





Campylobacteriosis Surveillance 2010-2014

Rhode Island Department of Health

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

Center for Acute Infectious Diseases Epidemiology



About Campylobacteriosis

- Campylobacteriosis is a bacterial disease most often contracted by eating unpasteurized dairy products, undercooked meat (especially poultry), or other food that has been contaminated with the bacteria; drinking water that has been contaminated with the bacteria; or by direct contact with infected animals.
- Symptoms of campylobacteriosis include diarrhea or bloody diarrhea, fever, abdominal pain, tiredness, nausea, and vomiting. Symptoms may last from a few days to two weeks.
- The case fatality rate of campylobacteriosis is less than <math><1\%</math> of cases.
- People are affected by campylobacteriosis worldwide. It is especially common among males and young children.

Summary: Campylobacteriosis in Rhode Island, 2010-2014



- The number of cases of campylobacteriosis reported in Rhode Island during 2014 (188) was greater than the numbers reported each year from 2010-2013.
- A wide range of age groups were affected, especially infants and adults. Lower rates of campylobacteriosis were reported among children and adults aged 40-49.
- In contrast to trends observed from 2010-2013, the rate of campylobacteriosis was higher among females than males in 2014.
- In 2014, the highest rate of reported cases of campylobacteriosis was in Newport County.
- In 2014, reported cases of campylobacteriosis increased sharply during early summer, peaked in June, and declined slowly during fall.

Figure 1. Reported Cases of Campylobacteriosis by Year, RI, 2010-2014

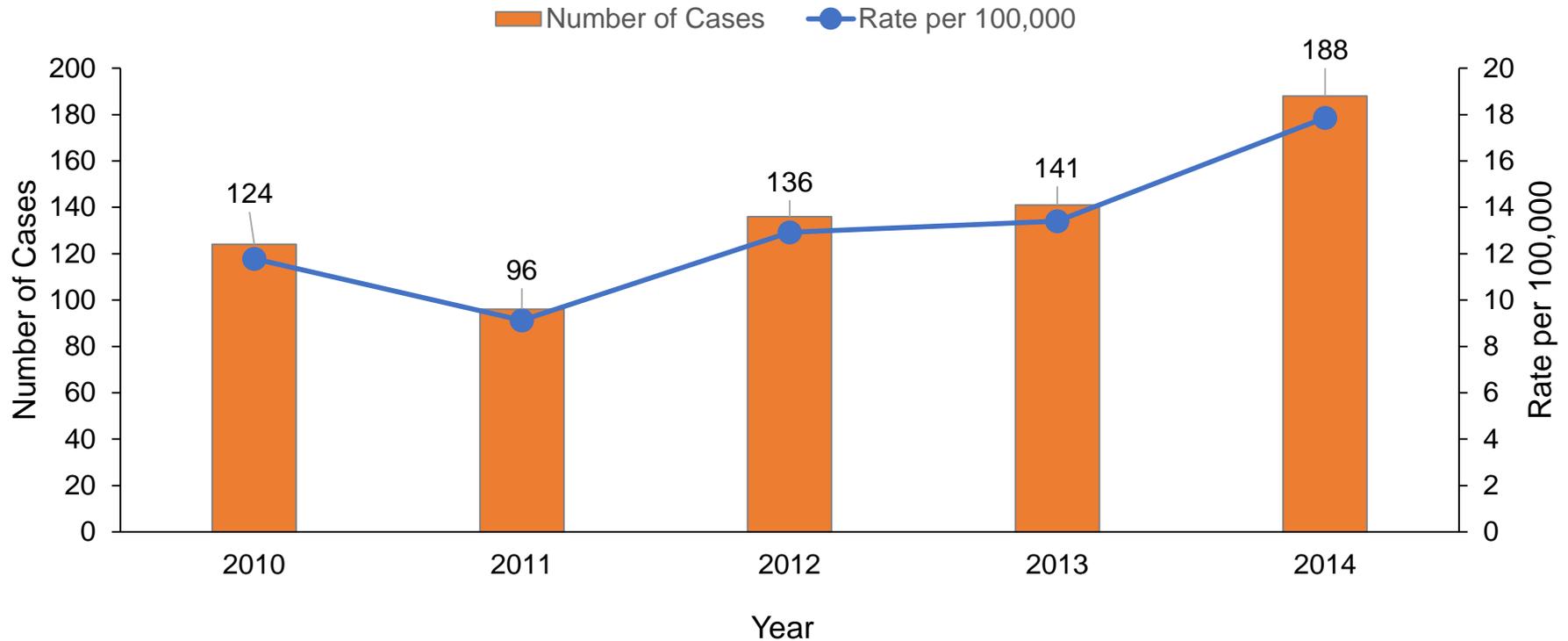


Figure 1: In 2014, 188 cases of campylobacteriosis were reported in Rhode Island.

