



2016-17 Ottawa County Influenza Surveillance Report

Local Influenza Activity Level: Regional

Released February 9, 2017

Influenza and Influenza-like Illness (ILI) reported by schools, licensed childcare, colleges, healthcare providers and long-term care facilities to the Ottawa County Department of Public Health through the week ending 2/4/17 (Week 5) indicate widespread illness. 286 confirmed cases of influenza, 57% type A, 32% type B and 11% of undetermined type, have been reported by healthcare providers since mid-October, though testing is not always reflective of the prevalence of influenza in a community. Sixty percent (171) of the positive rapid flu tests for this season occurred during the last two reporting weeks.

Figure 1. Comparison of Current Flu-like Illness Activity to the Average over the Previous Three Flu Seasons

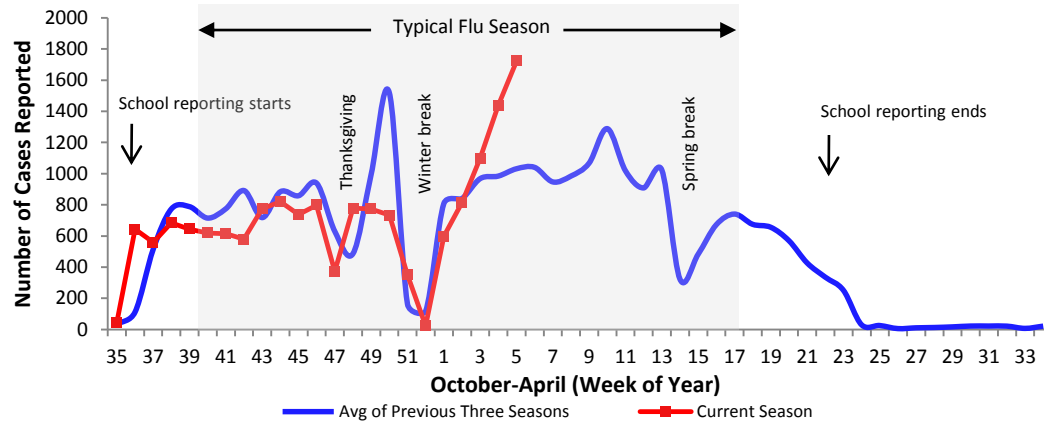
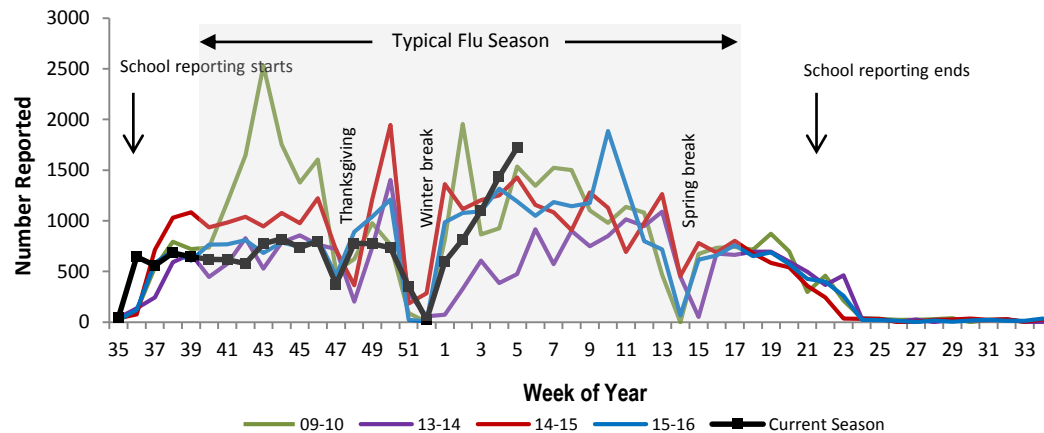


Figure 1 shows total reported cases of influenza-like illness or *ILI* (defined as fever in the presence of cough and/or sore throat). Weekly reports were following a pattern similar to the expected seasonal pattern into January. The last two to three reporting weeks have exceeded expected levels and is at a seasonal high.

