



WEST VIRGINIA TUBERCULOSIS PROFILE

ANNUAL REPORT 2019

**WEST VIRGINIA DEPARTMENT OF HEALTH AND HUMAN RESOURCES
BUREAU FOR PUBLIC HEALTH
DIVISION OF TUBERCULOSIS ELIMINATION**

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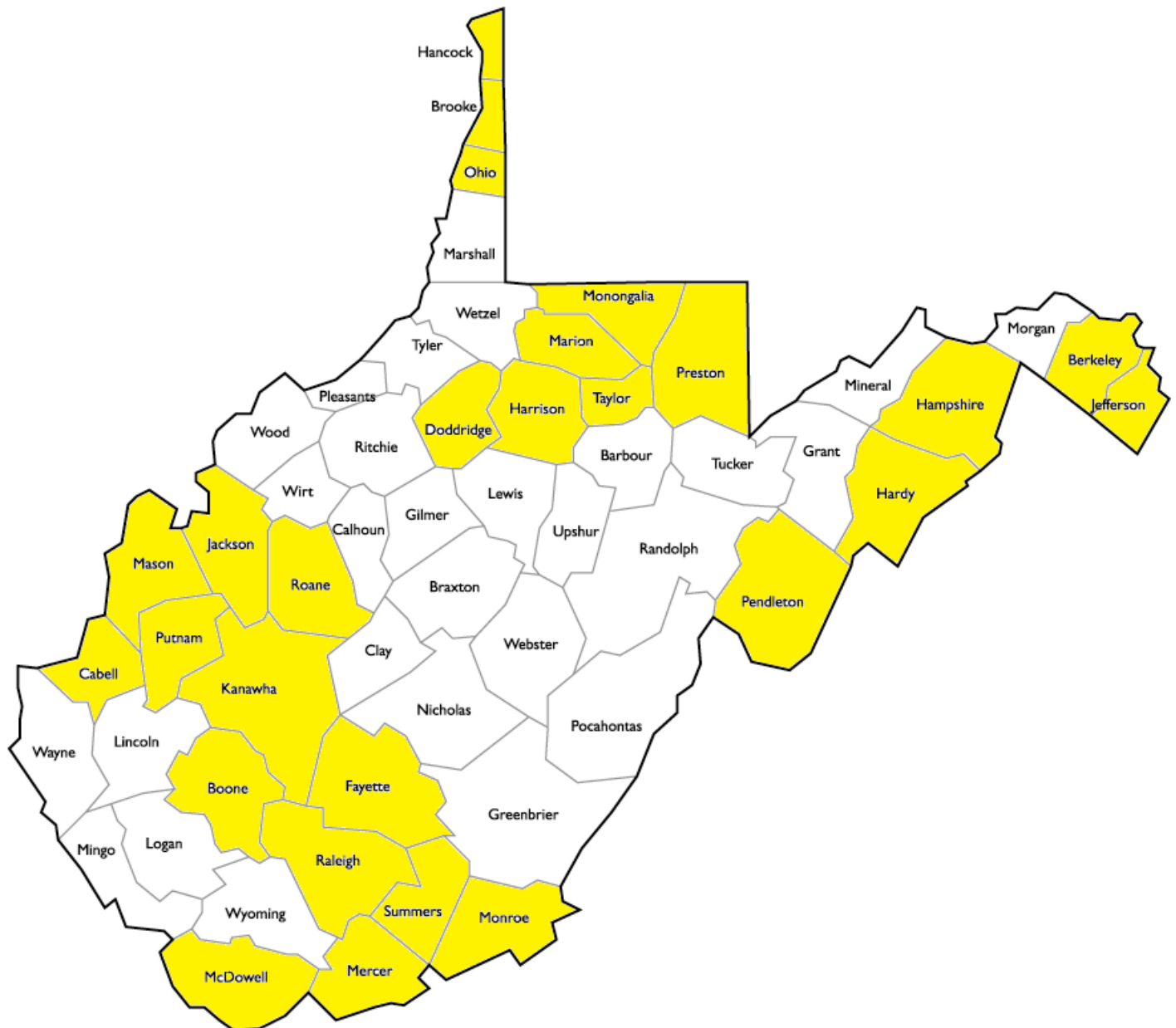
Staff

| | |
|--|----------------|
| Sandra Y. Elliott, M.D. Medical Director | (304) 558-3669 |
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2019 WV TB Advisory Committee

| | |
|-----------------------|--|
| Dr. Sandra Y. Elliott | Medical Director, West Virginia Department of Health and Human Resources, Bureau for Public Health, Division of Tuberculosis Elimination |
| Dr. Dominic Gaziano | Medical Consultant, West Virginia Department of Health and Human Resources, Bureau for Public Health, Division of Tuberculosis Elimination |
| Dr. Loretta Haddy | State Epidemiologist, West Virginia Department of Health and Human Resources, Bureau for Public Health |
| Suzanne Wilson | Director, West Virginia Department of Health and Human Resources, Bureau for Public Health, Division of Tuberculosis Elimination |
| Stephanie McLemore | Surveillance Nurse, West Virginia Department of Health and Human Resources, Bureau for Public Health, Division of Tuberculosis Elimination |
| Chaste Barclay | American Lung Association |
| Dr. Melanie Fisher | West Virginia University |
| Rebecca King | West Virginia Department of Education |
| Dr. Michael Kilkenny | Cabell-Huntington Health Department |
| Dr. Lee B. Smith | Monongalia County Health Department |
| Jordyn Reed | West Virginia Higher Education Policy Commission |
| Angela Gray | Berkeley County Health Department |
| Peggy Lambert Fink | West Virginia University Tech Student Health - Nurse Practitioner |

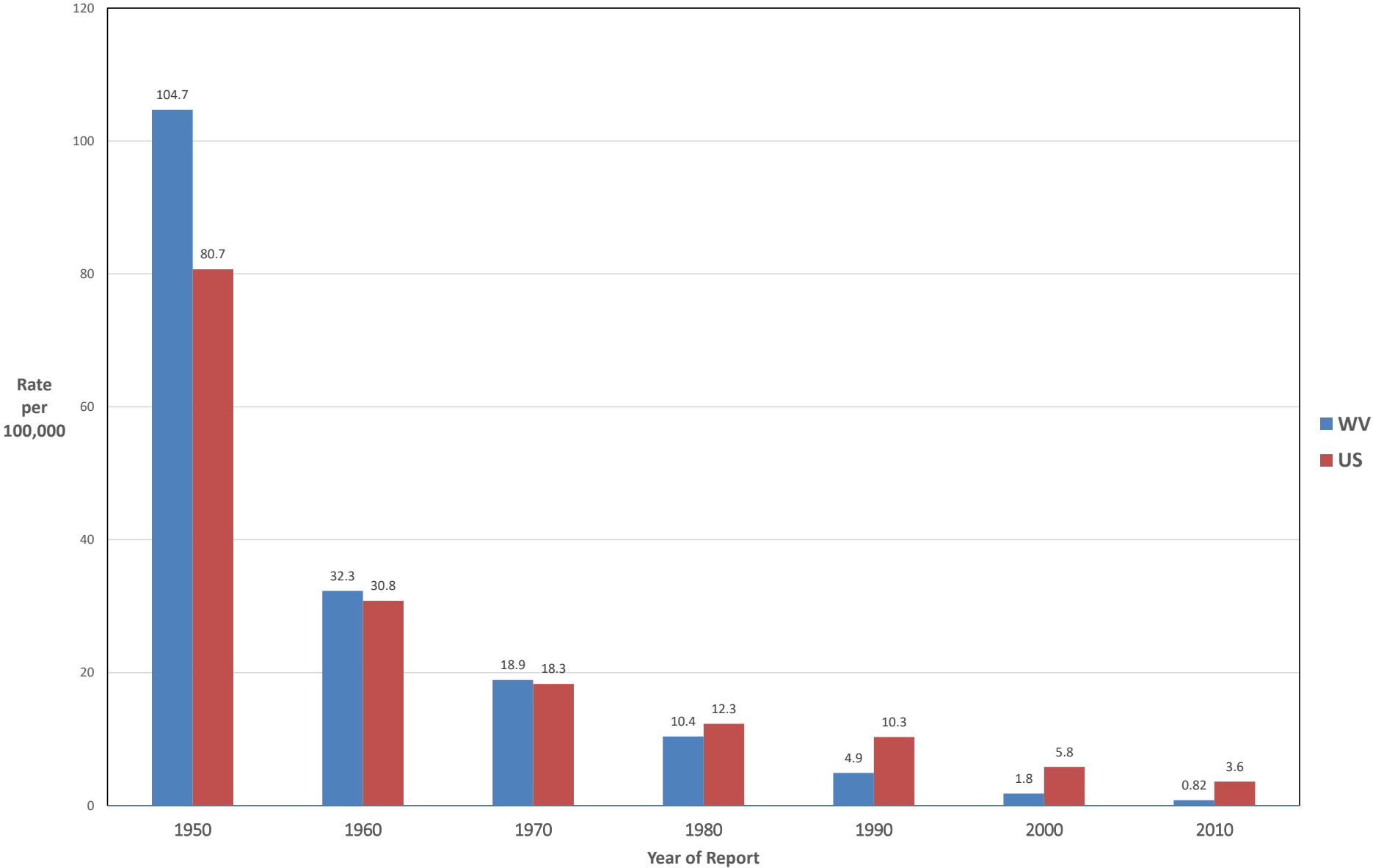
WV Active Tuberculosis Cases by County, 2015-2019



