# Changes in the Supply and Rural-Urban Distribution of Psychiatrists in the U.S., 1995-2019 

## KEY FINDINGS

- The number of psychiatrists per 100,000 population in rural U.S. counties (3.5) was about one fourth that of urban counties (13.0).
- The ratio of psychiatrists to population decreased by $5.4 \%$ in rural counties and $11.6 \%$ in urban counties from 1995 to 2019.
- The 2019 supply of psychiatrists per 100,000 population varied substantially across different types of rural places, from 5.6 , in micro counties nonadjacent to metro counties, to 1.5 , in small and remote adjacent to micro counties.
- Nearly three quarters (70.2\%) of rural counties did not have a psychiatrist in 2019 compared to $27.1 \%$ of urban counties.

This report describes the rural-urban distribution of psychiatrists with an M.D. or D.O. degree (unless otherwise specified) in U.S. counties from 1995 to 2019. Counties were categorized using the U.S. Department of Agriculture Urban Influence Codes (UIC). For detailed county designations, see page 4.

Figure 1. Psychiatrists per 100,000 Population in U.S. Rural and Urban Counties, 1995, 2005*, 2015 and 2019


Figure 2. Psychiatrists per 100,000 Population in U.S. Rural and Urban Counties, 1995-2019*


[^0]Table 1. Psychiatrists per 100,000 Population in U.S. Rural and Urban Counties, 1995-2019*

|  | 1995 | 2000 | 2001 | 2004 | 2005 | 2006 | 2010 | 2012 | 2014 | 2015 | 2017 | 2018 | 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Urban (metro) | 14.7 | 13.8 | 14.0 | 13.4 | 13.9 | 13.7 | 13.1 | 13.1 | 13.0 | 13.0 | 13.1 | 12.9 | 13.0 |
| All Rural (nonmetro) | 3.7 | 4.0 | 4.1 | 4.0 | 4.1 | 3.9 | 3.6 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | 3.5 |
| Adjacent to metro | 3.3 | 3.6 | 3.6 | 3.5 | 3.7 | 3.5 | 3.2 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 |
| Micro nonadjacent to metro | 6.5 | 6.8 | 7.0 | 7.0 | 7.0 | 6.8 | 6.3 | 5.9 | 5.8 | 5.8 | 5.7 | 5.7 | 5.6 |
| Small and remote adjacent to micro | 1.8 | 2.2 | 2.0 | 1.9 | 1.7 | 1.7 | 1.4 | 1.3 | 1.6 | 1.5 | 1.5 | 1.5 | 1.5 |
| Small and remote nonadjacent to micro or metro | 2.7 | 2.9 | 3.1 | 3.2 | 3.0 | 2.8 | 2.8 | 2.6 | 2.8 | 2.8 | 2.8 | 2.8 | 3.0 |

Data source: Area Health Resource Files (AHRF), 2013-2015, 2018-2021. *Ratios for 2000-2006 include MDs only.

Figure 3. Change in Psychiatrists per 100,000 Population in U.S. Rural Counties, 1995-2019


Data source: Area Health Resource Files (AHRF), 2013-2015, 2018-2021.

Table 2. Psychiatrists per 100,000 Population in U.S. Counties by Rural-Urban Location and Census Division†, 1995 and 2019

|  | Urban |  | All Rural |  | Rural |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Metro |  | Nonmetro |  | Adjacent to metro |  | Micropolitan nonadjacent to metro |  | Small and remote adjacent to micro |  | Small and remote nonadjacent to metro or micro |  |
|  | 1995 | 2019 | 1995 | 2019 | 1995 | 2019 | 1995 | 2019 | 1995 | 2019 | 1995 | 2019 |
| Total U.S. | 14.7 | 13.0 | 3.7 | 3.5 | 3.3 | 3.1 | 6.5 | 5.6 | 1.8 | 1.5 | 2.7 | 3.0 |
| New England | 25.4 | 24.4 | 14.3 | 14.6 | 12.0 | 10.3 | 26.6 | 36.0 | 7.3 | 22.2 | 10.6 | 7.4 |
| Middle Atlantic | 22.7 | 19.0 | 5.2 | 4.5 | 4.7 | 4.4 | 10.5 | 7.0 | 2.4 | 2.7 | ** | ** |
| East North Central | 11.7 | 11.2 | 3.1 | 2.9 | 2.8 | 2.4 | 5.2 | 6.6 | 2.2 | 1.0 | 3.3 | 3.9 |
| West North Central | 12.6 | 12.0 | 3.7 | 2.9 | 3.0 | 3.1 | 6.5 | 3.7 | 1.6 | 1.6 | 1.6 | 1.9 |
| South Atlantic | 13.5 | 11.4 | 3.6 | 3.2 | 3.6 | 3.2 | 6.3 | 3.7 | 2.5 | 1.0 | 1.7 | 6.9 |
| East South Central | 10.3 | 9.4 | 2.2 | 2.3 | 1.8 | 1.9 | 3.4 | 4.3 | 1.1 | 0.5 | 4.0 | 3.1 |
| West South Central | 10.1 | 9.1 | 2.1 | 2.1 | 1.9 | 2.3 | 4.1 | 2.8 | 0.3 | 0.7 | 1.1 | 0.0 |
| Mountain | 11.1 | 9.4 | 3.5 | 3.7 | 2.7 | 3.5 | 5.4 | 4.8 | 4.1 | 1.9 | 1.8 | 2.2 |
| Pacific | 14.0 | 13.8 | 5.4 | 4.3 | 4.1 | 3.7 | 8.4 | 6.2 | 3.2 | 0.0 | 4.3 | 2.0 |

