# Chicago Flu Update



Rahm Emanuel, Mayor March 15, 2019 Julie Morita, MD, Commissioner

#### **News & Updates**

Currently, the Illinois Department of Public Health continues to recommend temporary hospital visitor restrictions<sup>1</sup> during times of increased influenza-like



illness in the community. Vaccination is the best way to protect against influenza infection and all Chicagoans 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 Walk-In Immunization Clinics<sup>2</sup> is available on the city website and by calling 311. To locate the closest City of Chicago clinic or retail pharmacy, go to www.chicagoflushots.org.

#### What is the risk?

Currently, the risk of influenza infection is high.

# Are severe cases of influenza occurring? For the week of March 3-9, 2019, 28 influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 30, 2018, 218 influenza-associated ICU hospitalizations have been reported; 209 were positive for influenza A (93 H1N1pdm09, 5 H3N2, and 111 unknown subtype [subtyping not attempted or not all subtypes tested]) and nine were positive for influenza B. The median age of reported cases is 57 years (range 1 month-92 years); one pediatric death was reported and 11 cases were admitted from long-term care facilities; selected attributes are summarized in **Table 1**.

Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations reported for Chicago residents during the 2018-2019 season. October-May

residents during the 2016-2019 season, October-May.					
Age Group	#	%*	Sex	#	%
0-4	30	14	Male	109	50
5-17	12	6	Female	109	50
18-24	4	2	Med. Cond./Complication <sup>†</sup>		
25-49	39	18	Lung Disease	90	41
50-64	60	28	Cardiac Disease	71	33
≥65	73	33	Diabetes	50	23
Race/Ethnicity			Ventilator Support	56	26
NH-White	49	22	Reported Deaths <sup>‡</sup>	9	4
NH-Black	113	52	Treatment/Vaccination <sup>†</sup>		
Hispanic	45	21	Reported Antiviral Tx	190	87
Asian/Other	11	5	Reported Flu Shot	58	27

<sup>\*</sup> 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.

#### 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 3-9, 2019, 241 of the 1,298 (18.6%) specimens tested for influenza were positive; 232 typed as influenza A (61 H1N1pdm09, 21 H3N2, and 150 unknown subtype) and nine typed as influenza B (**Figure 2**).

Since September 30, 2018, 1,770 of 20,174 (8.8%) specimens tested for influenza have been positive; 1,729 typed as influenza A (496 H1N1pdm09, 67 H3N2, and 1,166 unknown subtype [subtyping not performed or not all subtypes tested]) and 41 typed as influenza B.

Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2018-2019)

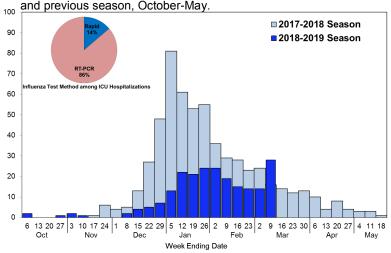
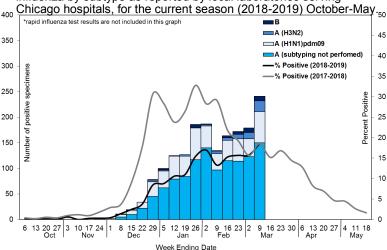


Figure 2. Percent of specimens testing positive (by RT-PCR\*) for influenza by subtype as reported by local laboratories serving





All data are preliminary and may change as more reports are received.

## How much influenza-like illness is occurring?

Several outpatient clinics throughout Chicago participate in CDC's Influenza-like Illness Surveillance Network (**ILINet**) by 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 3-9, 2019, 120 of the 5,945 (2.0%) reported outpatient clinic visits were due to influenza-like illness, which is lower than Illinois (3.5%), Region 5 (3.4%) and the U.S. (4.5%) (**Figure 3**).

In addition to ILINet, ESSENCE is an electronic syndromic surveillance system that utilizes the chief complaints of patients visiting emergency departments to monitor for influenza-like illness. Currently, ESSENCE captures nearly every emergency department visit in the city on a daily basis. For the week of March 3-9, 2019, 757 of the 24,844 (3.1%) total emergency department 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 3-9, 2019, 39 of 59 (66%) zip codes had ILI activity levels in the moderate to high categories; this is similar to last season where 66% of zip codes were also at moderate to high levels for the same time period **(Figure 6).** 

Figure 6. Percent of **zip codes** in the moderate to high ILI activity levels by week, Chicago, for current season



### Where can I get more information?

The Centers for Disease Control and Prevention's FluView<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<sup>4</sup> and Suburban Cook County<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<sup>6</sup>.

#### **Reporting Information**

The Illinois Department of Public Health (IDPH) has issued influenza testing and reporting recommendations<sup>7</sup>. In addition, The Chicago Department of Public Health recently issued guidance on reporting influenza-associated ICU hospitalizations<sup>8</sup>. Healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)<sup>9</sup>.

All data are preliminary and may change as more reports are received.

Figure 3. Percent of medically-attended **outpatient** visits attributed to influenza-like illness as reported by **ILINet** facilities, Chicago, by week for the current season (2018-2019) and for Illinois, Region 5, and U.S., October-May.

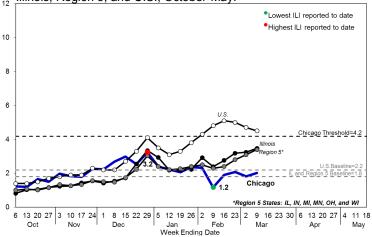


Figure 4. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current

season (2018-2019) and previous two seasons, October-May.

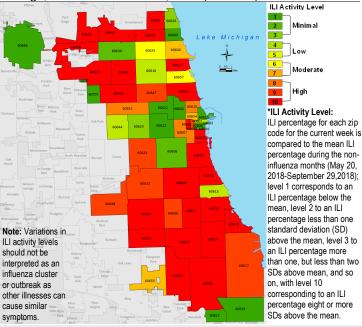
\*\*Lowest ILI reported to date\*

\*Highest ILI reported to date\*

### Dec 13 20 27 3 10 17 24 1 8 15 22 29 5 12 19 26 2 9 16 23 2 9 16 23 30 6 13 20 27 4 11 18

May Week Ending Date\*

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 3-9, 2019 (Week 10).



<sup>3</sup> http://www.cdc.gov/flu/weekly/index.htm;4 http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/influenza-surveillance#publications;

<sup>&</sup>lt;sup>5</sup> http://cookcountypublichealth.org/data-reports/communicable-diseases; <sup>6</sup> https://www.cityofchicago.org/city/en/depts/cdph/supp\_info/health-protection/current\_flu\_situationinchicago2011.html; <sup>7</sup> dph.illinois.gov/sites/default/files/publications/ohp-annual-flu-testing-guidance-09182018.pdf; <sup>8</sup> https://www.chicagohan.org/documents/14171/39923/Reporting+Influenza-Associated+ICU+Hospitalizations/bc2f49b2-cf74-487c-9441-0b0a930e4b41; <sup>9</sup> https://dph.partner.illinois.gov/