Nevada State Health Division

Weekly Influenza Report

Week Ending July 10, 2009

H1N1 Influenza (Previously Swine Flu)

Epidemiology

****On June 11, 2009, the World Health Organization (WHO) raised the pandemic alert level to Phase 6. This change is due to the geographic spread of the virus and not to its severity. See page 5 for more information on pandemic influenza phases. ****

As of 11:30am PT, July 9, 2009, Nevada had 320 **confirmed** cases of H1N1 flu and 11 **probable** cases, ten of which have viral loads too low for subtyping. There has been one death of a Nevadan resident (June 28, 2009), and another in Nevada (June 12, 2009) of a visiting New York resident. The illness in the H1N1 cases has been similar in severity to seasonal flu. This season the non H1N1 flu illness has been relatively mild.

Nevada Cases of H1N1 Flu Infection			
County	**Confirmed**	**Probable**	**Deaths**
Carson City	29	6	
Clark	103	0	1
Washoe	162	3	
Other 14 counties	26	2	
Total	320	11	1

Laboratory

As of 11:30am PT, July 9, 2009, the Nevada State Public Health Laboratory has tested a total of 1,575 samples since April 26, 2009. Cumulative total results are noted below.

	Total Tested	H1N1	% H1N1	H1	H3	B	Total Other	% Other	Negative	% Negative
July 09, 2009	**1,575**	**320**	**20.3%**	**20**	**73**	**78**	**171**	**10.9%**	**1084**	**68.8%**
July 02, 2009	1,450	293	20.2%	20	73	78	171	11.8%	986	68.0%
June 25, 2009	1,344	240	17.9%	20	73	78	171	12.7%	933	69.4%
June 18, 2009	1,265	215	17.0%	20	73	78	171	13.5%	879	69.5%
June 04, 2009	1,051	136	14.5%	20	68	78	166	15.8%	749	71.3%
May 28, 2009	938	100	10.7%	20	68	75	163	17.4%	675	72.0%
May 21, 2009	803	47	6.7%	17	62	73	152	18.9%	604	75.2%
May 14, 2009	705	24	3.4%	16	59	65	140	19.9%	541	76.7%

*update unavailable June 11, 2009

As of May 6, 2009, test confirmations are being done at the Nevada State Public Health Laboratory.

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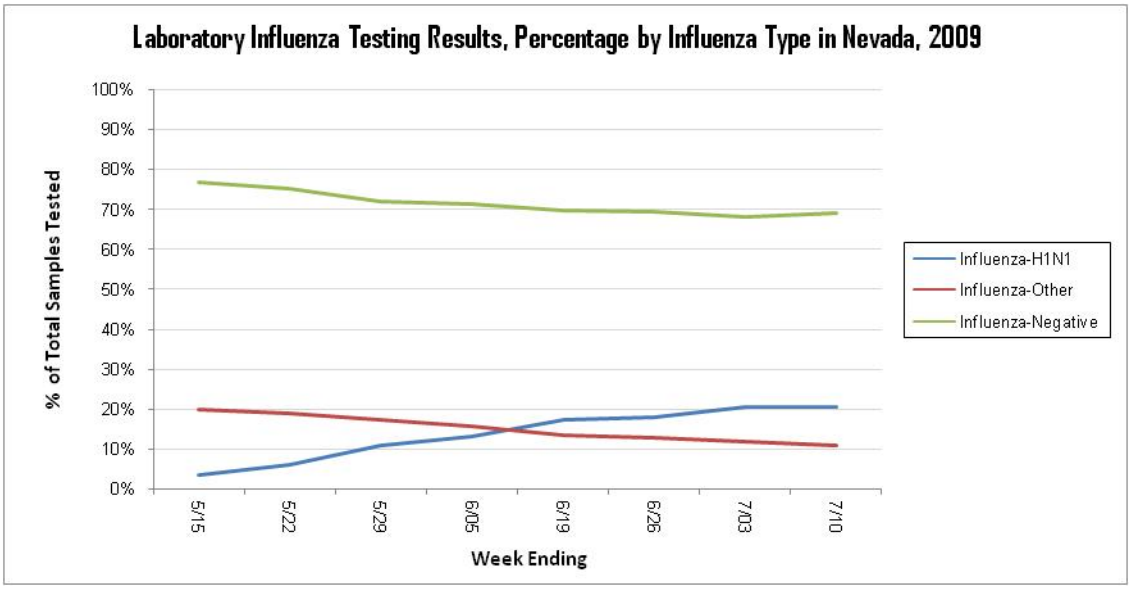

