





Giardiasis Surveillance 2014-2018

Rhode Island Department of Health

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

Center for Acute Infectious Disease Epidemiology



About Giardiasis

- Giardiasis is a diarrheal disease caused by a microscopic parasite.
- Humans can get giardiasis from drinking or swimming in contaminated water, from eating contaminated food, through fecal-oral transmission, or through sexual contact.
- Symptoms include acute diarrhea lasting 2-4 weeks; chronic diarrhea; loose, pale, or greasy stools; abdominal cramps; bloating; fatigue; malabsorption; and weight loss. Symptoms typically begin 1-3 weeks after becoming infected.



Data Overview, Giardiasis

- 56 cases of giardiasis were reported in 2018 (5.3 cases per 100,000 people), consistent with the number of cases observed in past years, with the exception of 2016 when a spike in cases was observed.
- In 2018, rates of giardiasis in Rhode Island were highest among young children 0-4 years old and adults 30-39 years old.
- As observed in prior years, the rate of giardiasis was observed to be higher among males compared to females.
- The highest rates of giardiasis in 2018 were observed among residents of Bristol and Newport counties.
- Giardiasis cases were most commonly reported during spring and summer months during 2018.

Reported Cases of Giardiasis, Rhode Island, 2014-2018

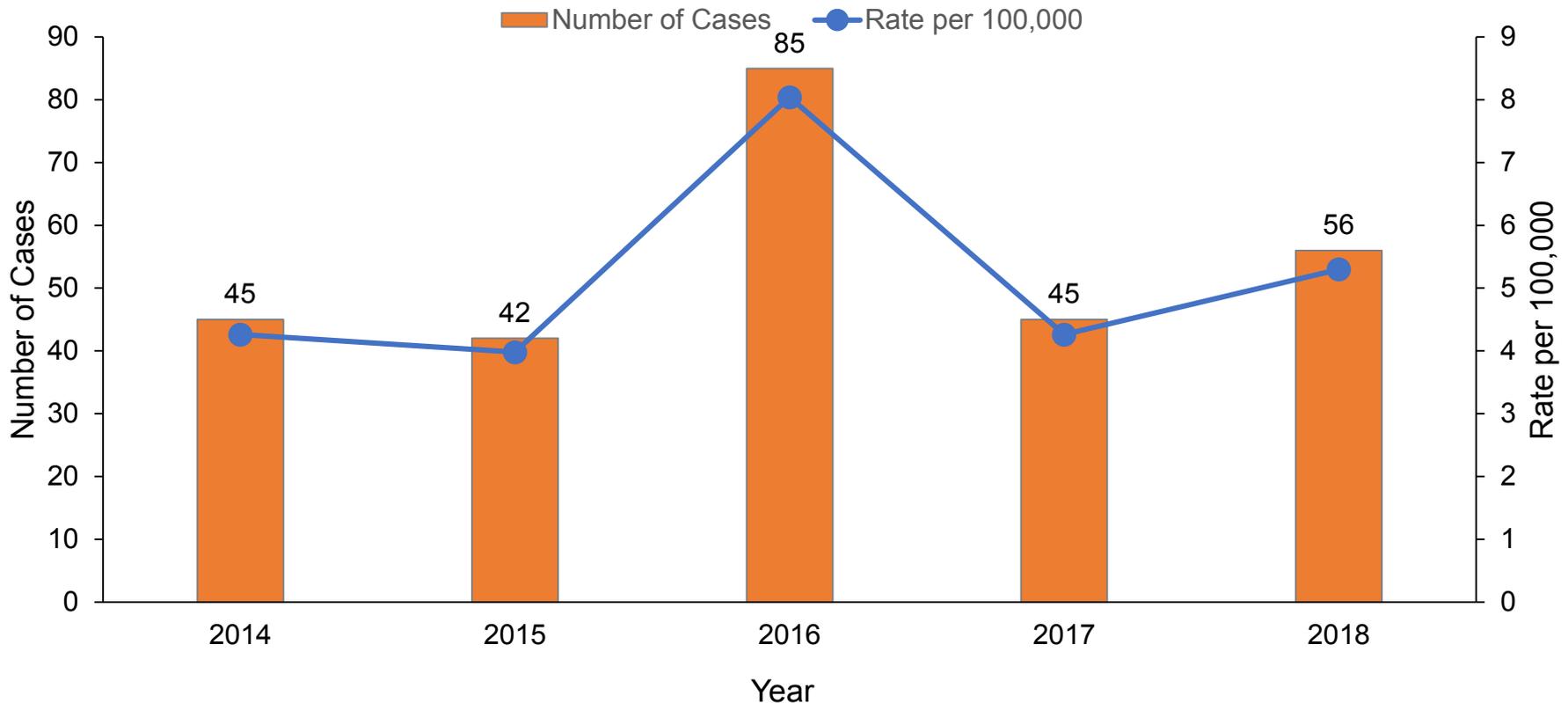


Figure 1: There were 56 cases of giardiasis reported in 2018 (5.3 cases per 100,000 people). This was similar to the number of cases reported during the last five years, with the exception of 2016 when a spike in reported cases was observed.

