





# Tuberculosis Annual Surveillance Report, 2012-2021

**July 2022**



# 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).

# About Tuberculosis



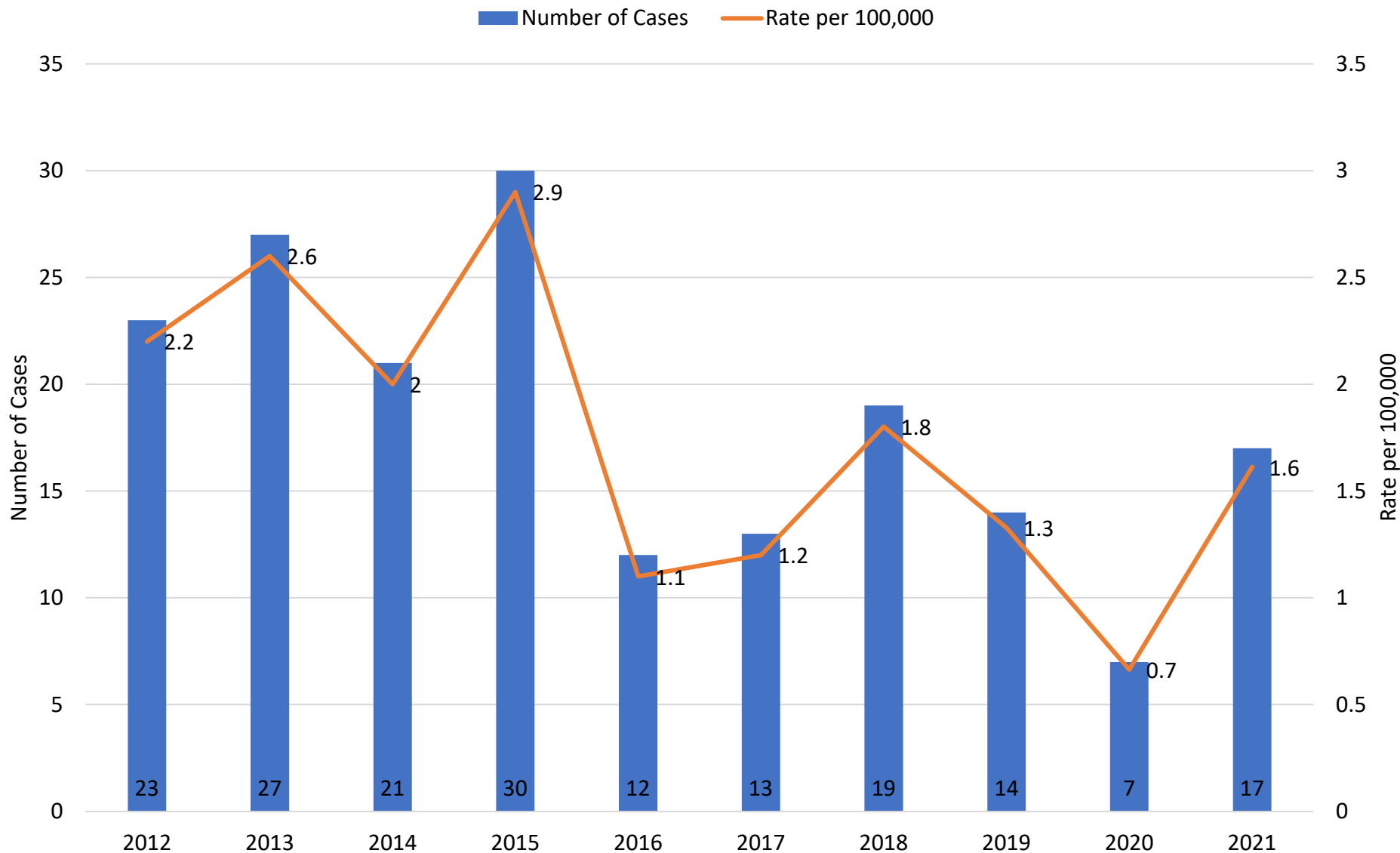
- Many people in Rhode Island (~15% of foreign born persons) have latent TB infection (LTBI). Those with LTBI have no symptoms and cannot spread TB bacteria.
- About 5-10% of people with LTBI will develop active TB disease in their lifetime; treatment reduces this risk.
- Symptoms of active pulmonary TB disease include cough, fever, night sweats, hemoptysis (coughing up blood), and weight loss.

