

# I. Influenza Summary to Date

Influenza surveillance for suburban Cook County involves the weekly collection of data from a sample of hospitals, private physician's offices, and laboratory data. The risk for influenza infection is currently low. Our sentinel participants reported the following aggregate measures: Syndromic Surveillance: 1.12% ILI<sup>1</sup>, Sentinel Surveillance: 2.72% ILI<sup>2</sup>. Six specimens (3.66%) tested positive for influenza B. Since Week 35 (8/24/2014), suburban Cook County has had 365 cases of influenza-associated intensive care unit (ICU) hospitalizations, 2 influenza-associated pediatric deaths, 36 clusters of ILI in schools, and 40 outbreaks of influenza in long term care (LTC) facilities. During week 19, no ICU hospitalizations due to influenza infection were reported to CCDPH. The percentage of deaths due to pneumonia and influenza was 4.40% for the previous week, which was below the threshold of 7.03%. Thank you to all of our surveillance partners for their help in collecting this information.

#### II. Syndromic Surveillance Data<sup>1</sup>

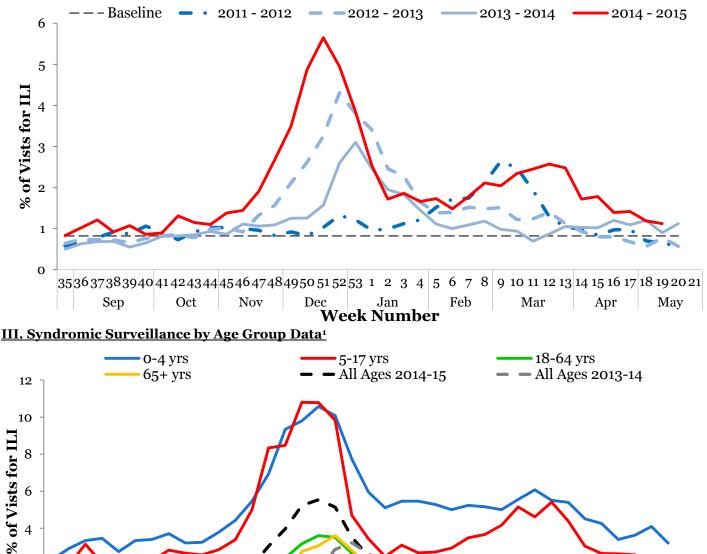
6

4

2

0

Sep



35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 1 2 3 4

Nov

Dec

Jan

Week Number

Oct

5678

Feb

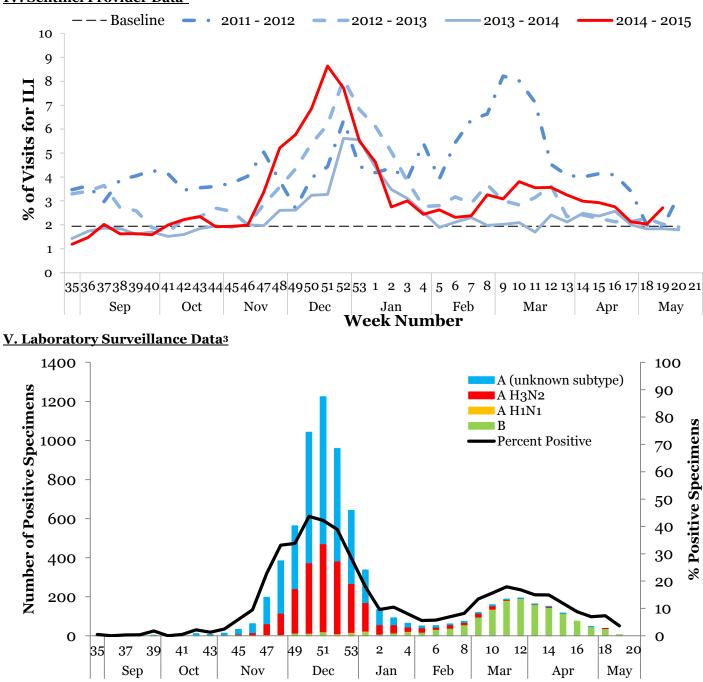
9 10 11 12 13 14 15 16 17 18 19 20

Apr

May

Mar

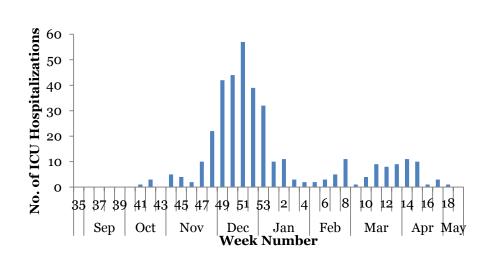
### IV. Sentinel Provider Data<sup>2</sup>



