Washington State Influenza Update, 2017-2018

The Department of Health (DOH), in collaboration with local health jurisdictions and the Centers Disease Control and Prevention (CDC), performed surveillance for influenza during the 2017 to 2018 season using several different systems. This report summarizes data collected through key systems from October 1, 2017 to September 29, 2018 (week 40 of 2017 through week 39 of 2018).

Overall Summary

Nationally, the 2017-2018 season was categorized as a high severity season. Activity reached an extended period of high activity during January and February, and remained elevated through March. Nationally, influenza A (H3N2) viruses were predominant overall for the season, with influenza B viruses becoming predominant from March onwards. In Washington state, influenza A (H3N2) and A (H1N1), as well as influenza B viruses, were seen throughout the season.

Influenza Laboratory Surveillance Data

For the 2017-2018 influenza season, CDC has generated separate graphs of data reported to CDC by public health laboratories (Figure 1) and commercial laboratories (Figure 2).

Figure 1: Influenza Positive Tests Reported to CDC, WA Public Health Laboratories

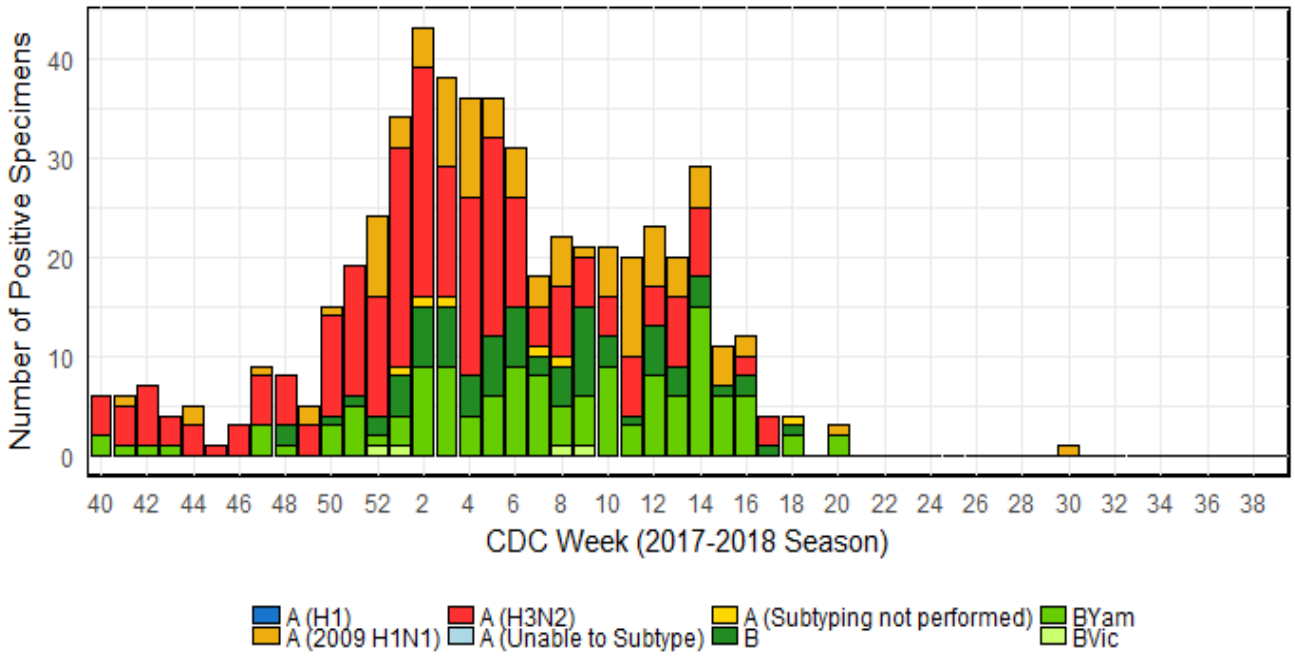
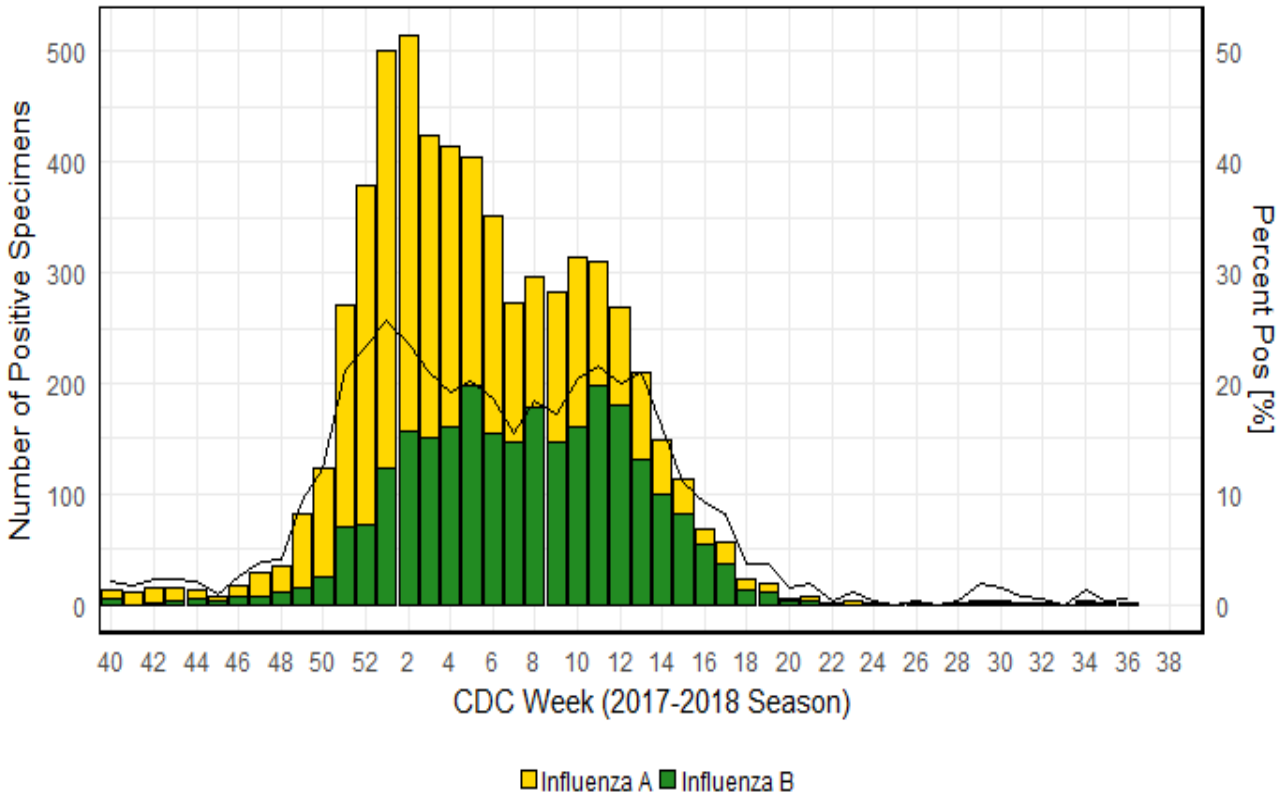


