



# Chicago Flu Update



Rahm Emanuel, Mayor

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Julie Morita, MD, Commissioner

## News & Updates

A recent influenza B associated pediatric death in Kane County highlights the importance of continued vaccination as long as influenza viruses are still circulating. Influenza B is currently the predominant circulating virus in Chicago. Vaccination is the best way to protect against influenza infection and all Chicagoans aged six months and older are encouraged to get vaccinated. In partnership with Walgreens pharmacy, CDPH has made additional influenza vaccine available for no out-of-pocket cost to individuals who are uninsured or unable to pay; visit the [CDPH website](#)<sup>1</sup> for specific pharmacy locations. Also available is the City's easy-to-use [interactive map](#)<sup>2</sup> to find a location near you to get a flu shot.

## What is the risk?

Currently, the risk of influenza infection has decreased.

## Are severe cases of influenza occurring?

For the week of April 15-21, 2018, 4 influenza-associated ICU hospitalizations were reported (**Figure 1**).

Since October 1, 2017, 567 influenza-associated ICU hospitalizations have been reported; 436 (77%) were positive for influenza A (135 H3N2, 20 H1N1, and 281 unknown subtype [subtyping not attempted or not all subtypes tested]) and 131 (23%) were positive for influenza B. The median age of reported cases is 63 years (range of 5 days-102 years); 60 (11%) cases were admitted from long-term care facilities (LTCF) and 19 outbreaks have been reported in LTCFs; three pediatric deaths were reported including one ICU hospitalization; selected attributes are summarized in **Table 1**.

There were 36 reported deaths<sup>‡</sup> among influenza-associated ICU hospitalizations; twenty-six (72%) were positive for influenza A, 21 (58%) were 65 years of age and older, and six (17%) had a reported influenza vaccination. The median number of days from influenza test performed to death was three days (range of 1-6 days).

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	43	8	Male	258	46
5-17	41	7	Female	308	54
18-24	16	3			
25-49	67	12	Med. Cond./Complication <sup>†</sup>	164	29
50-64	142	25	Lung Disease	160	28
≥65	258	46	Cardiac Disease	139	25
			Diabetes	142	25
			Ventilator Support	36	6
			Reported Deaths <sup>‡</sup>	421	74
			Treatment/Vaccination <sup>†</sup>	167	30
			Reported Antiviral Tx		
			Reported Flu Shot		

\* Percentages may not add up to 100 due to rounding; † As reported in INEDSS (Illinois National Electronic Disease Surveillance System); ‡ Date of death occurring within one week of positive influenza test among reported influenza-associated ICU hospitalizations.

influenza B] (**Figure 2**). Since October 1, 2017, 5,001 of 28,450 (17.6%) specimens tested for influenza have been positive; 3,667 typed as influenza A (1,259 H3N2, 172 (H1N1)pdm09, 2,236 unknown subtype [subtyping not performed or not all subtypes tested]) and 1,334 typed as influenza B. For the two months, influenza B has been the predominant circulating strain in Chicago accounting for 93% of the total positive influenza specimens for the current surveillance week.

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

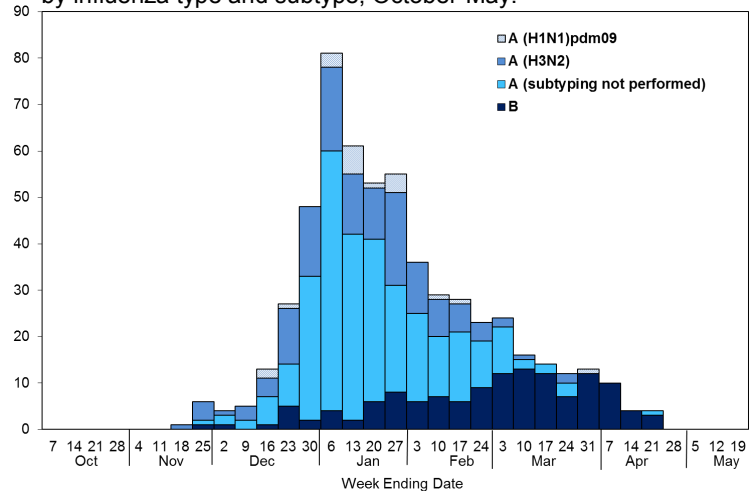
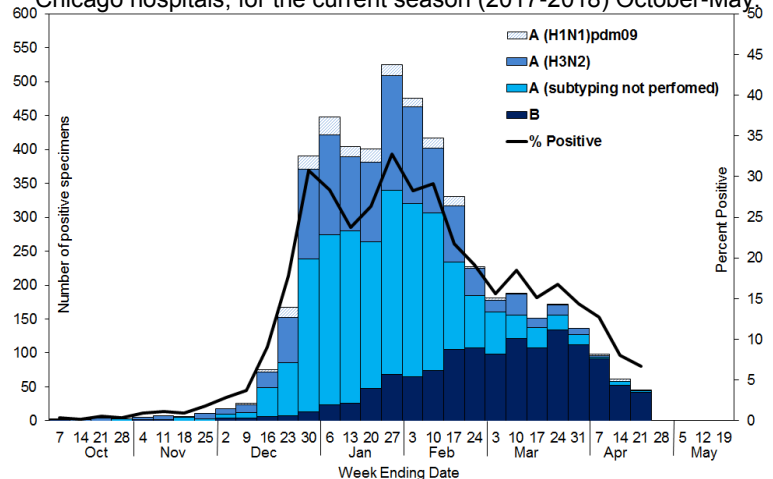


