

Washoe County Health District
2017-2018 Influenza Surveillance Program Season Summary
October 1, 2017 – May 19, 2018

Date: Monday, September 17, 2018
To: Participating Health Care Providers
From: **Influenza Surveillance Coordinator:**
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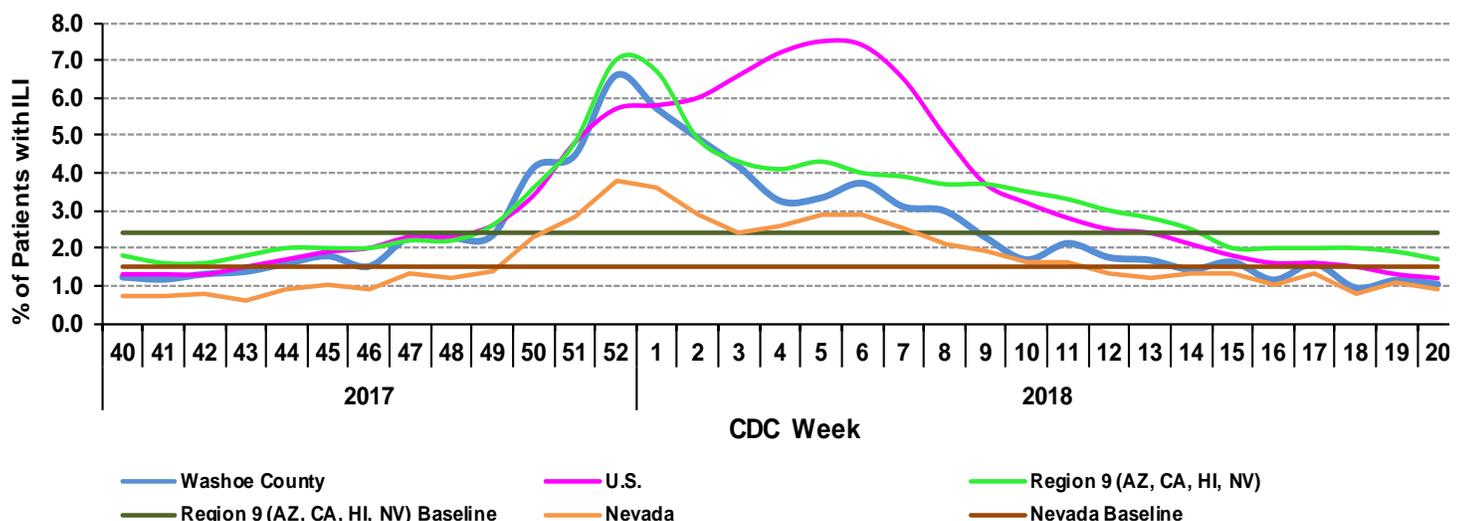
Summary: The 2017-18 influenza season had the greatest number of confirmed cases ever reported in Washoe County in a single season. A total of 5,522 confirmed cases were reported, a 128% increase over the 2016-17 influenza season. A total of 542 hospitalizations were reported, a 72% increase over the 2016-17 influenza season. Twenty-six deaths (26) due to influenza were reported.

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 occurred in Week 52 (Week ending December 30, 2017) at 6.6%

Forty-two percent (42%) of hospitalized flu cases in Washoe County were vaccinated with the seasonal flu vaccine. 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%). This follows the trend in which vaccine effectiveness is generally better against influenza B and influenza A (H1N1) viruses than influenza A (H3N2) viruses.¹

