



Infectious Disease Epidemiology Report



Influenza Trends, Maine – 2016 - 2017

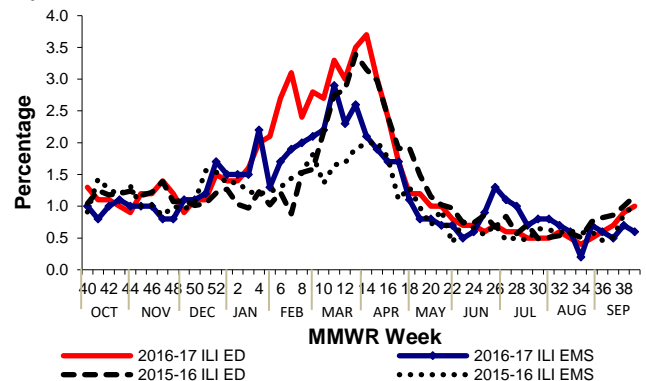
Synopsis

Influenza is a viral illness that typically occurs during the winter months. Influenza is spread from person to person primarily by coughing and sneezing, and is 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-like illness (ILI) is a term used to describe illness with the typical signs and symptoms of influenza that has not been confirmed by laboratory test. ILI is defined as fever greater than or equal to 100°F (37.8°C) plus cough and/or sore throat in the absence of a known cause other than influenza. The 2016 – 2017 influenza season ran from October 2, 2016 through September 30, 2017. Maine CDC released weekly reports from October 8, 2016 to May 22, 2017, when most activity occurred. Providers reported more cases of influenza and influenza-like illness in the 2016-2017 season than the previous season.

all Emergency Medical Services (EMS) providers in the state report daily de-identified EMS run data.

Maine CDC classified data into syndromes based on chief complaint then analyzed the ILI syndrome to calculate weekly percentage of visits. Emergency department visits for ILI peaked in early April and EMS runs for ILI peaked in late March.

Syndromic Surveillance data for ILI – Maine, 2015-17



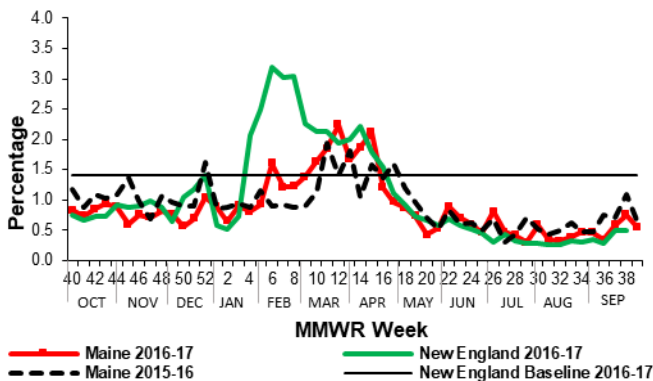
Outpatient Influenza-like Illness

Maine CDC collected outpatient ILI data through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), a collaborative effort between federal CDC, Maine CDC, and local healthcare providers. During the 2016-17 season 29 healthcare providers reported the total number of patients seen in their practices and the number of those patients with ILI by age group on a weekly basis. ILI visits peaked in late March.

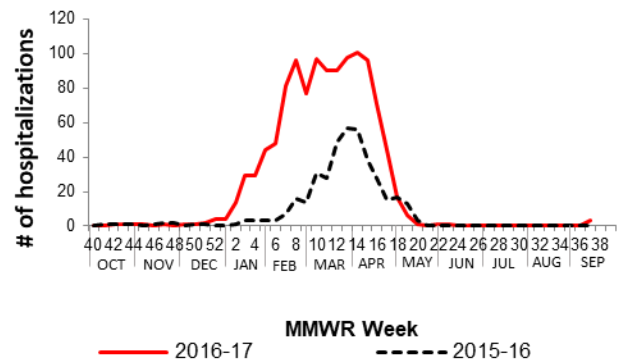
Hospital Admissions

Influenza hospitalizations became reportable in Maine beginning September 2015. During the 2016-2017 season, hospitals reported a total of 1,151 hospitalized patients who tested positive for influenza, with peak numbers of hospitalizations occurring in early April. The comparative 2015-2016 data presented may be an underestimation as providers adjusted to the new reporting requirements that season.

