





Cryptosporidiosis Surveillance 2012-2016

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



- 18 cases of cryptosporidiosis were reported in Rhode Island in 2016, for a rate of 1.7 cases per 100,000 people. The number of cryptosporidiosis cases reported in 2016 was lower than the number reported in 2015, but higher than the numbers reported from 2012-2014.
- In 2016, rates of cryptosporidiosis were highest among children 5-9 years old and adults 70-79 years old.
- Newport County had the highest reported rate of cryptosporidiosis in 2016.
- Reported cases of cryptosporidiosis peaked during late summer and early fall in 2016.

Reported Cases of Cryptosporidiosis, Rhode Island, 2012-2016

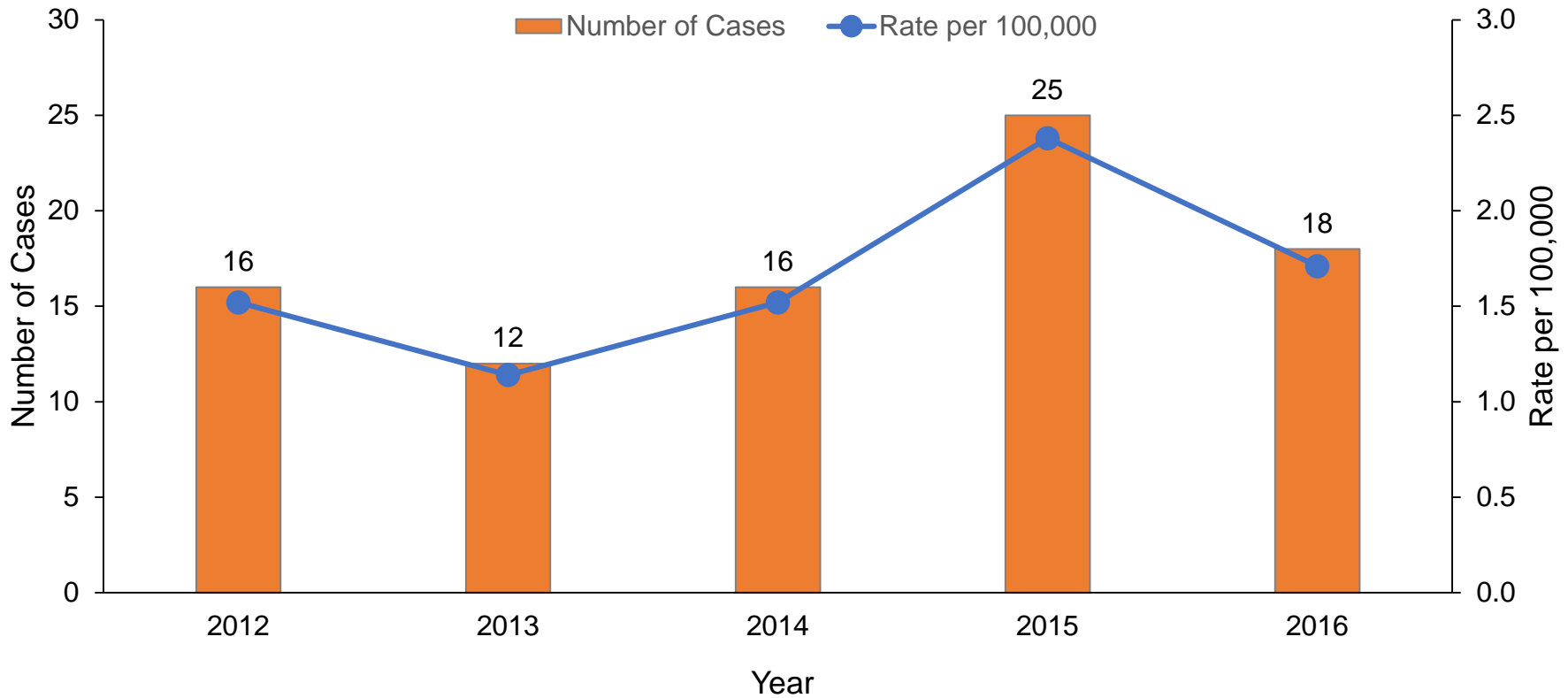


Figure 1: There were 18 cryptosporidiosis cases reported in Rhode Island in 2016. This number is lower than the number of cases reported in 2015, but higher than the number of cases reported during 2012-2014.

