





Tuberculosis Surveillance 2013-2017

**Rhode Island Department of Health
Division of Preparedness, Response, Infectious Disease,
and Emergency Medical Services
Center for HIV, Hepatitis, STDs, and TB Epidemiology**

About Tuberculosis



- Tuberculosis (TB) is caused by the *Mycobacterium tuberculosis* bacteria.
- TB bacteria are spread through the air and are transmitted by those with infectious active disease in the lungs or throat (pulmonary TB).
- Many people in Rhode Island (~15% of foreign born persons) have latent TB infection (LTBI). Those with LTBI have no symptoms and cannot spread TB bacteria.
- About 1% of people with LTBI will develop active TB disease in their lifetime; treatment reduces this risk.
- Symptoms of active pulmonary TB disease include cough, fever, night sweats, hemoptysis (coughing up blood), and weight loss.

Data Overview, Tuberculosis in Rhode Island, 2017



- In 2017, there were 13 cases of active TB disease:
 - 92% foreign born
 - 8% U.S. born
- The incidence rate was 1.2 cases of active disease per 100,000 population.
- Cases increased by 8.3% from 2016 to 2017.
- The highest rates of TB disease were seen in Providence County.

Reported Cases of Tuberculosis, Rhode Island, 2013-2017

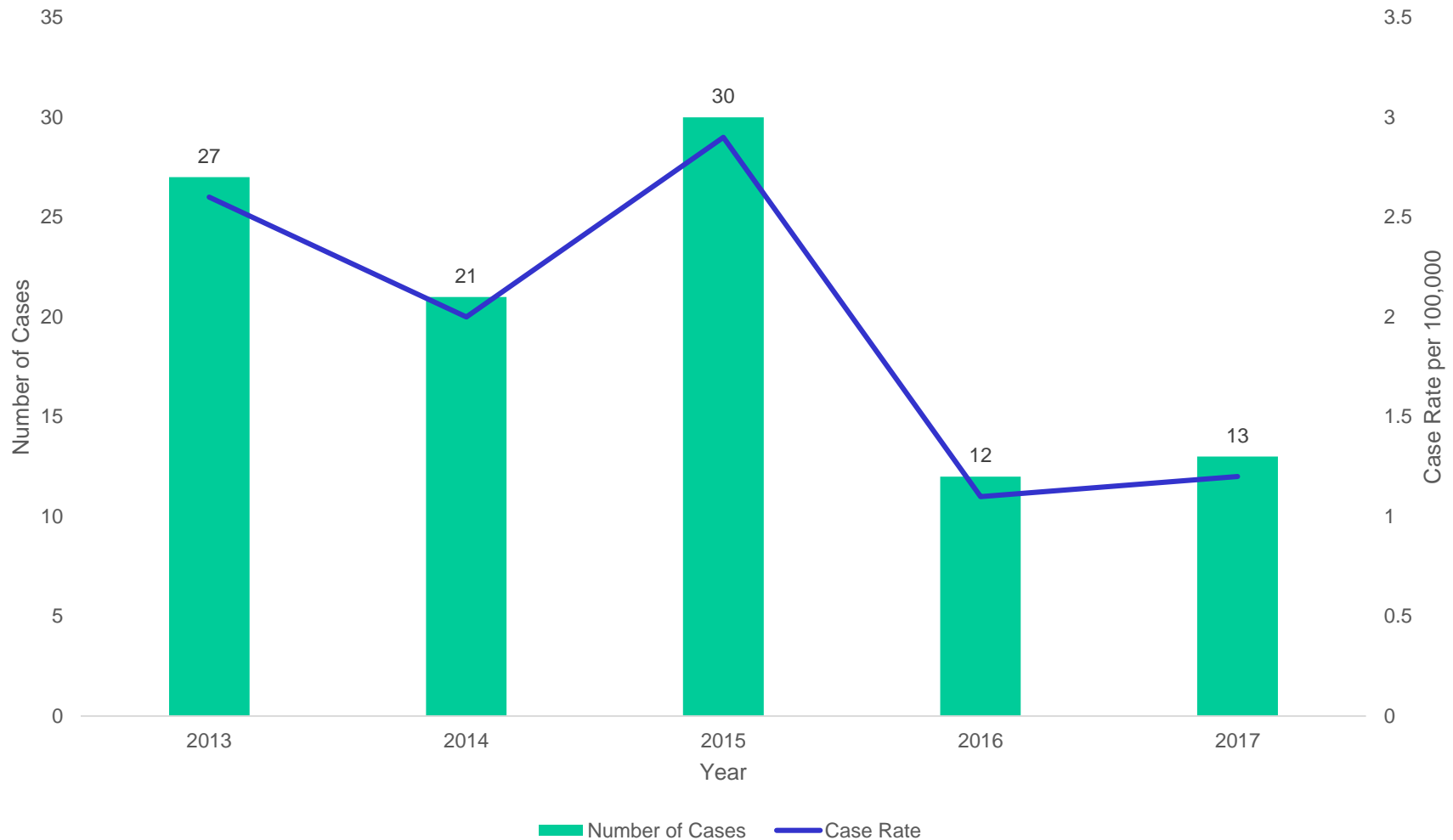


Figure 1. In 2017, there were 13 cases of Tuberculosis in Rhode Island, with a rate of 1.2 cases per 100,000 population. This rate has fluctuated over the last 5 years, with a spike in 2015.

