



Infectious Disease Epidemiology Report



Influenza, Maine – 2010 - 2011

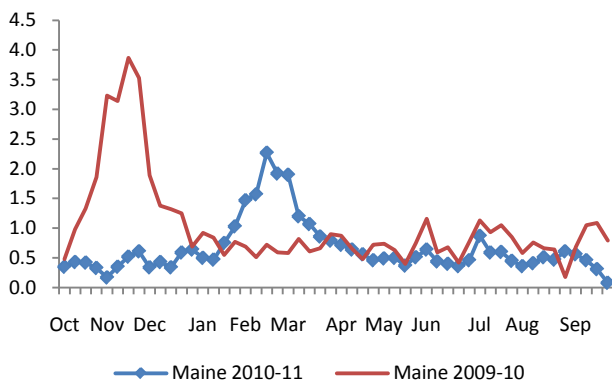
Synopsis

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 that presents with the typical signs and symptoms of influenza, but that has not been confirmed as influenza 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 2010 – 2011 influenza season ran from October 3, 2010 to October 1, 2011.

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 2010-11 season, 34 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. Outpatient ILI visits peaked in February 2011.

Outpatient Visits for ILI - Maine, 2009 - 11

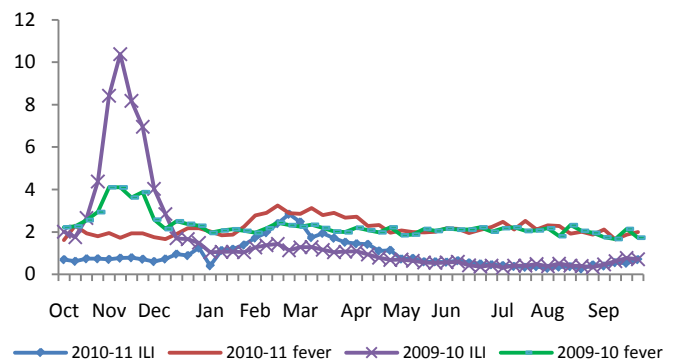


Syndromic Surveillance

During the 2010-11 season, an average of 24 Maine emergency departments report daily de-identified

visit data. The data are classified into syndromes based on chief complaint. The ILI and fever syndromes are used to get weekly percentage of visits for ILI and for fever. Emergency department visits for both ILI and fever peaked in February 2011.

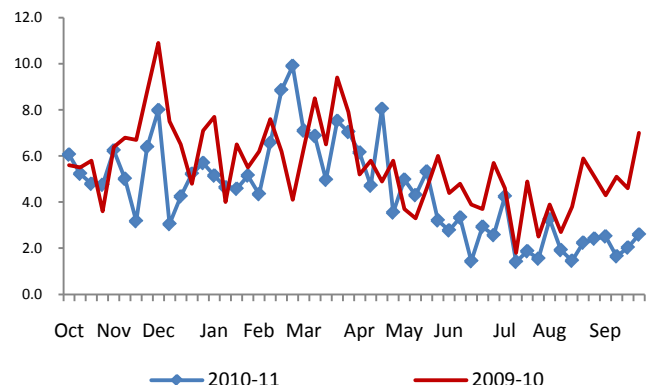
Emergency Department Visits for ILI and Fever – Maine, 2009-11



Hospital inpatients

Surveillance for inpatient respiratory illness admissions in Maine was conducted in collaboration with four hospitals. During the 2010-11 season, all hospitals reported the number of patients admitted to the hospital and the number of those patients admitted for influenza or pneumonia (P&I) using admitting diagnoses. Hospital admissions for influenza, pneumonia, or respiratory illness were highest in February.