Data source: Area Health Resource Files (AHRF), 2013-2015, 2018-2021. **There are no small and remote nonadjacent to metro or micro counties in the Middle Atlantic Census Division. ${ }^{\dagger}$ Census Divisions: New England—CT, ME, MA, NH, RI, VT; Middle Atlantic—NJ, NY, PA; East North Central—IL, IN, MI, OH, WI; West North Central— IA, KS, MN, MO, NE, ND, SD; South Atlantic-DE, DC, FL, GA, MD, NC, SC, VA, WV; East South Central-AL, KY, MS, TN; West South Central-AR, LA, OK, TX; Mountain-AZ, CO, ID, MT, NV, NM, UT, WY; Pacific-AK, CA, HI, OR, WA.

Figure 4. Percentage of U.S. Rural and Urban Counties Without a Psychiatrist, 1995-2019*


[^1]Table 3. Percentage of U.S. Rural and Urban Counties Without a Psychiatrist, 1995-2019*

|  | 1995 | 2000 | 2001 | 2004 | 2005 | 2006 | 2010 | 2012 | 2014 | 2015 | 2017 | 2018 | 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Urban (metro) | 32.0\% | 29.3\% | 28.5\% | 26.6\% | 26.6\% | 26.3\% | 26.6\% | 27.0\% | 29.0\% | 28.4\% | 28.4\% | 28.0\% | 27.1\% |
| All Rural (nonmetro) | 71.6\% | 68.1\% | 67.9\% | 68.3\% | 67.9\% | 67.9\% | 68.6\% | 70.2\% | 70.8\% | 70.9\% | 70.7\% | 70.5\% | 70.2\% |
| Adjacent to metro | 67.0\% | 63.2\% | 61.7\% | 63.8\% | 62.4\% | 62.8\% | 63.5\% | 65.7\% | 64.9\% | 65.0\% | 65.2\% | 64.3\% | 63.8\% |
| Micro nonadjacent to metro | 48.2\% | 42.9\% | 44.7\% | 43.6\% | 43.3\% | 41.5\% | 43.6\% | 46.1\% | 47.2\% | 48.3\% | 49.4\% | 50.6\% | 50.9\% |
| Small and remote adjacent to micro | 89.4\% | 85.9\% | 87.9\% | 87.2\% | 88.4\% | 88.7\% | 88.9\% | 90.2\% | 91.7\% | 91.7\% | 90.6\% | 90.9\% | 90.3\% |
| Small and remote nonadjacent to micro or metro | 85.8\% | 85.1\% | 84.8\% | 82.2\% | 82.5\% | 82.5\% | 82.8\% | 82.2\% | 85.9\% | 85.3\% | 83.7\% | 84.0\% | 83.7\% |

Data source: Area Health Resource Files (AHRF), 2013-2015, 2018-2021. *Percentages for 2000-2006 include counties without an MD only.