# Data Overview, Tuberculosis in Rhode Island,

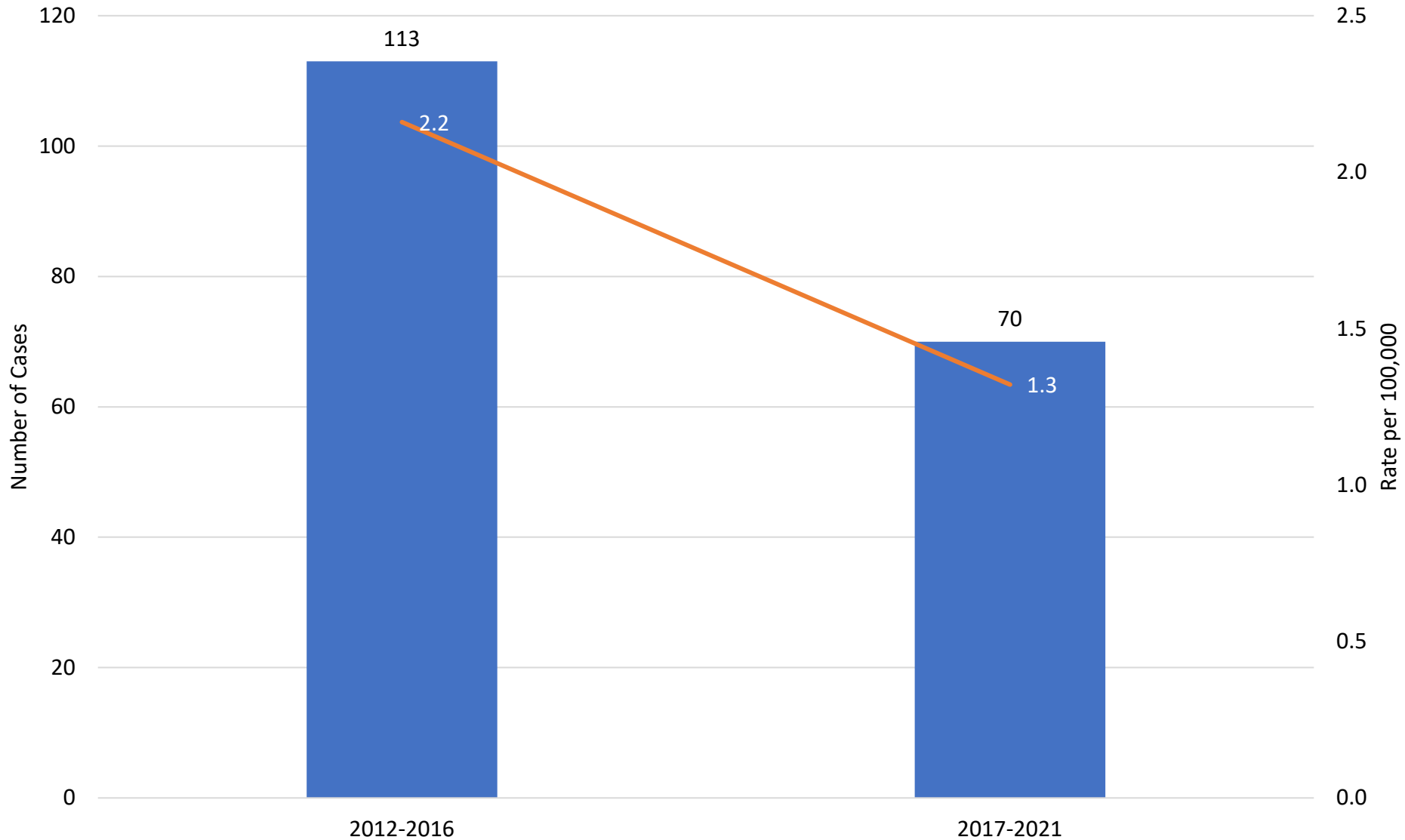


- Over the last five years (2017-2021) there were 70 cases of active TB disease reported:
  - 89% foreign born
- The average incidence rate 2017-2021 was 1.3 cases per 100,000 population.
- Five-year case totals decreased by 38% between 2012-2016 and 2017-2021.
- The highest rates of TB disease are seen in Providence County.

