Central Oregon Public Health Quarterly

Communicable Disease Update for Crook, Deschutes, and Jefferson Counties

Second Quarter Report, 2020

24/7 Communicable Disease reporting lines:

Crook County: 541-447-5165 Deschutes County: 541-322-7418

Jefferson County: 541-475-4456

Overview of 2019-2020 Central Oregon Flu Season

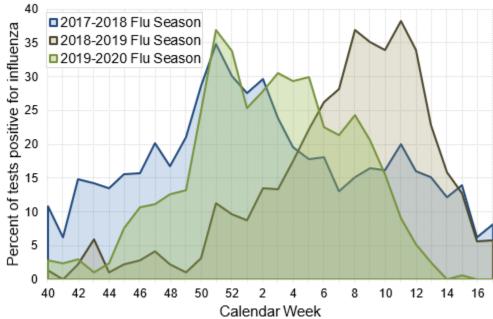
Flu in Central Oregon peaked earlier than last season.

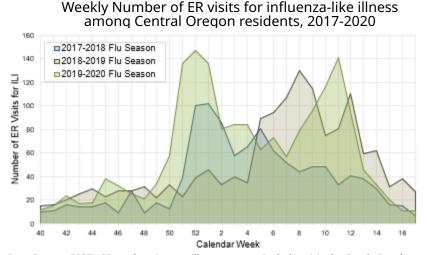
According to data collected from local Central Oregon labs, 2019-2020 flu season activity (shown in green) peaked during calendar week 51 (December 13 through December 19), followed by a steady decline in flu activity.

Flu season peaked around around the same time as 2017-2018 season and 12 weeks earlier than the 2018-2019 season.

This variability across flu seasons highlights the importance of regular local surveillance to identify when flu activity is increasing in our area.

Percent of reported flu tests positive by week, 2017-2020





Data Source: ESSENCE syndromic surveillance system. Includes visits by Crook, Deschutes, and Jefferson County residents to any ER across Oregon.

This flu season appears to have been less severe than last season.

According to CDC, the 2019-2020 flu season had a lower number of estimated hospitalizations than any season since CDC began making these estimates*.

Among Central Oregon residents, there were around 1,800 total emergency room (ER) visits for influenzalike illness (ILI) this season, compared to around 1,500 total visits for ILI last season. The number of weekly ILI visits peaked at 147 during calendar week 52 (December 22 through December 28). Last season's peak occurred during calendar week 8 (130 visits), and the 2017-2018 season's peak occurred during week 1 (176 visits).

* Centers for Disease Control and Prevention. (2020, December 3). Preliminary In-Season 2019–2020 Flu Burden Estimates. https://www.cdc.gov/flu/about/burden/preliminary-in-season-estimates htm

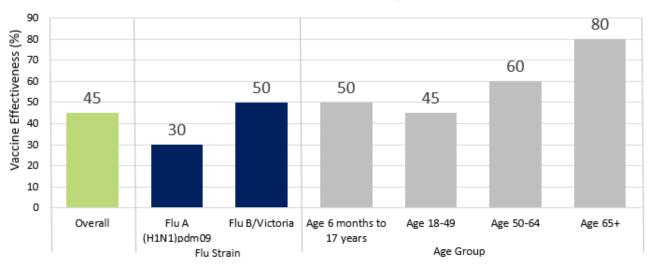
There were two reported flu outbreaks this season in Central Oregon.

Both flu outbreaks occurred in long term care facilities. The number of flu outbreaks reported this season is lower than the number reported last season (5). Statewide, there were 93 flu outbreaks this season as of May 1, around 64% of which occurred in long term care facilities.

Across Oregon as a whole, there were no flu-associated pediatric deaths reported so far this flu season.

Nationwide, there have been 169 flu-associated pediatric deaths reported so far this season, which is lower than the 2018-2019 season (199) and higher than the 2017-2018 season (114).

Flu Vaccine Effectiveness Estimates, 2019-2020 Flu Season



*Interim national estimates of the 2018-2019 seasonal flu vaccine effectiveness were published in the February 21, 2020 issue of Morbidity and Mortality Weekly Report. Vaccine effectiveness (VE) is defined as the percent reduction in the risk of medically attended, laboratoryconfirmed influenza virus infection.

Overall vaccine effectiveness (VE) this season was estimated to be 45%*. Over the past ten flu seasons, overall VE has ranged from 19% (2014-2015 season) to 60% (2010-2011 season).

As shown above, VE for Flu A (H1N1)pdm09 (30%) and is lower than for Flu B / Victoria (50%). There is no available estimate for Flu A (H3N2) VE for the 2019-2020 season. Overall VE estimates varied by age group. Vaccine effectiveness estimates were highest among those aged 65 years and older(80% VE) and lowest among those aged 18 to 49 years (45% VE).

Flu Vaccine Uptake

2019-2020 Oregon Flu Vaccine Doses Reported by Week

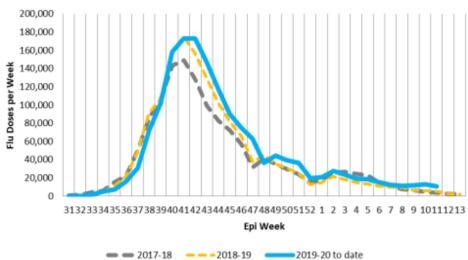


Figure source: Oregon Health Authority

As of mid-March, the Oregon Health Authority (OHA) observed that rates of new influenza immunization per week continue to run above prior seasons.

Around 1.7 million flu vaccines were administered to Oregon residents, which is higher than the 1.5 million administered during the 2018-2019 flu season and the 1.37 million administered during the 2017-2018 flu season.

The peak week for Oregonians to receive a flu vaccine was during week 41 (October 7 through October 13).

Despite the decline observed in mid-October, rates of new immunizations per week remained slightly above what is normally seen at this time of year.

Mid-season preliminary seasonal flu immunization rates by age

In January, Oregon Health Authority provided preliminary estimates of the season adult flu immunization rates by age.

Oregonians over age 65 have the highest flu immunization rate (64.9%), followed by those age 50 to 64 (43.8%) and those age and 4 or younger (40.7%).

Oregonians age 10 to 17 have the lowest immunization rate (27.4%).

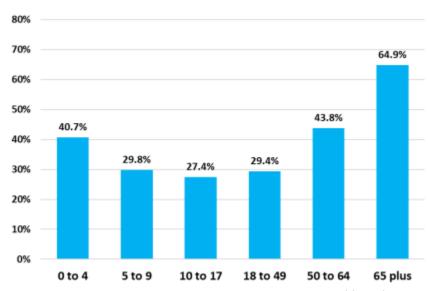


Figure source: Oregon Health Authority