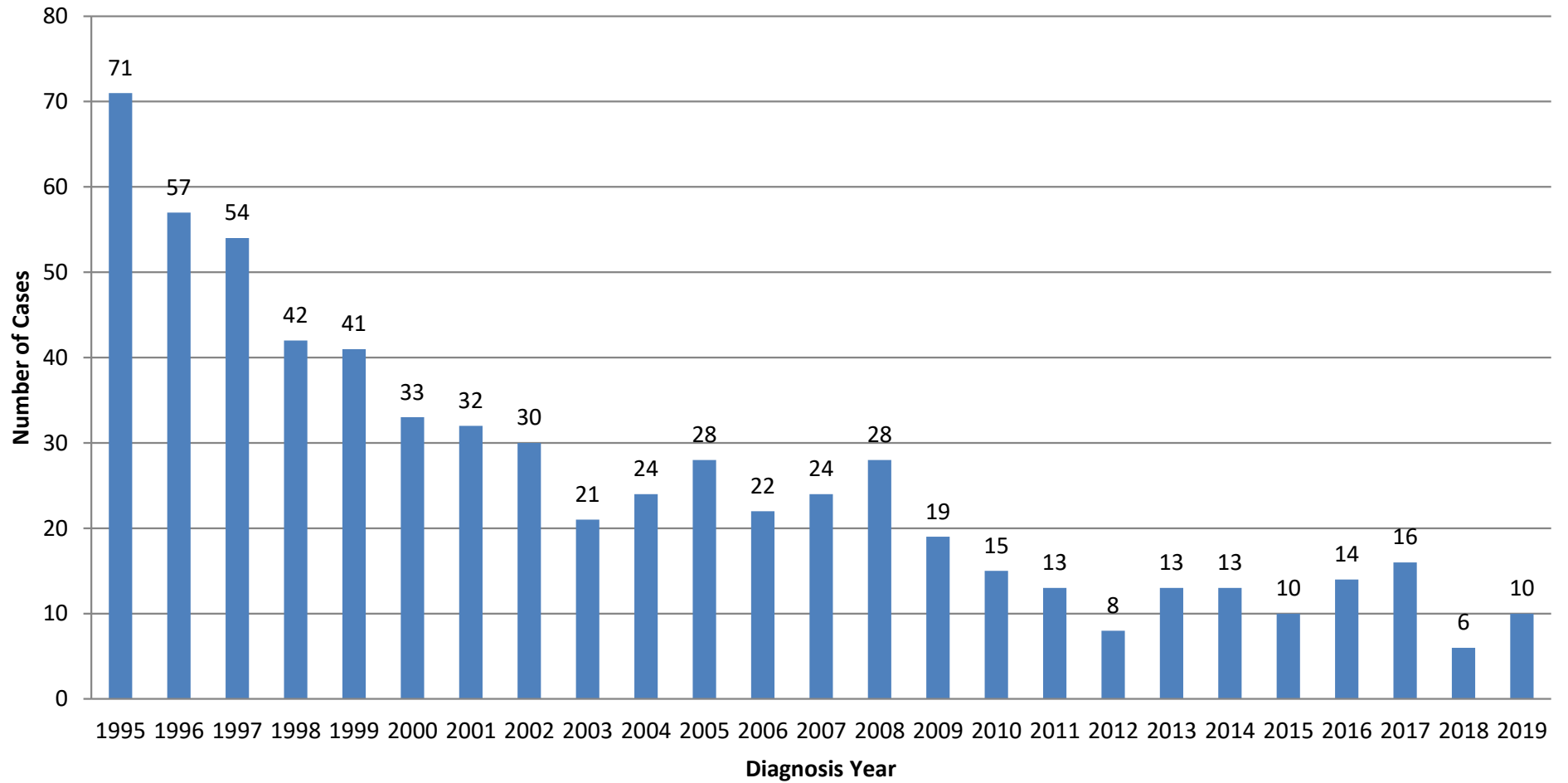
Each county may have one or multiple cases for the 2015-2019 period. This map is intended to show the geographic area of the cases only for the five-year period.