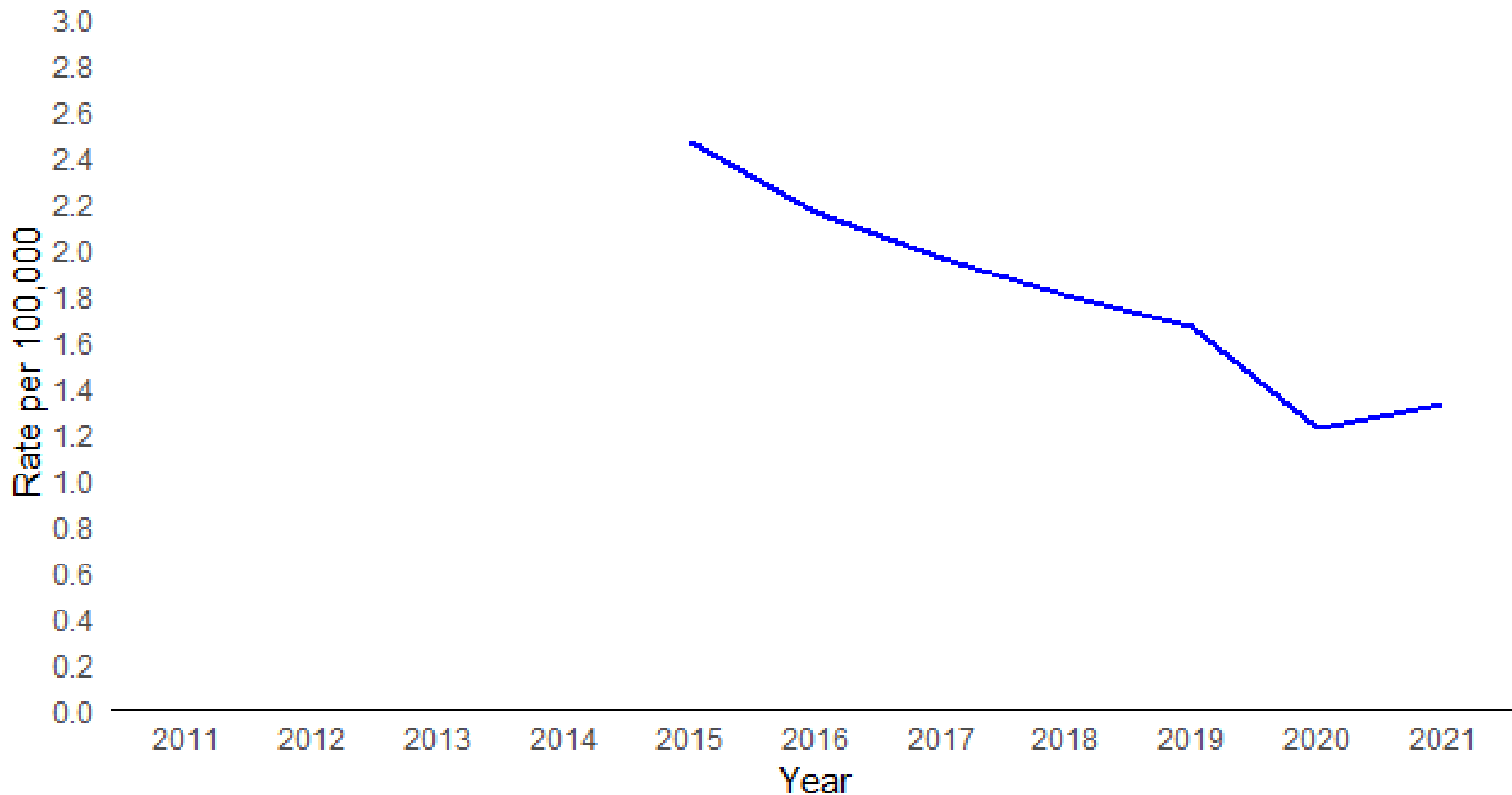
# Reported Cases of Tuberculosis, Rhode Island, 2012-2021



