

CD Info

May 2015

CDInfo is a surveillance newsletter intended to promote prevention of morbidity and mortality by providing useful data and practical recommendations for clinicians, laboratories, and infection control personnel who diagnose, treat or report infectious diseases in Chicago.

Communicable Disease Highlights, 2014

Shigellosis

During summer 2014, the Chicago Department of Public Health (CDPH) began seeing an increase in *Shigella sonnei* cases. From July 31–October 31, 2014, 57 *Shigella sonnei* cases were reported in Chicago as compared to an average of 30 cases during the same period in 2010–2013; adult males were disproportionately affected. CDPH selected all *Shigella sonnei* cases among adult males reported to CDPH from July 31–October 27, 2014 (n=23) and monitored demographic trends in shigellosis surveillance data. Eleven isolates were tested for antimicrobial susceptibility by CDC's National Antimicrobial Resistance Monitoring System (NARMS). Eight of the 11 isolates submitted to NARMS had decreased susceptibility to azithromycin (DSA), one was resistant to ciprofloxacin, and one isolate had both DSA and was resistant to ciprofloxacin. CDPH is working with CDC to determine the extent of resistance in Chicago.

Enterovirus D68

Enteroviruses are associated with various clinical symptoms, including mild respiratory illness, febrile rash illness, and neurologic illness, such as aseptic meningitis and encephalitis. Enterovirus D68 (EV-D68), however, primarily causes respiratory illness, although the full spectrum of disease remains unclear. EV-D68 is likely distributed widely across the state; however testing for this specific virus is not readily available in Illinois. In 2014, 11 patients from Chicago were confirmed to have EV-D68; nine patients were female, and ages ranged from 20 months to 15 years (median = 5 years). Eight patients (73%) had a previous history of asthma or wheezing. Prevention and control measures include handwashing, following good respiratory etiquette, seeing a physician when symptoms are severe, and staying home while ill.

Ebola

The 2014 Ebola epidemic is the largest in history, in which widespread transmission occurred in Liberia, and is still ongoing in Sierra Leone and Guinea. Several other countries were also affected to a much lesser degree, including the United States, with two imported cases and two locally acquired cases in healthcare workers. In October 2014, CDPH began monitoring arriving passengers for 21 days who traveled from countries where widespread Ebola transmission had occurred. As of May 2015, CDPH has monitored 107 people, and has worked with Chicago Ebola Response Network hospitals to assess eight individuals meeting the case definition of 'person under investigation'. None of these eight individuals had Ebola; alternate diagnoses included malaria (3), typhoid fever, influenza, coronavirus, nonspecific upper respiratory infection and dehydration.

Morbidity for selected infectious diseases and events, Chicago, 2010 - 2014

<i>Reportable Disease or Event</i>	2010	2011	2012	2013	2014	5-year median
Cryptosporidiosis	35	17	23	38	11	23
<i>E. coli</i> O157:H7 Disease	5	9	9	8	10	9
<i>E. coli</i> , Shiga toxin-producing (non-O157)	14	14	11	14	16	14
Foodborne disease outbreaks ¹	5	8	3	1	9	5
<i>H. influenzae</i> (type b) Disease (invasive)	1	0	0	0	0	0
<i>H. influenzae</i> (non-type b) Disease (invasive)	38	42	34	28	29	34
Hepatitis A (acute)	44	33	27	13	38	33
Hepatitis B (acute)	42	32	22	32	15	32
Hepatitis C (acute)	0	1	3	4	1	1
Histoplasmosis	15	46	27	28	33	28
Legionellosis	36	45	56	77	66	56
Listeriosis	4	10	15	14	9	10
Lyme Disease	11	29	11	33	16	16
Measles	0	1	0	0	0	0
Meningococcal Disease (invasive) ²	7	11	7	3	1	7
Mumps	8	9	6	3	13	8
Pertussis	98	94	279	118	113	113
Pneumococcal Disease (invasive) in child aged < 5 yrs	17	15	11	0	7	11
Salmonellosis	292	367	344	368	395	367
Shigellosis	107	103	116	126	272	116
Streptococcal Disease, Group A (invasive)	93	110	117	96	117	110
Tuberculosis Disease (active)	161	166	146	138	141	146
Typhoid Fever	6	6	7	1	1	6
Varicella	59	51	59	66	74	59
Staphylococcus aureus, VISA	0	1	0	1	2	1
West Nile Virus Infection	9	8	60	37	12	12
Yersiniosis	6	3	5	1	8	5

¹A foodborne disease outbreak is defined as an incident in which two or more persons experience a similar illness and have no other exposures that could account for their illnesses other than consuming the same meal or food item, or consuming items from the same food service establishment.

²Totals include confirmed cases and cases meeting the Centers for Disease Control and Prevention's definition of a probable case.