

# INFLUENZA SURVEILLANCE, 2016–2017

The Department of Health (DOH), in collaboration with local health jurisdictions and Centers for Disease Control and Prevention (CDC), performed surveillance for influenza during the 2016 to 2017 season using several different systems. This report summarizes data collected from July 23, 2016 to July 22, 2017 (week 30 of 2016 through week 29 of 2017) through key systems.

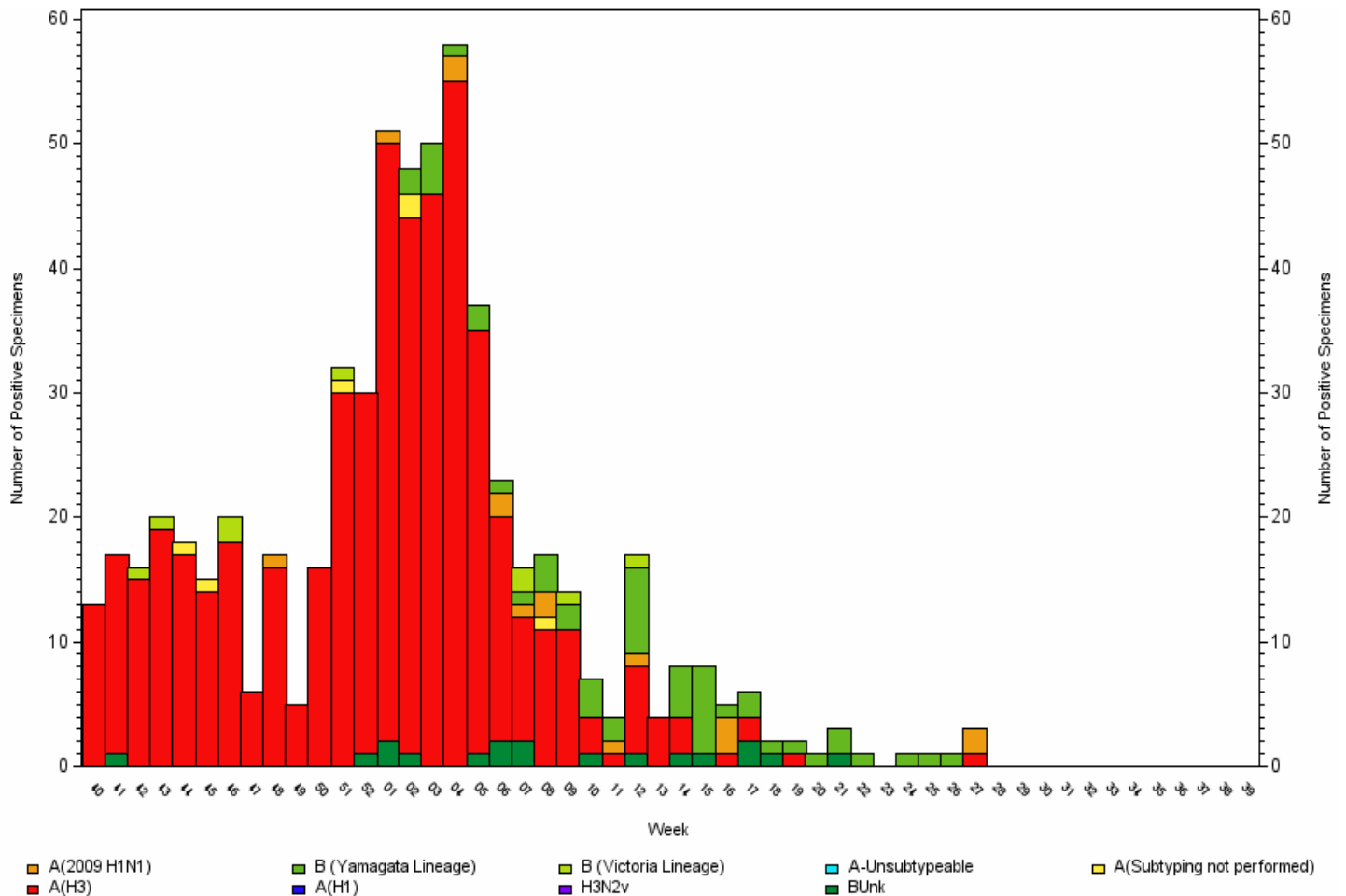