# Reported Cases of Tuberculosis, Rhode Island, 2012-2016 vs. 2017-2021



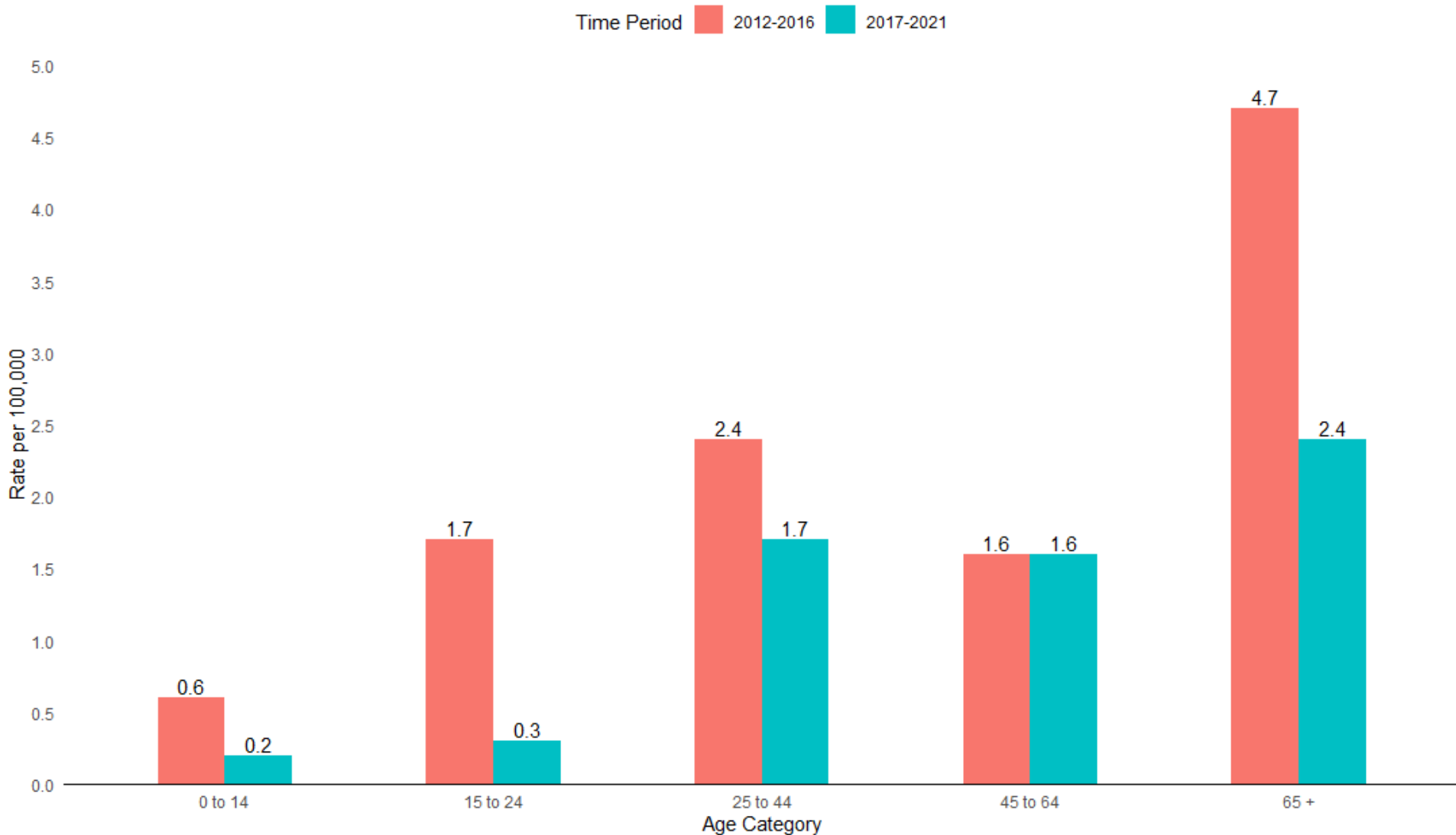
# Five-year moving average of Rhode Island TB Incidence Rate (2011-2021)