Figure 2: Rate of Campylobacteriosis by Age Group, RI, 2014

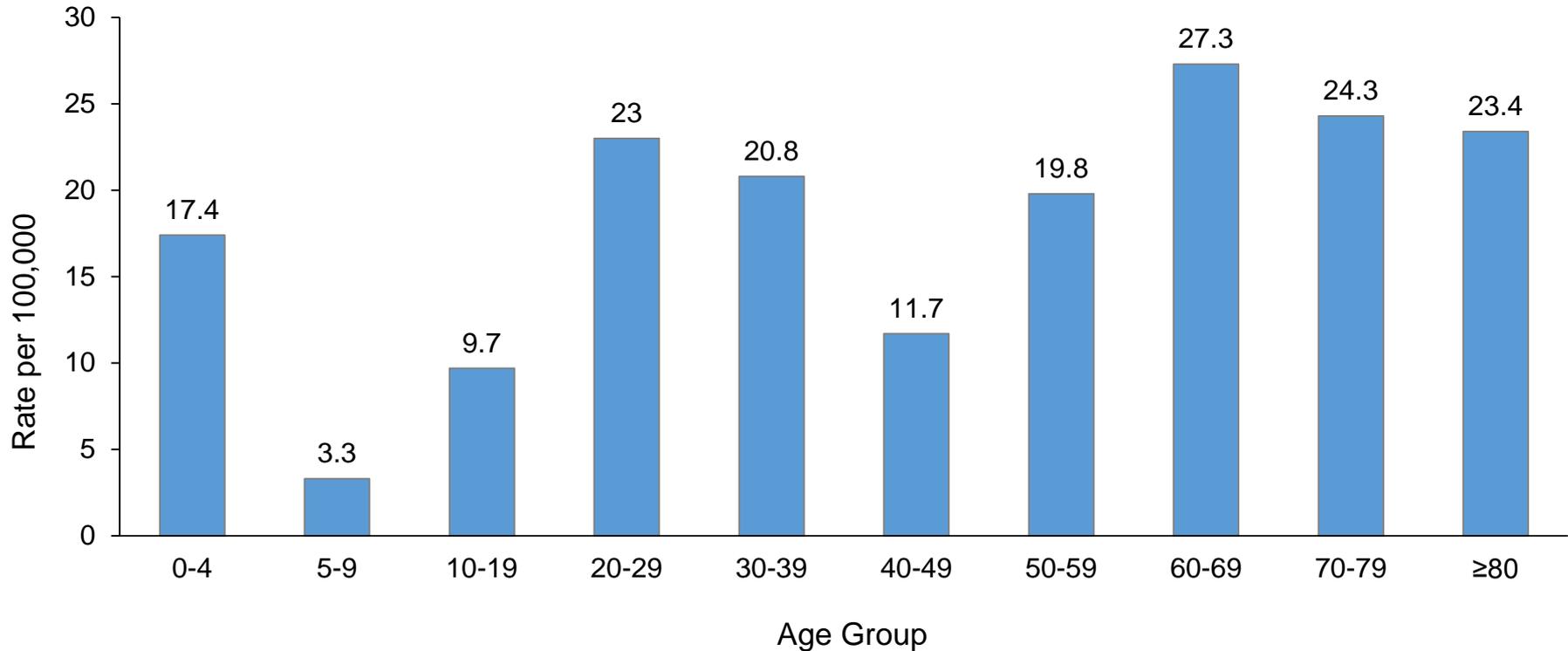


Figure 2: Infants and adults were predominantly affected by campylobacteriosis in 2014. The rate per 100,000 people was lower among children and adults ages 40-49.