## Overall Summary

Nationally, the [2016-2017 season](#) was categorized as moderate. Activity nationally peaked in February 2017 while in Washington influenza activity peaked slightly earlier in January. Nationally as well as in Washington, influenza A (H3N2) viruses predominated overall, with influenza B viruses occurring later in the season.

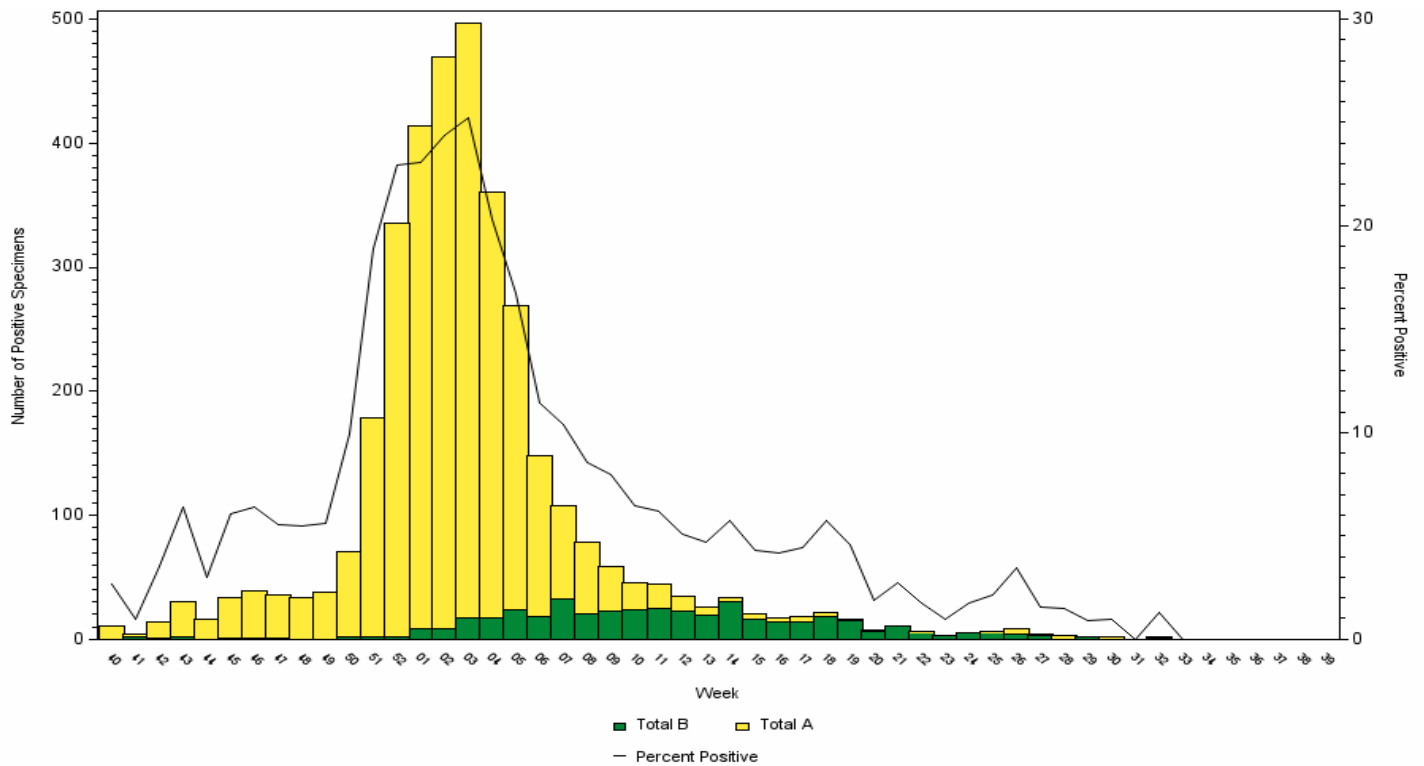
## Influenza Laboratory Surveillance Data