Five year moving average of Rhode Island TB Incidence Rate (2011-2021)



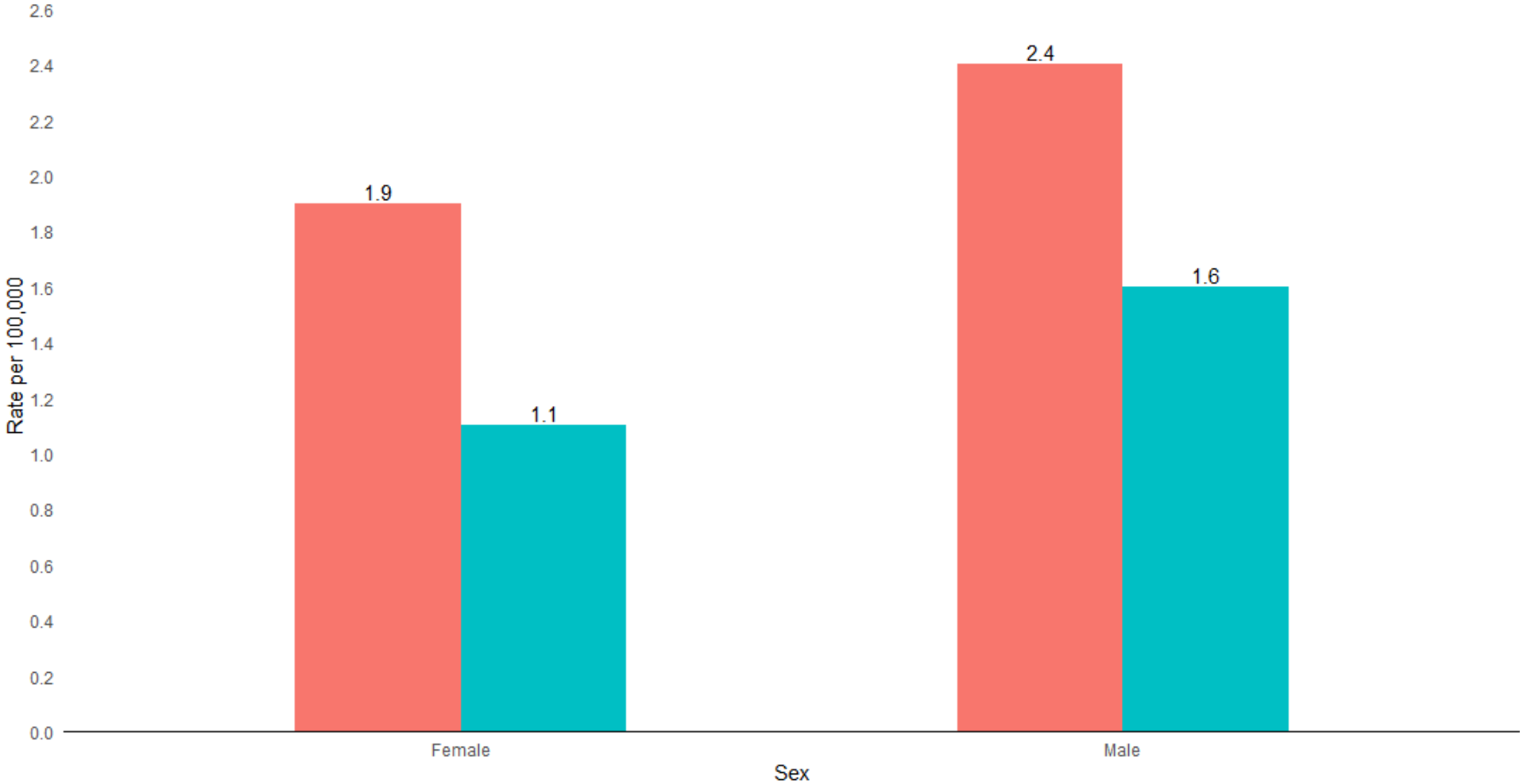
# Average Annual Rate of Tuberculosis, by Age Group, Rhode Island, 2012-2021