Figure 3. Rate of Campylobacteriosis by Sex and Year, RI, 2010-2014

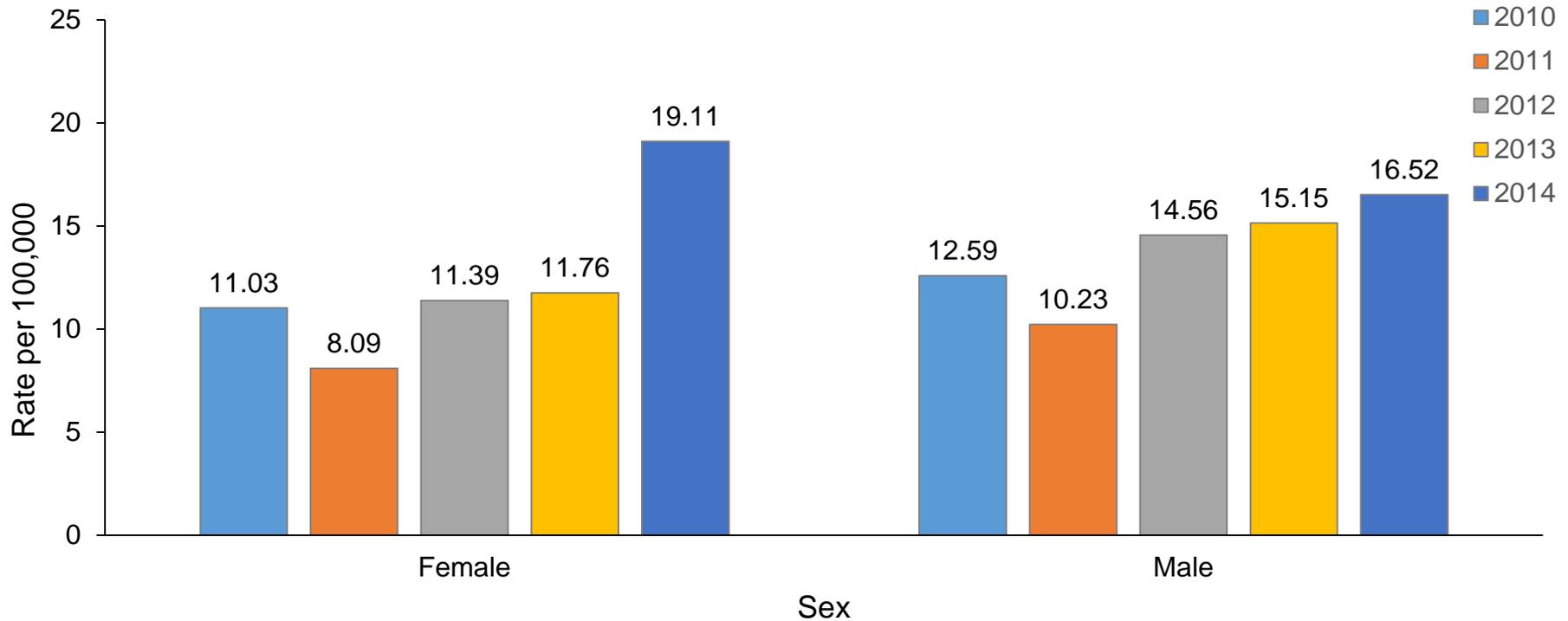


Figure 3: The rate of campylobacteriosis was higher among females compared to males in 2014. This trend contrasts in comparison to rates found during the four previous years. From 2010-2013, the rate of campylobacteriosis was higher among males.