Rate of Cryptosporidiosis, Age Group, Rhode Island, 2016

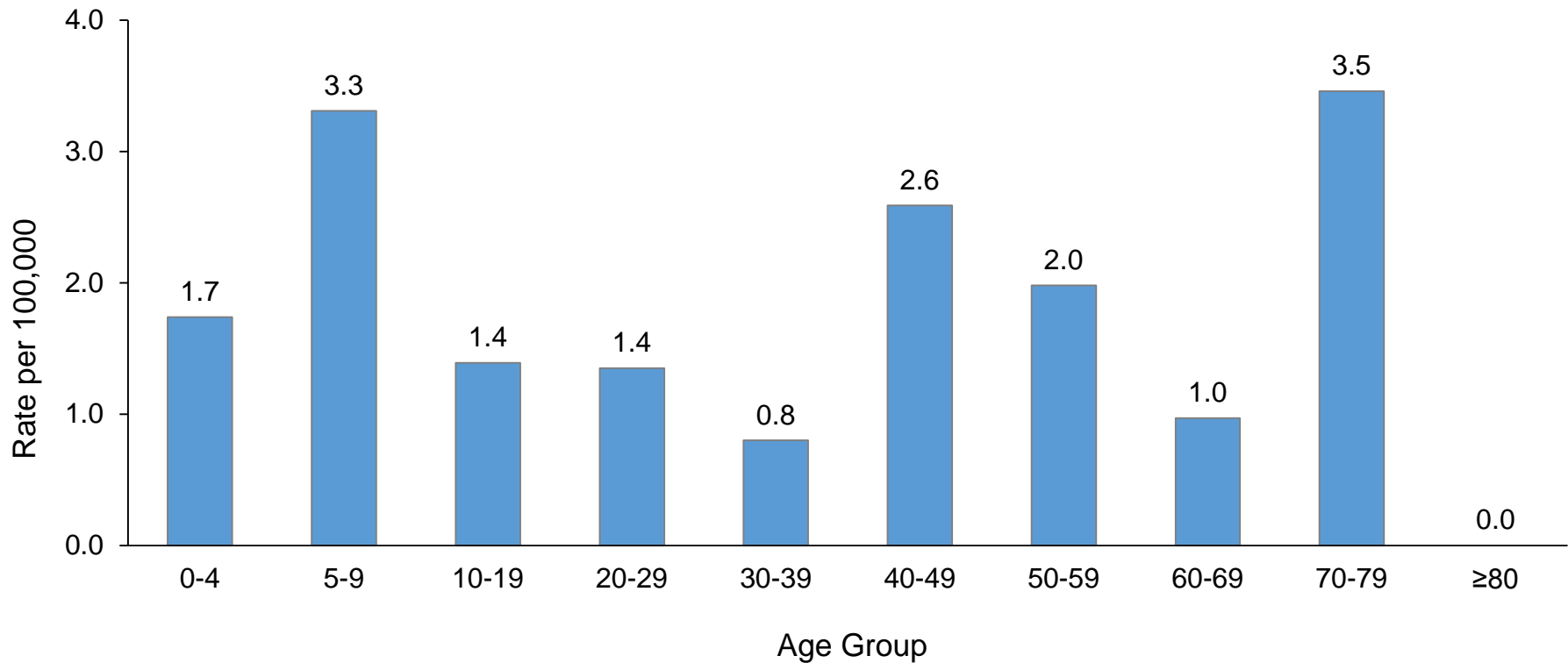


Figure 2: In 2016, the rate of cryptosporidiosis was observed to be highest among adults 70-79 years old (3.5 cases per 100,000 people), followed by children 5-9 years old (3.3 cases per 100,000 people).

