



# CDInfo



Richard M. Daley, Mayor

June 2009

Terry Mason, MD, FACS, Commissioner

[www.cityofchicago.org/health/](http://www.cityofchicago.org/health/)

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

## Plan to attend

The Chicago  
Department of  
Public Health

## 14th Annual Infection Control Conference

July 9, 2009

Navy Pier

600 East Grand  
Avenue

Chicago, Illinois

## Novel Influenza A (H1N1) Activity in Chicago

Since May 1, 2009 when novel influenza A (H1N1) virus infections were confirmed in two Chicago residents, over 1,000 Chicagoans have tested positive for the virus. These infections have been confirmed in residents of all geographic regions of the city. Since the end of April, influenza-like-illness (ILI) surveillance data from outpatient clinics and emergency departments in Chicago and Suburban Cook County indicate that a higher proportion of healthcare visits are due to ILI than in mid-April, prior to the identification of novel influenza A in the Chicago area. (ILI is defined as fever of at least 100°F with respiratory symptoms such as cough, sore throat, or rhinorrhea.)

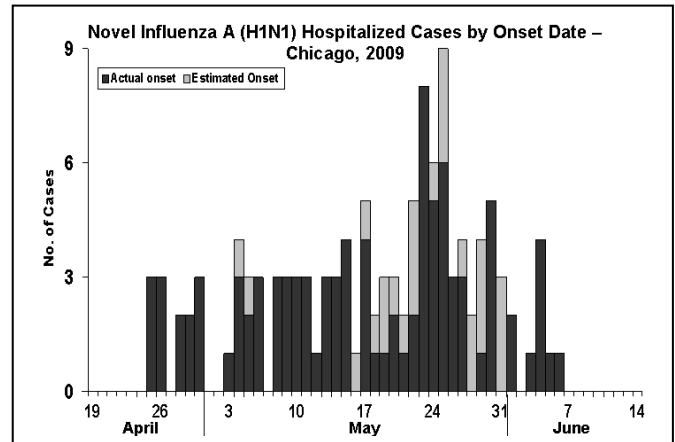
CDPH has issued several Chicago Health Alert Network notices to

members of the medical community related to reporting criteria, recommendations for laboratory testing, antiviral treatment and prophylaxis, infection control, and community mitigation. Additional guidance documents pertaining to home care of ill persons, population groups at highest risk of severe outcomes of infection, and managing potential transmission in various settings are available at [www.cityofchicago.org/swineflu](http://www.cityofchicago.org/swineflu).

Based on national data indicating that novel influenza A virus causes relatively mild disease in otherwise healthy patients, in early May, CDPH recommended that testing for novel influenza A (H1N1) be limited to patients who are hospitalized with ILI, clusters of persons with ILI, or deaths due to ILI (without alternative diagnoses). As of June 15, 2009, 121 hospitalized Chicago residents with confirmed novel influenza A infection had been reported to CDPH (figure). The age distribution of hospitalized patients (median: 15 years; range: 22 days –76 years; 67 [55%] ≤19 years) was similar to that of reported case-patients overall. Twenty one (17%) patients were admitted to an intensive care unit, six of whom required mechanical ventilation, and four deaths were reported. The duration of hospital stay ranged from 1 to 12 days (median: 2 days). Seven hospitalized patients were pregnant women. Of 102 hospitalized patients with information available on underlying illness, twenty two (22%) had a diagnosis of asthma and 12 (12%) had a diagnosis of diabetes. Clusters of ILI have occurred in healthcare personnel (HCP) in several healthcare facilities. There were no reported hospitalizations among ill HCP. Factors associated with HCP outbreaks have included failure of timely institution of droplet precautions and individuals working with symptoms of ILI.

The majority of confirmatory tests for novel influenza A (H1N1) have come through the Illinois Department of Public Health Division of Laboratories. At present four Chicago hospital laboratories are able to screen respiratory specimens for influenza A by Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR), and three of these hospitals are able to perform RT-PCR testing for seasonal H1 and H3 (capable of determining probable novel influenza A status among patients). CDPH had previously purchased RNA extractors and thermocyclers for these laboratories with emergency preparedness funding. This laboratory capacity can assist in the management of patients with underlying medical conditions, assist in detection of outbreaks, guide infection control measures for patients admitted to the hospital and facilitate assessment of HCP who develop ILI. Hospitals that do not have the capability to do RT-PCR testing for novel H1N1 should consider partnering with institutions that do have this capacity.

Novel influenza A vaccine is being produced by 5 different manufacturers. The safety and efficacy of these vaccines will be assessed in clinical trials in the next few months. CDC will be evaluating clinical trial results, novel influenza A activity in the US and in the southern hemisphere to determine if vaccination with the novel influenza A vaccine is necessary. CDPH has intensified planning for pandemic influenza vaccine distribution and mass vaccination.





## Morbidity for Selected Infectious Diseases and Events, Chicago, 2004 – 2008



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<i>Reportable Disease or Event</i>	2004	2005	2006	2007	2008	5-year median
Cryptosporidiosis	30	24	27	26	19	26
<i>E. coli</i> O157:H7 Disease	2	4	16	5	5	5
Foodborne disease outbreaks <sup>1</sup>	16	11	14	20	14	14
<i>H. influenzae</i> (type b) Disease (invasive)	1	2	1	1	0	1
<i>H. influenzae</i> (non-type b) Disease (invasive)	30	21	19	24	30	24
Hepatitis A (acute)	52	56	40	40	38	40
Hepatitis B (acute)	66	99	70	59	52	66
Hepatitis C (acute)	5	9	3	3	0	3
Histoplasmosis	5	17	21	18	26	18
Legionellosis	17	22	25	36	37	25
Listeriosis	3	7	10	8	5	8
Lyme Disease	11	10	14	7	11	11
Meningococcal Disease (invasive) <sup>2</sup>	11	13	12	21	37	13
Mumps	0	5	73	30	13	13
Pertussis	132	78	50	26	70	70
Pneumococcal Disease (invasive) in child aged < 5 yrs.	17	19	29	28	27	26
Salmonellosis	312	305	280	413	289	305
Shigellosis	140	144	148	141	229	144
Streptococcal Disease, Group A (invasive)	57	79	91	99	100	91
Tuberculosis Disease (active)	308	329	287	259	214	287
Typhoid Fever	7	9	7	4	4	7
Varicella	117	100	139	53	59	100
West Nile Virus Infection	6	41	29	11	4	11
Yersiniosis	6	6	6	9	6	6

<sup>1</sup> A 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.

<sup>2</sup> Totals include confirmed cases and cases meeting the Centers for Disease Control and Prevention's definition of a probable or suspect case.