Outpatient Visits for ILI - Maine, 2015 – 17



Hospital Admissions due to Influenza – Maine, 2015-17



Syndromic Surveillance

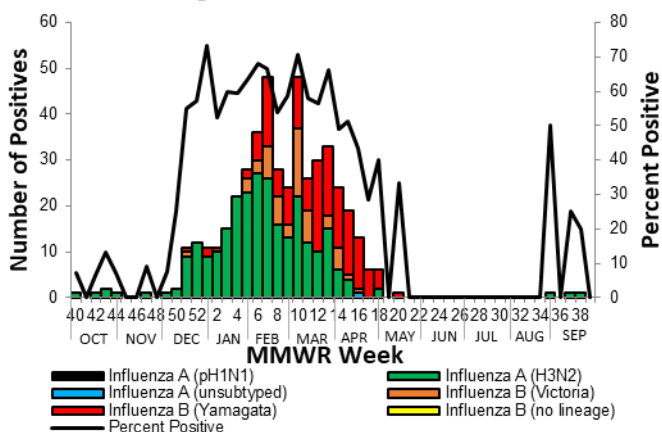
During the 2016-17 season, 33 Maine emergency departments reported daily de-identified visit data and

Influenza Trends – Maine, 2016-2017

Laboratory Reporting

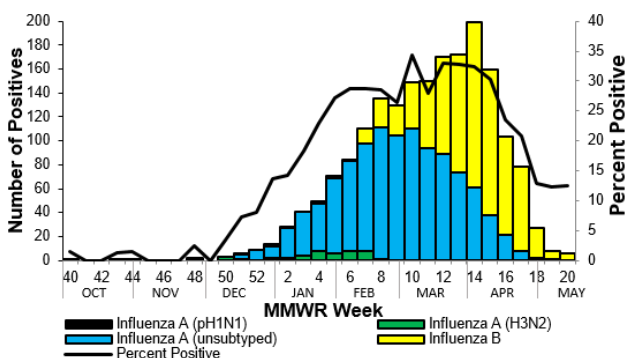
Maine’s Health and Environmental Testing Laboratory (HETL) reported the number of specimens received for influenza virus testing and the number positive by specimen collection date. During the 2016-17 season, HETL tested 955 respiratory specimens for influenza by culture and/or Polymerase Chain Reaction (PCR). Of the specimens tested for influenza, 464 (48.6%) tested positive (265 for influenza A/H3, 1 for influenza A/unsubtyped, 55 for influenza B/Victoria, and 143 for influenza B/Yamagata).

Positive PCR Samples for Influenza, HETL – Maine, 2016-17



Two Maine reference laboratories participated in influenza surveillance activities during the 2016-17 season. These laboratories submitted reports of laboratory-confirmed influenza by culture, PCR, or rapid test. During the 2016-17 season, these laboratories tested 8,008 respiratory specimens. Of these, 1,908 (23.8%) tested positive for influenza (45 for influenza A/H3, 1,068 for influenza A/unsubtyped, and 795 for influenza B).

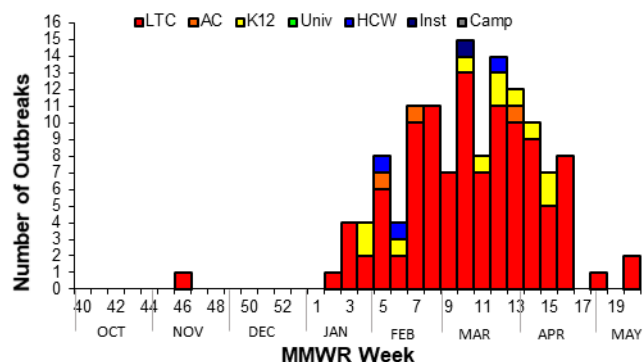
Positive PCR Samples for Influenza, Maine Reference Labs – Maine, 2016-17



Outbreaks

Outbreaks of influenza or ILI are reportable by law in Maine. The definition of an ILI outbreak depends on the facility type. During the 2016-17 season, Maine CDC identified a total of 128 ILI outbreaks. Of these outbreaks, 110 were in long-term care (LTC) facilities, 3 were in acute care facilities, 11 were in K-12 schools, 3 were in healthcare workers, and 1 was in an institution. Outbreaks peaked in early March and occurred in 15 counties (all but Piscataquis).

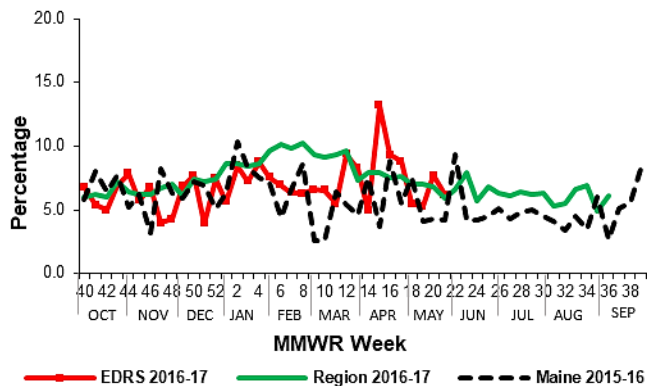
ILI Outbreaks by Facility Type – Maine, 2016-17



Death Certificates

Maine CDC obtained the number of death certificates listing pneumonia and influenza (P&I) as a cause of death from the Electronic Death Registry System (EDRS). During the 2016-17 season, vital records reported a total of 8,904 deaths. Of these, 606 (6.8%) listed pneumonia or influenza and 71 specifically listed influenza as a cause of death.

Deaths Attributable to P&I – Maine, 2015-17



Pediatric Influenza Deaths

There were no pediatric influenza-associated deaths reported during the 2016-17 influenza season.