Rate of Giardiasis, Age Group, Rhode Island, 2018

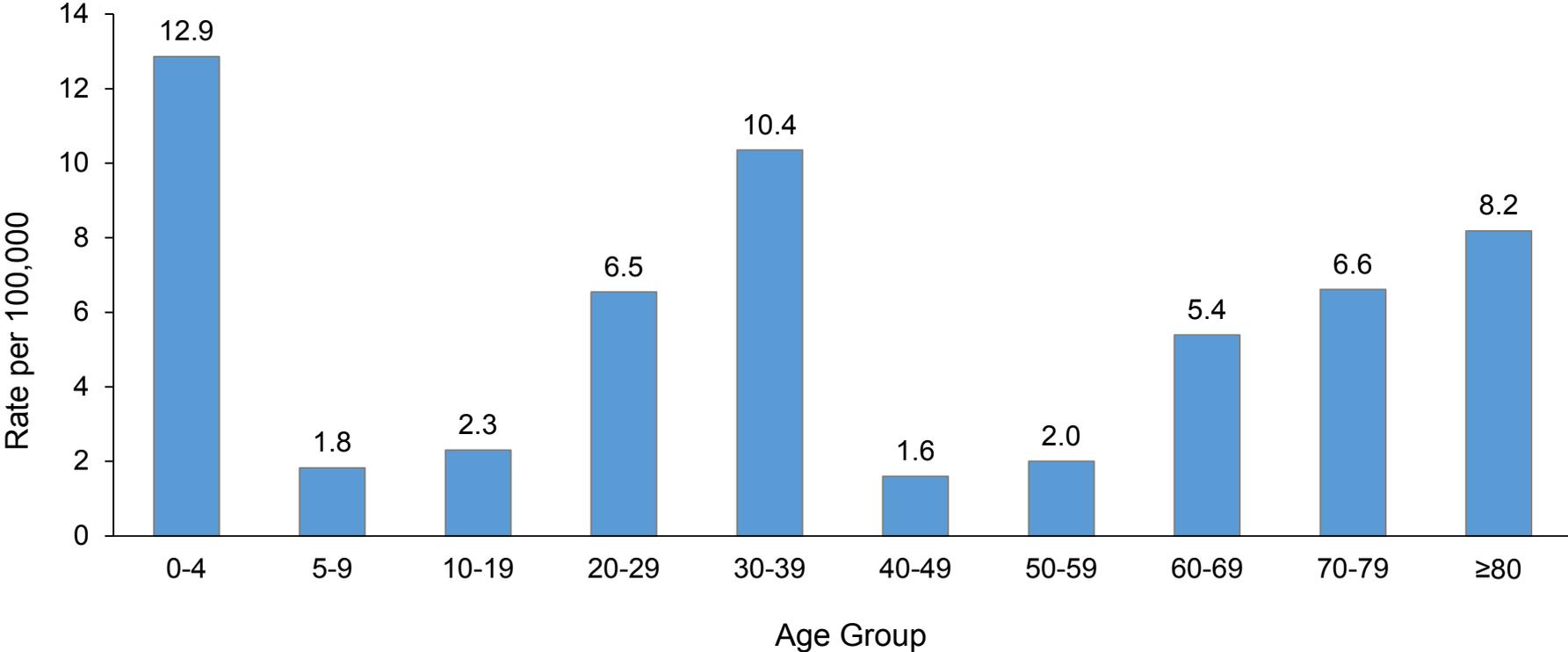


Figure 2: In 2018, the highest rates of giardiasis were observed among young children 0-4 years old, followed by adults 30-39 years old.

