Mapping Broadband Health in America 2017

General Sample Maps

• Chicago

Broadband Gaps in America. While the nation continues to make progress in broadband deployment, millions of Americans still lack access to adequate broadband, especially in rural areas and on Tribal lands. This baseline map visualizes fixed broadband access at the county level and identifies connectivity gaps—the lighter the color, the lower the percentage of households with broadband access. Toggle the map between state and county levels to see regional patterns and potential challenges in accessing broadband-enabled health tools.



Broadband and Physician Access. Broadband-enabled services can connect consumers to healthcare services that may be unavailable in their communities. This is particularly important in areas where chronic disease prevalence is high and physician access is low. This map shows primary care physician to population ratios (areas in red have highest ratios) in counties with less than 30% broadband access.



Broadband Access and Obesity. According to the CDC, more than one-third of adults in the U.S. have obesity. Obesity-related conditions, such as heart disease, stroke, type 2 diabetes and certain types of cancer, are some of the leading causes of preventable death. This map identifies all the majority rural counties where fixed broadband access is 30% or less, i.e., where 7 out of every 10 people lack access to high speed Internet at home, and shows obesity prevalence in those counties on a sliding color scale of yellow (low) to red (high). Concentrated in parts of Oklahoma, Missouri, Arkansas, Louisiana and Mississippi, areas in red have high levels of obesity that are 6 to 10 points above the national average and low broadband access.



Broadband Health Double Burden Areas. This sample map shows the power of the mapping platform to identify clusters of need, potentially catalyze public-private partnerships and private sector collaborations, and focus policy efforts. The five states in purple—Indiana, Louisiana, Mississippi, Missouri, and Oklahoma—experience incidences of chronic disease above the national average. At the same time, fixed broadband access percentages in rural areas of these states are on average below 50%, and in some cases far below. (See also *Rural Broadband Access and Health* maps below showing "double burden" areas at the county level.)

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Rural Sample Maps

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Rural Broadband Access and Health. For rural America, broadband connectivity can serve as a gateway to a number of services, include health care. The first sample map shows *Rural Broadband Access Below 50%*. Rural counties are 10 times as likely as urban areas to be in low broadband access (below 50%), high diabetes areas (above 10%).

The ability to connect consumers to health care services through broadband is particularly important in areas where chronic disease prevalence is high and physician access is low. The second map, *Rural Broadband and Physician Shortages*, shows all U.S. counties that have 80 physicians or fewer, per 100,000 people. Purple shading identifies "double burden" counties where rural broadband access is less than 50%, and physician shortages are most acute (above the national average). Pink shading identifies counties with higher levels of broadband access, where connectivity can be part of the solution to the primary care physician shortages in those areas.



Broadband and Diabetes in Rural America. According to the CDC, over 29 million Americans have diabetes, a chronic disease gateway to other health conditions. This map shows broadband access levels in counties where the majority of the population is rural and diabetes is greater than the national average. (Yellow areas have comparatively lower broadband access rates than blue.) Many rural communities with the highest diabetes prevalence also have the lowest broadband access. The inset map shows broadband access levels in urban communities where diabetes is greater than the national average. These two maps help visualize the rural/urban broadband health gap.