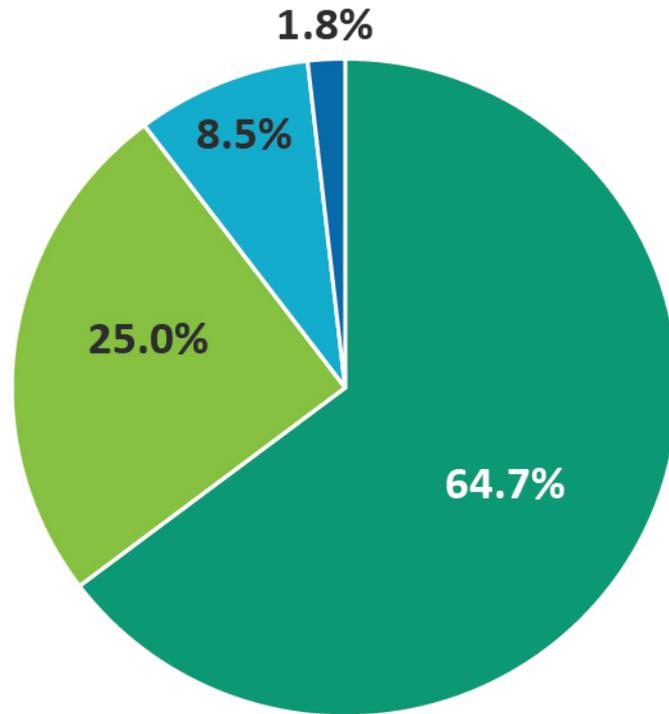
- **Parents/Caregivers (Adult 1 and Adult 2)**

- Age
- Sex
- Nativity
- Employment status
- Physical and mental health status



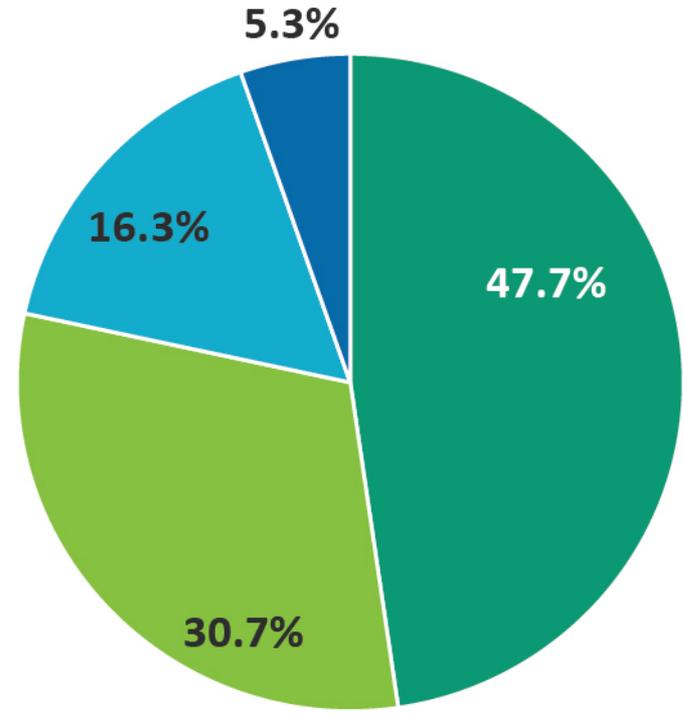
# Health Conditions: General Health Status

PROPORTION OF CHILDREN, 0-17 YEARS, BY GENERAL PHYSICAL HEALTH STATUS



■ Excellent      ■ Very Good  
■ Good          ■ Fair/Poor

PROPORTION OF CHILDREN, 1-17 YEARS, BY GENERAL ORAL HEALTH STATUS

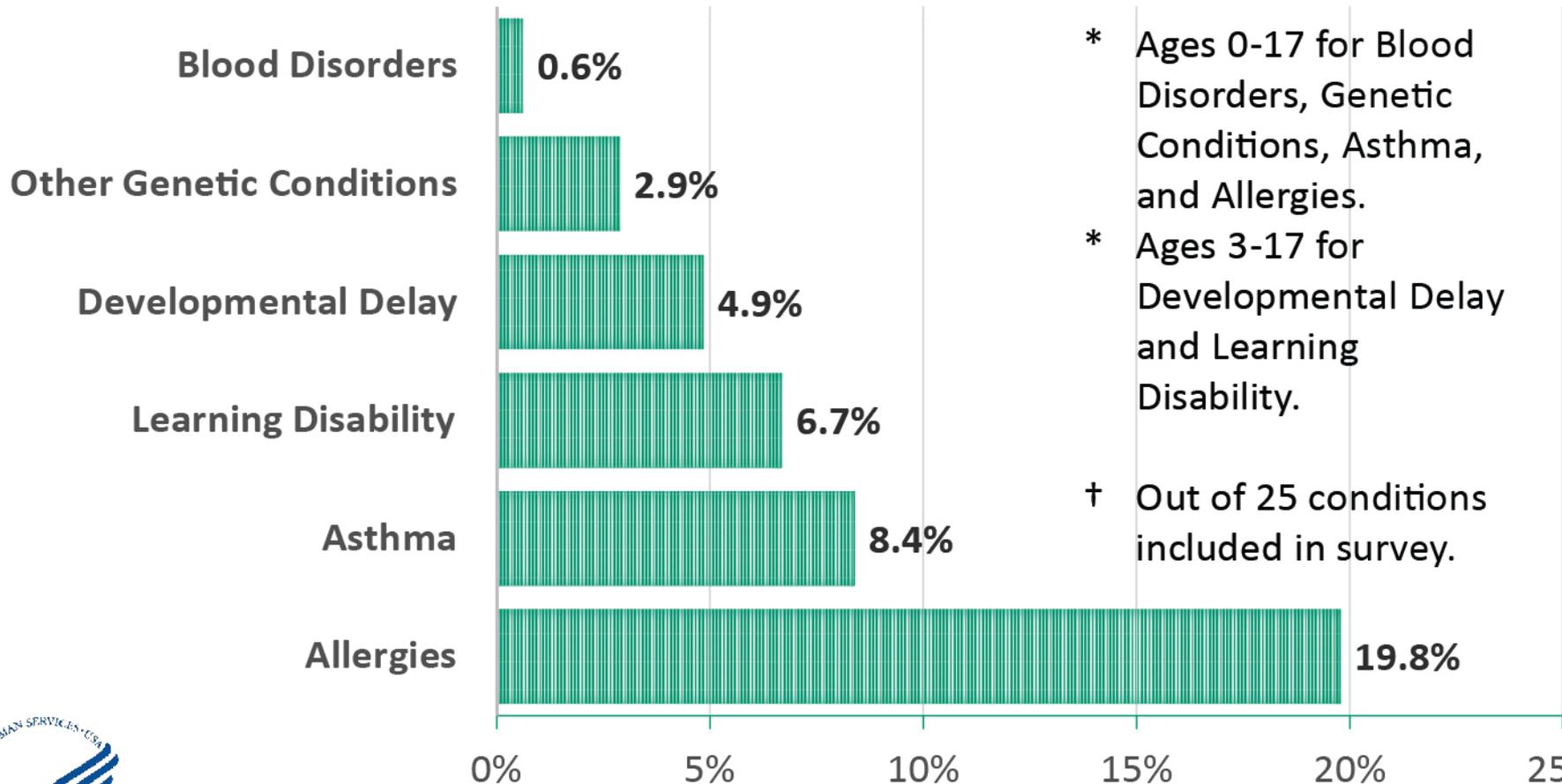


■ Excellent      ■ Very Good  
■ Good          ■ Fair/Poor



# Health Conditions: Selected Conditions

## PROPORTION OF CHILDREN\* WITH SELECTED HEALTH CONDITIONS (CURRENT)†



\* Ages 0-17 for Blood Disorders, Genetic Conditions, Asthma, and Allergies.

\* Ages 3-17 for Developmental Delay and Learning Disability.

† Out of 25 conditions included in survey.

# Special Health Care Needs

## Special Health Care Needs:

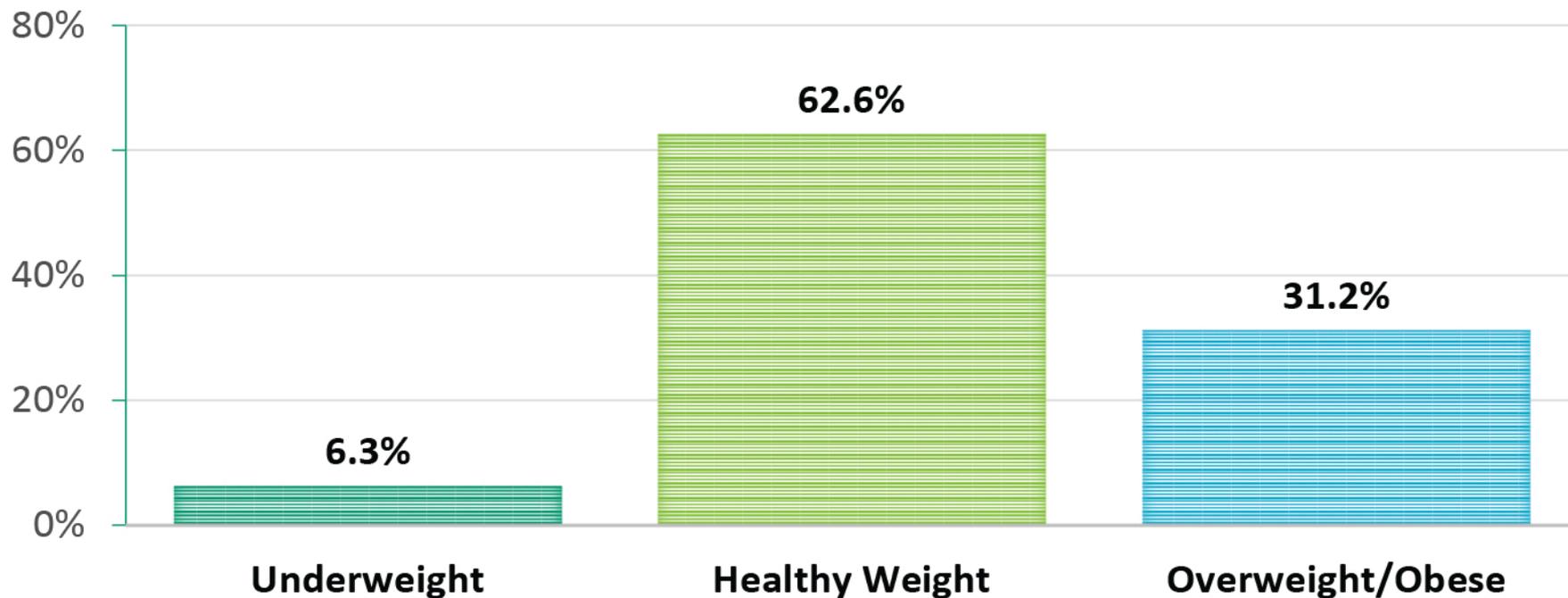
- 19.4% of US children had 1 or more special health care needs in 2016.
- Represents 14,196,961 children ages 0-17 years.
- 28.2% of HH in the US had 1 or more CSHCN.