Rate of Cryptosporidiosis, Gender and Year, Rhode Island, 2012-2016

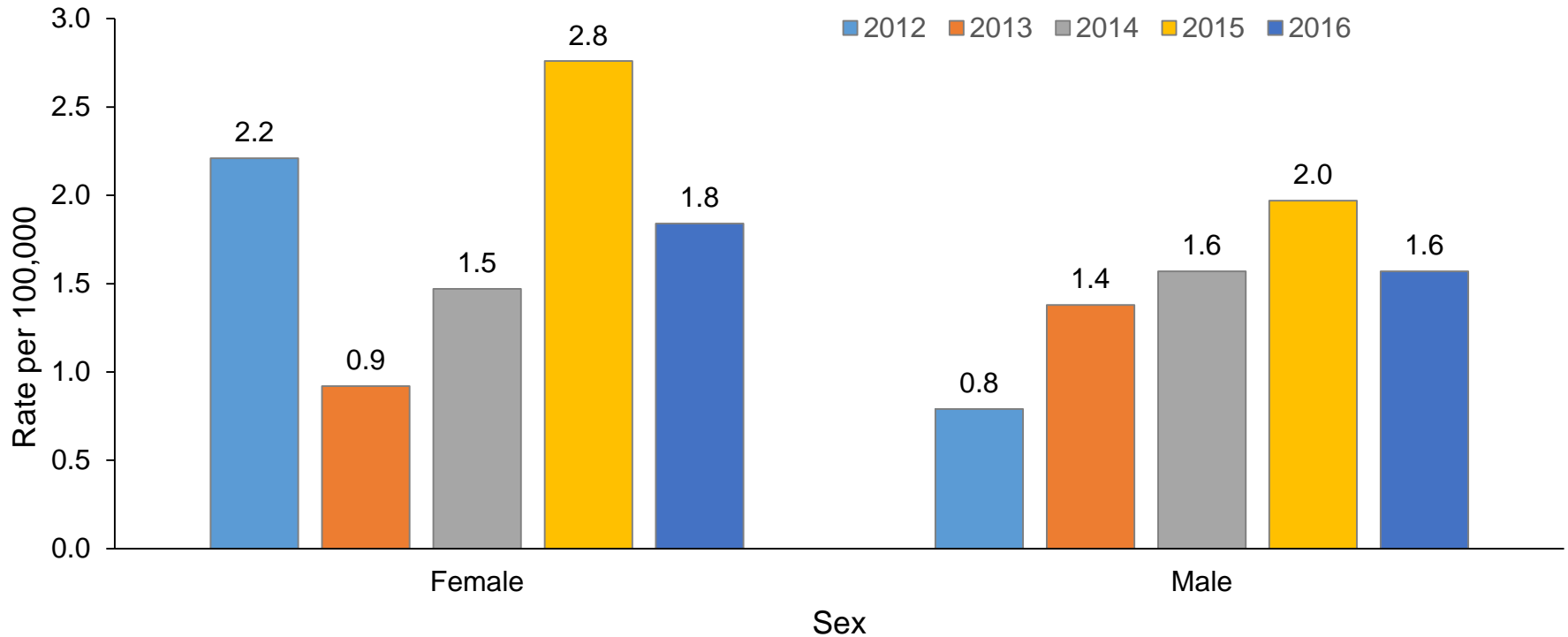


Figure 3: The rate of cryptosporidiosis in 2016 was observed to be slightly higher among females compared to males. The rate among females decreased from 2.8 to 1.8 cases per 100,000 females between 2015 and 2016.