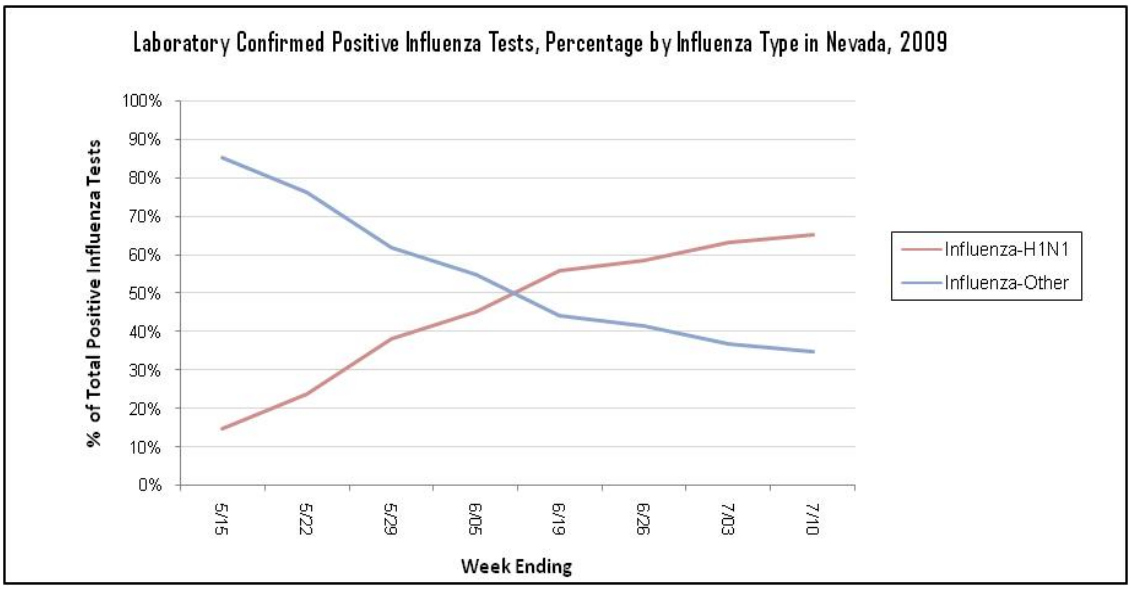

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Seasonal Influenza

Nevada

Nevada has 5 reporting regions. For MMWR week 25, we are at "**local**" influenza activity.
There are 5 levels of influenza activity as defined by the CDC.

- **No Activity:** No laboratory-confirmed cases of influenza and no reported increase in the number of cases of ILI.
- **Sporadic:** Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI.
- **Local:** Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in a single region of the state.
- **Regional:** Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in at least two but less than half the regions of the state with recent laboratory evidence of influenza in those regions.
- **Widespread:** Outbreaks of influenza or increases in ILI cases and recent laboratory-confirmed influenza in at least half the regions of the state with recent laboratory evidence of influenza in the state.

Source: CDC website at: http://www.cdc.gov/flu/weekly/fluactivity.htm

Below are *updated* numbers of seasonal influenza cases* in **Nevada** for 2009 as of July 9, 2009.

