
RHODE ISLAND
DEPARTMENT OF HEALTH

Cryptosporidiosis 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 Cryptosporidiosis

- Cryptosporidiosis is a diarrheal disease caused by cryptosporidium, a microscopic parasite. The parasite is found across the United States and throughout the world.
- It is transmitted through fecal-oral, animal-to-person, person-to-person, waterborne, and foodborne routes. Illnesses have commonly been linked to contaminated recreational and drinking water.
- The symptoms of cryptosporidiosis typically begin 2-10 days after becoming infected with the parasite and include diarrhea, anorexia, abdominal cramping, malaise, fever, nausea, and vomiting.
- Illness usually resolves within 30 days; although it may last longer among those who are immunocompromised.

Data Overview, Cryptosporidiosis

- 25 cases of cryptosporidiosis were reported in Rhode Island in 2015, with a rate of 2.4 cases per 100,000 people. The number of cases of cryptosporidiosis reported in 2015 was higher than the number reported from 2011-2014.
- In 2015, rates of cryptosporidiosis were highest among children <5 years old and adults 30-39 years old.
- Bristol County has had the highest rates of cryptosporidiosis reported from 2013-2015.
- Reported cases of cryptosporidiosis peaked during late summer and early fall in 2015.

Reported Cases of Cryptosporidiosis, Rhode Island, 2011-2015

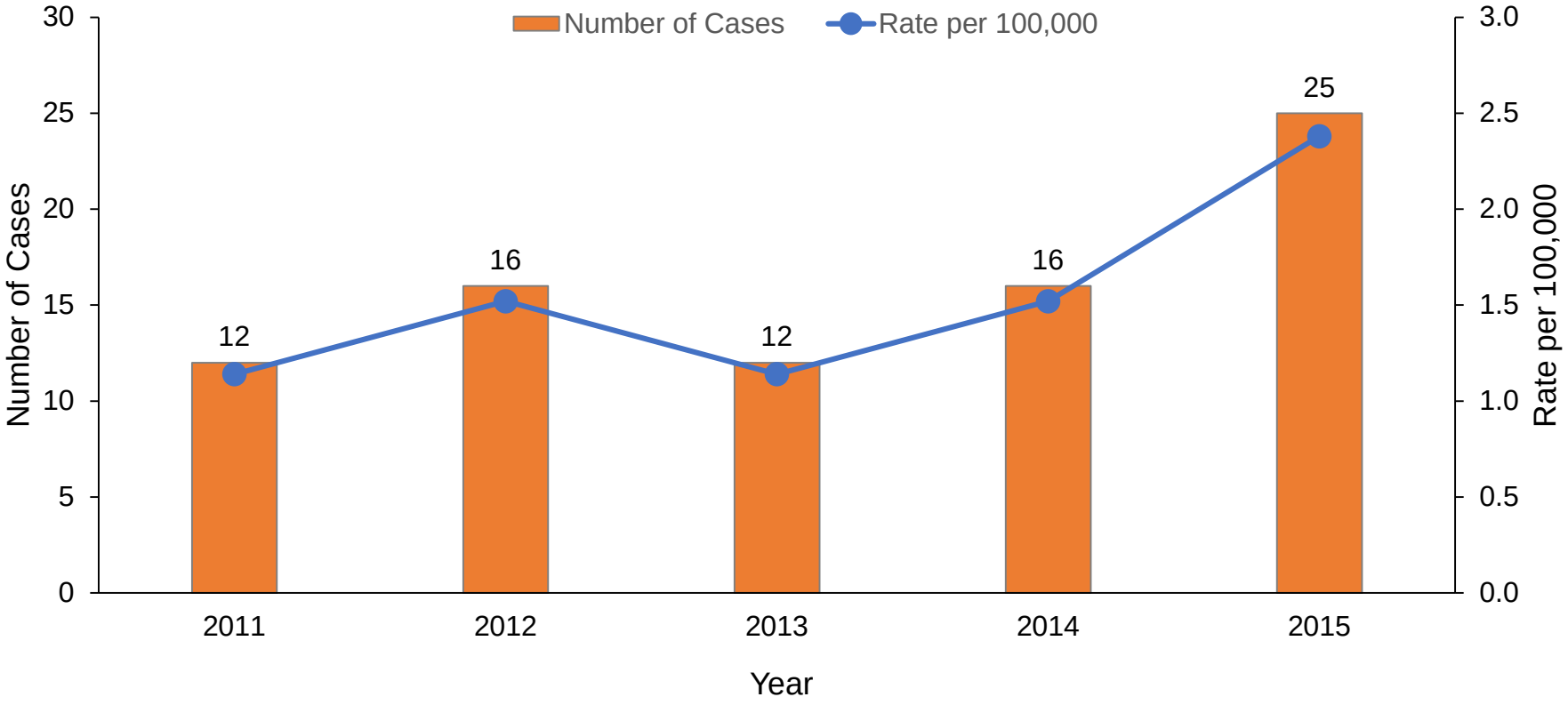

Figure 1: There were 25 cases of cryptosporidiosis reported in Rhode Island in 2015. This number is higher than the number of cases reported during 2011-2014.

