

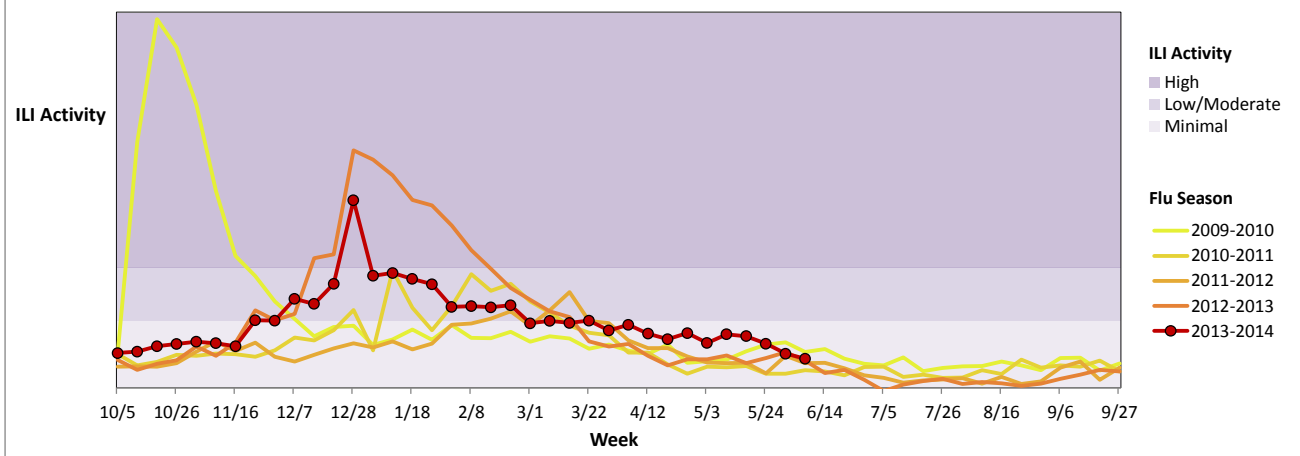
Utah 2013-2014 Influenza Season Summary

Overview of Influenza Surveillance: While influenza activity is monitored year-round, active surveillance for the 2013-2014 influenza season ran from September 29, 2013 - May 17, 2014. The Utah Department of Health publishes a weekly report throughout the active influenza season that synthesizes data from a variety of sources to give the most complete and up-to-date picture of influenza activity in the state of Utah.

Influenza-like Illness (ILI): The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) is a national system that conducts surveillance for influenza-like illness (ILI) in outpatient healthcare facilities. ILINet providers report weekly the total number of patients seen for any reason and the number of patients seen with ILI (defined as a fever $\geq 100^\circ$ F and a cough or sore throat). These data are used to determine the amount of ILI circulating in the community, as well as provide insight into regional differences in ILI activity. Currently, more than 50 facilities throughout Utah participate in ILINet.

Figure 1. Weekly Influenza-like Illness Activity

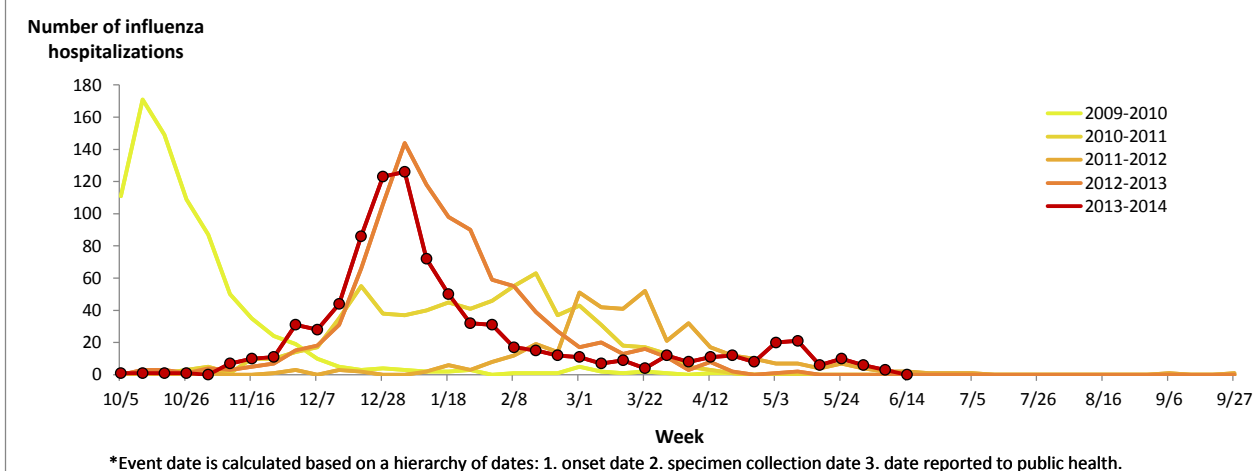
Influenza-like illness (ILI) activity as measured by the number of standard deviations from the epidemic threshold - Utah, 2013-2014



