





Giardiasis 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 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

- 40 cases of giardiasis were reported in Rhode Island in 2015, for a rate of 3.8 cases per 100,000 people. Compared to 2011-2014, the lowest number of giardiasis cases were observed in Rhode Island in 2015.
- In 2015, rates of giardiasis in Rhode Island were highest among children <5 years old and adults 50-69 years old.
- As observed in prior years, a higher rate of giardiasis in Rhode Island was observed among males compared to females.
- Among Rhode Island counties, the highest rate of giardiasis was observed in Providence County in 2015.
- In 2015, the number of cases of giardiasis in Rhode Island peaked in August.

Reported Cases of Giardiasis, Rhode Island, 2011-2015

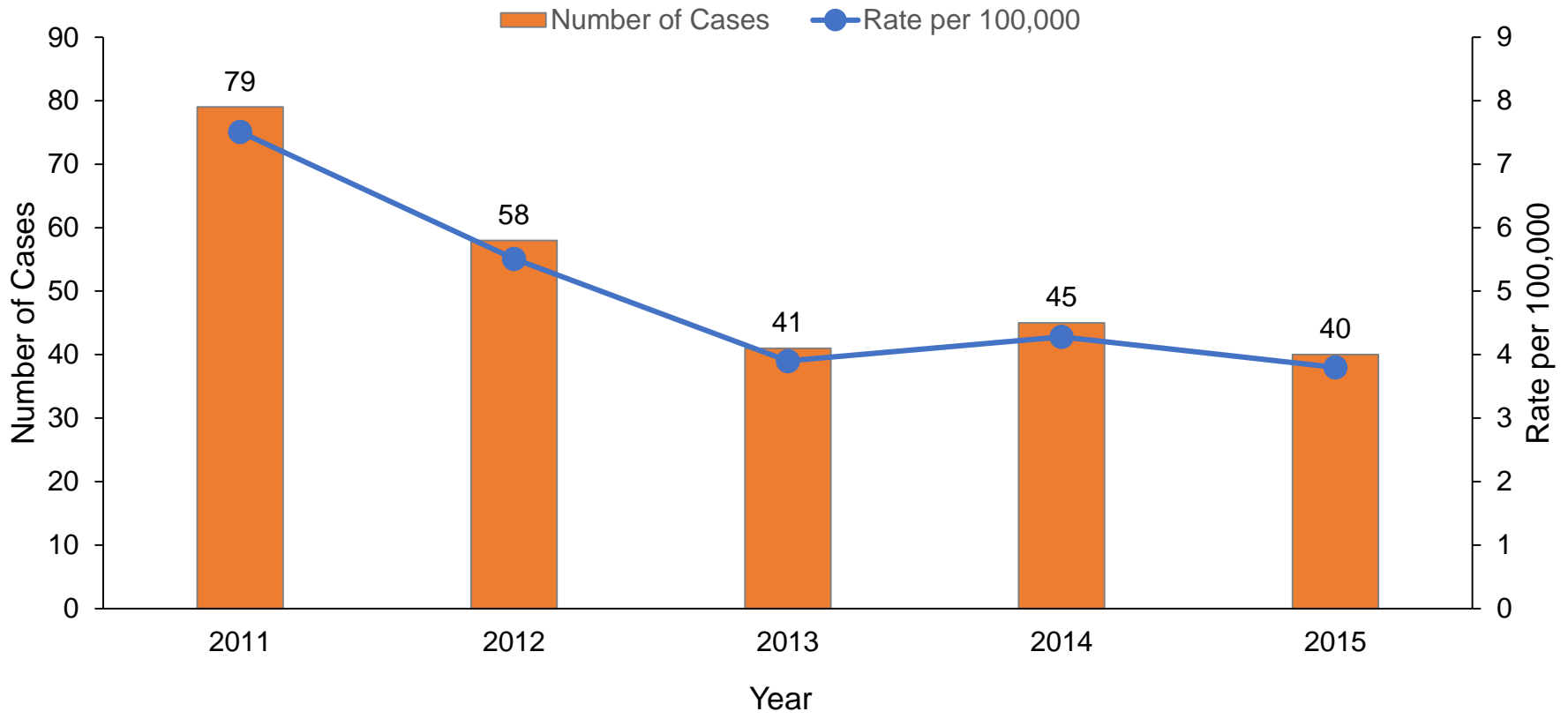


Figure 1: The lowest number of giardiasis cases were reported in Rhode Island in 2015 compared to 2011-2014. Rhode Island's rate of giardiasis in 2015 was 3.8 cases per 100,000 people, the lowest rate in the last five years.

