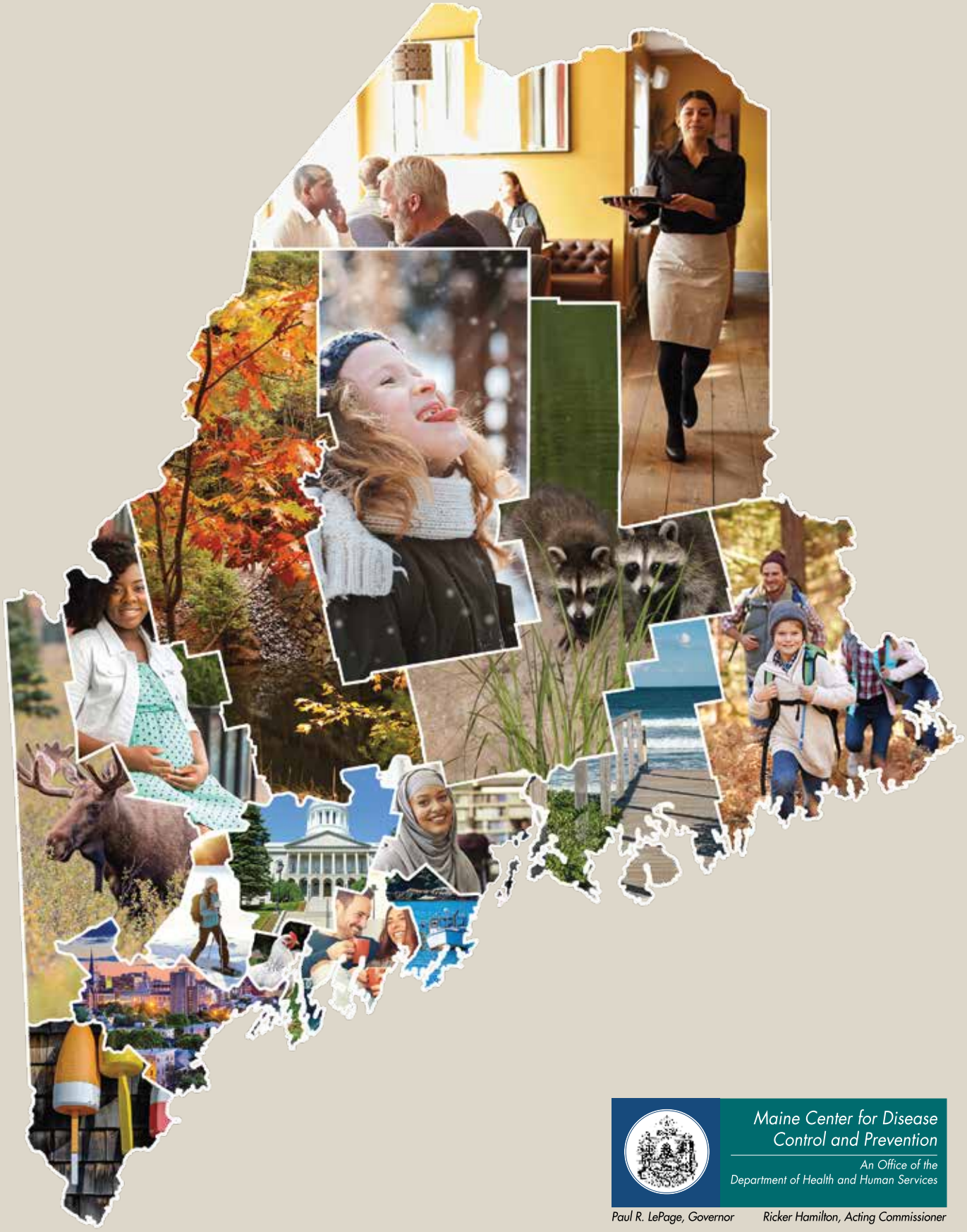
2016 Reportable Infectious Diseases Summary



Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services

Paul R. LePage, Governor
Ricker Hamilton, Acting Commissioner

Reportable Infectious Diseases in Maine 2016 Summary

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Paul R. LePage, Governor *Ricker Hamilton, Acting Commissioner*

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THANK YOU

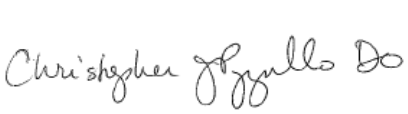
Maine Center for Disease Control and Prevention (Maine CDC) annually publishes a report on infectious diseases in Maine. This report is prepared by the Division of Disease Control and is intended to provide an overview of notifiable infectious diseases of public health importance in Maine.

We could not produce this report without the continued support of our healthcare and public health partners throughout the state. We greatly appreciate all of the laboratories, healthcare providers, childcare centers, school nurses, veterinarians, and others who provide disease surveillance information. Considerable time is spent assisting Maine CDC with infectious disease investigations and disease control measures that affect Maine residents. Public health partners' active and critical role in the infectious disease surveillance cycle informs statewide policies and programs that protect our residents from infectious diseases through health promotion, disease prevention, early detection, containment, and treatment.

We appreciate and encourage your vigilance in the effort to protect the people of Maine through timely, complete, and accurate notifiable infectious disease reporting. It is through these collaborative efforts that we are able to respond to emerging infectious disease threats and prevent outbreaks.

We hope you find this report useful as we all work to protect and promote the health of Maine's residents. As always, we welcome your feedback on how we can provide more useful disease information to you, our partners.

For more information on what, when, and how to report infectious diseases please see the Notifiable Diseases and Conditions List (Page 71) of this report, visit our website at www.maine.gov/idepi or call 1-800-821-5821.



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2016 Infectious Disease Surveillance Highlights

Maine CDC began tracking sexually transmitted disease (STD) data in the same system as our other infectious diseases. This allows better tracking and quantification of investigations and cases.

4,236

Disease reports investigated by Maine CDC staff including STD cases.

- 3,050 met a probable or confirmed case definition.

205

Potential outbreaks investigated by Maine CDC staff.

- 153 classified as outbreaks.

9,481

Disease reports handled without a full investigation by staff, either through passive surveillance or laboratory reports.

- 8,100 met a probable or confirmed case definition.
- These diseases include chlamydia, chronic hepatitis C, latent TB, Lyme disease, invasive MRSA, rabies post-exposure prophylaxis, and some varicella cases.

3,370

Maine CDC Infectious Disease Program responded to 3,370 consults during 2016.

- The top five topics for consults were: rabies (30% of all consults), tuberculosis, Zika, pertussis, and Lyme disease. Of note, Maine CDC handled over 100 consults on mumps.
- Every consult is assigned to a staff member who calls the individual back and follows up as necessary.

The Healthcare Associated Infections and Antibiotic Resistance Program (HAI/AR) re-vamped their website to provide more comprehensive information on their program and make their assessment services and information easier to access. During the website re-vamp the HAI/AR program:

- Created an online infection control consultations submission form www.maine.gov/dhhs/mecdc/infectious-disease/hai/
- Added a comprehensive webpage with resources for infection preventionists www.maine.gov/dhhs/mecdc/infectious-disease/hai/resources-for-infection-preventionists.shtml

5,800

Maine experienced a moderately severe 2016-2017 influenza season. Weekly reports with detailed information are available at www.maineflu.gov.

- Labs, hospitals, and providers reported more than 5,800 positive flu reports and over 800 influenza-related hospitalizations for the 2016-2017 flu season.

21

The HAI/AR program completed 21 assessments in long-term care facilities, 18 of them in nursing homes and three in assisted living.

2

Maine had two cases of an emerging tick borne disease *Borrelia miyamotoi*. These are the first two cases of symptomatic *Borrelia miyamotoi* identified in Maine.

Tickborne diseases all increased, with anaplasmosis and babesiosis both increasing substantially.

- Maine had 372 cases of anaplasmosis in 2016, a 101% increase from 2015.
- Maine had 82 babesiosis cases, a 49% increase from 2015.

23

Maine had 23 patients with active tuberculosis disease, a 28% increase from 2015.

66

Maine had 66 rabid animals reported in 13 of the 16 counties.

34

Maine had 34 mumps cases, the highest number of mumps cases in over a decade.

Using after-action analysis from the 2014-2016 West Africa Ebola Outbreak, Maine CDC worked with Public Health Emergency Preparedness to revise the Maine Ebola Response Plan, revised the Ebola Protocol and created an internal communications plan.

31

Maine had 31 hospitals participating in syndromic surveillance and sending HL7 (electronic) messages.

Zika virus arrived in the Americas. Maine identified 12 travel-associated cases and began work to monitor for the presence of the mosquito species that can carry this disease.

Counts of Selected* Reportable Diseases by Year

MAINE, 2007 – 2016**

Condition	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Anaplasma phagocytophilum	9	17	15	17	26	52	94	191	185	372
Babesiosis	11	11	3	5	9	10	36	42	55	82
Brucellosis	0	0	0	2	0	0	0	0	0	0
Campylobacteriosis	149	151	172	148	195	189	229	225	221	255
Carbapenem-resistant Enterobacteriaceae (CRE)***	NR	NR	NR	NR	NR	NR	NR	NR	12	50
Chikungunya Virus	NA	NA	NA	NA	0	0	1	6	2	0
Chlamydia	2543	2597	2443	2588	3101	3413	3440	3491	3851	4159
Creutzfeldt-Jakob Disease (CJD)	0	0	1	0	0	0	1	1	1	0
Cryptosporidiosis	56	46	67	93	51	58	35	51	34	55
Cyclosporiasis	0	0	0	1	0	0	0	7	1	3
Dengue	1	2	3	6	0	0	1	1	5	2
Eastern Equine Encephalitis	0	0	0	0	0	0	0	1	1	0
Ehrlichia chaffeensis	3	1	1	4	1	3	3	8	5	7
Giardiasis	197	188	223	223	171	169	218	154	116	137
Gonorrhea	118	96	143	163	273	456	246	236	422	444
Group A *Streptococcus*, invasive	28	26	21	47	43	37	37	53	56	60
Haemophilus influenzae, invasive	13	21	21	13	26	23	25	21	39	29
Hantavirus infection, non-Hantavirus pulmonary syndromes	0	0	0	0	1	0	0	0	0	0
Hemolytic uremic syndrome	1	1	2	1	2	2	2	1	7	2
Hepatitis A, acute	5	18	1	7	6	9	10	8	8	8
Hepatitis B, acute	19	15	15	13	8	9	11	12	9	53
Hepatitis B, chronic	139	142	125	102	105	105	106	108	107	157
Hepatitis C, acute	1	4	2	2	12	12	9	31	29	37
Hepatitis C, chronic	1244	1158	1112	1014	1085	1148	1234	1407	1442	1584
Hepatitis D, acute	0	0	0	1	1	0	0	0	0	0
Hepatitis E, acute	1	0	0	0	1	0	0	0	0	1
HIV Infection	52	46	51	56	54	48	39	59	48	56
Invasive Pneumococcal disease	NA	NA	127	151	136	102	121	137	135	133
Legionellosis	9	11	10	12	18	18	23	19	16	16
Listeriosis	5	5	4	1	4	5	4	8	7	11
Lyme disease	530	909	976	752	1012	1113	1384	1410	1215	1487

NR = not reportable; **NA** = not available

Condition	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Malaria	8	1	2	6	6	5	10	7	7	10
Mumps	24	5	6	2	2	0	1	0	0	34
Neisseria meningitides, invasive (Meningococcal disease)	8	6	4	5	5	3	4	2	4	1
Novel Influenza A virus Infections	0	0	2219	17	3	0	0	0	0	0
Pertussis	83	49	80	53	205	737	332	557	281	259
Powassan Encephalitis	0	0	0	0	0	0	1	0	1	1
Q fever	7	0	0	0	2	0	0	0	0	0
Rabies PEP	NR	NR	59	77	145	190	128	107	112	131
Rabies, animal	86	70	63	67	66	91	50	44	28	66
S. aureus, methicillin resistant (MRSA), invasive	NR	47	123	90	121	116	130	143	191	178
S. aureus, vancomycin intermediate resistance (VISA)	0	0	0	0	0	0	0	1	2	1
Salmonellosis	138	159	121	133	134	161	131	127	123	122
Shellfish poisoning	4	3	1	0	0	0	0	0	0	0
Shiga toxin-producing *Escherichia coli* (STEC)	41	26	19	21	28	20	27	33	29	37
Shigellosis	14	20	5	8	32	7	5	29	4	2
Spotted Fever Rickettsiosis	1	1	5	2	1	3	2	3	1	4
Syphilis	14	20	14	40	19	20	17	15	49	47
Tetanus	0	0	0	0	0	0	1	0	0	1
Trichinosis (Trichinellosis)	0	0	0	1	1	0	0	0	0	0
Tuberculosis	19	9	9	8	9	17	15	14	18	23
Varicella (Chickenpox)	366	269	235	247	226	258	140	207	233	228
Vibriosis	0	3	4	5	4	10	9	9	6	7
West Nile Encephalitis	0	0	0	0	0	1	0	0	1	0

*Maine did not have any cases of the following reportable conditions in the last ten years:

- Anthrax
- Botulism
- California Serogroup viruses
- Chancroid
- Coronavirus
- Diphtheria
- Hepatitis D, chronic
- Leptospirosis
- Measles
- Plague
- Polio
- Psittacosis
- Rabies, human
- Ricin
- Rubella
- Smallpox
- Saint Louis Encephalitis
- Tularemia
- Viral Hemorrhagic Fever
- Western Equine Encephalitis
- Yellow Fever

** Counts are updated annually. Data as of 6/2/2017

*** CRE became reportable as of September 8, 2015 so the 2015 numbers do not represent a full year

Rates per 100,000 Persons of Selected* Reportable Disease by Year

MAINE, 2007 – 2016**

Condition	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Anaplasma phagocytophilum	0.7	1.3	1.1	1.3	2.0	3.9	7.1	14.4	13.9	27.9
Babesiosis	0.8	0.8	0.2	0.4	0.7	0.8	2.7	3.2	4.1	6.2
Brucellosis	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Campylobacteriosis	11.3	11.5	13.0	11.1	14.7	14.2	17.2	16.9	16.6	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)***	NR	NR	NR	NR	NR	NR	NR	NR	0.9	3.8
Chikungunya Virus	NA	NA	NA	NA	0.0	0.0	0.1	0.5	0.2	0.0
Chlamydia	193.1	197.3	185.3	194.9	233.5	256.8	258.8	262.3	289.7	312.4
Creutzfeldt-Jakob Disease (CJD)	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0
Cryptosporidiosis	4.3	3.5	5.1	7.0	3.8	4.4	2.6	3.8	2.6	4.1
Cyclosporiasis	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.5	0.1	0.2
Dengue	0.1	0.2	0.2	0.5	0.0	0.0	0.1	0.1	0.4	0.2
Eastern Equine Encephalitis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Ehrlichia chaffeensis	0.2	0.1	0.1	0.3	0.1	0.2	0.2	0.6	0.4	0.5
Giardiasis	15.0	14.3	16.9	16.8	12.9	12.7	16.4	11.6	8.7	10.3
Gonorrhea	9.0	7.3	10.8	12.3	20.6	34.3	18.5	17.7	31.7	33.3
Group A *Streptococcus*, invasive	2.1	2.0	1.6	3.5	3.2	2.8	2.8	4.0	4.2	4.5
Haemophilus influenzae, invasive	1.0	1.6	1.6	1.0	2.0	1.7	1.9	1.6	2.9	2.2
Hantavirus infection, non-Hantavirus pulmonary syndromes	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Hemolytic uremic syndrome	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.5	0.2
Hepatitis A, acute	0.4	1.4	0.1	0.5	0.5	0.7	0.8	0.6	0.6	0.6
Hepatitis B, acute	1.4	1.1	1.1	1.0	0.6	0.7	0.8	0.9	0.7	4.0
Hepatitis B, chronic	10.6	10.8	9.5	7.7	7.9	7.9	8.0	8.1	8.0	11.8
Hepatitis C, acute	0.1	0.3	0.2	0.2	0.9	0.9	0.7	2.3	2.2	2.8
Hepatitis C, chronic	94.4	88.0	84.4	76.4	81.7	86.4	92.8	105.7	108.5	119.0
Hepatitis D, acute	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Hepatitis E, acute	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
HIV Infection	3.9	3.5	3.9	4.2	4.1	3.6	2.9	4.4	3.6	4.2
Invasive Pneumococcal disease	NA	NA	9.6	11.4	10.2	7.7	9.1	10.3	10.2	10.0
Legionellosis	0.7	0.8	0.8	0.9	1.4	1.4	1.7	1.4	1.2	1.2
Listeriosis	0.4	0.4	0.3	0.1	0.3	0.4	0.3	0.6	0.5	0.8
Lyme disease	40.2	69.0	74.0	56.6	76.2	83.8	104.1	106.0	91.4	111.7