MMWR Week	Week Ending	Carson	Clark	Washoe	FaR Counties	Totals
26**	7/04/09	5	1	4	1	**11**
25**	6/27/09	3	3	4	1	**11**
24**	6/20/09	3	4	6	1	**14**
23**	6/13/09	3	3	10	1	**17**
22**	6/06/09	2	19	10	3	**34**
21**	5/30/09	7	20	7	2	**36**
20**	5/23/09	5	58	13	9	**85**
19**	5/16/09	8	40	15	20	**83**
18**	5/09/09	6	38	39	15	**98**
17	5/02/09	5	11	37	37	**90**
16	4/25/09	7	2	8	2	**19**
15	4/18/09	9	9	7	4	**29**
14	4/11/09	7	19	17	7	**50**
13	4/04/09	12	16	32	17	**77**
12	3/28/09	6	8	31	20	**65**
11	3/21/09	5	5	35	19	**64**
10	3/14/09	8	19	44	13	**84**
9	3/07/09	4	7	34	18	**63**
8	2/28/09	16	15	39	13	**83**
7	2/21/09	13	20	43	14	**90**
6	2/14/09	18	6	40	17	**81**
5	2/07/09	18	13	24	13	**68**
4	1/31/09	8	10	12	11	**41**
3	1/24/09	6	1	11	8	**26**
2	1/17/09	5	2	8	1	**16**
1	1/10/09	1	1	4	2	**8**
Totals		**190**	**350**	**534**	**269**	**1,343**

*These numbers are preliminary and subject to change
** Enhanced surveillance because of recognition of new H1N1 strain in the U.S.

The number of cases statewide from October 1, 2008 – December 31, 2008 is 42, bringing the total number of cases so far for the 2008-2009 influenza season to 1,385.

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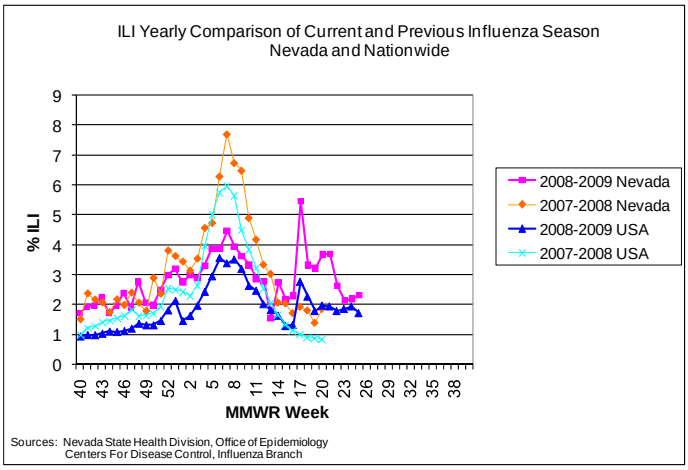
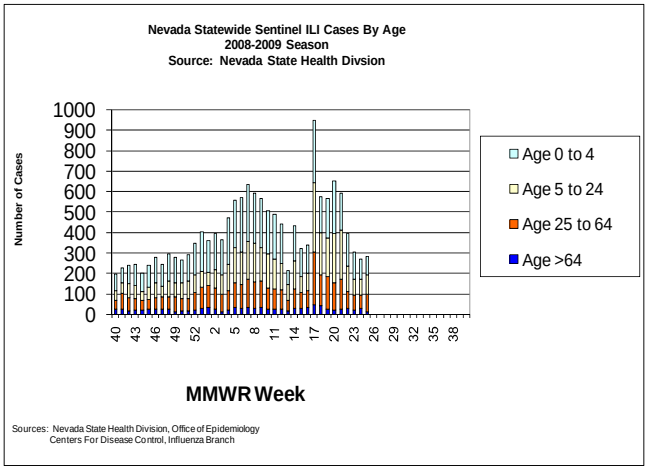
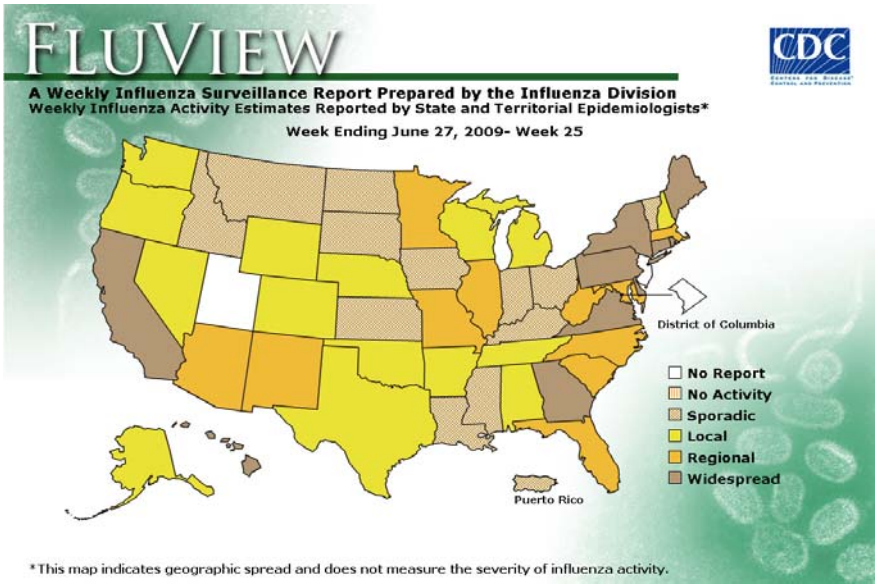




