



Infectious Disease Epidemiology Report

Influenza, Maine – 2013 - 2014



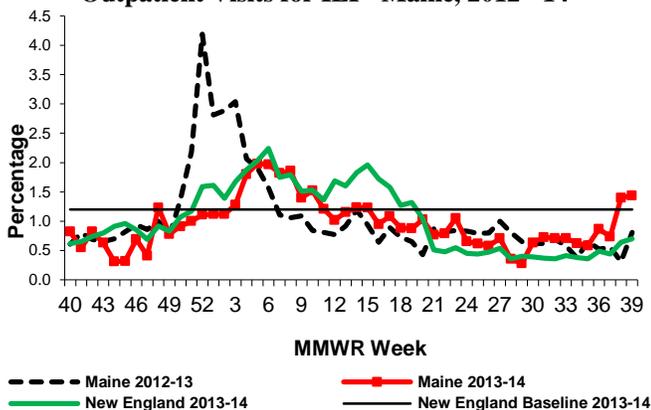
Synopsis

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 2013 – 2014 influenza season ran from September 29, 2013 to September 27, 2014. Maine CDC released weekly reports from September 29, 2013 to May 17, 2014, which is when the majority of activity occurred. The 2013-2014 influenza season was milder compared to the 2012-2013 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 2013-14 season, 33 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 February and a second smaller peak in late March.

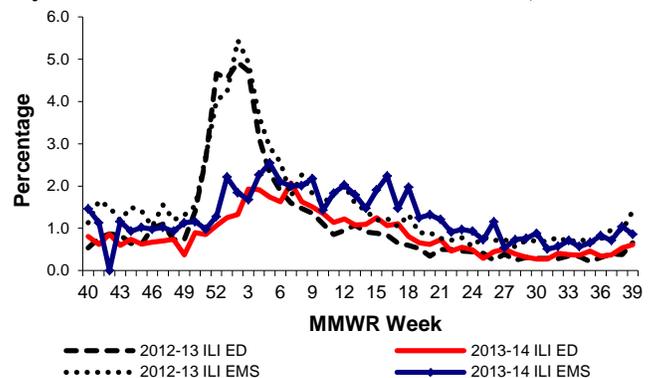
Outpatient Visits for ILI - Maine, 2012 - 14



Syndromic Surveillance

During the 2013-14 season, 25 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. Emergency department visits for ILI peaked in mid-February, and EMS runs for ILI peaked in late January.

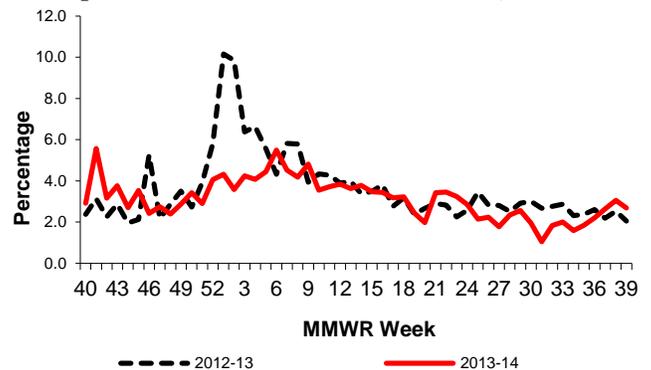
Syndromic Surveillance data for ILI – Maine, 2012-14



Hospital Inpatients

Surveillance for inpatient respiratory illness admissions in Maine was conducted in collaboration with four hospitals. During the 2013-14 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 February.