Rate of Giardiasis, Gender and Year, Rhode Island, 2014-2018

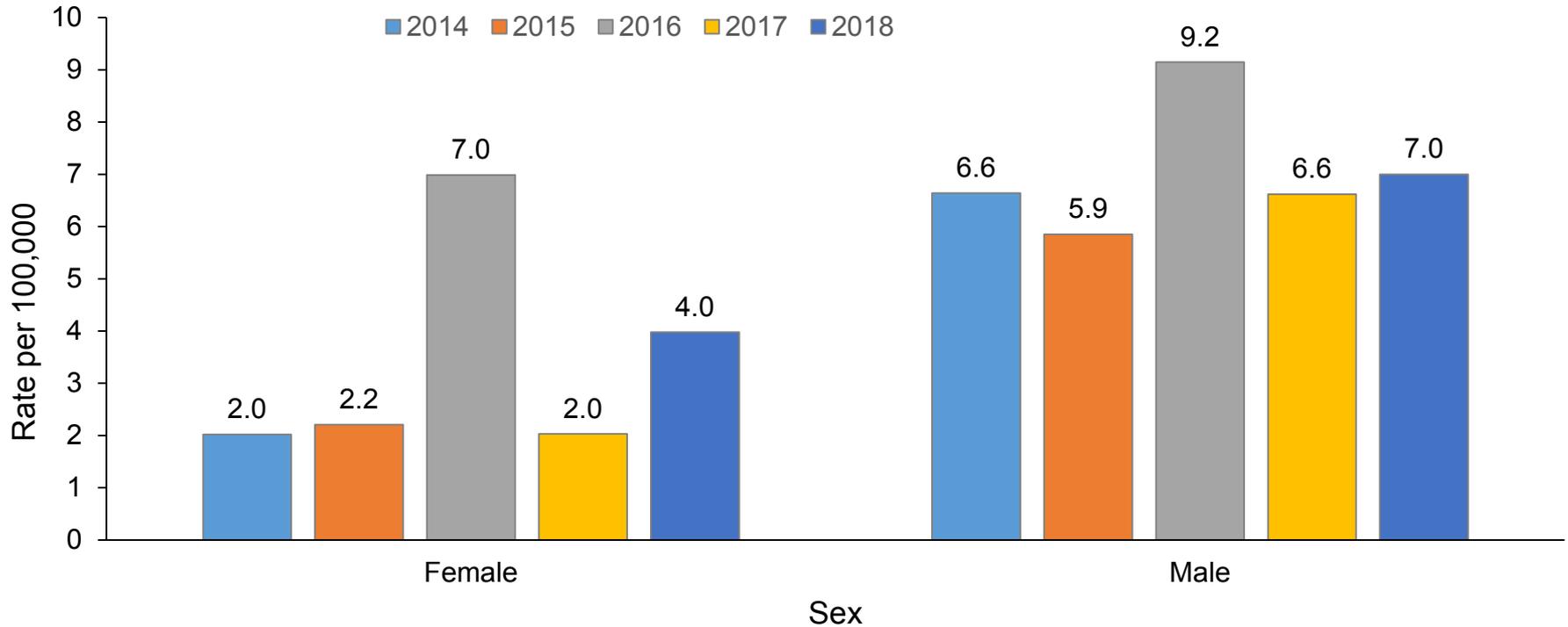


Figure 3: As observed in prior years, a higher rate of giardiasis in Rhode Island was observed among males compared to females in 2018.