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

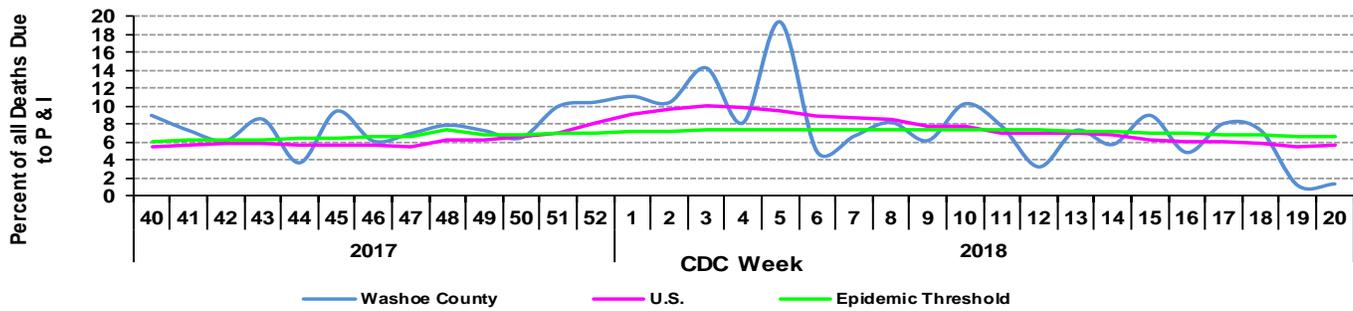


Data source for U.S., Region 9, and Nevada ILI activity and baselines: CDC Flu View Weekly Influenza Surveillance Report, <https://www.cdc.gov/flu/weekly/index.htm>.

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>.

Pneumonia & Influenza Mortality: The total P&I deaths registered in Washoe County for the 2017-2018 influenza surveillance season was 256. This reflects an overall P&I ratio of 7.9% (256/3249).

Figure 3. Pneumonia and Influenza Mortality, Washoe County Influenza Surveillance, 2017 – 2018.



INFLUENZA TESTING RESULTS

Note: All numbers are provisional and subject to change. Results are reported by the week of specimen collection date.

Sentinel Weekly Testing Results:

Provider Testing Results:	Week #	# Specimens Submitted	Results
	20	1	B (Yamagata)

Specimens Submitted To Date:

Total specimens	Influenza type A	Influenza type B	Negative	Pending
66	27	17	22	0

Washoe County Total: 5,522 | Influenza type A: 3,247 | Influenza type B: 1,848 | Influenza unk type: 427

Table 1. Number of Hospitalized Cases, ICU Cases and Fatalities for All Reported Laboratory-Confirmed Influenza, Washoe County Influenza Surveillance, 2017-2018.

	Current Week (Week 20) May 13 - May 19, 2018									Cumulative for 2017-2018 Influenza Season October 1, 2017 - May 19, 2018										
	Total		Hospitalized		Vax ^s		ICU		Death		Total		Hospitalized		Vax ^s		ICU		Death	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Total # of cases reported	10	3	30.0	1	33.3	0	0.0	0	0.0	0	0.0	5522	542	9.8	227	41.9	88	1.6	26	0.5
Influenza A (2009 H1N1)	0	0	0.0	0	N/A	0	N/A	0	N/A	0	N/A	8	3	0.6	0	0.0	0	0.0	0	0.0
Influenza A (seasonal H3)	0	0	0.0	0	N/A	0	N/A	0	N/A	0	N/A	81	13	2.4	4	30.8	3	3.4	0	0.0
Influenza A (not subtyped)	0	0	0.0	0	N/A	0	N/A	0	N/A	0	N/A	789	273	50.4	130	47.6	49	55.7	12	46.2
Influenza A (RIDT*)	0	0	0.0	0	N/A	0	N/A	0	N/A	0	N/A	2369	115	21.2	44	38.3	17	19.3	5	19.2
Influenza B (RIDT*)	4	1	33.3	1	100.0	0	N/A	0	N/A	0	N/A	1400	28	5.2	8	28.6	1	1.1	1	3.8
Influenza B (non-RIDT**)	4	2	66.7	0	0.0	0	N/A	0	N/A	0	N/A	448	110	20.3	41	37.3	18	20.5	8	30.8
Influenza (unknown type, RIDT*)	2	0	0.0	0	N/A	0	N/A	0	N/A	0	N/A	427	0	0.0	0	N/A	0	0.0	0	0.0

*RIDT: *Rapid Influenza Diagnostic Test

**Confirmatory tests other than RIDT may include culture, PCR, immunofluorescence, DFA/IFRA antibody staining, or rapid molecular assay.

^sVaccination status determined among hospitalized cases only. Patient is considered vaccinated if they received a flu vaccine ≥ 2 weeks prior to illness onset.