Rate of Cryptosporidiosis, Age Group, Rhode Island, 2015

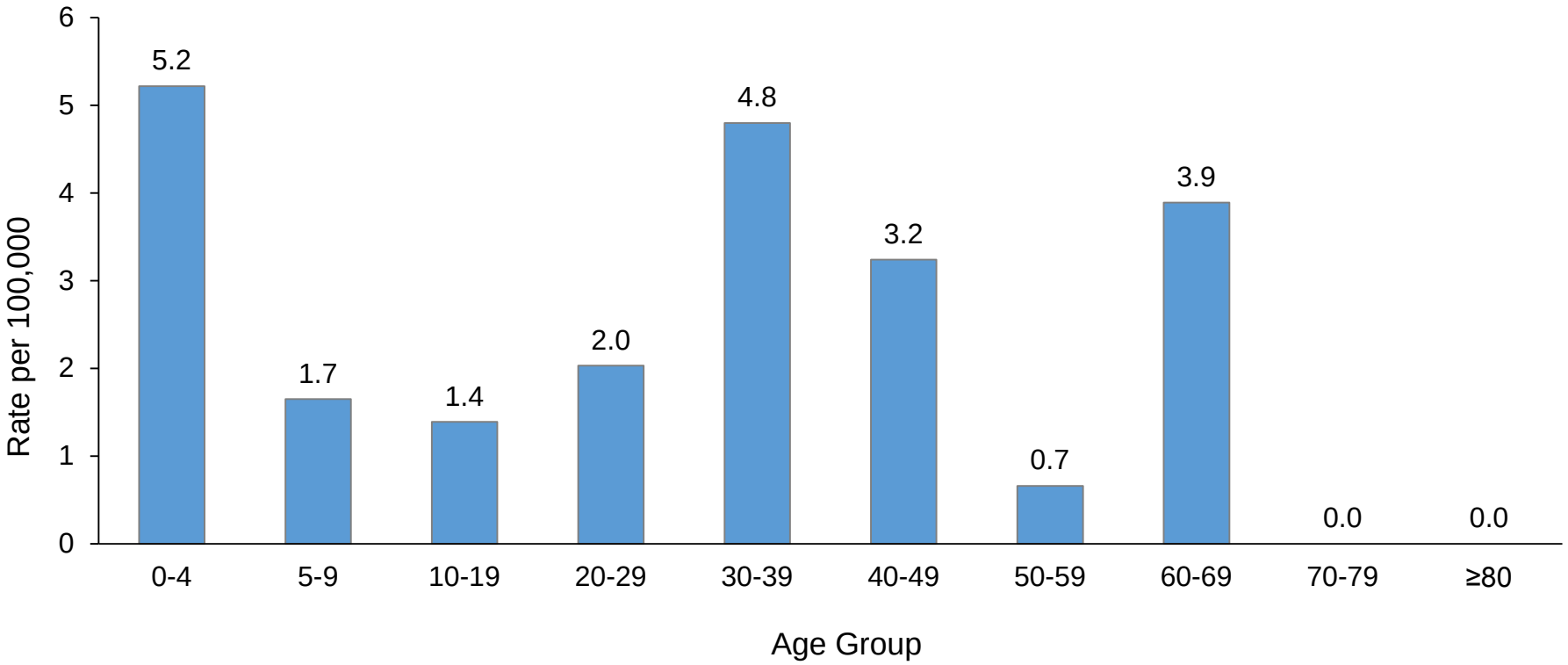

Figure 2: In 2015, the rate of cryptosporidiosis was highest among children <5 years old. No cases of cryptosporidiosis were observed among adults 70 years old or older.