TB Incidence Rate by Year of Report

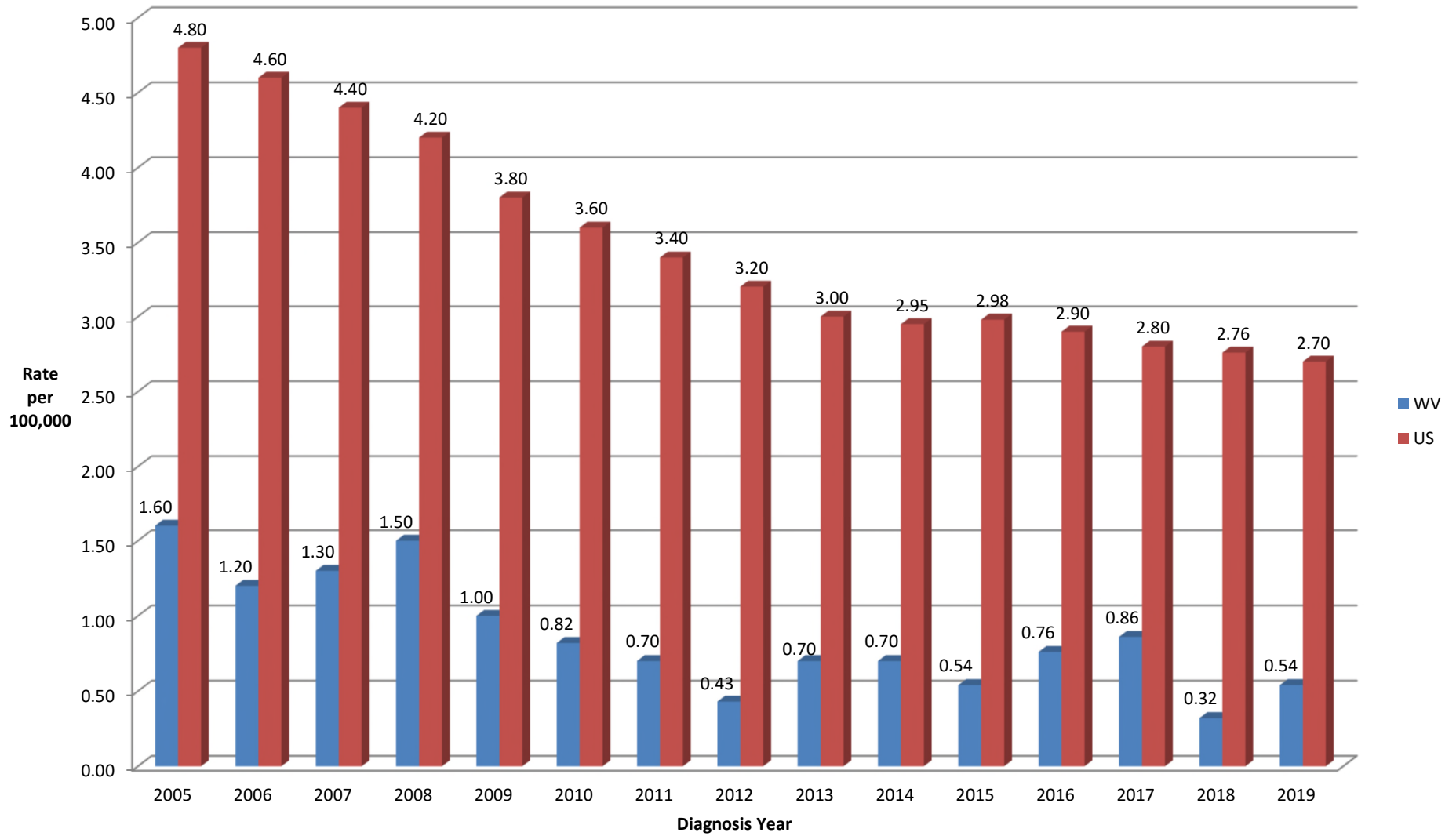
WV and US Decennial Rates, 1950-2010



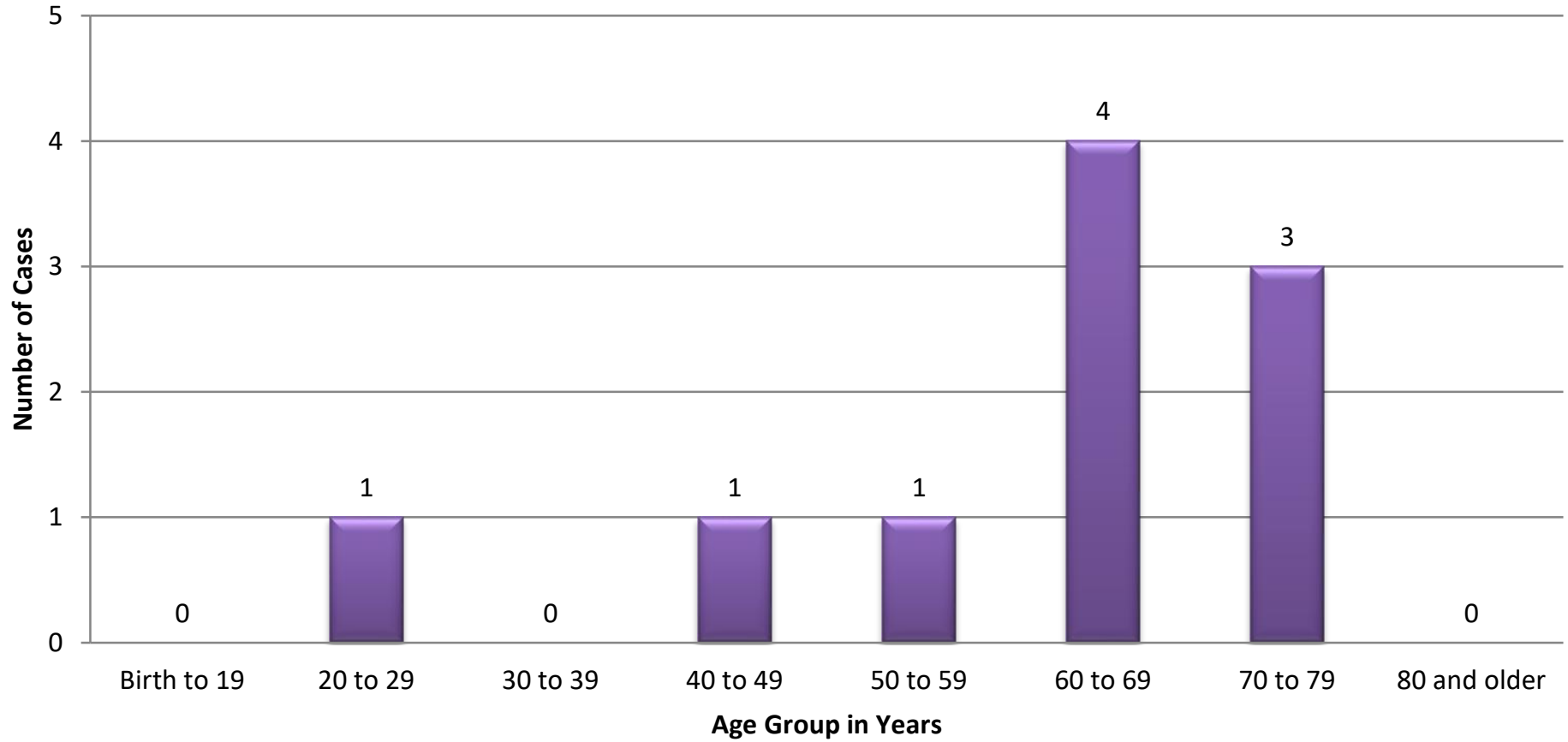
Newly Diagnosed Active TB Cases in WV by Year of Diagnosis 1995-2019



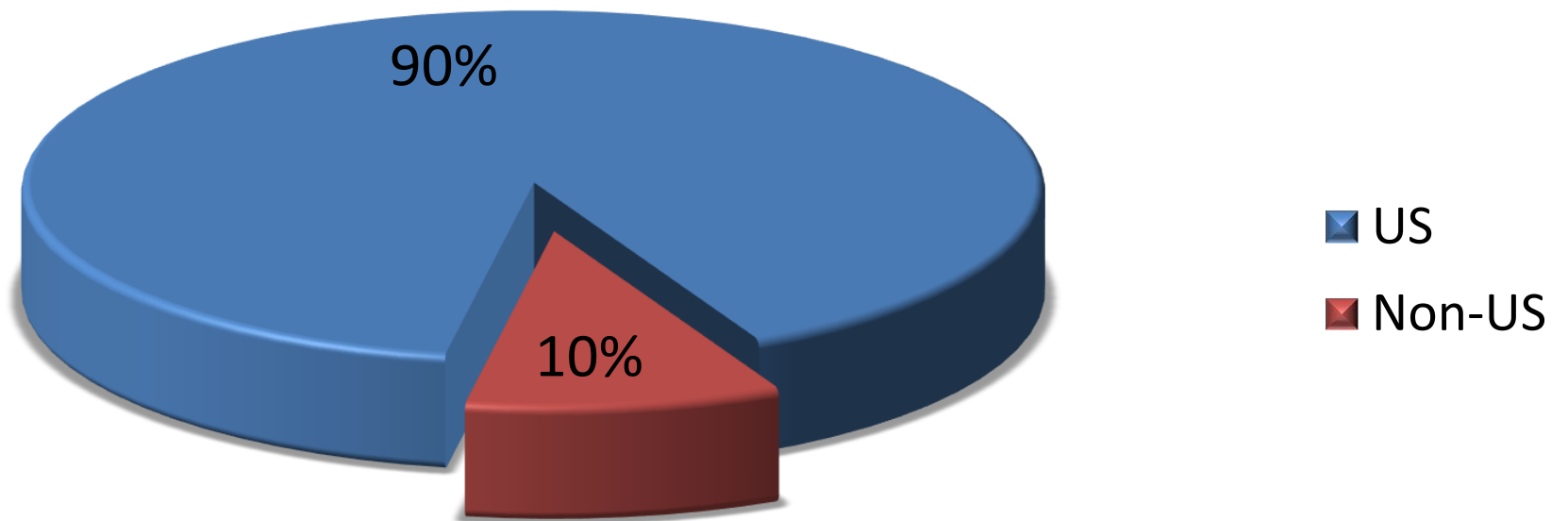
TB Incidence Rates by Diagnosis Year, WV and US 2005-2019