Figure 2. Comparison of Current Flu-like Illness Cases to Selected Previous Flu Seasons



MDSS data in Figure 2 indicates that this season's weekly number of *flu-like illness* cases had been following a pattern similar to the 13-14 and 15-16 seasons. The pandemic flu season of 09-10 had an early seasonal peak, while last year peaked late. *ILI* reports have increased steadily following winter break, and have exceeded the previous 3 seasons for week 5.

Figure 3. Percentage of Flu & Flu-like Illness in Students and in Patients, 2016-17 Flu Season

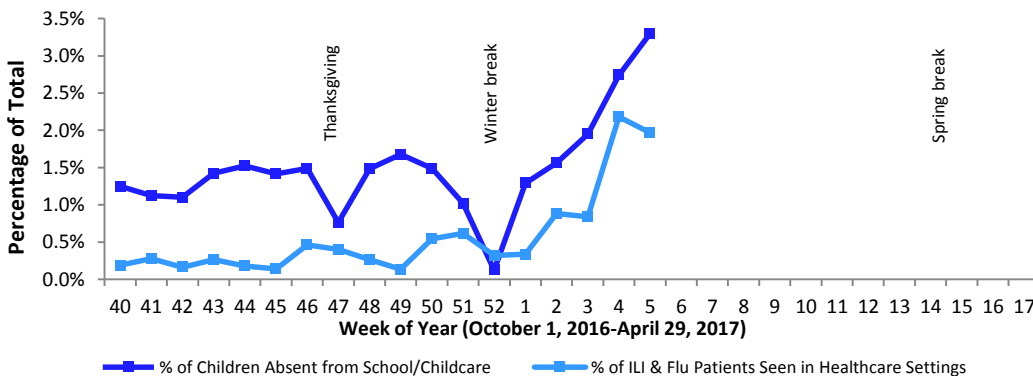


Figure 3 compares the percent reported absent due to *ILI* by schools and childcare, with the percent of visits for *ILI* & influenza to participating healthcare providers. During the peak of flu season, percentages are typically 4% to more. Both are at high levels for this season.

2016-17 Ottawa County Influenza Surveillance Summary

Michigan Syndromic Surveillance System (MSSS): Data from area emergency departments indicates that through 2/4/17, the proportion of visits for *constitutional complaints* (Figure 4) among Ottawa County residents had been less than the seasonal pattern for December, but is slightly higher than expected for the past 3 weeks. Constitutional visits are half a percentage point higher than the same week last season, have been steadily increasing since mid-December, but are currently stable.

The percentage of emergency department visits for *respiratory complaints* (Figure 5) among Ottawa County residents was higher than expected in late November and late December, but has decreased and is now at expected levels. Like constitutional visits, respiratory-related emergency visits are about half a percentage point higher than the same week last flu season.

Constitutional symptoms include fever, chills, fatigue, among others. Respiratory symptoms include cough, sore throat, congestion, among others.

Figure 4. 2016-17 Influenza Season: Percentage of Visits to Emergency Departments for Constitutional Complaints

