National and State by State Obesity Rates, Youth Ages 10-17

Robert Wood Johnson Foundation

The Issue

Children who are overweight or who have obesity are at greater risk for serious health conditions, including high blood pressure, type 2 diabetes, heart disease, and asthma.[1] Obesity disproportionately affects different racial and ethnic groups as well, with rates significantly higher among black and Hispanic youth than among white and Asian youth.[2] Each year, the United States spends $14 billion on childhood obesity alone, and between $147 billion and $210 billion on adult obesity.[3,4,5]

Research also shows that if children have obesity at an early age, they are more likely to later in life. One study found that five-year-old's who were overweight were four times as likely as healthy weight children to become obese by the time they were 14.[6] Adolescents who are overweight are more likely to have obesity as adults.[7] Helping children maintain a healthy weight from an early age is essential to preventing a wide range of health problems and saving billions in health care costs.

This brief includes new national and state-by-state obesity rates among 10- to 17-year-olds from the 2016 and 2017 National Survey of Children's Health (NSCH), which uses parent reports of a child's height and weight to calculate body mass index.[8] See Figure 1 for national data and Figure 2 for state-by-state data.

About the National Survey of Children's Health and Obesity

The National Survey of Children's Health (NSCH) collects information on the health of children in the United States who are 0-17 years old. Parents or caregivers are asked to report their child's height and weight, which can be used to calculate body-mass index (BMI) for children 10-17 years. BMI-for-age percentiles are then used to identify children who are obese (i.e., BMI at or above the 95th percentile).

An advantage of the NSCH is that it supports both national and state-by-state estimates, so obesity rates between states can be compared. A limitation is that the survey collects parents' report of their child's height and weight, not direct measures.

Prior to 2016, the NSCH was significantly redesigned. Due to changes in the survey's mode of data collection and sampling frame it is not possible to directly compare results from the 2016 or 2017 NSCH to earlier iterations. Starting in 2016, the NSCH is being conducted as an annual survey and will continue to collect new data each year going forward, so trends over time can be evaluated, with 2016 data serving as a new baseline.

The Health Resources and Services Administration's Maternal and Child Health Bureau (HRSA MCHB) funds and directs the NSCH and develops survey content in collaboration with a national technical expert panel and the U.S. Census Bureau, which then conducts the survey on behalf of HRSA MCHB. The Robert Wood Johnson Foundation worked with HRSA MCHB to disseminate the latest obesity data.

Key Findings

- The national obesity rate for youth ages 10-17 in 2016-17 was 15.8 percent, compared to 16.1 percent in 2016 alone. The difference is not statistically significant.
- Racial and ethnic disparities persist. Black youth had the highest rate, at 22.5 percent, followed by Hispanic youth at 20.6 percent, white youth at 12.5 percent, and Asian youth at 6.4 percent.
- Mississippi has the highest youth obesity rate, 26.1 percent, and Utah has the lowest, 8.7 percent.
- Mississippi is the only state whose rate is significantly higher than the national rate. Eight states—Colorado, Connecticut, Minnesota, New Hampshire, Oregon, Utah, Washington, Wyoming—had rates significantly lower than the national one.
- North Dakota's youth obesity rate declined significantly between 2016 and the combined 2016-17 data. It was the only state to see a statistically significant difference.

Recommendations

Scientists predict that more than half of today's children will be obese by age 35 if current trends continue.[9] In order to alter this alarming trajectory, there must be continued commitment to obesity-prevention policies and programs from federal, state, and local policymakers, as well as business leaders and advocates.

The following recommendations for preventing obesity and promoting a healthy weight among children nationwide come from *State of Obesity: Better Policies for a Healthier Future, 2018,*[10] produced by Trust for America's Health and the Robert Wood Johnson Foundation.

- Congress and the Administration should maintain and strengthen essential nutrition supports for low-income children, families, and individuals through programs—like the Supplemental Nutrition Assistance Program (SNAP), the Child and Adult Care Food Program (CACFP), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)—and expand programs and pilots to make healthy foods more available and affordable through the program.
- The U.S. Department of Agriculture should maintain nutrition standards for school meals that were in effect prior to USDA's interim final rule from November 2017, as well as current nutrition standards for school snacks.

- The U.S. Department of Agriculture should continue to ensure that WIC provides mothers, infants, and young children with access to affordable, healthy food and breastfeeding support.
- The U.S. Department of Education should maintain the Office of Safe and Healthy Schools, as well as Title I and Title IV programs under the Every Students Succeeds Act (ESSA), through which schools can receive funding for physical education and physical activity initiatives.
- States should ensure that all students receive at least 60 minutes of physical education or activity during each school day.
- States should follow expert guidance and adopt and implement best practices—including by investment in Quality Rating and Improvement Systems—for nutrition, activity and screen time requirements and regulations covering child care and day care settings.
- States should support access for low-income families to targeted home visiting and community-based programs.
- States and localities should ensure all restaurant meals marketed to children meet nutrition standards, and remove sugary drinks from all restaurant children's meals.
- Food and beverage companies should eliminate children's exposure to advertising and marketing of unhealthy products
- States should refrain from adopting preemption policies that limit the ability of local communities to improve the health of their residents.

For the full set of policy recommendations endorsed by TFAH and RWJF, see: https://stateofobesity.org/policy-recommendations/

Additional Resources

- State of Obesity
- Voices for Healthy Kids
- Healthy Eating Research

Suggested citation:

Robert Wood Johnson Foundation, 2018. National and State by State Obesity Rates, Youth Ages 10-17.

