



**Cook County Department of Public Health**  
 Promoting health. Preventing disease.  
*Protecting you.*

# CD UPDATE

April 2013

## Norovirus in Suburban Cook County

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**Cook County Department of Public Health**  
[www.cookcountypublichealth.org](http://www.cookcountypublichealth.org)

**Chicago Department of Public Health**  
[www.cityofchicago.org/city/en/depts/cdph.html](http://www.cityofchicago.org/city/en/depts/cdph.html)

**Illinois Department of Public Health**  
[www.idph.state.il.us](http://www.idph.state.il.us)

**Centers for Disease Control and Prevention**  
[www.cdc.gov](http://www.cdc.gov)

To report a communicable disease, please call **708-633-8030** during regular business hours (8:30 AM - 4:30 PM).

To reach communicable disease staff after hours (4:30 PM - 8:30 AM), please call **708-633-4000** and follow the prompts.

Noroviruses account for 90% of community outbreaks of acute gastroenteritis (AGE) and are the leading cause of foodborne outbreaks in the United States [1]. Each year in the U.S., noroviruses cause about 21 million cases of AGE and contribute to about 70,000 hospitalizations and 800 deaths. Infections occur in all age groups and occur year round with an increase during winter months. Symptoms manifest as an abrupt onset of vomiting or watery diarrhea with or without abdominal pain and nausea. Illness occurs 12 to 48 hours after exposure to the virus, and symptom duration lasts 24 to 60 hours.

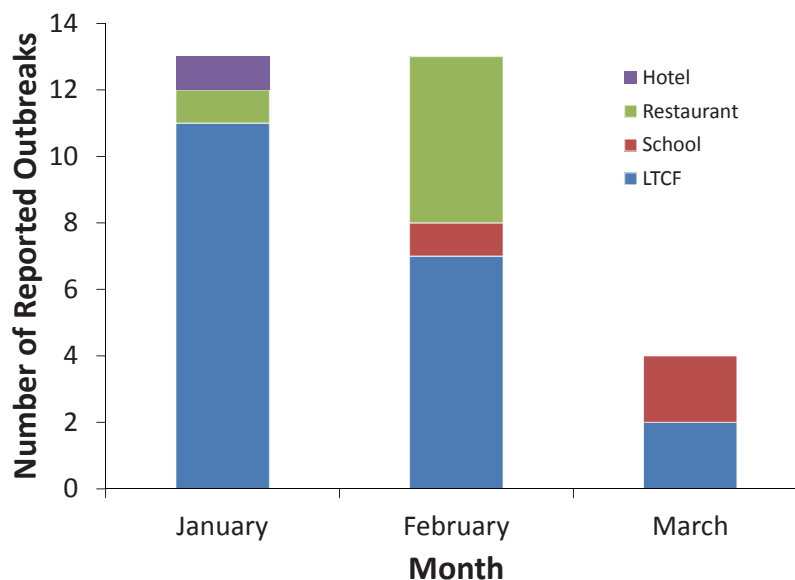
Noroviruses are extremely contagious; as few as 10 viral particles can infect someone. Transmission of the virus can occur from person-to-person, or from contaminated food, water, vomitus, and surfaces. Individuals are contagious before they feel ill and can shed the virus in stool for two weeks or more after the illness resolves [2].

Noroviruses are members of a group of viruses called Caliciviruses. They are divided into five genogroups, GI – GV. Most human infections due to noroviruses are caused by genogroups GI and GII. In March of 2012, a new strain was identified in Australia, known as GII.4 Sydney. In the United States, GII.4 Sydney has spread rapidly. From September – December, 2012, 53% of the outbreaks reported to the CDC were due to GII.4 Sydney [1].