For the 2016-2017 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**



Updated 08/25/2017

### Antigenic Characterization

Antigenic characterization has been conducted by CDC on a subset of influenza specimens collected in Washington during the 2016-2017 season.

Twenty one influenza A (H3N2) specimens were characterized as A/Hong Kong/4801/2014-like, the influenza A (H3N2) component of the 2016-2017 vaccine.

Three influenza B specimens were characterized as B/Brisbane/60/2008-like, the B Victoria lineage component of the 2016-2017 trivalent and quadrivalent influenza vaccines.

Fourteen influenza B specimens were characterized as B/Phuket/3073/2013-like, the B Yamagata lineage component of the 2016-2017 quadrivalent influenza vaccine.

Two influenza A specimens were characterized as A/Michigan/45/2015 (H1N1)pdm09-like.

### Novel, Avian and Unsubtypable Influenza Viruses

In March 2017, influenza [H7N9](#) was identified in Tennessee commercial poultry and low pathogenic avian influenza was identified in Alabama poultry.

In December 2016 influenza H7N2 was identified in cats in New York City, with [one human infection](#) reported. For more about avian influenza, see [CDC's materials](#).

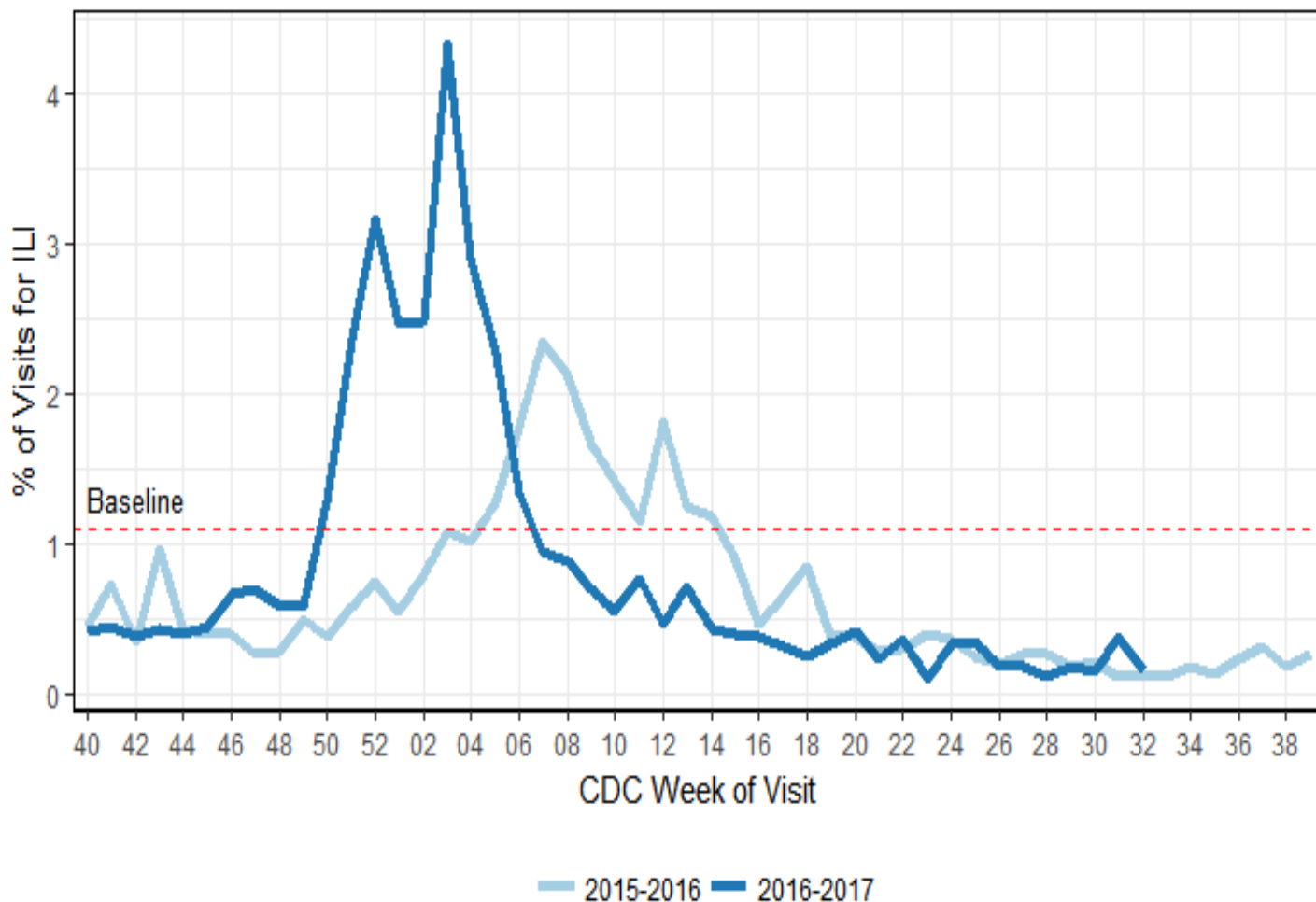
### **Outpatient Influenza-like Illness Surveillance Network (ILINet) Data**

