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IDAHO DISEASE Bulletin

IDAHO DEPARTMENT OF HEALTH & WELFARE

Office of Epidemiology, Food Protection, and Immunization

Idaho Department of Health and Welfare

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2009–2010 Influenza Season Update

Vaccine

As of 12/11/2009, 432,900 doses of 2009 H1N1 vaccine have been allocated to Idaho. Enough vaccine has been distributed that vaccination is now available to everyone in Idaho six months of age or older for whom vaccine is not contraindicated. Public mass immunization clinics and school-based clinics continue to be held throughout the state. In some areas, vaccine is available at retail pharmacies. Anecdotal reports of vaccine uptake among hospital healthcare workers indicate concern over the use of live attenuated influenza vaccine (LAIV) (nasal spray) in hospital settings. LAIV is a very good option for most health care providers who are healthy, younger than 50 years of age, and not pregnant. However, health care providers should not get LAIV if they are providing medical care for patients who require special environments in the hospital because they are profoundly immunocompromised (*e.g.,* those who work in bone marrow transplant units). See **http://www.cdc.gov/h1n1flu/vaccination/nasalspray_qa.htm** for more information.

Antivirals

The Centers for Disease Control and Prevention (CDC) recommends that all *hospitalized* patients with suspected or confirmed 2009 H1N1 influenza receive antiviral treatment with a neuraminidase inhibitor – either oseltamivir or zanamivir – as early as possible after illness onset. Although antiviral treatment is most effective when begun within 48 hours of influenza illness onset, studies have shown that hospitalized patients still benefit when treatment with oseltamivir is started more than 48 hours after illness onset. Outpatients, particularly those with risk factors (see **http://www.cdc.gov/h1n1flu/highrisk.htm**) for severe illness who are not improving, might also benefit from treatment initiated more than 48 hours after illness onset. Treatment should not be delayed while waiting for laboratory confirmation by RT-PCR, nor deterred by a negative rapid flu test: the sensitivity of rapid flu tests for detecting 2009 H1N1 influenza is estimated to range from 10–70%. See **http://www.cdc.gov/H1N1flu/recommendations.htm** for further information.

Intravenous peramivir has been made available under an Emergency Use Authorization through CDC for the treatment of certain patients hospitalized with influenza. Licensed clinicians with prescribing privileges may request Peramivir IV directly from the CDC. As of 12/11/09, CDC has had over 950 requests for peramivir, including several requests from Idaho providers. Supplies are expected to remain sufficient for demand. See **http://www.cdc.gov/h1n1flu/eua/peramivir.htm** for more information.

Hospitalizations

During the week of 12/6–12/12, there was one hospitalized patient who had a laboratory-confirmed test for influenza of any strain; this represents the second consecutive week with only one hospitalized flu case (Figure 1). Since September 1st, young people have represented the largest percentage of hospitalized cases:

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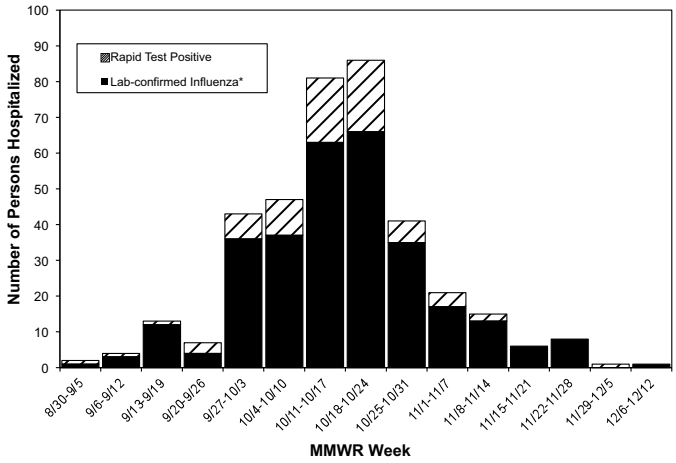
Figure 1. Hospitalized cases in Idaho with any positive influenza test, as reported to IDHW, by MMWR week



** Confirmed by culture, viral Ag DFA or RT-PCR*

70% of hospitalized cases have been younger that 50 years of age, 38 % have been less than 19 years of age, and 19% have been younger than 5 years of age.

N-95 Respirators in Healthcare Settings

While the national debate about the use of N-95 respirators for protection from 2009 H1N1 influenza in healthcare settings continues, the IDHW Office of Epidemiology, Food Protection, and Immunization recommends that healthcare facilities review CDC's "Interim Guidance on Infection Control Measures for 2009 H1N1 Influenza in Healthcare Settings, Including Protection of Healthcare Personnel" at **http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm** and prioritize respirator and face-mask use accordingly, as needed. See also **http://www.cdc.gov/h1n1flu/guidelines_infection_control_qa.htm**.

On 11/02/2009, Idaho received over 275,000 N-95 respirators from CDC's Strategic National Stockpile, which were shipped to local public health districts. These masks are available to assist healthcare workers supplement supplies when local shortages occur in healthcare settings.

