



Infectious Disease Epidemiology Report

Influenza Trends, Maine – 2014 - 2015



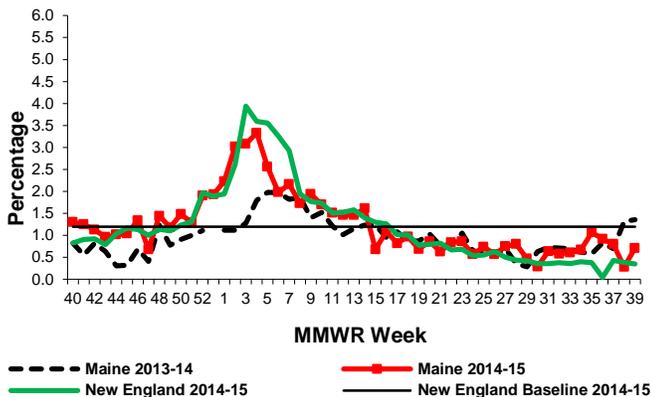
Synopsis

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 2014 – 2015 influenza season ran from September 28, 2014 to October 3, 2015. Maine CDC released weekly reports from October 14, 2014 to May 26, 2015, which is when the majority of activity occurred. The 2014-2015 influenza season was more severe than the 2013-2014 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 2014-15 season, 31 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 moderate influenza year, with a peak in ILI visits in late January.

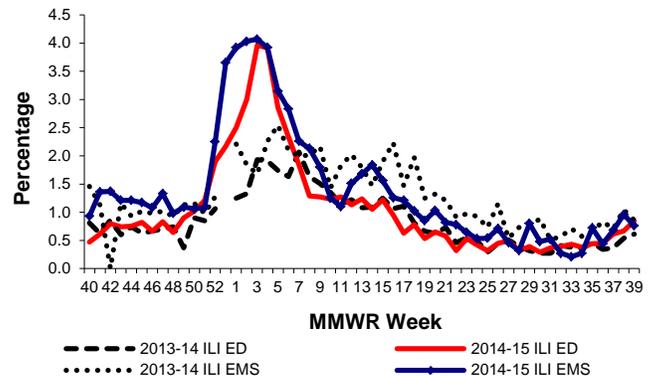
Outpatient Visits for ILI - Maine, 2013 - 15



Syndromic Surveillance

During the 2014-15 season, 27 Maine emergency departments reported daily de-identified visit data; and all Emergency Medical Services (EMS) providers in the state report daily de-identified EMS run data. Data is classified into syndromes based on chief complaint. The ILI syndrome is used to calculate weekly percentage of visits. Both emergency department visits for ILI and EMS runs for ILI peaked in late January.

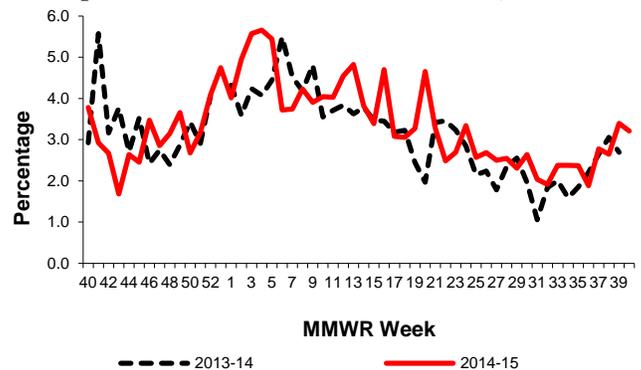
Syndromic Surveillance data for ILI – Maine, 2013-15



Hospital Inpatients

Surveillance for inpatient respiratory illness admissions in Maine was conducted in collaboration with four hospitals. During the 2014-15 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, 2013-15