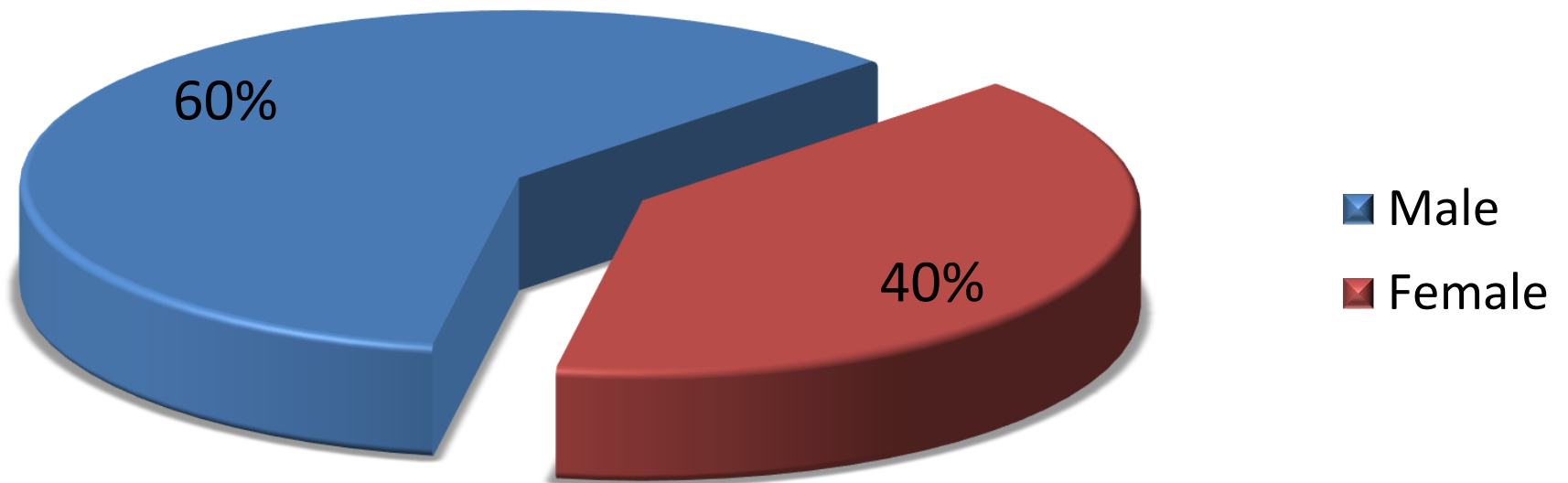
WV Cases of Active TB by Age Group - 2019



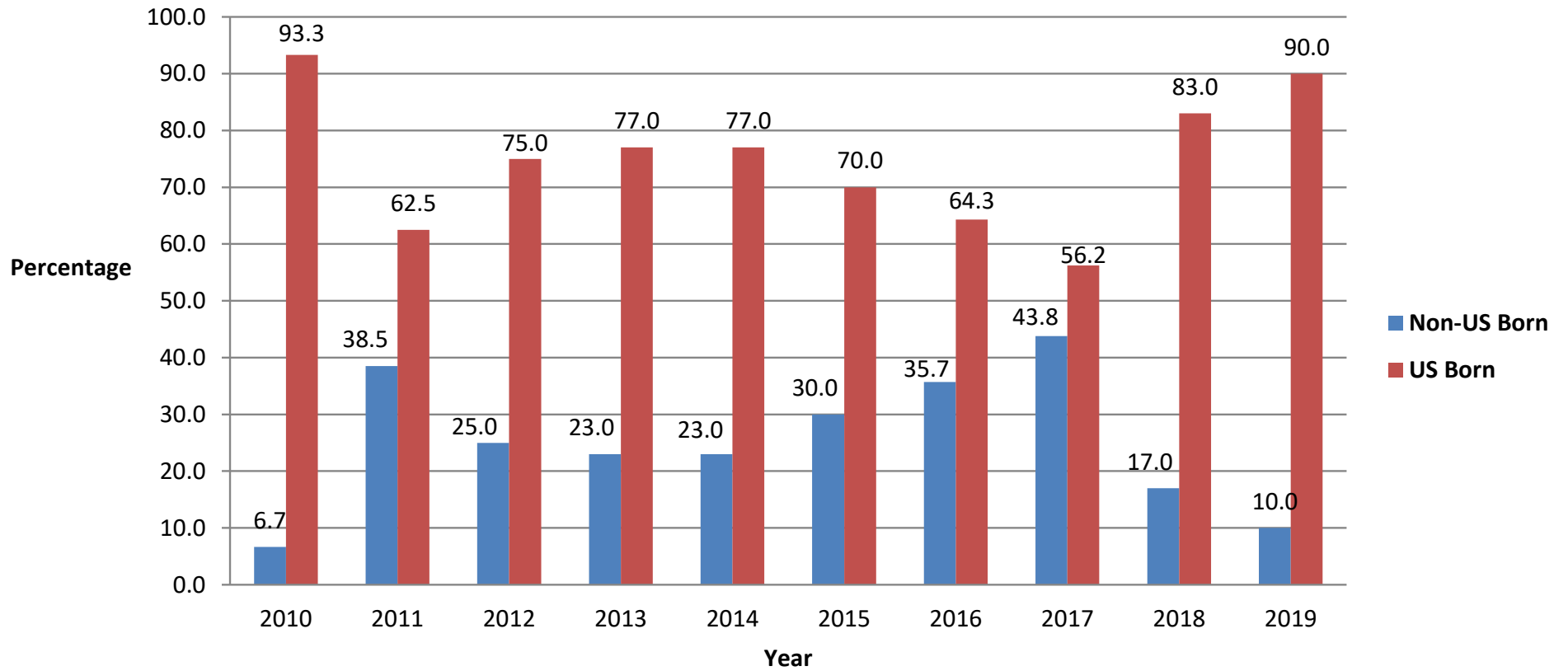
WV TB Active Cases by Country of Origin - 2019