NR = not reportable; **NA** = not available

Condition	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Malaria	0.6	0.1	0.2	0.5	0.5	0.4	0.8	0.5	0.5	0.8
Mumps	1.8	0.4	0.5	0.2	0.2	0.0	0.1	0.0	0.0	2.6
Neisseria meningitides, invasive (Meningococcal disease)	0.6	0.5	0.3	0.4	0.4	0.2	0.3	0.2	0.3	0.1
Novel Influenza A virus Infections	0.0	0.0	168.3	1.3	0.2	0.0	0.0	0.0	0.0	0.0
Pertussis	6.3	3.7	6.1	4.0	15.4	55.5	25.0	41.9	21.1	19.5
Powassan Encephalitis	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1
Q fever	0.5	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Rabies PEP	NR	NR	4.5	5.8	10.9	14.3	9.6	8.0	8.4	9.8
Rabies, animal	6.5	5.3	4.8	5.0	5.0	6.8	3.8	3.3	2.1	5.0
S. aureus, methicillin resistant (MRSA), invasive	NR	3.6	9.3	6.8	9.1	8.7	9.8	10.7	14.4	13.4
S. aureus, vancomycin intermediate resistance (VISA)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1
Salmonellosis	10.5	12.1	9.2	10.0	10.1	12.1	9.9	9.5	9.3	9.2
Shellfish poisoning	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shiga toxin-producing *Escherichia coli* (STEC)	3.1	2.0	1.4	1.6	2.1	1.5	2.0	2.5	2.2	2.8
Shigellosis	1.1	1.5	0.4	0.6	2.4	0.5	0.4	2.2	0.3	0.2
Spotted Fever Rickettsiosis	0.1	0.1	0.4	0.2	0.1	0.2	0.2	0.2	0.1	0.3
Syphilis	1.1	1.5	1.1	3.0	1.4	1.5	1.3	1.1	3.7	3.5
Tetanus	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Trichinosis (Trichinellosis)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Tuberculosis	1.4	0.7	0.7	0.6	0.7	1.3	1.1	1.1	1.4	1.7
Varicella (Chickenpox)	27.8	20.4	17.8	18.6	17.0	19.4	10.5	15.6	17.5	17.1
Vibriosis	0.0	0.2	0.3	0.4	0.3	0.8	0.7	0.7	0.5	0.5
West Nile Encephalitis	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0

*Maine did not have any cases of the following reportable conditions in the last ten years:

- Anthrax
- Botulism
- California Serogroup viruses
- Chancroid
- Coronavirus
- Diphtheria
- Hepatitis D, chronic
- Leptospirosis
- Measles
- Plague
- Polio
- Psittacosis
- Rabies, human
- Ricin
- Rubella
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- Saint Louis Encephalitis
- Tularemia
- Viral Hemorrhagic Fever
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Outbreaks

Maine, 2016

Outbreaks are a reportable condition in Maine and are classified into types of outbreak by the potential etiology. All reported outbreaks are assigned out for follow-up with a field epidemiologist. This table only represents those that met an outbreak definition of confirmed, probable, or suspect. Outbreak definitions vary based on the category, setting, and suspected etiology.

County	Absenteeism	ADC	GI	Hepatitis	ILI*	Other	VPD	Varicella	Vector
Androscoggin	0	0	5	0	2	0	1	0	1
Aroostook	5	0	1	0	1	2	2	0	0
Cumberland	1	0	14	0	8	0	3	0	0
Franklin	0	0	1	0	0	0	0	0	0
Hancock	2	0	4	0	1	0	0	0	0
Kennebec	3	0	10	0	4	0	7	0	0
Knox	1	0	2	0	2	0	1	0	0
Lincoln	0	1	2	0	2	0	0	0	1
Out of State	0	0	15	0	0	0	0	0	0
Oxford	2	0	1	0	1	0	1	0	0
Penobscot	1	0	1	1	2	1	0	0	1
Piscataquis	0	0	0	0	1	0	0	0	0
Sagadahoc	0	0	1	0	2	0	0	0	0
Somerset	1	0	2	0	1	0	0	0	0
Waldo	8	1	1	0	1	0	0	0	0
Washington	0	0	0	0	0	1	0	0	0
York	1	1	7	0	4	1	1	1	0
Total	**25**	**3**	**67**	**1**	**32**	**5**	**16**	**1**	**3**

*ILI outbreaks included here are for the calendar year 2016, so includes outbreaks from the 2015-16 and 2016-17 influenza seasons.

Any outbreak can be healthcare associated.

Outbreak Categories and Definitions

Absenteeism: Absenteeism reports are submitted by schools when they have ≥15% absenteeism due to illness. If there is a single etiology an absenteeism report may also be counted as a disease-specific outbreak as well.

Airborne and Direct Contact (ADC): Airborne and Direct Contact outbreaks are transmitted through airborne bacteria or viruses or through direct contact. Examples of Airborne and Direct Contact outbreaks include pneumonia, conjunctivitis, hand foot and mouth disease, and MRSA.

Gastrointestinal Illness (GI): GI illness outbreaks are characterized through gastrointestinal symptoms. The most commonly reported GI outbreak is caused by norovirus. Out of state GI outbreaks are when a Maine resident matches a national cluster through Pulsed-field Gel Electrophoresis (PFGE) testing such as Salmonella or Shiga toxin producing *E. coli* (STEC).

Hepatitis: Hepatitis outbreaks are characterized as ≥3 acute hepatitis A, hepatitis B, or hepatitis C cases that are epidemiologically linked.

Influenza-like Illness (ILI): Influenza-like illness outbreaks are characterized as a respiratory illness with fever and/or sore throat without another known cause. The majority of ILI outbreaks are confirmed as influenza through laboratory testing.

Other: Outbreaks in this category are not captured in any other group. Examples include *C. difficile*, multi-drug resistant organisms, or outbreaks caused by contaminated devices.

Vaccine-Preventable Disease (VPD): Vaccine-preventable disease outbreaks are caused by one of the illnesses for which there is a routine vaccine. The most commonly reported VPD outbreak is caused by pertussis.

Varicella: Varicella (chickenpox) outbreaks are caused by chickenpox. An outbreak is defined by three or more confirmed cases in a single setting.

Vector: Vector outbreaks are caused by an organism that spreads infection from one host to another. The most common vectors in Maine are ticks and mosquitoes, but the most common vector outbreak is caused by scabies.

Cases of Reported Diseases by Age and Gender

Maine, 2016

	Gender		Age Group							
Condition	**F**	**M**	**0-5 years**	**5-14 years**	**15-24 years**	**25-34 years**	**35-44 years**	**45-54 years**	**55-64 years**	**65+ years**
Acute flaccid myelitis	1	1	1	1	0	0	0	0	0	0
Anaplasma phagocytophilum	146	226	0	9	6	19	23	58	100	157
Ascariasis	0	1	0	0	0	0	1	0	0	0
Babesiosis	32	50	1	2	0	5	7	8	21	38
Campylobacteriosis	116	139	10	16	29	23	25	37	52	63
Carbapenem-resistant Enterobacteriaceae (CRE)	29	21	2	0	1	1	3	2	7	34
Chlamydia trachomatis infection	2801	1358	1	16	2719	1103	243	51	21	5
Cryptosporidiosis	33	22	7	10	6	11	6	6	4	5
Cyclosporiasis	3	0	0	0	0	1	0	0	1	1
Dengue	1	1	0	0	0	1	1	0	0	0
Ehrlichiosis, chaffeensis	2	5	0	0	1	1	0	2	2	1
Ehrlichiosis/Anaplasmosis, undetermined	2	2	1	2	0	1	0	0	0	0
Emerging Infection	1	1	0	0	0	0	0	0	1	1
Encephalitis, Powassan	1	0	0	0	0	0	0	0	0	1
Giardiasis	74	63	10	11	11	17	15	22	25	26
Gonorrhea	133	311	0	1	172	166	52	31	22	0
Group A *Streptococcus*, invasive	27	33	2	0	1	7	16	17	6	11
HIV	21	35	0	0	6	15	21	6	5	3
Haemophilus influenzae, invasive	15	14	2	1	0	1	0	4	4	17
Hemolytic uremic syndrome, postdiarrheal	2	0	0	0	0	0	0	0	1	1
Hepatitis A, acute	6	2	0	0	3	1	1	0	1	2
Hepatitis B, chronic	64	93	0	5	16	32	49	30	14	11
Hepatitis B, acute	19	34	0	0	1	15	21	6	9	1
Hepatitis C, acute	19	18	0	0	4	14	7	8	3	1
Hepatitis C, chronic	672	912	14	10	182	606	269	205	211	87
Hepatitis E, acute	1	0	0	0	0	1	0	0	0	0
Influenza Associated Pediatric Mortality	1	0	1	0	0	0	0	0	0	0
Invasive Pneumococcal Disease	70	63	8	5	1	5	7	19	27	61

	Gender		Age Group							
Condition	**F**	**M**	**0-5 years**	**5-14 years**	**15-24 years**	**25-34 years**	**35-44 years**	**45-54 years**	**55-64 years**	**65+ years**
Latent TB Infection	250	301	23	67	94	130	132	71	23	11
Legionellosis	6	10	1	0	0	1	4	2	2	6
Listeriosis	7	4	0	0	1	1	0	0	0	9
Lyme disease	612	875	58	211	94	113	123	215	268	405
Malaria	6	4	1	0	0	6	0	3	0	0
Mumps	11	23	0	0	33	0	0	0	1	0
Neisseria meningitidis, invasive (Meningococcal disease)	0	1	0	0	0	0	0	1	0	0
Pertussis	128	131	45	111	76	5	7	7	4	4
Rabies PEP	69	62	9	21	15	21	11	23	20	11
Rabies, animal	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	69	109	3	5	5	20	18	24	27	76
S. aureus, vancomycin intermediate susc (VISA)	1	0	0	0	0	0	0	0	1	0
Salmonellosis	63	59	10	3	17	12	14	24	17	25
Scombroid fish poisoning	0	1	0	0	0	0	1	0	0	0
Shiga toxin-producing *Escherichia coli* (STEC)	23	14	5	4	5	4	2	2	5	10
Shigellosis	1	1	0	0	0	1	0	0	1	0
Spotted Fever Rickettsiosis	2	2	0	0	0	2	0	0	0	2
Streptococcal toxic-shock syndrome	5	3	0	0	0	1	4	0	1	2
Syphilis	3	44	0	0	11	12	8	8	6	2
Tetanus	0	1	0	0	0	1	0	0	0	0
Tuberculosis	7	16	0	0	4	3	5	3	4	4
Typhoid fever (*Salmonella typhi*)	0	1	0	0	0	0	0	1	0	0
Varicella (Chickenpox)	117	111	32	64	11	20	13	26	15	47
Vibriosis (non-cholera Vibrio species infections)	3	4	0	0	1	1	0	0	1	4
Zika virus disease, non-congenital	8	4	0	1	1	1	2	1	5	1

Cases of Reported Diseases by Race and Ethnicity

Maine, 2016

	RACE							ETHNICITY		
Condition	American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	White	Two or more	Other	Unknown	Hispanic	Non-Hispanic	Unknown
Acute flaccid myelitis	0	0	0	2	0	0	0	0	1	1
Anaplasma phagocytophilum	0	2	0	357	0	0	13	4	336	32
Ascariasis	0	0	0	0	0	0	1	0	1	0
Babesiosis	0	1	0	79	0	0	2	1	78	3
Campylobacteriosis	0	0	0	244	2	0	9	3	244	8
Carbapenem-resistant Enterobacteriaceae (CRE)	0	0	1	44	0	0	5	0	43	7
Chlamydia trachomatis infection	15	38	176	2493	9	106	1322	44	1594	2521
Cryptosporidiosis	0	0	1	53	0	0	1	0	54	1
Cyclosporiasis	0	0	0	3	0	0	0	0	3	0
Dengue	0	0	0	2	0	0	0	0	1	1
Ehrlichiosis, chaffeensis	0	0	0	7	0	0	0	0	7	0
Ehrlichiosis/Anaplasmosis, undetermined	0	0	0	4	0	0	0	0	4	0
Emerging Infection	0	0	0	2	0	0	0	0	2	0
Encephalitis, Powassan	0	0	0	1	0	0	0	0	1	0
Giardiasis	0	1	9	113	0	0	14	1	117	19
Gonorrhea	3	4	53	357	3	15	9	9	353	82
Group A *Streptococcus*, invasive	2	0	1	54	1	0	2	4	47	9
HIV	0	0	21	33	0	1	1	1	49	6
Haemophilus influenzae, invasive	0	0	0	27	0	0	2	4	23	2
Hemolytic uremic syndrome, postdiarrheal	0	0	0	2	0	0	0	0	2	0
Hepatitis A, acute	0	0	0	8	0	0	0	0	8	0
Hepatitis B, chronic	0	20	76	55	0	1	5	3	141	13
Hepatitis B, acute	0	0	1	52	0	0	0	0	51	2
Hepatitis C, acute	0	0	0	36	0	0	1	0	35	2
Hepatitis C, chronic	14	4	18	736	4	26	782	9	475	1100
Hepatitis E, acute	0	0	0	1	0	0	0	0	1	0
Influenza Associated Pediatric Mortality	0	0	0	1	0	0	0	0	1	0
Invasive Pneumococcal Disease	1	0	1	106	1	0	24	3	82	48

