

2009-2010 Influenza Season (Season began 10/4/2009)

Synopsis:

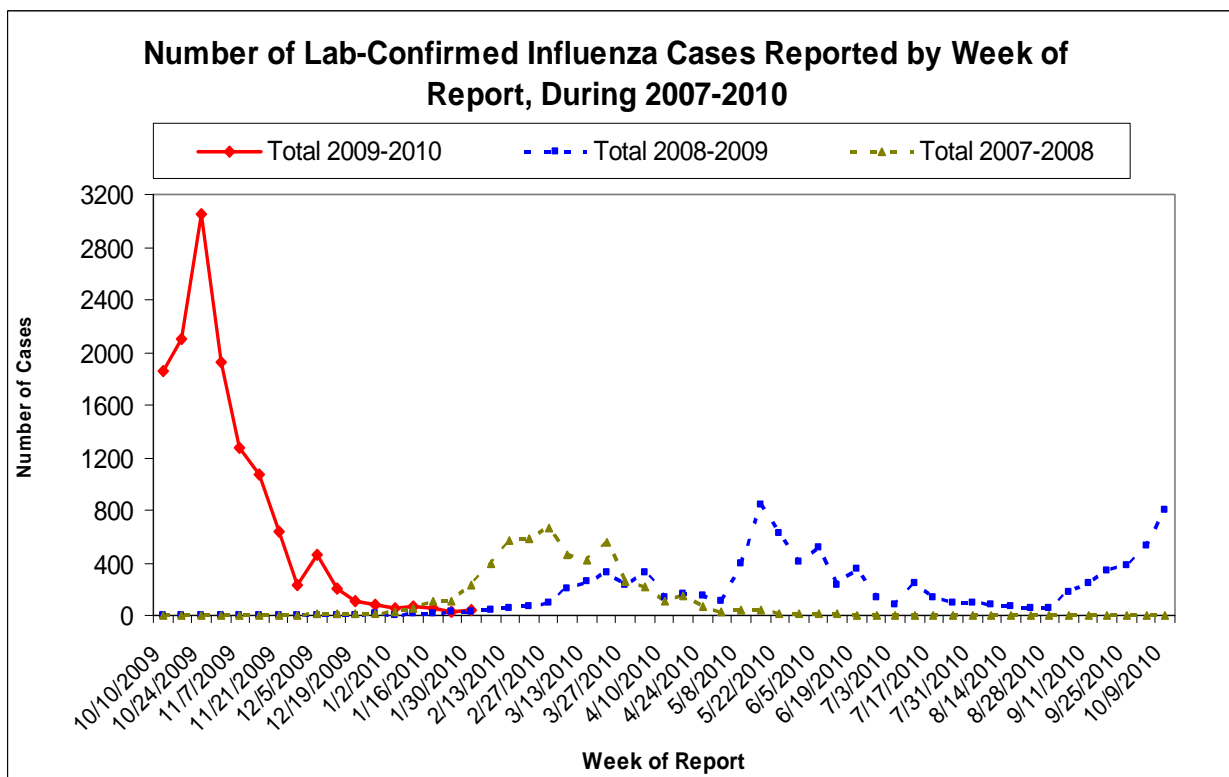
During the past week, the number of influenza lab reports received slightly increased and, as a result, Arizona’s influenza activity elevated to the “local” activity level.

Influenza activity highlights:

- 40 laboratory-confirmed cases of influenza were reported in the past week; this includes 9 laboratory-confirmed cases of 2009 H1N1 influenza.
- 100% of the subtyped influenza viruses at the Arizona State Laboratory during the previous week were the 2009 H1N1 influenza virus.
- From the death certificate database, 36 pneumonia and influenza (P&I) deaths were identified during the previous week and 332 P&I deaths have been identified during the 2009-2010 influenza season; 880 P&I deaths were identified during the 2008-2009 influenza season
- 2 deaths associated with lab-confirmed 2009 H1N1 influenza virus were identified during the previous week; 145 deaths associated with the 2009 H1N1 influenza virus have been identified since April 2009.
- No lab-confirmed influenza-associated pediatric deaths were reported in the past week and 14 deaths have been reported for the current season. The 2009 H1N1 influenza virus was confirmed in all fourteen pediatric deaths.
- The cases included in this report represent a small proportion of the true number of cases of influenza. Many people do not visit the doctor when ill and doctors should not be expected to run tests on all patients exhibiting influenza-like symptoms.

Laboratory-Confirmed Influenza Activity by Season [2007-2010]:

Positive influenza tests are reported to ADHS. These include many types of test (rapid tests, culture, PCR, DFA, etc.). Many of these do not distinguish 2009 H1N1 influenza from other influenza strains.