Rate of Tuberculosis, Age Group, Rhode Island, 2017

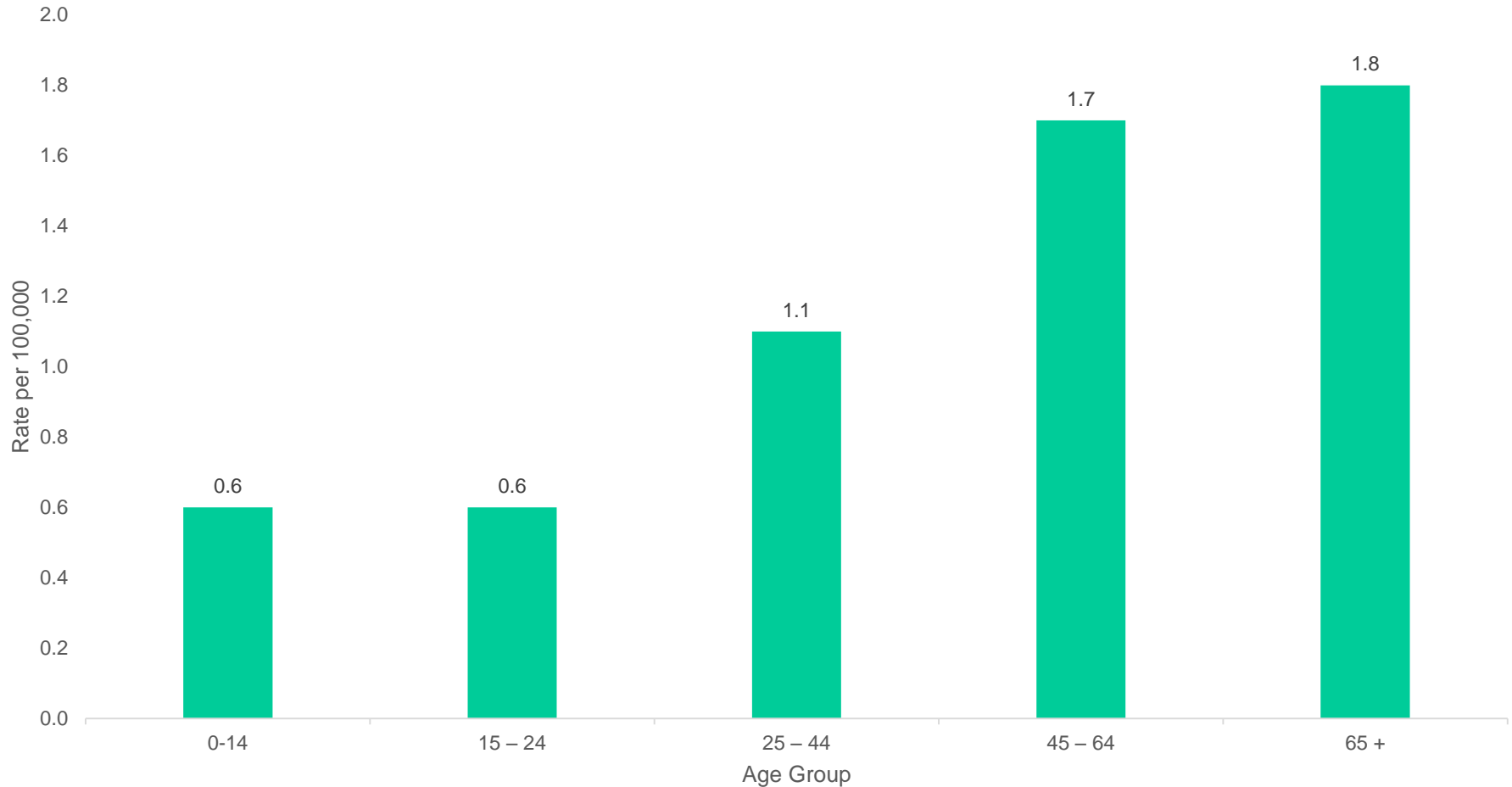


Figure 2. In 2017, adults aged 65+ had the highest rate of tuberculosis in Rhode Island, with 1.8 cases per 100,000 population. The second highest rate of infection was among the 45-64 age group, with a rate of 1.7 cases per 100,000. The 2017 Rhode Island data is comparable to national trends.