Condition	RACE							ETHNICITY		
	American Indian or Alaska Native	Asian or Pacific Islander	Black or African American	White	Two or more	Other	Unknown	Hispanic	Non-Hispanic	Unknown
Latent TB Infection	0	25	374	115	0	0	37	8	503	40
Legionellosis	0	1	0	14	0	0	1	0	16	0
Listeriosis	0	0	0	11	0	0	0	0	10	1
Lyme disease	0	2	6	1188	0	0	291	0	437	1050
Malaria	0	0	10	0	0	0	0	0	10	0
Mumps	0	0	0	18	0	0	16	1	16	17
Neisseria meningitidis, invasive (Meningococcal disease)	0	0	0	1	0	0	0	0	1	0
Pertussis	1	1	1	219	3	0	34	2	196	61
Rabies PEP	1	1	0	76	0	0	53	1	68	62
Rabies, animal	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	1	1	1	98	0	0	77	4	56	118
S. aureus, vancomycin intermediate susc (VISA)	0	0	0	1	0	0	0	0	1	0
Salmonellosis	0	2	3	117	0	0	0	1	120	1
Scombroid fish poisoning	0	0	0	0	0	0	1	0	0	1
Shiga toxin-producing *Escherichia coli* (STEC)	0	0	1	36	0	0	0	0	36	1
Shigellosis	0	0	0	2	0	0	0	0	2	0
Spotted Fever Rickettsiosis	0	0	0	3	0	0	1	0	3	1
Streptococcal toxic-shock syndrome	0	0	0	7	0	0	1	0	7	1
Syphilis	0	2	1	41	1	1	1	1	39	7
Tetanus	0	0	0	1	0	0	0	0	1	0
Tuberculosis	0	5	11	7	0	0	0	1	22	0
Typhoid fever (*Salmonella typhi*)	0	1	0	0	0	0	0	0	1	0
Varicella (Chickenpox)	0	2	1	156	2	0	67	1	133	94
Vibriosis (non-cholera Vibrio species infections)	0	1	0	6	0	0	0	0	6	1
Zika virus disease, non-congenital	0	0	0	11	0	0	1	2	9	1

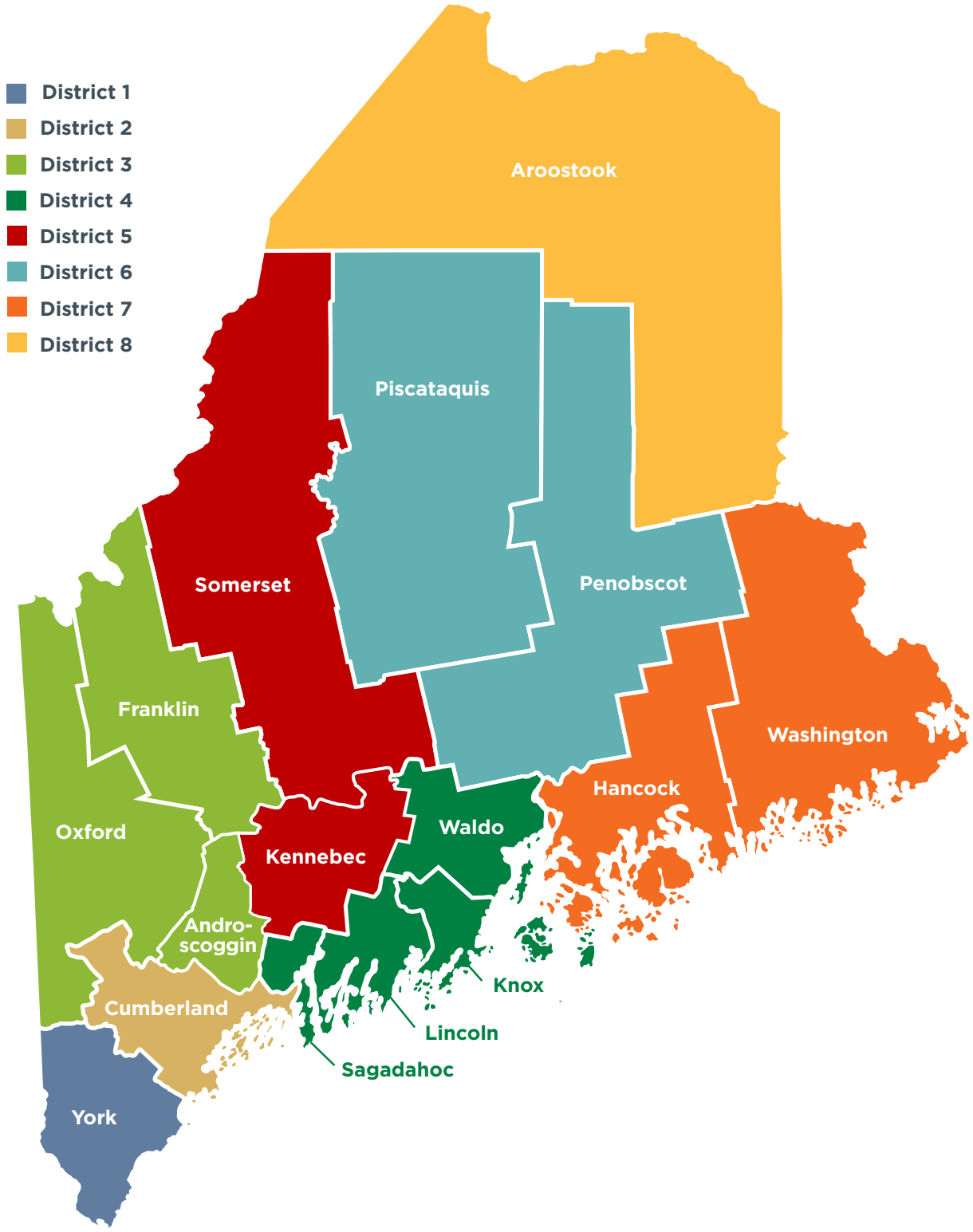
COUNTIES

Since 2003, the Infectious Disease Program of Maine CDC has published an annual summary of infectious disease data. Publishing reports on surveillance activities and data provides the health care community, government agencies, individuals, and groups with important statistical information on Maine's reportable diseases and conditions.

For the 2016 annual report, Maine CDC changed the format to provide more specific county-level data, provide data that is more easily compared, and summarize important projects/investigations the department worked on throughout the year. Maine CDC is also including information on conditions that are investigated that are not explicitly reportable but have public health significance. Examples of these conditions include accute flaccid myelitis, Ascariasis, emerging infections (in 2016 these were *B. miyamotoi* cases), latent TB infections, and Zika virus. The goal of this format change is to provide Maine CDC's partners with a helpful resource.

(Population data is from 2016 census estimates.)

Public Health District Map



ANDROSCOGGIN COUNTY

Population: 107,319

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	13	12.1	19	9.8	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	6	5.6	8	4.1	82	6.2
Campylobacteriosis	10	9.3	21	10.8	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	2	1.9	8	4.1	50	3.8
Chlamydia trachomatis infection	525	489.2	800	411.2	4159	312.4
Cryptosporidiosis	1	0.9	5	2.6	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	0	0.0	0	0.0	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	1	0.9	1	0.5	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	16	14.9	28	14.4	137	10.3
Gonorrhea	75	69.9	96	49.3	444	33.3
Group A *Streptococcus*, invasive	4	3.7	5	2.6	60	4.5
HIV	12	11.2	12	6.2	56	4.2
Haemophilus influenzae, invasive	3	2.8	5	2.6	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	0	0.0	0	0.0	8	0.6
Hepatitis B, chronic	27	25.2	29	14.9	157	11.8
Hepatitis B, acute	3	2.8	4	2.1	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	5	4.7	5	2.6	37	2.8
Hepatitis C, chronic	120	111.8	190	97.7	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	10	9.3	18	9.3	133	10.0
Latent TB Infection	149	138.8	150	77.1	551	41.4
Legionellosis	2	1.9	2	1.0	16	1.2
Listeriosis	0	0.0	0	0.0	11	0.8
Lyme disease	92	85.7	138	70.9	1487	111.7
Malaria	2	1.9	2	1.0	10	0.8
Mumps	18	16.8	18	9.3	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	1	0.9	38	19.5	259	19.5
Rabies PEP	9	8.4	19	9.8	131	9.8
Rabies, animal	6	NA	13	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	7	6.5	19	9.8	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	12	11.2	21	10.8	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	0	0.0	4	2.1	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	1	0.9	1	0.5	4	0.3
Streptococcal toxic-shock syndrome	1	0.9	1	0.5	8	0.6
Syphilis	4	3.7	4	2.1	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	10	9.3	10	5.1	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	15	14.0	27	13.9	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	0	0.0	3	1.5	12	0.9

AROOSTOOK COUNTY

Population: 67,959

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	0	0.0	0	0.0	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	0	0.0	0	0.0	82	6.2
Campylobacteriosis	11	16.2	11	16.2	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	0	0.0	0	0.0	50	3.8
Chlamydia trachomatis infection	132	194.2	132	194.2	4159	312.4
Cryptosporidiosis	2	2.9	2	2.9	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	0	0.0	0	0.0	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	0	0.0	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	3	4.4	3	4.4	137	10.3
Gonorrhea	9	13.2	9	13.2	444	33.3
Group A *Streptococcus*, invasive	1	1.5	1	1.5	60	4.5
HIV	1	1.5	1	1.5	56	4.2
Haemophilus influenzae, invasive	2	2.9	2	2.9	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	0	0.0	0	0.0	8	0.6
Hepatitis B, chronic	3	4.4	3	4.4	157	11.8
Hepatitis B, acute	3	4.4	3	4.4	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	1	1.5	1	1.5	37	2.8
Hepatitis C, chronic	82	120.7	82	120.7	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	9	13.2	9	13.2	133	10.0
Latent TB Infection	14	20.6	14	20.6	551	41.4
Legionellosis	1	1.5	1	1.5	16	1.2
Listeriosis	0	0.0	0	0.0	11	0.8
Lyme disease	1	1.5	1	1.5	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	0	0.0	0	0.0	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	19	28.0	19	28.0	259	19.5
Rabies PEP	4	5.9	4	5.9	131	9.8
Rabies, animal	0	NA	0	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	12	17.7	12	17.7	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	5	7.4	5	7.4	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	1	1.5	1	1.5	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	0	0.0	0	0.0	8	0.6
Syphilis	0	0.0	0	0.0	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	1	1.5	1	1.5	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	4	5.9	4	5.9	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	1	1.5	1	1.5	12	0.9

CUMBERLAND COUNTY

Population: 292,041

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	59	20.2	59	20.2	372	27.9
Ascariasis	1	0.3	1	0.3	1	0.1
Babesiosis	17	5.8	17	5.8	82	6.2
Campylobacteriosis	66	22.6	66	22.6	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	19	6.5	19	6.5	50	3.8
Chlamydia trachomatis infection	977	334.5	977	334.5	4159	312.4
Cryptosporidiosis	4	1.4	4	1.4	55	4.1
Cyclosporiasis	1	0.3	1	0.3	3	0.2
Dengue	1	0.3	1	0.3	2	0.2
Ehrlichiosis, chaffeensis	2	0.7	2	0.7	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	1	0.3	1	0.3	4	0.3
Emerging Infection	1	0.3	1	0.3	2	0.2
Encephalitis, Powassan	1	0.3	1	0.3	1	0.1
Giardiasis	37	12.7	37	12.7	137	10.3
Gonorrhea	156	53.4	156	53.4	444	33.3
Group A *Streptococcus*, invasive	12	4.1	12	4.1	60	4.5
HIV	22	7.5	22	7.5	56	4.2
Haemophilus influenzae, invasive	2	0.7	2	0.7	29	2.2
Hemolytic uremic syndrome, postdiarrheal	1	0.3	1	0.3	2	0.2
Hepatitis A, acute	2	0.7	2	0.7	8	0.6
Hepatitis B, chronic	70	24.0	70	24.0	157	11.8
Hepatitis B, acute	4	1.4	4	1.4	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	9	3.1	9	3.1	37	2.8
Hepatitis C, chronic	468	160.3	468	160.3	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	17	5.8	17	5.8	133	10.0
Latent TB Infection	340	116.4	340	116.4	551	41.4
Legionellosis	3	1.0	3	1.0	16	1.2
Listeriosis	2	0.7	2	0.7	11	0.8
Lyme disease	310	106.1	310	106.1	1487	111.7
Malaria	8	2.7	8	2.7	10	0.8
Mumps	10	3.4	10	3.4	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	1	0.3	1	0.3	1	0.1
Pertussis	55	18.8	55	18.8	259	19.5
Rabies PEP	18	6.2	18	6.2	131	9.8
Rabies, animal	10	NA	10	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	39	13.4	39	13.4	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	27	9.2	27	9.2	122	9.2
Scombroid fish poisoning	1	0.3	1	0.3	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	10	3.4	10	3.4	37	2.8
Shigellosis	2	0.7	2	0.7	2	0.2
Spotted Fever Rickettsiosis	1	0.3	1	0.3	4	0.3
Streptococcal toxic-shock syndrome	2	0.7	2	0.7	8	0.6
Syphilis	24	8.2	24	8.2	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	8	2.7	8	2.7	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	42	14.4	42	14.4	228	17.1
Vibriosis (non-cholera Vibrio species infections)	3	1.0	3	1.0	7	0.5
Zika virus disease, non-congenital	3	1.0	3	1.0	12	0.9

FRANKLIN COUNTY

Population: 30,001

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	1	3.3	19	9.8	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	0	0.0	8	4.1	82	6.2
Campylobacteriosis	1	3.3	21	10.8	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	1	3.3	8	4.1	50	3.8
Chlamydia trachomatis infection	79	263.3	800	411.2	4159	312.4
Cryptosporidiosis	2	6.7	5	2.6	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	0	0.0	0	0.0	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	1	0.5	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	8	26.7	28	14.4	137	10.3
Gonorrhea	5	16.7	96	49.3	444	33.3
Group A *Streptococcus*, invasive	1	3.3	5	2.6	60	4.5
HIV	0	0.0	12	6.2	56	4.2
Haemophilus influenzae, invasive	0	0.0	5	2.6	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	0	0.0	0	0.0	8	0.6
Hepatitis B, chronic	0	0.0	29	14.9	157	11.8
Hepatitis B, acute	0	0.0	4	2.1	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	0	0.0	5	2.6	37	2.8
Hepatitis C, chronic	16	53.3	190	97.7	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	1	3.3	18	9.3	133	10.0
Latent TB Infection	0	0.0	150	77.1	551	41.4
Legionellosis	0	0.0	2	1.0	16	1.2
Listeriosis	0	0.0	0	0.0	11	0.8
Lyme disease	3	10.0	138	70.9	1487	111.7
Malaria	0	0.0	2	1.0	10	0.8
Mumps	0	0.0	18	9.3	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	1	3.3	38	19.5	259	19.5
Rabies PEP	4	13.3	19	9.8	131	9.8
Rabies, animal	2	NA	13	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	7	23.3	19	9.8	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	7	23.3	21	10.8	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	2	6.7	4	2.1	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	1	0.5	4	0.3
Streptococcal toxic-shock syndrome	0	0.0	1	0.5	8	0.6
Syphilis	0	0.0	4	2.1	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	0	0.0	10	5.1	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	1	3.3	27	13.9	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	0	0.0	3	1.5	12	0.9