Rate of Giardiasis, Age Group, Rhode Island, 2015

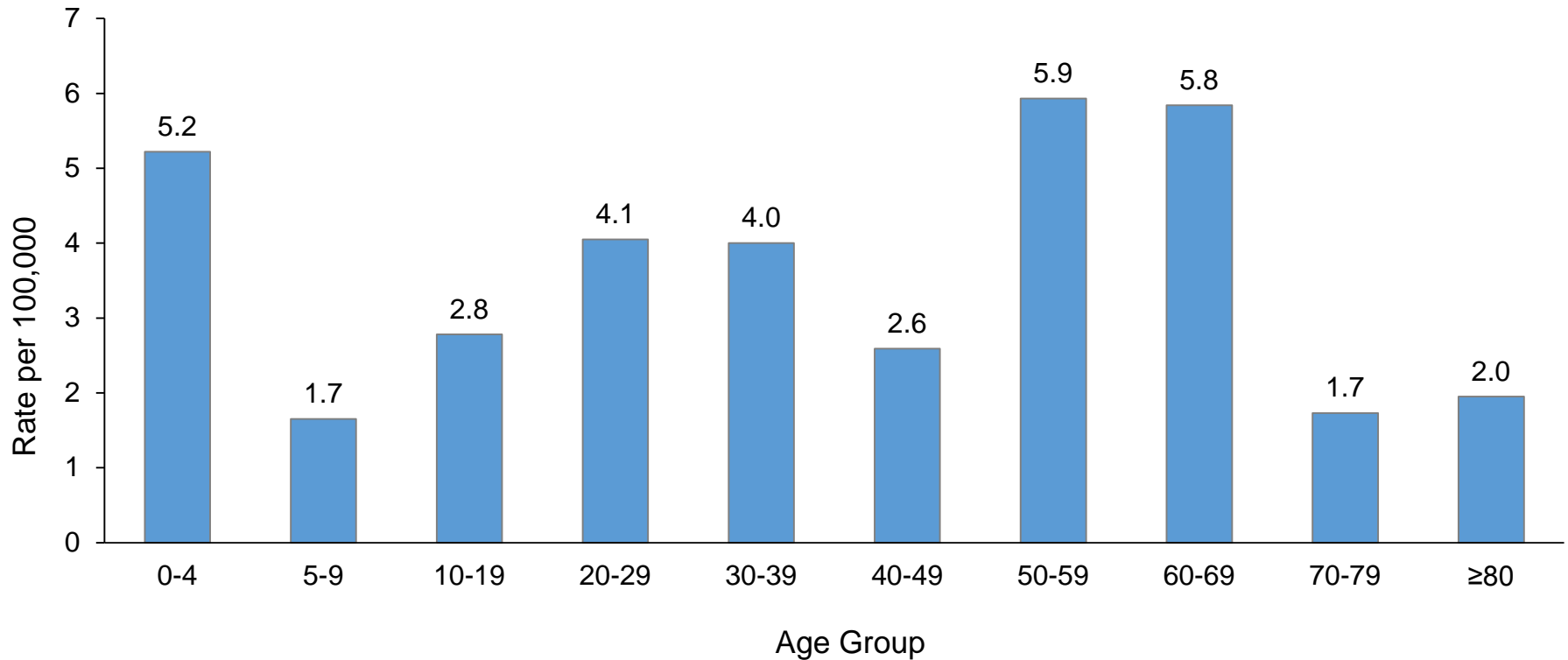


Figure 2: In 2015, the rates of giardiasis were highest among children <5 years old and adults, particularly those ages 50-59 and 60-69 years old.