Figure 2: Influenza Positive Tests Reported to CDC, WA Commercial Laboratories



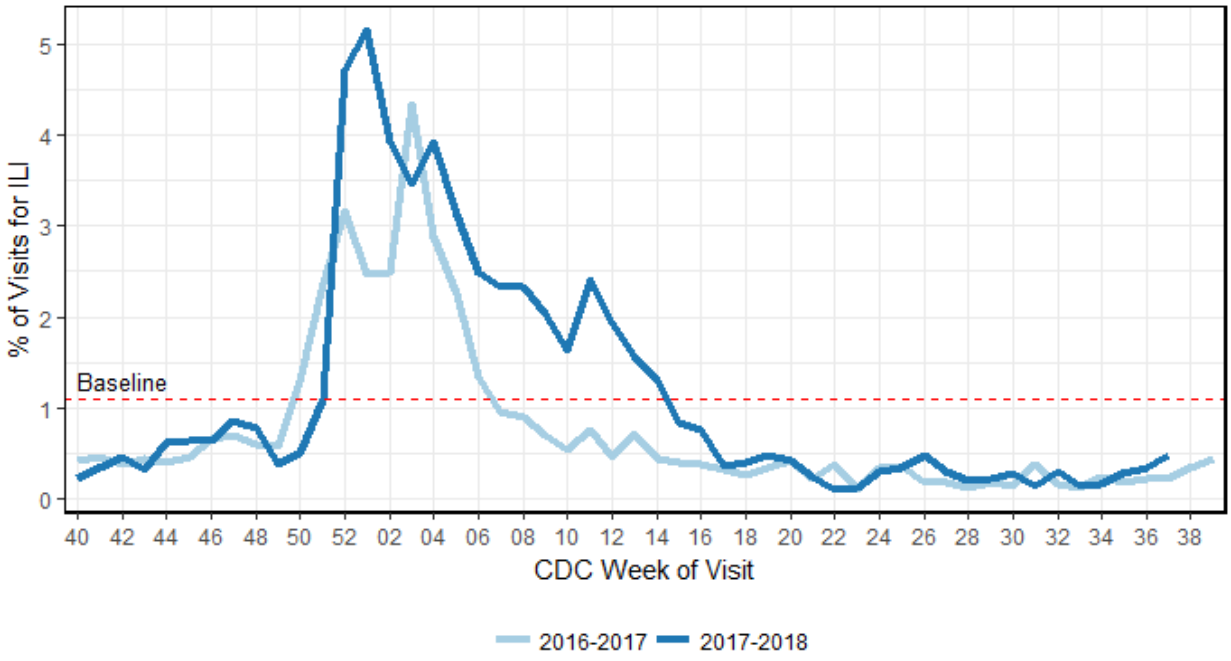
Outpatient Influenza-like Illness Surveillance Network (ILINet) Data