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2017-2018) October-May.



## Which influenza strains are circulating?

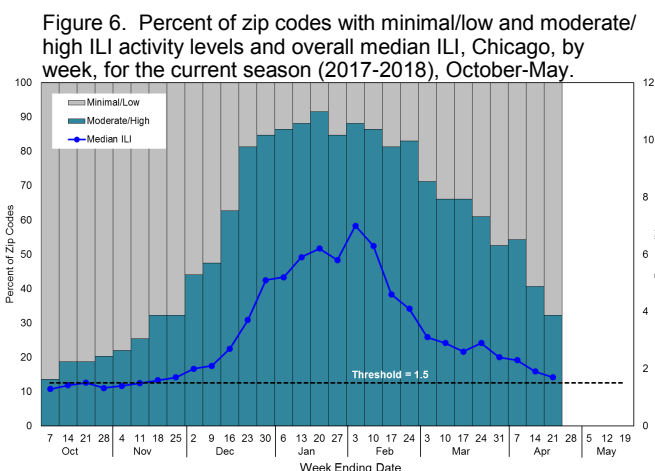
Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of April 15-21, 2018, with 6 laboratories reporting, 54 of the 781 (6.9%) specimens tested for influenza were positive [0 A (H3N2), 1 A (H1N1)pdm09, 3 A unknown subtype and 50

## How much influenza-like illness is occurring?

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 April 15-21, 2018, 527 of the 24,018 (2.2%) total emergency department visits were due to influenza-like illness (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 April 15-21, 2018, with 21 facilities reporting, 1.5% of outpatient clinic visits were due to influenza-like illness (**Figure 4**).

**Figure 5** represents the percentage of emergency department visits due to influenza-like illness aggregated by patient zip code. For the week of April 15-21, 2018, 19 of 59 (32%) zip codes had ILI activity levels in the moderate to high categories and 40 (68%) had ILI activity levels in the minimal to low categories; the median percent ILI was 1.7% (range of <1%-8%) (**Figure 6**).



## Where can I get more information?

The Centers for Disease Control and Prevention's [FluView](http://www.cdc.gov/flu/weekly/index.htm)<sup>3</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](http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/surveillance)<sup>4</sup> and [Suburban Cook County](http://cookcountypublichealth.org/data-reports/communicable-diseases)<sup>5</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](https://www.cityofchicago.org/city/en/depts/cdp/supp_info/health-protection/current_flu_situationinchicago2011.html)<sup>6</sup>.

## Reporting Information

The Illinois Department of Public Health (IDPH) has issued [influenza testing and reporting recommendations](https://www.cityofchicago.org/city/en/depts/cdp/supp_info/health-protection/current_flu_situationinchicago2011.html)<sup>7</sup> healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)<sup>8</sup>

Figure 3. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current season (2017-2018) and previous season, October-May.

