South Carolina Influenza Surveillance Components and Definitions

Influenza Surveillance Components

1. **Lab-Confirmed Influenza Cases** include positive tests for respiratory culture, rt-PCR, DFA, and/or IFA. Reporting is required to DHEC within 3 days by the South Carolina Disease and Outbreak Network (SCION) or DHEC 1129 card.

2. **Influenza-Like Illness Surveillance** Providers enrolled in the Center for Disease Control Influenza-Like Illness Network (ILINet) surveillance system report weekly aggregate numbers of patient visits, and of those visits the number of patients seen for an influenza-like illness by age group (i.e. 0-4, 5-24, 25-49, 50-64, ≥65).

3. **Influenza-Associated Hospitalizations** are reported weekly in aggregate numbers. Laboratory confirmation for hospitalizations include culture, rt-PCR, DFA, IFA, and rapid antigen detection testing. The reporting worksheet can be found at http://www.scdhec.gov/Health/DiseasesandConditions/InfectiousDiseases/Flu/ReportingFormsandWorksheets/

4. **Influenza-Associated Deaths** are reported for all ages. Laboratory confirmation for deaths include culture, rt-PCR, DFA, IFA, and rapid antigen detecting testing, or autopsy. The reporting worksheet can be found at http://www.scdhec.gov/Health/DiseasesandConditions/InfectiousDiseases/Flu/ReportingFormsandWorksheets/

Influenza Surveillance Definitions

1. **Activity Level (Geographic Spread):** Indicator of the geographic spread of influenza activity, which is reported to CDC each week.
   No activity: No increase in ILI activity and no laboratory-confirmed influenza cases.
   Sporadic: No increase in ILI activity and isolated laboratory-confirmed influenza cases.
   Local: Increased ILI or 2 or more institutional outbreaks in one DHEC PH region and laboratory-confirmed influenza cases within the past 3 weeks in the PH region with increased ILI or outbreaks.
   Regional: Increased ILI or institutional outbreaks in 2-3 DHEC PH regions and laboratory-confirmed influenza cases within the past 3 weeks in the PH regions with increased ILI or outbreaks.
   Widespread: Increased ILI and/or institutional outbreaks in at least 4 regions and laboratory-confirmed influenza in the state within the past 3 weeks.

2. **Activity Level (Influenza-like Illness):** Comparison of the current week mean reported percent of visits due to ILI to the non-influenza weeks mean reported percent of visits due to ILI. The activity level corresponds to the number of standard deviations below, at, or above the mean for the current week compared to the mean of the non-influenza weeks.
   Minimal: Less than 2 standard deviations above the mean.
   Low: 2 to less than 4 standard deviations above the mean.
   Moderate: 4 to less than 6 standard deviations above the mean.
   High: Greater than or equal to 6 standard deviations above the mean.

3. **Five Season Average:** The five season average is the average value from seasons 2013-14 to 2017-18 for the same MMWR week as the current reporting period.

4. **Hospitalization and mortality rate:** The hospitalization and mortality rate, is both the cumulative and weekly number of hospitalizations or deaths divided by the age group populace (U.S. Census Bureau 2017 Population Data) x 100,000.

5. **Influenza-like Illness (ILI):** Fever ≥ 100°F (37.8°C) AND cough AND/OR sore throat (without a known cause other than influenza). The SC baseline is the mean percentage of patient visits for ILI during non-influenza weeks (weeks when the percent of positive lab tests were less than 2% of the total season's positive lab tests for two consecutive weeks) for the previous three seasons plus two standard deviations.

6. **MMWR week:** Term for influenza surveillance week. Each week begins on Sunday and ends on Monday. Nationally, the influenza season begins with MMWR week 40 and ends with MMWR week 39. The 2018-19 influenza season began on September 30, 2018 and will end on September 28, 2019.