Rate of Cryptosporidiosis, Gender and Year, Rhode Island, 2011-2015

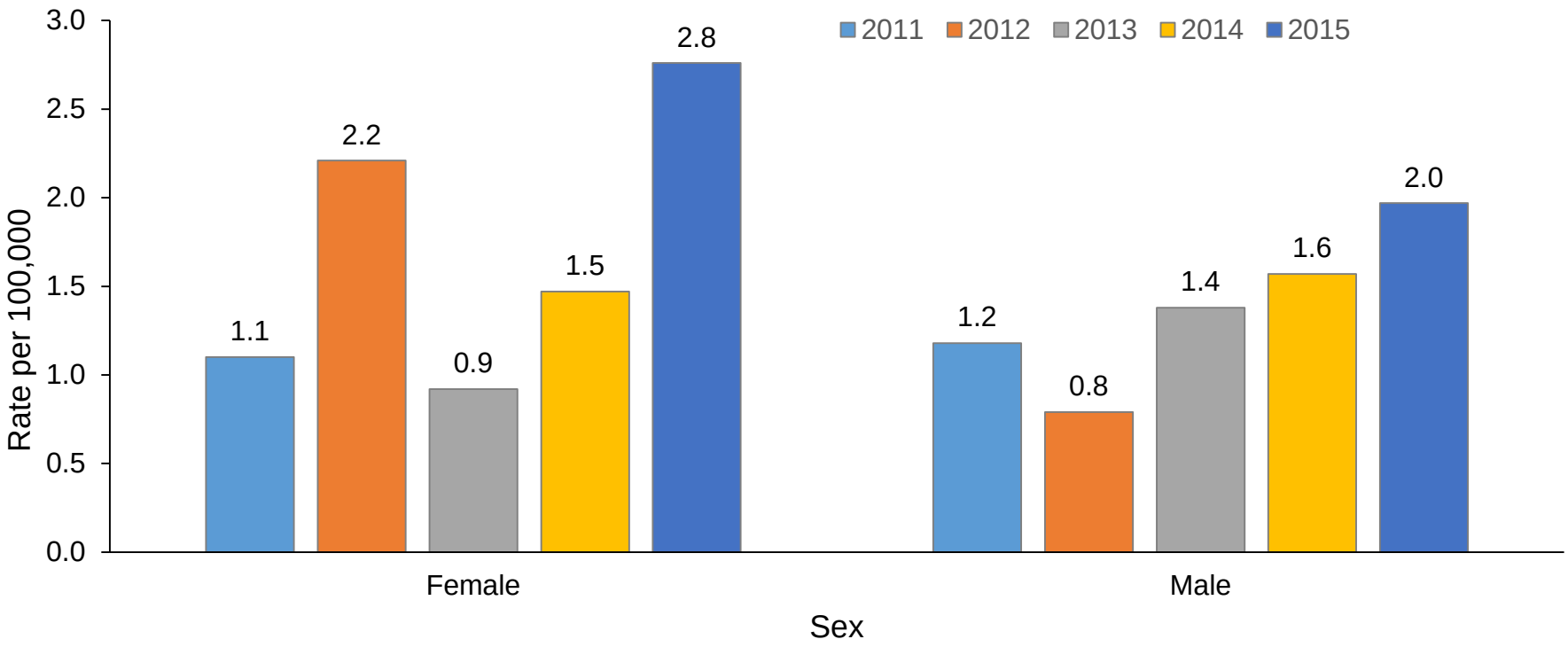

Figure 3: The rate of cryptosporidiosis reported in 2015 was higher among females compared to males. The rate among females increased from 1.5 to 2.8 per 100,000 females between 2014 and 2015.