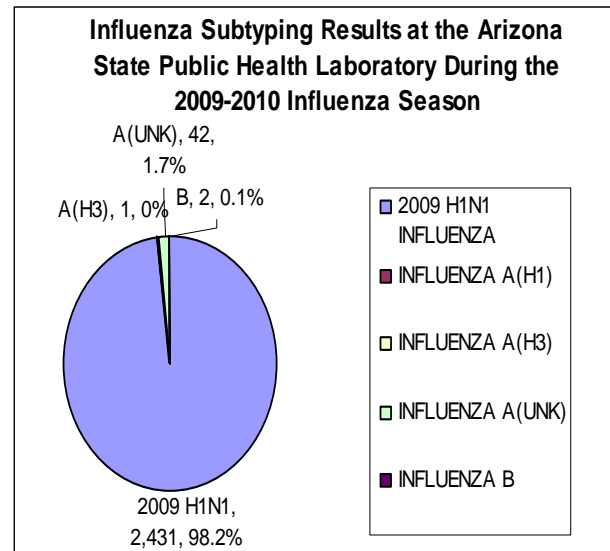
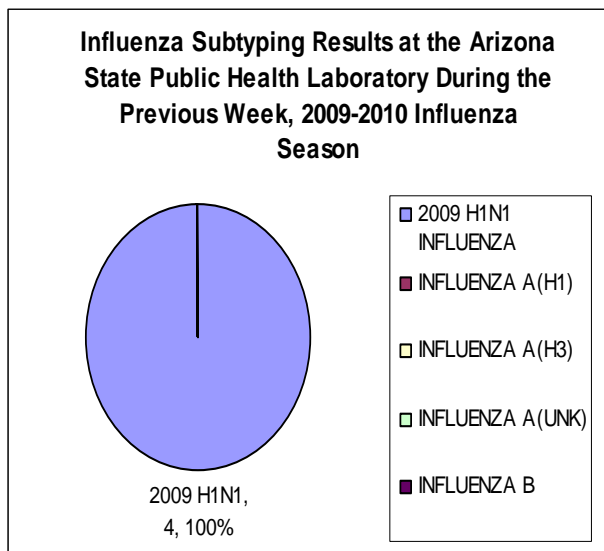


Laboratory-Confirmed Influenza Activity by County [2009-2010 Influenza Season]:

County	Number of Laboratory-Confirmed Cases (Includes ALL reported lab-confirmed flu reports, regardless of subtype.)		Number of Laboratory-Confirmed 2009 H1N1 Influenza Cases (Includes ONLY cases that are confirmed to be H1N1 by the State Lab or other validated facilities.)		
	2009-2010 Season	Last Week	2009-2010 Season	Last Week	Total Since April 2009
Apache	186	2	28	0	86
Cochise	501	1	41	0	52
Coconino	336	1	81	0	164
Gila	67	0	25	0	52
Graham	590	1	14	0	23
Greenlee	3	0	3	0	3
La Paz	7	0	4	0	19
Maricopa	7,170	26	4,032	7	5,508
Mohave	352	0	277	0	347
Navajo	112	3	44	0	134
Pima	2,382	3	968	0	1,218
Pinal	725	1	424	1	535
Santa Cruz	74	0	28	0	45
Yavapai	463	1	179	1	200
Yuma	290	1	129	0	208
Unknown	1	0	0	0	0
Total	13,259	40	6,277	9	8,594

Arizona State Public Health Laboratory (ASPHL) - Influenza Subtyping Data:

- In the past week, 4 specimens tested positive for influenza at ASPHL.
- ASPHL subtyping results for the previous week: 100% of the subtyped influenza viruses were identified to be the 2009 H1N1 influenza virus.



Epidemiologic Information for confirmed 2009 H1N1 influenza cases since April 2009:

	Total Confirmed H1N1 Cases (N=8,594)	Identified H1N1 Hospitalizations (N=1,844)	Identified H1N1- Associated Deaths (N=145)
AGE			
Range	0 days – 100 years	7 days – 96 years	4 months – 80 years
Mean, Median	23 years, 18 years	28 years, 24 years	42 years, 46 years
AGE GROUP			
0 to 4 years	1,284 (15%)	380 (21%)	5 (3%)
5 to 18 years	3,371 (39%)	395 (21%)	15 (10%)
19 to 49 years	2,908 (34%)	608 (33%)	63 (43%)
50 to 64 years	747 (9%)	334 (18%)	47 (32%)
65 years or older	229 (3%)	127 (7%)	15 (10%)
Unknown age	55 (1%)	0 (0%)	0 (0%)
		Investigated H1N1 Hospitalizations** (N=1,350)	Investigated H1N1- Associated Deaths** (N=138)
MEDICAL HISTORY & INFO			
At least 1 Underlying Medical Condition*		830 (61%)	118 (86%)
Pneumonia at Time of Hospital Admission		542 (40%)	94 (68%)
Intensive Care Unit Admission		352 (26%)	109 (79%)
Mechanical ventilation required		215 (16%)	103 (75%)

*Medical conditions include: asthma, chronic lung disease, chronic heart or circulatory disease, metabolic disease, cancer, pregnancy, immunosuppressive condition, neurologic disease, and other chronic diseases.

**Investigations for identified H1N1 hospitalizations and deaths are ongoing. Pertinent data may not be collected for all identified cases at time of the report, so data presented above are only for investigated cases.

Glossary of Key Terms:

2009-2010 Influenza Season – The season is defined by surveillance weeks. The first day of the 2009-2010 influenza season was October 4th, 2009, or week 40 and the 2009-2010 surveillance season will continue through October 2nd, 2010, or week 39.

Local Activity – Increased ILI in only one region and recent (within the previous three weeks) laboratory-confirmed cases of influenza in region with increased ILI. Local activity can also be defined by 2 or more institutional outbreaks (ILI or laboratory-confirmed) in one region and recent laboratory-confirmed cases of influenza in region with outbreaks and influenza virus activity is not greater than sporadic in other regions.

Pneumonia and Influenza Mortality – Many influenza-related deaths are due to complications of influenza infection, including pneumonia, and influenza is infrequently listed as the cause of death on death certificates. Surveillance from death certificates often uses the category of “pneumonia and influenza” as an indicator, although not all pneumonias are associated with influenza. See the CDC website for more information
http://www.cdc.gov/flu/about/disease/us_flu-related_deaths.htm.

Hospitalization – A hospitalization, for purposes of 2009 H1N1 influenza investigations, is defined as a laboratory-confirmed 2009 H1N1 influenza case who has been admitted to the hospital for at least 24 hours.