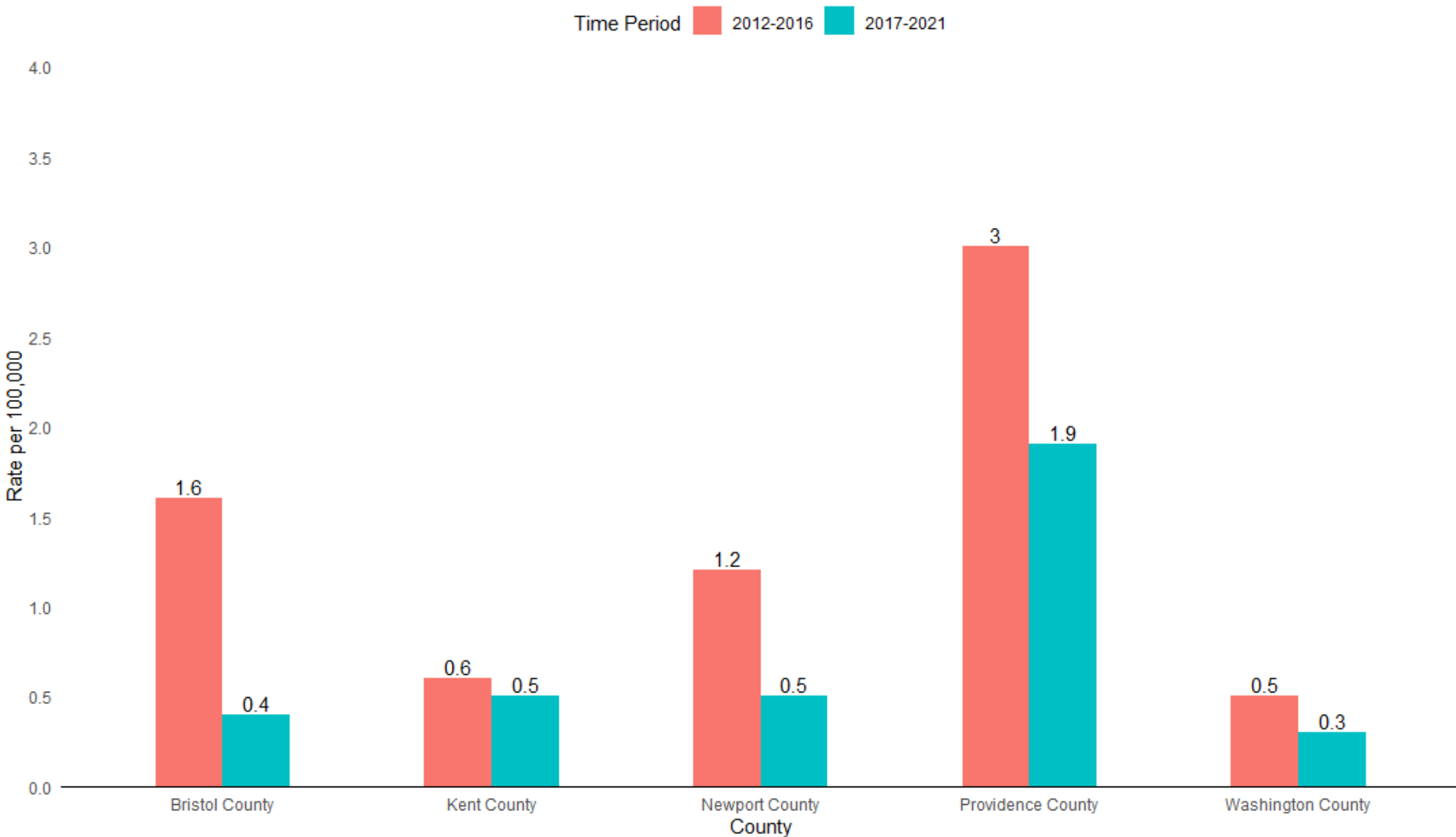
# Average Annual Rate of Tuberculosis, by Sex, Rhode Island, 2012-2021



