Chicago Flu Update



Rahm Emanuel, Mayor

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News & Updates

As long as influenza viruses are still circulating and unexpired vaccine is available, influenza vaccinations should continue to be offered. 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 website¹ for specific pharmacy locations. Also available is the City's easy-to-use interactive map² to find a location near you to get a flu shot.

What is the risk?

Currently, the risk of influenza infection continues to decrease.

Are severe cases of influenza occurring?

For the week of March 11-17, 2018, 10 influenzaassociated ICU hospitalizations were reported (**Figure** 1).

Since October 1, 2017, 497 influenza-associated ICU hospitalizations have been reported; 411 were positive for influenza A (128 H3N2, 19 H1N1, and 264 unknown subtype [subtyping not attempted or not all subtypes tested]) and 86 were positive for influenza B. The median age of reported cases is 62 years (range of 5 days-102 years); 52 (11%) cases were admitted from long-term care facilities (LTCF) and 19 outbreaks have been reported in LTCFs; two pediatric deaths were reported including one ICU hospitalization; selected attributes are summarized in **Table 1**.

There were 34 reported deaths[‡] among influenza-associated ICU hospitalizations; twenty-six (76%) were positive for influenza A, 19 (56%) were 65 years of age and older, and five (15%) 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	44	9	Male	226	45
5-17	37	7	Female	271	55
18-24	15	3	Med. Cond./Complication [†]		
25-49	62	12	Lung Disease	144	29
50-64	126	25	Cardiac Disease	137	28
≥65	213	43	Diabetes	116	23
Race/Ethnicity			Ventilator Support	124	25
NH-White	127	26	Reported Deaths [‡]	34	7
NH-Black	260	52	Treatment/Vaccination [†]		
Hispanic	97	20	Reported Antiviral Tx	362	73
Asian/Other	13	3	Reported Flu Shot	146	29

^{*} 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.

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.

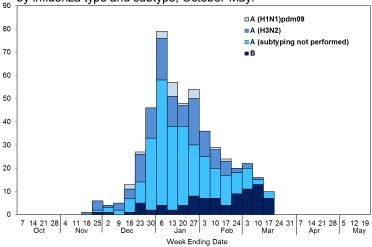
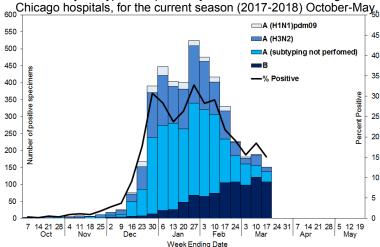


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving



Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of March 11-17, 2018, with 6 laboratories reporting, 151 of the 995 (15.2%) specimens tested for influenza were positive [14 A (H3N2), 0 A (H1N1)pdm09, 30 A unknown subtype and 107 influenza B] (**Figure 2**). Since October 1, 2017, 4,456 of

23,954 (18.6%) specimens tested for influenza have been positive; 3,582 typed as influenza A (1,232 H3N2, 165 (H1N1) pdm09, 2,185 unknown subtype [subtyping not performed or not all subtypes tested]) and 874 typed as influenza B. For the third consecutive week, influenza B continues to account for the majority (71%) of positive influenza specimens.

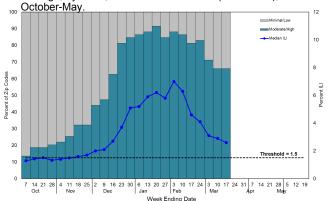
How much influenza-like illness is occurring?

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 March 11-17, 2018, 781 of the 25,311 (3.1%) total emergency department visits were due to influenza-like illness (ILI) (**Figure 3**). Children less than five years of age had the highest percentage of visits due to ILI at 9.7%, down from a peak of 19.4% six weeks ago.

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 March 11-17, 2018, with 22 facilities reporting, 2.5% 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 March 11-17, 2018, 39 of 59 (66%) zip codes had ILI activity levels in the moderate to high categories and 20 (34%) had ILI activity levels in the minimal to low categories; the median percent ILI was 2.6% (range of <1%-6.7%) (**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 FluView³ 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 Illinois⁴ and Suburban Cook County⁵ 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 Chicago⁶.

Reporting Information

The Illinois Department of Public Health (IDPH) has issued influenza testing and reporting recommendations⁷ healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)⁸

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.

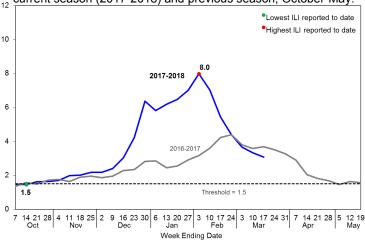


Figure 4. Percent of medically-attended **outpatient** visits attributed to influenza-like illness as reported by **ILINet** facilities, Chicago, by week, for the current season (2017-2018) and previous three seasons, October-May.

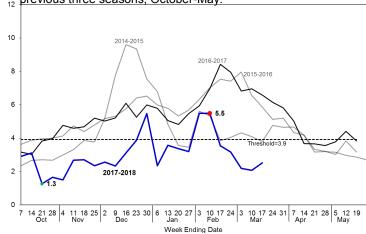
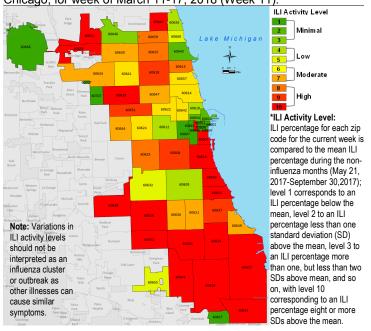


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of March 11-17, 2018 (Week 11).



³ http://www.cdc.gov/flu/weekly/index.htm;4 http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/surveillance;5 http://cookcountypublichealth.org/data-reports/ communicable-diseases;6 https://www.cityofchicago.org/city/en/depts/cdph/supp_info/health-protection/current_flu_situationinchicago2011.html;