HANCOCK COUNTY

Population: 54,419

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	13	23.9	13	15.1	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	1	1.8	1	1.2	82	6.2
Campylobacteriosis	9	16.5	15	17.5	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	0	0.0	0	0.0	50	3.8
Chlamydia trachomatis infection	104	191.1	193	224.8	4159	312.4
Cryptosporidiosis	4	7.4	7	8.2	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	0	0.0	1	1.2	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	0	0.0	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	8	14.7	11	12.8	137	10.3
Gonorrhea	11	20.2	16	18.6	444	33.3
Group A *Streptococcus*, invasive	2	3.7	5	5.8	60	4.5
HIV	1	1.8	1	1.2	56	4.2
Haemophilus influenzae, invasive	2	3.7	3	3.5	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	1	1.8	1	1.2	8	0.6
Hepatitis B, chronic	5	9.2	5	5.8	157	11.8
Hepatitis B, acute	6	11.0	9	10.5	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	0	0.0	1	1.2	37	2.8
Hepatitis C, chronic	45	82.7	94	109.5	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	2	3.7	8	9.3	133	10.0
Latent TB Infection	3	5.5	3	3.5	551	41.4
Legionellosis	0	0.0	1	1.2	16	1.2
Listeriosis	1	1.8	2	2.3	11	0.8
Lyme disease	150	275.6	170	198.0	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	0	0.0	0	0.0	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	1	1.8	1	1.2	259	19.5
Rabies PEP	8	14.7	12	14.0	131	9.8
Rabies, animal	0	NA	1	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	7	12.9	11	12.8	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	4	7.4	6	7.0	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	0	0.0	0	0.0	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	2	3.7	3	3.5	8	0.6
Syphilis	0	0.0	0	0.0	47	3.5
Tetanus	1	1.8	1	1.2	1	0.1
Tuberculosis	1	1.8	1	1.2	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	14	25.7	19	22.1	228	17.1
Vibriosis (non-cholera Vibrio species infections)	2	3.7	2	2.3	7	0.5
Zika virus disease, non-congenital	1	1.8	1	1.2	12	0.9

KENNEBEC COUNTY

Population: 120,569

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	1	0.6	2	0.2
Anaplasma phagocytophilum	29	24.1	31	18.1	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	5	4.1	7	4.1	82	6.2
Campylobacteriosis	28	23.2	38	22.2	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	3	2.5	4	2.3	50	3.8
Chlamydia trachomatis infection	422	350.0	591	344.6	4159	312.4
Cryptosporidiosis	12	10.0	15	8.7	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	1	0.8	1	0.6	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	2	1.7	2	1.2	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	9	7.5	23	13.4	137	10.3
Gonorrhea	38	31.5	50	29.2	444	33.3
Group A *Streptococcus*, invasive	7	5.8	11	6.4	60	4.5
HIV	9	7.5	10	5.8	56	4.2
Haemophilus influenzae, invasive	7	5.8	8	4.7	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	1	0.6	2	0.2
Hepatitis A, acute	2	1.7	2	1.2	8	0.6
Hepatitis B, chronic	8	6.6	10	5.8	157	11.8
Hepatitis B, acute	3	2.5	3	1.7	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	3	2.5	6	3.5	37	2.8
Hepatitis C, chronic	67	55.6	110	64.1	1584	119.0
Hepatitis E, acute	0	0.0	1	0.6	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	16	13.3	24	14.0	133	10.0
Latent TB Infection	11	9.1	15	8.7	551	41.4
Legionellosis	1	0.8	1	0.6	16	1.2
Listeriosis	1	0.8	3	1.7	11	0.8
Lyme disease	204	169.2	225	131.2	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	4	3.3	4	2.3	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	64	53.1	68	39.7	259	19.5
Rabies PEP	22	18.2	32	18.7	131	9.8
Rabies, animal	15	NA	20	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	16	13.3	23	13.4	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	12	10.0	19	11.1	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	3	2.5	4	2.3	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	0	0.0	0	0.0	8	0.6
Syphilis	6	5.0	6	3.5	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	1	0.8	1	0.6	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	19	15.8	29	16.9	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	1	0.8	1	0.6	12	0.9

KNOX COUNTY

Population: 39,744

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	77	193.7	177	119.1	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	13	32.7	26	17.5	82	6.2
Campylobacteriosis	8	20.1	39	26.2	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	3	7.5	8	5.4	50	3.8
Chlamydia trachomatis infection	98	246.6	377	253.7	4159	312.4
Cryptosporidiosis	0	0.0	5	3.4	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	1	2.5	2	1.3	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	0	0.0	4	0.3
Emerging Infection	0	0.0	1	0.7	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	1	2.5	8	5.4	137	10.3
Gonorrhea	6	15.1	20	13.5	444	33.3
Group A *Streptococcus*, invasive	2	5.0	7	4.7	60	4.5
HIV	0	0.0	2	1.3	56	4.2
Haemophilus influenzae, invasive	2	5.0	2	1.3	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	0	0.0	1	0.7	8	0.6
Hepatitis B, chronic	2	5.0	6	4.0	157	11.8
Hepatitis B, acute	2	5.0	4	2.7	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	0	0.0	3	2.0	37	2.8
Hepatitis C, chronic	70	176.1	170	114.4	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	1	2.5	1	0.7	1	0.1
Invasive Pneumococcal Disease	7	17.6	23	15.5	133	10.0
Latent TB Infection	2	5.0	4	2.7	551	41.4
Legionellosis	0	0.0	1	0.7	16	1.2
Listeriosis	0	0.0	0	0.0	11	0.8
Lyme disease	102	256.6	362	243.6	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	0	0.0	0	0.0	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	9	22.6	29	19.5	259	19.5
Rabies PEP	3	7.5	13	8.7	131	9.8
Rabies, animal	2	NA	11	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	8	20.1	27	18.2	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	1	2.5	7	4.7	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	0	0.0	2	1.3	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	1	2.5	1	0.7	8	0.6
Syphilis	1	2.5	2	1.3	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	0	0.0	0	0.0	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	8	20.1	22	14.8	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	0	0.0	2	1.3	12	0.9

LINCOLN COUNTY

Population: 34,216

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	63	184.1	177	119.1	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	7	20.5	26	17.5	82	6.2
Campylobacteriosis	12	35.1	39	26.2	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	2	5.8	8	5.4	50	3.8
Chlamydia trachomatis infection	70	204.6	377	253.7	4159	312.4
Cryptosporidiosis	0	0.0	5	3.4	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	0	0.0	2	1.3	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	0	0.0	4	0.3
Emerging Infection	0	0.0	1	0.7	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	6	17.5	8	5.4	137	10.3
Gonorrhea	5	14.6	20	13.5	444	33.3
Group A *Streptococcus*, invasive	0	0.0	7	4.7	60	4.5
HIV	0	0.0	2	1.3	56	4.2
Haemophilus influenzae, invasive	0	0.0	2	1.3	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	0	0.0	1	0.7	8	0.6
Hepatitis B, chronic	3	8.8	6	4.0	157	11.8
Hepatitis B, acute	1	2.9	4	2.7	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	1	2.9	3	2.0	37	2.8
Hepatitis C, chronic	37	108.1	170	114.4	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	1	0.7	1	0.1
Invasive Pneumococcal Disease	4	11.7	23	15.5	133	10.0
Latent TB Infection	0	0.0	4	2.7	551	41.4
Legionellosis	1	2.9	1	0.7	16	1.2
Listeriosis	0	0.0	0	0.0	11	0.8
Lyme disease	98	286.4	362	243.6	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	0	0.0	0	0.0	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	1	2.9	29	19.5	259	19.5
Rabies PEP	3	8.8	13	8.7	131	9.8
Rabies, animal	4	NA	11	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	8	23.4	27	18.2	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	2	5.8	7	4.7	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	1	2.9	2	1.3	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	0	0.0	1	0.7	8	0.6
Syphilis	0	0.0	2	1.3	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	0	0.0	0	0.0	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	6	17.5	22	14.8	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	1	2.9	2	1.3	12	0.9

OXFORD COUNTY

Population: 57,217

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	5	8.7	19	9.8	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	2	3.5	8	4.1	82	6.2
Campylobacteriosis	10	17.5	21	10.8	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	5	8.7	8	4.1	50	3.8
Chlamydia trachomatis infection	196	342.6	800	411.2	4159	312.4
Cryptosporidiosis	2	3.5	5	2.6	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	0	0.0	0	0.0	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	1	0.5	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	4	7.0	28	14.4	137	10.3
Gonorrhea	16	28.0	96	49.3	444	33.3
Group A *Streptococcus*, invasive	0	0.0	5	2.6	60	4.5
HIV	0	0.0	12	6.2	56	4.2
Haemophilus influenzae, invasive	2	3.5	5	2.6	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	0	0.0	0	0.0	8	0.6
Hepatitis B, chronic	2	3.5	29	14.9	157	11.8
Hepatitis B, acute	1	1.7	4	2.1	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	0	0.0	5	2.6	37	2.8
Hepatitis C, chronic	54	94.4	190	97.7	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	7	12.2	18	9.3	133	10.0
Latent TB Infection	1	1.7	150	77.1	551	41.4
Legionellosis	0	0.0	2	1.0	16	1.2
Listeriosis	0	0.0	0	0.0	11	0.8
Lyme disease	43	75.2	138	70.9	1487	111.7
Malaria	0	0.0	2	1.0	10	0.8
Mumps	0	0.0	18	9.3	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	36	62.9	38	19.5	259	19.5
Rabies PEP	6	10.5	19	9.8	131	9.8
Rabies, animal	5	NA	13	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	5	8.7	19	9.8	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	2	3.5	21	10.8	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	2	3.5	4	2.1	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	1	0.5	4	0.3
Streptococcal toxic-shock syndrome	0	0.0	1	0.5	8	0.6
Syphilis	0	0.0	4	2.1	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	0	0.0	10	5.1	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	11	19.2	27	13.9	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	3	5.2	3	1.5	12	0.9

PENOBSCOT COUNTY

Population: 151,806

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	2	1.3	2	1.2	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	3	2.0	3	1.8	82	6.2
Campylobacteriosis	20	13.2	21	12.5	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	0	0.0	0	0.0	50	3.8
Chlamydia trachomatis infection	528	347.8	557	330.3	4159	312.4
Cryptosporidiosis	12	7.9	17	10.1	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	1	0.7	1	0.6	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	0	0.0	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	10	6.6	15	8.9	137	10.3
Gonorrhea	43	28.3	43	25.5	444	33.3
Group A *Streptococcus*, invasive	7	4.6	7	4.2	60	4.5
HIV	4	2.6	5	3.0	56	4.2
Haemophilus influenzae, invasive	1	0.7	1	0.6	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	1	0.7	1	0.6	8	0.6
Hepatitis B, chronic	16	10.5	16	9.5	157	11.8
Hepatitis B, acute	20	13.2	21	12.5	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	10	6.6	10	5.9	37	2.8
Hepatitis C, chronic	228	150.2	242	143.5	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	9	5.9	11	6.5	133	10.0
Latent TB Infection	8	5.3	8	4.7	551	41.4
Legionellosis	4	2.6	4	2.4	16	1.2
Listeriosis	1	0.7	1	0.6	11	0.8
Lyme disease	90	59.3	93	55.1	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	0	0.0	0	0.0	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	8	5.3	8	4.7	259	19.5
Rabies PEP	11	7.2	14	8.3	131	9.8
Rabies, animal	5	NA	5	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	25	16.5	28	16.6	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	15	9.9	19	11.3	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	3	2.0	6	3.6	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	1	0.7	1	0.6	8	0.6
Syphilis	6	4.0	8	4.7	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	0	0.0	0	0.0	23	1.7
Typhoid fever (*Salmonella typhi*)	1	0.7	1	0.6	1	0.1
Varicella (Chickenpox)	47	31.0	55	32.6	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	0	0.0	0	0.0	12	0.9

PISCATAQUIS COUNTY

Population: 16,843

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	0	0.0	2	1.2	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	0	0.0	3	1.8	82	6.2
Campylobacteriosis	1	5.9	21	12.5	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	0	0.0	0	0.0	50	3.8
Chlamydia trachomatis infection	29	172.2	557	330.3	4159	312.4
Cryptosporidiosis	5	29.7	17	10.1	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	0	0.0	1	0.6	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	0	0.0	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	5	29.7	15	8.9	137	10.3
Gonorrhea	0	0.0	43	25.5	444	33.3
Group A *Streptococcus*, invasive	0	0.0	7	4.2	60	4.5
HIV	1	5.9	5	3.0	56	4.2
Haemophilus influenzae, invasive	0	0.0	1	0.6	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	0	0.0	1	0.6	8	0.6
Hepatitis B, chronic	0	0.0	16	9.5	157	11.8
Hepatitis B, acute	1	5.9	21	12.5	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	0	0.0	10	5.9	37	2.8
Hepatitis C, chronic	14	83.1	242	143.5	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	2	11.9	11	6.5	133	10.0
Latent TB Infection	0	0.0	8	4.7	551	41.4
Legionellosis	0	0.0	4	2.4	16	1.2
Listeriosis	0	0.0	1	0.6	11	0.8
Lyme disease	3	17.8	93	55.1	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	0	0.0	0	0.0	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	0	0.0	8	4.7	259	19.5
Rabies PEP	3	17.8	14	8.3	131	9.8
Rabies, animal	0	NA	5	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	3	17.8	28	16.6	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	4	23.7	19	11.3	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	3	17.8	6	3.6	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	0	0.0	1	0.6	8	0.6
Syphilis	2	11.9	8	4.7	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	0	0.0	0	0.0	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	1	0.6	1	0.1
Varicella (Chickenpox)	8	47.5	55	32.6	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	0	0.0	0	0.0	12	0.9

SAGADAHOC COUNTY

Population: 35,273

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	27	76.5	177	119.1	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	4	11.3	26	17.5	82	6.2
Campylobacteriosis	4	11.3	39	26.2	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	1	2.8	8	5.4	50	3.8
Chlamydia trachomatis infection	112	317.5	377	253.7	4159	312.4
Cryptosporidiosis	1	2.8	5	3.4	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	1	2.8	2	1.3	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	0	0.0	4	0.3
Emerging Infection	1	2.8	1	0.7	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	0	0.0	8	5.4	137	10.3
Gonorrhea	6	17.0	20	13.5	444	33.3
Group A *Streptococcus*, invasive	2	5.7	7	4.7	60	4.5
HIV	0	0.0	2	1.3	56	4.2
Haemophilus influenzae, invasive	0	0.0	2	1.3	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	0	0.0	1	0.7	8	0.6
Hepatitis B, chronic	1	2.8	6	4.0	157	11.8
Hepatitis B, acute	0	0.0	4	2.7	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	1	2.8	3	2.0	37	2.8
Hepatitis C, chronic	25	70.9	170	114.4	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	1	0.7	1	0.1
Invasive Pneumococcal Disease	4	11.3	23	15.5	133	10.0
Latent TB Infection	1	2.8	4	2.7	551	41.4
Legionellosis	0	0.0	1	0.7	16	1.2
Listeriosis	0	0.0	0	0.0	11	0.8
Lyme disease	91	258.0	362	243.6	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	0	0.0	0	0.0	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	1	2.8	29	19.5	259	19.5
Rabies PEP	1	2.8	13	8.7	131	9.8
Rabies, animal	2	NA	11	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	4	11.3	27	18.2	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	2	5.7	7	4.7	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	0	0.0	2	1.3	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	0	0.0	1	0.7	8	0.6
Syphilis	0	0.0	2	1.3	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	0	0.0	0	0.0	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	4	11.3	22	14.8	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	0	0.0	2	1.3	12	0.9