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

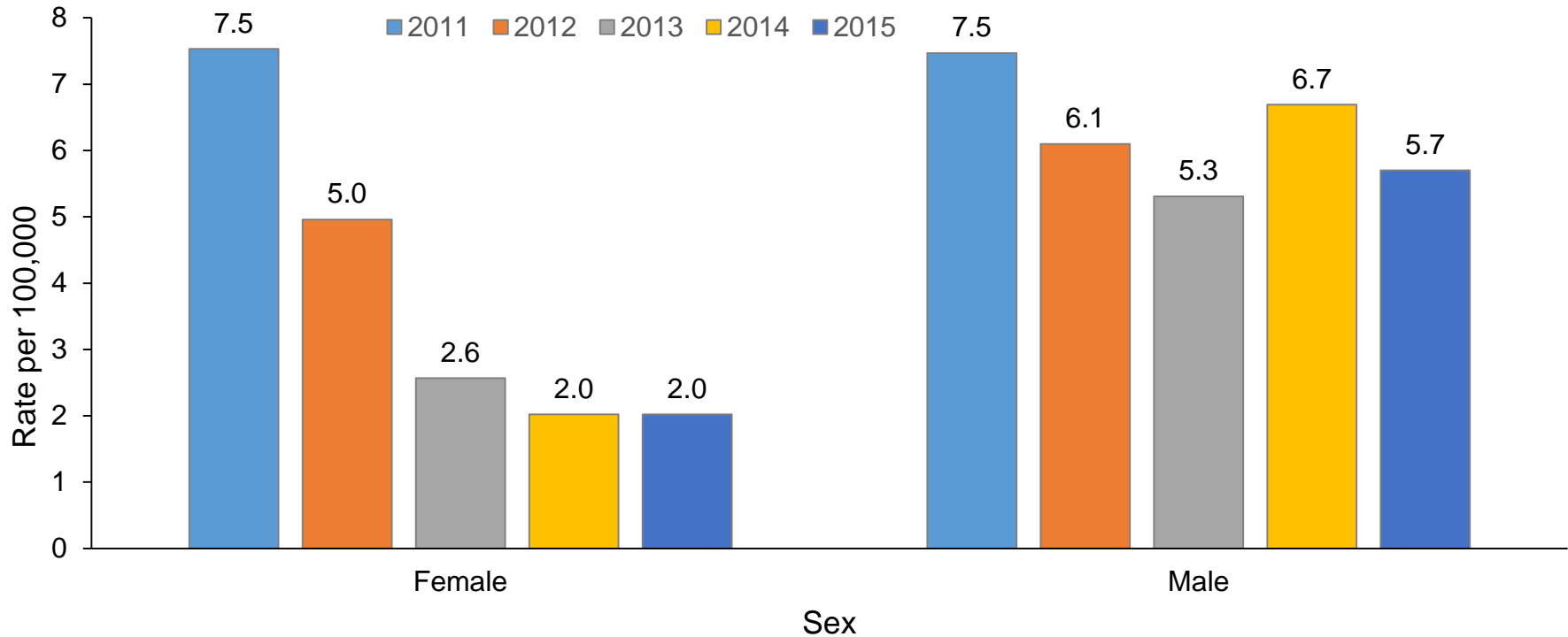


Figure 3: As observed in previous years, a higher rate of giardiasis in Rhode Island was found among males compared to females in 2015.