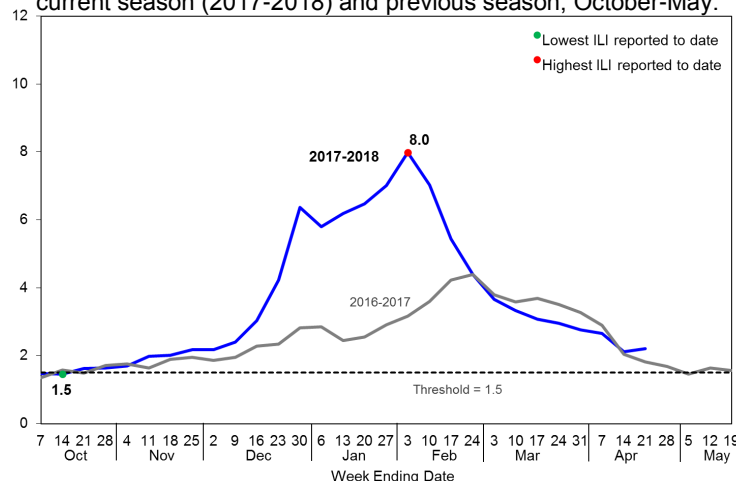


Figure 4. Percent of medically-attended **outpatient** visits attributed to influenza-like illness as reported by **ILINet** facilities, Chicago, by week, for the current season (2017-2018) and previous three seasons, October-May.

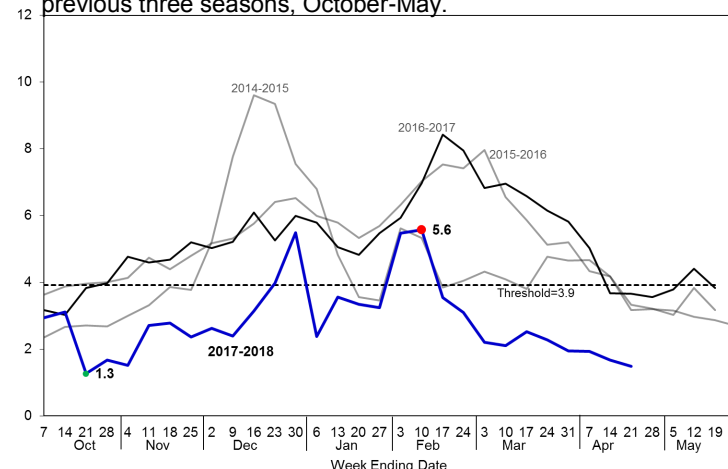
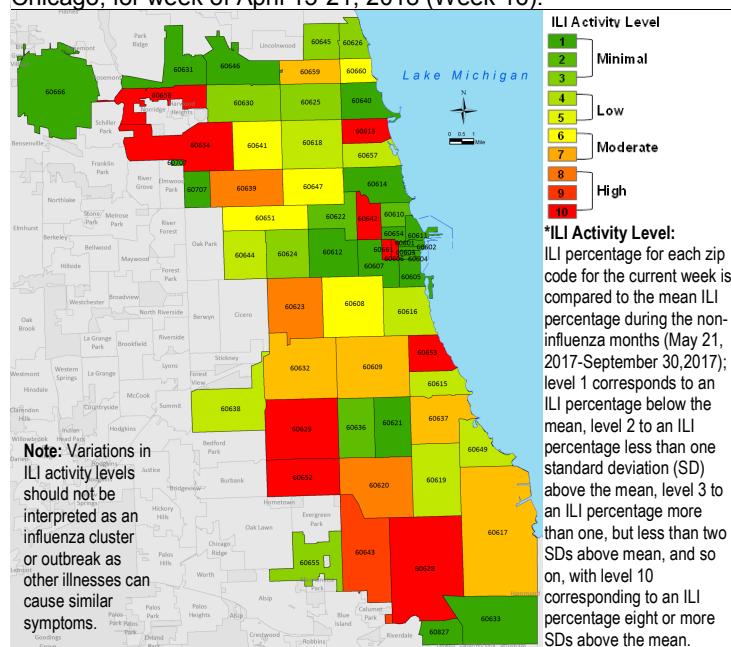


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of April 15-21, 2018 (Week 16).



<sup>3</sup> <http://www.cdc.gov/flu/weekly/index.htm>; <sup>4</sup> <http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/surveillance>; <sup>5</sup> <http://cookcountypublichealth.org/data-reports/communicable-diseases>; <sup>6</sup> [https://www.cityofchicago.org/city/en/depts/cdp/supp\\_info/health-protection/current\\_flu\\_situationinchicago2011.html](https://www.cityofchicago.org/city/en/depts/cdp/supp_info/health-protection/current_flu_situationinchicago2011.html);

<sup>7</sup> <http://dph.illinois.gov/sites/default/files/publications/publications-ohp-annual-flu-testing-guidance-10132017.pdf>; <sup>8</sup> <https://dph.partner.illinois.gov/>