## Qualifying Criteria:

- Prescription medication: 14.20%
- Specialized service need/use: 4.99%
- Elevated service need/use: 9.92%
- Functional limitations: 4.96%
- Ongoing emotional, behavioral, or developmental condition: 8.21%

# Health Conditions: Overweight/Obesity

**BODY-MASS INDEX (BMI) CLASSIFICATION,  
CHILDREN 10-17 YEARS\***



\* Based on parent-reported child height, weight, and age.

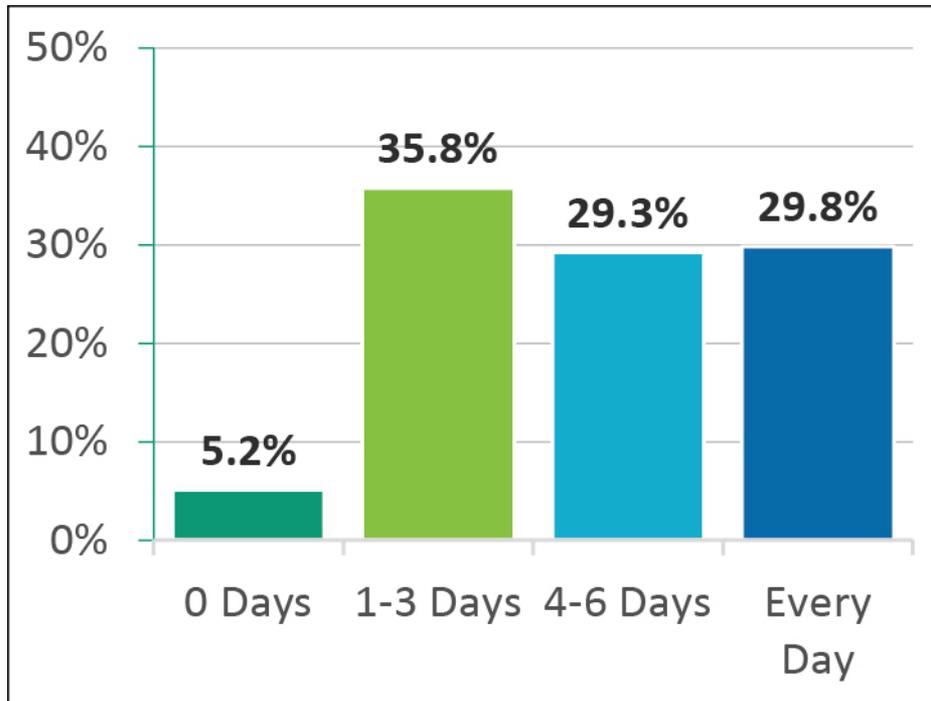
Underweight: < 5<sup>th</sup> percentile

Healthy Weight: 5<sup>th</sup> to less than 85<sup>th</sup> percentile

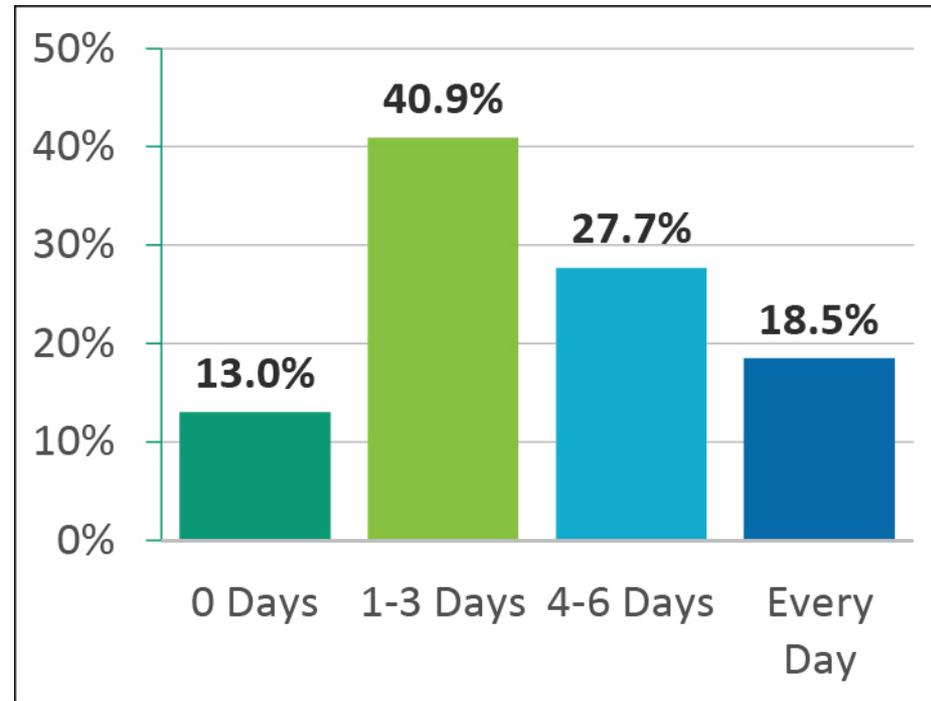
Overweight/Obese: ≥ 85<sup>th</sup> percentile

# Child Health Behaviors: Physical Activity

**PROPORTION OF CHILDREN, 6-11 YEARS, WHO ARE PHYSICALLY ACTIVE 60 MIN/DAY (DAYS PER WEEK)**

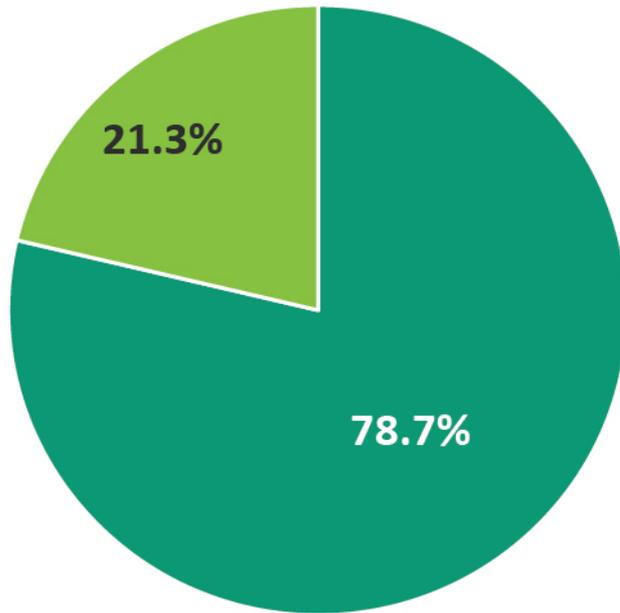


**PROPORTION OF ADOLESCENTS, 12-17 YEARS, WHO ARE PHYSICALLY ACTIVE 60 MIN/DAY (DAYS PER WEEK)**



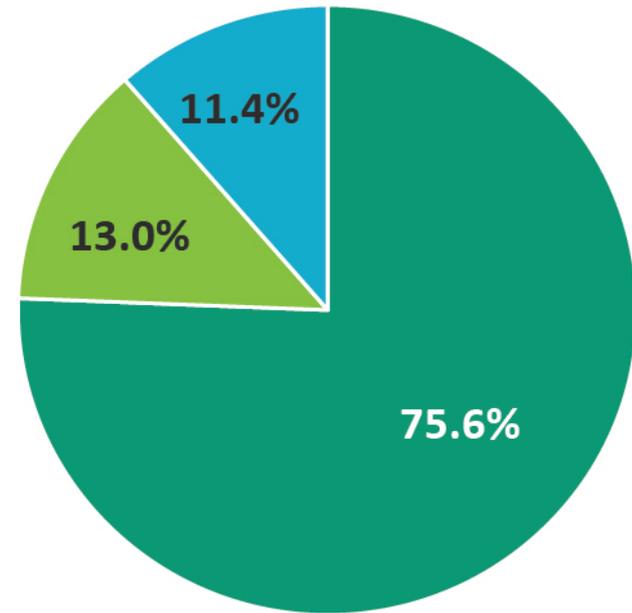
# Family Health Behaviors: Breastfeeding and Safe Sleep