Influenza Hospitalizations: Influenza hospitalizations are a reportable condition in Utah. A person meets the case definition for an influenza hospitalization if they are hospitalized for any length of time and have an influenza positive serology, DFA, PCR, or culture test (confirmed case) or a positive rapid influenza diagnostic test (probable case). Public health in Utah gathers a variety of data on influenza hospitalizations including clinical features, course of illness, risk and protective factors, and influenza type and subtype. Data from influenza hospitalizations allows public health in Utah to better understand subgroups of the Utah population that are most severely affected by influenza and help to guide prevention messages and interventions.

Figure 2. Influenza Hospitalizations

Number of influenza hospitalizations by event date* - Utah, 2013-2014



*Event date is calculated based on a hierarchy of dates: 1. onset date 2. specimen collection date 3. date reported to public health.

Utah 2013-2014 Influenza Season Summary

Table 1. Influenza Hospitalizations by Week - Utah, 2013-2014 Season

<u>Week</u>	<u>Total Cases</u>
10/5	1
10/12	1
10/19	1
10/26	1
11/2	0
11/9	7
11/16	10
11/23	11
11/30	31
12/7	28
12/14	44
12/21	86
12/28	123
1/4	126
1/11	72
1/18	50
1/25	32
2/1	31
2/8	17
2/15	15
2/22	12
3/1	11
3/8	7
3/15	9
3/22	4
3/29	12
4/5	8
4/12	11
4/19	12
4/26	8
5/3	20
5/10	21
5/17	6

Table 2. Influenza Hospitalizations by Health District - Utah, 2013-2014 Season

<u>Health District</u>	<u>Total Cases</u>	<u>Rate*</u>
Bear River	25	14.88
Central	12	15.82
Davis	76	24.07
Salt Lake	417	39.20
Southeastern	3	5.31
Southwest	64	30.41
Summit	12	31.58
Tooele	7	11.69
TriCounty	19	34.63
Utah	115	21.28
Wasatch	6	23.74
Weber-Morgan	75	30.43
Out of State	2	-
State	833	29.17

*Rate is calculated as the number of cases per 100,000 population

Utah 2013-2014 Influenza Season Summary

Table 3. Influenza Hospitalizations by Age Group - Utah, 2013-2014 Season

Age Group	Total Cases	% of Cases	Rate*
0-4	115	13.8	42.49
5-24	69	8.3	7.29
25-49	235	28.2	23.69
50-64	215	25.8	53.69
65+	197	23.6	79.76
Unknown	2	-	-
Total	833	100.0	29.17