Information on patient visits to health care providers for influenza-like illness is collected through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet).

Each week, up to 40 outpatient healthcare providers in Washington reported data to CDC on the total number of patients seen and the number of those patients with influenza-like illness (ILI) by age group. For the purposes of ILINet, ILI is defined as fever (temp 100ºF/37.8ºC or higher) plus cough and/or sore throat.

More information about ILINet is available here.

Figure 3: Percentage of ILI Visits Reported by Sentinel Providers, Washington, 2016-2018

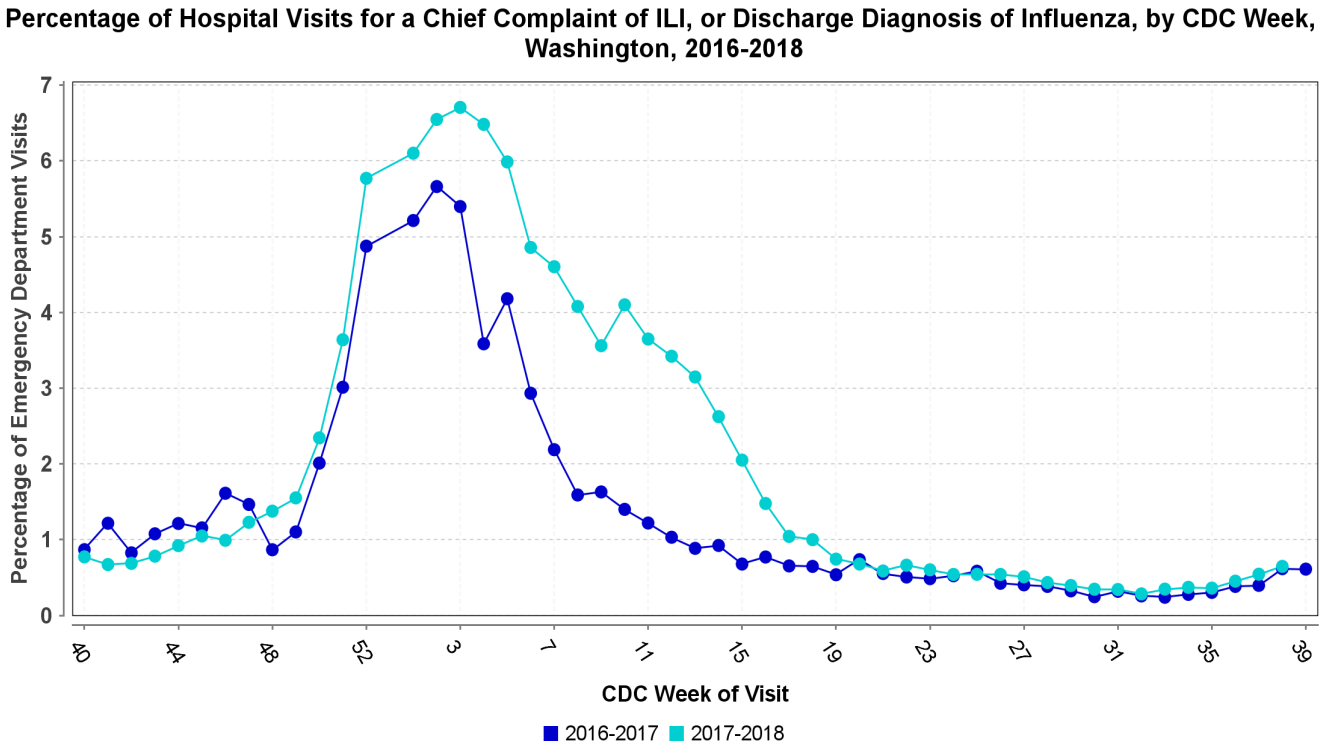


ESSENCE Syndromic Surveillance Data

Figure 4 shows the proportion of visits at a subset of emergency departments across Washington for a chief complaint of influenza-like illness, or discharge diagnosis of influenza, by CDC week. For this purpose, ILI is defined as "influenza" or fever with cough or fever with sore throat.

For more information about Syndromic Surveillance in Washington State, see http://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/HealthcareProfessionsandFacilities/DataReportingandRetrieval/ElectronicHealthRecordsMeaningfulUse/SyndromicSurveillance