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 100°F/37.8°C 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, 2015–2017**



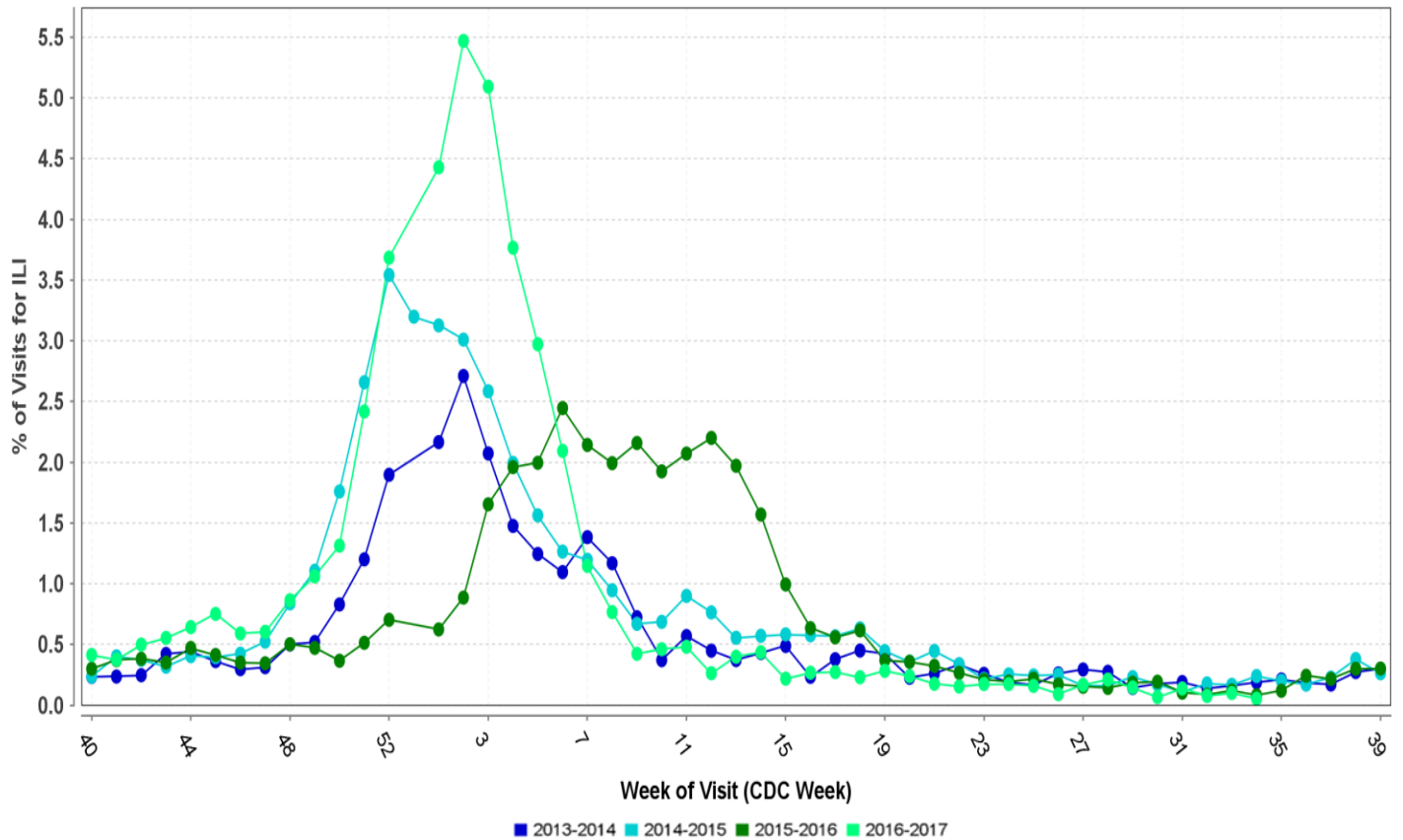
## Influenza-like Illness Syndromic Surveillance Data, Western Washington