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

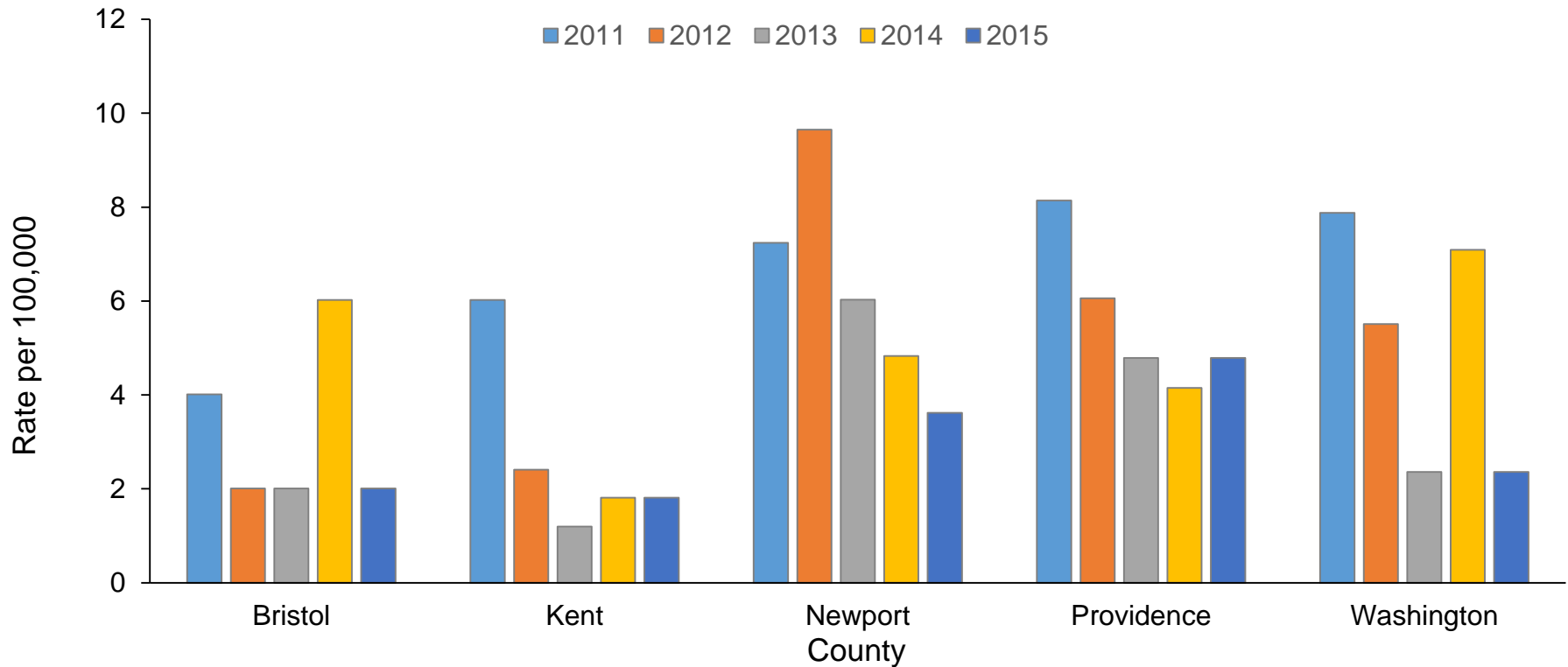


Figure 4: The rate of giardiasis reported in Rhode Island during 2015 was observed to be highest among residents of Providence County (4.8 cases per 100,000 people). Bristol and Washington counties experienced the greatest rate decreases in giardiasis from 2014 to 2015.