Rate of Giardiasis, County and Year, Rhode Island, 2014-2018

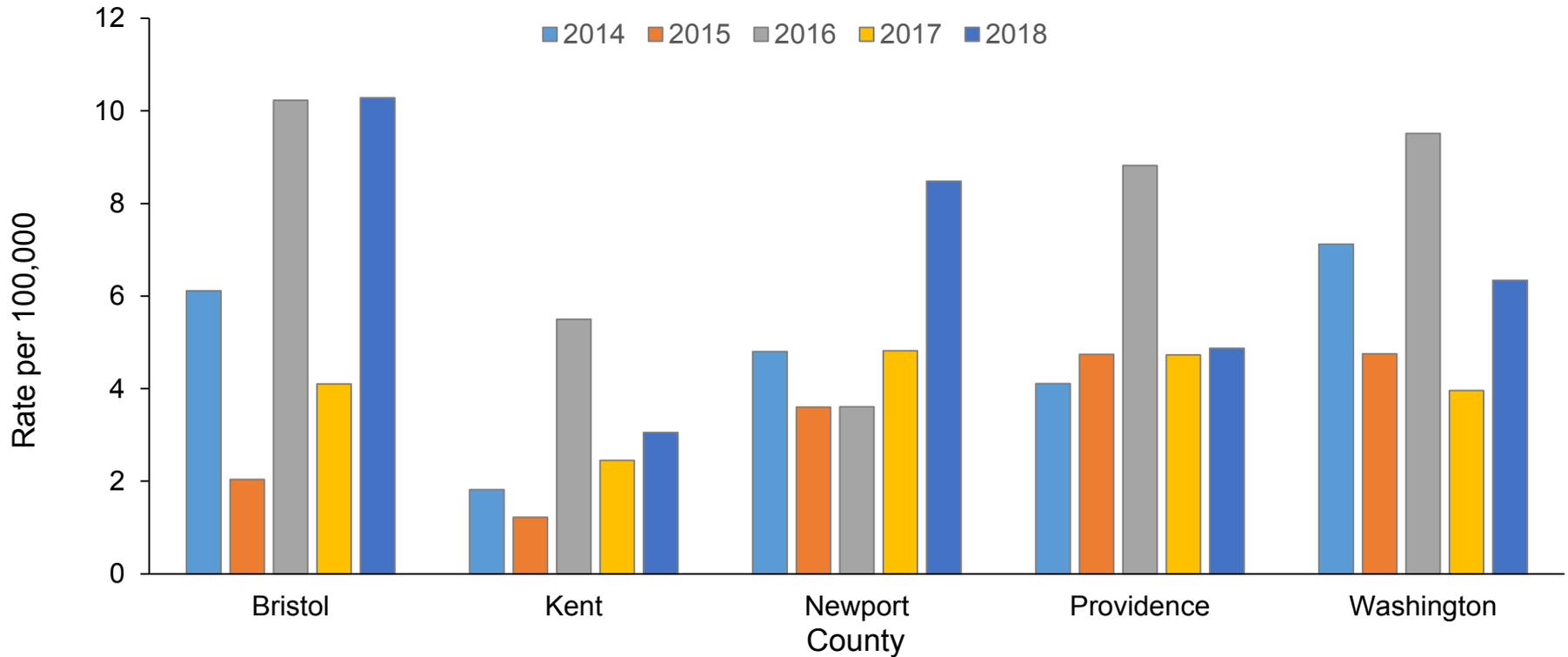


Figure 4: The rate of giardiasis reported in Rhode Island during 2018 was observed to be highest among residents of Bristol County (10.3 cases per 100,000 people), followed by Newport County (8.5 cases per 100,000 people).

