

# Chicago Flu Update



Rahm Emanuel, Mayor

**December 15, 2017** 

Julie Morita, MD, Commissioner



## **News & Updates**

Vaccination is the best way to protect against influenza infection and all Chicagoans aged six months and older are encouraged to get vaccinated. Chicagoans should ask their healthcare provider or pharmacist about vaccine availability. For those without a healthcare provider or whose healthcare providers do not have the influenza vaccine, a list of City of Chicago Fast-Track Immunization Clinics<sup>1</sup> is available on the City

website and by calling 311. To locate the closest City of Chicago clinic or retail pharmacy, visit www.chicagoflushots.org.

#### What is the risk?

Currently, the risk of influenza infection has increased slightly, but remains low.

# Are severe cases of influenza occurring?

For the week of December 3-9, 2017, four influenzaassociated ICU hospitalizations were reported (**Figure 1**).

Since October 1, 2017, 13 influenza-associated ICU hospitalizations have been reported; 11 were positive for influenza A (7 H3N2 and 4 unknown subtype [subtyping not attempted or not all subtypes tested]) and two were positive for influenza B. The median age of reported cases is 63 years (range of 44-96 years); selected attributes are summarized in **Table 1**.

Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations reported for Chicago residents during the 2017-2018 season, October-May.

Age Group	#	%*	Sex	#	%	
0-4	0	0	Male	4	31	
5-17	0	0	Female	9	69	
18-24	0	0	Med. Cond./Complication <sup>†</sup>			
25-49	2	15	Lung Disease	2	15	
50-64	5	39	Cardiac Disease	7	54	
≥65	6	46	Diabetes	5	39	
Race/Ethnicity			Ventilator Support	5	39	
NH-White	4	31	Reported Deaths	0	0	
NH-Black	8	62	Treatment/Vaccination	on <sup>†</sup>		
Hispanic	1	8	Reported Antiviral Tx	9	69	
Asian	0	0	Reported Flu Shot	5	39	
* B						

<sup>\*</sup> Percentages may not add up to 100 due to rounding; † Among cases with reported information.

## Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of December 3-9, 2017, with 6 laboratories reporting, 25 of the 672 (3.7%) specimens tested for influenza were positive [11 A (H3N2), 2 A (H1N1)pdm09, 9 A unknown subtype and 3 influenza B] (**Figure 2**).

Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2017-2018) and previous season, October-May.

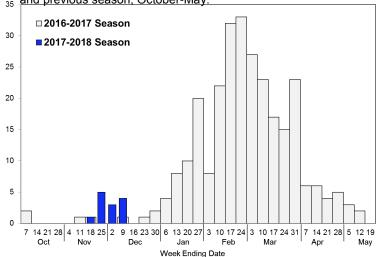
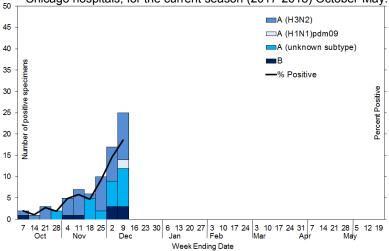


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2017-2018) October-May.



Since October 1, 2017, 78 of 5,559 (1.4%) specimens tested for influenza have been positive; 69 typed as influenza A (43 H3N2, 2 (H1N1)pdm09, 24 unknown subtype [subtyping not performed or not all subtypes tested]) and nine typed as influenza B.

#### How much influenza-like illness is occurring?

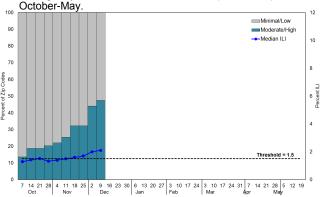
CDPH receives data from several hospitals in Chicago that provide emergent care, which report on a weekly basis the total number of emergency department visits, and of those visits, the number with influenza-like illness (*fever of 100°F or greater and cough and/or sore throat*). For the week of December 3-9, 2017, with seven hospitals reporting, 2.7% of

emergency department visits were due to ILI (**Figure 3**). In addition to emergency departments, several outpatient clinics throughout Chicago participate in CDC's Influenza-like Illness Surveillance Network (**ILINet**) by also reporting on a weekly basis the total number of outpatient clinic visits, and of those visits, the number with influenza-like illness (ILI). For the week of December 3-9, 2017, with 22 facilities reporting, 2.3% of outpatient clinic visits were due to influenza-like illness (**Figure 4**).

