





# Hepatitis A Surveillance 2011-2015

Rhode Island Department of Health

Division of Preparedness, Response, Infectious  
Disease and Emergency Medical Services

Center for Acute Infectious Disease Epidemiology



# About Hepatitis A

- Hepatitis A is a contagious liver disease that results from infection with the Hepatitis A virus. It can range in severity from a mild illness lasting a few weeks to a severe illness lasting several months.
- Symptoms include fever, fatigue, nausea, vomiting, abdominal pain, dark urine, joint pain, jaundice, and elevated liver function tests. Symptoms can last for several months.
- Hepatitis A is transmitted via the fecal-oral route. It is usually spread when the virus is taken in by mouth from contact with objects, food, or drinks contaminated by the feces of an infected person.
- High risk groups include travelers to endemic countries, men who have sex with men, illicit drug users, individuals with clotting-factor disorders, and close contacts of people with Hepatitis A infection.
- Hepatitis A is a vaccine-preventable disease. Vaccination is recommended for all children, travelers to certain countries, and people at high risk of infection.

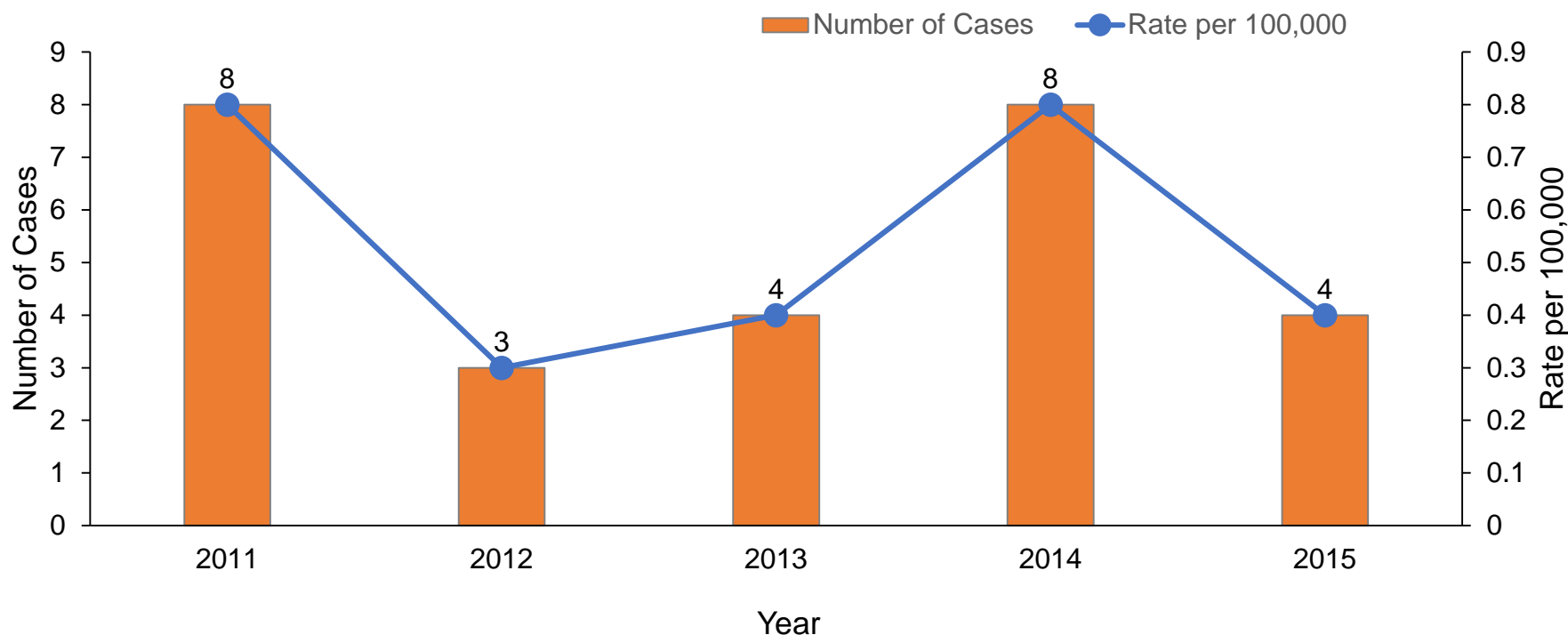
# Data Overview

## Hepatitis A



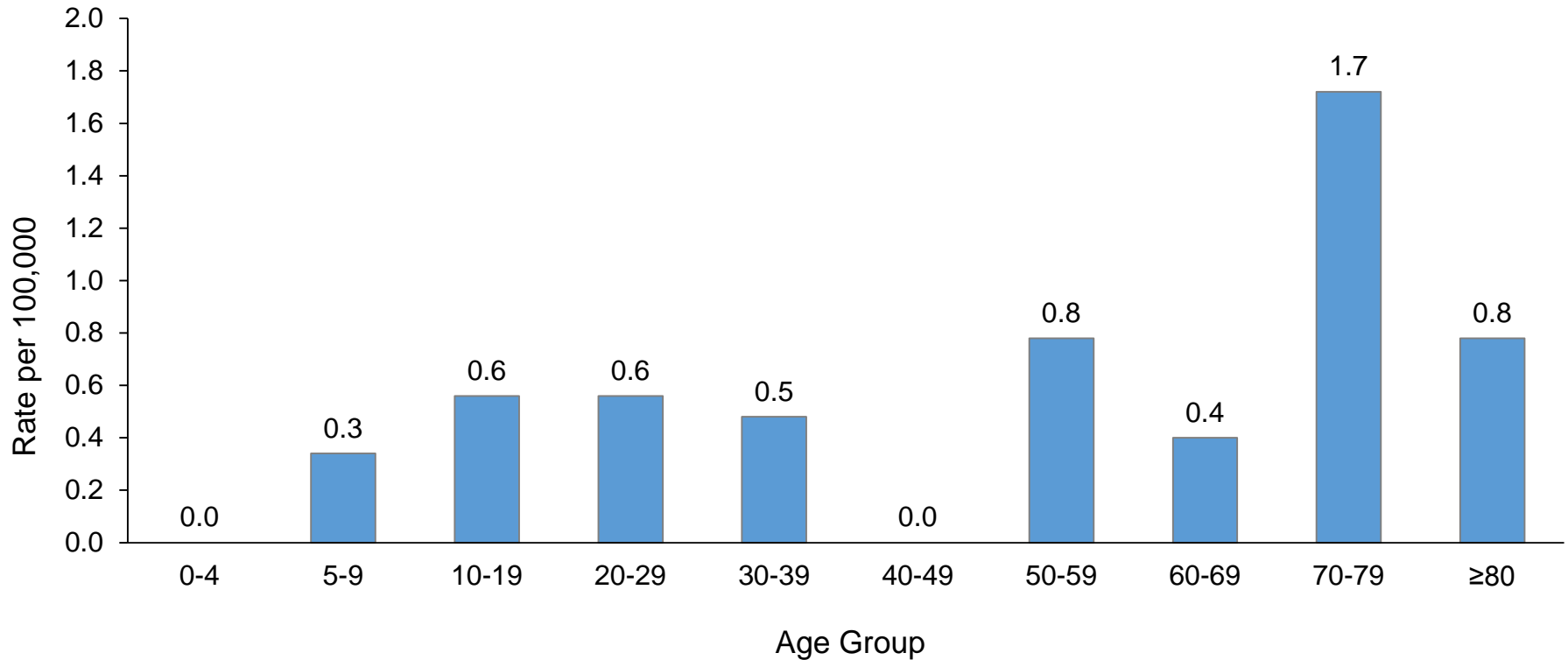
- Hepatitis A is not common in RI. There were four cases of Hepatitis A reported in 2015, and a total of 27 reported cases in the last 5 years (2011-2015).
- Hepatitis A has decreased significantly in RI and in the United States recently. In 2006-2010, there were a total of 60 reported cases in RI, while in 2001-2005, there were 169 reported cases.
- The incidence rate of Hepatitis A in 2015 was 0.4 cases per 100,000 population.
- Those 70-79 years of age had the highest average rate of Hepatitis A infection during the five year period.
- The five year average showed a similar incidence rate for both males and females (0.6 cases per 100,000 population in females, and 0.5 cases per 100,000 population in males).
- The highest five year average rate of Hepatitis A was in Washington County (1.3 cases per 100,000 population), followed closely by Bristol County (1.2 cases per 100,000 population). Newport County has not had a case of Hepatitis A in the last 5 years.