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

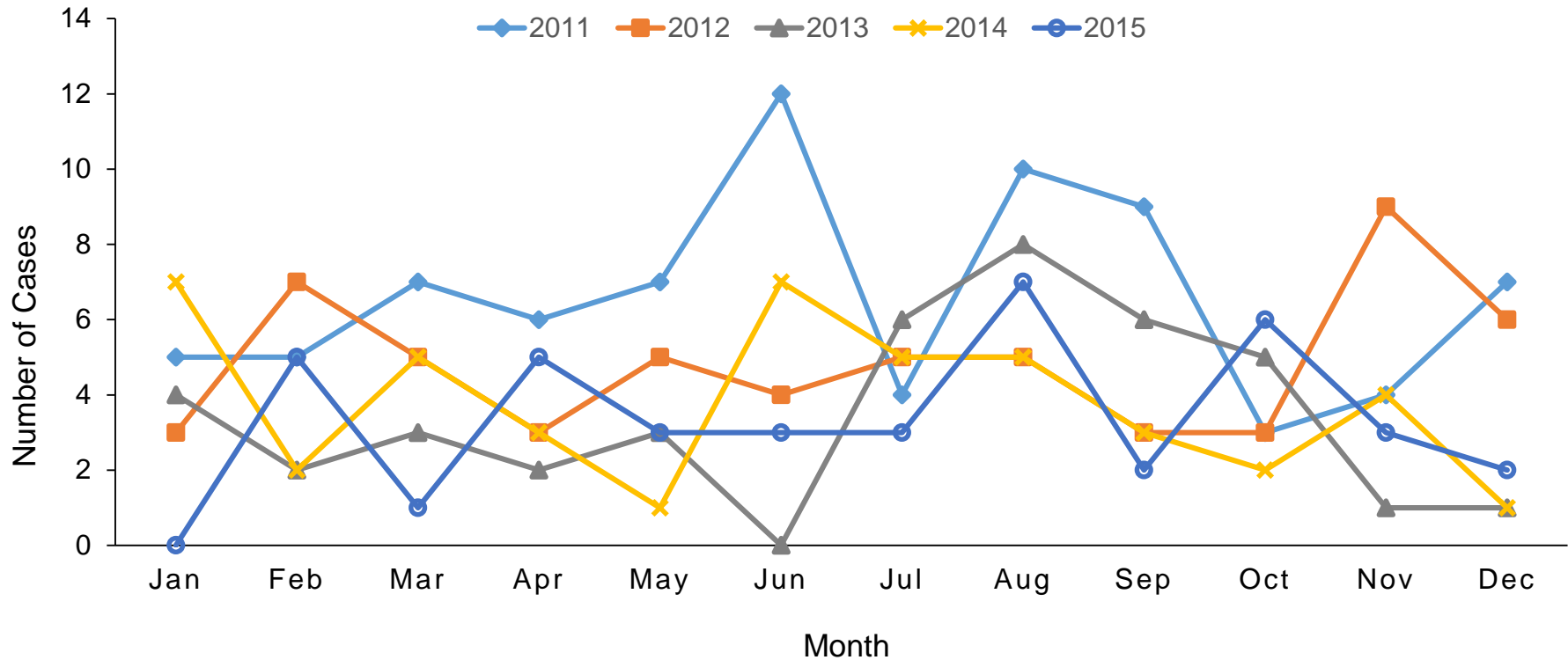


Figure 5: Giardiasis is most commonly observed during early summer through early fall. In 2015, the number of cases of giardiasis reported in Rhode Island was highest in August.

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



Table 1. Frequency by Year

	2011	2012	2013	2014	2015
Number of Cases	79	58	41	45	40

Table 2. Rate by Year

	2011	2012	2013	2014	2015
Rate per 100,000	7.5	5.5	3.9	4.3	3.8

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



Table 3. Frequency by Age Group and Year

	2011	2012	2013	2014	2015
0-4	8	6	2	0	3
5-9	4	4	3	0	1
10-19	9	8	5	5	4
20-29	10	7	12	8	6
30-39	4	8	4	10	5
40-49	13	12	4	11	4
50-59	11	8	5	4	9
60-69	14	3	5	2	6
70-79	5	2	1	1	1
≥80	1	0	0	4	1
Total	79	58	41	45	40

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



Table 4. Rate by Age Group and Year

	2011	2012	2013	2014	2015
0-4	13.9	10.4	3.5	0.0	5.2
5-9	6.6	6.6	5.0	0.0	1.7
10-19	6.3	5.6	3.5	3.5	2.8
20-29	6.8	4.7	8.1	5.4	4.1
30-39	3.2	6.4	3.2	8.0	4.0
40-49	8.4	7.8	2.6	7.1	2.6
50-59	7.3	5.3	3.3	2.6	5.9
60-69	13.6	2.9	4.9	2.0	5.8
70-79	8.7	3.5	1.7	1.7	1.7
≥80	2.0	0.0	0.0	7.8	2.0

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



Table 5. Frequency by Sex and Year

	2011	2012	2013	2014	2015
Female	41	27	14	11	11
Male	38	31	27	34	29
Total	79	58	41	45	40

Table 6. Rate by Sex and Year

	2011	2012	2013	2014	2015
Female	7.5	5.0	2.6	2.0	2.0
Male	7.5	6.1	5.3	6.7	5.7

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



Table 7. Frequency by County and Year

	2011	2012	2013	2014	2015
Bristol	2	1	1	3	1
Kent	10	4	2	3	3
Newport	6	8	5	4	3
Providence	51	38	30	26	30
Washington	10	7	3	9	3
All	79	58	41	45	40

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



Table 8. Rate by County and Year

	2011	2012	2013	2014	2015
Bristol	4.0	2.0	2.0	1.8	2.0
Kent	6.0	2.4	1.2	4.8	1.8
Newport	7.2	9.7	6.0	4.2	3.6
Providence	8.1	6.1	4.8	7.1	4.8
Washington	7.9	5.5	2.4	2.0	2.4

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



Table 9. Frequency by Month and Year

	2011	2012	2013	2014	2015
Jan	5	3	4	7	0
Feb	5	7	2	2	5
Mar	7	5	3	5	1
Apr	6	3	2	3	5
May	7	5	3	1	3
Jun	12	4	0	7	3
Jul	4	5	6	5	3
Aug	10	5	8	5	7
Sep	9	3	6	3	2
Oct	3	3	5	2	6
Nov	4	9	1	4	3
Dec	7	6	1	1	2
All	79	58	41	45	40



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/giardia/general-info.html>