





Giardiasis Surveillance 2013-2017

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 anal intercourse.
- 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

- 45 cases of giardiasis were reported in Rhode Island in 2017, for a rate of 4.3 cases per 100,000 people. This was lower than the number of cases reported in 2016, but consistent with the number of cases reported from 2013-2015.
- In 2017, rates of giardiasis in Rhode Island were highest among adults 40-49 and 60-69 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 2017 were observed among residents of Newport and Providence counties.
- The number of cases of giardiasis in Rhode Island peaked in August 2017.

Reported Cases of Giardiasis, Rhode Island, 2013-2017

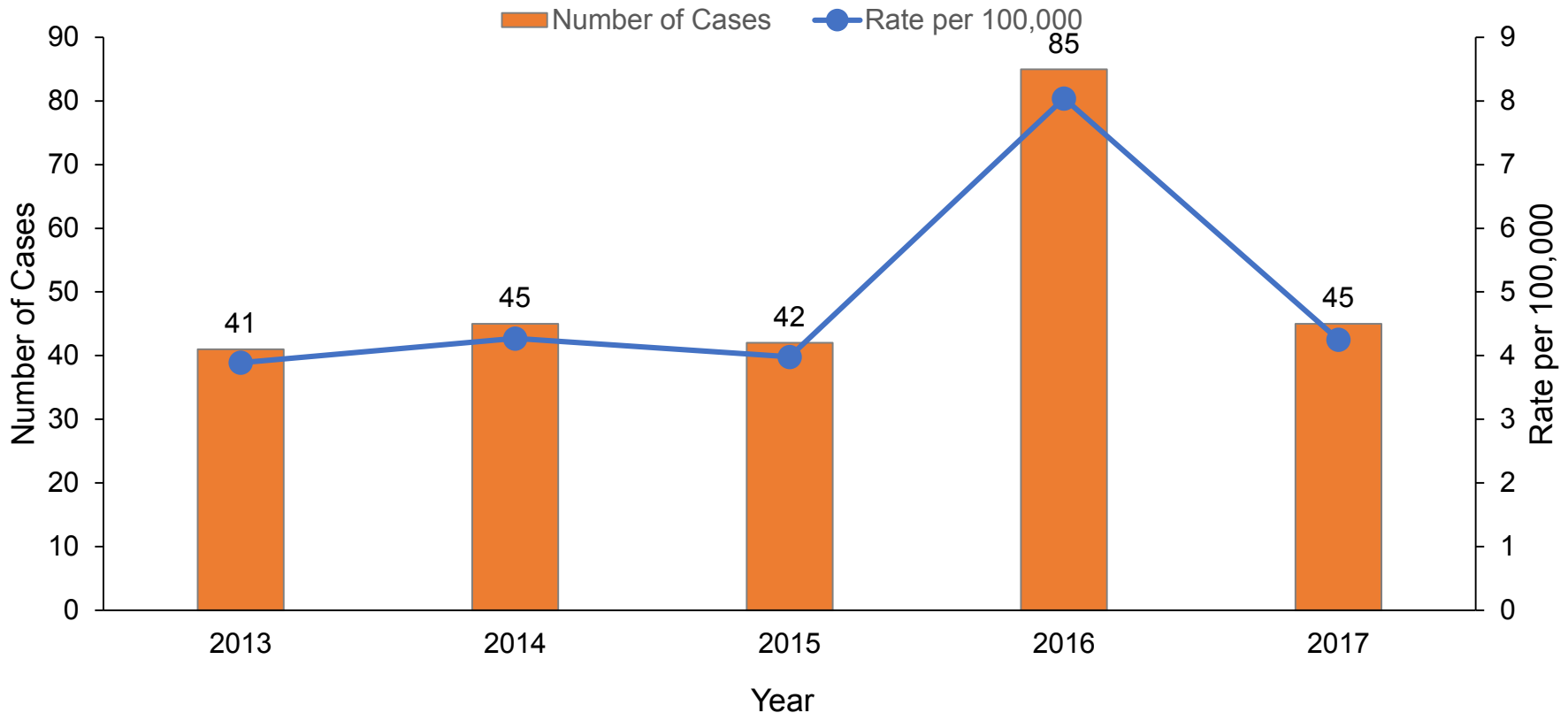


Figure 1: There were 45 cases of giardiasis reported in 2017 (4.3 cases per 100,000 people), which was lower than the number of cases reported in 2016, but similar to the number of cases reported from 2013-2015.