*Rate is calculated as the number of cases per 100,000 population

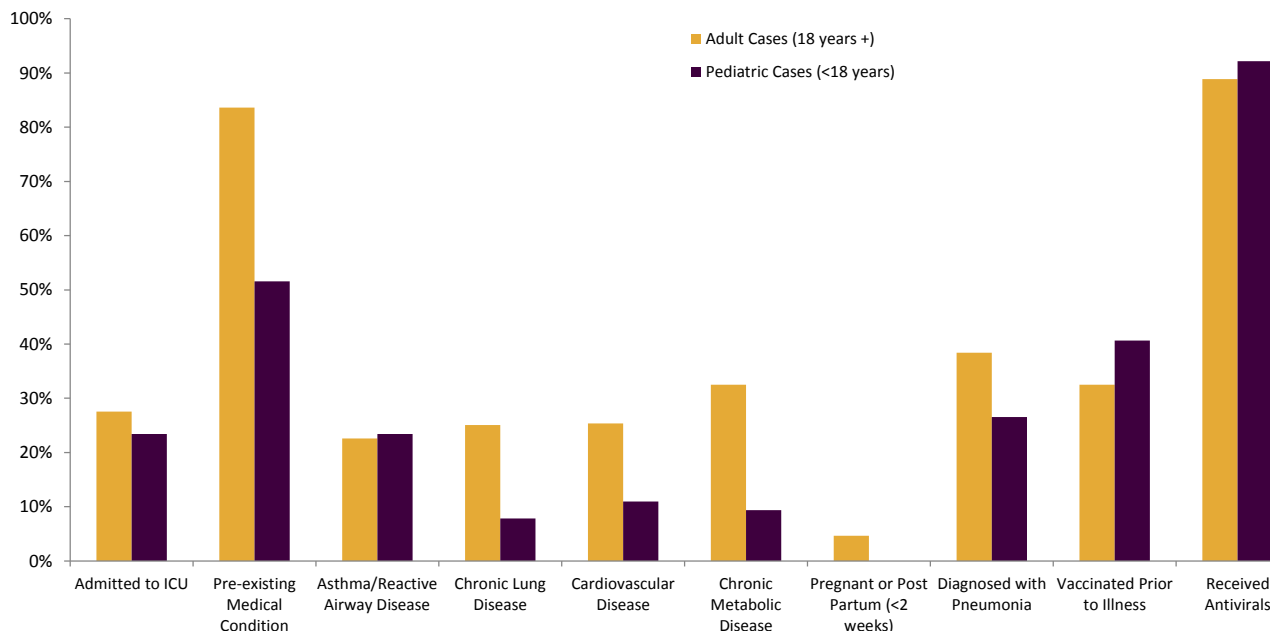
Table 4. Influenza Hospitalizations by Sex and Race - Utah, 2012-2013 Season

Variable	Total Cases	% of Cases	Rate*
Sex			
Male	427	51.3	29.72
Female	406	48.7	28.60
Race			
White, Not Hispanic	546	65.2	24.87
Hispanic	110	13.2	38.09
Native Hawaiian/Pacific Islander	45	5.4	221.83
Black/African American	15	1.8	45.96
American Indian	8	1.0	21.62
Asian	6	0.7	11.66
Unknown	103	12.4	-

*Rate is calculated as the number of cases per 100,000 population

Figure 3. Summary Data for Influenza Hospitalizations

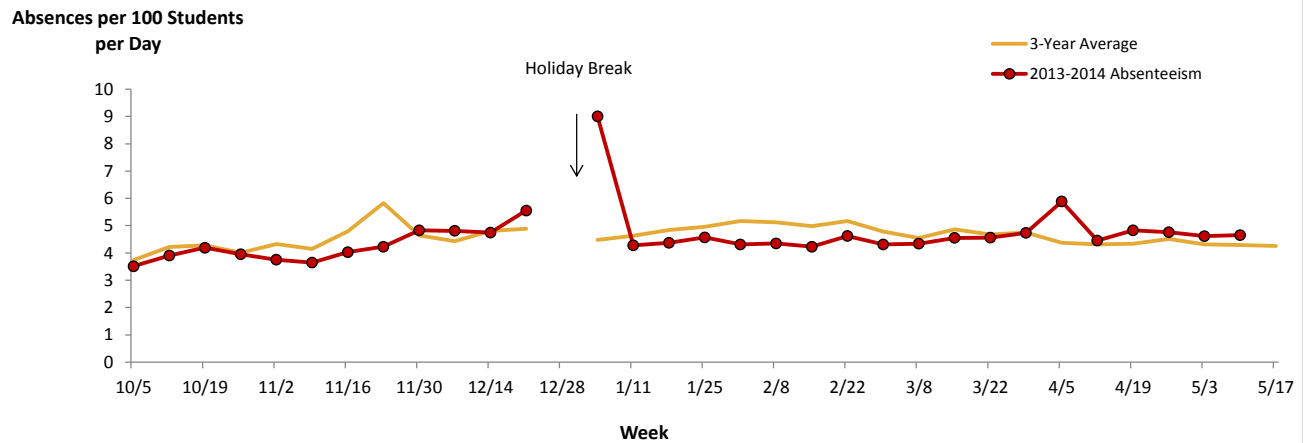
Severity, common risk factors, prevention, and treatment information collected on a subset of influenza hospitalizations - Utah, 2013-2014