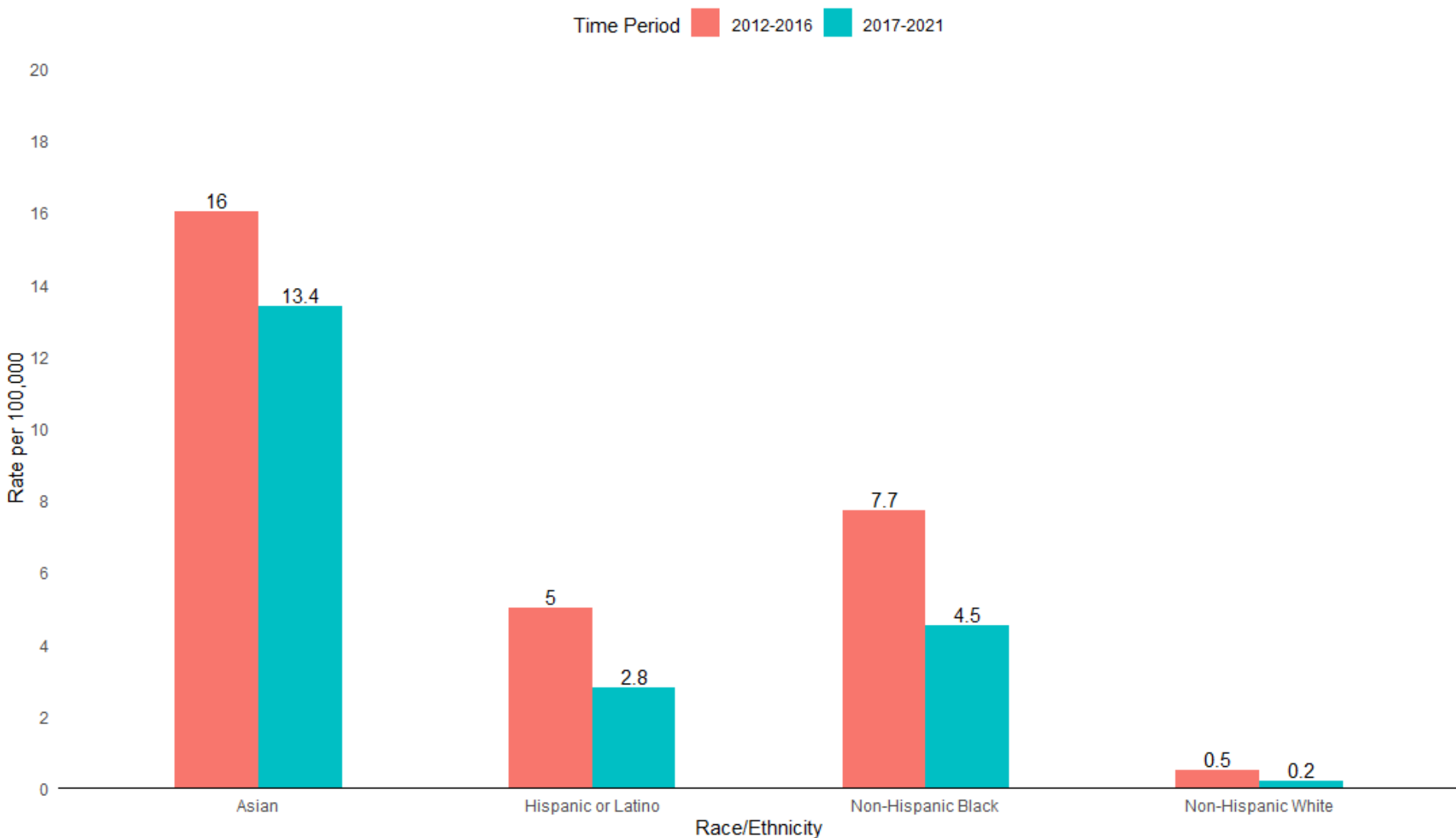
Time Period ■ 2012-2016 ■ 2017-2021



# Average Annual Rate of Tuberculosis, by County, Rhode Island, 2012-2021



# Average Annual Rate of Tuberculosis, by Race/Ethnicity, Rhode Island,



# Reported Cases of Tuberculosis, 2012-2021



**Table 1. Frequency & Rate by Year**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Cases	23	27	21	30	12	13	19	14	7	17
Rate per 100,000	2.2	2.6	2.0	2.9	1.1	1.2	1.8	1.3	0.7	1.6

# Tuberculosis Frequency and Average Annual Rate, Rhode Island, 2012-2021



**Table 2. Frequency by Time Period**

	2012-2016	2017-2021
Number of Cases	113	70

**Table 3. Average Annual Rate by Time Period**

	2012-2016	2017-2021
Rate per 100,000	2.2	1.3

# Tuberculosis Frequency & Average Annual Rate, by Age Group, Rhode Island, 2012-2021



**Table 4. Frequency by Age Group and Time Period**

	2012-2016	2017-2021
0-14	5	<5
15-24	13	<5
25-44	32	22
45-64	24	24
≥65	39	20
Total	113	70

**Table 5. Rate by Age Group and Time Period**

	2012-2016	2017-2021
0-14	0.6	0.2
15-24	1.7	0.3
25-44	2.4	1.7
45-64	1.6	1.6
≥65	4.7	2.4

# Tuberculosis Frequency and Average Annual Rate by Sex, Rhode Island, 2012-2021



**Table 6. Frequency by Sex and Time Period**

	2012-2016	2017-2021
Female	52	29
Male	61	41
Total	113	70

**Table 7. Average Annual Rate by Sex and Time Period**

	2012-2016	2017-2021
Female	1.9	1.1
Male	2.4	1.6