Rate of Giardiasis, Age Group, Rhode Island, 2017

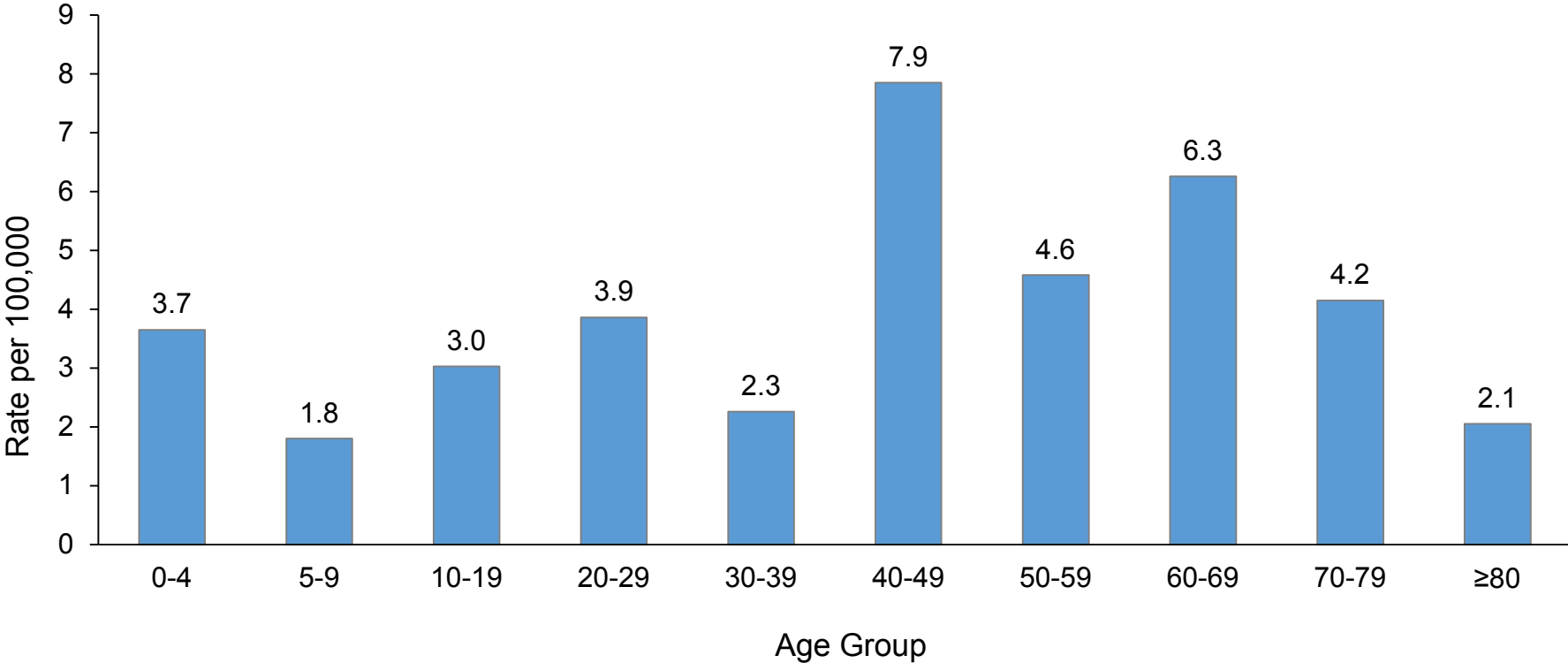


Figure 2: In 2017, the highest rates of giardiasis were observed among adults 40-49 years old, followed by adults 60-69 years old.