# Reported Cases of Hepatitis A, Rhode Island, 2011-2015



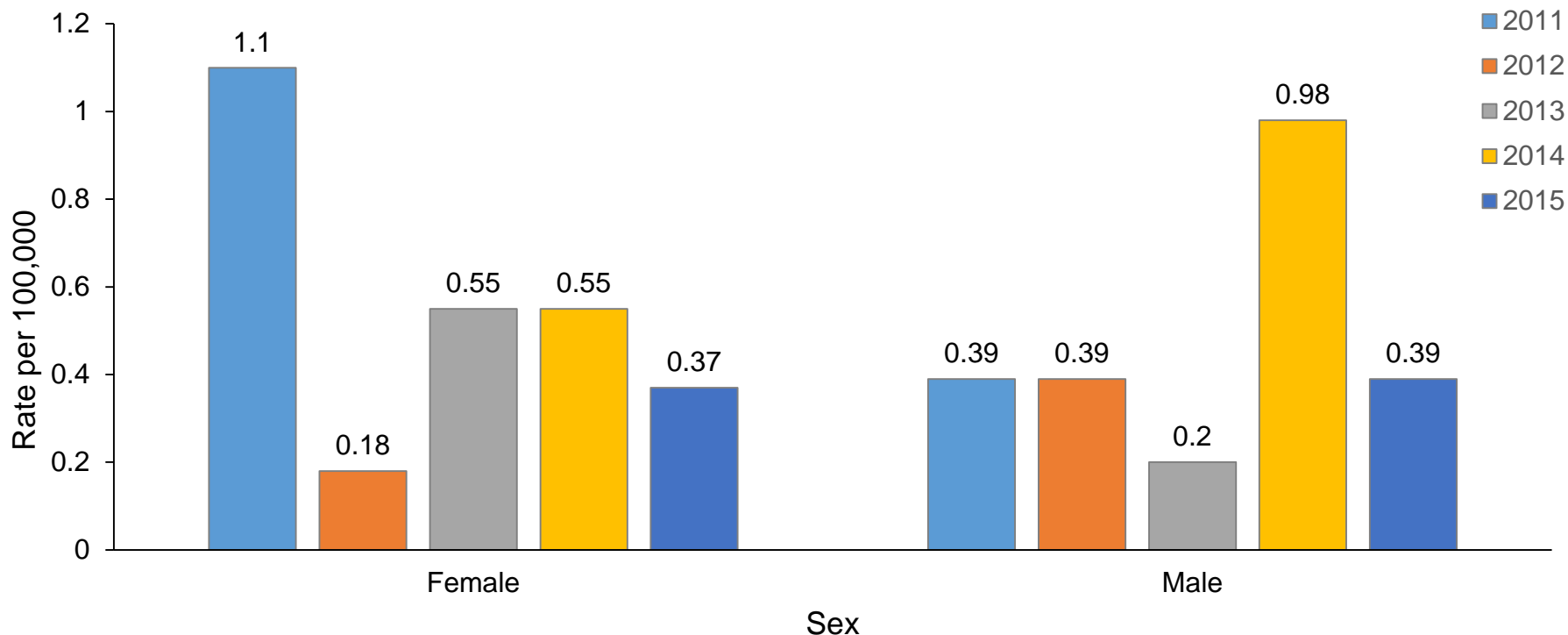
**Figure 1:** Hepatitis A is not common in RI. There were four cases of Hepatitis A reported in 2015, and a total of 27 reported cases in the last 5 years. The 5-year average incidence rate for 2011-2015 is 0.5 cases per 100,000 population. Hepatitis A has decreased significantly in RI and in the United States in the last 15 years. In 2006-2010, there were a total of 60 reported cases in RI, while in 2001-2005, there were 169 reported cases in RI.