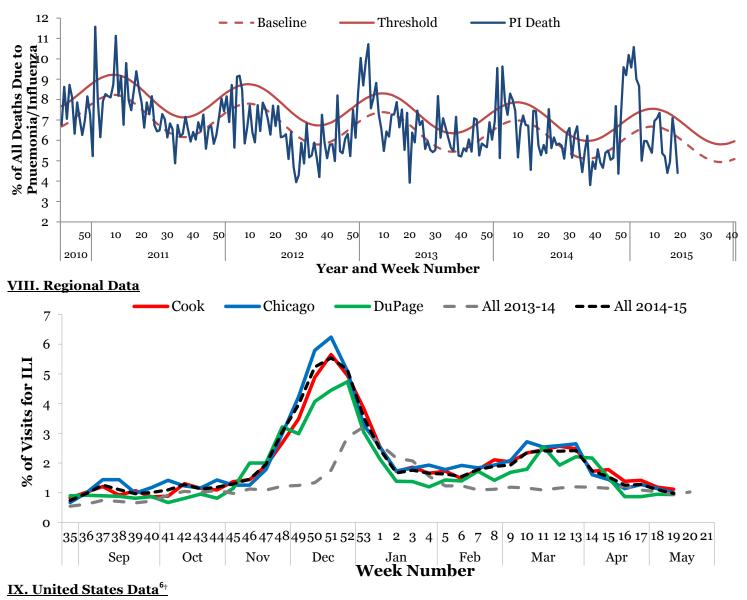
Week Number

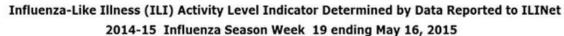
## VI. ICU Hospitalization Data<sup>4</sup>

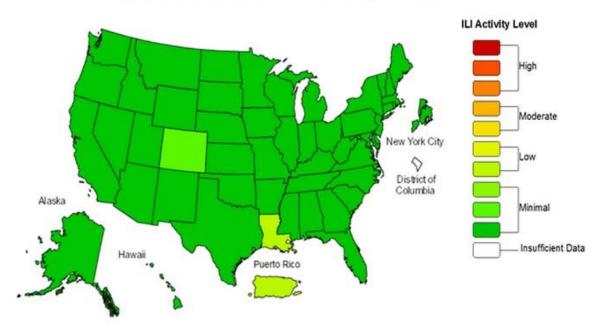
Hospitalized Case Counts	#
Total Cases	365
Incidence by Age	#
0-4	8
5-24	26
25-49	24
50-64	74
65+	233
Incidence by Region	#
North	160
West	62
Southwest	52
South	91



# VII. Pneumonia and Influenza Mortality Data5







<sup>(</sup>All data are preliminary and may change as more reports are received.)

For further information about influenza activity see: <u>City of Chicago Surveillance Report</u>, <u>DuPage County Surveillance Report</u>, <u>Illinois Department of Public Health Surveillance Report</u>, <u>CDC Surveillance Report</u>.

- 1. Syndromic surveillance influenza-like-illness (ILI) syndrome is defined as a symptom complex fever and cough or sore throat from ESSENCE. 45 hospital EDs participate in ESSENCE. ILI = # of ED visits for ILI / total # of ED visits.
- 2. ILI is defined as fever  $\geq$  100°F, cough and/or sore throat in the absence of a known cause other than influenza. 8 hospital EDs and 3 physician offices are participating CDC sentinel sites.
- 3. Laboratory surveillance includes viral culture, RT-PCR, and the rapid antigen test. Not all cases are suburban Cook County Residents. Participating laboratories: IDPH, NSUHS, and ACL.
- 4. Hospitalization data are only for suburban Cook County residents (excludes Evanston, Skokie, Oak Park, and Stickney). Data includes reported cases for the presented week.
- 5. Pneumonia and Influenza (P&I) deaths include all deaths where the immediate cause of death or a contributing factor was pneumonia and/or influenza (aspiration pneumonia is excluded.) Data includes all of Cook County. The percentage of deaths due to P&I are compared with a seasonal baseline and epidemic threshold value calculated for each week. The seasonal baseline of P&I deaths is calculated using a periodic regression model that incorporates a CDC based robust regression procedure applied to data from the previous four years. An increase of 1.645 standard deviations above the seasonal baseline of P&I deaths is considered the "epidemic threshold," i.e., the point at which the observed proportion of deaths attributed to pneumonia or influenza was significantly higher than would be expected at that time of the year in the absence of substantial influenza-related mortality. <u>http://www.cdc.gov/flu/weekly/overview.htm#Mortality</u>
- 6. <u>http://www.cdc.gov/flu/weekly/index.htm</u>
- <sup>†</sup> This map uses the proportion of outpatient visits to health care providers for influenza-like illness to measure the ILI activity level within a state.