

MONTANA
 DEPARTMENT OF
 HEALTH & HUMAN
 SERVICES
 LABORATORY
 SERVICES
 BUREAU

Updates from the MT
 Laboratory Services
 Bureau
 800-821-7284
www.lab.hhs.mt.gov



READY OR NOT, INFLUENZA SEASON IS HERE!

Surveillance for the 2013-2014 influenza season officially began on September 29, 2013 and as of November 7, 2013, the Montana Public Health Laboratory (MTPHL) has confirmed four (4) Influenza A 2009 H1 subtypes and two (2) Influenza Bs. These confirmations were reported from Gallatin, Flathead, and Deer Lodge counties. Receiving and confirming the first positive influenza specimens in the state is important to determine circulating strains, and these specimens are shared with the Centers for Disease Control for further characterization and anti-viral resistance testing.

This season we will be conducting influenza surveillance as we did last season. Once again, we will be utilizing our clinical laboratory partners that perform molecular testing in their laboratories. Each week, the seven laboratories that perform molecular testing report their test numbers and the number positive over a secure website. These data are aggregated and reported in the DPHHS Communicable Disease Update (attached) on a weekly basis.

In addition to this reporting, for geographic monitoring of the circulating strains of influenza and anti-viral resistance trends, thirteen (13) hospital laboratories have been geographically selected to submit one specimen per week for fee-waived surveillance testing. Special forms will be sent to these laboratories to facilitate the submission.

One other arm of the DPHHS Influenza Surveillance Program is the Sentinel Providers. The DPHHS Communicable Disease Epidemiology (CDEpi) section works with sentinel providers who report, on a weekly basis, the number of patients seen with Influenza-like Illness (ILI) and provide specimens to MTPHL for testing.

Suspected clusters/outbreaks or special circumstances surrounding ILI should be reported to MT DPHHS-CDEpi (406-444-0273) and special arrangements may be made for testing. All requested surveillance testing other than from the designated laboratories and Sentinel providers must have a CDEpi consult before acceptance for testing.

When submitting specimens for testing to the MTPHL, please do not submit specimens for testing that are the residual from rapid testing. Specimens must have been collected into universal transport media and shipped in a cold condition.

For more information surrounding specimen collection, diagnostic testing, and surveillance testing for Influenza, please visit the MTPHL website at:
<http://www.dphhs.mt.gov/publichealth/lab/news.shtml>

For more information about influenza activity in the United States during the influenza season, visit the Weekly U.S. Influenza Surveillance Report (FluView):
www.cdc.gov/flu/weekly/fluactivitysurv.htm

RSV UPDATES

As we enter the fifth reporting week for Respiratory Syncytial Virus testing, positivity rates continue to remain below the 10% threshold. RSV season onset in Montana officially begins after two consecutive weeks during which the positivity rate in any given region is $\geq 10\%$. Check out the Montana DPHHS website at www.rsv.mt.gov for information and weekly updates.

The MTPHL has completed validation studies, and is now offering RSV testing by PCR. This testing will take the place of RSV DFA testing previously offered. Although the DFA assay was quite specific, PCR offers improved sensitivity. The CPT code for RSV PCR is 87798 and the cost will be \$95.00, similar to other molecular assays. Specimen source is either a nasopharyngeal swab or a nasal aspirate.



Montana Communicable Disease Weekly Update

Release date: 11/8/2013

DISEASE INFORMATION

Summary – MMWR Week 44 - Ending 11/2/2013 Preliminary disease reports received at DPHHS during the reporting period October 26–November 2, 2013 included the following:

- **Vaccine Preventable Diseases:** Influenza* (1), Pertussis (3)
- **Invasive Diseases:** *Streptococcus pneumoniae*, invasive (2)
- **Enteric Diseases:** Campylobacteriosis (2), Cryptosporidiosis (2), Giardiasis (4), Shiga-toxin producing *E. coli* [STEC] (1), Shigellosis (1)
- **Hepatitis:** Hepatitis B, chronic (1)
- **HIV Disease**:** (0)
- **Vector-borne Diseases:** (0)
- **Animal Rabies:** (0)
- **Travel Related Conditions:** Legionellosis (1)

*Cases confirmed by MTPHL only. Weekly updated Montana Flu information will now be included as an attachment to the weekly update.