# Rate of Hepatitis A, Age Group, Rhode Island, 2011-2015



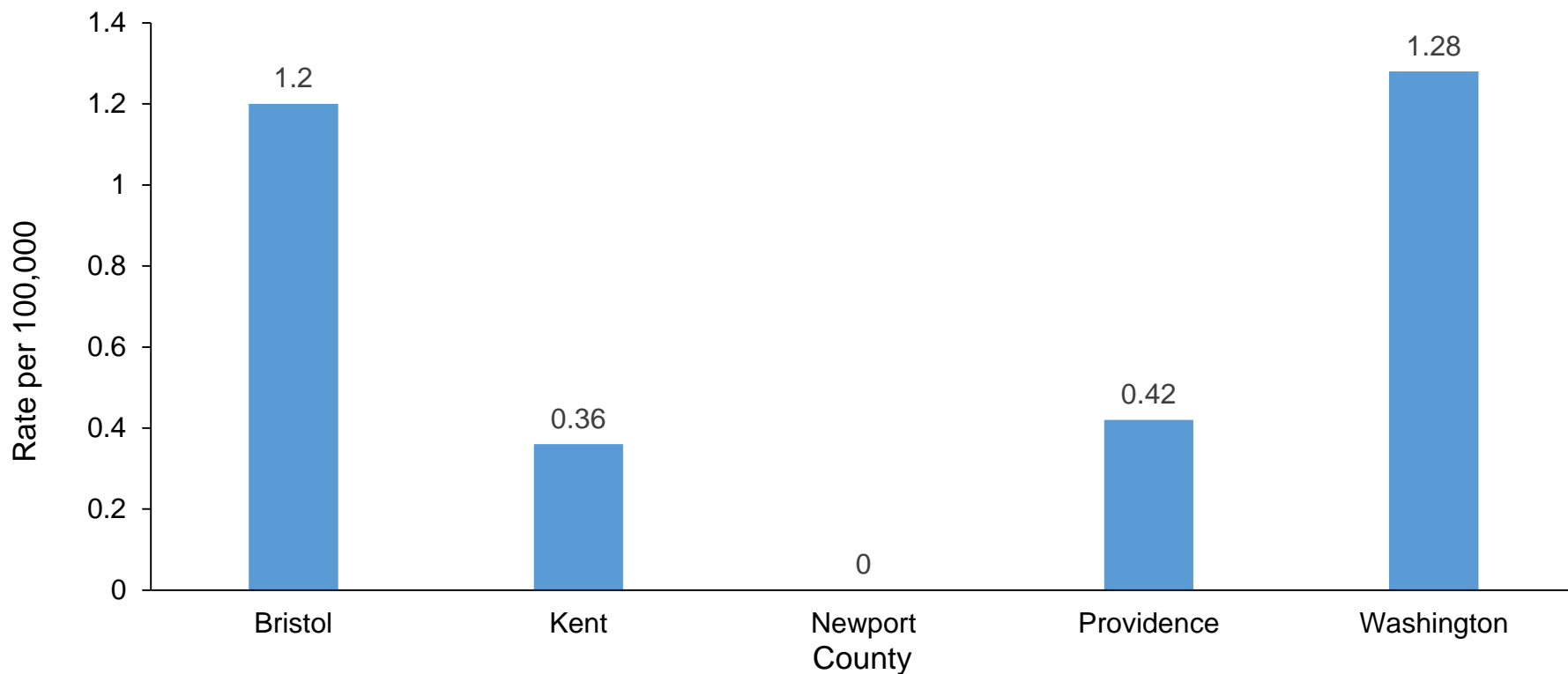
**Figure 2:** This graph shows the average incidence rates of Hepatitis A during the 5 year period of 2011-2015. From 2011 to 2015, people 70-79 years of age had the highest average incidence rate of Hepatitis A (1.7 cases per 100,000 population). RI's rates differ from the national trend in which the 30-39 age group has the highest rate of cases (0.7 cases per 100,000 population in 2013).

# Rate of Hepatitis A, Sex and Year, Rhode Island, 2011-2015



**Figure 3:** The relative incidence rates of reported Hepatitis A infections in males and females appear to differ by sex each year without a discernable trend. However, the 5-year average incidence rates in males and females from 2011-2015 demonstrate no difference by sex — 0.6 cases per 100,000 population in females, and 0.5 cases per 100,000 population in males. This mirrors the national Hepatitis A data, with the most recent data from 2013 showing incidence rates of 0.6 cases per 100,000 population for both males and females.