Figure 4: Rate of Campylobacteriosis by County and Year, RI, 2010-2014

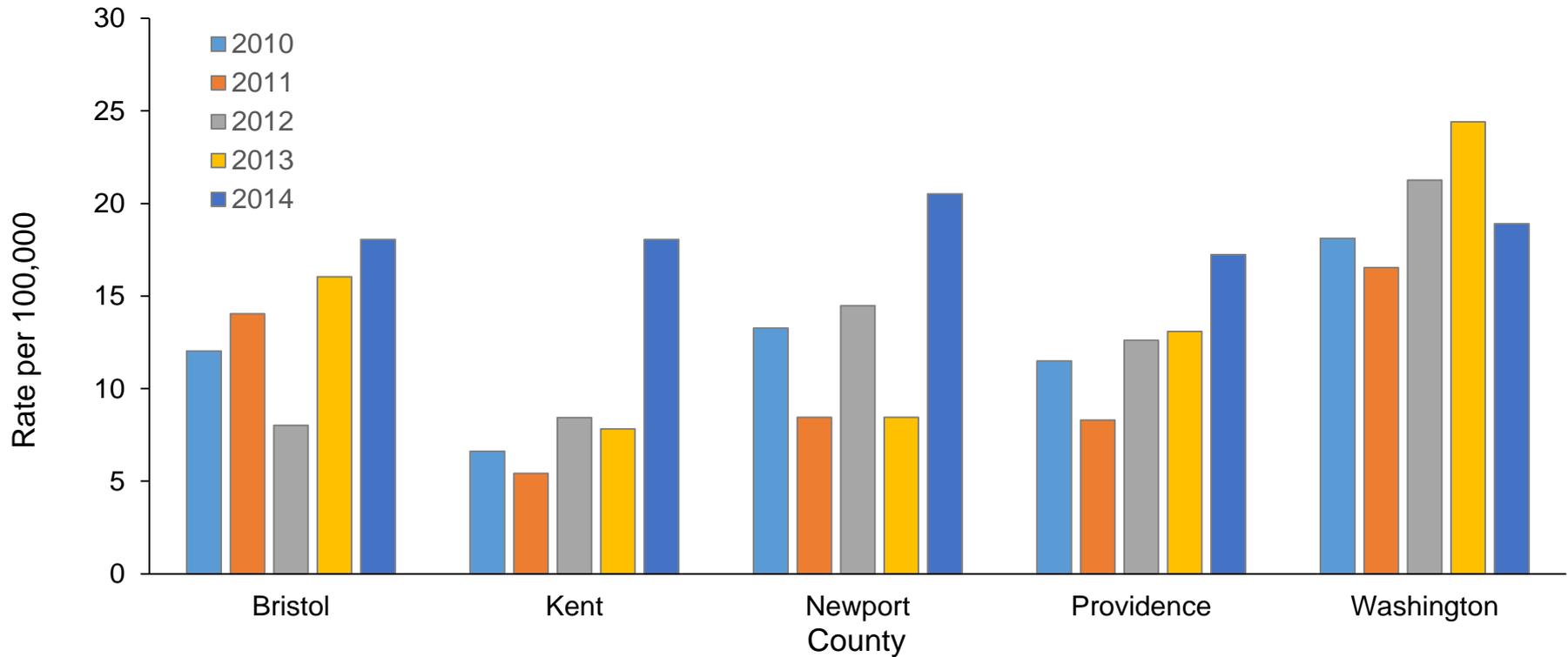


Figure 4: In 2014, the rate of campylobacteriosis was higher in Newport County compared to rates in the other Rhode Island counties.