** A case is included if a new confirmatory test or report was received by DPHHS. Cases include both persons who were newly diagnosed and persons newly reported in Montana who may have been diagnosed in another state or country.

NOTE: The attached reports have multiple pages reflecting the following information: (1) communicable diseases YTD; (2) cases just this past reporting week; (3) clusters and outbreaks; and (4) a quarterly HIV/STD summary.

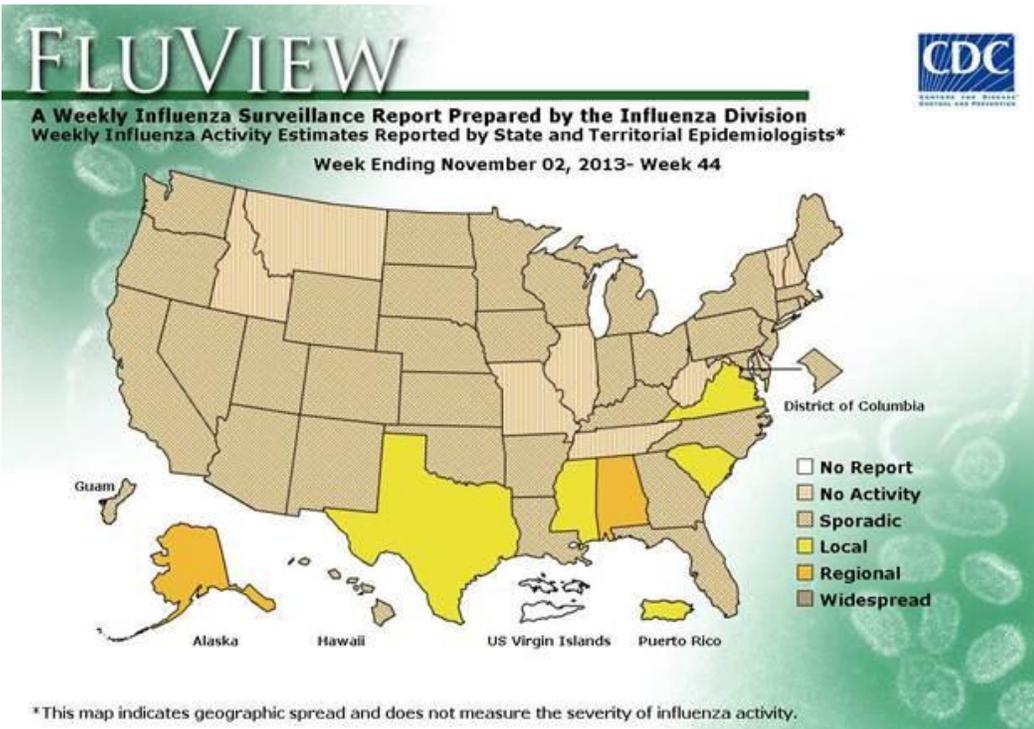
HOT TOPICS

Seasonal Influenza: IT'S HERE!!! Influenza that is. As you should have seen or heard, as of this week, Montana has now confirmed cases of Influenza A 2009 H1 (H1N1) and Influenza B circulating this week (MMWR Week 45). As of this writing we now have seven cases of Influenza A and two cases of Influenza B in five jurisdictions. The current vaccines this season incorporate two strains of Influenza A including an A/H1 and one or two strains of Influenza B - depending whether it's the trivalent or quadrivalent vaccine. (Note - Attached weekly flu summary runs one week behind current week for data)

With the holidays rapidly approaching we anticipate that influenza activity will continue to escalate around the state. All healthcare providers and public health jurisdictions should make every effort possible to vaccinate our residents against influenza as soon as possible. **That would include healthcare and public health staff members too!**

During week 44 (October 27-November 2, 2013), influenza activity remained low in the United States. More detailed information on national weekly influenza key points can be found in the attached "key points" document.

- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.
- **Influenza-Associated Pediatric Deaths:** Two influenza-associated pediatric deaths that occurred during the 2012-2013 season were reported.



Information on seasonal influenza vaccine for this season can be found in the Montana Public Health Prevention Opportunities under the Big Sky publication at <http://www.dphhs.mt.gov/publichealth/preventionopportunities/2013/October.pdf>

MIDIS and Influenza reporting: You may have noticed that in the lower right hand corner of the MIDIS homepage, the Notice box now contains information pertaining to influenza reporting for the 2013-14 season. Check this box to determine the correct week for reporting your weekly aggregate influenza case count. Remember that individual influenza investigations (cases) are not entered into MIDIS unless it is an influenza-related hospitalization and/or death. If you receive a positive lab report for influenza in your lab queue, you may mark it as reviewed.

Respiratory Syncytial Virus (RSV): This is the 5th reporting week for laboratories performing in-house RSV testing. We are seeing slight increases in RSV activity in the northwest and south central regions of Montana; however, positivity rates continue to remain below the 10% threshold that determines RSV season on-set. Weekly updates and additional RSV and RSV prophylaxis information can be found at:

- www.rsv.mt.gov

Norovirus: In conjunction with the arrival of influenza in Montana, the season has started for norovirus as well. A few cases have already been reported, mostly the very young and elderly. Cases are reported in the larger counties and one outbreak of norovirus in an assisted living facility has already been confirmed as well. There is no better time than now to educate the public on norovirus. In addition to the hand washing posters, we also have norovirus specific posters with instructions on how to prevent spread and environmental cleaning. Please contact Dana Fejes dfejes@mt.gov or 406-444-3049 with quantity and physical mailing address.



Final National 2012 Pertussis Surveillance Report: (Attached) For much of the year, Montana had the second highest incidence rate (per hundred thousand) in the country following Washington State but in the last half of 2012, and at the end Montana dropped to 8th with an incidence rate of 54.6 (549 cases). The national incidence rate ended up at 54.4 per hundred thousand. The highest incidence rate was in Wisconsin with 120.2 cases per hundred thousand. So, it could have been worse and in a sense it was as Montana continued at historically increased levels through the third quarter of 2013. This year's cases have dropped off significantly in the fourth quarter (knock on wood) but through October 26th, 2013, the state has exceeded 2012 numbers with 564 cases. The final summary for pertussis cases in Montana in 2012 can be viewed at [2012 MT Pertussis Summary](#)

INFORMATION/ANNOUNCEMENTS

Q3 2013 Reconciliation Reports: Reconciliation reports for Calendar Quarter 3 (July 1 through September 30) have been sent out this week via ePass. Once you have downloaded your report, please review the line list of cases for accuracy. Make any changes (including filling in the blank fields if possible) in a different color and return by ePass to sanderson2@mt.gov. Remember to save the report to your computer as you will need the data on tab 2 ("completeness") for your next PHEP progress report. Please have your reconciliation completed by November 20, 2013. If you have any questions please call Stacey Anderson (444-3012.) Thank you for your work to keep our state numbers timely and accurate!

Communicable Disease Rules WebEx: Topic: "Communicable Disease Control Rules Explained"

Description: This presentation will update and further clarify the new Communicable Disease Control Rules for the state of Montana and offer a question and answer period for attendees.

DATE: **Thursday, November 14th**, TIME: **2:00 PM**

TOLL FREE CALL IN NUMBER: 1-877-668-4490

WEBEX LINK:

<https://hhsmt.webex.com/hhsmt/j.php?ED=245354152&UID=488204857&PW=NZDQ5ZDA4Nzhj&RT=MiM2>

PASSWORD: montana1

24/7 AVAILABILITY

The Communicable Disease Epidemiology (CDEpi) Program is available 24 hours a day, 7 days a week, 365 days a year, primarily to assist local health jurisdictions. Local providers should call, including after normal business hours, their local health jurisdiction. The CDEpi 24-hour line is available as a back-up to the local health jurisdiction's 24-hour line. If you need CDEpi assistance, please call 406.444.0273. Phone calls to this number outside of normal business hours will be answered by the answering service. The answering service will immediately forward the message to CDEpi, and we will respond as quickly as possible.