Reported Cases of Giardiasis, Month and Year, Rhode Island, 2014-2018

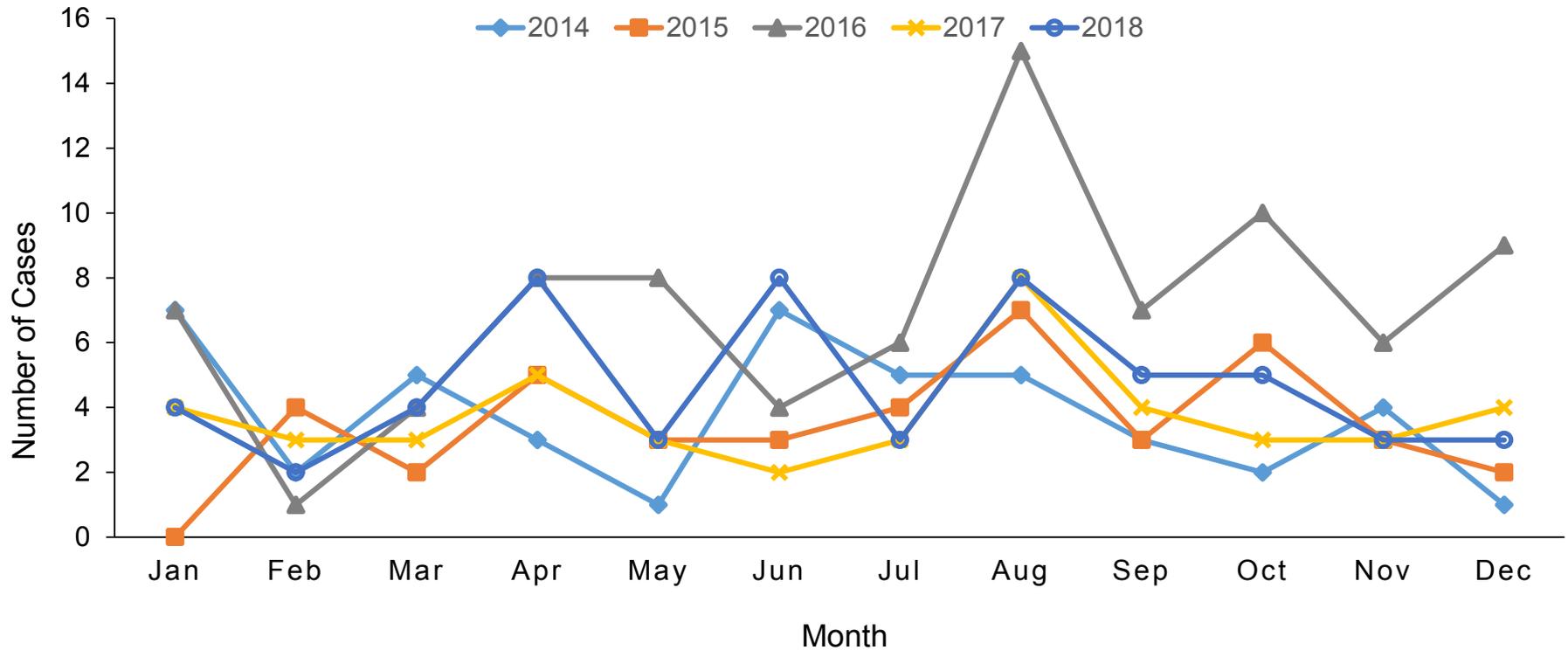


Figure 5: Nationally, giardia infections are observed to peak during the summer and early fall. This general trend has been observed in Rhode Island over time. In 2018, giardiasis was most commonly reported during spring and summer months in Rhode Island.