Rate of Cryptosporidiosis, County and Year, Rhode Island, 2012-2016

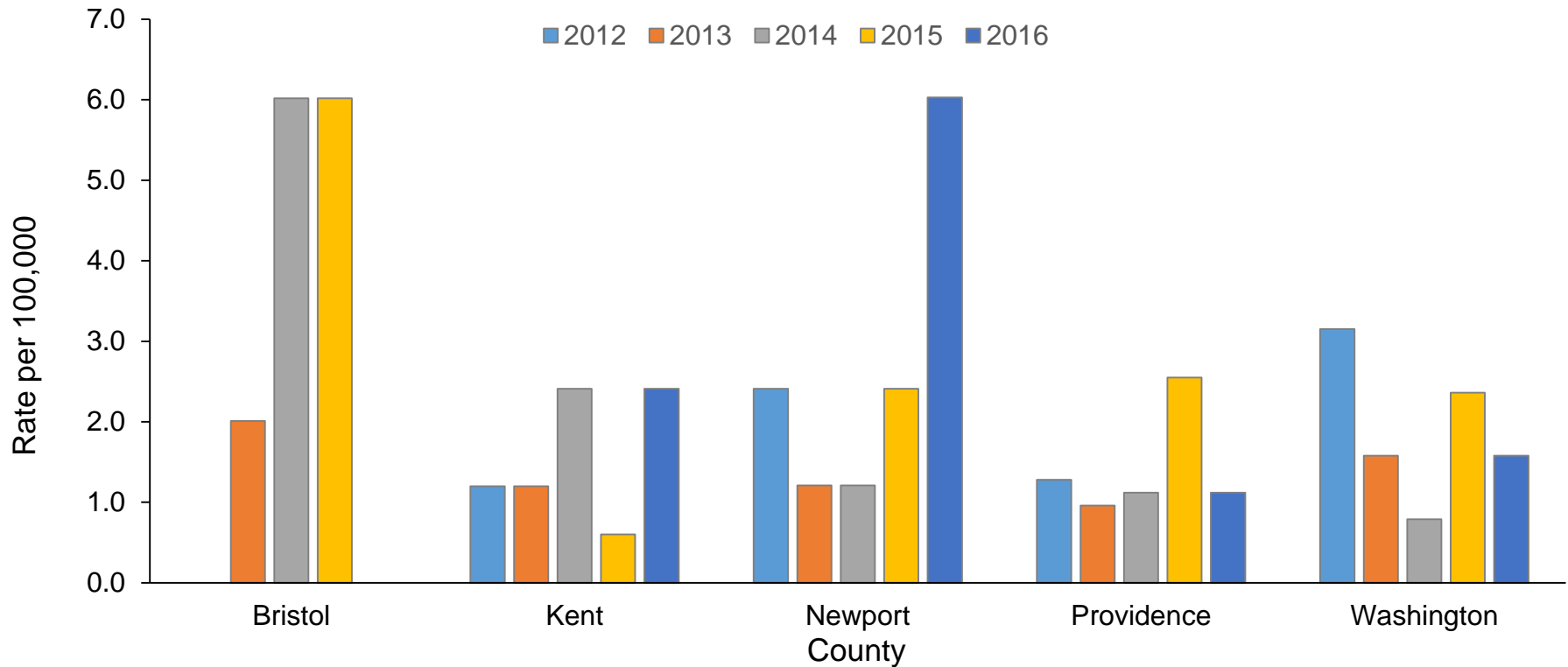


Figure 4: From 2013 to 2015, the rate of cryptosporidiosis was observed to be highest in Bristol County; however, in 2016, no cases were reported from Bristol County. In 2016, the rate of cryptosporidiosis was observed to be highest among residents of Newport County (6.0 cases per 100,000 people).

