





# **Tuberculosis Surveillance 2011-2015**

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

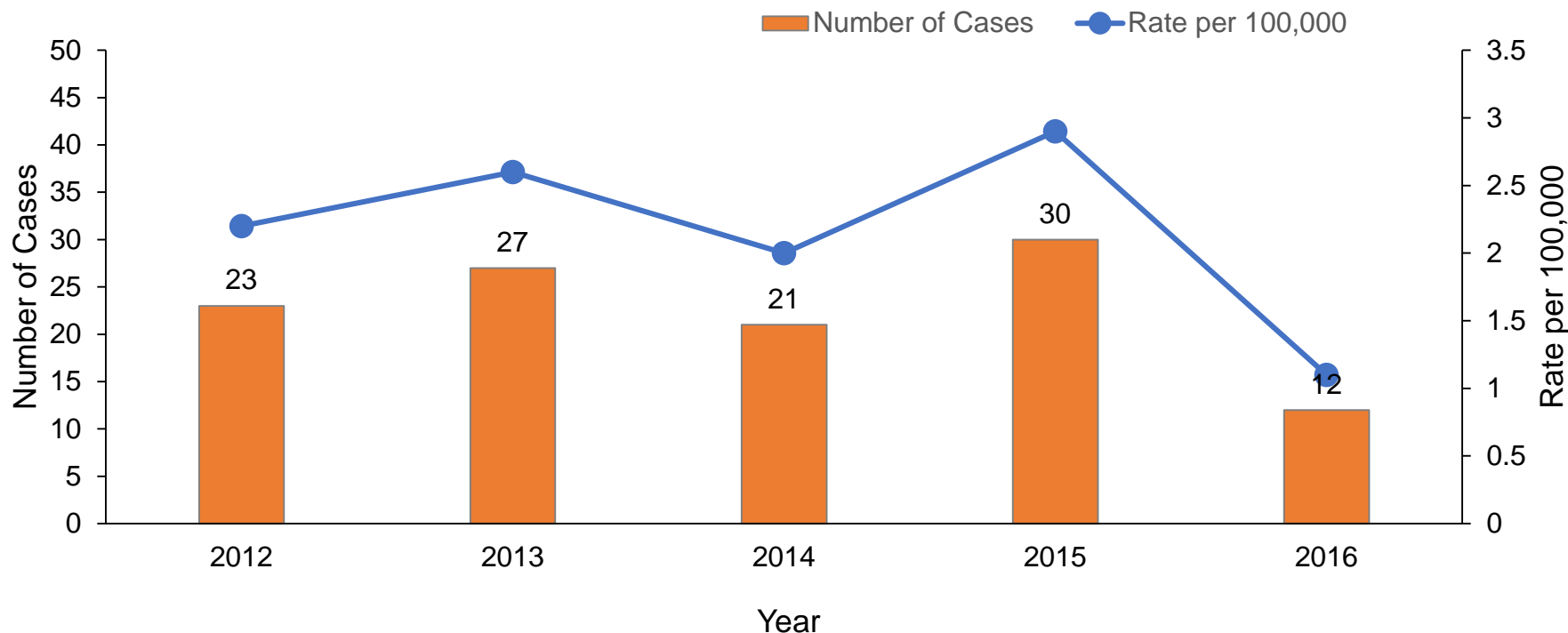
- Tuberculosis (TB) is caused by the *Mycobacterium tuberculosis* bacteria.
- TB is spread through the air and can only be spread by those with infectious TB disease in the lungs or throat.
- Many people in Rhode Island (about 15% of foreign born persons) have latent TB infection (LTBI). Those with LTBI cannot spread TB and they have no symptoms.
- A few people will develop active TB disease from their latent infection (about 1%).
- Symptoms of active TB disease include cough, fever, night sweats, coughing up blood, and weight loss.
- In 2016, 67% of Rhode Island TB cases were foreign-born.