Figure 4. Number of Influenza & RSV Cases, Washoe County Communicable Disease Surveillance, 2017-2018

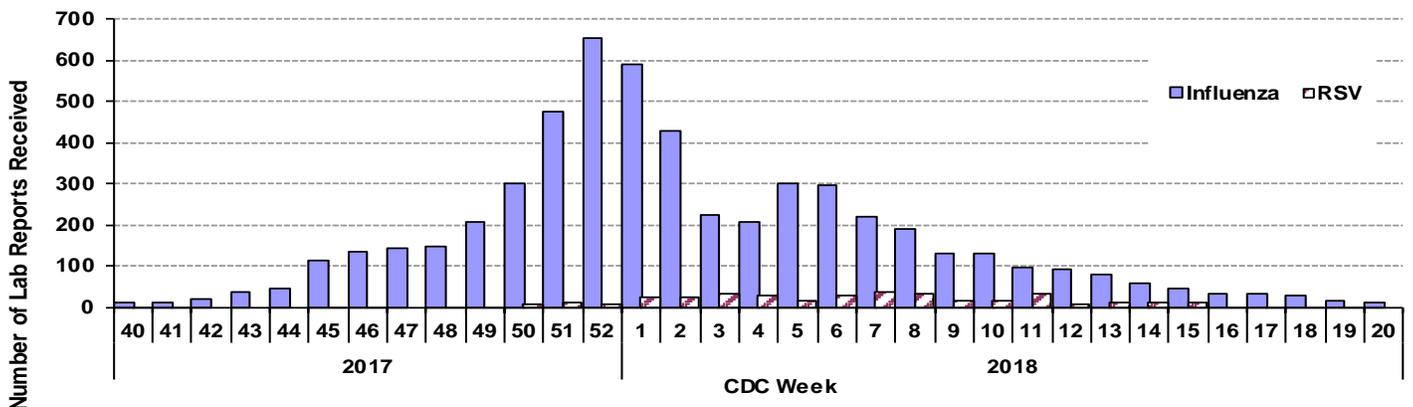


Figure 5. Influenza Positive Tests by Week of Collection, Washoe County Influenza Surveillance, 2017-2018.

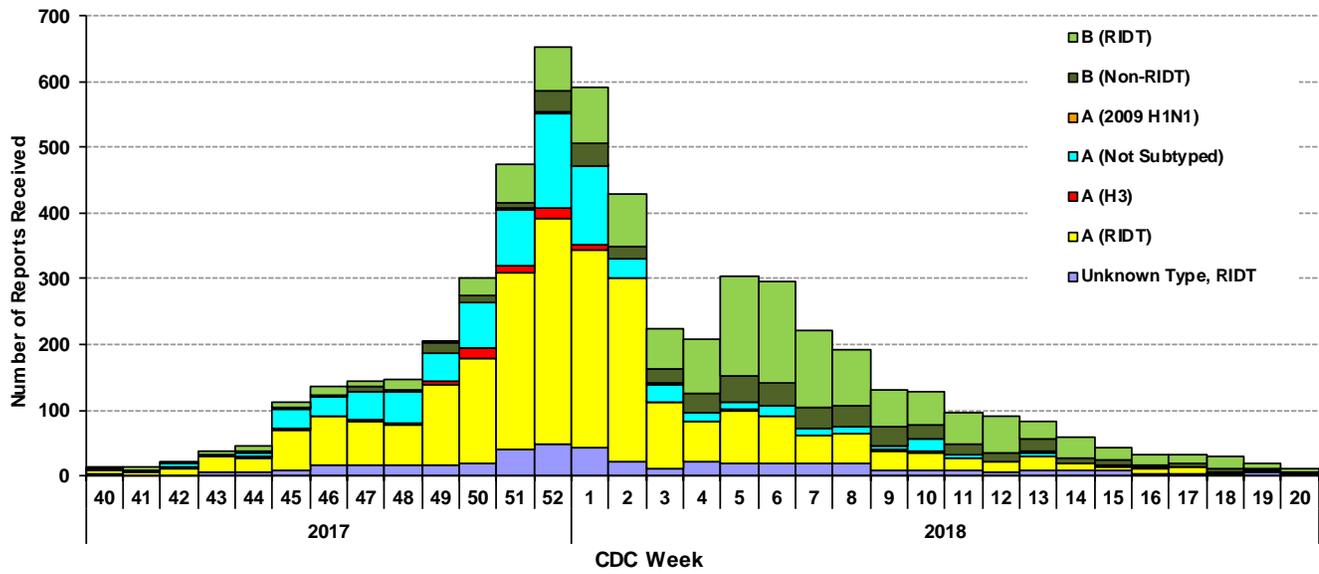


Figure 6. Laboratory Confirmed Influenza Reports, 2013-2018 Seasons:

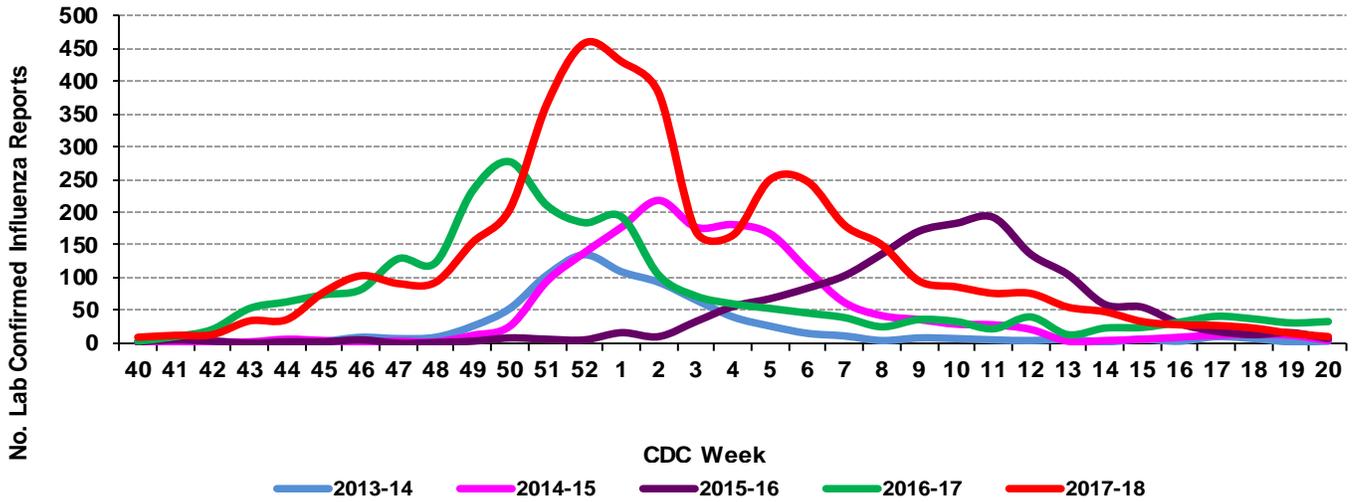
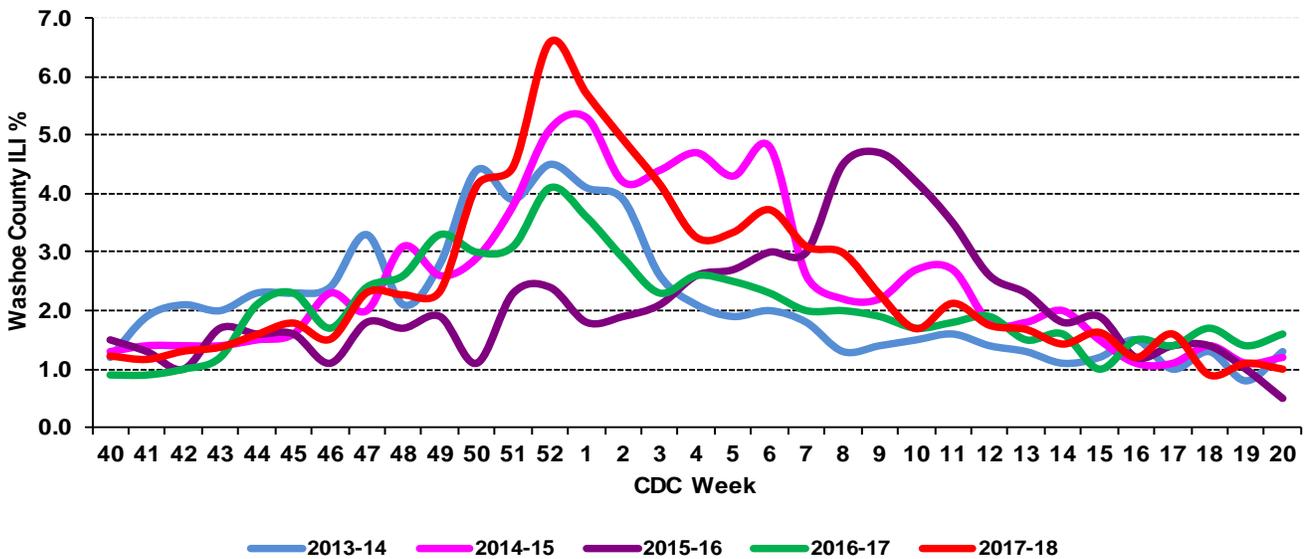
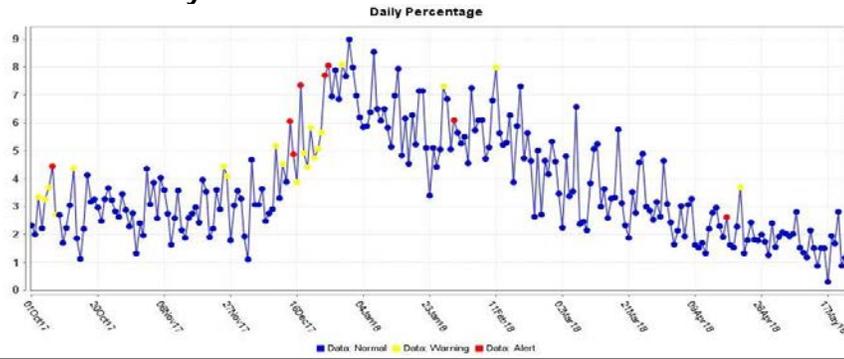