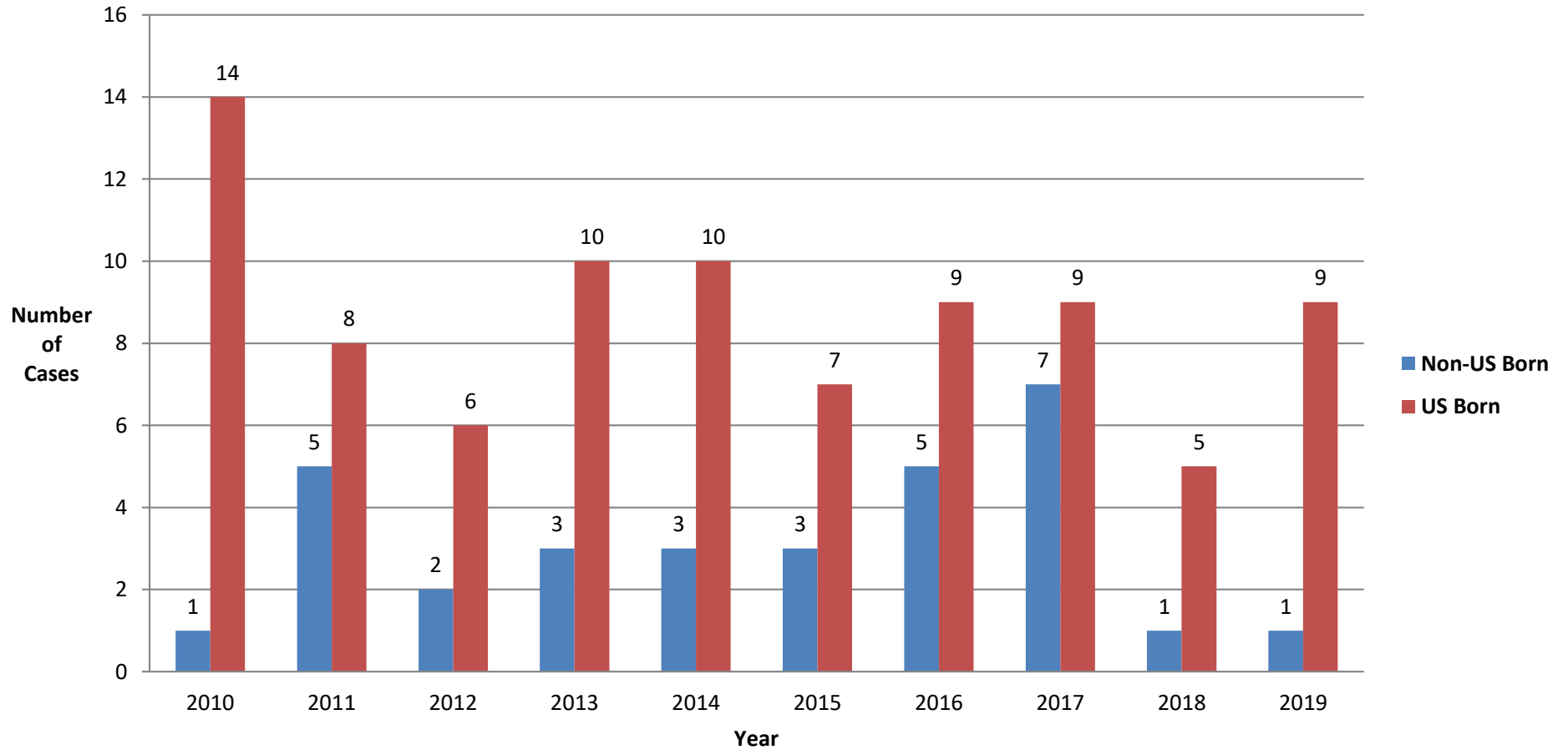
Gender of WV Active TB Cases - 2019



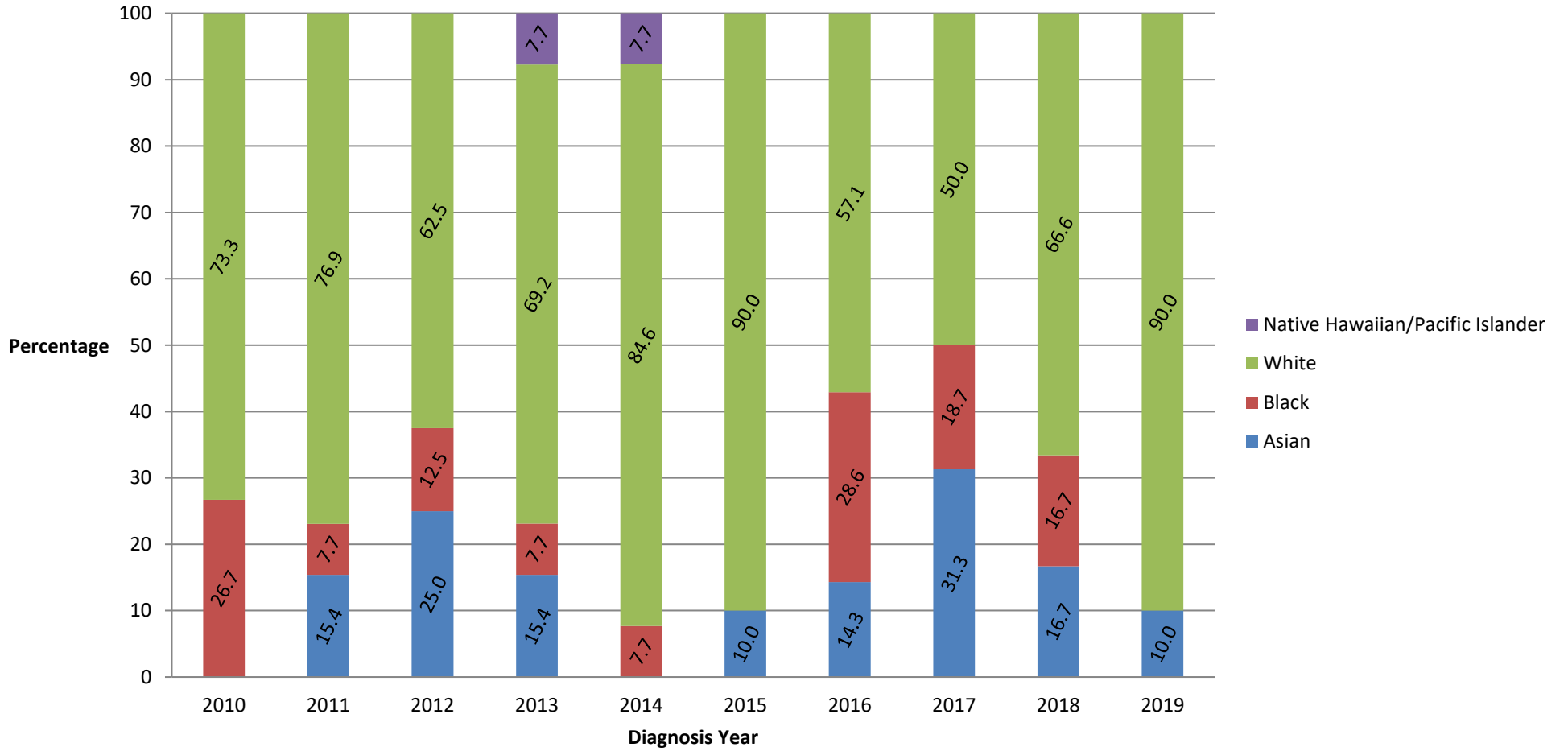
Percentage of WV Active TB Cases Non-US Born vs. US Born 2010-2019



Number of WV Active TB Cases Non-US born vs. US Born 2010-2019



Race of WV Active TB Cases by Diagnosis Year 2010-2019



**Reported Risk Factors and Occupations
WV TB Cases, 2019**

| <u>RISK FACTOR</u> | <u>Percentage of 2019 Cases</u> |
|--|--|
| Injected Drug Use | 0.00% |
| Non-Injected Drug Use | 0.00% |
| Excessive Alcohol Use | 20.00% |
| Homeless in Past Year | 0.00% |
| Resident of Long Term Care Facility at Diagnosis | 0.00% |
| Resident of Correctional Facility at Diagnosis | 10.00% |