# Data Overview, Tuberculosis

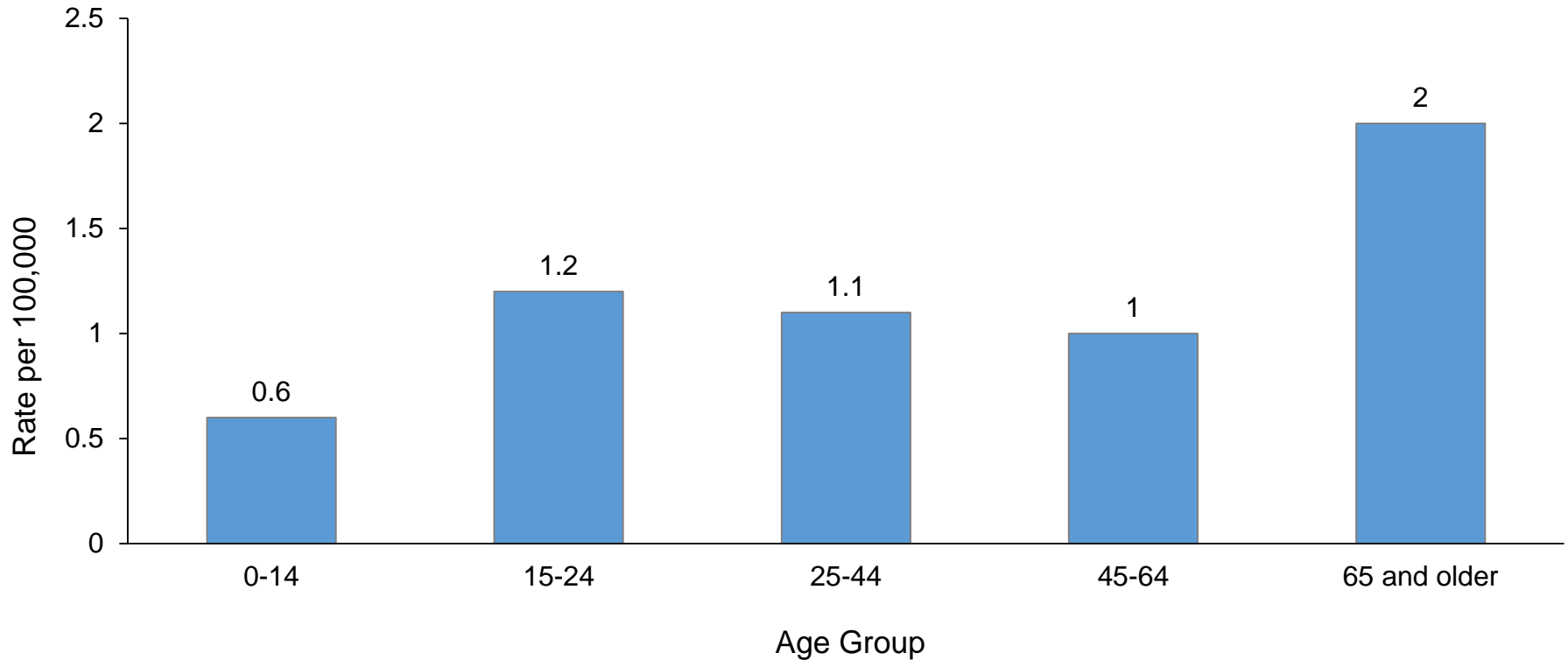
- In 2016, there were 12 cases of TB disease.
- The incidence rate was 1.1 cases per 100,000.
- Cases decreased by 60% from 2015 to 2016.
- The highest rates of TB disease are seen in Providence County.