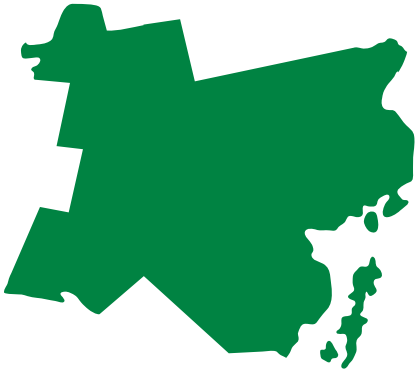
SOMERSET COUNTY

Population: 50,915

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	1	2.0	1	0.6	2	0.2
Anaplasma phagocytophilum	2	3.9	31	18.1	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	2	3.9	7	4.1	82	6.2
Campylobacteriosis	10	19.6	38	22.2	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	1	2.0	4	2.3	50	3.8
Chlamydia trachomatis infection	169	331.9	591	344.6	4159	312.4
Cryptosporidiosis	3	5.9	15	8.7	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	0	0.0	1	0.6	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	2	1.2	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	14	27.5	23	13.4	137	10.3
Gonorrhea	12	23.6	50	29.2	444	33.3
Group A *Streptococcus*, invasive	4	7.9	11	6.4	60	4.5
HIV	1	2.0	10	5.8	56	4.2
Haemophilus influenzae, invasive	1	2.0	8	4.7	29	2.2
Hemolytic uremic syndrome, postdiarrheal	1	2.0	1	0.6	2	0.2
Hepatitis A, acute	0	0.0	2	1.2	8	0.6
Hepatitis B, chronic	2	3.9	10	5.8	157	11.8
Hepatitis B, acute	0	0.0	3	1.7	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	3	5.9	6	3.5	37	2.8
Hepatitis C, chronic	43	84.5	110	64.1	1584	119.0
Hepatitis E, acute	1	2.0	1	0.6	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	8	15.7	24	14.0	133	10.0
Latent TB Infection	4	7.9	15	8.7	551	41.4
Legionellosis	0	0.0	1	0.6	16	1.2
Listeriosis	2	3.9	3	1.7	11	0.8
Lyme disease	21	41.2	225	131.2	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	0	0.0	4	2.3	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	4	7.9	68	39.7	259	19.5
Rabies PEP	10	19.6	32	18.7	131	9.8
Rabies, animal	5	NA	20	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	7	13.7	23	13.4	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	7	13.7	19	11.1	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	1	2.0	4	2.3	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	0	0.0	0	0.0	8	0.6
Syphilis	0	0.0	6	3.5	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	0	0.0	1	0.6	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	10	19.6	29	16.9	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	0	0.0	1	0.6	12	0.9



WALDO COUNTY

Population: 39,364

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	10	25.4	177	119.1	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	2	5.1	26	17.5	82	6.2
Campylobacteriosis	15	38.1	39	26.2	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	2	5.1	8	5.4	50	3.8
Chlamydia trachomatis infection	97	246.4	377	253.7	4159	312.4
Cryptosporidiosis	4	10.2	5	3.4	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	0	0.0	2	1.3	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	0	0.0	4	0.3
Emerging Infection	0	0.0	1	0.7	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	1	2.5	8	5.4	137	10.3
Gonorrhea	3	7.6	20	13.5	444	33.3
Group A *Streptococcus*, invasive	3	7.6	7	4.7	60	4.5
HIV	2	5.1	2	1.3	56	4.2
Haemophilus influenzae, invasive	0	0.0	2	1.3	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	1	2.5	1	0.7	8	0.6
Hepatitis B, chronic	0	0.0	6	4.0	157	11.8
Hepatitis B, acute	1	2.5	4	2.7	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	1	2.5	3	2.0	37	2.8
Hepatitis C, chronic	38	96.5	170	114.4	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	1	0.7	1	0.1
Invasive Pneumococcal Disease	8	20.3	23	15.5	133	10.0
Latent TB Infection	1	2.5	4	2.7	551	41.4
Legionellosis	0	0.0	1	0.7	16	1.2
Listeriosis	0	0.0	0	0.0	11	0.8
Lyme disease	71	180.4	362	243.6	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	0	0.0	0	0.0	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	18	45.7	29	19.5	259	19.5
Rabies PEP	6	15.2	13	8.7	131	9.8
Rabies, animal	3	NA	11	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	7	17.8	27	18.2	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	2	5.1	7	4.7	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	1	2.5	2	1.3	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	0	0.0	1	0.7	8	0.6
Syphilis	1	2.5	2	1.3	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	0	0.0	0	0.0	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	4	10.2	22	14.8	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	0	0.0	7	0.5
Zika virus disease, non-congenital	1	2.5	2	1.3	12	0.9

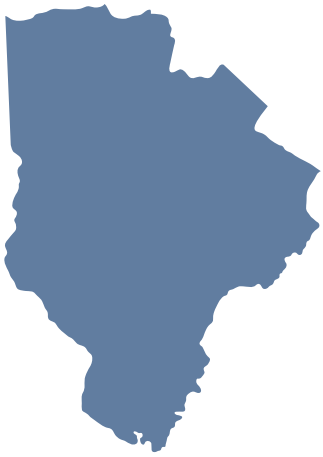
WASHINGTON COUNTY

Population: 31,450

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	0	0.0	0	0.0	2	0.2
Anaplasma phagocytophilum	0	0.0	13	15.1	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	0	0.0	1	1.2	82	6.2
Campylobacteriosis	6	19.1	15	17.5	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	0	0.0	0	0.0	50	3.8
Chlamydia trachomatis infection	89	283.0	193	224.8	4159	312.4
Cryptosporidiosis	3	9.5	7	8.2	55	4.1
Cyclosporiasis	0	0.0	0	0.0	3	0.2
Dengue	0	0.0	0	0.0	2	0.2
Ehrlichiosis, chaffeensis	1	3.2	1	1.2	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	0	0.0	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	3	9.5	11	12.8	137	10.3
Gonorrhea	5	15.9	16	18.6	444	33.3
Group A *Streptococcus*, invasive	3	9.5	5	5.8	60	4.5
HIV	0	0.0	1	1.2	56	4.2
Haemophilus influenzae, invasive	1	3.2	3	3.5	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	0	0.0	1	1.2	8	0.6
Hepatitis B, chronic	0	0.0	5	5.8	157	11.8
Hepatitis B, acute	3	9.5	9	10.5	53	4.0

Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	1	3.2	1	1.2	37	2.8
Hepatitis C, chronic	49	155.8	94	109.5	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	6	19.1	8	9.3	133	10.0
Latent TB Infection	0	0.0	3	3.5	551	41.4
Legionellosis	1	3.2	1	1.2	16	1.2
Listeriosis	1	3.2	2	2.3	11	0.8
Lyme disease	20	63.6	170	198.0	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	0	0.0	0	0.0	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	0	0.0	1	1.2	259	19.5
Rabies PEP	4	12.7	12	14.0	131	9.8
Rabies, animal	1	NA	1	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	4	12.7	11	12.8	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	0	0.0	0	0.0	1	0.1
Salmonellosis	2	6.4	6	7.0	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	0	0.0	0	0.0	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	0	0.0	0	0.0	4	0.3
Streptococcal toxic-shock syndrome	1	3.2	3	3.5	8	0.6
Syphilis	0	0.0	0	0.0	47	3.5
Tetanus	0	0.0	1	1.2	1	0.1
Tuberculosis	0	0.0	1	1.2	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	5	15.9	19	22.1	228	17.1
Vibriosis (non-cholera Vibrio species infections)	0	0.0	2	2.3	7	0.5
Zika virus disease, non-congenital	0	0.0	1	1.2	12	0.9



YORK COUNTY

Population: 202,343

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Acute flaccid myelitis	1	0.5	1	0.5	2	0.2
Anaplasma phagocytophilum	71	35.1	71	35.1	372	27.9
Ascariasis	0	0.0	0	0.0	1	0.1
Babesiosis	20	9.9	20	9.9	82	6.2
Campylobacteriosis	44	21.7	44	21.7	255	19.2
Carbapenem-resistant Enterobacteriaceae (CRE)	11	5.4	11	5.4	50	3.8
Chlamydia trachomatis infection	532	262.9	532	262.9	4159	312.4
Cryptosporidiosis	0	0.0	0	0.0	55	4.1
Cyclosporiasis	2	1.0	2	1.0	3	0.2
Dengue	1	0.5	1	0.5	2	0.2
Ehrlichiosis, chaffeensis	0	0.0	0	0.0	7	0.5
Ehrlichiosis/Anaplasmosis, undetermined	0	0.0	0	0.0	4	0.3
Emerging Infection	0	0.0	0	0.0	2	0.2
Encephalitis, Powassan	0	0.0	0	0.0	1	0.1
Giardiasis	12	5.9	12	5.9	137	10.3
Gonorrhea	54	26.7	54	26.7	444	33.3
Group A *Streptococcus*, invasive	12	5.9	12	5.9	60	4.5
HIV	3	1.5	3	1.5	56	4.2
Haemophilus influenzae, invasive	6	3.0	6	3.0	29	2.2
Hemolytic uremic syndrome, postdiarrheal	0	0.0	0	0.0	2	0.2
Hepatitis A, acute	1	0.5	1	0.5	8	0.6
Hepatitis B, chronic	18	8.9	18	8.9	157	11.8
Hepatitis B, acute	5	2.5	5	2.5	53	4.0

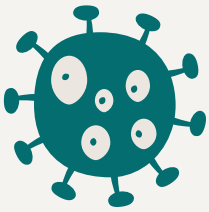
Counts of confirmed and probable cases. Rates of confirmed and probable cases per 100,000 people.

	County		District		State	
Condition	**Count**	**Rate**	**Count**	**Rate**	**Count**	**Rate**
Hepatitis C, acute	2	1.0	2	1.0	37	2.8
Hepatitis C, chronic	228	112.7	228	112.7	1584	119.0
Hepatitis E, acute	0	0.0	0	0.0	1	0.1
Influenza Associated Pediatric Mortality	0	0.0	0	0.0	1	0.1
Invasive Pneumococcal Disease	23	11.4	23	11.4	133	10.0
Latent TB Infection	17	8.4	17	8.4	551	41.4
Legionellosis	3	1.5	3	1.5	16	1.2
Listeriosis	3	1.5	3	1.5	11	0.8
Lyme disease	188	92.9	188	92.9	1487	111.7
Malaria	0	0.0	0	0.0	10	0.8
Mumps	2	1.0	2	1.0	34	2.6
Neisseria meningitidis, invasive (Meningococcal disease)	0	0.0	0	0.0	1	0.1
Pertussis	41	20.3	41	20.3	259	19.5
Rabies PEP	19	9.4	19	9.4	131	9.8
Rabies, animal	6	BA	6	NA	66	NA
S. aureus, coag+, meth- or oxi- resistant (MRSA)	19	9.4	19	9.4	178	13.4
S. aureus, vancomycin intermediate susc (VISA)	1	0.5	1	0.5	1	0.1
Salmonellosis	18	8.9	18	8.9	122	9.2
Scombroid fish poisoning	0	0.0	0	0.0	1	0.1
Shiga toxin-producing *Escherichia coli* (STEC)	10	4.9	10	4.9	37	2.8
Shigellosis	0	0.0	0	0.0	2	0.2
Spotted Fever Rickettsiosis	2	1.0	2	1.0	4	0.3
Streptococcal toxic-shock syndrome	0	0.0	0	0.0	8	0.6
Syphilis	3	1.5	3	1.5	47	3.5
Tetanus	0	0.0	0	0.0	1	0.1
Tuberculosis	2	1.0	2	1.0	23	1.7
Typhoid fever (*Salmonella typhi*)	0	0.0	0	0.0	1	0.1
Varicella (Chickenpox)	30	14.8	30	14.8	228	17.1
Vibriosis (non-cholera Vibrio species infections)	2	1.0	2	1.0	7	0.5
Zika virus disease, non-congenital	1	0.5	1	0.5	12	0.9

Workgroup Summaries

Food Safety Workgroup

The Maine Interagency Food Safety Workgroup is led by Maine's CDC Foodborne Disease Epidemiologist and is comprised of representatives from State and federal agencies involved in improving food safety in Maine (including, but not limited to, the Maine Department of Marine Resources, the Maine Department of Agriculture, Conservation and Forestry, the Maine Department of Education, the United States Department of Agriculture, and the Food and Drug Administration). These agencies collaborate to reduce the incidence of food- and waterborne infectious diseases in Maine, respond to foodborne and waterborne outbreaks, and work together to advance food safety initiatives. The workgroup meets quarterly during the year to discuss the latest developments and cooperate to improve response and prevention. It occasionally holds trainings for its member agencies and invites industry members to meetings to discuss ways to resolve common issues. The workgroup and Maine CDC infectious disease epidemiologists met in Augusta in March 2016 for a two-day Epi Ready Training taught by the Colorado Food Safety Center of Excellence. This training focused on improving the understanding of the roles and responsibilities of the different agencies and programs involved in foodborne outbreak investigations. It emphasized improving communication and efficiency in foodborne outbreak response. Members of the workgroup conducted several outbreak investigations over the course of the year. The workgroup also focused on completing sections of the Council to Improve Foodborne Outbreak Response (CIFOR) toolkit aimed at identifying areas of outbreak response in need of further improvement.



Influenza Workgroup

Maine's Influenza Workgroup meets quarterly to address current topics in influenza and other viral respiratory pathogens. The workgroup is chaired by the Influenza Epidemiologist and includes representatives from epidemiology, public health preparedness, the Maine Immunization Program, Maine's Health and Environmental Testing Laboratory, Maine Department of Agriculture, Conservation, and Forestry and other relevant partners. The workgroup coordinates surveillance and response to influenza and maintains and updates the pandemic influenza plan. The influenza workgroup also sponsors a start of influenza season conference call for healthcare providers and labs to update them on new guidance, reporting requirements, and assistance available from the State.

Rabies Workgroup

The Maine Rabies Workgroup meets quarterly to address current topics in statewide rabies prevention and management. The workgroup, co-chaired by the State Epidemiologist and the State Veterinarian, is comprised of animal and human health representatives from public and private local, State and federal agencies whose mission is to control the spread of rabies, a fatal zoonotic disease that is endemic in Maine. By the end of 2016, the workgroup finalized the revision of the third edition of the Maine Rabies Management Guidelines, 2012, to include updated guidance on the management of dogs, cats, and ferrets exposed to rabies from the National Association of Public Health Veterinarians' 2016 Compendium on Animal Rabies Prevention and Control. The workgroup also plans statewide events to promote awareness for annual World Rabies Day celebrations in September.