PROPORTION OF CHILDREN, 0-5 YEARS,  
WHO WERE EVER BREASTFED



■ Yes ■ No

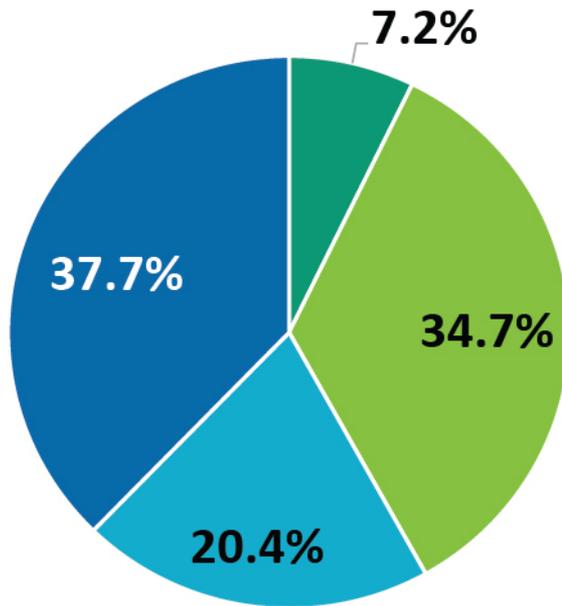
PROPORTION OF INFANTS, < 1 YEAR, WHO  
WERE PUT BACK-TO-SLEEP



■ Back ■ Side ■ Stomach

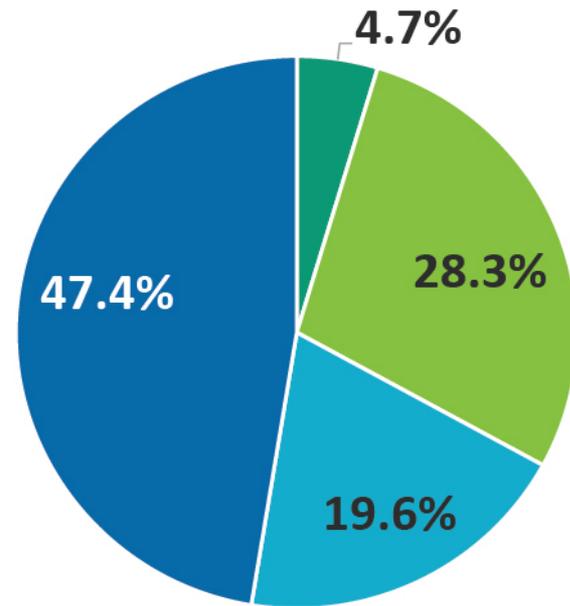
# Family Health Behaviors: Reading, Singing, and Story Telling

PROPORTION OF CHILDREN, 0-5 YEARS,  
WHOSE CAREGIVERS READ TO THEM  
(PAST WEEK)



■ 0 days    ■ 1-3 days  
■ 4-6 days    ■ Every day

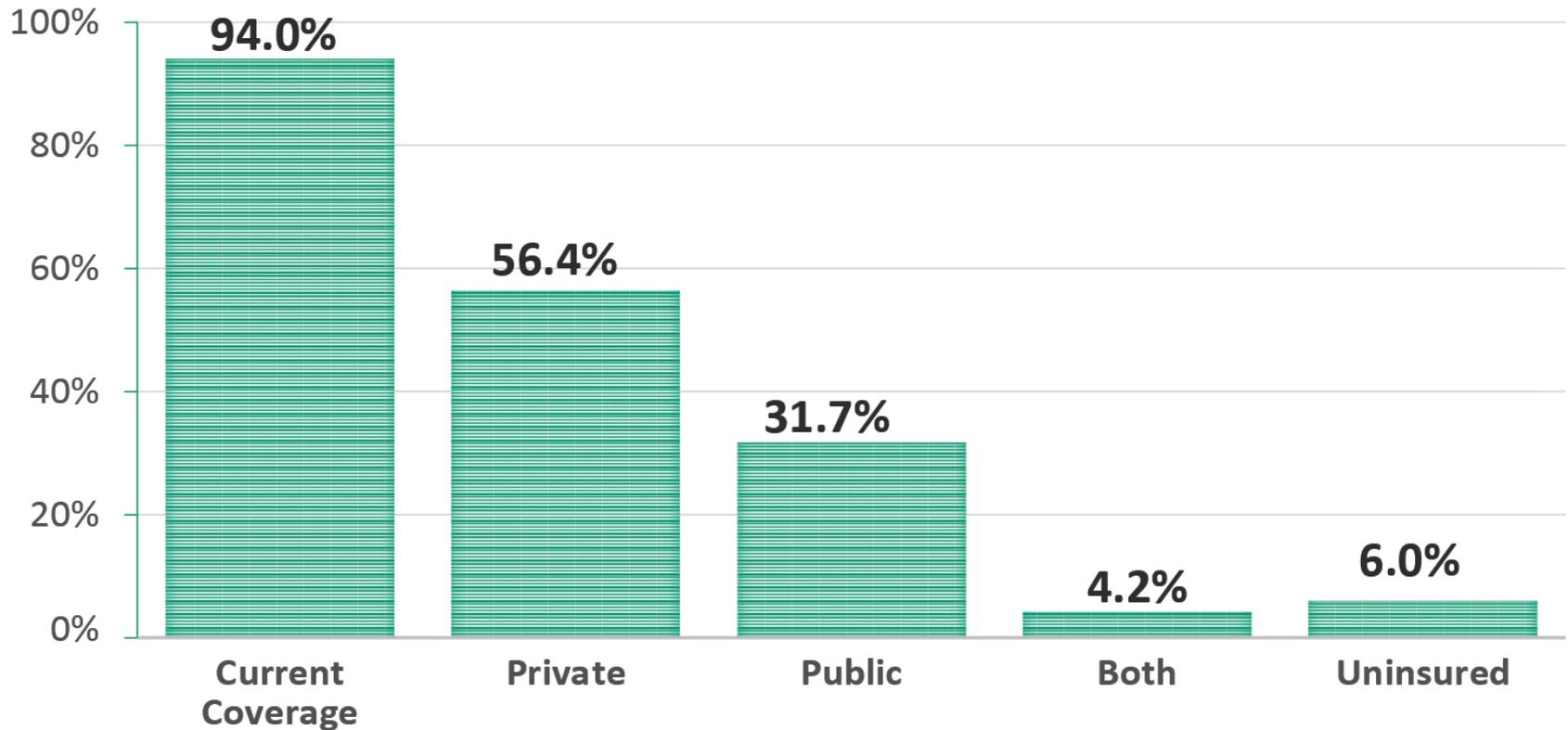
PROPORTION OF CHILDREN, 0-5 YEARS,  
WHOSE CAREGIVERS SING OR TELL THEM  
STORIES (PAST WEEK)