U.S.

According to ILINet (CDC's influenza syndromic surveillance system), for MMWR week 25 nationwide:

- 10 states reported **widespread** activity
- 11 states reported **regional** activity
- 15states reported **local** activity
- 12 states reported **sporadic** activity
- 0 states reported **no activity**
- 2 states did not report



The influenza activity reported weekly by each state measures geographic spread of influenza and is not a measure of the severity of influenza activity.

According to ILINet, Nevada's ILI rate was 2.3% during week 25. Nationally, the ILI rate was 1.7%, which is below the national baseline of 2.4%. In Region IX, which includes Nevada, ILI was 1.5%, which is below the regional baseline of 2.7%. The ILI surveillance system measures illness due to ***both*** seasonal and H1N1 flu.

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Antiviral Medications

Nevada has antiviral medications available from a state stockpile and from the Strategic National Stockpile (SNS). As of May 21, 2009, antiviral use from these stockpiles is noted below. This section will be updated on a monthly basis. The next update will be August 7, 2009.

Tamiflu 75 mg = 89
Tamiflu 45 mg = 4
Tamiflu 30 mg = 8
Tamiflu Oral Suspension = 12
Relenza 5 mg = 7

Total = 120

Response Activities

- The state laboratories in the north and south continue to test samples for the H1N1 flu virus
- Surveillance of regular flu and the H1N1 flu virus continues throughout Nevada.
- The Nevada State Health Division continues to update the website
- The hotline number continues to be activated
- Public notifications continue to be published as the situation warrants
- Continue to access the websites below for up-to-date information:
    - Nevada State Health Division: http://health.nv.gov
    - Centers for Disease Control and Prevention: http://www.cdc.gov/h1n1flu

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The current WHO phase of pandemic alert is 6.

In nature, influenza viruses circulate continuously among animals, especially birds. Even though such viruses might theoretically develop into pandemic viruses, in **Phase 1** no viruses circulating among animals have been reported to cause infections in humans.

In **Phase 2** an animal influenza virus circulating among domesticated or wild animals is known to have caused infection in humans, and is therefore considered a potential pandemic threat.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

Phase 4 is characterized by verified human-to-human transmission of an animal or human-animal influenza reassortant virus able to cause "community-level outbreaks." The ability to cause sustained disease outbreaks in a community marks a significant upwards shift in the risk for a pandemic. Any country that suspects or has verified such an event should urgently consult with WHO so that the situation can be jointly assessed and a decision made by the affected country if implementation of a rapid pandemic containment operation is warranted. Phase 4 indicates a significant increase in risk of a pandemic but does not necessarily mean that a pandemic is a forgone conclusion.

Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

Phase 6, the pandemic phase, is characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in **Phase 5**. Designation of this phase will indicate that a global pandemic is under way.

During the **post-peak period**, pandemic disease levels in most countries with adequate surveillance will have dropped below peak observed levels. The post-peak period signifies that pandemic activity appears to be decreasing; however, it is uncertain if additional waves will occur and countries will need to be prepared for a second wave.

Previous pandemics have been characterized by waves of activity spread over months. Once the level of disease activity drops a critical communications task will be to balance this information with the possibility of another wave. Pandemic waves can be separated by months and an immediate "at-ease" signal may be premature.

In the **post-pandemic period**, influenza disease activity will have returned to levels normally seen for seasonal influenza. It is expected that the pandemic virus will behave as a seasonal influenza A virus. At this stage, it is important to maintain surveillance and update pandemic preparedness and response plans accordingly. An intensive phase of recovery and evaluation may be required.