### ESSENCE Syndromic Surveillance Data

Figure 4 shows the proportion of visits at a sample of emergency departments in western 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. Syndromic Surveillance ILI data are not available for eastern Washington facilities.

More information about Syndromic Surveillance in Washington state is available [here](#).

**Figure 4: Syndromic Surveillance, Percentage of Hospital Visits for a Chief Complaint of ILI, or Discharge Diagnosis of Influenza, by CDC Week, Western Washington, 2013-2017**



## 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:

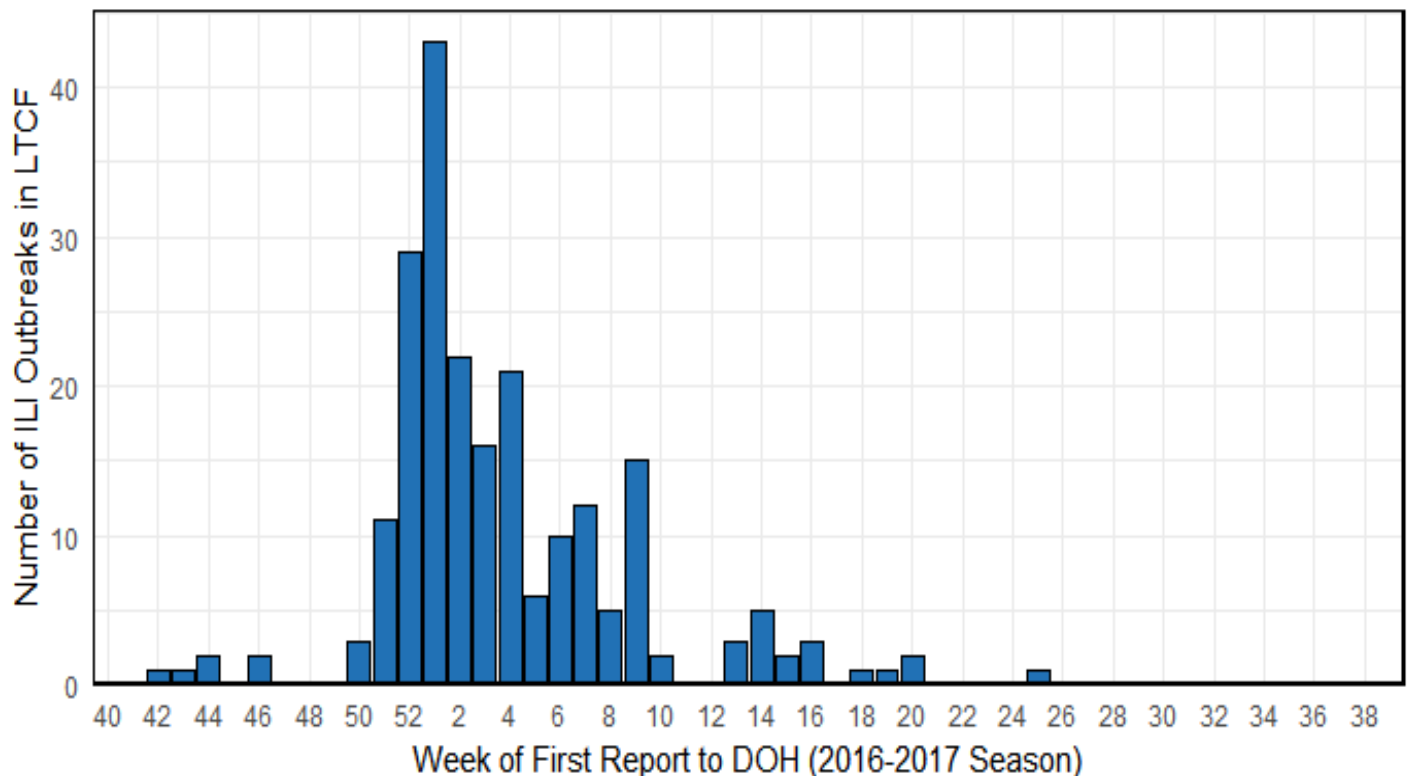
- A sudden increase in acute febrile respiratory illness over the normal background rate (e.g., 2 or more cases of acute respiratory illness occurring within 72 hours of each other) OR
- Any resident who tests positive for influenza

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.

Since July 2016, 234 influenza-like illness outbreaks in long-term care facilities have been reported to the Washington State Department of Health.