Rate of Cryptosporidiosis, County and Year, Rhode Island, 2011-2015

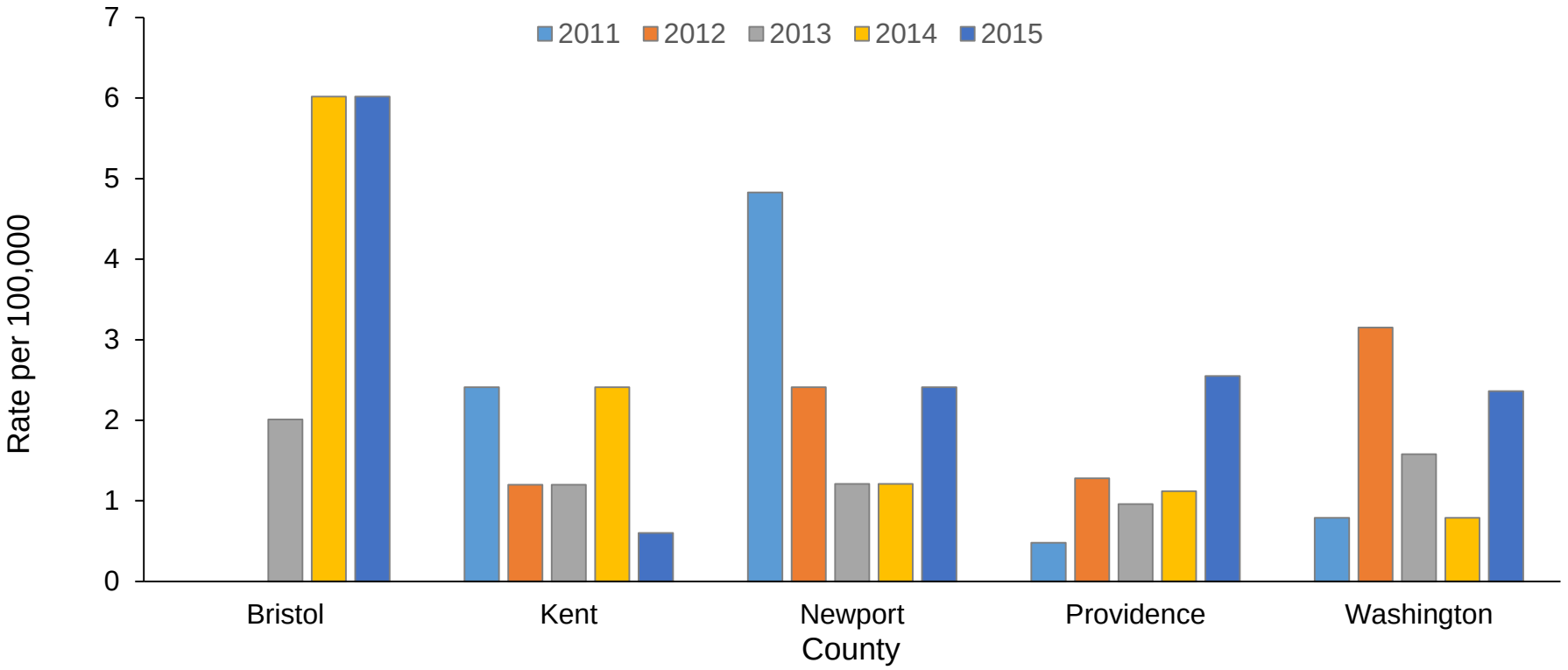

Figure 4: From 2013 to 2015, the rate of cryptosporidiosis has been higher in Bristol County compared to the other Rhode Island counties. In 2014 and 2015 this increase was most noticeable, with a rate of 6 cases per 100,000 people for each of these years. Providence, Newport, and Washington counties experienced similar cryptosporidiosis rates in 2015 and Kent County had the lowest rate.