■ 0 days    ■ 1-3 days  
■ 4-6 days    ■ Every day

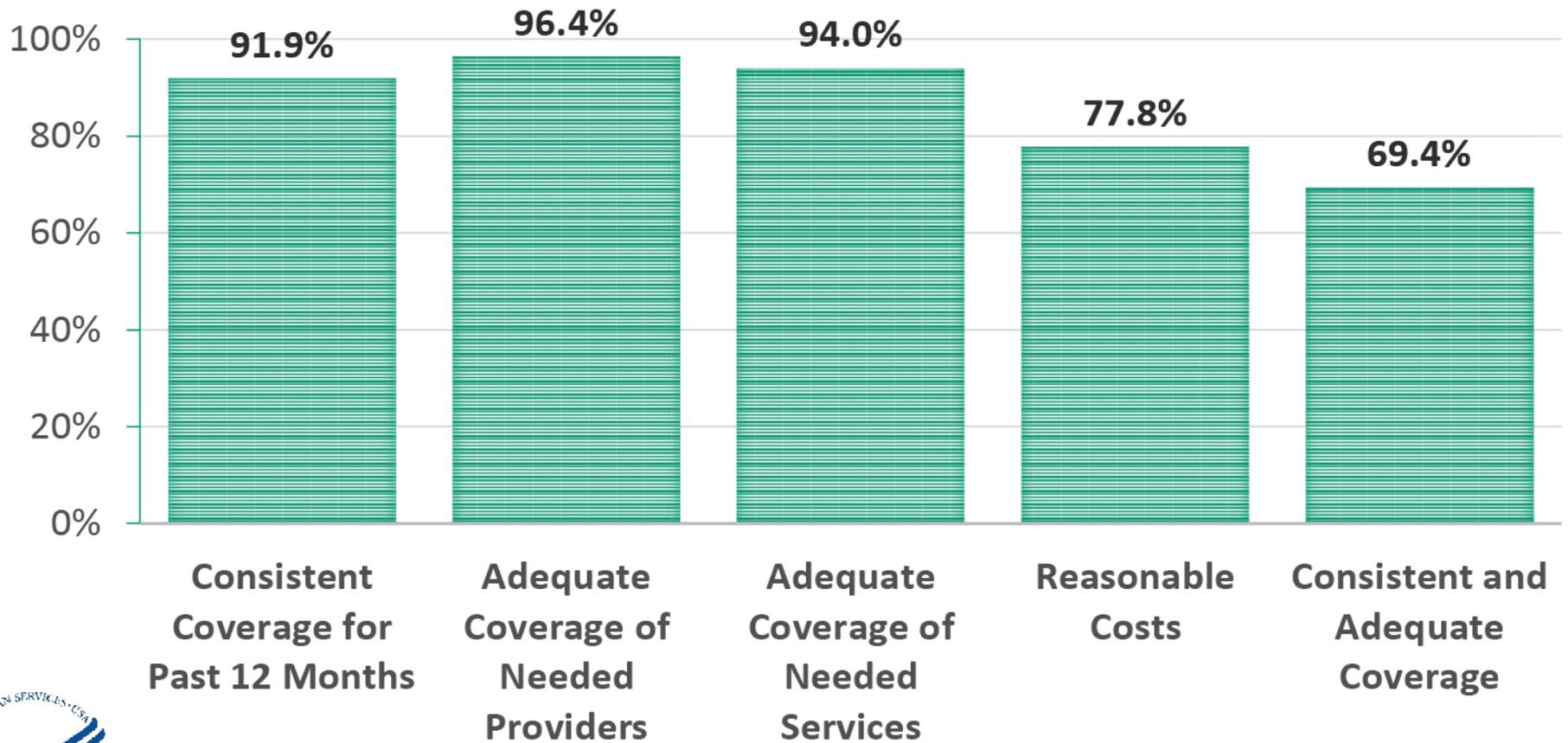
# Health Insurance Coverage

**PROPORTION OF CHILDREN, 0-17 YEARS, WITH  
CURRENT HEALTH INSURANCE,  
BY TYPE OF COVERAGE**



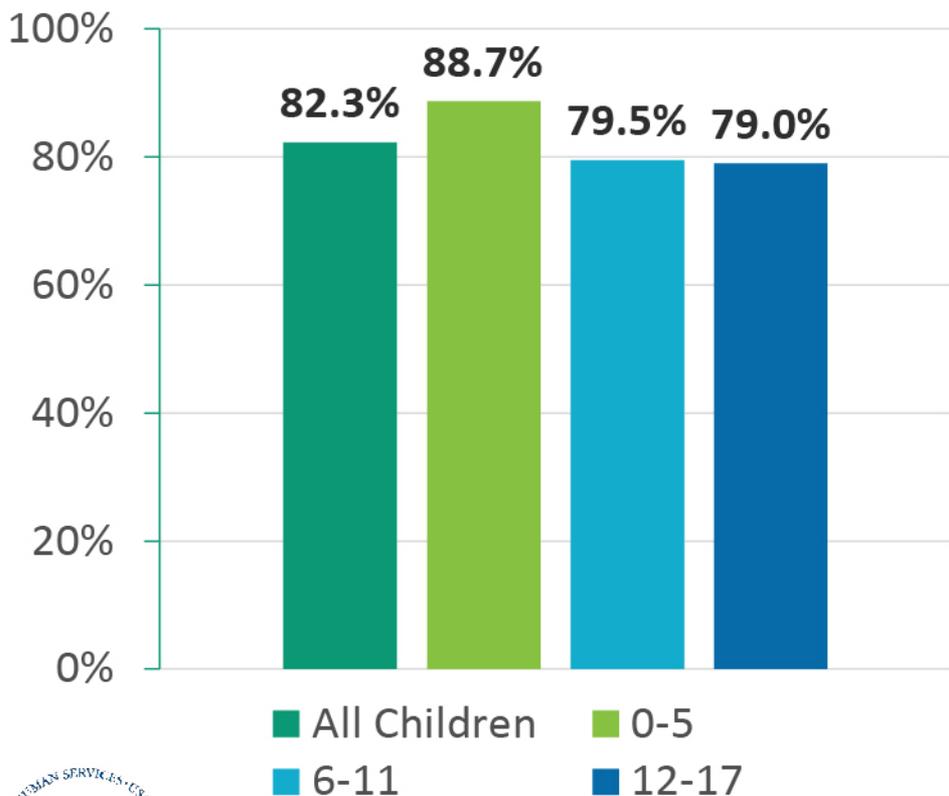
# Health Insurance Adequacy

## PROPORTION OF CHILDREN, 0-17 YEARS, WITH CONSISTENT AND ADEQUATE HEALTH INSURANCE COVERAGE

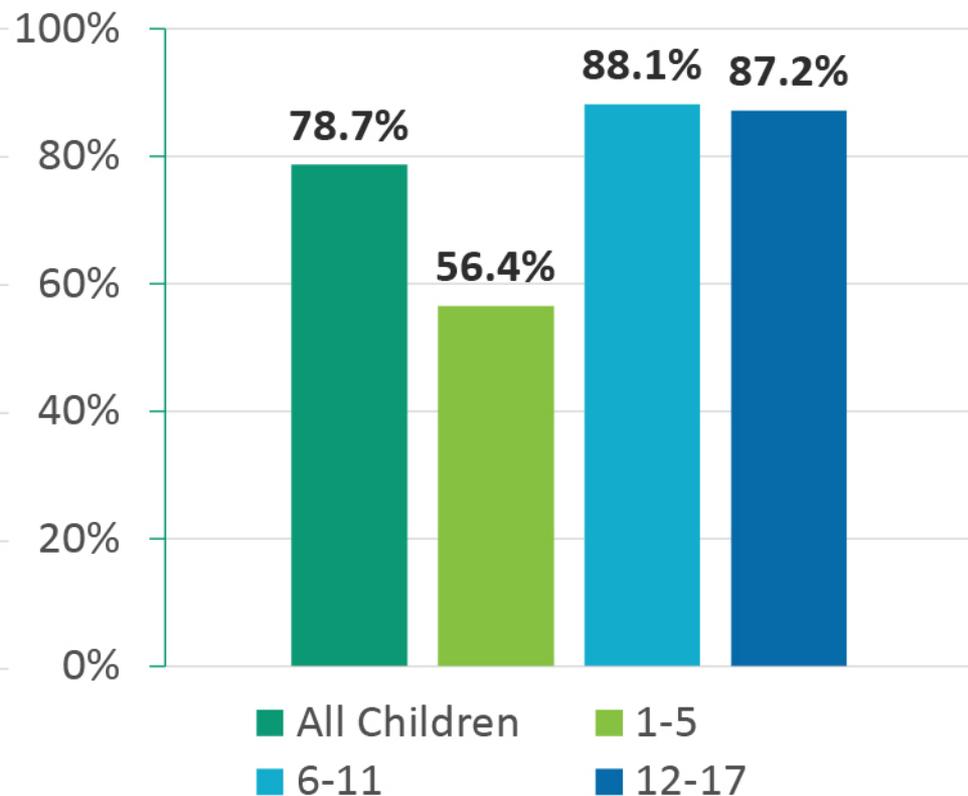


# Health Care Utilization: Preventive Medical and Dental Visits

PROPORTION OF CHILDREN, 0-17 YEARS,  
WITH A PREVENTIVE MEDICAL VISIT IN  
THE PAST 12 MONTHS, BY AGE

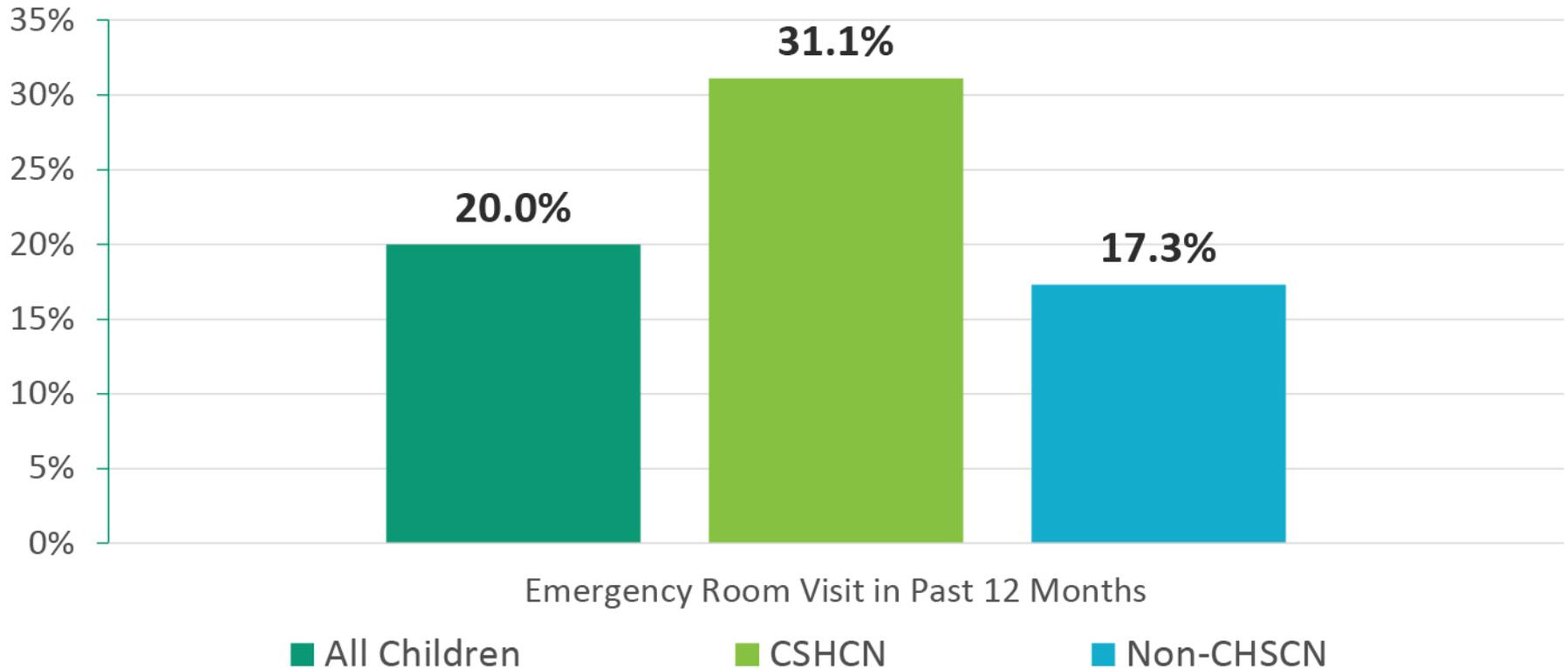


PROPORTION OF CHILDREN, 1-17 YEARS,  
WITH A PREVENTIVE DENTAL VISIT IN THE  
PAST 12 MONTHS, BY AGE



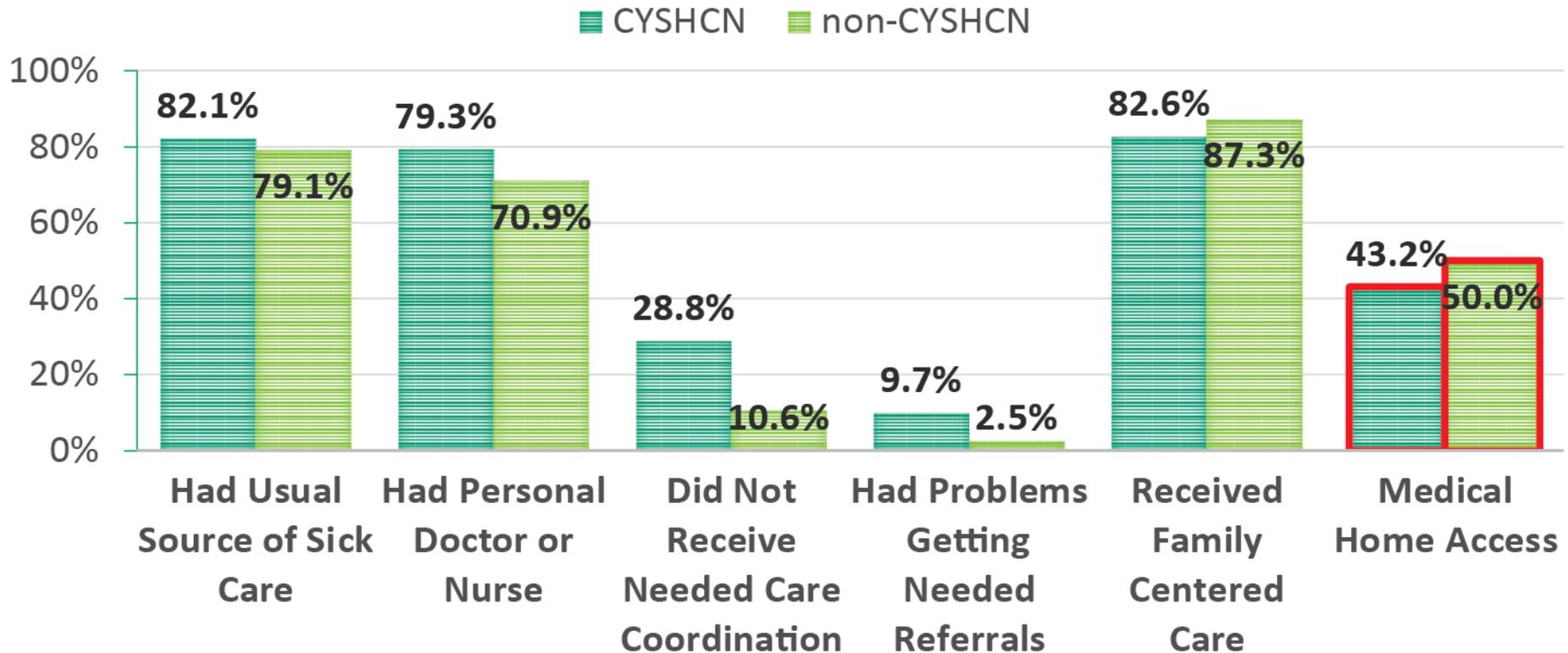
# Health Care Utilization: Emergency Room Visits

PROPORTION OF CHILDREN 0-17 YEARS WITH AN EMERGENCY ROOM VISIT IN THE PAST 12 MONTHS, BY CSHCN STATUS



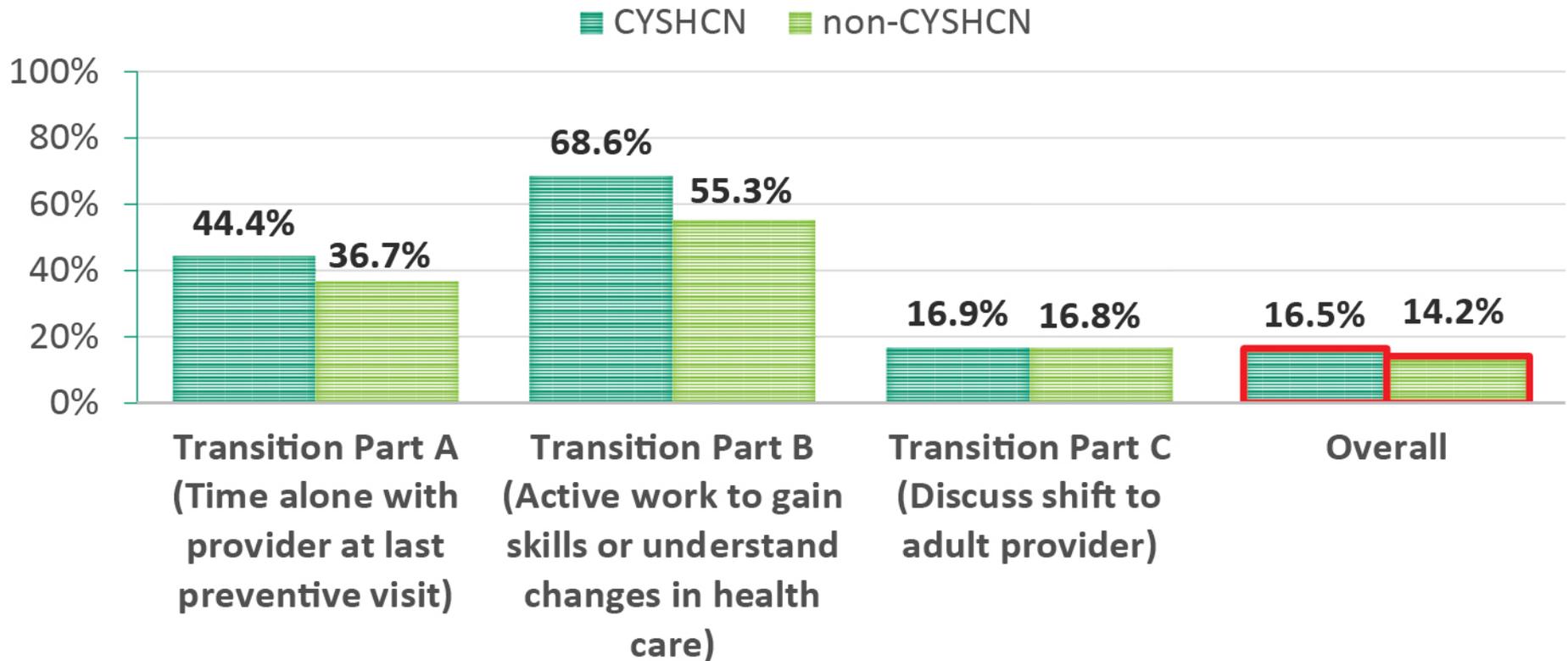
# Medical Home

**MEDICAL HOME ACCESS AMONG CHILDREN, 0-17 YEARS, BY COMPONENT AND OVERALL ACCESS**



# Transition to Adult Health Care

## TRANSITION TO ADULT HEALTH CARE AMONG CHILDREN, 12-17 YEARS, BY COMPONENT AND OVERALL



# Healthy and Ready to Learn

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- **Major area of new content (22 items added to 0-5 instrument).**
- **Added at the suggestion of state stakeholders and designed to serve as a National Outcome Measure for Title V.**
- **Also supported by Healthy People:**
  - Early and Middle Childhood (EMC) 1. (Developmental) Increase the proportion of children who are ready for school in all five domains of healthy development: physical development, social-emotional development, approaches to learning, language, and cognitive development.
- **Has never been assessed among US population using a multidimensional approach.**



# Accessing Data and Resources



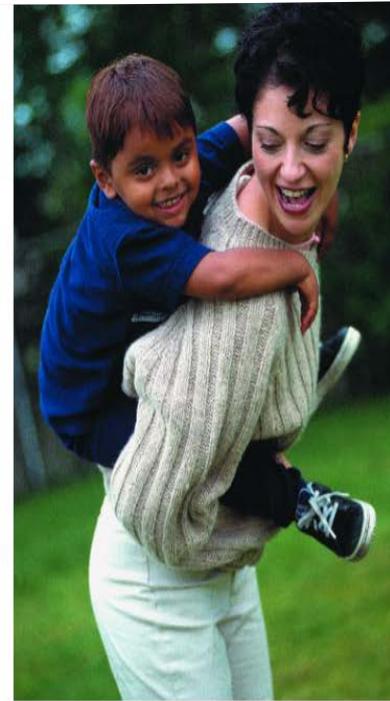


Data Resource Center for  