Rate of Giardiasis, Gender and Year, Rhode Island, 2013-2017

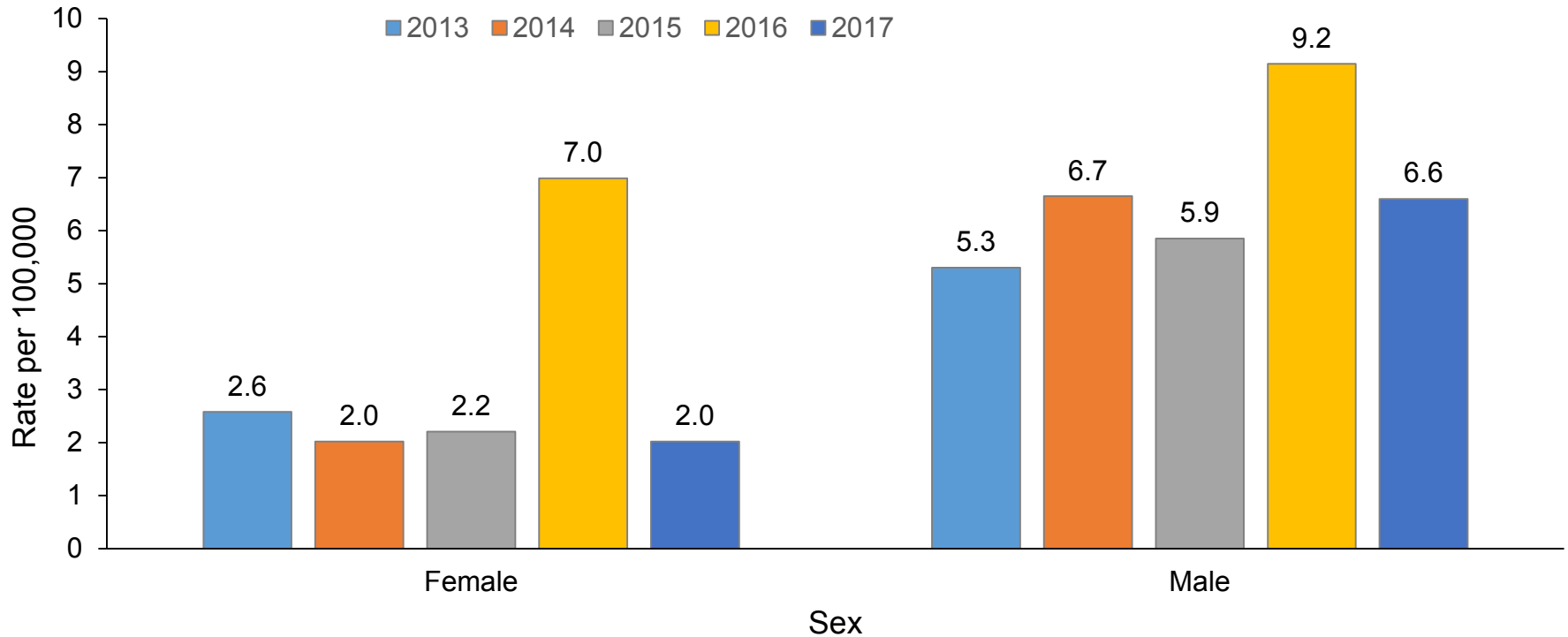


Figure 3: As observed in prior years, a higher rate of giardiasis in Rhode Island was observed among males compared to females in 2017.