Norovirus is not a reportable disease; however, clusters of cases of norovirus illness in congregate settings (e.g., long term care facility (LTCF) or school) or outbreaks of foodborne-related illnesses are reportable to public health. In suburban Cook County from 1/1/2013 – 3/31/2013, 30 outbreaks of AGE due to infection with noroviruses were reported to the Cook County Department of Public Health and affected 711 individuals as follows: 516 cases in 20 LTCFs, 81 cases in 3 schools, 8 cases in a hotel, and 106 cases in 6 restaurants or food catering companies.

Washing hands with soap and warm water for 15-20 seconds before eating or drinking is the best way to prevent infection with noroviruses. Ill persons should practice good personal hygiene and wash hands thoroughly, particularly after using the restroom. During outbreaks and periods of high transmission in the community, washing hands with soap and water is preferable to using alcohol based hand sanitizers. Hand sanitizers are believed to be only minimally effective against noroviruses. Ill individuals should stay home for 24 hours after symptoms have resolved.

**Figure 1. Number of norovirus outbreaks by setting for January - March, 2013.**



Ill food handlers should be restricted from food preparation for 72 hours after symptoms have resolved. Contaminated surfaces should be cleaned and disinfected with a 1:50 dilution of bleach solution (1/3 cup bleach to 1 gallon of water) or other EPA-approved disinfectant effective against noroviruses.

Table 1. Morbidity for Selected Infectious Diseases, Suburban Cook County\*, 2008-2012

Vaccine Preventable Diseases	2008	2009	2010	2011	2012	5 yr Median
Diphtheria	0	0	0	0	0	0
<i>Haemophilus influenzae</i> †	30	32	32	23	26	30
Hepatitis B						
Acute	66	34	26	25	15	26
Chronic	385	385	326	315	264	326
Measles	11	0	0	1	0	0
Mumps	19	14	4	2	4	4
Pertussis (Whooping cough)	92	98	142	280	461	142
Pneumococcal disease (invasive) ¶	32	23	17	9	7	17
Rubella	0	0	0	0	0	0
Streptococcal Invasive (Group A)	38	46	50	49	69	49
Tetanus	0	0	1	0	1	0
<b>Selected Diseases</b>						
Cryptosporidiosis	14	15	27	17	8	15
<i>E. coli</i> O157:H7	10	33	10	16	18	16
Giardiasis	72	79	78	81	73	78
Hepatitis A	46	36	5	6	6	6
Hepatitis C	811	806	852	920	868	852
Histoplasmosis	19	3	15	12	20	15
Legionnaires' disease	38	30	39	27	51	38
Listeriosis	11	10	6	6	4	6
Lyme Disease	9	23	32	31	36	31
Malaria	21	19	12	19	7	19
Meningococcal disease	22	8	3	3	3	3
Salmonellosis	282	285	356	260	308	285
Shigellosis	120	90	128	60	52	90
Tuberculosis	100	100	93	75	89	93
Typhoid Fever	5	3	6	8	2	5
WNV (neuroinvasive)	3	0	15	10	61	10
<b>Sexually Transmitted Infections</b>						
Chlamydia	8,219	8,204	8,825	8,398	8,941	8,398
Gonorrhea	2,560	2,196	2,093	2,067	2,102	2,196
HIV	201	182	184	166§	158§	182
AIDS	112	84	62	58§	61§	62
Syphilis‡	89	133	151	171	134§	133

\* Excludes Evanston, Oak Park, Skokie and Stickney Township (except for tuberculosis).

† Includes type B.

¶ As of 3/08, reportable only in those < 5 years of age.

§ Provisional cases.

‡ Early syphilis (i.e., primary, secondary and early latent).

1. Barclay, L., et al. Notes from the Field: Emergence of New Norovirus Strain GII.4 Sydney – United States, 2012. Morbidity and Mortality Weekly Report. 2013. 62(03): 55-55.
2. Centers for Disease Control and Prevention. Norovirus: Transmission. <http://www.cdc.gov/norovirus/about/transmission.html>. April 12, 2012. Accessed: April 11, 2013.