Child & Adolescent Health

*A project of the Child and Adolescent Health Measurement Initiative*

# About the DRC: Accessing Data and Resources

Christina Bethell, PhD, MBA, MPH  
Professor, Johns Hopkins Bloomberg School  
Public Health; Director, Child and Adolescent  
Measurement Initiative



# What is the Data Resource Center (DRC)?

[URL to the NSCH: www.nschdata.org](http://www.nschdata.org)

(or search for NSCH on [www.childhealthdata.org](http://www.childhealthdata.org))

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1. Provides **centralized, easy, and interactive** access to national, regional, state-level findings from all years of the National Survey on Children's Health and prior years of the National Survey on Children With Special Health Care Needs. Going forward, focus on NSCH only.
2. Collaborates in the design, development, documentation and dissemination of the NSCH with the federal Maternal and Child Health and the US Bureau and Bureau of the Census
3. Seeks to build **knowledge and the capacity** to use data to inform and inspire innovation and transformative partnerships that improve child, youth and family outcomes and well being and systems performance at the national, state and local levels. The DRC provides resources such as:

Interactive data  
query

Cleaned datasets  
and codebooks

Survey overviews  
& supporting  
documents

Data visualizations  
(charts, maps,  
snapshots)

Examples of data  
in action

Special topics  
portals

Training and  
Technical  
assistance



# How do I access data on the DRC?

Ask a Question Request a Dataset Partners REGISTER for Additional Features

Data Resource Center for Child & Adolescent Health  
A project of the Child and Adolescent Health Measurement Initiative

Interactive Data Query Learn About the DRC Review the Surveys Explore the Data See Your Data in Action Get Help

Browse Data By: Survey State or Geographic Region Topic or Initiative

What can we help you find?