Local health jurisdictions, please ensure that your local providers have your 24/7/365 contact information. And please inform CDEpi or the Public Health Emergency Preparedness Program of updates to your required 24/7 contact information.

This update is produced by the Montana Communicable Disease Epidemiology Program. Questions regarding its content should be directed to 406.444.0273 (24/7/365). For more information: <http://cdepi.hhs.mt.gov>

Montana Communicable Disease Case Counts by Jurisdiction of Residence, YTD November 2, 2013¹⁻³

	Communicable Disease Case Counts																																
	Campylobacteriosis	Coccidioidomycosis	Colorado Tick Fever	Crotzfeldt-Jakob Disease	Cryptosporidiosis	Dengue Fever	Ethelberg's	Giardiasis	Haemophilus influenzae	Hantavirus Pulmonary Syndrome	Hepatitis A, Acute	Hepatitis B, Acute	Hepatitis B, Chronic	Hepatitis C, Acute	Legionellosis	Leishmaniasis	Lyme Disease	Meningococcal Disease	Peritonsillitis	Q Fever	Rabies, Animal	Rocky Mountain Spotted Fever	STE C	Salmonellosis	Shigellosis	Streptococcal pneumoniae, invasive	Typhoid Malaria	Tuberculosis	Tularemia	Varicella	Vibriosis	West Nile	
Beaverhead	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	6	0	0	
Big Horn/Crow	3	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	
Blaine/Ft. Belknap	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Broadwater	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	11	0	0	0	0	0	0	0	1	0	0	0	1	0	0	
Carbon	6	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	1	
Carter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
Cascade	12	0	0	1	18	0	0	11	0	0	0	0	2	2	0	1	0	3	0	0	0	3	12	1	0	0	0	0	1	0	1		
Chouteau	1	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0		
Custer	5	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	0	4	0	0	1	2	0	0	0	1	2	0	6		
Denali	1	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DeWoon	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
Deer Lodge	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	38	2	0	0	0	0	0	0	0	0	0	0	3	0	0	
Fallon	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
Fergus	4	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	18	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
Fishhead	7	2	0	0	14	0	1	13	0	0	0	1	2	0	2	0	2	209	0	1	0	3	7	0	3	0	0	0	6	1	0		
Gallatin	22	0	0	0	9	0	0	13	0	1	0	0	1	0	0	1	1	26	0	0	0	10	14	5	0	0	0	0	8	1	0		
Garfield	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Glacier/Blackfeet	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Golden Valley	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	
Granite	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hill/Roads Bar	3	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	2	0	1	0	6	0	4		
Jefferson	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	8	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Lake/CSKT	5	0	0	0	1	0	0	3	0	0	0	0	0	2	0	0	7	0	2	0	1	1	0	5	0	0	1	1	0	0	0	0	
Lewis & Clark	13	0	0	0	0	0	0	7	1	0	0	1	0	0	0	0	90	0	6	1	1	9	1	3	0	0	0	9	0	0	0		
Liberty	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
Lincoln	11	0	0	0	1	0	0	0	0	0	0	1	2	0	0	0	16	0	2	0	1	0	2	1	0	1	0	1	0	1	0	0	
Madison	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
McCone	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1