Rate of Giardiasis, County and Year, Rhode Island, 2013-2017

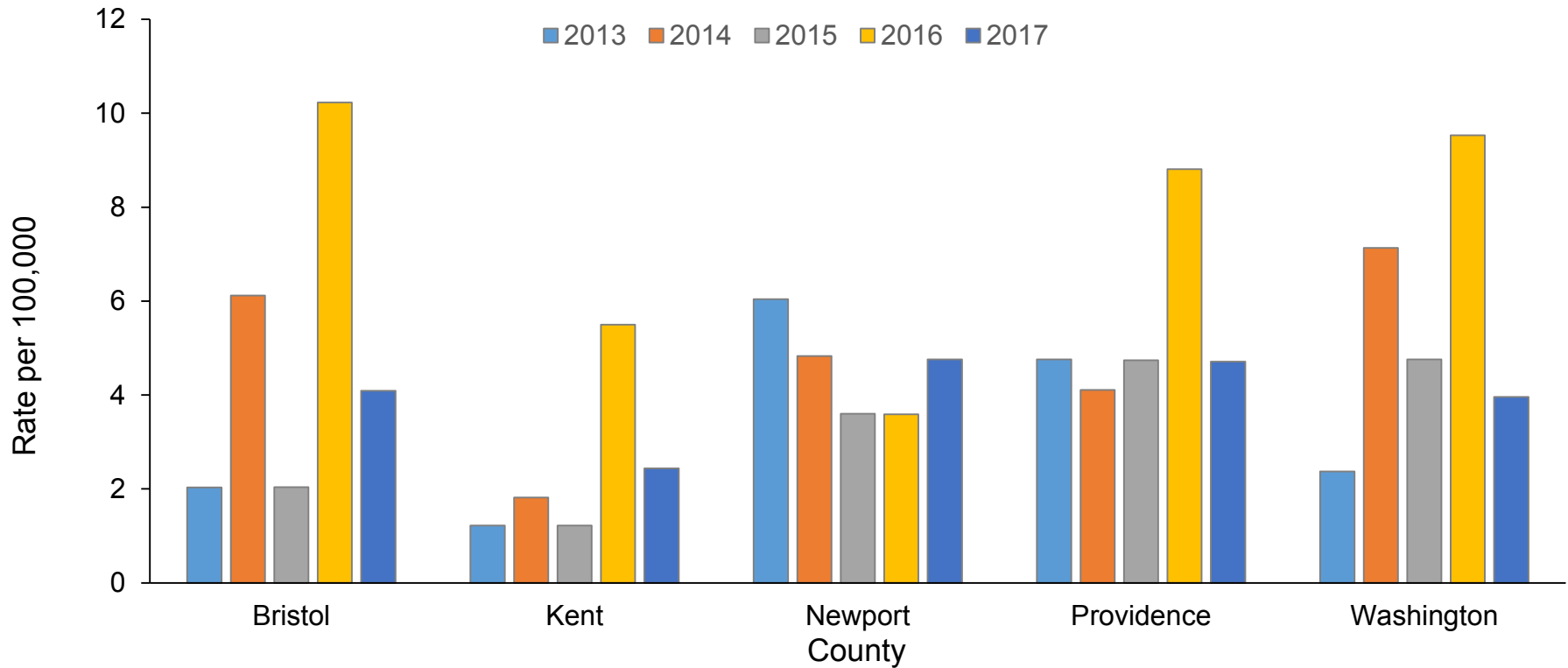


Figure 4: The rate of giardiasis reported in Rhode Island during 2017 was observed to be highest among residents of Newport County (4.8 cases per 100,000 people), followed by Providence County (4.7 cases per 100,000 people).

