National Survey of Children's Health

Rural/Urban Differences in Children's Health, 2017-2018

Data Brief | October 2020

ABOUT THE NSCH

The National Survey of Children's Health (NSCH), funded and directed by the Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB), provides information on the health and well-being of children ages 0-17 years in the United States. The NSCH is the largest national and state-level survey on the health and health care needs of children, their families, and their communities.

RURAL/URBAN RESIDENCY

Areas of residency were classified according to the 2010 Rural-Urban Commuting Areas (RUCAs) based on definitions developed by HRSA's Federal Office of Rural Health Policy in conjunction with the United States Department of Agriculture (https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/documentation/). Census tracts are the building blocks for RUCA codes on a scale representing urbanization, population density, and daily commuting. The 10 major RUCA codes were grouped into three categories. **Urban-focused areas** include metropolitan and surrounding areas from which commuters flow to an urban core; **large rural areas** include large towns (micropolitan areas) with populations of 10,000-49,999 and their surrounding areas; and **small or isolated rural areas** include small towns with populations of 2,500-9,999 and their surrounding areas.

2018 NSCH DATA

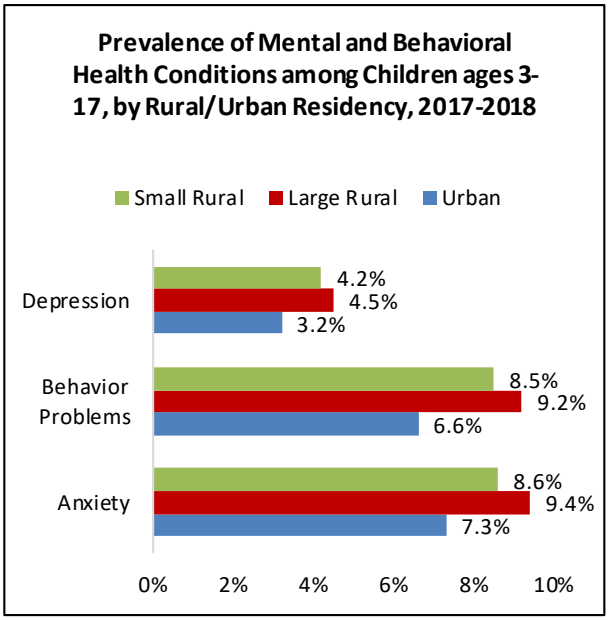
To access the 2018 data and supporting materials, please visit **HRSA MCHB** (https://mchb.hrsa.gov/data/national-surveys) or the **U.S. Census Bureau** (https://www.census.gov/nsch).

The NSCH allows child health conditions to be viewed in the context of rural/urban residency. Rural environments may be less stressful,[1] with less air pollution,[2] and more open spaces for healthful physical exploration.[3] Yet, some large or small rural areas are characterized by geographic isolation with fewer job opportunities, lower socioeconomic status, and limited access to healthcare specialists.[4,5] These factors can lead to health disparities that are best addressed in the early stages of child development to avoid chronic conditions and lifelong health problems.

2017-2018 RURAL/URBAN DATA SNAPSHOT

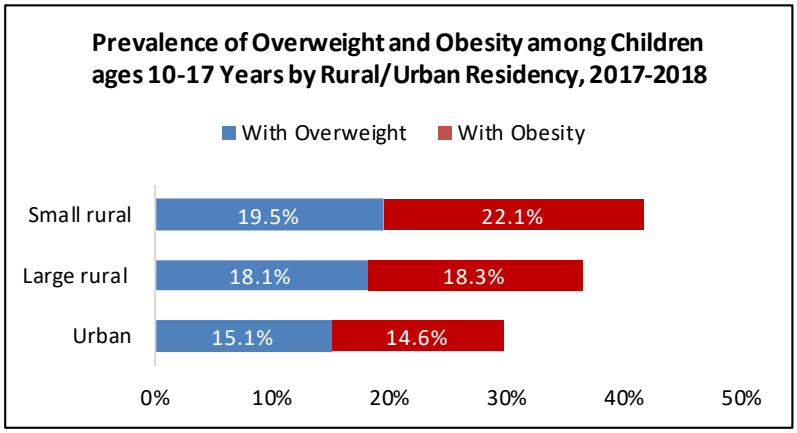
Mental and Behavioral Health Conditions

- Mental and behavioral health conditions can begin in childhood and affect lifelong health and well-being. In 2017-2018, depression, anxiety, and behavioral conditions were more prevalent among rural children ages 3-17 compared to urban children.
- Among children with mental and behavioral health conditions, there were no differences in the receipt of mental health treatment by residency (urban=50.6%, large rural=47.3%, small rural=50.9%).