Reported Cases of Cryptosporidiosis, Month and Year, Rhode Island, 2012-2016

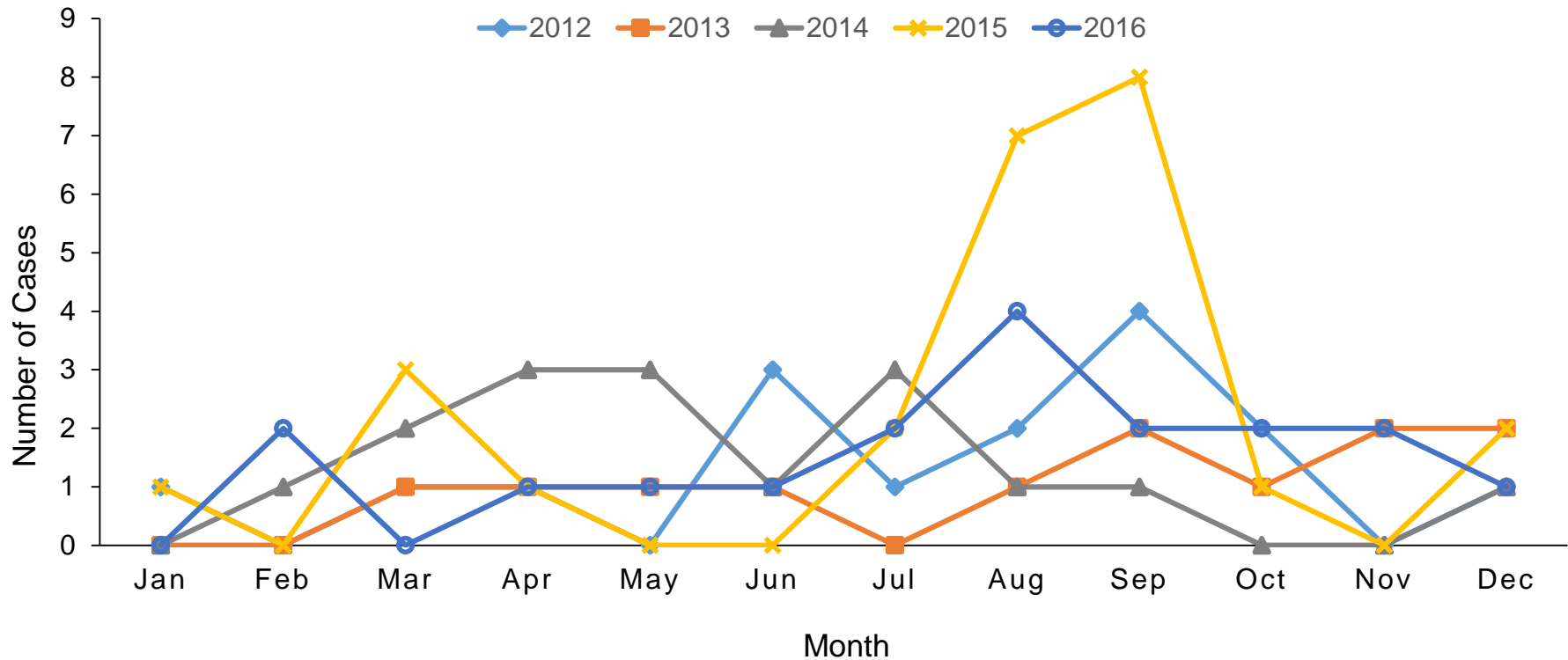


Figure 5: The number of cases of cryptosporidiosis reported in Rhode Island in 2016 peaked in late summer through early fall. This is consistent with trends observed in other years; however, the peak was not as high as what was observed in 2015.

Cryptosporidiosis Frequency and Rates by Year, Rhode Island, 2012-2016



Table 1. Frequency by Year

	2012	2013	2014	2015	2016
Number of Cases	16	12	16	25	18

Table 2. Rate by Year

	2012	2013	2014	2015	2016
Rate per 100,000	1.5	1.1	1.5	2.4	1.7

Cryptosporidiosis Frequency, Age Group and Year, Rhode Island, 2012-2016



Table 3. Frequency by Age Group and Year

	2012	2013	2014	2015	2016
0-4	1	1	0	3	1
5-9	1	0	0	1	2
10-19	2	3	0	2	2
20-29	2	4	4	3	2
30-39	4	0	0	6	1
40-49	3	1	3	5	4
50-59	0	1	3	1	3
60-69	0	0	2	4	1
70-79	1	1	1	0	2
≥80	2	1	3	0	0
Total	16	12	16	25	18

Cryptosporidiosis Rates, Age Group and Year, Rhode Island, 2012-2016



Table 4. Rate by Age Group and Year

	2012	2013	2014	2015	2016
0-4	1.7	1.7	0.0	5.2	1.7
5-9	1.7	0.0	0.0	1.7	3.3
10-19	1.4	2.1	0.0	1.4	1.4
20-29	1.4	2.7	2.7	2.0	1.4
30-39	3.2	0.0	0.0	4.8	0.8
40-49	1.9	0.7	1.9	3.2	2.6
50-59	0.0	0.7	2.0	0.7	2.0
60-69	0.0	0.0	2.0	3.9	1.0
70-79	1.7	1.7	1.7	0.0	3.5
≥80	3.9	2.0	5.8	0.0	0.0

Cryptosporidiosis Frequency and Rates, Gender and Year, Rhode Island, 2012-2016



Table 5. Frequency by Sex and Year

	2012	2013	2014	2015	2016
Female	12	5	8	15	10
Male	4	7	8	10	8
Total	16	12	16	25	18

Table 6. Rate by Sex and Year

	2012	2013	2014	2015	2016
Female	2.2	0.9	1.5	2.8	1.8
Male	0.8	1.4	1.6	2.0	1.6

Cryptosporidiosis Frequency, County and Year, Rhode Island, 2012-2016



Table 7. Frequency by County and Year

	2012	2013	2014	2015	2016
Bristol	0	1	3	3	0
Kent	2	2	4	1	4
Newport	2	1	1	2	5
Providence	8	6	7	16	7
Washington	4	2	1	3	2
All	16	12	16	25	18

Cryptosporidiosis Rates by County and Year, Rhode Island, 2012-2016



Table 8. Rate by County and Year

	2012	2013	2014	2015	2016
Bristol	0.0	2.0	6.0	6.0	0.0
Kent	1.2	1.2	2.4	0.6	2.4
Newport	2.4	1.2	1.2	2.4	6.0
Providence	1.3	1.0	1.1	2.6	1.1
Washington	3.2	1.6	0.8	2.4	1.6

Cryptosporidiosis Frequency, Month and Year, Rhode Island, 2012-2016



Table 9. Frequency by Month and Year

	2012	2013	2014	2015	2016
Jan	1	0	0	1	0
Feb	0	0	1	0	2
Mar	1	1	2	3	0
Apr	1	1	3	1	1
May	0	1	3	0	1
Jun	3	1	1	0	1
Jul	1	0	3	2	2
Aug	2	1	1	7	4
Sep	4	2	1	8	2
Oct	2	1	0	1	2
Nov	0	2	0	0	2
Dec	1	2	1	2	1
All	16	12	16	25	18



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/>