Figure 7. Washoe County ILI Cases Reported by Sentinel Providers, 2013-2018 Seasons:



SYNDROMIC SURVEILLANCE:

Figure 8. Percentage of ED and UC Visits for Influenza-Like Illness, Washoe County

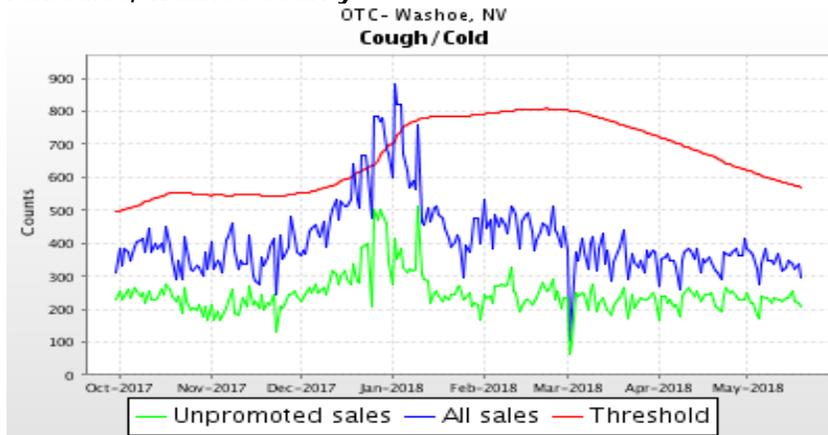


Emergency Department (ED) Visits and Renown Urgent Care (UC) Visits:

Percentage of patients seen for an Influenza-like Illness (ILI). ILI is defined as influenza or fever and a cough and/or a sore throat. Non-ILI fevers are excluded. Yellow dots indicate data warnings and red dots indicate data alerts. These warnings and alerts indicate an unusually high percentage of ILI visits according to ESSENCE algorithms.

(Source: ESSENCE)

Figure 9. Over-the-Counter (OTC) sales for cough and/or cold remedies, Washoe County



Over-the-Counter (OTC) sales for cough and/or cold remedies

include: Cold Relief Adult/Pediatric Liquid/Tablet (plain cold liquids or tablets, antihistamines, decongestants, night-time liquid cold relief products, and allergy relief products); Cough Syrup Adult Liquid/Tablet (Any cough whip products, cough syrups, cough tablets, capsules, squares for relief of cough in adults); Cough Syrup Pediatric Liquid (Any cough whip products, cough syrups for relief of cough in children).

(Data source: National Retail Data Monitor Data coverage in Washoe County: ~40%)