What is the risk?
Currently, the risk of influenza infection is low.

Are severe cases of influenza occurring?
For the week of October 1-7 2017, no influenza-associated ICU hospitalizations were reported (Figure 1).

2016-2017 Quick Summary
During the 2016-2017 influenza season, 276 influenza-associated ICU hospitalizations were reported with 185 (67%) being positive for influenza A (108 H3N2, 2 H1N1pdm09, 75 unknown subtype [subtyping not attempted or not all subtypes tested] and 91 were positive for influenza B. The median age of reported cases was 62 years (range of 1 month - 100 years). Forty-nine deaths occurred among ICU cases and 19 cases were admitted from long-term care facilities; selected characteristics are summarized in Table 1.

Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations reported for Chicago residents during the 2016-2017 season, October-May.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>#</th>
<th>%</th>
<th>Sex</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4</td>
<td>28</td>
<td>10</td>
<td>Male</td>
<td>131</td>
<td>47</td>
</tr>
<tr>
<td>5-17</td>
<td>30</td>
<td>11</td>
<td>Female</td>
<td>145</td>
<td>53</td>
</tr>
<tr>
<td>18-24</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-49</td>
<td>32</td>
<td>12</td>
<td>Lung Disease</td>
<td>90</td>
<td>33</td>
</tr>
<tr>
<td>50-64</td>
<td>59</td>
<td>21</td>
<td>Cardiac Disease</td>
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<tr>
<td>≥65</td>
<td>121</td>
<td>44</td>
<td>Diabetes</td>
<td>64</td>
<td>23</td>
</tr>
</tbody>
</table>

Med. Cond./Complication†
Lung Disease
Heart Disease
Diabetes
Ventilator Support
Reported Deaths
Reported Antiviral Tx
Reported Flu Shot

Race/Ethnicity
NH-White
NH-Black
Hispanic
Asian

Treatment/Vaccination†
Reported Antiviral Tx
Reported Flu Shot

Reported Deaths

Reported Antiviral Tx
Reported Flu Shot

Reported Deaths

Reported Antiviral Tx
Reported Flu Shot

Reported Deaths

Reported Antiviral Tx
Reported Flu Shot

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

For those without a healthcare provider or whose healthcare providers do not have the influenza vaccine, a schedule of City of Chicago influenza vaccination clinics1 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.

Figure 2 shows the cumulative number of reported ICU-hospitalizations for the past seven influenza seasons. For three out of the seven seasons, 50% or more of the total number reported cases for the season was reached by mid to late February; December was the earliest month where half or more of cases had already been reported (2014-2015) and March was the latest month that occurred (2011-2012).

News & Updates
This is the first Chicago Flu Update for the 2017-2018 influenza season. This update will be issued every Friday until May 2018. 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.

How much influenza-like illness is occurring?
Influenza-like illness (ILI) is a syndrome (a set of signs and symptoms that appear together that characterize a disease or illness) that is part of a larger syndromic surveillance system used to monitor potential indicators of an event or disease of public health significance. Here, ILI is defined as fever of 100°F or greater and cough and/or sore throat. Influenza-like illness is not lab-confirmed influenza, but is used to monitor emergency department and doctor’s office visits for people with flu-like symptoms.

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 (ILI).

For the week of October 1-7, 2017, with eight hospitals reporting, 2.0% of emergency department visits were due to ILI (Figure 3).

**ESSENCE** is an electronic syndromic surveillance system that utilizes the chief complaints of patients visiting emergency departments to monitor a variety of syndromes including ILI; ILI activity is determined solely based on the patient’s chief complaint and does not take into account the entire medical record, as the ILI activity reported in Figure 3 does, which may result in a lower ILI percentage detected. Currently, all Chicago hospitals submit data to ESSENCE on a daily basis, covering every emergency department visit in the city.

For the week of October 1-7, 2017, 380 of the 25,778 (1.5%) emergency department visits among the 59 Chicago zip codes analyzed were due to influenza-like illness (ILI) (Figure 4).

Among the data elements collected in ESSENCE for each emergency department visit is patient zip code. Figure 5 represents the percentage of emergency department visits due to influenza-like illness aggregated by zip code; each zip code’s ILI percentage is categorized into one of ten levels: minimal (levels 1-3), low (levels 4-5), moderate (levels 6-7), and high (levels 8-10).

For the week of October 1-7, 2017, 51 of 59 (86%) zip codes had ILI activity levels in the minimal to low categories and 7 (12%) had ILI activity levels in the moderate to high categories; the median percent ILI was 1.3% with a range from <1% to 4.0%. Variations in ILI activity levels should not be interpreted as an influenza cluster or outbreak as other illnesses can cause similar symptoms. It is a single measure of individuals visiting emergency departments with flu-like symptoms as defined by the ILI syndrome.

All data are preliminary and may change as more reports are received.
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 October 1-7, 2017, with 21 facilities reporting, 2.9% of outpatient clinic visits were due to influenza-like illness. This is similar to previous seasons and below the calculated threshold of 3.9% (Figure 6).

Which influenza strains are circulating? Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of October 1-7, 2017, with 6 laboratories reporting, 2 of the 494 (<1%) specimens tested for influenza were positive for influenza (1 A H3N2 and 1 influenza B) (Figure 7).

During the past three influenza seasons, the peak percentage of specimens testing positive for influenza was between 21% and 25% occurring as early as mid-December (2014-2015) to mid to late February during the last two influenza seasons (Figure 8).

Where can I get more information? The Centers for Disease Control and Prevention’s FluView® 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® and Suburban Cook County® 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.

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

This year the Chicago Department of Public Health has partnered with the Chicago Park District so that any individual who receives a flu shot at a CDPH flu shot clinic receives 200 Park Points © from the Chicago Park District. Visit https://www.chiparkpoints.com for more information.