# Reported Cases of Tuberculosis, Rhode Island, 2012-2016



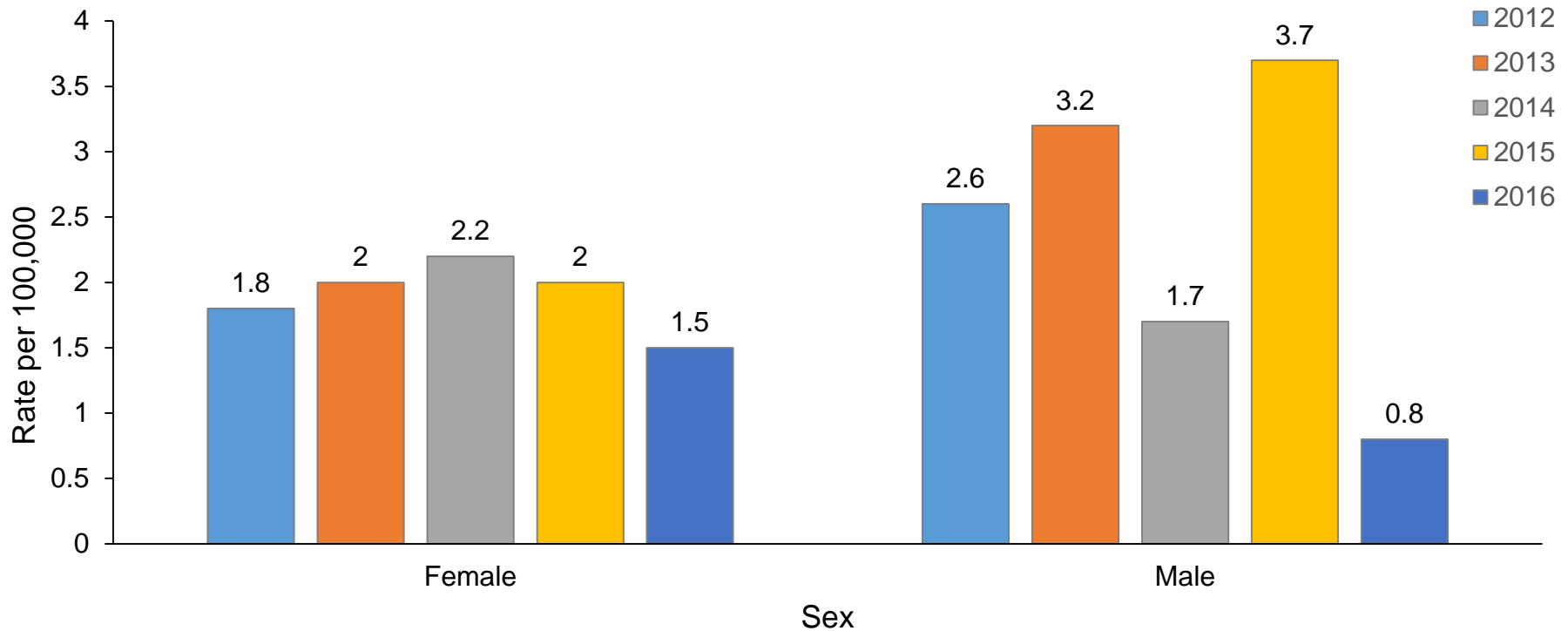
**Figure 1:** In 2016, there were 12 cases of Tuberculosis in Rhode Island, with a rate of 1.1 cases per 100,000 population. Although cases have decreased from 2015 to 2016, tuberculosis rates in Rhode Island has remained fairly stable over the last five years.

# Rate of Tuberculosis, Age Group, Rhode Island, 2016



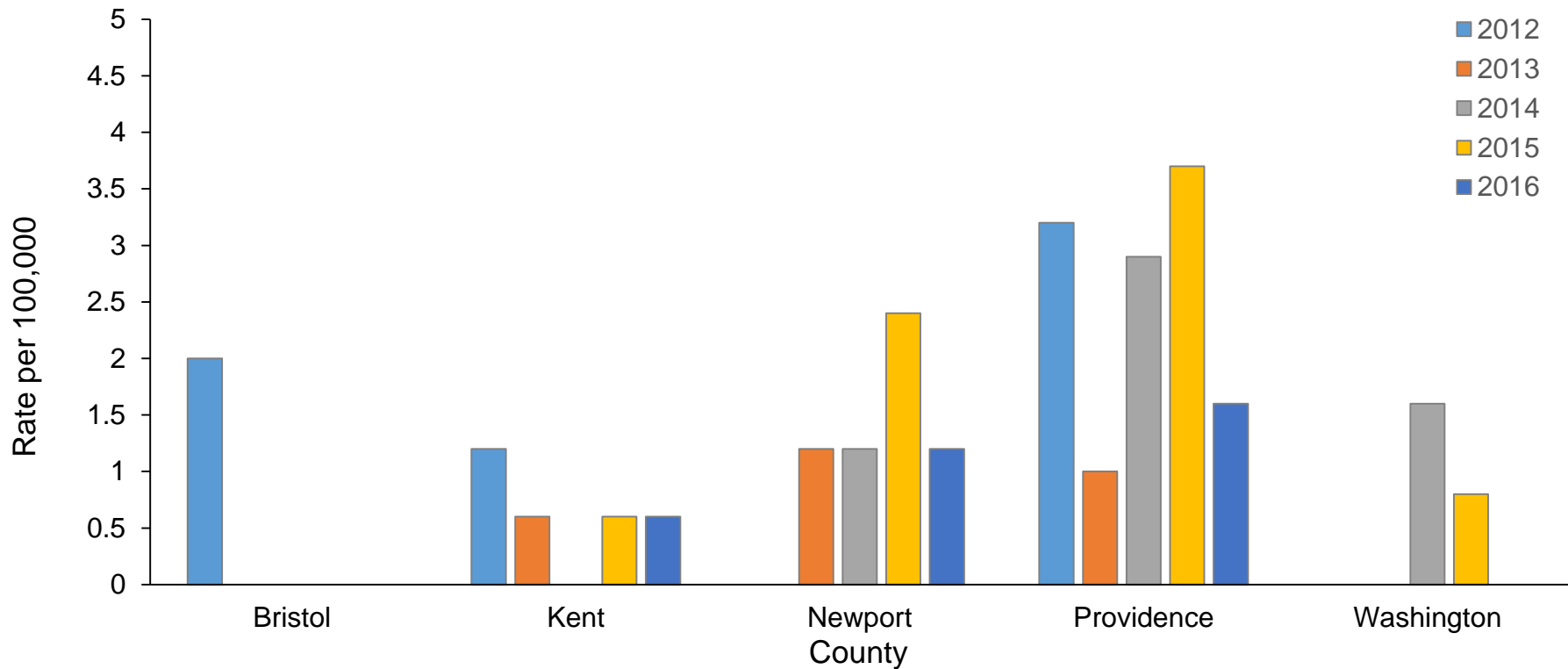
**Figure 2:** In 2016, adults 65 or older had the highest rate of tuberculosis with 2.0 cases per 100,000 population. This is similar to national trends, where this age group also has the highest rate of TB. In Rhode Island, young adults 15-24 had the second highest rate of infection: 1.2 cases per 100,000.