OCCUPATION

| <u>CLASSIFICATION</u> | <u>NUMBER</u> | <u>PERCENT</u> |
|--|----------------------|-----------------------|
| Healthcare Worker | 1 | 10.00% |
| Correctional Employee | 0 | 0.00% |
| Migratory Agricultural Worker | 0 | 0.00% |
| Other Occupation | 1 | 10.00% |
| Retired | 5 | 50.00% |
| Not Seeking Employment (e.g., student, etc.) | 1 | 10.00% |
| Not Employed Within Past 12 Months | 2 | 20.00% |
| Unknown/Missing | 0 | 0.00% |
| TOTAL | 10 | 100.00% |

SURVEILLANCE CLINICAL DATA
 For the Month - Year Counted
 Beginning 1/2019 and Ending 12/2019

Reporting Area: West Virginia Department of Health and Human Resources,
 Bureau for Public Health - All Counties

STATUS AT DIAGNOSIS OF TB

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|-----------------------|--------------------------|----------------|
| Alive | 10 | 100.00% |
| Dead | 0 | 0.00% |
| Unknown/Missing | 0 | 0.00% |
| TOTAL | 10 | 100.00% |

PREVIOUS DIAGNOSIS OF TB

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|-----------------------|--------------------------|----------------|
| No | 10 | 100.00% |
| Yes | 0 | 0.00% |
| Unknown/Missing | 0 | 0.00% |
| TOTAL | 10 | 100.00% |

SITE OF DISEASE

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|-------------------------|--------------------------|----------------|
| Pulmonary | 8 | 80.00% |
| Extrapulmonary | 2 | 20.00% |
| Both | 0 | 0.00% |
| Site Not Stated/Missing | 0 | 0.00% |
| TOTAL | 10 | 100.00% |

SPUTUM SMEAR

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|-----------------------|--------------------------|----------------|
| Positive | 4 | 40.00% |
| Negative | 2 | 20.00% |
| Not Done | 4 | 40.00% |
| Unknown/Missing | 0 | 0.00% |
| TOTAL | 10 | 100.00% |

SURVEILLANCE CLINICAL DATA
 For the Month - Year Counted
 Beginning 1/2019 and Ending 12/2019
 (continued)

SPUTUM CULTURE

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|-----------------------|--------------------------|----------------|
| Positive | 3 | 30.00% |
| Negative | 2 | 20.00% |
| Not Done | 4 | 40.00% |
| Unknown/Missing | 1 | 10.00% |
| TOTAL | 10 | 100.00% |

MICROSCOPIC EXAM OF TISSUE AND OTHER BODY FLUIDS

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|-----------------------|--------------------------|----------------|
| Positive | 2 | 20.00% |
| Negative | 0 | 0.00% |
| Not Done | 8 | 80.00% |
| Unknown/Missing | 0 | 0.00% |
| TOTAL | 10 | 100.00% |

CULTURE OF TISSUE AND OTHER BODY FLUIDS

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|-----------------------|--------------------------|----------------|
| Positive | 2 | 20.00% |
| Negative | 0 | 0.00% |
| Not Done | 8 | 80.00% |
| Unknown/Missing | 0 | 0.00% |
| TOTAL | 10 | 100.00% |

CHEST X-RAY

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|--------------------------|--------------------------|----------------|
| Normal | 2 | 20.00% |
| Abnormal | 7 | 70.00% |
| Not Done/Unknown/Missing | 1 | 10.00% |
| TOTAL | 10 | 100.00% |

SURVEILLANCE CLINICAL DATA
 For the Month - Year Counted
 Beginning 1/2019 and Ending 12/2019
 (continued)

TUBERCULIN (MANTOUX) SKIN TEST AT DIAGNOSIS

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|-----------------------|--------------------------|----------------|
| Positive | 1 | 10.00% |
| Negative | 1 | 10.00% |
| Not Done | 8 | 80.00% |
| Unknown | 0 | 0.00% |
| Missing | 0 | 0.00% |
| TOTAL | 10 | 100.00% |

HIV STATUS

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|----------------------------|--------------------------|----------------|
| Negative | 10 | 100.00% |
| Positive | 0 | 0.00% |
| Indeterminate | 0 | 0.00% |
| Refused | 0 | 0.00% |
| Not Offered | 0 | 0.00% |
| Test Done, Results Unknown | 0 | 0.00% |
| Unknown | 0 | 0.00% |
| Missing | 0 | 0.00% |
| TOTAL | 10 | 100.00% |

INITIAL DRUG REGIMEN

| CLASSIFICATION | NUMBER OF RECORDS | PERCENT |
|-------------------------------------|--------------------------|----------------|
| No Drugs | 0 | 0.00% |
| One Drug | 0 | 0.00% |
| INH, RIF, PZA, and EMB or SM | 9 | 90.00% |
| INH, RIF, and PZA | 0 | 0.00% |
| INH and RIF | 0 | 0.00% |
| Any other Multiple Drug Combination | 1 | 10.00% |
| Unknown | 0 | 0.00% |
| TOTAL | 10 | 100.00% |

NEWLY REPORTED VERIFIED CASES OF TUBERCULOSIS IN WEST VIRGINIA, 2013-2019
INCIDENCE RATES ARE SHOWN PER 100,000 RESIDENTS

| COUNTY | POPULATION 2010 CENSUS | 2013 I-RATE | 2014 I-RATE | 2015 I-RATE | 2016 I-RATE | 2017 I-RATE | 2018 I-RATE | 2019 I-RATE |
|---------------|-----------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Barbour | 16,589 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Berkeley | 104,169 | 0.96 | 0.96 | 0.00 | 2.88 | 0.96 | 0.00 | 0.00 |
| Boone | 24,629 | 0.00 | 4.06 | 4.06 | 0.00 | 4.06 | 0.00 | 0.00 |
| Braxton | 14,523 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Brooke | 24,069 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.15 | 0.00 |
| Cabell | 96,319 | 3.11 | 2.08 | 0.00 | 6.23 | 1.04 | 0.00 | 1.04 |
| Calhoun | 7,627 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Clay | 9,386 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Doddridge | 8,202 | 12.19 | 24.38 | 0.00 | 12.19 | 0.00 | 0.00 | 0.00 |
| Fayette | 46,039 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.17 | 0.00 |
| Gilmer | 8,693 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grant | 11,937 | 8.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Greenbrier | 35,480 | 0.00 | 2.82 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hampshire | 23,964 | 0.00 | 0.00 | 0.00 | 0.00 | 4.17 | 0.00 | 0.00 |
| Hancock | 30,676 | 0.00 | 0.00 | 3.26 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hardy | 14,025 | 0.00 | 0.00 | 0.00 | 0.00 | 7.13 | 0.00 | 0.00 |
| Harrison | 69,099 | 1.45 | 0.00 | 1.45 | 0.00 | 0.00 | 1.45 | 0.00 |
| Jackson | 29,211 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.42 | 0.00 |
| Jefferson | 53,498 | 1.87 | 0.00 | 0.00 | 1.87 | 0.00 | 0.00 | 0.00 |
| Kanawha | 193,063 | 0.00 | 1.04 | 1.55 | 0.00 | 0.52 | 0.00 | 0.52 |
| Lewis | 16,372 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Lincoln | 21,270 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Logan | 36,743 | 0.00 | 2.72 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Marion | 56,418 | 1.77 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.77 |
| Marshall | 33,107 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mason | 27,324 | 0.00 | 3.66 | 0.00 | 0.00 | 0.00 | 3.66 | 0.00 |
| McDowell | 22,113 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.04 |
| Mercer | 62,264 | 1.61 | 1.61 | 0.00 | 0.00 | 0.00 | 1.61 | 0.00 |
| Mineral | 28,212 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Mingo | 26,839 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Monongalia | 96,189 | 2.08 | 0.00 | 1.04 | 1.04 | 2.08 | 0.00 | 2.08 |
| Monroe | 13,502 | 0.00 | 0.00 | 0.00 | 0.00 | 7.41 | 0.00 | 0.00 |
| Morgan | 17,541 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Nicholas | 26,233 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Ohio | 44,443 | 0.00 | 0.00 | 0.00 | 0.00 | 2.25 | 0.00 | 2.25 |
| Pendleton | 7,695 | 13.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 13.00 |
| Pleasants | 7,605 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Pocahontas | 8,719 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Preston | 33,520 | 0.00 | 0.00 | 0.00 | 0.00 | 2.98 | 0.00 | 0.00 |