**ESSENCE** is an electronic syndromic surveillance system used to monitor influenza-like illness by utilizing the chief complaints of patients visiting emergency departments. Currently, all Chicago hospitals submit data to ESSENCE on a daily basis, covering every emergency department visit in the city. For the week of December 3-9, 2017, 596 of the 24,751 (2.4%) total emergency department visits were due to influenza-like illness (ILI); children less than five years of age had the highest percentage of visits due to ILI at 10.4%

**Figure 5** represents the percentage of emergency department visits due to influenza-like illness aggregated by patient zip code. For the week of December 3-9, 2017, 31 of 59 (53%) zip codes had ILI activity levels in the minimal to low categories and 28 (47%) had ILI activity levels in the moderate to high categories; the median percent ILI was 2.1% with a range from <1% to 5% (**Figure 6**).

Figure 6. Percent of zip codes with minimal/low and moderate/high ILI activity levels and overall median ILI, Chicago, by week, for the current season (2017-2018),



## Where can I get more information?

The Centers for Disease Control and Prevention's FluView<sup>2</sup> report provides national updates and trends related to the intensity of influenza activity across the United States, as well as detailed information on antiviral resistance, severity of illness, and other topics. Updates specific to Illinois<sup>3</sup> and Suburban Cook County<sup>4</sup> are also available online. Current and archived issues of the *Chicago Flu Update* can be found on the CDPH website section Current Flu Situation in Chicago<sup>5</sup>.

## **Reporting Information**

The Illinois Department of Public Health (IDPH) has issued influenza testing and reporting recommendations<sup>6</sup> healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS).<sup>7</sup>

Figure 3. Percent of **emergency department** visits attributed to influenza-like illness based on manual reports by individual hospitals, Chicago, by week, for the current season (2017-2018) and provious three seasons. October May

and previous three seasons, October-May.

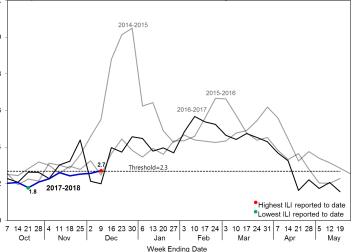


Figure 4. Percent of medically-attended **outpatient** visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week, for the current season (2017-2018) and previous three seasons, October-May.

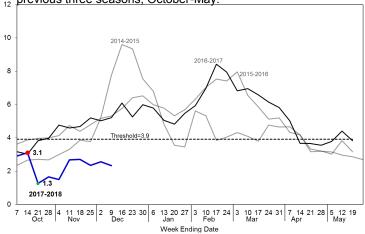
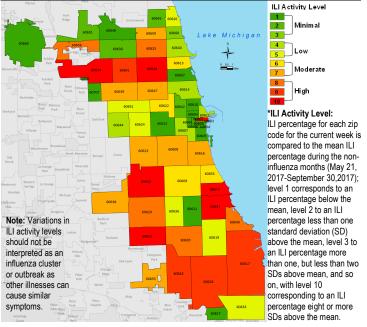


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of December 3-9, 2017(week 49).



<sup>&</sup>lt;sup>2</sup> http://www.cdc.gov/flu/weekly/index.htm;<sup>3</sup> http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/surveillance;<sup>4</sup> http://cookcountypublichealth.org/data-reports/communicable-diseases;<sup>5</sup> https://www.cityofchicago.org/city/en/depts/cdph/supp\_info/health-protection/current\_flu\_situationinchicago2011.html;

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