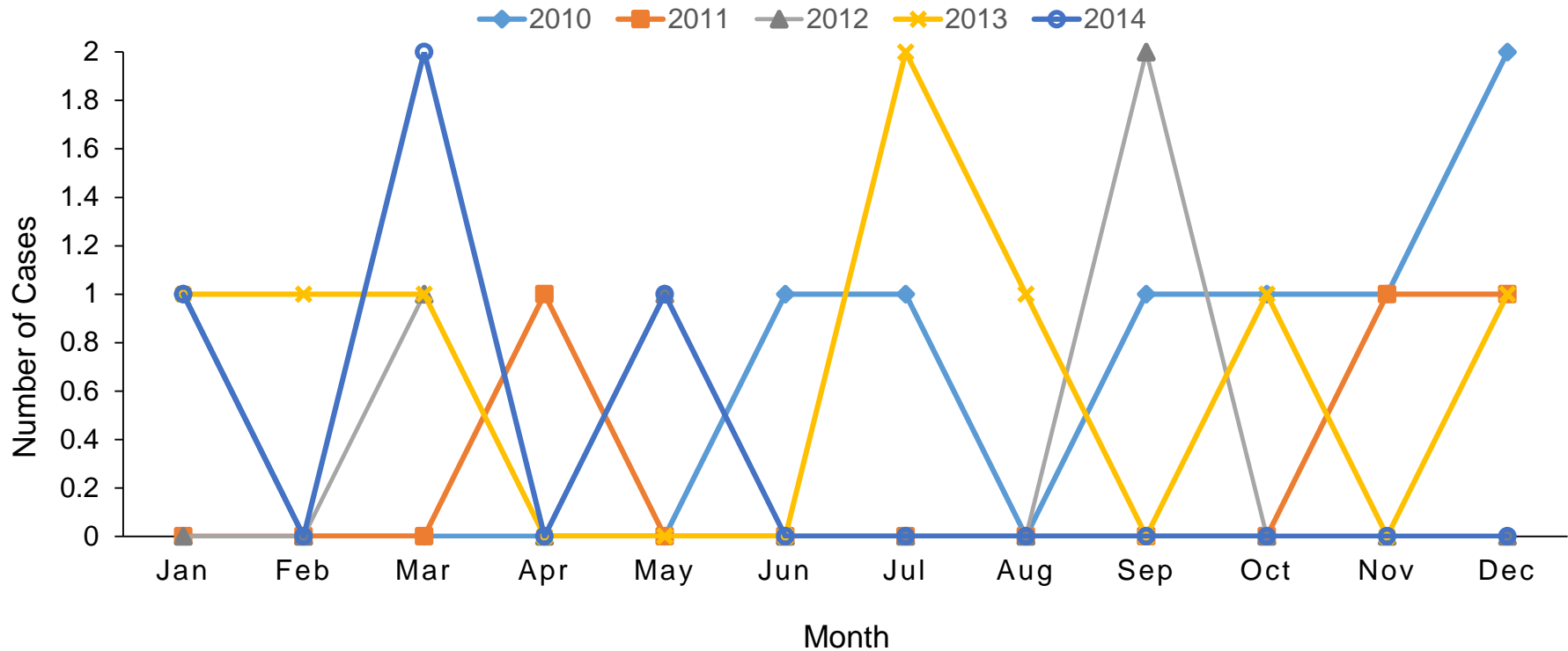
# Rate of Hepatitis A, County and Year, Rhode Island, 2011-2015



**Figure 4:** During 2011-2015, the highest 5-year average incidence rate of Hepatitis A was in Washington County (1.3 cases per 100,000 population), followed closely by Bristol County (1.2 cases per 100,000 population). Newport County has not had a case of Hepatitis A in the past 5 years.



# Reported Cases of Hepatitis A, Month and Year, Rhode Island, 2011-2015



**Figure 5:** Hepatitis A infection occurs year-round in Rhode Island, with no trend in seasonality.

# Hepatitis A Frequency and Rates by Year, Rhode Island, 2011-2015



**Table 1. Frequency by Year**

	2011	2012	2013	2014	2015	5 Year Average
<b>Number of Cases</b>	8	3	4	8	4	<b>5.4</b>

**Table 2. Rate by Year**

	2011	2012	2013	2014	2015	5 Year Average
<b>Rate per 100,000</b>	0.8	0.3	0.4	0.8	0.4	<b>0.5</b>

# Hepatitis A Frequency, Age Group and Year, Rhode Island, 2011-2015



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

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>5 Year Average</b>
<b>0-4</b>	0	0	0	0	0	<b>0</b>
<b>5-9</b>	0	0	0	0	1	<b>0.2</b>
<b>10-19</b>	3	0	1	0	0	<b>0.8</b>
<b>20-29</b>	2	0	1	1	0	<b>0.8</b>
<b>30-39</b>	1	0	0	1	1	<b>0.6</b>
<b>40-49</b>	0	0	0	0	0	<b>0</b>
<b>50-59</b>	0	0	2	2	2	<b>1.2</b>
<b>60-69</b>	2	0	0	0	0	<b>0.4</b>
<b>70-79</b>	0	1	0	4	0	<b>1</b>
<b>≥80</b>	0	2	0	0	0	<b>0.4</b>
<b>Total</b>	8	3	4	8	4	

