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START OF 2018-19 INFLUENZA SEASON

The 2018-19 influenza ("flu") season began on Sunday, September 30, 2018. Updates for this flu season are provided below.

Highlights from ACIP's Recommendations for the 2018-19 Flu Season

In August the Advisory Committee for Immunization Practices (ACIP) released their recommendations for the 2018-19 flu season. The full report is available at <https://www.cdc.gov/mmwr/volumes/67/rr/rr6703a1.htm>.

The Washoe County Health District (WCHD) encourages all providers to read the full report as it discusses specific changes to labeling, recent licensures, and age indications, among others. However, a few highlights from their recommendations are listed below.

- **Routine annual influenza vaccination is recommended for all persons aged ≥ 6 months who do not have contraindications.**
- A licensed, age-appropriate influenza vaccine should be used: inactivated influenza vaccine (IIV), recombinant influenza vaccine (RIV), or live attenuated influenza vaccine (LAIV). Consult package information for age indications.
- **Nasal spray flu vaccine (LAIV4, FluMist) is an option for influenza vaccination of persons for whom it is appropriate for the 2018–19 season.**
- The flu vaccine has been updated. Vaccine viruses included in the 2018–19 U.S. trivalent influenza vaccines will be an A/Michigan/45/2015 (H1N1)pdm09-like virus, an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus, and B/Colorado/06/2017-like virus (Victoria lineage). Quadrivalent influenza vaccines will contain these three viruses and an additional influenza B vaccine virus, a B/Phuket/3073/2013-like virus (Yamagata lineage).
- **Vaccination should be offered by the end of October if possible** and should continue to be offered as long as influenza viruses are circulating and unexpired vaccine is available.
- Emphasis should be placed on vaccination of high-risk groups and their contacts and caregivers.
- All women who are pregnant or who might be pregnant during the influenza season should receive influenza vaccine. An age-appropriate IIV or RIV4 may be used. LAIV4 should not be used during pregnancy.

- Persons aged ≥ 65 years may receive any age-appropriate IIV (standard- or high-dose, trivalent or quadrivalent, adjuvanted or unadjuvanted) or RIV4. High-dose IIV3 exhibited superior efficacy over comparator standard-dose IIV3 in a large randomized trial, and may provide better protection than standard dose IIV3 for this age group. However, vaccination should not be delayed to find a particular product if an appropriate one is available.

Weekly Flu Reports

WCHD puts together weekly flu reports that summarize flu activity in Washoe County. These reports include information about influenza-like illness (ILI) activity, influenza test results, numbers of hospitalizations, pneumonia and influenza mortality, and regional and national flu activity. These reports are posted weekly and are made available to the public at

<http://tinyurl.com/WashoeFlu>. These weekly reports are also emailed to physicians, public health practitioners, infection preventionists, daycare operators, and others in our community. If you would like to be added to the email list serve, please email the following information to epicenter@washoecounty.us: your name (first and last), title, organization, and email address.

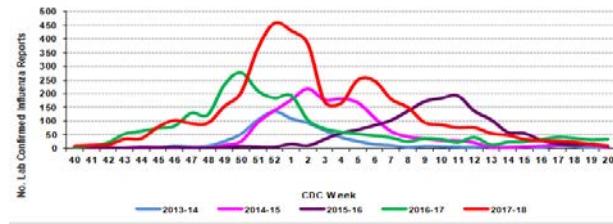
Disease Reporting

Influenza is a reportable condition in Nevada. Please report cases to WCHD at 775-328-2447 (24/7) or 775-328-3764 (Fax). Suspected or confirmed outbreaks of flu must be reported as soon as possible.

SUMMARY OF THE 2017-18 SEASON

The 2017-18 influenza season had the greatest number of confirmed cases ever reported in Washoe County in a single season. A total of 5,522 confirmed cases were reported, a 128% increase over the 2016-17 influenza season (Figure 1). A total of 542 hospitalizations were reported, a 72% increase over the 2016-17 influenza season. Twenty-six deaths (26) due to influenza were reported, a 225% increase over the 2016-17 season.

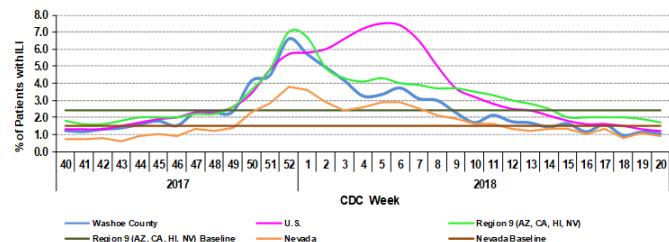
Figure 1. Laboratory Confirmed Influenza Reports, 2013-2018 Seasons.



