



# Infectious Disease Epidemiology Report

## Influenza Trends, Maine – 2015 - 2016



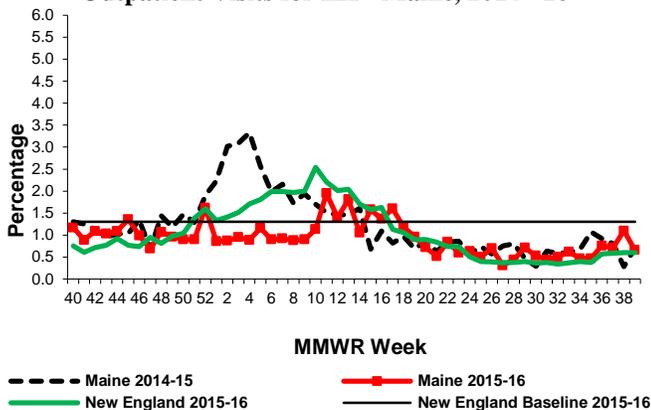
### Synopsis

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) and cough and/or sore throat in the absence of a known cause other than influenza. The 2015 – 2016 influenza season ran from October 4, 2015 through October 1, 2016. Maine CDC released weekly reports from October 13, 2015 to May 24, 2016, which is when the majority of activity occurred. The 2015-2016 influenza season was less severe than the 2014-2015 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 2015-16 season, 29 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 mid-March.

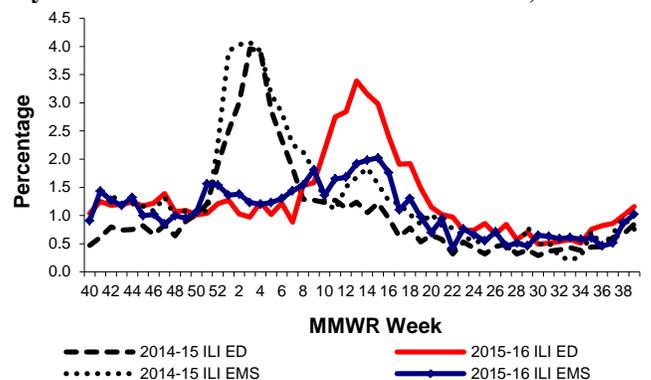
Outpatient Visits for ILI - Maine, 2014 - 16



### Syndromic Surveillance

During the 2015-16 season, 29 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 mid-March.

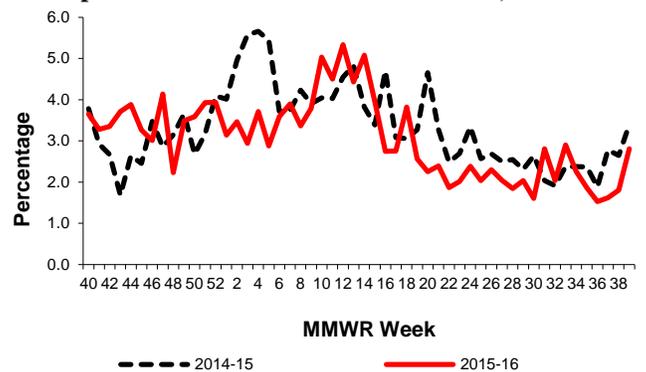
Syndromic Surveillance data for ILI – Maine, 2014-16



### Hospital Inpatients

Surveillance for inpatient respiratory illness admissions in Maine was conducted in collaboration with four hospitals. During the 2015-16 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 March.