Rate of Tuberculosis, Sex and Year, Rhode Island, 2017

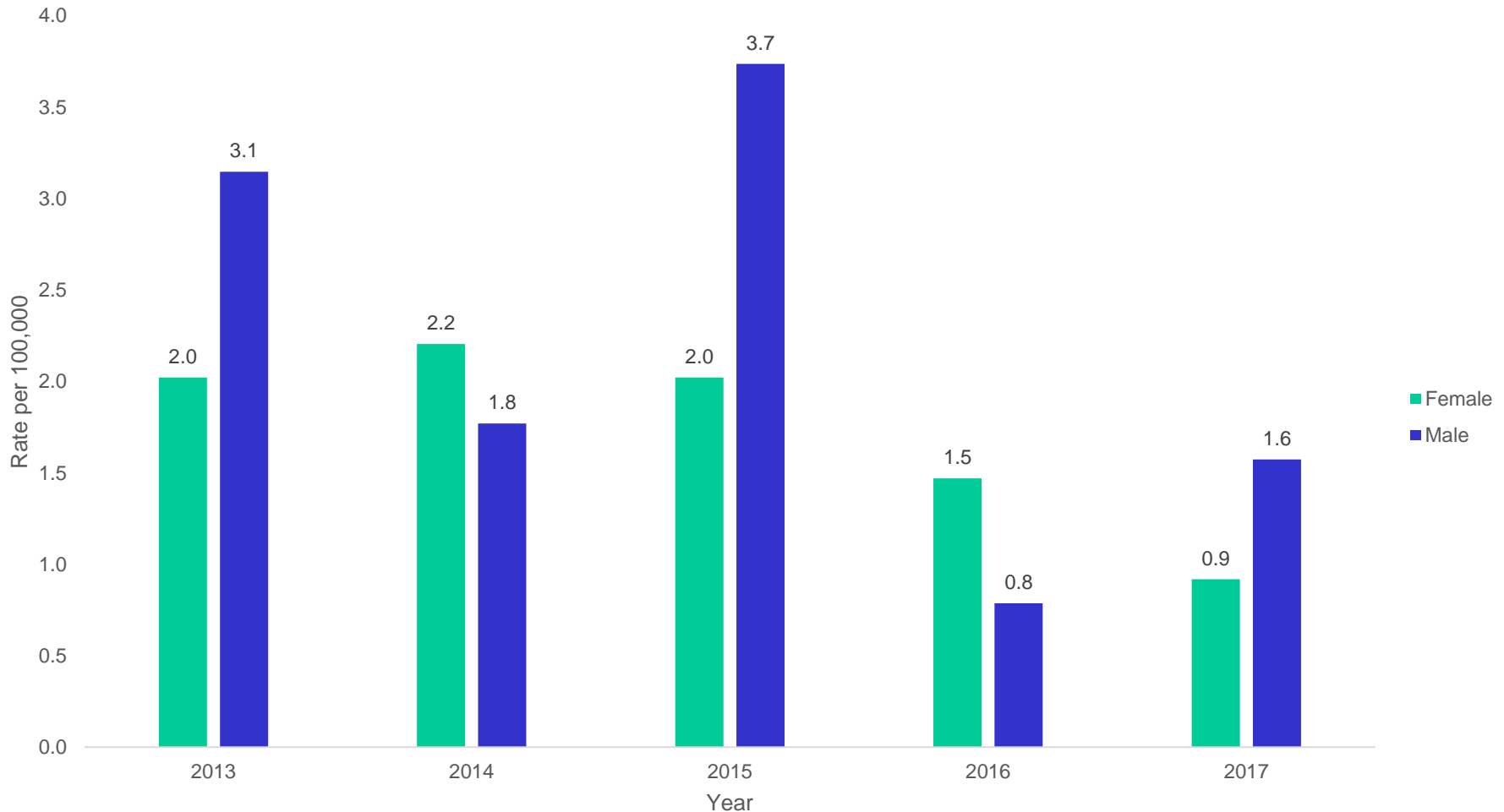


Figure 3. Tuberculosis was generally reported in males at a higher rate than females over the last five years. In 2017, there were 8 male cases and 5 female cases.