Making data accessible to all. It's your data...your story!

Visit the Interactive Data Query

Learn More

Explore the Data See Your Data in Action

- Data by Survey and Topic
- Data Snapshots
- Compare Data Across States
- Explore Data Trends
- Medical Home Portal
- Healthy People 2020 Portal
- Systems Improvement Portal
- Perinatal and Medicaid Data Portal
- Maternal and Child Health Measurement Portal
- Autism Spectrum Disorder Portal

# The DRC's Interactive Data Query

## Browse by Survey & Topic

To begin your interactive data search:

- 1) Select a **survey**, **survey year**, and **geographic level**.
- 2) Select your desired **topic/starting point** (**at-a-glance content maps** are available to view/download at this step).
- 3) Select your **measure**.

These steps will direct you to a results page where you can compare across states, regions and by numerous subgroups.

### 1. Select a Survey, Year, and Geographic Area

Select a Survey

National Survey of Children's Health ▼

Select a Year

2016 ▼

Select a State/Region

Nationwide ▼

### 2. Select a Starting Point/Topic

Child and Family Health Measures

Over 100 indicators for child and family health and well-being

Title V Block Grant Measures

Title V Maternal and Child Health Block Grant National Performance and Outcome Measures



# Select a Topic Area & Measure

## 2. Select a Starting Point/Topic

### Child and Family Health Measures

Over 100 indicators for child and family health and well-being

- Physical, Oral Health and Functional Status
- Emotional and Mental Health
- Health Insurance Coverage
- Health Care Access and Quality
- Community and School Activities
- Family Health and Activities
- Neighborhood Safety and Support
- Child and Family Demographics

### 3. Select a Survey Question (click the [i](#) for more information on the question)

- Indicator 6.1: Physical health status of mother [i](#)
- Indicator 6.1a: Physical health status of father [i](#)
- Indicator 6.2: Mental health status of mother [i](#)
- Indicator 6.2a: Mental health status of father [i](#)
- Indicator 6.3: Overall health status of mother [i](#)
- Indicator 6.3a: Overall health status of father [i](#)
- Indicator 6.4: Someone living in the household smokes [i](#)
- Indicator 6.4a: Someone smokes inside the home [i](#)
- Indicator 6.5: Children living in "working poor" families [i](#)
- Indicator 6.6: Family shares ideas, 6-17 years [i](#)
- Indicator 6.7: Family reads to children, 0-5 years [i](#)
- Indicator 6.8: Family sings and tells stories to children, 0-5 years [i](#)
- Indicator 6.9: Family eats meal together [i](#)
- Indicator 6.10: Time spent watching TV or playing video games [i](#)
- Indicator 6.11: Time spent with a computer, cell phone, electronic device [i](#)
- Indicator 6.12: Family resilience [i](#)
- Individual items for family resilience -- list of 4 items
- Indicator 6.13: Adverse childhood experiences [i](#)
- Adverse childhood experiences -- 0 items
- Indicator 6.14: Parental aggravation [i](#)
- Individual item for parental stress -- 3 items
- Indicator 6.15: Parent receives emotional help with parenting [i](#)
- Indicator 6.16: Coping with daily demands of raising children [i](#)
- Indicator 6.17: Job change due to problems with child care, age 0-5 years [i](#)
- Indicator 6.18: Stopped working and cut back hours due to child's health [i](#)
- Indicator 6.19: Avoided changing jobs to maintain insurance [i](#)

# View Measure in Tabular & Graphic Format

## Current Search Criteria

Survey: 2016 National Survey of Children's Health

Starting Point: Child and Family Health Measures

State/Region: Nationwide

Topic: Family Health and Activities

Question: Indicator 6.13: Adverse childhood experiences (details)

## Edit Search Criteria

Compare States:

Select a State or Region ▼

Compare Subgroups:

Select a Subgroup ▼

[Change question, topic or survey](#)

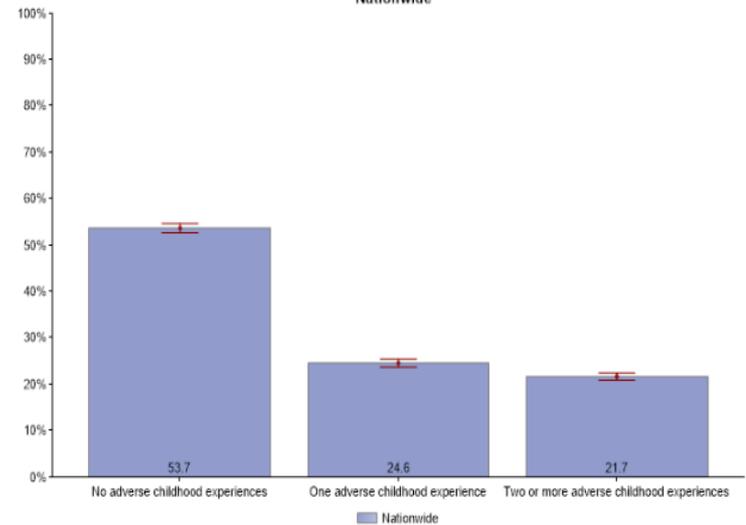
## Indicator 6.13: Children experienced one or more adverse childhood experiences from the list of 9 ACEs (details)

	No adverse childhood experiences	One adverse childhood experience	Two or more adverse childhood experiences	Total %
%	53.7	24.6	21.7	100.0
C.I.	(52.7 - 54.7)	(23.7 - 25.5)	(20.9 - 22.5)	
Sample Count	29,609	10,926	9,017	
Pop. Est.	38,647,370	17,687,522	15,610,547	

C.I. = 95% Confidence Interval.

Percentages and population estimates (Pop.Est.) are weighted to represent child population in US.

## Adverse childhood experiences Children age 0-17 years Nationwide



# View Measure Data by Subgroup

## Current Search Criteria

Survey: 2016 National Survey of Children's Health  
 Starting Point: Child and Family Health Measures  
 State/Region: Nationwide  
 Topic: Family Health and Activities  
 Question: Indicator 6.13: Adverse childhood experiences (details)  
 Sub Group: Household income level

## Edit Search Criteria

Compare States:  
 Select a State or Region  
 Compare Subgroups:  
 Household income level  
[Change question, topic or survey](#)

Indicator 6.13: Children experienced one or more adverse childhood experiences from the list of 9 ACEs (details)

		No adverse childhood experiences	One adverse childhood experience	Two or more adverse childhood experiences	Total %
0 - 99% FPL	%	33.3	29.8	37.0	100.0
	C.I.	(30.6 - 36.0)	(27.2 - 32.4)	(34.5 - 39.6)	
	Sample Count	1,460	1,365	1,918	
	Pop. Est.	5,078,269	4,543,267	5,647,578	
100 - 199% FPL	%	42.8	30.1	27.1	100.0
	C.I.	(40.4 - 45.3)	(27.8 - 32.5)	(25.0 - 29.2)	
	Sample Count	3,182	2,302	2,352	
	Pop. Est.	6,803,580	4,778,562	4,298,004	
200 - 399% FPL	%	56.8	24.2	19.0	100.0
	C.I.	(55.1 - 58.4)	(22.8 - 25.6)	(17.7 - 20.4)	
	Sample Count	8,773	3,756	2,826	
	Pop. Est.	11,002,176	4,683,532	3,688,036	
400% FPL or higher	%	73.6	17.2	9.2	100.0
	C.I.	(72.3 - 74.8)	(16.1 - 18.3)	(8.5 - 10.0)	
	Sample Count	16,194	3,503	1,921	
	Pop. Est.	15,763,345	3,682,162	1,976,929	

## Subgroups

- Age in 3 groups
- Sex of child
- Race/ethnicity of child
- Race/ethnicity – with Asian (National only)
- Parental nativity
- Primary language in household
- Primary household language for Hispanic children
- Family structure – 4 categories
- Household income level
- Household income level (SCHIP)
- Highest education of adult in household
- Special health care needs status
- Complexity of health care needs
- Emotional, behavioral, or developmental issues
- Family resilience
- Medical home
- Current insurance status
- Adequacy of health insurance
- Consistency of health insurance coverage
- Type of health insurance
- Well-functioning system of care

# View Measure Data by State or Region

## Current Search Criteria

**Survey:** 2016 National Survey of Children's Health  
**Starting Point:** Child and Family Health Measures  
**State/Region:** Nationwide vs. Maryland  
**Topic:** Family Health and Activities  
**Question:** Indicator 6.13: Adverse childhood experiences (details)

## Edit Search Criteria

Compare States:  
Maryland ▼  
 Compare Subgroups:  
 Select a Subgroup ▼  
[Change question, topic or survey](#)

## Indicator 6.13: Children experienced one or more adverse childhood experiences from the list of 9 ACEs (details)

Notes: Click on the Column Header to sort the results by ascending or descending order. To get a detailed explanation of the data HOVER over the text in the table.