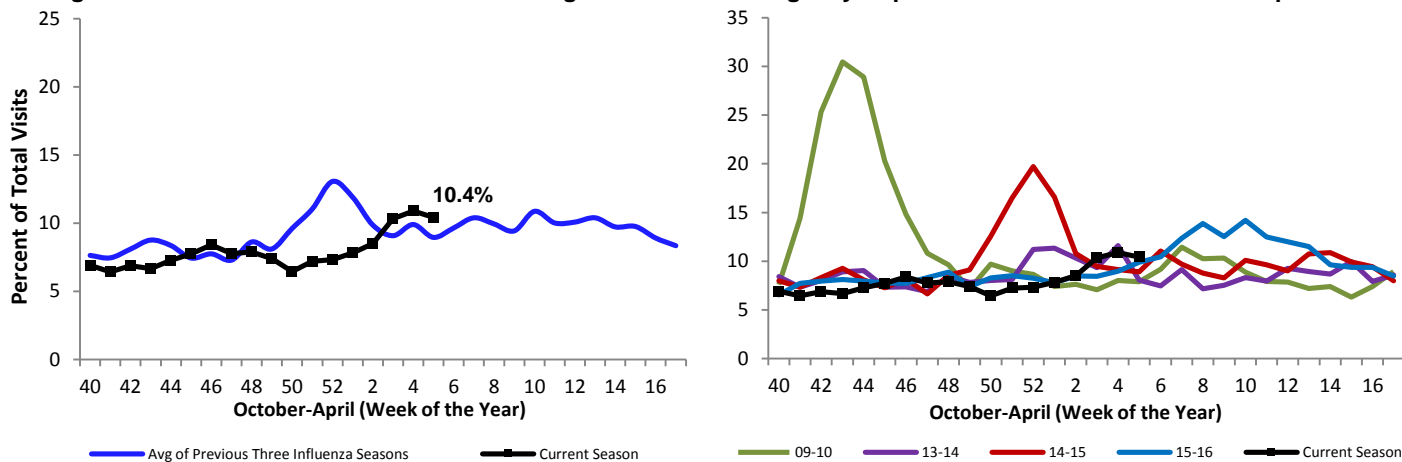
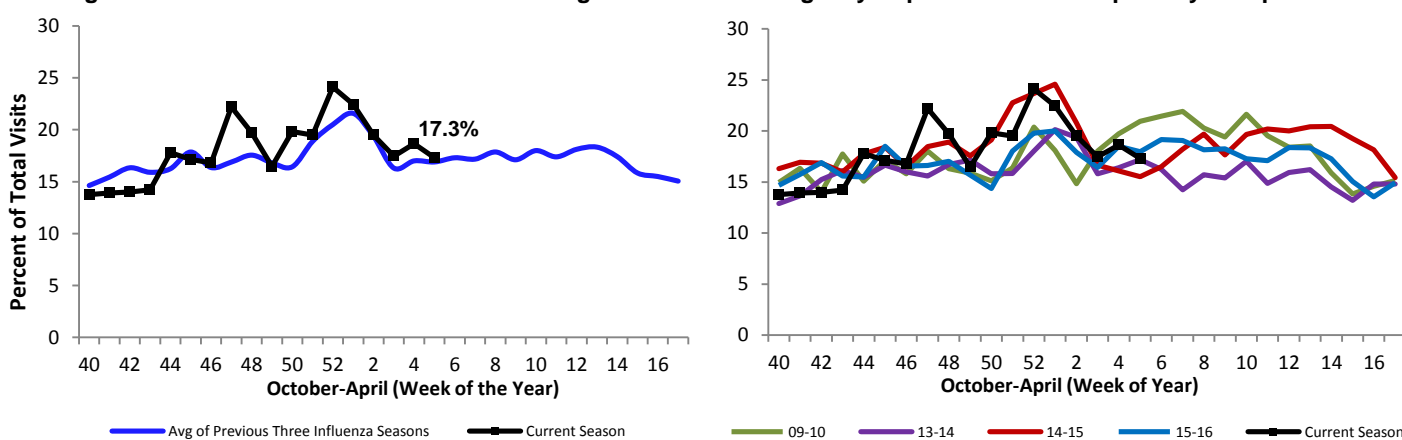


Figure 5. 2016-17 Influenza Season: Percentage of Visits to Emergency Departments for Respiratory Complaints



Influenza and Respiratory Illness Outbreaks in Congregate Settings: Outbreaks of respiratory or flu-like illness are listed in the table below by facility type. There have been 8 respiratory illness congregate setting outbreaks reported to ODCPH for the 2016-17 season.

Facility Type	Total
Licensed Childcare	3
K-12 School	3
Long-term Care or Assisted Living	2

Influenza-associated Pediatric Mortality: There have been 15 influenza-associated pediatric deaths reported in the U.S. as of 1/28/17, but none reported in Michigan. There were 13 reported in the U.S. by the same point last season.