Reported Cases of Cryptosporidiosis, Month and Year, Rhode Island, 2011-2015

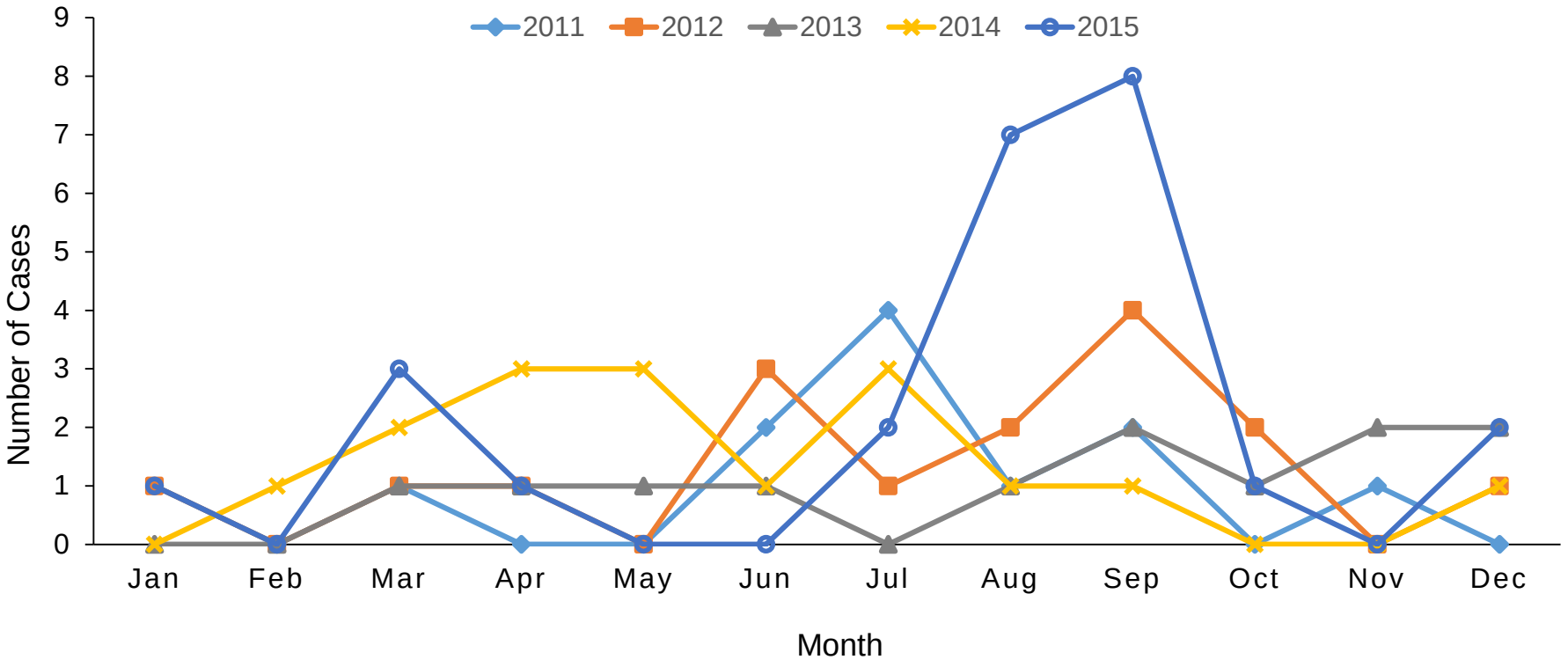

Figure 5: The number of cases of cryptosporidiosis reported in Rhode Island in 2015 peaked in late summer through early fall. This is consistent with trends observed in other years; however the peak was higher in 2015. This trend differed from the trend observed in 2014 where the number of cases climbed gradually during the spring and peaked during the summer.