	Campylobacteriosis	Coccidioidomycosis	Colorado Tick Fever	Creutzfeldt-Jakob Disease	Cryptosporidiosis	Dengue Fever	Ehrlichiosis ³	Gardiasis	Hemophilus influenzae	Hantavirus Pulmonary Syndrome	Hepatitis A, Acute	Hepatitis B, Acute	Hepatitis B, Chronic	Hepatitis C, Acute	Legionellosis	Leishmaniasis	Lyme Disease	Meningococcal Disease	Peritonitis	Q Fever	Rabies, Animal	Rocky Mountain Spotted Fever	STEC ⁴	Salmonellosis	Shigellosis	Streptococcus pneumoniae, invasive	Tekdorne Relapsing Fever	Tuberculosis	Tularia	Varicella	Vibriosis ⁵	West Nile
Beauper	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blaine	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	2	0	0
Butte	13	0	0	0	7	2	0	10	0	0	1	0	4	1	0	0	2	0	9	0	2	0	0	7	0	1	0	0	0	2	0	0
Chouteau	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
County	3	0	0	0	3	0	0	1	0	0	0	0	0	0	0	1	0	2	0	0	0	1	2	1	0	0	0	0	4	0	0	0
Deer Lodge	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0
Flour	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6	0	2	0	0
Four	6	0	0	0	1	0	0	2	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Glacier	7	0	0	0	1	0	0	2	0	0	3	0	0	0	0	1	0	6	0	3	1	1	0	0	2	1	0	0	0	0	1	0
Granite	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	1	0	0	0	0	0	3	0	0	0
Great Falls	3	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	0
Highway	2	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	11	1	0	0	0	0	0	1	0
Judith	4	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0
Liberty	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Missoula	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	29	0	0	0	4	1	1	0	0	0	0	0	0	1
Miner	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Missoula	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nez Perce	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
North	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	6	0	1	0
Paradise	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	2	0
Phillips	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pondera	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Powder River	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	6	0	2	0	0
Powell	6	0	0	0	1	0	0	2	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Ravalli	7	0	0	0	1	0	0	2	0	0	3	0	0	0	0	1	0	6	0	3	1	1	0	0	2	1	0	0	0	0	1	0
Richland	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	1	0	0	0	0	0	3	0	0	0
Roosevelt/Ft. Peck	3	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	0
Rosebud/N. Chouteau	2	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	11	1	0	0	0	0	0	1	0
Sanders	4	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0
Sheridan	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Silver Bow	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	29	0	0	0	4	1	1	0	0	0	0	0	0	1
Stillwater	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Sweet Grass	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Teton	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Toole	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	6	0	1	0
Treasure	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Valley	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	2	0
Wheatland	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Yellowstone	18	0	0	0	39	0	0	3	0	0	0	4	4	3	0	0	0	43	0	1	0	9	12	15	3	0	0	1	3	0	11	0
2013	181	3	1	3	121	2	1	77	4	2	6	2	18	14	10	1	11	1	564	2	32	2	43	79	60	25	1	5	4	79	2	38
2012	210	3	1	1	60	2	NR	59	5	3	6	2	22	6	3	NR	6	10	477	2	22	3	39	96	9	29	1	5	3	110	NR	6

¹Data retrieved from the Montana Infectious Disease Information System (MIDIS). Note: The case counts reflected above are provisional and may differ slightly from local health jurisdiction numbers at any given time.

²Counties with zero (0) reportable conditions are not reflected on this report.

³African Tick Fever, Coccidioidomycosis, Dengue Fever, Lyme Disease and Malaria are reportable diseases that are not endemic to Montana. Residents with these illnesses have acquired the disease out-of-state or out of the country but still are reflected in this summary report.

⁴STEC = Shiga-toxin producing Escherichia coli

⁵NR = Not reportable in 2012

Montana Communicable Disease Reports for MMWR Week 44 (October 27 - November 2, 2013)

	Campylobacteriosis	Cryptosporidiosis	Giardiasis	Hepatitis B, Chronic	Legionellosis	Pertussis	STEC	Shigellosis	Streptococcus pneumoniae, invasive
Big Horn/Crow	0	1	0	0	0	0	0	1	0
Flathead	1	1	1	0	0	1	0	0	2
Gallatin	0	0	2	0	0	0	0	1	0
Hill/Rocky Boy	0	0	0	0	0	1	0	0	0
Lake/CSKT	0	0	0	0	1	0	0	0	0
Lewis & Clark	0	0	1	0	0	0	0	0	0
Lincoln	1	0	0	0	0	1	0	0	0
Madison	0	0	0	0	0	0	1	0	0
Yellowstone	0	0	0	1	0	0	0	0	0
WEEK 44 Total	2	2	4	1	1	3	1	2	2

Note: The case counts reflected above are provisional and may differ slightly from local health jurisdiction numbers at any given time.
 STEC = Shiga-toxin producing Escherichia coli

Below are the number of select STD and HIV cases by county as of September 30, 2013. Case counts may not match current county figures as updates reported to DPHHS since September 30 are not reflected in the numbers below.