Rate of Tuberculosis, County and Year, Rhode Island, 2013-2017

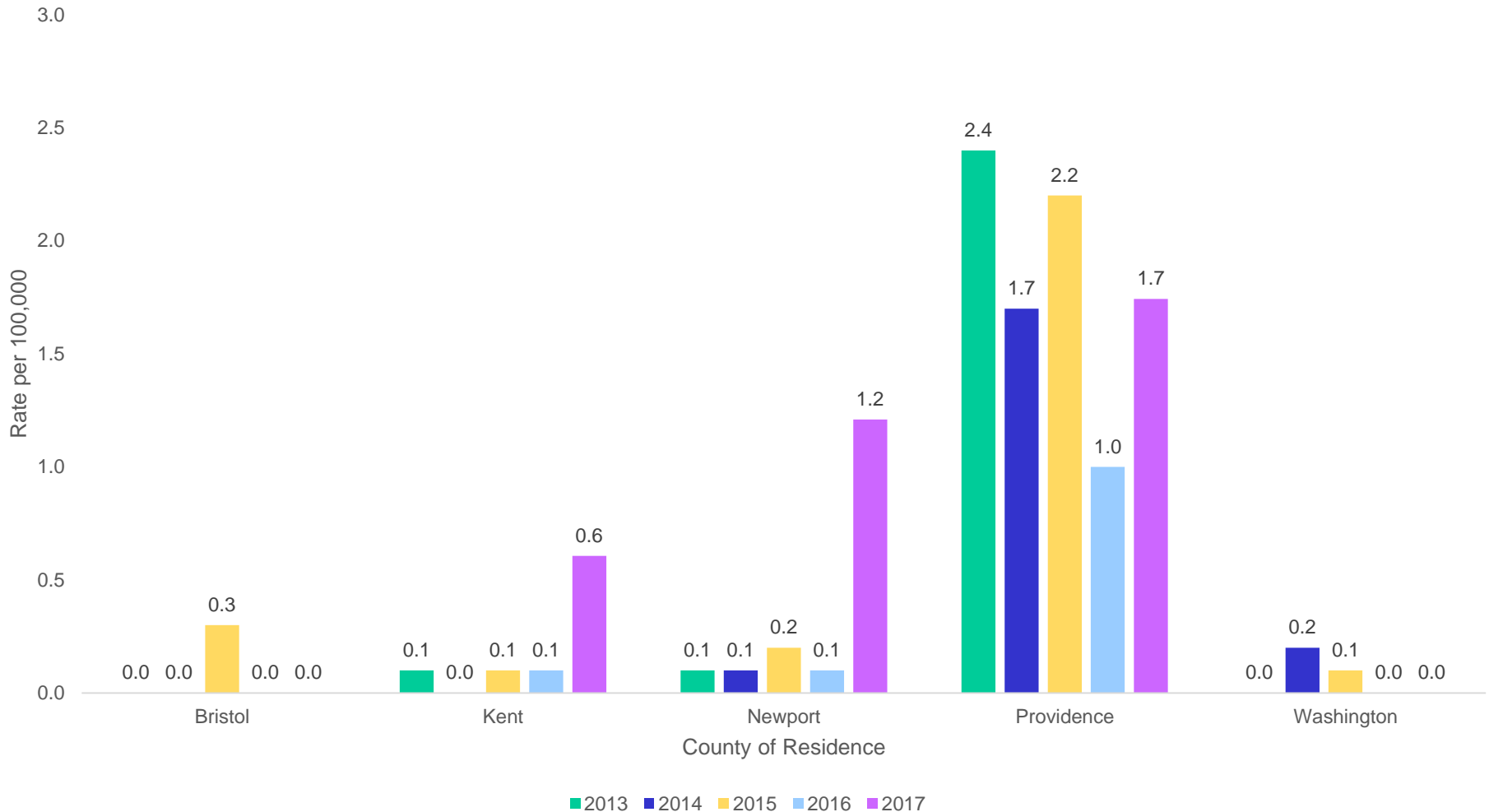


Figure 4. Between 2013 and 2017, tuberculosis rates were consistently highest in Providence County.

Tuberculosis Frequency and Rates by Year, Rhode Island, 2013-2017



Table 1. Frequency by Year

	2013	2014	2015	2016	2017
Number of Cases	27	21	30	12	13

Table 2. Rate by Year

	2013	2014	2015	2016	2017
Rate per 100,000	2.6	2.0	2.9	1.1	1.2

Tuberculosis Frequency, Age Group and Year, Rhode Island, 2013-2017



Table 3. Frequency by Age Group and Year

	2013	2014	2015	2016	2017
0-14	2	0	0	1	1
15-24	1	4	2	2	1
25-44	9	7	8	3	3
45-64	4	5	8	3	5
≥65	11	5	12	3	3
Total	27	21	30	12	13

Tuberculosis Rates, Age Group and Year, Rhode Island, 2013-2017



Table 4. Rate by Age Group and Year

	2013	2014	2015	2016	2017
0-14	1.7	0.0	0.0	0.6	0.6
15-24	0.6	2.5	1.2	1.2	0.6
25-44	3.4	2.7	3.0	1.1	1.1
45-64	1.4	1.7	2.7	1.0	1.7
≥65	7.2	3.3	7.9	2.0	1.8

Tuberculosis Frequency and Rates, Sex and Year, Rhode Island, 2013-2017



Table 5. Frequency by Sex and Year

	2013	2014	2015	2016	2017