Vectorborne Workgroup

Maine's Vectorborne Workgroup meets every other month to address current topics in vectorborne diseases, particularly related to ticks and mosquitoes. The workgroup is chaired by the Vectorborne Epidemiologist and includes representatives from Epidemiology, Environmental Health, Maine's Health and Environmental Testing Laboratory, Maine Department of Agriculture, Conservation, and Forestry, Maine Department of Environmental Protection, Maine Department of Education, Maine Medical Center Research Institute, University of Maine Cooperative Extension, Maine Inland Fisheries and Wildlife, the Biodiversity Research Institute, pest control companies, and other relevant individuals. Subcommittees include the wildlife subcommittee which works on issues like deer density, the messaging committee which works on creating and standardizing information for common questions, and the education subcommittee which works on outreach. The workgroup coordinates mosquito and tick surveillance within the state, and supports Lyme Disease Awareness Month in May. In 2016, the Vectorborne workgroup developed a draft arboviral response plan, and coordinated surveillance for the mosquito that can transmit Zika virus (*Aedes albopictus*) to ensure Mainers are safe from locally mosquito transmitted disease.

Gastrointestinal Illness Outbreak

August – September 2016, Maine

Two out-of-state residents visited Maine together during the week of August 29, 2016 and ate at multiple restaurants throughout the state. During their meals, they consumed multiple types of seafood. Both became ill and went to a Maine hospital on August 31. An emergency department provider suspected shellfish poisoning and reported it to the Northern New England Poison Center and Maine CDC. One individual (Patient A) had nausea and abdominal cramping on August 30 as well as symmetrical cramping of hands and calves. This individual was admitted to the hospital for observation. The individual developed diarrhea, and a stool specimen was taken and tested. The other individual (Patient B) had onset of nausea, fever, chills, headache, and photophobia on August 31. The second individual was discharged from the emergency department. Patient A was eventually discharged after recovery.

A Maine CDC field epidemiologist interviewed the two individuals and shared information on the exposures with the Maine Health Inspection Program (HIP), the Maine Department of Marine Resources (DMR), and the Maine Department of Agriculture, Conservation and Forestry (DACF) for appropriate follow-up on the restaurants visited and the seafood consumed. HIP visited four establishments, and found a variety of violations. Oysters, from the same lot as those consumed by the two individuals, tested negative for the marine biotoxin domoic acid that causes amnesic shellfish poisoning.

Patient A was infected with *Vibrio parahaemolyticus*, as well as Norovirus GI and GII as identified through testing at Maine's Health and Environmental Testing Laboratory (HETL). New York State Department of Health's Wadsworth Center confirmed the norovirus results as well as finding Astrovirus and Sapovirus.

On September 6, Maine CDC received a report about a group of 6 out-of-state residents who ate at one of the same restaurants (Restaurant A) as the first group on August 31. Five were ill approximately 3 – 4 hours after the meal with a mixture of symptoms that included nausea, vomiting, chills, and diarrhea. All had returned to their home states by the time Maine CDC was notified. One of the common items consumed was lobster rolls. Maine CDC epidemiologists worked with epidemiologists in other states to assist in making recommendations for specimen collection. However, no specimens were collected from this group of individuals despite best efforts from health department staff.

HIP inspected Restaurant A again and found more violations. DACF and DMR followed up on the two distributors and processors who provided the restaurant with cooked lobster meat for the lobster rolls. HIP found an unlicensed room for lobster picking, which was closed down. Lobster and lobster tank samples were taken from this processor for testing at HETL. DACF and DMR conducted additional follow-up and traceback on the seafood suppliers and noted no significant findings.

On September 14, Maine CDC received a complaint from a third group (six individuals) who were ill after eating lunch at Restaurant A on September 11. Symptoms included vomiting and diarrhea. The median time between meal and illness onset was 36 hours. All had recovered and were out-of-state residents. No specimens were collected nor did members of the group visit a medical provider for their illness despite urging by Maine CDC epidemiologists.

HIP issued Restaurant A an Imminent Health Hazard, and it voluntarily closed for cleaning. It reopened within a day, and Maine CDC received no additional reports of illness related to this outbreak.

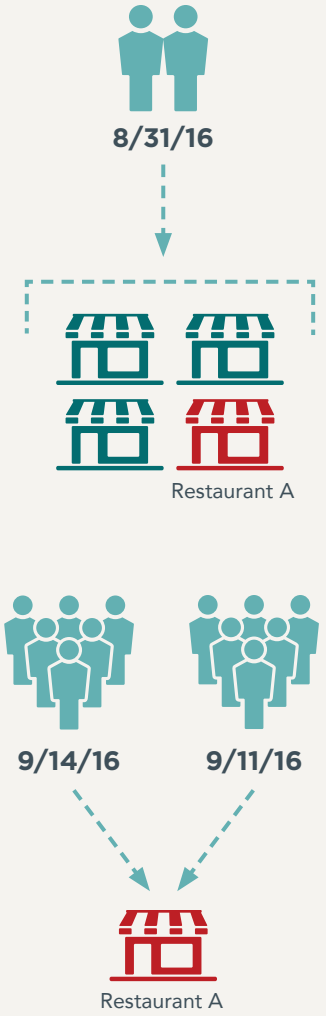
HETL tested oysters, lobster, and lobster tank water during the investigation. HETL identified strains of *Vibrio* in these samples, but norovirus was not found. Upon request by Maine CDC, the federal Centers for Disease Control and Prevention performed pulsed-field gel electrophoresis (PFGE) and whole genome sequencing (WGS) on the clinical *Vibrio* sample from Patient A and compared it to other *Vibrio parahaemolyticus* positive specimens collected. There were no matches between those samples.

The conclusions from this outbreak indicate no definitive link to a specific etiology since there were insufficient specimens collected from ill individuals during the outbreak, and the one that was collected was found to be co-infected with several different viruses and bacteria. With no laboratory results confirming the link between the food and water specimens and the clinical specimen, a specific strain of *Vibrio parahaemolyticus* could not be confirmed as the etiology of the groups' illnesses either.

One challenge identified during this outbreak investigation was that all cases of illness were residents of other states and most had returned to their home states before they notified Maine CDC of their illnesses. Out-of-state specimen collection and testing added another hurdle for epidemiologists. This challenge occurs in many outbreaks in Maine. This is especially true when the population in the state increases during peak tourism months when many out-of-state residents visit Maine and its restaurants.

The quick, cooperative, and comprehensive response by the agencies and programs involved in this outbreak was a noted success. The covering foodborne epidemiologist coordinated the outbreak through formal outbreak team meetings as well as other means of communication. Another noted success was the thorough testing of food and water specimens for norovirus and Vibrio at HETL. This greatly advanced the outbreak team's understanding of the outbreak.

Gastrointestinal Illness Outbreak Timeline



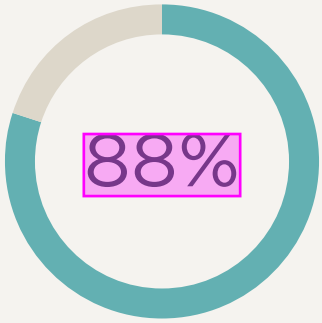
Mumps Outbreak on College Campuses in Maine

In 2016, providers and laboratories reported 34 mumps to Maine CDC, the largest number of cases reported in a decade. Cases occurred in four counties and the vast majority of cases (97%) were in college-aged students. There were two confirmed mumps outbreaks in Maine in 2016. Of the 34 cases, 88% (n=30) were associated with an outbreak on a college campus and 74% (n=25) were associated with a single outbreak spanning two college campuses.

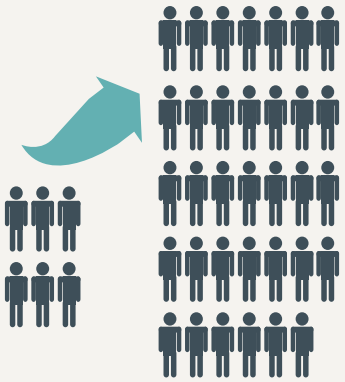
Mumps in uncommon in Maine with an average of 6 cases reported annually over the last 10 years (range from 0-24 cases). The significant increase in cases in 2016 is similar to what the United States as a whole experienced. The federal Centers for Disease Control and Prevention reported 5,833 cases in 2016 compared to 229 in 2015.

Of the 30 outbreak-associated cases in Maine in 2016, 96.6% (n=29) were fully vaccinated with a record of two doses of Measles, Mumps, and Rubella (MMR) vaccine. One case was partially vaccinated having received one dose of MMR (the second dose was not administered because of a medical contraindication). Federal CDC reports outbreaks can still occur among these very highly vaccinated communities. These outbreaks were likely due to a combination of factors including, the known effectiveness of the vaccine[1], lack of previous exposure to wild-type virus, the exposure setting (crowded environments such as dorm rooms, classrooms, sports teams etc.) and behaviors that increase the risk of transmission (sharing drinks, kissing, sharing lipstick or cigarettes).

Maine CDC's Field Epidemiologists worked with the colleges' medical center staff, medical directors, and school administrators to implement public health control measures. The schools reviewed their vaccination records for the entire student population and identified all unimmunized or under-immunized students. Schools excluded these students from campus for 18 days (one incubation period) from the onset of symptoms of the last identified case, according to Maine state vaccination laws. The college campuses hosted vaccine clinics and provided MMR vaccine to students who were un- or under-vaccinated for mumps so that they could comply with the law and return to school. Additionally, they provided letters to students noting the signs and symptoms of illness and how/where to seek care.



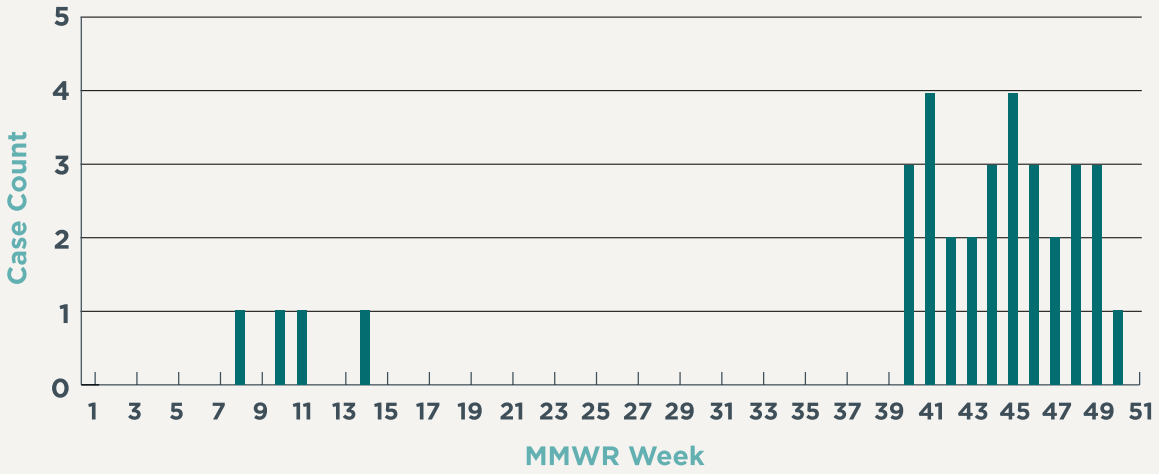
of cases were associated with an outbreak on a college campus



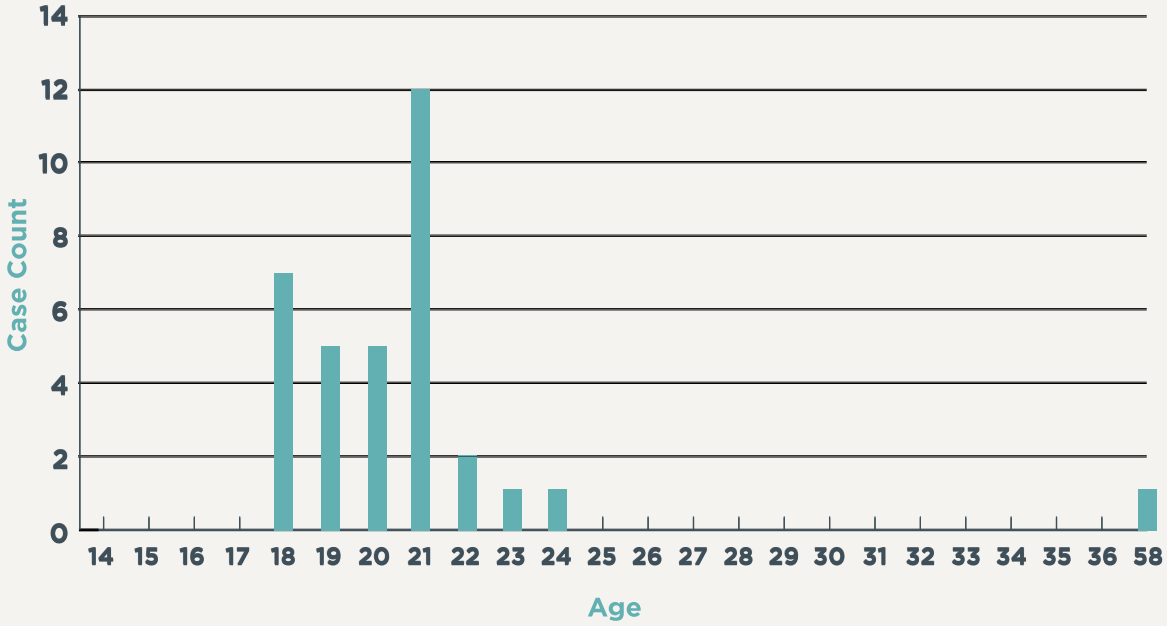
Cases grew from a ten year average of 6 to 34 in 2016

1 Vaccine Effectiveness: Two doses of the vaccine are 88% (range: 66 to 95%) effective at protecting against mumps; one dose is 78% (range: 49% to 92%) effective. Center for Disease Control. Accessed from: https://www.cdc.gov/mumps/vaccination.html

2016 Mumps Cases in Maine by MMWR Week



Age Distribution of Mumps Cases in Maine 2016



The MMWR week is the week of the epidemiologic year for which the National Notifiable Diseases Surveillance System (NNDSS) disease report is assigned for the purposes of MMWR disease incidence reporting and publishing. When a notifiable disease case is reported to the state or local health department, it is assigned (coded) to an MMWR Week.

Syndromic Surveillance 2016

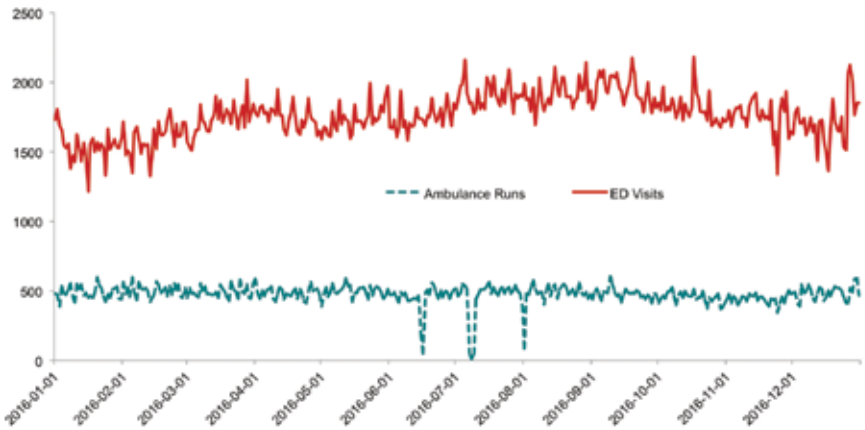
Syndromic surveillance is real-time monitoring of patient emergency room visits or ambulance run data to improve situational awareness and enhance responsiveness to hazardous events and disease outbreaks to protect Maine's health, safety, and security.