Summary

While influenza activity is dropping off at the time of this printing, it is still unknown whether seasonal influenza viruses will emerge as an important factor this fall and winter in the U.S. population. In addition, the future activity of the 2009 novel H1N1 virus is uncertain; additional waves of illness may yet occur this influenza season. Therefore, persons are urged to continue to obtain influenza vaccine when it's available for them in their communities.

Initial Appearance of 2009 Novel H1N1 Influenza in Idaho: Data Summary from Spring/Summer 2009

In Idaho, 341 confirmed cases of 2009 H1N1 were reported from April through August, none of them fatal. H1N1 cases were consistently reported through the summer. As is shown in Figure 2, there was a steady rise in case reports throughout the summer.

Among all 341 reported cases, 54% were male and 46% were female. The age groups most affected by H1N1 influenza tended to be younger than those traditionally hardest hit by classic seasonal influenza. The median age of confirmed H1N1 cases was 20.0 years (range: <1 years–69 years).

A total of 15 confirmed 2009 H1N1 cases were reported hospitalized. Hospitalized cases were 53% male and 47% female. The median age of hospitalized, confirmed cases was 22.0 years (range: 0–74 years).

The most common reported comorbid condition in hospitalized cases, where known, was asthma. Other conditions included other chronic disease, other chronic lung disease, chronic heart or circulatory disease, metabolic disease (including diabetes), and neurologic disease (Table).

Figure 2. Confirmed 2009 H1N1 reported cases by event date–Idaho, 4/24/2009–8/31/2009

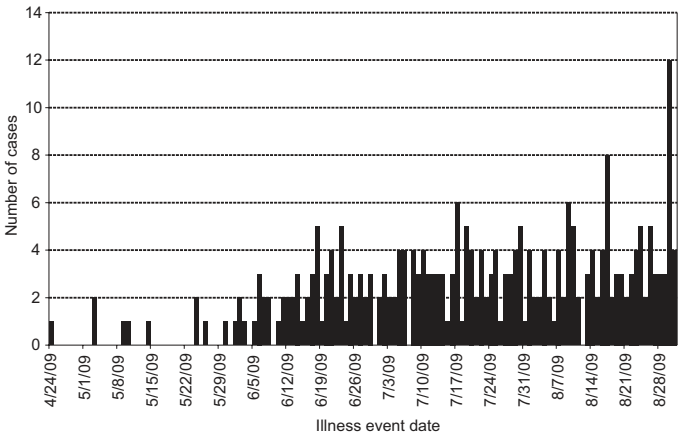


Table. H1N1 cases by reported co-morbid condition*—Idaho, 4/26/2009–8/31/2009

Comorbid conditions	Yes	No	Unknown	Missing	Total	% yes of known
Asthma	12	63	33	233	341	16.0%
Other chronic disease	4	69	34	234	341	5.5%
Other chronic lung disease	3	72	31	235	341	4.0%
Chronic heart or circulatory disease	3	74	32	232	341	3.9%
Metabolic disease (including diabetes)	3	73	31	234	341	3.9%
Neurological disease	1	71	34	235	341	1.4%
Cancer in last 12 months	0	78	29	234	341	0.0%
Kidney disease	0	73	33	235	341	0.0%
Immunosuppresive condition	0	0	0	341	341	--

**132 (39%) of 341 case-records had missing or unknown values for every co-morbid condition*

Opthalmia Neonatorum Prophylaxis Shortage Update

Shortages of erythromycin (0.5%) ophthalmic ointment for prophylaxis of ophthalmia neonatorum have existed since August 2009. Medical providers have been advised to review and reserve supplies for neonatal prophylaxis use. When erythromycin otphalmic ointment is not available, CDC recommends using AzaSite (azithromycin ophthalmic solution 1%, Inspire Pharmaceuticals). If neither are available, CDC lists several other acceptable alternatives: gentamycin ophthalmic ointment 0.3%, tobramycin ophthalmic ointment 0.3%, and if none of these recommended or alternative options are available, ciprofloxacin ophthalmic ointment 0.3%.

Notably, the FDA continues to receive reports of mostly mild adverse reactions associated with the use of gentamicin ophthalmic ointment from several lots. The latest communication posted to CDC's web site states:

"Until the etiology is known, it may be reasonable to limit the contact exposure of gentamicin ophthalmic ointment on the skin. Gentamicin ophthalmic ointment should be used with caution and used only if acceptable alternatives…are not available. These adverse events will continue to be investigated by the FDA. Providers should continue to report adverse events to FDA MedWatch (**http://www.fda.gov/Safety/MedWatch**)."

"Erythromycin ophthalmic ointment is currently available through the major wholesalers and should be the first option for prophylaxis of ophthalmia neonatorum. Providers are strongly encouraged to locate and obtain this product. Bausch and Lomb has increased its production of erythromycin ophthalmic ointment (1 gm tube) and is expected to meet demand. In an effort to ensure equitable distribution of product and to minimize spot shortages, providers should order product based on short term need only. Alternative recommendations should only be used if erythromycin ophthalmic ointment can not be obtained. See the FDA website (**http://www.fda.gov/Drugs/DrugSafety/DrugShortages/ucm050792.htm**) for more information on obtaining erythromycin ophthalmic ointment."