**Figure 5: Influenza-like Illness Outbreaks in Long Term Care Facilities in Washington State, 2016-2017**



## **Reported Laboratory-Confirmed Influenza-Associated Deaths**

### **Reported laboratory-Confirmed Influenza Associated Deaths**

Two hundred and seventy six laboratory-confirmed influenza deaths have been reported from week 40 of 2016 through week 32 of 2017: 259 influenza A and 17 influenza B. Most deaths have occurred in people with underlying health conditions, or in people with no pre-existing conditions but who were elderly. Six deaths have occurred in children.

**Table 1: Number and rate of reported laboratory-confirmed influenza-**

<b>Age Group (in years)</b>	<b>Number of Deaths</b>	<b>Death Rate (per 100,000 population)</b>
0–4	2	0.46
5–24	5	0.28
25–49	15	0.22
50–64	22	1.58
65+	242	25.83
<b>Total</b>	<b>276</b>	<b>4.01</b>

### **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 4 and 5, 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 [here](#).

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 [here](#).

**Table 2: Number and rate of reported laboratory-confirmed influenza-associated deaths by age group, past season totals**

<b>Season</b>	<b>Count of Deaths for Season</b>
2016-2017, weeks 32 to 40	276
2015-2016, total	67
2014-2015, total	156
2013-2014, total	80
2012-2013, total	54
2011-2012, total	20
2010-2011, total	36