Maine's syndromic surveillance system receives near real-time de-identified patient visit data from hospital emergency room visits and Emergency Medical Service (EMS) ambulance runs. Typical information obtained for each ER visit and ambulance run includes:

- Age
- Gender
- Patient zip code
- Chief complaint (reason for visit according to patient)
- Diagnosis

Using Syndromic Surveillance to Understand Trends

Daily number of visits to Maine EDs vs. daily number of ambulance runs



Source: Maine Center for Disease Control and Prevention

Quick Facts Emergency Room Data

31 hospitals sent data to the system

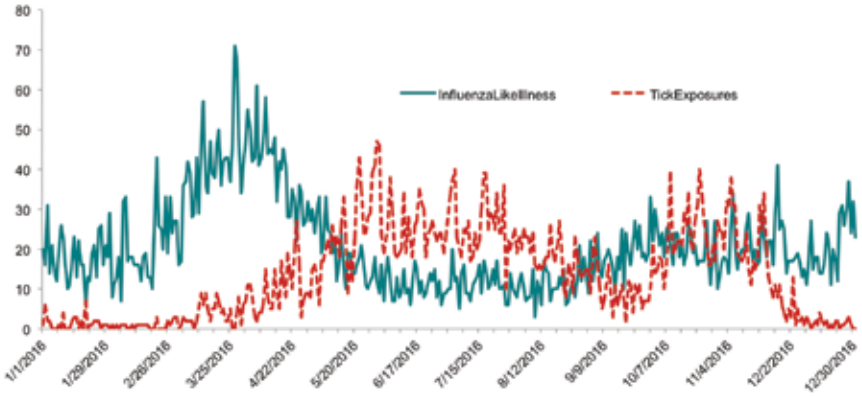
645,353 visits captured during 2016

the average number of patient visits per day was 1,763

A major use of syndromic surveillance within Maine is to identify the seasonality of disease. Syndromic surveillance allows Maine CDC to see when visits for influenza-like illness start to increase, indicating the start of the flu season. Maine CDC also tracks visits for suspected tick exposures allowing us to determine when the risk from tickborne diseases begins to increase. This allows for targeted messaging to make sure information is timely and relevant.

Using Syndromic Surveillance to Understand Trends

Daily number of Maine ED visits exhibiting syndromes of influenza-like illness and tick exposures



Source: Maine Center for Disease Control and Prevention

New in 2016

Maine CDC began developing syndromes to monitor for any suspected drug overdose, opioid related overdose, and heroin related overdose. This information will help quantify the drug overdose problem in Maine, provide more up to date data than are currently available, and assist in targeting areas for education and intervention.

For more information please contact syndromic@maine.gov.

Quick Facts
Ambulance Runs

100%
of ambulance runs in Maine included in the system

174,533
EMS runs captured during 2016

the average number of runs per day was 476

Maine's Ryan White Part B and AIDS Drug Assistance Program

The Ryan White Part B Program helps low-income people living with HIV (PLWH) in Maine to fill gaps in care and treatment with the ultimate goal being the achievement and maintenance of viral suppression. The AIDS Drug Assistance Program helps low-income PLWH obtain and maintain access to prescription drugs to treat HIV and its related conditions by paying health insurance premiums, copays, deductibles, coinsurance, and HIV-related lab tests and paying the full cost of HIV-related drugs for those without insurance. The Ryan White Part B Program helps low-income PLWH access food, dental care, and housing. The Program also supports medical case management for those who do not qualify for other types of case management.

People Living with HIV Utilizing Ryan White Part B Services
2015-2016

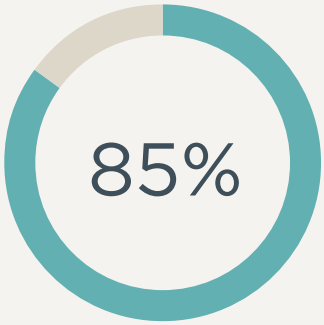
Service	2015	2016
Dental assistance	183	185
Food assistance	497	522
Full-cost drugs	110	120
Housing assistance	168	199
Insurance premiums	208	190
Lab tests	14	20
Medical case management	87	90
Prescription wrap-around	626	602

Services Available:

PLWH who are virally suppressed (defined as less than 200 copies/mL) are less likely to develop HIV-related complications, which leads to longer, healthier lives and less costly care and treatment. PLWH who are virally suppressed also do not transmit the virus to others. The National HIV/AIDS Strategy calls for 80% viral suppression among all PLWH in the U.S. by 2020. In 2016, 85% of people living with HIV enrolled in Maine's Ryan White Part B Program were virally suppressed as of the last result reported in 2016. Of those with no viral load reported in 2016, 65% were virally suppressed as of the last result reported in 2015.

Viral Suppression Among Enrollees by Public Health District
2016

District	Number Virally Suppressed	Number Enrolled	% Virally Suppressed
Aroostook	24	26	92%
Central	108	127	85%
Cumberland	325	381	85%
Downeast	57	62	92%
Mid Coast	59	68	87%
Penquis	79	87	91%
Western	105	127	83%
York	110	148	74%
Overall	**867**	**1,026**	**85%**



of people living with HIV enrolled in Maine's Ryan White Part B Program were virally suppressed

Resistome Project

Current national surveillance tracking for identifying the prevalence of emerging pathogens does not always capture data from Maine. This is due to the fact that Maine is not one of the ten states selected to conduct national surveillance and patients referred out-of-state do not tend to seek medical care in the New England state that does conduct national surveillance. In addition, some emerging threats such as colistin-resistance are unlikely to be captured by routine laboratory testing due to the limited use of colistin in humans. Colistin is an antibiotic that is typically only used when no other options are available. Due to these limitations, Maine's Health and Environmental Testing Laboratory (HETL), which is the state public health laboratory, and the Healthcare Associated Infections and Antibiotic Resistance (HAI/AR) Program at Maine CDC worked together to organize enhanced surveillance to look further at multidrug resistant organisms (MDROs) and emerging pathogens within the state. The goal of this project was to use whole genome sequencing to determine what novel resistant strains of MDROs and/or emerging pathogen threats may be present in the State of Maine.

HETL and the HAI/AR Program worked together to seek voluntary submission of any MDRO isolates, as well as any isolates of *Pseudomonas* and *Acinetobacter*, from clinical laboratories across the state. Isolate submission began in the fall of 2016 and laboratories submitted 395 isolates for testing. To date, HETL completed resistance analysis for 180 of these isolates. Testing of the remaining isolates will continue through July 2017.

Notable findings from the 180 isolates tested to date include the identification of at least five carbapenemase-producing Enterobacteraciae species expressing the KPC gene (four *Klebsiella pneumoniae* and one *Escherichia coli*). These findings are significant, because bacteria that produce KPC can confer resistance to multiple antibiotics making treatment options more limited. HETL has not yet identified NDM, OXA-48, VIM, IMP, or GES genes in carbapenem-resistant Enterobacteraciae species submitted to the study. Testing has also not yet identified any mcr-1 genes for colistin resistance in Enterobacteraciae species in Maine. HETL identified an *Enterococcus faecium* with dual vanA and vanB genotype, which confers acquired inducible resistance to both vancomycin and teicoplanin.

180
Isolates tested to date

5
Carbapenemase-producing Enterobacteraciae species expressing the KPC gene identified

HETL has also started analyzing antibiotic resistance factors in all PulseNet whole genome sequencing samples. PulseNet is a national laboratory network that collects information on foodborne illness cases in order to help with outbreak detection. Retrospective analyses of two Shigella isolates found the plasmid-mediated quinolone resistance (PMQR) gene, QnrS1. This gene is responsible for phenotypic resistance to the antibiotic ciprofloxacin. Shigella expressing QnrS1 are a priority-3 World Health Organization (WHO) pathogen.

This project provided Maine with the opportunity to identify resistance patterns present in the state not captured by existing surveillance systems or routine testing platforms. Information gleaned from this project will allow the State public health department to use data to drive prevention activities, such as management of MDROs and emerging pathogen threats in healthcare facilities as well as exploration of methodologies for containment of novel resistant organisms.

Sexually Transmitted Diseases (STD) Updates

During 2016, Maine continued to see confirmed case counts of chlamydia, gonorrhea, and syphilis that were well above five-year medians. It is unclear what exactly is driving this increase in STD rates—increased transmission, improved surveillance, or increased testing of at-risk populations.

2016 Case Counts and Five-Year Medians

	2016 Case Count	Five-year Median
Chlamydia	4,159	3,440
Gonorrhea	444	273
Syphilis	47	19

Chlamydia

Chlamydia (CT) is Maine's most reported infectious disease. Androscoggin County had the highest rate at 489.2 cases per 100,000 population. This is dramatically higher than the overall state rate of 312.4 as well as the next highest county rate, 350.0 in Kennebec County. Two-thirds of cases were among females and 65% of cases were among people aged 15-24 years.

66%
FEMALE

Gonorrhea

Gonorrhea (GC) rates rose slightly between 2015 and 2016, from 31.8 per 100,000 to 33.3. This is compared to the 78.7% increase between 2014 and 2015. Androscoggin and Cumberland Counties have rates above the state rate at 69.9 and 53.4, respectively. The majority of cases were among males (70%) and people aged 15 to 34 years (76%).

70%
MALE

Syphilis

Syphilis rates in 2016 dropped slightly as compared to 2015, going from 3.7 per 100,000 in 2015 to 3.5 in 2016. Syphilis rates are highest in Cumberland County at 8.2. Forty-four of the 47 cases were among males. Cases were almost evenly split between those aged 15 to 34 years (49%) and those aged 34 years and over (51%).

93%
MALE

Topics of Special Interest

Extragenital Testing

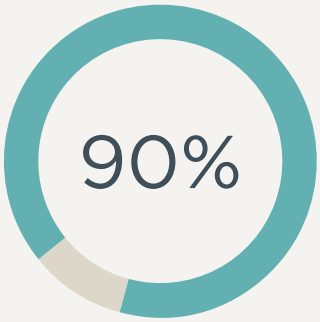
Extragenital testing for STDs is critical for improving STD diagnosis rates, reducing the spread of STDs, and improving patient health outcomes, particularly, but not exclusively, among men who have sex with men. A recent study of national STD clinic data found that "more than 70% of extragenital GC infections and 85% of extragenital CT infections were associated with negative urethral tests at the same visit and would not have been detected with urethral screening alone.[1]" Specimen source is not a required data point for STD reporting, so Maine is unable to report on rates of STDs detected with extragenital testing. However, Maine CDC encourages providers to conduct patient risk assessments and to conduct extragenital testing as needed based on patient behaviors.

Treatment Guidelines for Gonorrhea

Currently, there is only one dual therapy treatment recommended for gonorrhea:

Ceftriaxone 250 mg intramuscular (IM) as a single dose PLUS azithromycin 1 g orally as a single dose.

In 2016, 90% of confirmed gonorrhea cases in Maine received the recommended treatment as outlined above. The US Centers for Disease Control and Prevention recommend administering treatment together on the same day whenever possible. For more information on current STD treatment guidelines, please visit https://www.cdc.gov/std/tg2015/default.htm.



In 2016, 90% of confirmed gonorrhea cases in Maine received the recommended treatment.

1 Patton ME, Kidd S, Llata E, et al. Extragenital gonorrhea and chlamydia testing and infection among men who have sex with men-STD Surveillance Network, United States, 2010-2012. Clin Infect Dis. 2014 Jun; 58 (11): 1564-70.

HIV, STD, and Viral Hepatitis Prevention Program

The HIV, STD, and Viral Hepatitis Prevention program works to reduce the acquisition and transmission of HIV, syphilis, gonorrhea, chlamydia, hepatitis B, and hepatitis C. The program does this through the support of statewide screening and testing activities, linkages to treatment and care, and a broad array of outreach and prevention activities.

The program contracts with two clinical agencies (Maine Family Planning and the City of Portland's India Street Clinic) and with two community-based organizations (Down East AIDS Network and Frannie Peabody Center) to provide screening and testing services.

In 2016, the program funded 2,229 HIV tests that identified seven new diagnoses, 2,617 combination chlamydia/gonorrhea screening tests resulting in 281 positive chlamydia diagnosis and 117 positive gonorrhea diagnoses. The program funded 143 syphilis screenings finding 46 new diagnoses. It is important to note that these numbers only reflect the screening results for tests funded through the program. See specific disease information for total statewide case counts.

Also in 2016, HIV prevention and surveillance programs coordinated and led an integrated Linkage to Care effort. Linkage to Care is a relatively new federal program focused on linkage to and retention in medical care for people living with HIV. It works to ensure that individuals newly diagnosed with HIV are linked to care within three months of initial diagnosis. It also works to reengage HIV positive people who may have fallen out of care or who never were in care since diagnosis. The initial cohort of focus was people diagnosed within the last five years and without a lab (CD4 or viral load) reported to Maine CDC. A second group included individuals diagnosed outside of the last five years with no evidence of care reported to Maine CDC. Maine CDC suspected both groups to be out of care.

Staff generated a list of 187 people suspected to be out of care from the HIV Surveillance database. Of those 187 people, 40 were diagnosed in the last five years and had no labs within the last 15 months, and 147 were suspected of never having care at any point since diagnosis.

40 ➡ 20	147 ➡ 91
Of those 40, six (6) were actually in care, 13 had moved out of state and one had died, leaving 20 people who will be followed up with to see if we can reengage them in care.	Of the147 individuals who were suspected of never having any care, one had actually been in care, 39 had moved out of state, and 16 were deceased, leaving 91 individuals who need to be linked to care.

These efforts are a great example of how data and surveillance activities can benefit the health outcomes of people who would have fallen through the cracks and potentially have not had a chance to receive important and life-saving care.

Vaccine-Preventable Disease Program in Maine

Maine CDC maintains a robust vaccine-preventable disease surveillance program to identify and investigate cases of vaccine-preventable diseases, analyze and present data on where and when these cases occur, and identify missed opportunities for vaccination and disease prevention. A vaccine-preventable disease is a disease for which a preventive vaccine exists. Examples include but are not limited to measles, mumps, pertussis, polio, and rubella. Vaccination status is one of many data points that an epidemiologist requests when interviewing a case. This data point is important to understand on a local level and is reported to federal CDC for national surveillance on vaccine effectiveness.

In December 2016, Maine's Department of Health and Human Services changed its vaccination rule to further align with national recommendations for pertussis vaccination.

Effective for the start of the 2017-18 school year, 1 dose of Tdap vaccine is now required for all children entering 7th grade.

This is an exciting change for Maine CDC; pertussis rates are elevated across the state over the last five years and the majority of cases are in school-aged children. This vaccination requirement will provide optimal protection for one of the populations most at risk of getting pertussis.

There were 259 cases of pertussis in 2016.

The average age of cases was 14 years and there was a range from 1 month to 84 years.

Pertussis usually starts with cold-like symptoms including a mild cough or fever. These early symptoms can last for 1-2 weeks before the disease progresses and more classic pertussis symptoms appear. Classic pertussis symptoms include: Paroxysms, whoop, vomiting after coughing, and exhaustion after coughing. However, it's important to know that the infection is generally milder in teens and adults, especially those who have been vaccinated. Additionally, the "whoop" is often absent for people who have milder (less serious) disease.