Medical providers are cautioned that the efficacy data of alternate regimens are unavailable, and there may be the possibility of prophylaxis failure. Infants should be examined closely for ophthalmia neonatorum at their first postnatal visit 48–72 hours after discharge from the hospital. Infants presenting with ophthalmia neonatorum should be tested for *N. gonorrhoeae*.

Healthcare Acquired Infections Grant

The United States Congress recently allocated $40 million in American Recovery and Reinvestment Act (ARRA) funding through the Centers for Disease Control and Prevention (CDC) to support healthcare associated infection (HAI) surveillance and prevention activities. The funding provided to state health departments will enhance state capacity for HAI prevention. Potential target areas include MRSA, *Clostridium difficile* infections, bloodstream infections, and urinary tract infections.

The funding Idaho has received will be used to enhance infrastructure for hospitals to implement or improve HAI surveillance activities. Facilities across the state need assistance in the design and improvement of effective and efficient active surveillance processes and reduction strategies for HAI rates. With a surveillance infrastructure in place, Idaho healthcare facilities will eventually be able to sustain an ongoing HAI surveillance and prevention program, evaluate efforts, compare their efforts to statewide targets, and make improvements.

Currently, the Idaho Department of Health and Welfare (IDHW) epidemiology staff are drafting a five-year plan to address HAI surveillance and prevention in Idaho. The draft plan is being reviewed by a group of stakeholders to provide input and recommendations for the statewide plan, which will cover the following broad objectives:

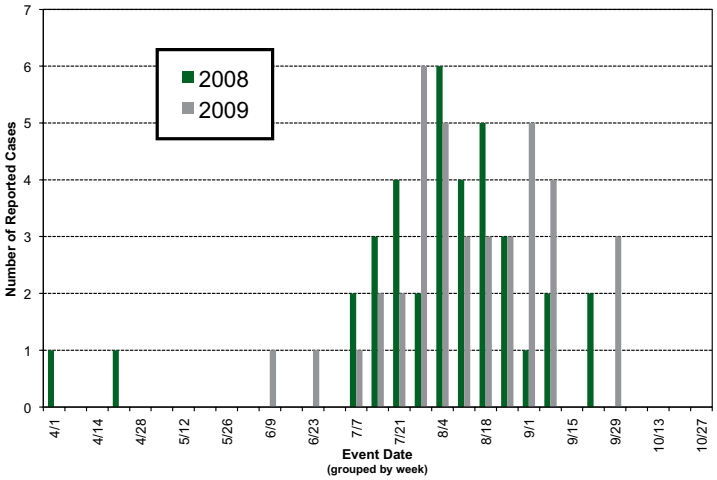
1. Establishing and defining objectives, criteria, and standards for HAI reporting.
2. Developing an action plan to implement statewide HAI surveillance using the National Healthcare Safety Network.
3. Identifying specific infections and indicators for surveillance and reporting.

Once the statewide plan has been drafted, ARRA funding will be used to implement the plan. Initial work will focus on facilitating and providing technical assistance to facilities that volunteer to participate in this initiative. For more information about the HAI initiative, please contact OEFI at 208-334-5939. For more information about the CDC's National Healthcare Safety Network (NHSN), see **http://www.cdc.gov/nhsn/**.

West Nile Virus in Idaho, 2009

West Nile virus (WNV) caused low-level morbidity and mortality in Idaho in 2009. WNV infections were reported in 41 individuals in 2009: two were asymptomatic blood donors. The median age of reported cases was 53 years of age (range 14 years to 86 years) and 57.5% were male. Of the symptomatic cases (n=39), 16 (41%) were hospitalized, and 12 (31%) had neurologic involvement (*i.e.*, meningitis, encephalitis, meningoencephalitis, or other neuroinvasive conditions including flaccid paralysis). Two deaths were attributed to WNV in 2009, both in persons over 65 years of age. Seasonality is shown in the figure. The majority of 2009 WNV infections occurred between June and October—similar to the 2008 WNV season. WNV was detected in nine horses, two birds, one dog and numerous mosquito pools. Evidence of human, mammal, and mosquito WNV activity appears to be limited to central and southern Idaho. Idaho surveillance data, "Fight the Bite" WNV prevention campaign materials, and other guidance documents for health care providers, local government entities and the public at large are found at **http://www.westnile.idaho.gov**.

Figure. WNV human cases, by week—Idaho, 2008–2009



ROUTINE 24-Hour Disease Reporting Line 1.800.632.5927
EMERGENCY 24-Hour Reporting Line 1.800.632.8000

An electronic version of the Rules and Regulations Governing Idaho Reportable Diseases may be found at http://adm.idaho.gov/adminrules/rules/idapa16/0210.pdf.

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