Student Absenteeism: School-age children are at high risk for respiratory virus infections, including influenza. Aggregate, all-cause absenteeism data is collected weekly from over 350 schools throughout Utah. These data are analyzed to identify elevated absenteeism rates that could indicate the circulation of influenza in school-age children.

Figure 4. Student Absenteeism by Week

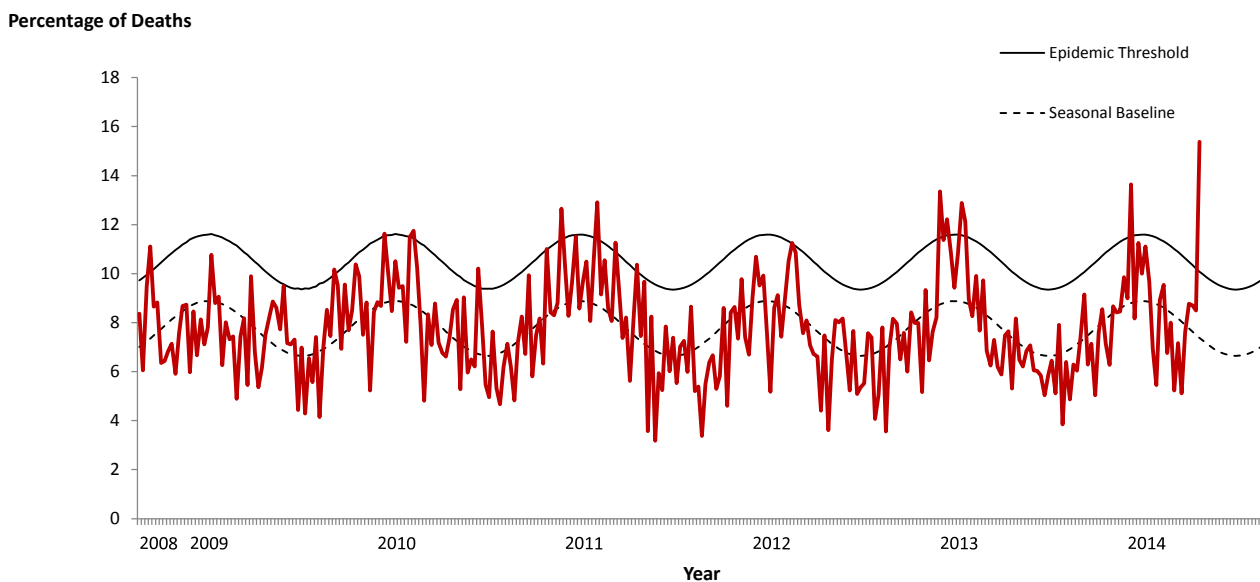
Rates for absences due to all causes - Utah, 2013-2014 and previous 3 year average



Pneumonia and Influenza Deaths: Each week the total number of death certificates received and the number of those for which pneumonia or influenza was listed as an underlying or contributing cause of death is collected. The percentage of deaths due to pneumonia and influenza are compared with a seasonal baseline and epidemic threshold value calculated for each week. These data are used to monitor the severity of influenza illness in the community.