FIGURE 1: NATIONAL YOUTH OBESITY RATE, INCLUDING DIFFERENCES BY SEX AND BY RACE AND ETHNICITY

	2016	2016-17
All Youth	16.1%	15.8%
Differences by Sex		
Male	19.1	18.0
Female	13.0	13.4
Differences by Race and Ethnicity		
White, non-Hispanic	13.0	12.5
Black, non-Hispanic	21.9	22.5
Hispanic	22.5	20.6
Asian, non-Hispanic	6.5	6.4
Multiple Race, non-Hispanic	12.2	16.3

Source:
Health Resources and Services Administration, Maternal and Child Health Bureau. National Survey of Children's Health.
Available at: https://mchb.hrsa.gov/data/national-surveys.

FIGURE 2: STATE-BY-STATE YOUTH OBESITY RATES

	2016	2016-17			
State	**Overall**	**Overall**	**White, non-Hispanic**	**Black, non-Hispanic**	**Hispanic**
Alaska	15.4%	12.6%	9.1%		16.2%*
Alabama	18.2	18.2	17.5	22.7%*	
Arkansas	19.1	15.6	18.3	10.2*	15.6*
Arizona	15.9	14.2	6.9		20.9
California	16.1	15.6	6.8		22.4
Colorado	9.0	10.7	7.1		13.0
Connecticut	13.4	11.9	13.0		14.0*
District of Columbia	16.3	16.1	1.8*	20.6	12.2*
Delaware	16.8	16.7	10.7	26.8*	21.4*
Florida	17.9	16.9	10.9	21.7*	24.4*
Georgia	18.6	18.4	13.5	23.4*	32.8*
Hawaii	11.0	13.9	8.4*		9.3*
Iowa	17.5	17.7	16.9		23.7*
Idaho	14.9	13.4	10.3		25.9*
Illinois	14.9	16.2	13.6	28.2*	20.2*
Indiana	18.5	17.5	16.4		28.8*
Kansas	11.6	13.0	11.9		22.1*
Kentucky	19.6	19.3	15.4	45.2*	32.8*
Louisiana	19.2	19.1	16.1	20.6	38.0*
Massachusetts	15.0	15.0	9.0		30.9*
Maryland	16.9	15.7	10.0	23.4*	27.8*
Maine	13.9	14.7	14.2		
Michigan	13.9	17.3	13.4	33.2*	25.8*
Minnesota	13.4	10.4	9.6		6.2*
Missouri	14.0	12.7	11.5	13.2*	14.6*

State rate is significantly lower than national rate

State rate is significantly higher than national rate

Difference between 2016 and 2016-17 is statistically significant

FIGURE 2 CONTINUED: STATE-BY-STATE YOUTH OBESITY RATES

	2016	2016-17			
State	Overall	Overall	White, non-Hispanic	Black, non-Hispanic	Hispanic
Mississippi	26.2%	26.1%	21.5%	31.5%	
Montana	12.4	12.3	11.2		
North Carolina	12.6	13.1	9.2	21.4*	11.8*
North Dakota	15.8	12.5	12.3		
Nebraska	16.7	15.5	14.3		19.9*
New Hampshire	8.5	9.8	8.4		
New Jersey	14.8	14.8	12.8	19.5*	17.9
New Mexico	13.1	15.1	5.6*		18.3
Nevada	14.5	14.7	6.0		23.0*
New York	14.8	15.3	13.7	20.4*	19.6*
Ohio	18.6	18.6	16.6	25.3*	
Oklahoma	18.1	18.7	19.8		17.9*
Oregon	10.2	11.4	10.5		14.6*
Pennsylvania	14.2	16.8	16.5	23.7*	10.2*
Rhode Island	19.2	16.8	11.9		33.7*
South Carolina	18.2	15.4	9.9	22.6	22.9*
South Dakota	13.0	13.6	11.7		
Tennessee	19.2	15.6	16.7	10.6*	23.5*
Texas	21.3	18.5	11.8	34.9*	20.3
Utah	9.5	8.7	6.6		14.5*
Virginia	14.1	13.2	12.4	13.3*	14.9*
Vermont	11.8	13.0	12.1		
Washington	8.7	10.1	9.1		10.2*
Wisconsin	14.6	14.3	12.4		17.4*
West Virginia	19.9	20.3	20.0		
Wyoming	12.9	10.6	8.5		21.0*

State rate is significantly lower than national rate

State rate is significantly higher than national rate

Difference between 2016 and 2016-17 is statistically significant

*Note:
Estimate has a 95% confidence interval width > 20 percentage points, > 1.2 times the estimate, or that is inestimable and should be interpreted with caution. If a cell is blank, that means the rate estimate for that group in that state has an unweighted denominator < 30 and is not reportable.

Source:
Health Resources and Services Administration, Maternal and Child Health Bureau. National Survey of Children's Health.
Available at: https://mchb.hrsa.gov/data/national-surveys.

Endnotes

1 Centers for Disease Control and Prevention. "Childhood Obesity Causes & Consequences." Accessed October 8, 2018. www.cdc.gov/obesity/childhood/causes.html.

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9 Ward, Zachary, Long, Michael, Resch, Stephen, et al. 2017. "Simulation of Growth Trajectories of Childhood Obesity into Adulthood." New England Journal of Medicine. 377:2145-2153. DOI: 10.1056/NEJMoa1703860.

10 Trust for America's Health and Robert Wood Johnson Foundation. 2018. State of Obesity: Better Policies for a Healthier America, Accessed on October 8, 2018. https://stateofobesity.org/wp-content/uploads/2018/09/stateofobesity2018.pdf.