NEWLY REPORTED VERIFIED CASES OF TUBERCULOSIS IN WEST VIRGINIA, 2013-2019 (continued)
INCIDENCE RATES ARE SHOWN PER 100,000 RESIDENTS

| COUNTY | POPULATION 2010 CENSUS | 2013 I-RATE | 2014 I-RATE | 2015 I-RATE | 2016 I-RATE | 2017 I-RATE | 2018 I-RATE | 2019 I-RATE |
|----------------------|-----------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Putnam | 55,486 | 0.00 | 0.00 | 3.60 | 0.00 | 5.41 | 0.00 | 0.00 |
| Raleigh | 78,859 | 0.00 | 0.00 | 0.00 | 1.27 | 1.27 | 0.00 | 1.27 |
| Randolph | 29,405 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Ritchie | 10,449 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Roane | 14,926 | 0.00 | 0.00 | 0.00 | 0.00 | 6.70 | 0.00 | 0.00 |
| Summers | 13,927 | 0.00 | 0.00 | 7.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| Taylor | 16,895 | 0.00 | 0.00 | 0.00 | 5.92 | 0.00 | 0.00 | 0.00 |
| Tucker | 7,141 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tyler | 9,208 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Upshur | 24,254 | 0.00 | 4.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Wayne | 42,481 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Webster | 7,154 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Wetzel | 16,583 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Wirt | 5,717 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Wood | 86,956 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Wyoming | 23,796 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL | 1,852,994 | | | | | | | |
| I-Rate for WV | | 0.70 | 0.70 | 0.54 | 0.76 | 0.86 | 0.32 | 0.54 |

Latent Tuberculosis Infection and LTBI Incidence/100,000 Population by County, 2015-2019

| COUNTY | POPULATION 2010 CENSUS | 2015 LTBI | 2015 Rate | 2016 LTBI | 2016 Rate | 2017 LTBI | 2017 Rate | 2018 LTBI | 2018 Rate | 2019 LTBI | 2019 Rate |
|---------------|-----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Barbour | 16,589 | 3 | 18.08 | 1 | 6.03 | 2 | 0.00 | 3 | 18.08 | 5 | 30.14 |
| Berkeley | 104,169 | 4 | 3.84 | 8 | 7.68 | 9 | 7.68 | 23 | 22.08 | 26 | 24.96 |
| Boone | 24,629 | 1 | 4.06 | 0 | 0.00 | 2 | 0.00 | 3 | 12.18 | 3 | 12.18 |
| Braxton | 14,523 | 0 | 0.00 | 0 | 0.00 | 2 | 0.00 | 2 | 13.77 | 0 | 0.00 |
| Brooke | 24,069 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 3 | 12.46 | 7 | 29.08 |
| Cabell | 96,319 | 18 | 18.69 | 55 | 57.10 | 32 | 70.60 | 21 | 21.80 | 54 | 56.06 |
| Calhoun | 7,627 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 2 | 26.22 |
| Clay | 9,386 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 10.65 |
| Doddridge | 8,202 | 6 | 73.15 | 2 | 24.38 | 0 | 0.00 | 2 | 24.38 | 1 | 12.19 |
| Fayette | 46,039 | 0 | 0.00 | 0 | 0.00 | 2 | 0.00 | 0 | 0.00 | 7 | 15.20 |
| Gilmer | 8,693 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 11.50 |
| Grant | 11,937 | 0 | 0.00 | 0 | 0.00 | 1 | 0.00 | 1 | 8.38 | 1 | 8.38 |
| Greenbrier | 35,480 | 3 | 8.46 | 3 | 8.46 | 3 | 2.82 | 6 | 16.91 | 4 | 11.27 |
| Hampshire | 23,964 | 2 | 8.35 | 0 | 0.00 | 2 | 0.00 | 2 | 8.35 | 0 | 0.00 |
| Hancock | 30,676 | 0 | 0.00 | 1 | 3.26 | 2 | 3.26 | 2 | 6.52 | 3 | 9.78 |
| Hardy | 14,025 | 51 | 363.64 | 10 | 71.30 | 24 | 114.08 | 9 | 64.17 | 4 | 28.52 |
| Harrison | 69,099 | 8 | 11.58 | 8 | 11.58 | 5 | 2.89 | 9 | 13.02 | 8 | 11.58 |
| Jackson | 29,211 | 0 | 0.00 | 0 | 0.00 | 1 | 0.00 | 1 | 3.42 | 3 | 10.27 |
| Jefferson | 53,498 | 4 | 7.48 | 2 | 3.74 | 3 | 20.56 | 5 | 9.35 | 11 | 20.56 |
| Kanawha | 193,063 | 26 | 13.47 | 10 | 5.18 | 24 | 8.29 | 33 | 17.09 | 43 | 22.27 |
| Lewis | 16,372 | 2 | 12.22 | 3 | 18.32 | 1 | 6.11 | 4 | 24.43 | 5 | 30.54 |
| Lincoln | 21,720 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 4.60 |
| Logan | 36,743 | 2 | 5.44 | 15 | 40.82 | 3 | 19.05 | 7 | 19.05 | 5 | 13.61 |
| Marion | 56,418 | 2 | 3.54 | 1 | 1.77 | 0 | 3.54 | 6 | 10.63 | 5 | 8.86 |
| Marshall | 33,107 | 1 | 3.02 | 1 | 3.02 | 0 | 0.00 | 1 | 3.02 | 6 | 18.12 |
| Mason | 27,324 | 2 | 7.32 | 0 | 0.00 | 0 | 0.00 | 2 | 7.32 | 3 | 10.98 |
| McDowell | 22,113 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 4.52 | 7 | 31.66 |
| Mercer | 62,264 | 9 | 14.45 | 1 | 1.61 | 0 | 0.00 | 11 | 17.67 | 8 | 12.85 |
| Mineral | 28,212 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 3 | 10.63 | 2 | 7.09 |
| Mingo | 26,839 | 1 | 3.73 | 0 | 0.00 | 1 | 3.73 | 2 | 7.45 | 1 | 3.73 |
| Monongalia | 96,189 | 15 | 15.59 | 9 | 9.36 | 33 | 21.83 | 41 | 42.62 | 22 | 22.87 |
| Monroe | 13,502 | 0 | 0.00 | 1 | 7.41 | 0 | 7.41 | 1 | 7.41 | 0 | 0.00 |
| Morgan | 17,541 | 0 | 0.00 | 0 | 0.00 | 1 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Nicholas | 26,233 | 1 | 3.81 | 0 | 0.00 | 1 | 0.00 | 4 | 15.25 | 1 | 3.81 |
| Ohio | 44,443 | 1 | 2.25 | 1 | 2.25 | 1 | 2.25 | 2 | 4.50 | 5 | 11.25 |
| Pendleton | 7,695 | 1 | 13.00 | 0 | 0.00 | 0 | 0.00 | 1 | 13.00 | 0 | 0.00 |
| Pleasants | 7,605 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 13.15 |
| Pocahontas | 8,719 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Preston | 33,520 | 1 | 2.98 | 0 | 0.00 | 0 | 0.00 | 3 | 8.95 | 3 | 8.95 |
| Putnam | 55,486 | 3 | 5.41 | 1 | 1.80 | 0 | 1.80 | 5 | 9.01 | 3 | 5.41 |
| Raleigh | 78,859 | 9 | 11.41 | 9 | 11.41 | 11 | 29.17 | 16 | 20.29 | 25 | 31.70 |
| Randolph | 29,405 | 1 | 3.40 | 0 | 0.00 | 1 | 10.20 | 2 | 6.80 | 1 | 3.40 |
| Ritchie | 10,449 | 0 | 0.00 | 0 | 0.00 | 2 | 0.00 | 1 | 9.57 | 1 | 9.57 |
| Roane | 14,926 | 1 | 6.70 | 0 | 0.00 | 1 | 0.00 | 0 | 0.00 | 1 | 6.70 |
| Summers | 13,927 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 2 | 14.36 | 1 | 7.18 |
| Taylor | 16,895 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 4 | 23.68 | 3 | 17.76 |
| Tucker | 7,141 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 14.00 | 0 | 0.00 |
| Upshur | 24,254 | 0 | 0.00 | 0 | 0.00 | 1 | 8.25 | 1 | 4.12 | 1 | 4.12 |
| Wayne | 42,481 | 2 | 4.71 | 0 | 0.00 | 0 | 0.00 | 2 | 4.71 | 2 | 4.71 |
| Webster | 7,154 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 1 | 13.98 | 0 | 0.00 |
| Wetzel-Tyler | 25,791 | 0 | 0.00 | 1 | 3.88 | 0 | 0.00 | 3 | 11.63 | 4 | 15.51 |
| Wirt | 5,717 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 |
| Wood | 86,956 | 2 | 2.30 | 1 | 1.15 | 1 | 3.45 | 8 | 9.20 | 8 | 9.20 |
| Wyoming | 23,796 | 0 | 0.00 | 2 | 8.40 | 3 | 0.00 | 1 | 4.20 | 1 | 4.20 |
| TOTAL | 1,852,994 | 182 | 9.82 | 146 | 7.88 | 175 | 9.44 | 261 | 14.09 | 310 | 16.73 |