Figure 5. Pneumonia and Influenza Deaths

Percentage of deaths attributable to pneumonia and influenza by week of death - Utah, 2008-2014



Utah 2013-2014 Influenza Season Summary

Laboratory Surveillance: The Unified State Laboratory: Public Health receives specimens from all over the state for comprehensive influenza testing. All specimens are tested to determine influenza type and subtype. A portion of specimens are also sent to the Centers for Disease Control and Prevention for additional testing, including gene sequencing, antiviral resistance testing and antigenic characterization.

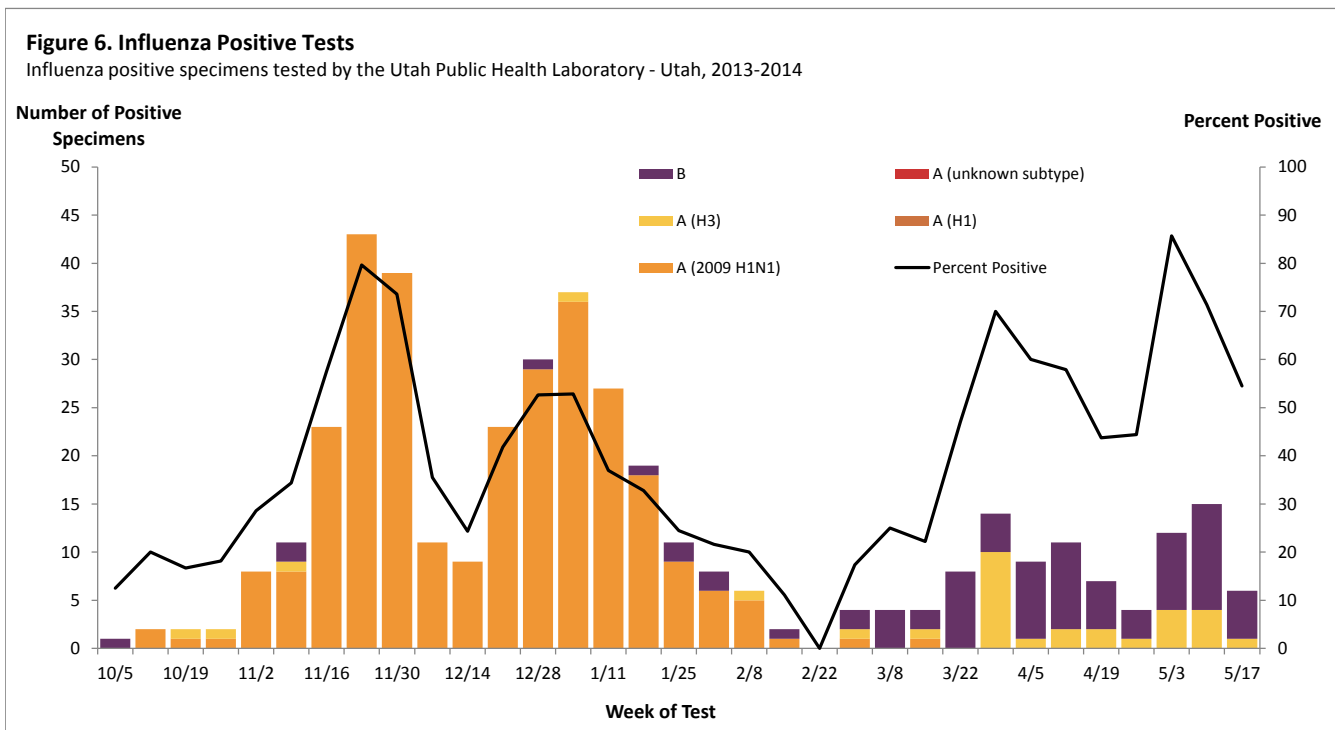


Table 6. Unified State Laboratory: Public Health Influenza Testing Data - Utah, 2013-2014 Season

	Total	Percent
Specimens tested	994	--
Positive specimens	412	41.4
Positive Specimens by Type/Subtype		
Influenza A	333	80.8
A (2009 H1N1)	301	90.4
A (H1)	0	0.0
A (H3)	32	9.6
A (unable to subtype)	0	0.0
Influenza B	79	19.2