Figure 5: Reported Cases of Campylobacteriosis by Month and Year, RI, 2010-2014

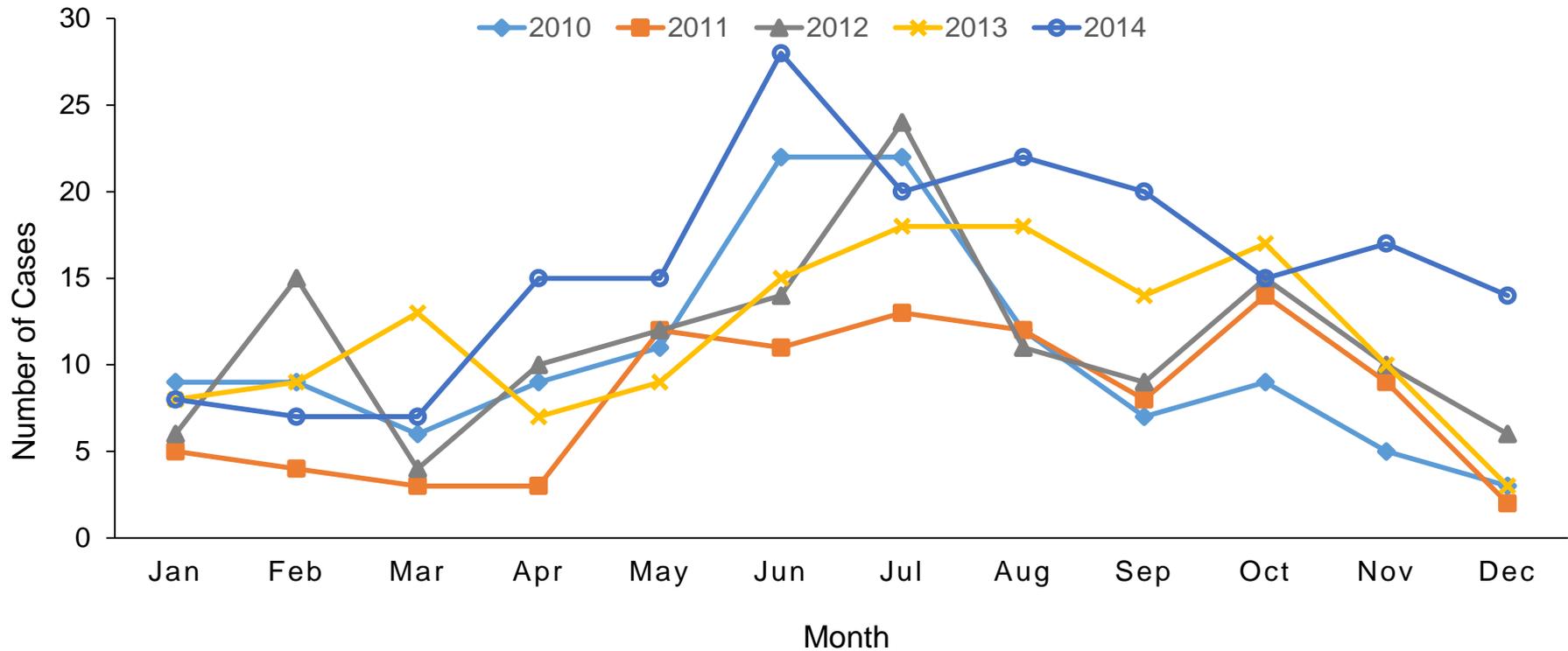


Figure 5: The highest number of reported cases of campylobacteriosis in Rhode Island occurred during the summer months and early fall. In 2014, the number of reported cases rose sharply in early summer, peaked in June, and gradually declined during the fall.

Campylobacteriosis Frequency and Rates by Year, RI, 2010-2014



Table 1. Frequency by Year

	2010	2011	2012	2013	2014
Number of Cases	124	96	136	141	188

Table 2. Rate by Year

	2010	2011	2012	2013	2014
Rate per 100,000	11.8	9.1	12.9	13.4	17.9

Campylobacteriosis Frequency by Age Group and Year, RI, 2010-2014



Table 3. Frequency by Age Group and Year

	2010	2011	2012	2013	2014
0-4	15	<5	12	7	10
5-9	<5	5	<5	<5	<5
10-19	9	9	13	10	14
20-29	12	9	18	21	34
30-39	8	8	21	15	26
40-49	18	17	18	14	18
50-59	29	19	21	35	30
60-69	19	14	15	23	28
70-79	8	8	10	<5	14
≥80	<5	<5	5	9	12
Total	124	96	136	141	188

Campylobacter Rates by Age Group and Year, RI, 2010-2014



Table 4. Rate by Age Group and Year

	2010	2011	2012	2013	2014
0-4	26.1	7	20.9	12.2	17.4
5-9	3.3	8.3	5	5	3.3
10-19	6.3	6.3	9	7	9.7
20-29	8.1	6.1	12.2	14.2	23
30-39	6.4	6.4	16.8	12	20.8
40-49	11.7	11	11.7	9.1	11.7
50-59	19.1	12.5	13.8	23.1	19.8
60-69	18.5	13.6	14.6	22.4	27.3
70-79	13.9	13.9	17.3	6.9	24.3
≥80	7.8	5.8	9.7	17.5	23.4

Campylobacteriosis Frequency and Rates by Sex and Year, RI, 2010-2014



Table 5. Frequency by Sex and Year

	2010	2011	2012	2013	2014
Female	60	44	62	64	104
Male	64	52	74	77	84
Total	124	96	136	141	188

Table 6. Rate by Sex and Year

	2010	2011	2012	2013	2014
Female	11.0	8.1	11.4	11.8	19.1
Male	12.6	10.2	14.6	15.5	16.5

Campylobacteriosis Frequency By County and Year, RI, 2010-2014



Table 7. Frequency by County and Year

	2010	2011	2012	2013	2014
Bristol	6	7	<5	8	9
Kent	11	9	14	13	30
Newport	11	7	12	7	17
Providence	72	52	79	82	108
Washington	23	21	27	31	24
Unknown	<5	0	0	0	0
All	124	96	136	141	188

Campylobacteriosis Rates by County and Year, RI, 2010-2014



Table 8. Rate by County and Year

	2010	2011	2012	2013	2014
Bristol	12.0	14.0	8.0	16.0	18.1
Kent	6.6	5.4	8.4	7.8	18.1
Newport	13.3	8.5	14.5	8.5	20.5
Providence	11.5	8.3	12.6	13.1	17.2
Washington	18.1	16.5	21.3	24.4	18.9

Campylobacteriosis Frequency by Month and Year, RI, 2010-2014



Table 9. Frequency by Month and Year

	2010	2011	2012	2013	2014
Jan	9	5	6	8	8
Feb	9	<5	15	9	7
Mar	6	<5	<5	13	7
Apr	9	<5	10	7	15
May	11	12	12	9	15
Jun	22	11	14	15	28
Jul	22	13	24	18	20
Aug	12	12	11	18	22
Sep	7	8	9	14	20
Oct	9	14	15	17	15
Nov	5	9	10	10	17
Dec	<5	<5	6	<5	14
All	124	96	136	141	188



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 people. The population denominator is based on 2010 US Census Population.