Figure 4: Syndromic Surveillance, Percentage of Hospital Visits for a Chief Complaint of ILI, or Discharge Diagnosis of Influenza, by CDC Week, Washington, 2016-2018



Influenza-like Illness Outbreaks in Long Term Care Facilities

Long term care facilities are required to report all suspected and confirmed outbreaks to their local health jurisdiction per Washington Administrative Code (WAC) 246-101-305. Long-term care facilities are required to report the following:

- A sudden increase in acute febrile respiratory illness over the normal background rate (e.g., 2 or more cases of acute respiratory illness occurring within 72 hours of each other) OR
- Any resident who tests positive for influenza

Recommendations for prevention and control of influenza outbreaks in long-term care facilities are available here.

Local health jurisdictions in turn report long-term care facility influenza-like illness outbreaks to the Washington State Department of Health.

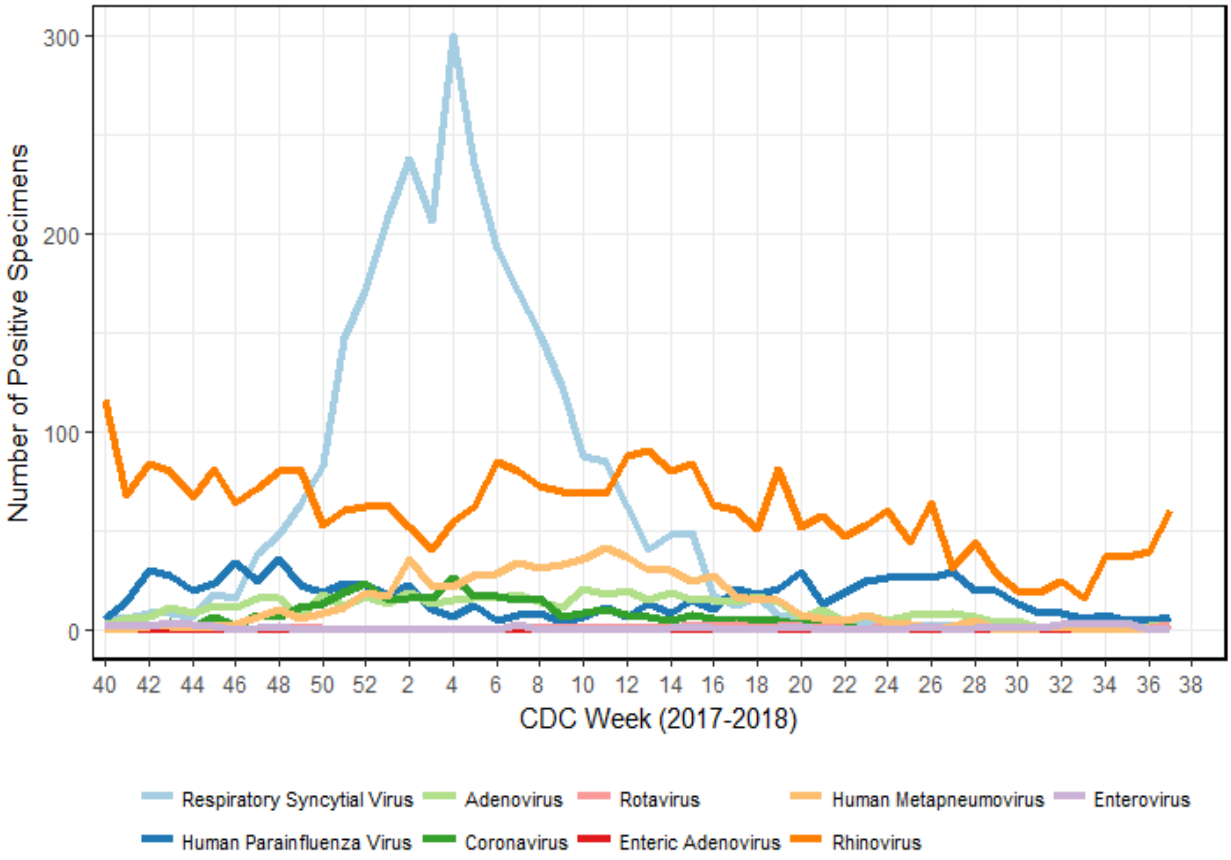
For the 2017-2018 season, 237 influenza-like illness outbreaks in long-term care facilities were reported to the Washington State Department of Health.