# Hepatitis A Rates, Age Group and Year, Rhode Island, 2011-2015



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

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>5-year average</b>
<b>0-4</b>	0	0	0	0	0	<b>0</b>
<b>5-9</b>	0	0	0	0	1.7	<b>0.3</b>
<b>10-19</b>	2.1	0	0.7	0	0	<b>0.6</b>
<b>20-29</b>	1.4	0	0.7	0.7	0	<b>0.6</b>
<b>30-39</b>	0.8	0	0	0.8	0.8	<b>0.5</b>
<b>40-49</b>	0	0	0	0	0	<b>0.0</b>
<b>50-59</b>	0	0	1.3	1.3	1.3	<b>0.8</b>
<b>60-69</b>	2	0	0	0	0	<b>0.4</b>
<b>70-79</b>	0	1.7	0	6.9	0	<b>1.7</b>
<b>≥80</b>	0	3.9	0	0	0	<b>0.8</b>

# Hepatitis A Frequency and Rates, Gender and Year, Rhode Island, 2011-2015



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

	2011	2012	2013	2014	2015	5 Year Average
<b>Female</b>	6	1	3	3	2	<b>3</b>
<b>Male</b>	2	2	1	5	2	<b>2.4</b>
<b>Total</b>	8	3	4	8	4	

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

	2011	2012	2013	2014	2015	5 Year Average
<b>Female</b>	1.1	0.2	0.6	0.6	0.4	<b>0.6</b>
<b>Male</b>	0.4	0.4	0.2	1.0	0.4	<b>0.5</b>

# Hepatitis A Frequency, County and Year, Rhode Island, 2011-2015



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

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>5 Year Average</b>
<b>Bristol</b>	1	0	1	1	0	<b>0.6</b>
<b>Kent</b>	1	0	0	1	1	<b>0.6</b>
<b>Newport</b>	0	0	0	0	0	<b>0</b>
<b>Providence</b>	3	1	2	5	2	<b>2.6</b>
<b>Washington</b>	3	2	1	1	1	<b>1.6</b>
<b>All</b>	8	3	4	8	4	

# Hepatitis A Rates by County and Year, Rhode Island, 2011-2015



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

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>5 Year Average</b>
<b>Bristol</b>	2.0	0	2.0	2.0	0	<b>1.2</b>
<b>Kent</b>	0.6	0	0	0.6	0.6	<b>0.4</b>
<b>Newport</b>	0	0	0	0	0	<b>0.0</b>
<b>Providence</b>	0.5	0.2	0.3	0.8	0.3	<b>0.4</b>
<b>Washington</b>	2.4	1.6	0.8	0.8	0.8	<b>1.3</b>

# Hepatitis A Frequency, Month and Year, Rhode Island, 2011-2015



**Table 9. Frequency by Month and Year**

	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>5 Year Average</b>
<b>Jan</b>	1	0	0	1	1	<b>0.6</b>
<b>Feb</b>	0	0	0	1	0	<b>0.2</b>
<b>Mar</b>	0	0	1	1	2	<b>0.8</b>
<b>Apr</b>	0	1	0	0	0	<b>0.2</b>
<b>May</b>	0	0	1	0	1	<b>0.4</b>
<b>Jun</b>	1	0	0	0	0	<b>0.2</b>
<b>Jul</b>	1	0	0	2	0	<b>0.6</b>
<b>Aug</b>	0	0	0	1	0	<b>0.2</b>
<b>Sep</b>	1	0	2	0	0	<b>0.6</b>
<b>Oct</b>	1	0	0	1	0	<b>0.4</b>
<b>Nov</b>	1	1	0	0	0	<b>0.4</b>
<b>Dec</b>	2	1	0	1	0	<b>0.8</b>
<b>All</b>	8	3	4	8	4	<b>5.4</b>





# Notes on Data

- Case counts include patients classified as confirmed and probable cases.
- “Event Date” (used to classify cases by month and year) is generated based on the availability of data in the following order:
  1. Illness onset date
  2. Specimen collection date
  3. Date of report to public health agency
- Rate is calculated per 100,000 population. The population denominator is based on 2010 US Census Population.



# References

- <http://www.cdc.gov/hepatitis/hav/index.htm>
- <http://www.health.ri.gov/diseases/hepatitis/>