Female	11	12	11	8	5
Male	16	9	19	4	8
Total	27	21	30	12	13

Table 6. Rate by Sex and Year

	2013	2014	2015	2016	2017
Female	2.0	2.2	2.0	1.5	0.9
Male	3.2	1.7	3.7	0.8	1.6

Tuberculosis Frequency, County and Year, Rhode Island, 2013-2017



Table 7. Frequency by County and Year

	2013	2014	2015	2016	2017
Bristol	0	0	3	0	0
Kent	1	0	1	1	1
Newport	1	1	2	1	1
Providence	25	18	23	10	11
Washington	0	2	1	0	0
All Counties	27	21	30	12	13

Tuberculosis Rates by County and Year, Rhode Island, 2013-2017



Table 8. Rate by County and Year

	2013	2014	2015	2016	2017
Bristol	0.0	0.0	0.0	0.0	0.0
Kent	0.6	0.0	0.6	0.6	0.6
Newport	1.2	1.2	2.4	1.2	1.2
Providence	4.0	2.9	3.7	1.6	1.7
Washington	0.0	1.6	0.8	0.0	0.0

Notes on Data



- Rates calculated per 100,000 population.
- For years 2013-2016, population denominator is based on 2010 U.S. Census Population Data; for 2017, population denominator is based on 2017 R.I. Census Population Data

References



- <https://www.cdc.gov/tb/publications/factsheets/general/tb.htm>
- https://www.cdc.gov/tb/statistics/reports/2015/pdfs/2015_Surveillance_Report_Full_Report.pdf