Other Causes of Respiratory Infections

During the 2017-2018 season, the following non-influenza respiratory viruses were reported to the National Respiratory and Enteric Surveillance System (NREVSS).

For more information about NREVSS, see https://www.cdc.gov/surveillance/nrevss/index.html.

Figure 5: Respiratory and Enteric Viruses, Washington, 2017-2018 Season to Date



Laboratory Confirmed Influenza-Associated Deaths

Note that these counts reflect only deaths officially reported to the Washington State Department of Health.

Two hundred ninety six laboratory-confirmed influenza deaths were reported for the 2017-2018 season: 176 influenza A, 113 influenza B, and 7 type unknown (Table 1). Most deaths occurred in people with underlying health conditions, or in people with no pre-existing conditions but who were elderly. One pediatric death was reported.

Table 1: Count and rate of reported laboratory-confirmed influenza-associated deaths by age group, Washington, 2017-2018 season

Age Group (in years)	Count of Deaths	Death Rate (per 100,000 population)
0-4	1	0.23
5-24	0	0.00
25-49	13	0.56
50-64	54	3.88
65+	228	24.33
Total	***296***	***4.30***

Reported Laboratory-Confirmed Influenza-Associated Deaths, Past Seasons

For reference, lab-confirmed influenza death totals reported to the Department of Health for past seasons are presented below in Table 2. Note that for the purposes of tables 1 and 2, each influenza season runs from week 40 of one year to week 39 of the next (roughly October to October).

Past season summaries are available:
http://www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/CommunicableDiseaseSurveillanceData/InfluenzaSurveillanceData

Note that influenza deaths are likely under-reported. The reasons for this under-reporting vary. Influenza may not be listed as a cause of death, influenza testing may not have occurred in a timely fashion to identify the virus, or may not have been performed at all, and lab-confirmed influenza deaths may not have been appropriately reported to public health.

CDC has published information about estimating seasonal influenza-associated deaths: (http://www.cdc.gov/flu/about/disease/us_flu-related_deaths.htm?mobile=nocontent)

Table 2: Count of Reported Laboratory-Confirmed Influenza-Associated Deaths, Past Seasons Total

Season	Count of Deaths for the Season
2017-2018	296
2016-2017	278
2015-2016	67
2014-2015	156
2013-2014	80
2012-2013	54
2011-2012	20
2010-2011	36

Additional Resources

International Influenza Data: http://www.who.int/topics/influenza/en/
National Influenza Surveillance Report: http://www.cdc.gov/flu/weekly/

Washington DOH Influenza Information for Public Health and Healthcare Providers: http://www.doh.wa.gov/ForPublicHealthandHealthcareProviders/PublicHealthSystemResourcesandServices/Immunization/InfluenzaFluInformation#recommendation

Washington Local Health Department Influenza Surveillance Reports:

Clark County: https://www.clark.wa.gov/public-health/flu

King County:
http://www.kingcounty.gov/healthservices/health/communicable/diseases/Influenza.aspx

Kitsap County: http://www.kitsappublichealth.org/Respiratory.pdf

Pierce County: https://www.tpchd.org/healthy-people/provider-resources/disease-information-for-providers/influenza/influenza-reports

Whatcom County: http://www.co.whatcom.wa.us/967/Influenza

Yakima County: http://www.yakimacounty.us/365/RSV-Flu-Stats