



Infectious Disease Epidemiology Report

Influenza, Maine – 2012 - 2013



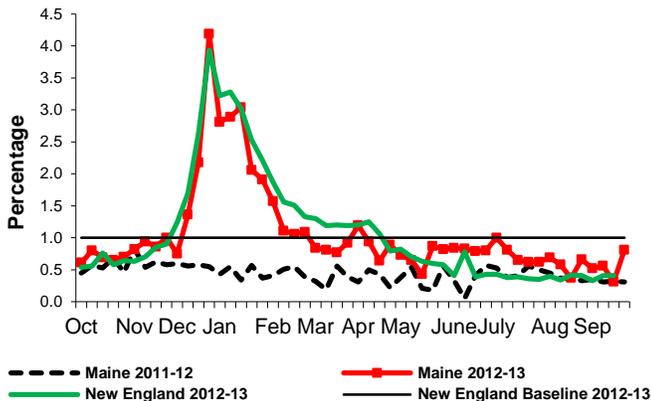
Synopsis

Influenza is a viral illness that typically occurs during the winter months. Characterized by the abrupt onset of constitutional and respiratory signs and symptoms, such as fever, muscle aches, headache, severe malaise, non-productive cough, sore throat, and runny nose, influenza is spread from person to person primarily by coughing and sneezing. Influenza-like illness (ILI) is a term used to describe illness with the typical signs and symptoms of influenza, but has not been confirmed by laboratory test. ILI is defined as fever greater than or equal to 100°F (37.8°C) and cough and/or sore throat in the absence of a known cause other than influenza. The 2012 – 2013 influenza season ran from September 30, 2012 to September 28, 2013. Maine CDC released weekly reports from September 30, 2012 to May 18, 2013, which is when the majority of activity occurred. The 2012-2013 influenza season was more severe compared to the 2011-2012 season.

Outpatient Influenza-like Illness

Outpatient ILI data were collected through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), a collaborative effort between the federal CDC, Maine CDC, and local health care providers. During the 2012-13 season, 36 health care providers reported the number of patients seen in their practices and the number of those patients with ILI by age group on a weekly basis. It was a moderately severe influenza year, with the peak in ILI visits in late December through February.

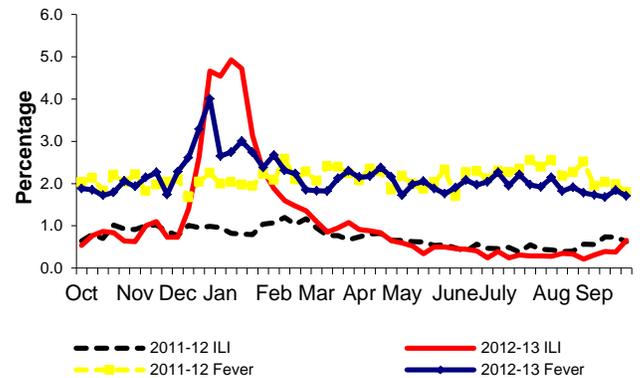
Outpatient Visits for ILI - Maine, 2011 - 13



Syndromic Surveillance

During the 2012-13 season, 26 Maine emergency departments reported daily de-identified visit data. Data were classified into syndromes based on chief complaint. The ILI and fever syndromes were used to calculate weekly percentage of visits for each. Emergency department visits for ILI peaked in January 2013. Fever visits peaked in late December and early January.

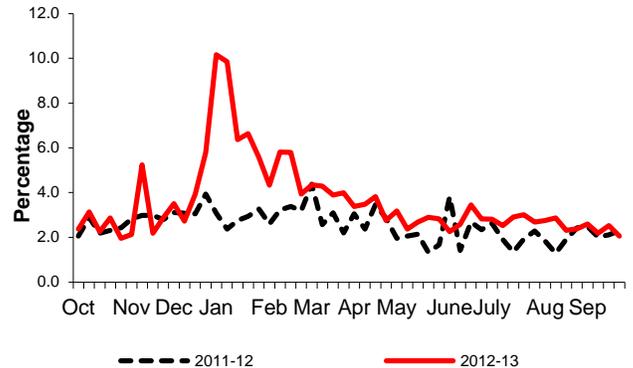
Emergency Department Visits for ILI and Fever – Maine, 2011-13



Hospital Inpatients

Surveillance for inpatient respiratory illness admissions in Maine was conducted in collaboration with four hospitals. During the 2012-13 season, the four hospitals reported the number of patients admitted to the hospital and the number of those patients admitted for pneumonia or influenza (P&I) using admitting diagnoses. Hospital admissions for pneumonia and influenza were highest in January.