# Rate of Tuberculosis, Sex and Year, Rhode Island, 2016



**Figure 3:** Tuberculosis was generally reported in males at a higher rate than females over the last five years. In 2016, there were eight cases in females and four cases in males.

# Rate of Tuberculosis, County and Year, Rhode Island, 2012-2016



**Figure 4:** Between 2012 and 2016, tuberculosis rates were highest in Providence County.



# Tuberculosis Frequency and Rates by Year, Rhode Island, 2012-2016



**Table 1. Frequency by Year**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Number of Cases</b>	23	27	21	30	12

**Table 2. Rate by Year**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Rate per 100,000</b>	2.2	2.6	2.0	2.9	1.1

# Tuberculosis Frequency, Age Group and Year, Rhode Island, 2012-2016



**Table 3. Frequency by Age Group and Year**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>0-14</b>	2	1	0	0	1
<b>15-24</b>	4	1	4	8	2
<b>25-44</b>	5	9	7	8	3
<b>45-64</b>	4	4	5	8	3
<b>≥ 65</b>	4	4	5	8	3
<b>Total</b>	23	27	21	30	12

# Tuberculosis Rates, Age Group and Year, Rhode Island, 2012-2016



**Table 4. Rate by Age Group and Year**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>0-14</b>	3.5	1.7	0.0	0.0	0.6
<b>15-24</b>	2.5	0.6	2.5	1.2	1.2
<b>25-44</b>	1.9	3.4	2.7	3.0	1.1
<b>45-64</b>	1.4	1.4	1.7	2.7	1.0
<b>≥ 65</b>	5.3	7.2	3.3	7.9	2.0

# Tuberculosis Frequency and Rates, Sex and Year, Rhode Island, 2012-2016



**Table 5. Frequency by Sex and Year**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Female</b>	10	11	12	11	8
<b>Male</b>	13	16	9	19	4
<b>Total</b>	23	27	21	30	12

**Table 6. Rate by Sex and Year**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Female</b>	1.8	2.0	2.2	2.0	1.5
<b>Male</b>	2.6	3.2	1.7	3.7	0.8

# Tuberculosis Frequency, County and Year, Rhode Island, 2012-2016



**Table 7. Frequency by County and Year**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Bristol</b>	1	0	0	3	0
<b>Kent</b>	2	1	0	1	1
<b>Newport</b>	0	1	1	2	1
<b>Providence</b>	20	25	18	23	10
<b>Washington</b>	0	0	02	1	0
<b>All</b>	23	27	21	30	12

# Tuberculosis Rates by County and Year, Rhode Island, 2012-2016



**Table 8. Rate by County and Year**

	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Bristol</b>	2.0	0.0	0.0	0.0	0.0
<b>Kent</b>	1.2	0.6	0.0	0.6	0.6
<b>Newport</b>	0.0	1.2	1.2	2.4	1.2
<b>Providence</b>	3.2	4.0	2.9	3.7	1.6
<b>Washington</b>	0.0	0.0	1.6	0.8	0



# Notes on Data

- Rate is calculated per 100,000 population. The population denominator is based on 2010 US Census Population.



# 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](https://www.cdc.gov/tb/statistics/reports/2015/pdfs/2015_Surveillance_Report_Full_Report.pdf)