Hospital Admissions due to P&I – Maine, 2014-16

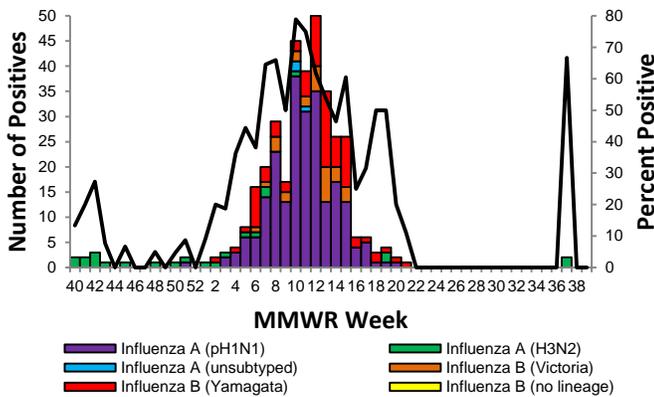


# Influenza Trends – Maine, 2015-2016

## Laboratory Reporting

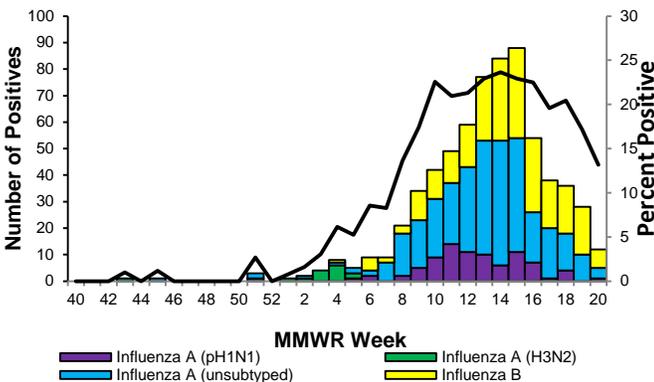
Maine CDC’s Health and Environmental Testing Laboratory (HETL) reported the number of specimens received for respiratory virus testing and the number positive by specimen collection date. During the 2015-16 season, 921 respiratory specimens were tested by HETL for influenza by culture and/or Polymerase Chain Reaction (PCR). Of the specimens tested for influenza, 358 (38.9%) were positive for influenza (227 for influenza A/pH1N1, 24 for influenza A/H3, 3 for influenza A/unsubtyped, 29 for influenza B/Victoria, and 75 for influenza B/Yamagata).

Positive PCR Samples for Influenza, HETL – Maine, 2015-16



Two Maine reference laboratories participated in influenza surveillance activities during the 2015-16 season. These laboratories submitted reports of laboratory-confirmed influenza by culture, PCR, or rapid test. During the 2015-16 season, 4,999 respiratory specimens were tested for influenza. Of these, 665 (13.3%) were positive for influenza (85 for influenza A/pH1N1, 15 for influenza A/H3, 326 for influenza A/unsubtyped, and 239 for influenza B).

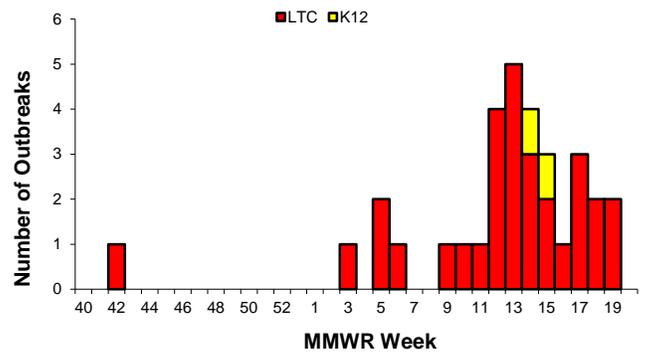
Positive PCR Samples for Influenza, Maine Reference Labs – Maine, 2015-16



## 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 2015-16 season, a total of 32 outbreaks of influenza were reported in Maine. Of these outbreaks, 30 were in long-term care (LTC) facilities, and 2 were in K-12 schools. Outbreaks peaked in late March and occurred in 14 counties (all but Franklin and Washington).

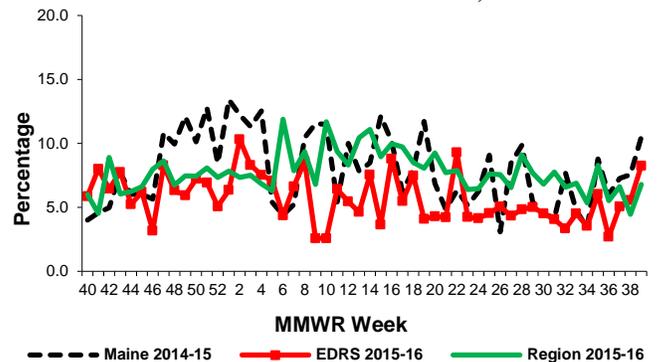
ILI Outbreaks by Facility Type – Maine, 2015-16



## 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 2015-16 season, a total of 13,367 deaths were reported to EDRS. Of these, 771 (5.8%) were attributed to pneumonia or influenza, and 6 (0.04%) specifically listed influenza as a cause of death.

Deaths Attributable to P&I – Maine, 2014-16



## Pediatric Influenza Deaths

One pediatric influenza-associated death was reported during the 2015-16 season in an unvaccinated child less than 5 years old. This was confirmed as influenza B/Victoria lineage.