Symptoms reported in Maine's 2016 pertussis cases:

19%
whoop

29%
apnea (only reported in children <1 year old)

51%
post-tussive vomiting

99%
paroxysmal cough

The average cough duration at date of final interview

Infection Control Assessments in Long-Term Care

The federal Centers for Disease Control and Prevention (federal CDC) developed a tool to assess infection prevention and control in various healthcare settings. Federal CDC developed these tools to assist health departments in assessing infection prevention practices with the overarching goal of guiding quality improvement activities. Over the past year, individuals from the Healthcare Associated Infections and Antibiotic Resistance (HAI/AR) program at Maine CDC visited 18 nursing homes and 3 assisted living facilities throughout the state in an effort to complete infection control consultations utilizing the assessment tool. The visits are nonregulatory and are offered as an educational opportunity to identify strengths and areas that could be improved upon.

Maine CDC staff identified numerous strengths at facilities particularly in the areas of healthcare personnel and resident safety, surveillance and disease reporting and respiratory/cough etiquette. There were also consistent gaps seen across facilities in Maine, which are also reflected at the national level. These gaps included training and competency validation upon hire and annually thereafter specifically for: hand hygiene, use of personal protective equipment (PPE), injection safety (for individuals who perform point of care testing), and cleaning and disinfection procedures (for environmental cleaning personnel). While training is happening in many facilities, the newer concept of including a competency component is something that can be improved upon. Another gap noted was a lack of routine audits (monitoring and documentation) for hand hygiene adherence, personal protective equipment (PPE) use and adherence, and adherence to injection safety during point of care testing and providing feedback to personnel based on audit results. The domain with the greatest number of gaps was antibiotic stewardship, which is not surprising as this is a new requirement for long-term care. Antibiotic stewardship programs do not have to be in place until November 28, 2017. Antibiotic stewardship refers to a set of commitments and actions designed to promote the appropriate use of antimicrobials.

Priority Areas for Infection Prevention

Hand Hygiene

PPE Use

Injection Safety

Disinfection Procedures

In an effort to address some of the items noted for improvement on the assessments completed to date, Maine CDC HAI/AR program added a new section to their website "Resources for Infection Preventionists." Many of the tools sent out to individual facilities to address gaps can now be accessed by all facilities on this website. In addition, Maine CDC HAI/AR staff presented results from the assessments to numerous stakeholders to promote collaboration in making improvements. The HAI/AR program is also utilizing results from the assessments to identify areas for educational opportunities for facilities. Examples of educational opportunities include regional infection control training sessions for long-term care facilities and break out session presentations at various statewide conferences. Staff members from Maine CDC's HAI/AR program checked in with facilities six months after doing the assessments and saw substantial progress both at the facility and healthcare system levels.

If you have any questions about the infection control assessments or findings, please contact Brittany Roy, Maine CDC HAI Specialist, at brittany.roy@maine.gov.

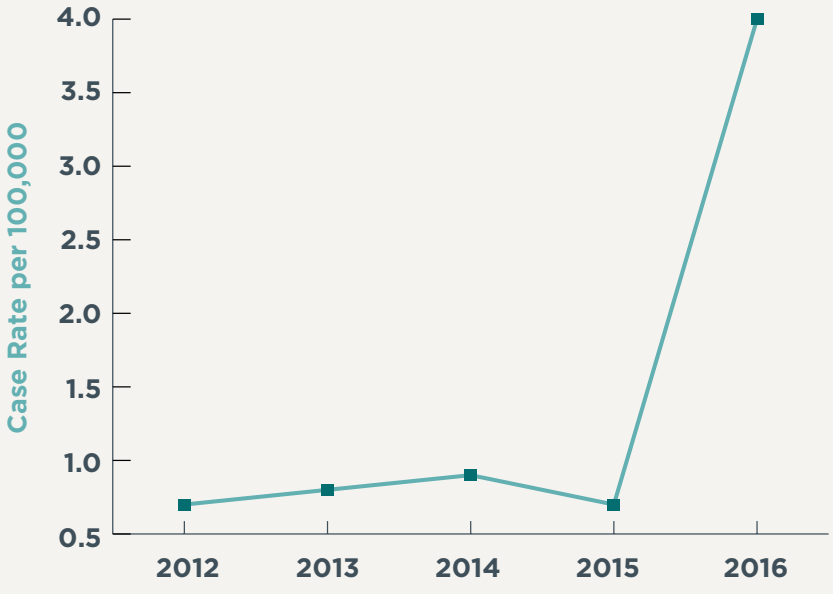
Increase in Acute Hepatitis B cases in Maine

In 2016, Maine CDC identified 53 acute hepatitis B cases. This was a 489% increase in acute hepatitis B cases from the 9 cases reported in 2015. Penobscot County had the majority of these cases (38%).

From 2010-2015 there was an average of 10 acute hepatitis B cases reported annually, with a range from 8-12 cases. The cause of the increase in cases in 2016 remains unknown and Maine CDC is actively taking steps to determine the cause of the increase. Maine CDC investigates each case of hepatitis B to determine risk factors and performs ongoing surveillance in every county. Eighty-five percent (85%) of acute hepatitis B cases who reported their drug status (n=39) indicated a history of injection drug use, non-injection drug use, or both. Nineteen percent (19%) of cases (n=10) reported having more than one sex partner. Forty-five percent (45%) of cases (n=24) were co-infected with hepatitis C.

Although Hepatitis B is vaccine preventable, 92% of acute hepatitis B cases with reported vaccine status (n=34) had no documented hepatitis B vaccines. Adults at risk for hepatitis B should receive the hepatitis B vaccine series. Those at risk include the following: people who use injection drugs, people who have more than one sexual partner, health care workers, dialysis patients, adults with disabilities, household contacts and sex partners of those with chronic Hepatitis B, or those co-infected with hepatitis C. In 2016, Maine CDC held a vaccination clinic in Penobscot county in an attempt to vaccinate high-risk individuals. Messaging was sent out to healthcare providers about the increase in hepatitis B rates and urging testing and vaccination of high-risk individuals. Providers are encouraged to report all cases of viral hepatitis. Additionally, Maine has six needle exchange programs throughout the state that will conduct one-for-one exchanges of used syringes for new ones in an effort to prevent needle sharing. Most needle exchange programs also provide free condoms, information about hepatitis B vaccine sites in their area, and information about preventing the transmission of hepatitis B.

Annual Incidence – Acute Hepatitis B
Maine 2012-2016



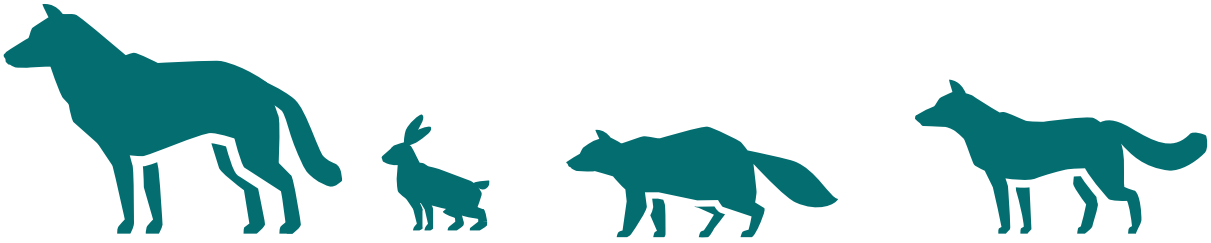
More information about the certified needle exchange programs can be found at www.maine.gov/dhhs/mecdc/infectious-disease/hiv-std/services/needle-exchange.shtml

Rabies – Notes from the Field

Rabies was the topic of most infectious disease consults in 2016—with 1,000 documented consults. The most common questions were on the following topics:

- **Animal bites through heavy gloves, coats, and pants** – There were many questions regarding animal bites to people who attempted to protect themselves from harm by wearing heavy gloves, coats, or pants. People were well intended in trying to rescue or relocate wild animals but they still received bites or scratches through their clothes that necessitated the receipt of rabies prophylaxis. One example was a person who found a raccoon quilled by a porcupine in a hole in the basement. The raccoon appeared lethargic, and the person wanted to help the animal. The person put on welding gloves and a heavy coat and jumped into the hole with the raccoon to rescue it. The raccoon turned out to be quite spirited and bit the person through the welding gloves. It is not advisable to attempt to handle any wild animal.
- **Bites from domestic animals** – Maine residents received bites after attempting to help domestic animals as well. Advice was given when people were bitten while trying to assist animals after they had been hit by vehicles, when intervening in animal fights, and in other scenarios involving domestic animals in peril.
- **Feeding wild or feral animals** – Maine CDC received many consults related to bites that resulted after feeding wild animals or feral cats. For example, people fed feral cat colonies and foxes, and in some instances people thought they were feeding their own cats but were actually feeding raccoons. Feeding wild animals or feral cats could encourage them to stay near residential or recreational areas, which can lead to unnecessary contact with humans.
- **Small animals** – Many calls were concerning bites from small mammals such as squirrels, mice, and chipmunks. Aside from bats, small mammals are not typically vectors for rabies as they do not survive bites that would infect them with rabies. Rabies prophylaxis is not routinely recommended in instances involving bites from these small mammals. Routine wound care is always advised.
- **Bats** – Bats seem to have a knack for making their way into homes and camps. Many consults in 2016 were related to people awaking to a bat in their bedroom or finding bats flying around their homes and camps during waking hours. If individuals are concerned about possible bat bites, Maine CDC epidemiologists can provide consultation and help determine next steps for testing or prophylaxis.

Maine CDC and Maine Department of Agriculture, Conservation, and Forestry, together with the Maine Rabies Workgroup, updated the Maine Rabies Management Guidelines for 2017. To review these guidelines as well as many other resources including rabies fact sheets and rabies submission forms, please go to **www.maine.gov/dhhs/mecdc/infectious-disease/epi/zoonotic/rabies/index.shtml.**



September 8, 2015

Maine Center for Disease Control and Prevention

NOTIFIABLE DISEASES AND CONDITIONS LIST

24 Hours A Day, 7 Days A Week Disease Reporting:

Telephone: 1-800-821-5821 **Fax: 1-800-293-7534**

☎ Conditions are reportable **immediately** by telephone on recognition or strong suspicion of disease

All others are reportable by telephone, fax, electronic lab report, or mail within **48 hours** of recognition or strong suspicion of disease

➔✉ Directors of laboratories are to submit isolates or clinical specimens, as well as any isolates or clinical specimens as requested by Maine CDC, to the *Maine Health and Environmental Testing Laboratory* for confirmation, typing, and/or antibiotic sensitivity

Acid-Fast Bacillus ➔ ✉
Acquired Immunodeficiency Syndrome (AIDS)
Anaplasmosis
☎ Anthrax ➔ ✉ (*Bacillus anthracis*)
Babesiosis
☎ Botulism ➔ ✉ (*Clostridium botulinum*)
☎ Brucellosis ➔ ✉ (*Brucella* species)
California Serogroup Viruses
Campylobacteriosis
Carbapenem-resistant Enterobacteriaceae (CRE) [1]
Carbon Monoxide Poisoning [2]
Chancroid
Chlamydia
Chickenpox (Varicella)
Chikungunya
☎ Coronavirus, Novel and SARS ➔ ✉
Creutzfeldt-Jakob disease, <55 years of age
Cryptosporidiosis
Cyclosporiasis
Dengue
☎ Diphtheria ➔ ✉ (*Corynebacterium diphtheriae*)
E. coli, Shiga toxin-producing (STEC) ➔ ✉
Eastern Equine Encephalitis
Ehrlichiosis
Giardiasis
Gonorrhea
Haemophilus influenzae, invasive ➔ ✉
Hantavirus, pulmonary and non-pulmonary syndromes
Hemolytic-uremic syndrome (post-diarrheal)
☎ Hepatitis A, B, C, D, E (acute)
Hepatitis B, C, D (chronic)
Human Immunodeficiency Virus (HIV) [3]
Influenza-associated pediatric death
☎ Influenza A, Novel ➔ ✉
Influenza-associated hospitalizations, laboratory-confirmed
Legionellosis
Leptospirosis
Listeriosis ➔ ✉ (*Listeria monocytogenes*)
Lyme Disease
Malaria
☎ Measles ➔ ✉ (Rubeola virus)
☎ Meningococcal Disease, invasive ➔ ✉ (*Neisseria meningitidis*)
☎ Mumps ➔ ✉
☎ Pertussis
☎ Plague ➔ ✉ (*Yersinia pestis*)
☎ Poliomyelitis ➔ ✉ (Polio virus)
Powassan Virus
Psittacosis
☎ Q Fever
☎ Rabies (human and animal) ➔ ✉ (Rabies virus)
Rabies Post-Exposure Prophylaxis
☎ Ricin Poisoning ➔ ✉
☎ Rubella (including congenital) ➔ ✉ (Rubella virus)
Salmonellosis ➔ ✉ (*Salmonella* species)
☎ Shellfish Poisoning
Shigellosis ➔ ✉ (*Shigella* species)
☎ Smallpox ➔ ✉ (Variola virus)
Spotted Fever Rickettsiosis
St. Louis Encephalitis
Staphylococcus aureus, Methicillin-Resistant (MRSA), invasive
☎ Staphylococcus aureus with resistance to Vancomycin (VRSA) ➔ ✉
Streptococcus Group A, invasive
Streptococcus pneumoniae, invasive
Syphilis
☎ Tetanus ➔ ✉ (*Clostridium tetani*)
Trichinosis
☎ Tuberculosis (active and presumptive) ➔ ✉ (*Mycobacterium tuberculosis*)
☎ Tularemia ➔ ✉ (*Francisella tularensis*)
Vibrio species, including Cholera ➔ ✉ (*Vibrio* species)
☎ Viral Hemorrhagic Fever
West Nile Virus
Western Equine Encephalitis
Yellow Fever

☎ **Any Case of Unusual Illness of Infectious Cause**
☎ **Any Cluster/Outbreak of Illness with Potential Public Health Significance**

Who must report: Health Care Providers, Medical Laboratories, Health Care Facilities, Administrators, Health Officers, Veterinarians

What to report: Disease reports must include as much of the following as is known:

- Disease or condition diagnosed or suspected
- Patient's name, date of birth, address, phone number, occupation, race, and ethnicity
- Diagnostic laboratory findings and dates of test relevant to the notifiable condition
- Health care provider name, address and phone number
- Name and phone number of person making the report

Footnotes:

1. Carbapenem-resistant Enterobacteriaceae (CRE): See current definition as adopted by the United States Centers for Disease Control and Prevention
2. Carbon Monoxide, including clinical signs, symptoms or known exposure consistent with diagnosis of carbon monoxide poisoning and/or: a carboxyhemoglobin (COHb) level ≥5%
3. Human Immunodeficiency Virus (HIV), including:
   - Confirmed, positive antibody tests
   - Viral load tests, all results
   - CD4 lymphocyte counts, all results

Complete Rules for the Control of Notifiable Diseases and Conditions:
http://www.maine.gov/dhhs/mecdc/infectious-disease/epi/disease-reporting/index.shtml

Maine Center for Disease Control and Prevention
An Office of the Department of Health and Human Services

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