# Chicago Flu Update



Rahm Emanuel, Mayor

March 1, 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 February 17-23, 2019, 8 influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 30, 2018, 152 influenza-associated ICU hospitalizations have been reported; 144 were positive for influenza A (69 H1N1pdm09, 3 H3N2, and 72 unknown subtype [subtyping not attempted or not all subtypes tested]) and eight were positive for influenza B. The median age of reported cases is 56.5 years (range 1 month-92 years); one pediatric death was reported and eight 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.

#	% <sup>*</sup>	Sex	#	%
20	13	Male	78	51
11	7	Female	74	49
3	2	Med. Cond./Complication <sup>†</sup>		
26	17	Lung Disease	59	39
42	28	Cardiac Disease	47	31
50	33	Diabetes	36	24
		Ventilator Support	41	27
28	18	Reported Deaths <sup>‡</sup>	8	5
83	55	Treatment/Vaccination <sup>†</sup>		
32	21	Reported Antiviral Tx	130	86
9	6	Reported Flu Shot	39	26
	20 11 3 26 42 50 28 83 32	20 13 11 7 3 2 26 17 42 28 50 33 28 18 83 55 32 21	<ul> <li>20 13 Male</li> <li>11 7 Female</li> <li>3 2 Med. Cond./Complication</li> <li>26 17 Lung Disease</li> <li>42 28 Cardiac Disease</li> <li>50 33 Diabetes</li></ul>	20       13       Male       78         11       7       Female       74         3       2       Med. Cond./Complication         26       17       Lung Disease       59         42       28       Cardiac Disease       47         50       33       Diabetes       36         Ventilator Support       41         28       18       Reported Deaths <sup>‡</sup> 8         83       55       Treatment/Vaccination <sup>†</sup> 32       21       Reported Antiviral Tx       130

<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 February 17-23, 2019, with 5 laboratories reporting, 158 of the 993 (15.9%) specimens tested for influenza were positive; 153 typed as influenza A (44 H1N1pdm09, 9 H3N2, and 100 unknown subtype) and five typed as influenza B (**Figure 2**).

Since September 30, 2018, 1,336 of 17,637 (7.6%) specimens tested for influenza have been positive; 1,313 typed as influenza A (400 H1N1pdm09, 34 H3N2, and 879 unknown subtype [subtyping not performed or not all subtypes tested]) and 23 typed as influenza B.

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

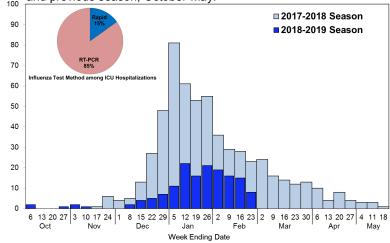
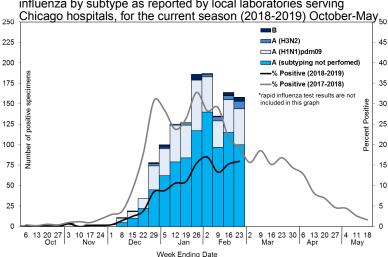


Figure 2. Percent of specimens testing positive (by RT-PCR\*) for influenza by subtype as reported by local laboratories serving





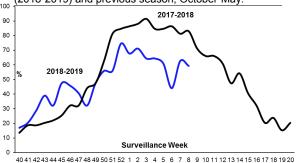
### How much influenza-like illness is occurring?

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 February 17-23, 2019, 117 of the 5,619 (2.1%) reported outpatient clinic visits were due to influenza-like illness, which is lower than Illinois (3.2%), Region 5 (3.0%) and the U.S. (5.0%) **(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 February 17-23, 2019, 650 of the 24,885 (2.6%) 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 February 17-23, 2019, 35 of 59 (59%) zip codes had ILI activity levels in the moderate to high categories; this is lower than last season where 83% of zip codes were 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 (2018-2019) and previous season, October-May.



#### 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>.

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.

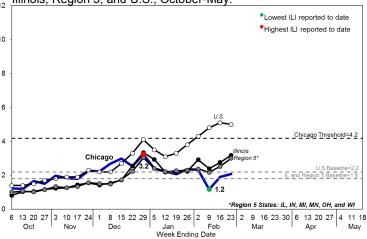


Figure 4. Percent of **emergency department** visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to **ESSENCE**, Chicago, by week, for the current

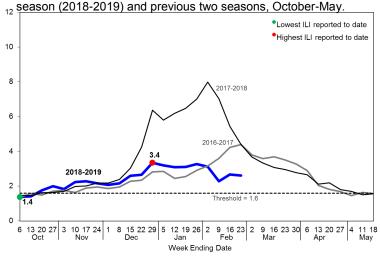
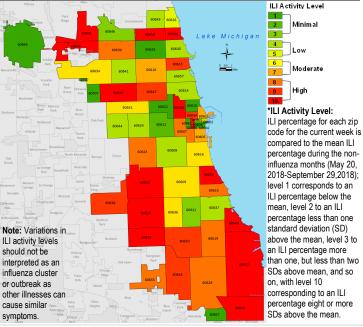


Figure 5. Influenza-like Illness (ILI) activity level by patient zip code determined by chief complaint data submitted to **ESSENCE**, Chicago, for week of February 17-23, 2019 (Week 8).



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