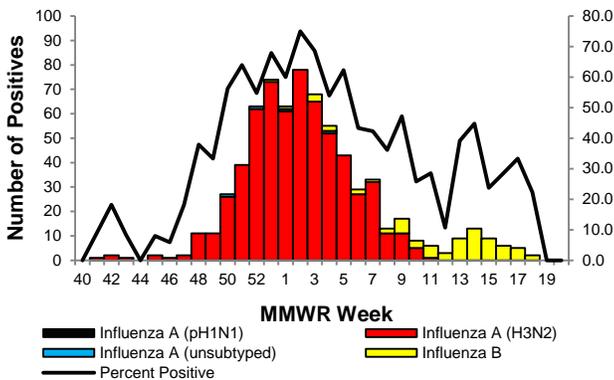


Influenza Trends – Maine, 2014-2015

Laboratory Reporting

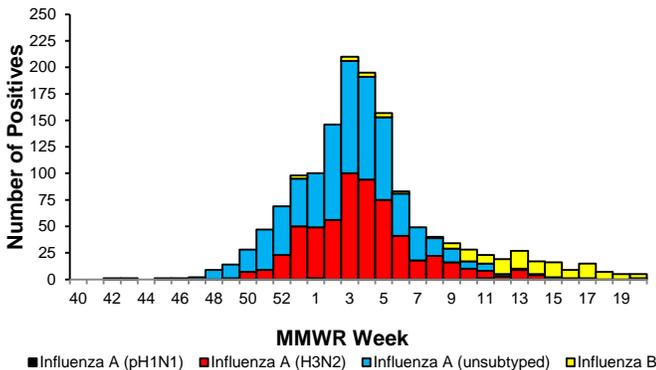
Maine CDC’s Health and Environmental Testing Laboratory (HETL) reported the number of specimens received for respiratory virus testing and the number positive by specimen collection date. During the 2014-15 season, 1,505 respiratory specimens were tested by HETL for influenza by culture and/or Polymerase Chain Reaction (PCR). Of the specimens tested for influenza, 695 (46.2%) were positive for influenza (617 for influenza A/H3, 4 for influenza A/unsubtyped, and 74 for influenza B).

Positive PCR Samples for Influenza, HETL – Maine, 2014-15



Two Maine reference laboratories participated in influenza surveillance activities during the 2014-15 season. These laboratories submitted reports of laboratory-confirmed influenza by culture, PCR, or rapid test. During the 2014-15 season, 7,000 respiratory specimens were tested for influenza. Of these, 1,456 (20.8%) were positive for influenza (2 for influenza A/pH1N1, 595 for influenza A/H3, 722 for influenza A/unsubtyped, and 137 for influenza B).

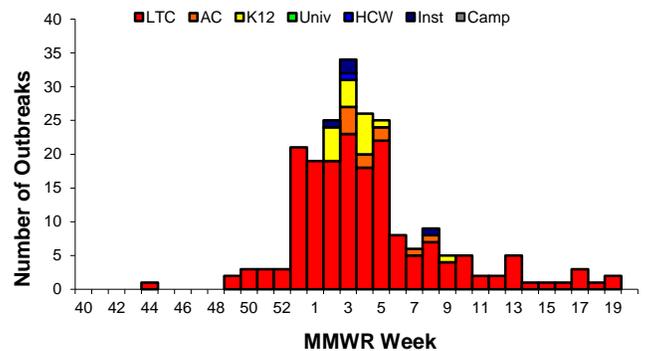
Positive PCR Samples for Influenza, Maine Reference Labs – Maine, 2014-15



Outbreaks

Outbreaks of influenza or ILI are reportable by law in Maine. During the 2014-15 season, a total of 213 outbreaks of influenza were reported in Maine. Of these outbreaks, 181 were in long-term care facilities, 10 in acute care facilities, 17 in K-12 schools, 1 in health care workers, and 4 in institutions. Outbreaks peaked in late January and occurred in all 16 counties.

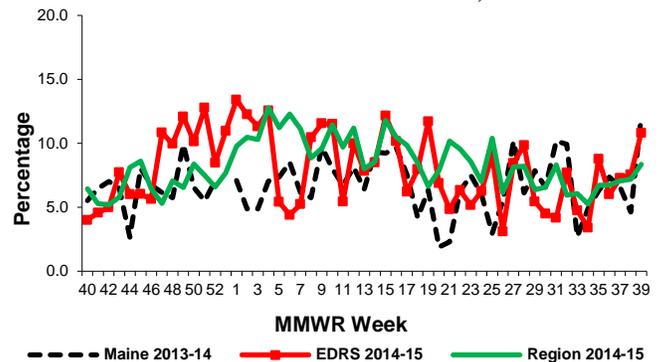
ILI Outbreaks by Facility Type – Maine, 2014-15



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 2014-15 season, a total of 14,228 deaths were reported to EDRS. Of these, 1,143 (8.0%) were attributed to pneumonia or influenza, and 20 (0.1%) specifically listed influenza as a cause of death.

Deaths Attributable to P&I – Maine, 2013-15



Pediatric Influenza Deaths

No pediatric deaths were reported during the 2014-15 influenza season.