	State	No adverse childhood experiences %	One adverse childhood experience %	Two or more adverse childhood experiences %	Total %
1	Alabama	49.9	22.4	27.7	100.0
2	Alaska	55.7	20.6	23.8	100.0
3	Arizona	50.6	18.8	30.6	100.0
4	Arkansas	44.1	26.2	29.6	100.0
5	California	57.9	25.7	16.4	100.0
6	Colorado	53.7	24.0	22.3	100.0
7	Connecticut	57.8	22.8	19.4	100.0
8	Delaware	51.7	25.7	22.6	100.0
9	District of Columbia	52.9	25.3	21.8	100.0
10	Florida	48.0	27.2	24.8	100.0
11	Georgia	52.3	22.7	25.0	100.0
12	Hawaii	56.8	21.8	21.4	100.0
13	Idaho	48.1	27.5	23.4	100.0
14	Illinois	60.3	20.3	19.5	100.0
15	Indiana	52.7	23.1	24.2	100.0
16	Iowa	56.2	23.8	20.0	100.0
17	Kansas	54.8	23.4	21.7	100.0
18	Kentucky	46.9	26.3	26.9	100.0
19	Louisiana	46.3	25.4	28.2	100.0
20	Maine	48.3	27.1	24.6	100.0
21	Maryland	59.0	25.6	15.4	100.0
22	Massachusetts	61.2	22.9	15.9	100.0
23	Michigan	53.8	24.4	21.8	100.0
24	Minnesota	61.9	21.3	16.8	100.0
25	Mississippi	46.6	26.2	27.2	100.0
26	Missouri	52.2	20.6	27.2	100.0

## Indicator 6.13: Children experienced one or more adverse childhood experiences from the list of 9 ACEs (details)

		No adverse childhood experiences	One adverse childhood experience	Two or more adverse childhood experiences	Total %
Nationwide	%	53.7	24.6	21.7	100.0
	C.I.	(52.7 - 54.7)	(23.7 - 25.5)	(20.9 - 22.5)	
	Sample Count	29,609	10,926	9,017	
	Pop. Est.	38,647,370	17,687,522	15,610,547	
Maryland	%	59.0	25.6	15.4	100.0
	C.I.	(54.8 - 63.1)	(21.9 - 29.8)	(12.6 - 18.6)	
	Sample Count	700	228	150	
	Pop. Est.	778,961	338,683	202,944	

C.I. = 95% Confidence Interval.  
 Percentages and population estimates (Pop.Est.) are weighted to represent child population in US.



# Compare Data Across States

Ask a Question Request a Dataset Partners REGISTER for Additional Features

Data Resource Center for Child & Adolescent Health  
A project of the Child and Adolescent Health Measurement Initiative

Interactive Data Query Learn About the DRC Review the Surveys **Explore the Data** See Your Data in Action Get Help

Browse Data By: Survey > State or Geographic Region > Topic or Initiative >

What can we help you find?

Making data accessible to all. It's your data...your story!

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Data by Survey and Topic

Data Snapshots

**Compare Data Across States**

Explore Data Trends

Medical Home Portal

Healthy People 2020 Portal

Systems Improvement Portal

Perinatal and Medicaid Data Portal

Maternal and Child Health Measurement Portal

Autism Spectrum Disorder Portal

# Hot-Spotting Tables & US Maps

## Compare Data Across States

### And Compare States to National Averages



Compare States Across Multiple Measures

#### [Compare States Across Multiple Measures](#)

These interactive tables allow users to select multiple indicators and compare performance across states to the national average.



Compare States Using Single-Measure Maps: Latest Data

#### [Compare States Using Single-Measure Maps: Latest Data](#)

US state maps compare each state's performance to the national average on single child health indicators from the 2011/12 National Survey of Children's Health (NSCH) and the 2009/10 National Survey of Children with Special Health Care Needs (NS-CSHCN).



Compare States Using Single-Measure Maps: Previous Years

#### [Compare States Using Single-Measure Maps: Previous Years](#)

US state maps compare each state's performance to the national average on single child health indicators from the 2007 National Survey of Children's Health (NSCH), and the 2005/06 National Survey of Children with Special Healthcare Needs (NS-CSHCN).

# Compare States Using Single-Measure Maps

## Compare Data Across State Maps

The US state maps below compare each state's performance to the national average on key child health indicators from the National Survey of Children's Health (NSCH) and National Survey of Children with Special Health Care Needs (NS-CSHCN).

To start, **click on any topic of interest below**. Additionally, there are several other ways to view state-specific data on the DRC:

- View the DRC's **data snapshots** to view topics in **one state profile**.
- Use the DRC's **interactive data query** to access **state data for hundreds of health indicators**, and then sub-populate these results by a variety of demographic indicators such as race/ethnicity, income, sex, etc.

## Title V National Performance and Outcome Measure State Maps

### National Performance Measures (NPMs)

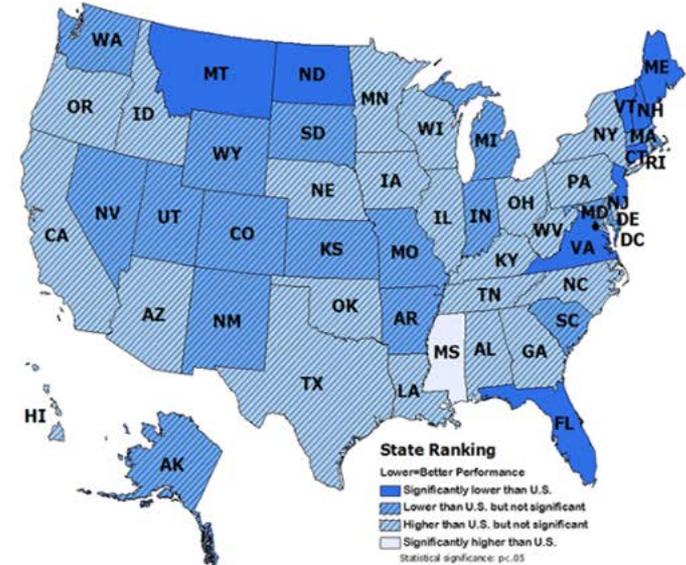
- NPM #1: Well-Woman Visit (ages 18-44)\*
- NPM #6: Developmental Screening (ages 10 months - 5 years)
- NPM #8.1: Physical Activity (ages 6-11)
- NPM #8.2: Physical Activity (ages 12-17)
- NPM #9: Bullying (ages 12-17)
- NPM #10: Adolescent Well-Visit (ages 12-17)
- NPM #11.1: Medical Home: CSHCN (ages 0-17)
- NPM #11.2: Medical Home: Non-CSHCN (ages 0-17)
- NPM #12: Transition: CSHCN (ages 12-17)\*
- NPM #13B: Preventive Dental Visit (ages 1-17)
- NPM #14B: Counseling (ages 0-17)

Title V National Performance Measure #9: Percent of adolescents, ages 12 through 17, who bully others

2011/12 National Survey of Children's Health

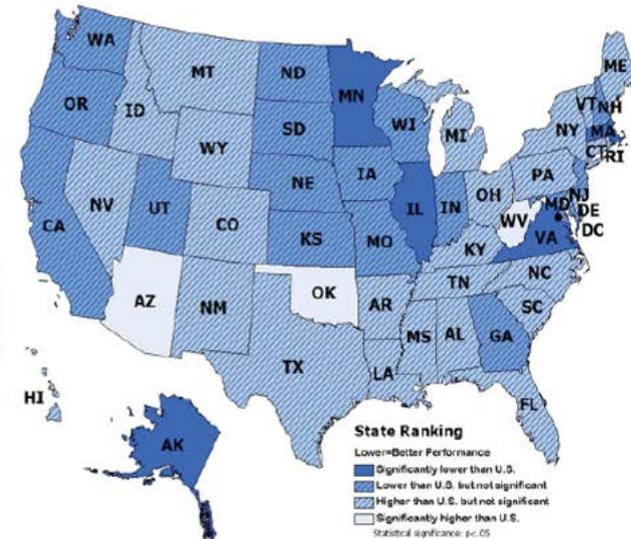
Nationwide: 14.2% of children met indicator

Range Across States: 7.8% to 20.9%



Percent of Children Age 0-5 with One or More Adverse Childhood Experiences in the US

Nationwide: 35.0%  
State Range: 23.1%–49.1%



# Compare States Across Multiple Measures

## Compare State Data Across State

### 2011/12 National Survey of Children



Title V National Performance Measures (NPMs)

This table represents the prevalence of selected child and family health measures among children who experienced one or more ACEs.

[Learn More](#)



Title V National Outcome Measures (NOMs)

This table represents the prevalence of selected child and family health measures among children who experienced one or more ACEs.

[Learn More](#)

## Title V National Outcome Measures Across State

- To sort a measure by state prevalence, click on the arrows at the top of the column.
- Hover over each measure title to see the measure description, learn whether lower prevalence means better performance, and see the data source.
- Click on any prevalence estimate to view national and state level data and to view subgroup level data (i.e. age, race, insurance type) for individual measures.