Cryptosporidiosis Frequency and Rates by Year, Rhode Island, 2011-2015

Table 1. Frequency by Year					
	2011	**2012**	**2013**	**2014**	**2015**
Number of Cases	12	16	12	16	25

Table 2. Rate by Year					
	2011	**2012**	**2013**	**2014**	**2015**
Rate per 100,000	1.1	1.5	1.1	1.5	2.4

Cryptosporidiosis Frequency, Age Group and Year, Rhode Island, 2011-2015

Table 3. Frequency by Age Group and Year					
	2011	2012	2013	2014	2015
0-4	1	1	1	0	3
5-9	0	1	0	0	1
10-19	1	2	3	0	2
20-29	2	2	4	4	3
30-39	2	4	0	0	6
40-49	2	3	1	3	5
50-59	0	0	1	3	1
60-69	2	0	0	2	4
70-79	1	1	1	1	0
≥80	1	2	1	3	0
Total	12	16	12	16	25

Cryptosporidiosis Rates, Age Group and Year, Rhode Island, 2011-2015

Table 4. Rate by Age Group and Year					
	2011	**2012**	**2013**	**2014**	**2015**
0-4	1.7	1.7	1.7	0.0	5.2
5-9	0.0	1.7	0.0	0.0	1.7
10-19	0.7	1.4	2.1	0.0	1.4
20-29	1.4	1.4	2.7	2.7	2.0
30-39	1.6	3.2	0.0	0.0	4.8
40-49	1.3	1.9	0.7	1.9	3.2
50-59	0.0	0.0	0.7	2.0	0.7
60-69	2.0	0.0	0.0	2.0	3.9
70-79	1.7	1.7	1.7	1.7	0.0
≥80	2.0	3.9	2.0	5.8	0.0

Cryptosporidiosis Frequency and Rates, Gender and Year, Rhode Island, 2011-2015

Table 5. Frequency by Sex and Year					
	2011	**2012**	**2013**	**2014**	**2015**
Female	6	12	5	8	15
Male	6	4	7	8	10
Unknown	0	0	0	0	0
Total	12	16	12	16	25

Table 6. Rate by Sex and Year					
	2011	**2012**	**2013**	**2014**	**2015**
Female	1.1	2.2	0.9	1.5	2.8
Male	1.2	0.8	1.4	1.6	2.0

Cryptosporidiosis Frequency, County and Year, Rhode Island, 2011-2015

Table 7. Frequency by County and Year					
	2011	2012	2013	2014	2015
Bristol	0	0	1	3	3
Kent	4	2	2	4	1
Newport	4	2	1	1	2
Providence	3	8	6	7	16
Washington	1	4	2	1	3
All	12	16	12	16	25

Cryptosporidiosis Rates by County and Year, Rhode Island, 2011-2015

Table 8. Rate by County and Year					
	2011	2012	2013	2014	2015
Bristol	0.0	0.0	2.0	6.0	6.0
Kent	2.4	1.2	1.2	2.4	0.6
Newport	4.8	2.4	1.2	1.2	2.4
Providence	0.5	1.3	1.0	1.1	2.6
Washington	0.8	3.2	1.6	0.8	2.4

Cryptosporidiosis Frequency, Month and Year, Rhode Island, 2011-2015

Table 9. Frequency by Month and Year					
	2011	2012	2013	2014	2015
Jan	1	1	0	0	1
Feb	0	0	0	1	0
Mar	1	1	1	2	3
Apr	0	1	1	3	1
May	0	0	1	3	0
Jun	2	3	1	1	0
Jul	4	1	0	3	2
Aug	1	2	1	1	7
Sep	2	4	2	1	8
Oct	0	2	1	0	1
Nov	1	0	2	0	0
Dec	0	1	2	1	2
All	12	16	12	16	25

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

- https://www.cdc.gov/parasites/crypto/