Hospital Admissions due to P&I – Maine, 2009-11

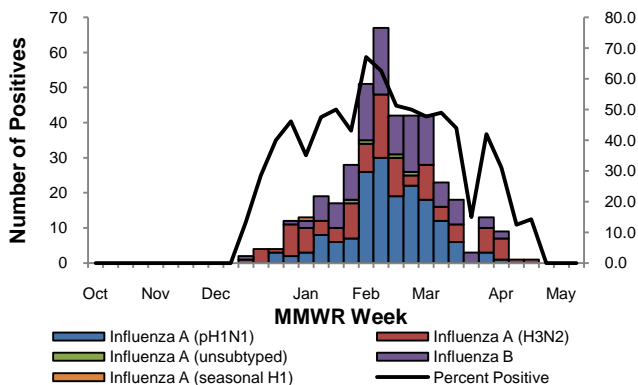


Influenza – Maine, 2010-2011

Laboratory Reporting

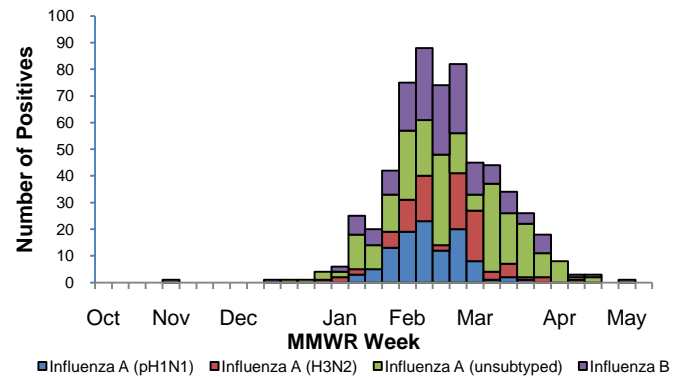
Maine CDC's Health and Environmental Testing Laboratory (HETL) worked collaboratively with hospitals and private laboratories to collect specimens for respiratory virus testing and influenza positive isolate subtyping. HETL reported the number of specimens received for respiratory virus testing and the number positive by specimen collection date. During the 2010-11 season, 1,013 respiratory specimens were tested by HETL for influenza by culture and/or PCR. Of the specimens tested for influenza, 411 (40.6%) were positive for influenza (166 for influenza A/pH1N1, 1 for influenza A/H1 seasonal, 114 for influenza A/H3, 4 for influenza A [subtype unknown], and 126 for influenza B).

Positive PCR Samples for Influenza, HETL – Maine, 2010-11



Two Maine reference laboratories and multiple national reference laboratories also participated in 2010-11 influenza surveillance activities. These laboratories submitted reports of laboratory-confirmed influenza by culture or reverse-transcriptase polymerase chain reaction (RT-PCR). During the 2010-11 season, 602 specimens were positive for influenza (107 for influenza A/pH1N1, 94 for influenza A/H3, 237 for influenza A [subtype unknown] and 164 for influenza B).

Positive PCR Samples for Influenza, Maine and National Reference Labs – Maine, 2010-11



Outbreaks

Outbreaks of influenza or influenza-like illness are reportable by law in Maine. During the 2010-11 season, a total of 61 outbreaks of influenza were reported in Maine. Of these outbreaks, 44 were in long-term care facilities, 1 in acute care facilities, 12 in K-12 schools, 1 in a residential school or university, and 3 in other institutions. The majority of outbreaks occurred during February and March 2011. Outbreaks occurred in all regions of the state. Outbreak definitions can be found at http://www.maine.gov/dhhs/boh/influenza_surveillance_weekly_updates.shtml under Methods.

Death Certificates

The vital statistics offices of one Maine city reported the number of death certificates in which pneumonia and influenza were mentioned as the primary or secondary cause of death. Data reported represent deaths that occurred in the reporting area, not the residence of the deceased. During the 2010-11 season, a total of 737 deaths were reported by the vital records office. Of these, 88 (11.9%) were attributed to pneumonia or influenza.

Pediatric Influenza Deaths

One pediatric influenza-associated pediatric death was reported from York County in a vaccinated child during the 2010-11 season.

References

<http://www.maineflu.gov>
<http://www.cdc.gov/flu/>