Giardiasis Frequency and Rates by Year, Rhode Island, 2014-2018



Table 1. Frequency by Year

	2014	2015	2016	2017	2018
Number of Cases	45	42	85	45	56

Table 2. Rate by Year

	2014	2015	2016	2017	2018
Rate per 100,000	4.3	4.0	8.0	4.3	5.3

Giardiasis Frequency, Age Group and Year, Rhode Island, 2014-2018



Table 3. Frequency by Age Group and Year

	2014	2015	2016	2017	2018
0-4	0	3	12	2	7
5-9	0	1	14	1	1
10-19	5	4	10	4	3
20-29	8	6	10	6	10
30-39	10	6	10	3	14
40-49	11	4	7	10	2
50-59	4	9	18	7	3
60-69	2	6	3	8	7
70-79	1	1	0	3	5
≥80	4	2	1	1	4
Total	45	42	85	45	56

Giardiasis Rates, Age Group and Year, Rhode Island, 2014-2018



Table 4. Rate by Age Group and Year

	2014	2015	2016	2017	2018
0-4	0.0	5.5	21.9	3.7	12.9
5-9	0.0	1.8	25.0	1.8	1.8
10-19	3.7	3.0	7.5	3.0	2.3
20-29	5.2	3.9	6.4	3.9	6.5
30-39	7.9	4.7	7.7	2.3	10.4
40-49	8.0	3.0	5.4	7.9	1.6
50-59	2.6	5.6	11.6	4.6	2.0
60-69	1.7	4.9	2.4	6.3	5.4
70-79	1.6	1.5	0.0	4.2	6.6
≥80	8.0	4.1	2.0	2.0	8.2

Giardiasis Frequency and Rates, Sex and Year, Rhode Island, 2014-2018



Table 5. Frequency by Sex and Year

	2014	2015	2016	2017	2018
Female	11	12	38	11	20
Male	34	30	47	34	36
Total	45	42	85	45	56

Table 6. Rate by Sex and Year

	2014	2015	2016	2017	2018
Female	2.0	2.2	7.0	2.0	3.7
Male	6.6	5.9	9.2	6.6	7.0

Giardiasis Frequency, County and Year, Rhode Island, 2014-2018



Table 7. Frequency by County and Year

	2014	2015	2016	2017	2018
Bristol	3	1	5	2	5
Kent	3	2	9	4	5
Newport	4	3	3	4	7
Providence	26	30	56	30	31
Washington	9	6	12	5	8
All	45	42	85	45	56

Giardiasis Rates by County and Year, Rhode Island, 2014-2018



Table 8. Rate by County and Year

	2014	2015	2016	2017	2018
Bristol	6.1	2.0	10.2	4.1	10.3
Kent	1.8	1.2	5.5	2.4	3.1
Newport	4.8	3.6	3.6	4.8	8.5
Providence	4.1	4.7	8.8	4.7	4.9
Washington	7.1	4.8	9.5	4.0	6.3

Giardiasis Frequency, Month and Year, Rhode Island, 2014-2018



Table 9. Frequency by Month and Year

	2014	2015	2016	2017	2018
Jan	7	0	7	4	4
Feb	2	4	1	3	2
Mar	5	2	4	3	4
Apr	3	5	8	5	8
May	1	3	8	3	3
Jun	7	3	4	2	8
Jul	5	4	6	3	3
Aug	5	7	15	8	8
Sep	3	3	7	4	5
Oct	2	6	10	3	5
Nov	4	3	6	3	3
Dec	1	2	9	4	3
All	45	42	85	45	56



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.
- Population denominators are based on the Annual Estimates of the Resident Population: April 1, 2010-July 1, 2018, U.S. Census Bureau.



References

- <https://www.cdc.gov/parasites/giardia/general-info.html>