**TUBERCULOSIS IN WEST VIRGINIA AND THE US
1979-2019**

| <u>YEAR</u> | <u># WV CASES</u> | <u>WV CASE RATE Per 100,000</u> | <u># US CASES</u> | <u>US CASE RATE Per 100,000</u> |
|-------------|-------------------|-------------------------------------|-------------------|-------------------------------------|
| 2019 | 10 | .54 | 8,920 | 2.7 |
| 2018 | 6 | .32 | 9,029 | 2.76 |
| 2017 | 16 | .86 | 9,093 | 2.8 |
| 2016 | 14 | .76 | 9,287 | 2.9 |
| 2015 | 10 | .54 | 9,563 | 2.98 |
| 2014 | 13 | .70 | 9,412 | 2.95 |
| 2013 | 13 | .70 | 9,588 | 3.0 |
| 2012 | 8 | .43 | 9,951 | 3.2 |
| 2011 | 13 | .70 | 10,521 | 3.4 |
| 2010 | 15 | .82 | 11,181 | 3.6 |
| 2009 | 19 | 1.0 | 11,540 | 3.8 |
| 2008 | 28 | 1.5 | 12,898 | 4.2 |
| 2007 | 24 | 1.3 | 13,293 | 4.4 |
| 2006 | 22 | 1.2 | 13,779 | 4.6 |
| 2005 | 28 | 1.6 | 14,093 | 4.8 |
| 2004 | 24 | 1.3 | 14,511 | 4.9 |
| 2003 | 21 | 1.2 | 14,874 | 5.1 |
| 2002 | 30 | 1.7 | 15,075 | 5.2 |
| 2001 | 32 | 1.8 | 15,989 | 5.6 |
| 2000 | 33 | 1.8 | 16,377 | 5.8 |
| 1999 | 41 | 2.3 | 17,531 | 6.4 |

**TUBERCULOSIS IN WEST VIRGINIA AND THE US
1979-2019
(Continued)**

| <u>YEAR</u> | <u># WV CASES</u> | <u>WV CASE RATE Per 100,000</u> | <u># US CASES</u> | <u>US CASE RATE Per 100,000</u> |
|-------------|-------------------|-------------------------------------|-------------------|-------------------------------------|
| 1998 | 42 | 2.3 | 18,361 | 6.8 |
| 1997 | 54 | 3.0 | 19,851 | 7.4 |
| 1996 | 57 | 3.2 | 21,337 | 8.0 |
| 1995 | 71 | 3.9 | 22,860 | 8.7 |
| 1994 | 80 | 4.4 | 24,361 | 9.4 |
| 1993 | 75 | 4.1 | 25,287 | 9.8 |
| 1992 | 92 | 5.1 | 26,673 | 10.5 |
| 1991 | 64 | 3.6 | 26,283 | 10.4 |
| 1990 | 87 | 4.9 | 25,701 | 10.3 |
| 1989 | 77 | 4.1 | 23,495 | 9.5 |
| 1988 | 68 | 3.6 | 22,436 | 9.2 |
| 1987 | 99 | 5.2 | 22,517 | 9.3 |
| 1986 | 124 | 6.5 | 22,768 | 9.5 |
| 1985 | 108 | 5.6 | 22,201 | 9.3 |
| 1984 | 133 | 6.8 | 22,255 | 9.4 |
| 1983 | 133 | 6.8 | 23,846 | 10.2 |
| 1982 | 162 | 8.3 | 25,520 | 11.0 |
| 1981 | 181 | 9.3 | 27,373 | 11.9 |
| 1980 | 203 | 10.4 | 27,749 | 12.2 |
| 1979 | 221 | 11.8 | 27,669 | 12.3 |

**TUBERCULOSIS DRUG RESISTANCE IN WV
1999 TO 2019**

| <u>YEAR</u> | <u>MONO</u> | <u>MDR</u> | <u>2 OTHER</u> |
|-------------|-------------|------------|----------------|
| 2019 | 0 | 0 | 0 |
| 2018 | 0 | 0 | 0 |
| 2017 | 2 | 0 | 0 |
| 2016 | 1 | 0 | 0 |
| 2015 | 1 | 0 | 0 |
| 2014 | 2 | 0 | 0 |
| 2013 | 4 | 0 | 0 |
| 2012 | 2 | 0 | 0 |
| 2011 | 1 | 0 | 0 |
| 2010 | 1 | 0 | 1 |
| 2009 | 3 | 0 | 0 |
| 2008 | 0 | 0 | 0 |
| 2007 | 1 | 0 | 1 |
| 2006 | 2 | 0 | 0 |
| 2005 | 3 | 0 | 0 |
| 2004 | 3 | 0 | 0 |
| 2003 | 0 | 0 | 1 |
| 2002 | 2 | 0 | 1 |
| 2001 | 5 | 0 | 0 |
| 2000 | 4 | 0 | 2 |
| 1999 | 2 | 0 | 2 |