# Tuberculosis Frequency & Average Annual Rate by County, Rhode Island, 2012-2021



**Table 8. Frequency by County and Time Period**

	2012-2016	2017-2021
Bristol	<5	<5
Kent	5	<5
Newport	5	<5
Providence	96	61
Washington	<5	<5
All Counties	113	70

**Table 9. Average Annual Rate by County and Time Period**

	2012-2016	2017-2021
Bristol	1.6	0.4
Kent	0.6	0.5
Newport	1.2	0.5
Providence	3.0	1.9
Washington	0.5	0.3

# Tuberculosis Frequency & Average Annual Rate by Race/Ethnicity, Rhode Island, 2012-2021



**Table 10. Frequency by Race/Ethnicity and Year**

	2012-2016	2017-2021
Non-Hispanic White	18	9
Non-Hispanic Black	24	14
Hispanic or Latino	41	23
Asian	30	25
American Indian/Alaska Native	<5	<5
Hawaii Native/Other Pacific Islander	<5	<5
Other/Unknown	<5	<5

**Table 11. Average Annual Rate by Race/Ethnicity and Year**

	2012-2016	2017-2021
Non-Hispanic White	0.5	0.2
Non-Hispanic Black	7.7	4.5
Hispanic or Latino	5.0	2.8
Asian	16.0	13.4
American Indian/Alaska Native	-	-
Hawaii Native/Other Pacific Islander	-	-
Other/Unknown	-	-

# Notes on Data



- Rates calculated per 100,000 population.
- Population denominator for 2012-2016 data based on 2010 U.S. Census.
- Population denominator for 2017-2021 data based on 2016 U.S. Census.



# References

- <https://www.cdc.gov/tb/publications/factsheets/general/ltbiandactivetb.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)



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