Hospital Admissions due to P&I – Maine, 2011-13

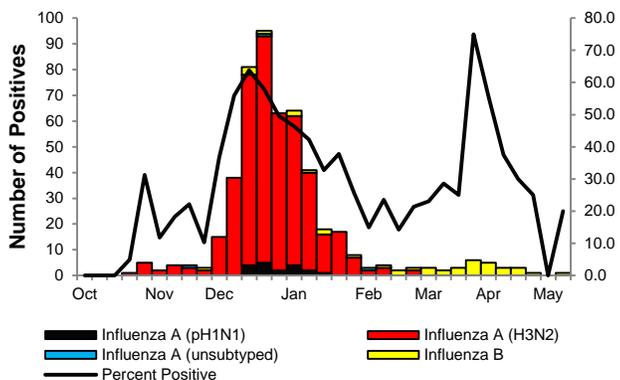


Influenza – Maine, 2012-2013

Laboratory Reporting

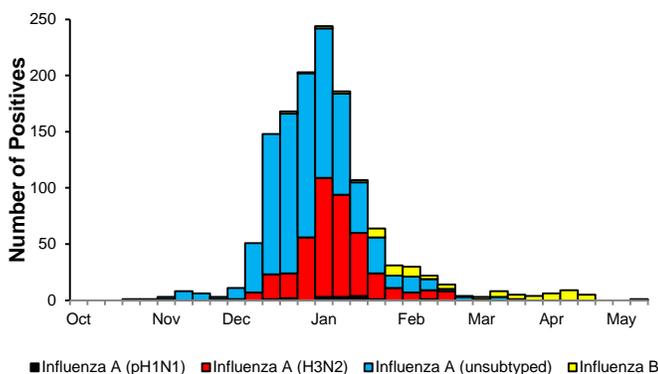
Maine CDC's Health and Environmental Testing Laboratory (HETL) reported the number of specimens received for respiratory virus testing and the number positive by specimen collection date. During the 2012-13 season, 1,237 respiratory specimens were tested by HETL for influenza by culture and/or Polymerase Chain Reaction (PCR). Of the specimens tested for influenza, 498 (40.3%) were positive for influenza (18 for influenza A/pH1N1, 435 for influenza A/H3, 3 for influenza A/ unsubtype, and 42 for influenza B).

Positive PCR Samples for Influenza, HETL – Maine, 2012-13



Two Maine reference laboratories and multiple national reference laboratories also participated in influenza surveillance activities during the 2012-13 season. These laboratories submitted reports of laboratory-confirmed influenza by culture or PCR. During the 2012-13 season, 1,346 specimens were positive for influenza (17 for influenza A/pH1N1, 420 for influenza A/H3, 830 for influenza A [subtype unknown] and 79 for influenza B).

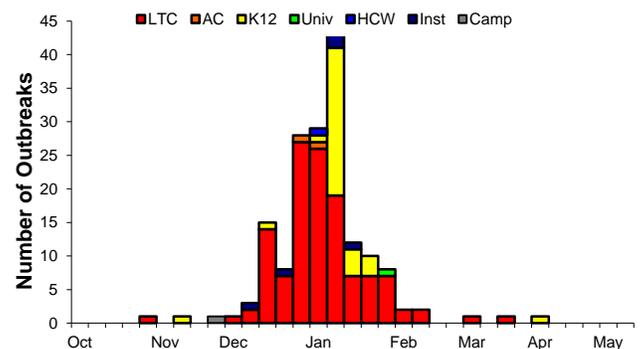
Positive PCR Samples for Influenza, Maine and National Reference Labs – Maine, 2012-13



Outbreaks

Outbreaks of influenza or ILI are reportable by law in Maine. During the 2012-13 season, a total of 168 outbreaks of influenza were reported in Maine. Of these outbreaks, 125 were in long-term care facilities, 2 in acute care facilities, 33 in K-12 schools, 1 in a residential school or university, 1 among health care workers, 5 in institutions, and 1 in a camp. Outbreaks peaked in January and occurred in all 16 counties.

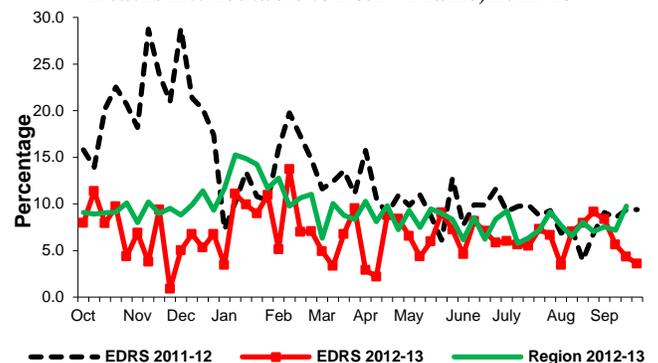
ILI Outbreaks by Facility Type – Maine, 2012-13



Death Certificates

The number of death certificates in which pneumonia and influenza (P&I) were listed as a cause of death was obtained from the Electronic Death Registry System (EDRS). During the 2012-13 season, a total of 12,946 deaths were reported to EDRS. Of these, 873 (6.7%) were attributed to pneumonia or influenza.

Deaths Attributable to P&I – Maine, 2011-13



Pediatric Influenza Deaths

One influenza-associated pediatric death was reported in an unvaccinated child from Central Maine during the 2012-13 season.