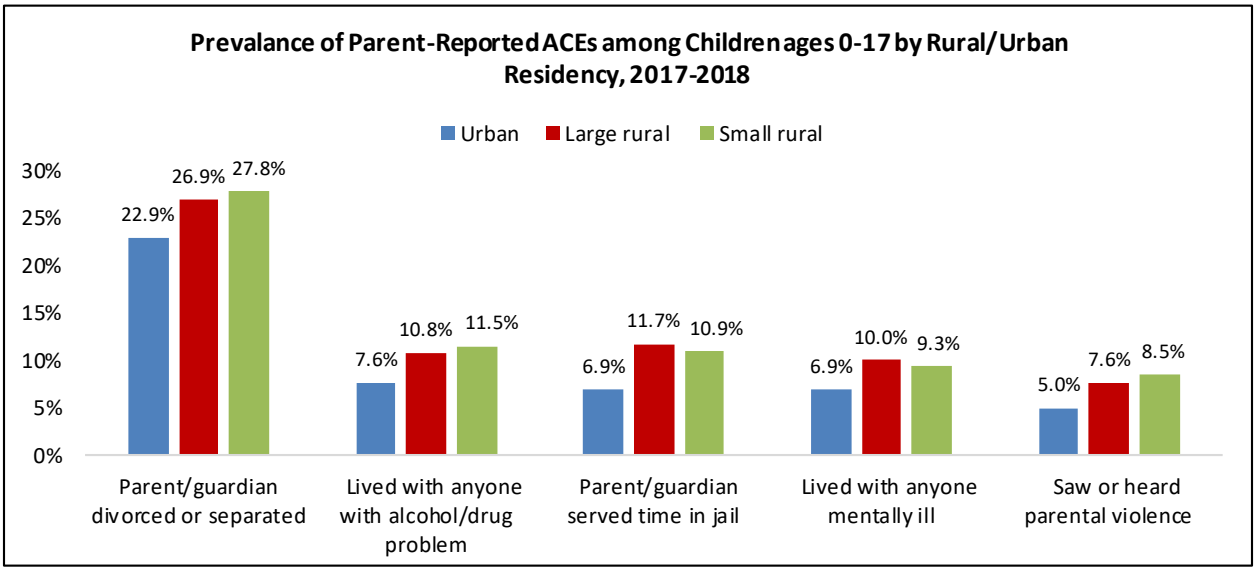
Weight Status and Physical Activity

- Children ages 10-17 who lived in small rural areas were more likely to be affected by overweight (19.5%) and obesity (22.1%), relative to children in urban areas (15.1% and 14.6%, respectively). Children in large rural areas were similar to small rural children in overweight (18.1%), but different in obesity (18.3%).
- In contrast, children ages 10-17 in small rural areas were more likely to meet the recommended 60 minutes of daily physical activity (25.8%) compared to urban children (18.9%). Daily physical activity was similar for children in large rural (19%) and urban areas.



Adverse Childhood Experiences

- Adverse childhood experiences (ACEs) are defined as stressful or traumatic events that occur during childhood and are strongly related to a range of health problems throughout a person's lifetime. NSCH collects data on eight ACEs.
- In 2017-2018, five out of eight ACEs were more prevalent among children in large and small rural areas compared to children in urban areas. The most prevalent ACE on average was "Parent/guardian divorced or separated" (urban=22.9%, large rural=26.9%, small rural=27.8%), followed by "Lived with anyone with alcohol/drug problem" (urban=7.6%, large rural=10.8%, small rural=11.5%) and "parent/guardian served time in jail" (urban=6.9%, large rural=11.7%, small rural=10.9%).
- Three ACEs are not shown in the graph below. Children in both large and small rural areas were similar to urban children in having a parent/guardian that died and in having been a victim of or witness to neighborhood violence. Children in large and small rural areas were less likely to experience being treated/judged unfairly due to race/ethnicity compared to urban children.



Health Care

- Having a usual source of care or a particular place to go for health care leads to better health outcomes for children. Having a usual source of sick and preventive care was similar for children in urban (75.8%) and large rural areas (75.4%), while children in small rural areas were less likely (71.4%) than urban children to have a usual source of sick and preventive care.
- Receiving preventive dental care was less common in small rural areas (74.0%) compared to urban areas (80.2%) while preventive dental care was equally likely in large rural areas (76.9%) as in urban areas.

Note: The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release. CBDRB-FY20-POP001-0107.

[1]Lederbogen F, et al. City living and urban upbringing affect neural social stress processing in humans. Nature. 2011; 474:499-501.
[2]Strosnider, H et al. Rural and urban differences in air quality, 2008-2012, and community drinking water quality, 2010-2015 –United States. MMWR Surveill Summ 2017;66(13).
[3]American Public Health Association (APHA), Improving Health and Wellness through Access to Nature. APHA Policy Statement no. 20137. 2013. https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database
[4]Anderson, TJ et al. A cross-sectional study on health differences between rural and non-rural U.S. counties using the County Health Rankings. BMC Health Services Research. 2015;15:441.
[5]Meir M, et al. The 2014 Update of the Rural-Urban Chartbook. Federal Office of Rural Health Policy;2014.

NSCH DATA COLLECTION

HRSA MCHB works with the U.S. Census Bureau to conduct the survey, oversee sampling, and produce a final data set for public use.

- ***How often is the NSCH conducted?*** The NSCH is conducted annually.
- ***How are the data collected?*** Survey participants complete either web-based or self-administered paper-and-pencil questionnaires.
- ***Who completes the survey?*** The NSCH is conducted as a household survey, and the respondent is a parent or guardian with knowledge of the sampled child.
- ***How many households participate in the NSCH?*** One child per household is selected to be the subject of the detailed age-specific questionnaire. In 2018, parents completed age-specific questionnaires for 30,530 children. These data can be combined with an additional 21,599 children from 2017, representing a combined total of 52,129 children in 2017-2018.