Table 4. Percentage of U.S. Rural Counties Without a Psychiatrist by Census Division ${ }^{\dagger}$, 1995-2019*

|  | 1995 | 2000 | 2001 | 2004 | 2005 | 2006 | 2010 | 2012 | 2014 | 2015 | 2017 | 2018 | 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total U.S. | 71.6\% | 68.1\% | 67.9\% | 68.3\% | 67.9\% | 67.9\% | 68.6\% | 70.2\% | 70.8\% | 70.9\% | 70.7\% | 70.5\% | 70.2\% |
| New England | 9.1\% | 9.1\% | 9.1\% | 6.1\% | 6.1\% | 3.0\% | 3.0\% | 6.1\% | 12.1\% | 9.1\% | 12.1\% | 9.1\% | 9.1\% |
| Middle Atlantic | 19.7\% | 23.0\% | 19.7\% | 24.6\% | 24.6\% | 23.0\% | 23.0\% | 27.9\% | 22.2\% | 22.2\% | 22.2\% | 24.1\% | 25.9\% |
| East North Central | 61.0\% | 56.1\% | 55.7\% | 57.6\% | 56.1\% | 55.7\% | 60.2\% | 63.3\% | 63.5\% | 62.7\% | 65.0\% | 64.3\% | 63.9\% |
| West North Central | 82.4\% | 80.8\% | 80.8\% | 81.6\% | 82.6\% | 81.6\% | 79.4\% | 80.8\% | 80.6\% | 80.6\% | 80.0\% | 80.8\% | 81.0\% |
| South Atlantic | 66.4\% | 61.0\% | 58.0\% | 57.6\% | 56.9\% | 60.7\% | 61.4\% | 63.4\% | 65.2\% | 64.4\% | 63.3\% | 63.0\% | 62.2\% |
| East South Central | 77.6\% | 72.8\% | 74.8\% | 74.0\% | 72.0\% | 70.7\% | 70.3\% | 72.0\% | 73.0\% | 73.0\% | 72.6\% | 71.8\% | 70.5\% |
| West South Central | 82.8\% | 78.5\% | 79.1\% | 78.8\% | 78.5\% | 76.7\% | 82.2\% | 83.1\% | 81.8\% | 82.8\% | 82.2\% | 80.3\% | 79.6\% |
| Mountain | 75.3\% | 71.7\% | 72.6\% | 72.6\% | 72.1\% | 73.5\% | 70.3\% | 71.2\% | 73.1\% | 74.1\% | 73.6\% | 74.1\% | 74.1\% |
| Pacific | 51.6\% | 49.5\% | 48.4\% | 49.5\% | 48.4\% | 51.6\% | 53.8\% | 52.7\% | 56.7\% | 58.9\% | 57.8\% | 60.0\% | 58.9\% |

Data source: Area Health Resource Files (AHRF), 2013-2015, 2018-2021. *Percentages for 2000-2006 include counties without an MD only. ${ }^{\dagger}$ Census Divisions: New England—CT, ME, MA, NH, RI, VT; Middle Atlantic—NJ, NY, PA; East North Central—IL, IN, MI, OH, WI; West North Central—IA, KS, MN, MO, NE, ND, SD; South Atlantic-DE, DC, FL, GA, MD, NC, SC, VA, WV; East South Central-AL, KY, MS, TN; West South Central-AR, LA, OK, TX; Mountain-AZ, CO, ID, MT, NV, NM, UT, WY; Pacific—AK, CA, HI, OR, WA.

County Category Designations
Urban: Metropolitan, i.e., counties with an urban core with a population of at least 50,000 residents (UIC 1-2).
All rural: Nonmetropolitan, i.e., counties without an urban core population of at least 50,000 residents (UIC 3-12).
Adjacent to metro: Counties next to a metropolitan county whose largest town has up to 49,999 residents (UIC 3-7).
Micro nonadjacent to metro: Micropolitan counties not next to a metropolitan county whose largest town has 10,000-49,999 residents (UIC 8). Small and remote adjacent to micro: Counties next to a micropolitan county whose largest town has less than 10,000 residents (UIC 9-10).
Small and remote nonadjacent to metro or micro: Counties not next to a metropolitan or micropolitan county whose largest town has less than 10,000 residents (UIC 11-12).

Suggested Citation: Andrilla CHA, Woolcock SC, Garberson LA, Patterson DG. Changes in the Supply and Rural-Urban Distribution of Psychiatrists in the U.S., 1995-2019. Data Brief. WWAMI Rural Health Research Center, University of Washington; October 2022.

Funding: This study was supported by the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement \#U1CRH03712. The information, conclusions, and opinions expressed in this policy brief are those of the authors and no endorsement by FORHP, HRSA, or HHS is intended or should be inferred.


[^0]:    Data source: Area Health Resource Files (AHRF), 2013-2015, 2018-2021. *Ratios for 2000-2006 include MDs only.

[^1]:    Data source: Area Health Resource Files (AHRF), 2013-2015, 2018-2021. *Percentages for 2000-2006 include counties without an MD only.