Reported Cases of Giardiasis, Month and Year, Rhode Island, 2013-2017

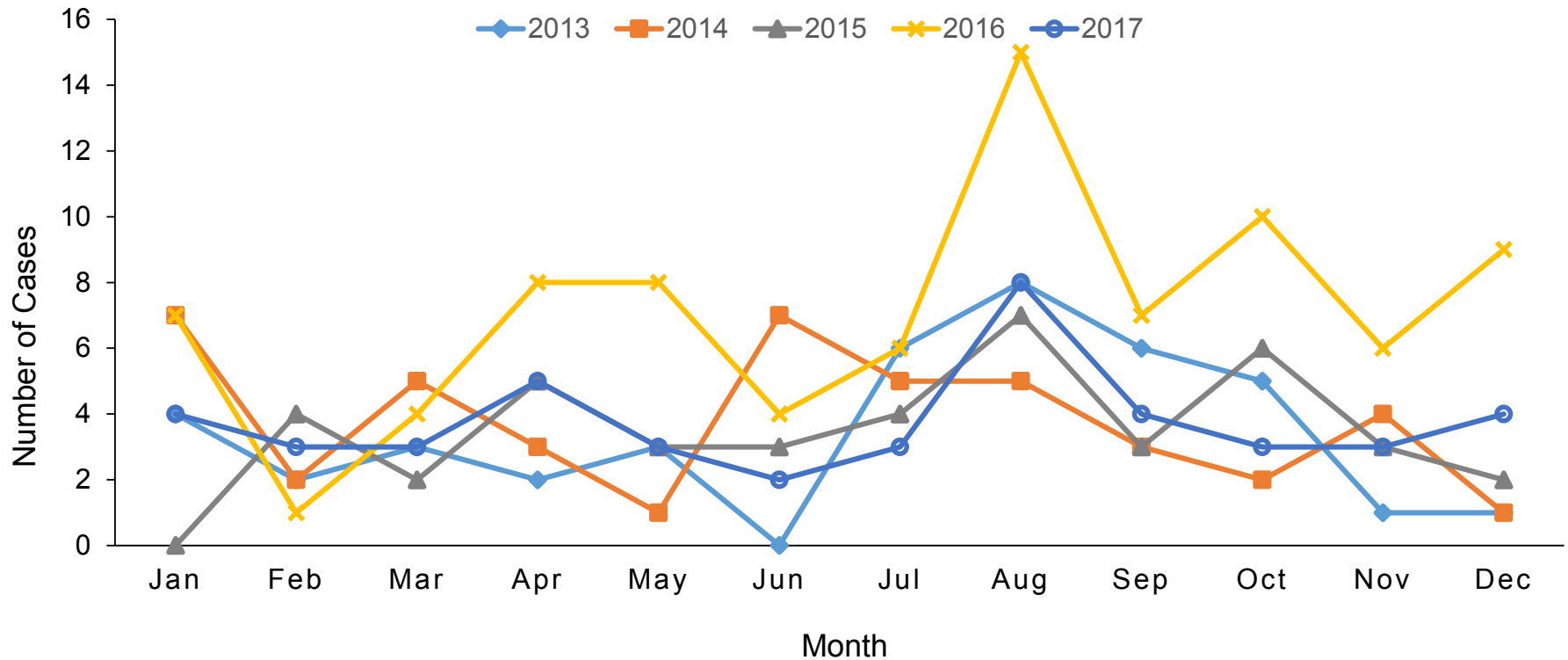


Figure 5: Giardiasis is most commonly observed during early summer through early fall. In 2017, the number giardiasis cases reported in Rhode Island followed this general trend and spiked during the month of August.

Giardiasis Frequency and Rates by Year, Rhode Island, 2013-2017



Table 1. Frequency by Year

	2013	2014	2015	2016	2017
Number of Cases	41	45	42	85	45

Table 2. Rate by Year

	2013	2014	2015	2016	2017
Rate per 100,000	3.9	4.3	4.0	8.0	4.3

Giardiasis Frequency, Age Group and Year, Rhode Island, 2013-2017



Table 3. Frequency by Age Group and Year

	2013	2014	2015	2016	2017
0-4	2	0	3	12	2
5-9	3	0	1	14	1
10-19	5	5	4	10	4
20-29	12	8	6	10	6
30-39	4	10	6	10	3
40-49	4	11	4	7	10
50-59	5	4	9	18	7
60-69	5	2	6	3	8
70-79	1	1	1	0	3
≥80	0	4	2	1	1
Total	41	45	42	85	45

Giardiasis Rates, Age Group and Year, Rhode Island, 2013-2017



Table 4. Rate by Age Group and Year

	2013	2014	2015	2016	2017
0-4	3.6	0.0	5.5	21.9	3.7
5-9	5.1	0.0	1.8	25.0	1.8
10-19	3.7	3.7	3.0	7.5	3.0
20-29	7.9	5.2	3.9	6.4	3.9
30-39	3.2	7.9	4.7	7.7	2.3
40-49	2.8	8.0	3.0	5.4	7.9
50-59	3.2	2.6	5.6	11.6	4.6
60-69	4.4	1.7	4.9	2.4	6.3
70-79	1.6	1.6	1.5	0.0	4.2
≥80	0.0	8.0	4.0	2.0	2.0

Giardiasis Frequency and Rates, Gender and Year, Rhode Island, 2013-2017



Table 5. Frequency by Sex and Year

	2013	2014	2015	2016	2017
Female	14	11	12	38	11
Male	27	34	30	47	34
Total	41	45	42	85	45

Table 6. Rate by Sex and Year

	2013	2014	2015	2016	2017
Female	2.6	2.0	2.2	7.0	2.0
Male	5.3	6.7	5.9	9.2	6.6

Giardiasis Frequency, County and Year, Rhode Island, 2013-2017



Table 7. Frequency by County and Year

	2013	2014	2015	2016	2017
Bristol	1	3	1	5	2
Kent	2	3	2	9	4
Newport	5	4	3	3	4
Providence	30	26	30	56	30
Washington	3	9	6	12	5
All	41	45	42	85	45

Giardiasis Rates by County and Year, Rhode Island, 2013-2017



Table 8. Rate by County and Year

	2013	2014	2015	2016	2017
Bristol	2.0	6.1	2.0	10.2	4.1
Kent	1.2	1.8	1.2	5.5	2.4
Newport	6.0	4.8	3.6	3.6	4.8
Providence	4.8	4.1	4.7	8.8	4.7
Washington	2.4	7.1	4.8	9.5	4.0

Giardiasis Frequency, Month and Year, Rhode Island, 2013-2017



Table 9. Frequency by Month and Year

	2013	2014	2015	2016	2017
Jan	4	7	0	7	4
Feb	2	2	4	1	3
Mar	3	5	2	4	3
Apr	2	3	5	8	5
May	3	1	3	8	3
Jun	0	7	3	4	2
Jul	6	5	4	6	3
Aug	8	5	7	15	8
Sep	6	3	3	7	4
Oct	5	2	6	10	3
Nov	1	4	3	6	3
Dec	1	1	2	9	4
All	41	45	42	85	45



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, 2017, U.S. Census Bureau.



References

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