Hospital Admissions due to P&I – Maine, 2012-14

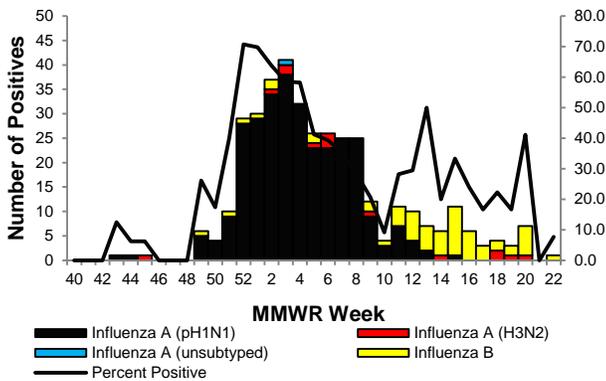


Influenza – Maine, 2013-2014

Laboratory Reporting

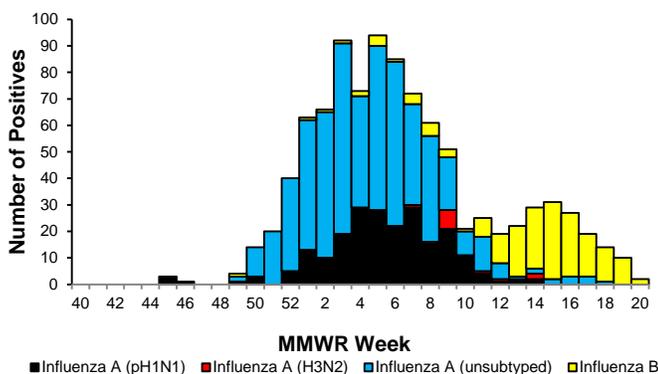
Maine CDC's Health and Environmental Testing Laboratory (HETL) reported the number of specimens received for respiratory virus testing and the number positive by specimen collection date. During the 2013-14 season, 1,171 respiratory specimens were tested by HETL for influenza by culture and/or Polymerase Chain Reaction (PCR). Of the specimens tested for influenza, 379 (32.4%) were positive for influenza (303 for influenza A/pH1N1, 14 for influenza A/H3, 1 for influenza A/unsubtyped, and 61 for influenza B).

Positive PCR Samples for Influenza, HETL – Maine, 2013-14



Two Maine reference laboratories participated in influenza surveillance activities during the 2013-14 season. These laboratories submitted reports of laboratory-confirmed influenza by culture or PCR. During the 2013-14 season, 4,851 respiratory specimens were tested for influenza. Of these, 957 (19.7%) were positive for influenza (219 for influenza A/pH1N1, 12 for influenza A/H3, 548 for influenza A/unsubtyped, and 178 for influenza B).

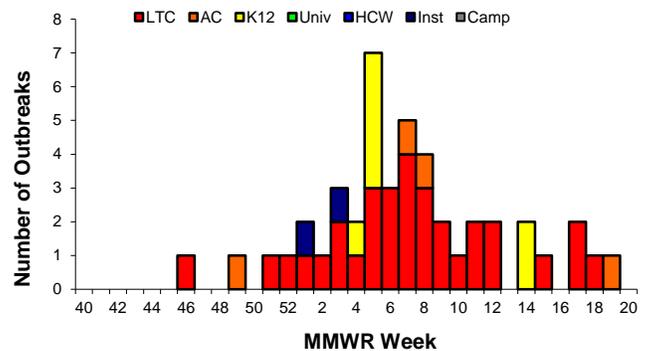
Positive PCR Samples for Influenza, Maine Reference Labs – Maine, 2013-14



Outbreaks

Outbreaks of influenza or ILI are reportable by law in Maine. During the 2013-14 season, a total of 46 outbreaks of influenza were reported in Maine. Of these outbreaks, 33 were in long-term care facilities, 4 in acute care facilities, 7 in K-12 schools, and 2 in institutions. Outbreaks peaked in late January and occurred in 13 counties.

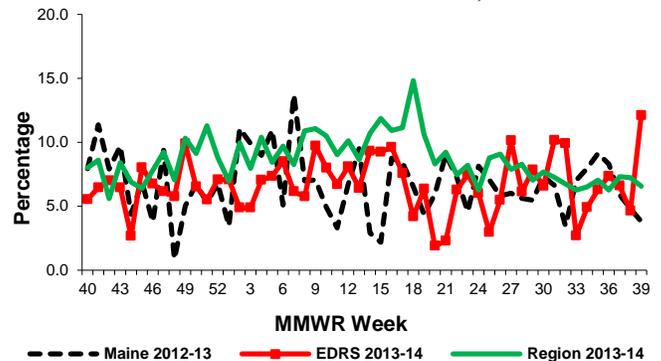
ILI Outbreaks by Facility Type – Maine, 2013-14



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 2013-14 season, a total of 12,665 deaths were reported to EDRS. Of these, 847 (6.7%) were attributed to pneumonia or influenza.

Deaths Attributable to P&I – Maine, 2012-14



Pediatric Influenza Deaths

One influenza-associated pediatric death was reported in a child from Western Maine during the 2013-14 season.