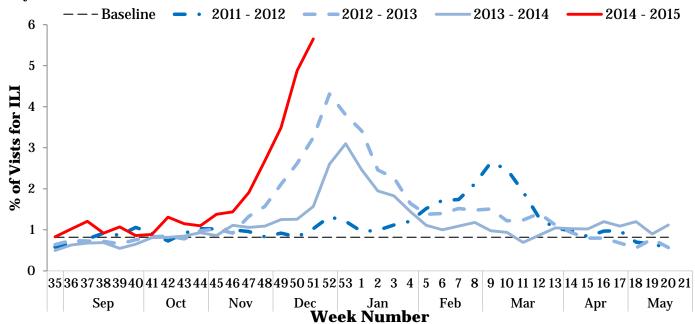
Influenza Surveillance Report Week 51: Dec 14th –Dec 20th, 2014

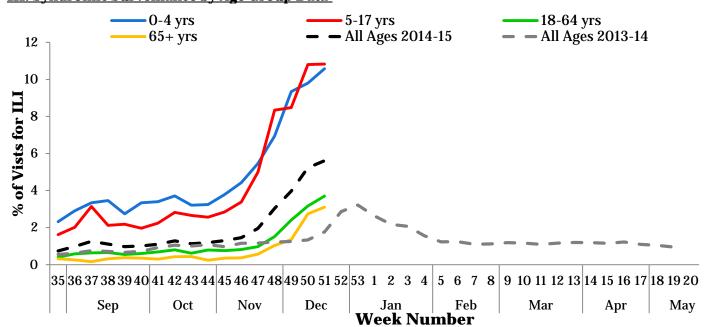
I. Influenza Summary to Date

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 continues to increase. Our sentinel participants reported the following aggregate measures: Syndromic Surveillance: 5.65% ILI¹, Sentinel Surveillance: 8.79% ILI². Nine hundred seventy-nine (43.7%) specimens tested positive for influenza (271 influenza A H3N2, 690 influenza A unknown subtype [subtyping not performed], 2 influenza A H1N1, and 16 influenza B). Since Week 35 (8/24/2014), suburban Cook County has had 169 cases of influenza-associated intensive care unit (ICU) hospitalizations, 35 clusters of ILI in schools, and 29 outbreaks of influenza in long term care (LTC) facilities. During week 51, 42 ICU hospitalizations due to influenza infection were reported, 7 clusters of ILI in schools were reported, and 10 outbreaks of influenza in LTC facilities were reported to CCDPH. The percentage of deaths due to pneumonia and influenza was 7.26% for the previous week which was above the threshold of 6.80%. Thank you to all of our surveillance partners for their help in collecting this information.

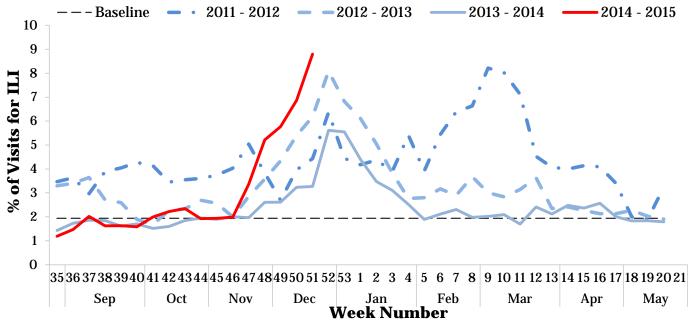
II. Syndromic Surveillance Data¹



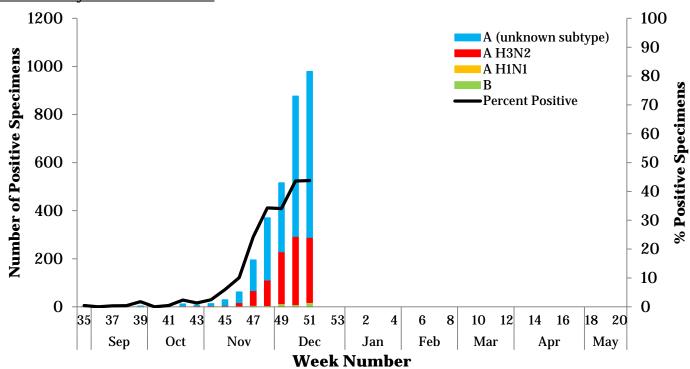
III. Syndromic Surveillance by Age Group Data¹



IV. Sentinel Provider Data²

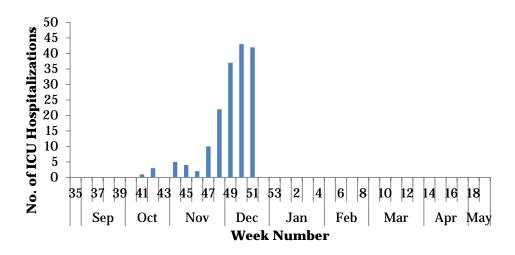


V. Laboratory Surveillance Data³

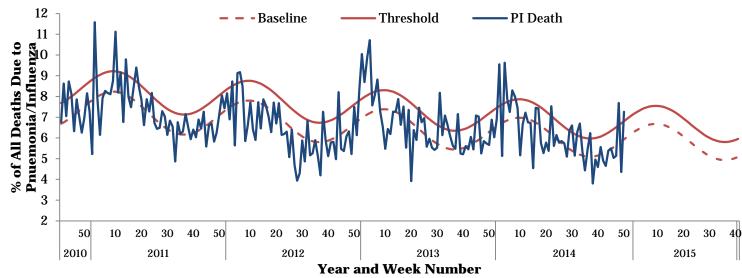


VI. ICU Hospitalization Data⁴

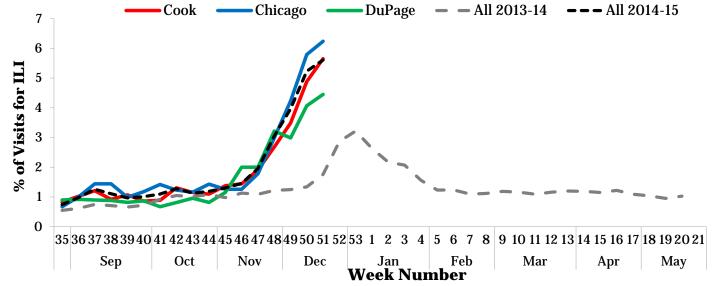
Hospitalized Case Counts	#
Total Cases	169
Incidence by Age	#
0-4	5
5-24	15
25-49	12
50-64	34
65+	103
Incidence by Region	#
North	85
West	28
Southwest	21
South	35



VII. Pneumonia and Influenza Mortality Data⁵

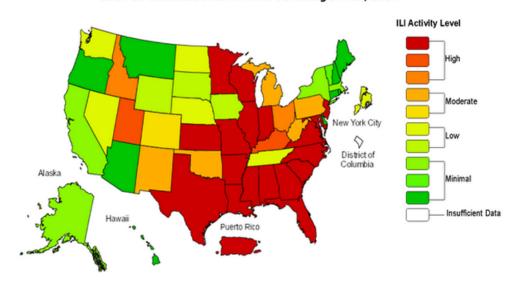


VIII. Regional Data



IX. United States Data^{6†}

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2014-15 Influenza Season Week 51 ending Dec 20, 2014



(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 $\geq 100^{\circ}$ 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. https://www.cdc.gov/flu/weekly/overview.htm#Mortality
- 6. http://www.cdc.gov/flu/weekly/index.htm
- † 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.