State	NPM1	NPM6	NPM8
Nationwide	66.0	30.8	35.6
Alabama	66.1	24.7	44.7
Alaska	53.8	32.6	39.9
Arizona	56.8	21.7	33.2
Arkansas	57.3	26.3	41.1
California	59.2	28.5	30.6
Colorado	64.5	47.0	33.5
Connecticut	69.2	26.6	29.8
Delaware	69.1	30.8	32.2
District of Columbia	69.0	31.4	37.1

TABLE 5. Across State Multiple Indicator Table: Percent of Children who Experienced Adverse Childhood Experiences (ACEs) and Prevalence of Selected Child and Family Health Measures<sup>A</sup> among Children Who Experienced One or More ACEs

State	2+ ACEs, 0-17 years <sup>A</sup>	1+ ACEs, 0-17 years <sup>A</sup>	1+ ACEs, 0-5 years <sup>A</sup>	Among Children with One or More Adverse Childhood Experiences								
				Chronic Health Condition <sup>A</sup>	Children with EBD conditions <sup>A</sup>	Cut Back or Stopped Working <sup>A</sup>	Family Routines and Habits <sup>A</sup>	Mother's Health <sup>**</sup>	Parent Coping <sup>**</sup>	School Engagement, 6-17 years <sup>**</sup>	Resilience, 6-17 years <sup>**</sup>	Supportive Neighborhood <sup>**</sup>
Nation	21.7	46.3	35.0	26.4	12.8	7.4	27.4	49.6	61.5	57.9	43.0	44.2
State Range	15.0-30.6	38.1-55.9	23.1-49.1	17.2-33.9	8.6-20.2	4.4-12.0	16.6-34.8	38.6-61.0	48.6-75.0	45.9-68.5	24.1-53.6	29.5-63.8
Alaska	23.8	44.3	23.1	23.0	13.4	6.2 <sup>†</sup>	23.8	45.6	58.5	49.2	40.3	50.0
Alabama	27.7	50.1	37.0	29.2	13.4	5.1 <sup>†</sup>	30.8	46.1	61.8	58.9	40.0	52.3
Arkansas	29.6	55.9	40.6	29.8	14.0	6.2 <sup>†</sup>	28.9	42.8	63.0	50.8	39.8	50.7
Arizona	30.6	49.4	44.4	26.3	12.9	7.3	34.8	40.9	54.0	50.1	44.2	40.3
California	16.4	42.1	33.1	24.0	11.7	8.0	28.8	52.8	59.7	58.9	45.0	37.6
Colorado	22.3	46.3	36.0	24.2	11.5	10.2	21.2	49.9	56.9	51.4	47.5	44.1
Connecticut	19.4	42.2	38.3	29.5	18.0	6.7	29.4	58.4	65.3	64.5	45.3	44.9
District of Columbia	21.8	47.1	32.3	25.2	12.6	5.6	21.5	60.6	67.2	65.1	51.5	38.9
Delaware	22.6	48.3	37.1	30.6	15.1	6.0	32.8	47.7	68.3	60.0	38.4	46.1
Florida	24.8	52.0	36.9	25.8	12.1	7.3	25.7	57.3	70.6	68.2	50.5	43.7
Georgia	25.0	47.7	29.3	27.1	14.5	5.0 <sup>†</sup>	27.3	43.1	70.3	54.8	39.2	43.7
Hawaii	21.4	43.2	37.1	17.2	9.1	6.8	22.7	55.3	51.8	57.0	43.8	45.6
Iowa	20.0	43.8	34.4	25.6	14.1	6.9	22.5	51.5	63.2	54.8	41.9	54.6
Idaho	23.4	50.9	38.4	24.2	15.6	6.2	20.3	48.7	53.5	54.0	39.0	51.4
Illinois	19.5	39.7	24.9	26.4	14.2	8.8	25.2	46.3	56.7	68.5	45.1	43.5
Indiana	24.2	47.3	33.6	33.9	19.8	12.0	28.5	45.2	60.6	54.0	42.1	54.9
Kansas	21.7	45.2	31.0	25.3	13.5	7.2	26.3	50.1	55.7	50.2	42.7	49.6
Kentucky	26.9	53.1	42.5	32.1	15.8	4.4	33.4	43.2	70.4	51.1	31.6	47.7
Louisiana	28.2	53.7	36.7	30.3	13.7	6.9	27.8	51.6	63.7	60.1	43.1	51.3
Massachusetts	15.9	38.8	27.3	28.0	20.2	11.3	27.9	53.2	61.7	58.1	41.8	48.8
Maryland	15.4	41.0	27.5	29.2	15.4	5.1 <sup>†</sup>	28.7	55.6	75.0	59.5	53.6	47.3
Maine	24.6	51.7	39.9	33.1	17.3	9.4	20.5	42.6	60.7	51.9	36.0	46.9
Michigan	21.8	46.2	36.4	25.8	11.0	4.7	29.1	50.2	64.8	59.3	42.7	43.1
Minnesota	16.8	38.1	26.2	25.8	15.4	4.7 <sup>†</sup>	27.9	52.0	60.2	56.4	39.7	51.6
Missouri	27.2	47.8	34.1	31.6	14.3	4.8	27.3	41.3	59.3	55.7	49.7	49.7
Mississippi	27.2	53.4	35.5	32.3	18.6	7.9	25.4	46.1	65.6	51.9	47.6	47.6



# Learn About the NSCH

Ask a Question Request a Dataset Partners REGISTER for Additional Features

Data Resource Center for Child & Adolescent Health  
A project of the Child and Adolescent Health Measurement Initiative

Interactive Data Query Learn About the DRC **Review the Surveys** Explore the Data See Your Data in Action Get Help

Browse Data By: Survey State or Geographic Region Topic or Initiative

What can we help you find?

Making data accessible to all. It's your data...your story!

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Learn More

Review the Surveys **Explore the Data** See Your Data

**National Survey of Children's Health**

National Survey of Children with Special Health Care Needs

Survey of Pathways to Diagnosis and Services

National Health Interview Survey-Child Component

National Health Interview Survey-CAM Supplement



# Resources for Using NSCH Data

**79.2% of children (0-5 years) were breastfed, with highest rates among Hispanic children.**

[Visit the Interactive Data Query](#)

[See the Data](#)

## Explore this Topic:

### National Survey of Children's Health

[Browse NSCH Data](#)

[NSCH FAQs](#)

[NSCH Guide to Topics & Questions](#)

[NSCH Resources for Data Analysis](#)

[National Survey of Children with Special Health Care Needs](#)

[Survey of Pathways to Diagnosis and Services](#)

[Home](#) > [Review the Surveys](#) > National Survey of Children's Health



## The National Survey of Children's Health

The National Survey of Children's Health (NSCH) was conducted three times between 2003 and 2012. It provides rich data on multiple, intersecting aspects of children's lives—including physical and mental health, access to quality health care, and the child's family, neighborhood, school, and social context. In 2003, 2007, and 2011/12, the NSCH was conducted using telephone methodology, and was led by the [National Center for Health Statistics at the Centers for Disease Control](#) under the direction and sponsorship of the federal [Maternal and Child Health Bureau \(MCHB\)](#).

The survey was recently conducted again by the Census Bureau in 2016. Among other changes, the 2016 National Survey of Children's Health will integrate two surveys: the NSCH and the [National Survey of Children with Special Health Care Needs \(NS-CSHCN\)](#). See the [MCHB website](#) for more information on the 2016 National Survey of Children's Health administration, methodology, survey content, and data availability.

[Visit the Interactive Data Query](#)

## Documents to assist with data analysis:

- NSCH FAQs
- Guide to Topics & Questions
- Sampling & Administration Process
- SPSS & SAS Codebooks
- Guide to Changes Across Survey Years
- Full-length Survey Questionnaires



# Wrap Up & Questions



# Additional Resources

## MCHB NSCH Website

2018 AMCHP Annual Cor x NPMNOM Data Checks x 2016 NSCH Briefing\_MCH x National Survey of Childr x

Secure | <https://drupal-hrsa-mchb-stg.cloud.hhs.gov/data/national-surveys>

**HRSA**  
Maternal & Child Health

Advanced Search

f yt e tw

Maternal & Child Health Topics | Programs & Initiatives | Funding Opportunities | **Data, Research & Epidemiology** | About MCHB

Home > Data, Research & Epidemiology > National Survey of Children's Health

### National Survey of Children's Health

The National Survey of Children's Health, funded and directed by HRSA MCHB, provides national and state level estimates of key measures of child health and well being. These data are essential to understanding the health status and health services needs of children across the nation and in your state and community.

**DATA USERS**  
Want to use data from the Survey? Find answers to FAQs

**PARTICIPANTS**  
Were you asked to take part in the Survey? Find answers to FAQs



**Related Sites/Resources:**

- [Census Bureau](#)
- [Data Resource Center](#)
- [Title V](#)
- [Healthy People](#)

*Date Last Reviewed: September 2017*

### Contact Us

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### What's New

- [Access the Data](#)

### Survey

- Surveys, Datasets, and related documents
- Publications/Supporting documents

### Previous Surveys

National Survey of Children's Health (NSCH)

- [2003, 2007, 2011/12](#)

National Survey of Children with Special Health Care Needs (NS-CSHCN)



# Additional Resources

- **Data Collection Instruments:**

- <http://mchb.hrsa.gov/data/national-surveys>

- **Data Release:**

- Public release September 5, 2017  
– National and State Levels

- **Data Availability:**

- Data Resource Center:  
[www.childhealthdata.org](http://www.childhealthdata.org)
- US Census Bureau:  
[www.census.gov/programs-surveys/nsch.html/](http://www.census.gov/programs-surveys/nsch.html/)

- **Reference Materials:**

- [FAQs](#)
- [Guide to Topics and Questions](#)
- [Changes to Title V NPMs and NOMs](#)
- [Visual description of sampling plan](#)
- Design and Operations Report
- [Variable lists](#)
- [Frequency counts](#)
- Codebook of variables
- [Geography variables 1-pager](#)
- [Insurance variables 1-pager](#)
- Programming code for SPSS, SAS, and STATA
- MCHJ manuscript



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Johns Hopkins Bloomberg School of Public Health

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# Questions?



# Question & Answer Period

- **To ask a question **on the Web**:**
  - Enter your question in the field at the bottom of the “QUESTIONS” box at the bottom of your screen and hit enter. Your question will be sent directly to the moderator.

# Additional Questions

- If you have any additional questions, you can email them to:

**[dataspeak@altarum.org](mailto:dataspeak@altarum.org)**

# Thank You

Thank you for participating. **Please click on this link to complete feedback on today's program.**

*(the link will open in a new window)*