Nationwide the 2017-18 influenza season was classified as a high severity season by the Centers for Disease Control and Prevention (CDC). The 2017-18 season was the first season to be classified as high severity across all age groups. As of August 25, 2018, a total of 180 pediatric deaths had been reported to CDC. This number exceeds the previous highest number of flu-associated deaths in children reported during a regular (non-pandemic) flu season (171 during the 2012-2013 season). Approximately 80% of these deaths occurred in children who had not received the flu vaccine.

Influenza A(H3N2) viruses predominated overall both in Washoe County and across the nation. However, influenza B viruses became more commonly reported than influenza A viruses starting in late winter. Peak influenza-like illness (ILI) activity in Washoe County occurred in Week 52 (Week ending December 30, 2017) at 6.6% (Figure 2).

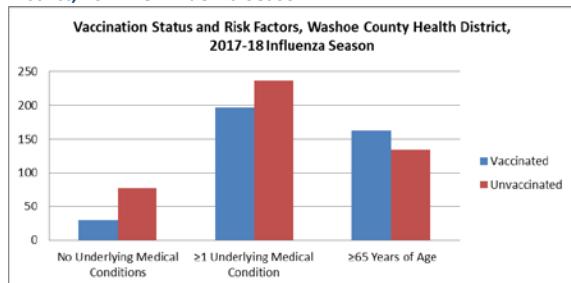
Figure 2. Proportion of Patients Seen with ILI by Sentinel Physicians, Washoe County Influenza Surveillance, 2017-2018.



Forty-two percent (42%) of hospitalized flu cases in Washoe County were vaccinated with the seasonal flu vaccine. However, 58% of hospitalized cases did not have a documented history of a current seasonal flu vaccine at least two weeks prior to illness onset. It is concerning that a majority of these unimmunized cases were at high-risk for influenza-associated complications either due to age or underlying medical conditions:

- Thirteen (4%) were too young to receive vaccine.
- Two hundred and thirty-seven (75%) had at least one documented underlying medical condition in their medical history that contributed to an increased risk for flu-related complications.
- One hundred thirty-four (43%) were aged 65 years or older.
- Three of seven pregnant cases (43%) were unimmunized.
- Nine of the twenty-six cases who died from influenza (35%) were unimmunized.

Figure 3. Vaccination Status and Risk Factors, Washoe County Health District, 2017-18 Influenza Season.



Vaccination is particularly important for persons at increased risk for flu-related complications. These data demonstrate that many vulnerable patients who should have been recommended for immunization did not receive a timely vaccination. Providers are encouraged to vaccinate their patients, especially those patients who are at increased risk for complications from influenza as well as those people who live with or care for persons at higher risk for influenza-related complications (including health care providers). There are several locations where patients can get an influenza vaccine including healthcare providers, pharmacies, and community clinics. To find a location near you visit <https://immunizenevada.org/flu/flu-vaccine-locations>.

According to vaccine effectiveness studies by CDC, getting the flu vaccine reduced the overall risk of going to the doctor for a flu illness by 40%. Vaccine effectiveness was highest against influenza A (H1N1) viruses (65%), followed by influenza B viruses (49%) and influenza A (H3N2) viruses (25%).¹ This follows the trend in which vaccine effectiveness is generally better against influenza B and A (H1N1) viruses than influenza A (H3N2) viruses.

RECOMMENDATIONS FOR HCPS

WCHD recommends that healthcare providers (HCPS) in Washoe County take the following actions:

1. Ensure you and your colleagues are vaccinated. It is especially important for HCPS to be vaccinated as you may be serving individuals at high risk for flu-related complications.
2. Encourage your patients to get vaccinated. Vaccination is especially important for those persons at a higher risk for flu-related complications.
3. Monitor influenza activity in Washoe County. WCHD flu reports are posted weekly at <http://tinyurl.com/WashoeFlu>. You can also sign up to receive weekly emails from WCHD.
4. Practice appropriate hand hygiene and respiratory etiquette to protect yourself and patients from the flu.
5. Provide antiviral treatment when indicated.
6. Report cases of flu to WCHD at 775-328-2447 (24/7) and 775-328-3764 (Fax).

ACKNOWLEDGEMENTS

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¹ Centers for Disease Control and Prevention. "Summary of the 2017-2018 Influenza Season." Updated 31 Aug 2018. Accessed 7 Sep 2018. <https://www.cdc.gov/flu/about/season/flu-season-2017-2018.htm>.