2013 PRELIMINARY STD & HIV CASES BY COUNTY AS OF September 30, 2013 ¹					
COUNTY	CHLAMYDIA	GONORRHEA	SYPHILIS	HIV ²	TOTAL
BEAVERHEAD	24	0	0	0	24
BIG HORN	136	7	1	0	144
BLAINE	32	0	0	0	32
BROADWATER	6	0	0	0	6
CARBON	10	0	0	0	10
CARTER	0	0	0	0	0
CASCADE	338	3	1	5	347
CHOUTEAU	0	0	0	0	0
CLUSTER	38	1	0	1	40
DANIELS	0	1	0	0	1
DAWSON	18	3	0	0	21
DEER LODGE	21	0	0	0	21
FALLON	3	0	0	0	3
FERGUS	7	0	0	0	7
FLATHEAD	173	2	1	7	183
GALLATIN	259	3	0	6	268
GARFIELD	0	0	0	0	0
GLACIER	130	5	0	0	135
GOLDEN VALLEY	1	0	0	0	1
GRANITE	4	0	0	0	4
HILL	109	1	0	0	110
JEFFERSON	10	0	0	1	11
JUDITH BASIN	0	0	0	0	0
LAKE	102	30	0	0	132
LEWIS AND CLARK	112	4	1	2	119
LIBERTY	1	0	0	0	1
LINCOLN	33	1	0	0	34
MADISON	11	0	0	1	12
MCCONE	3	0	0	0	3
MEAGHER	1	0	1	0	2
MINERAL	5	0	0	1	6
MISSOULA	296	13	1	4	314
MUSSELSHELL	5	0	0	0	5
PARK	14	0	0	1	15
PETROLEUM	0	0	0	0	0
PHILLIPS	4	0	0	0	4
PONDERA	4	0	0	1	5
POWDER RIVER	1	0	0	0	1
POWELL	8	0	0	0	8
PRAIRIE	2	0	0	0	2
RAVALLI	39	0	0	1	40
RICHLAND	50	0	0	0	50
ROOSEVELT	115	27	0	1	143
ROSEBUD	109	23	0	1	133
SANDERS	10	0	0	0	10
SHERIDAN	3	0	0	0	3
SILVER BOW	78	4	0	3	85
STILLWATER	6	0	0	0	6
SWEET GRASS	1	0	0	0	1
TETON	5	0	0	0	5
TOOLE	2	1	0	0	3
TREASURE	1	0	0	0	1
VALLEY	10	1	0	1	12
WHEATLAND	2	0	0	0	2
WIBAUX	4	0	0	0	4
YELLOWSTONE	473	18	1	9	501
YELLOWSTONE NP	1	0	0	0	1
UNKNOWN	2	0	0	0	2
TOTAL YTD	2829	148	7	46	3030

¹ CASES ARE COUNTED BY REPORT DATE, AND MAY DIFFER SLIGHTLY FROM COUNTY NUMBERS AT ANY GIVEN TIME. CASES ARE ASSIGNED TO THE COUNTY OF RESIDENCE AT THE TIME OF REPORT.

² A CASE IS INCLUDED IF A NEW CONFIRMATORY TEST OR REPORT WAS RECEIVED BY DPHHS. CASES INCLUDE BOTH PERSONS NEWLY DIAGNOSED IN MONTANA AND PERSONS NEWLY REPORTED IN MONTANA WHO MAY HAVE BEEN DIAGNOSED IN ANOTHER STATE OR COUNTRY.

Montana Influenza Summary

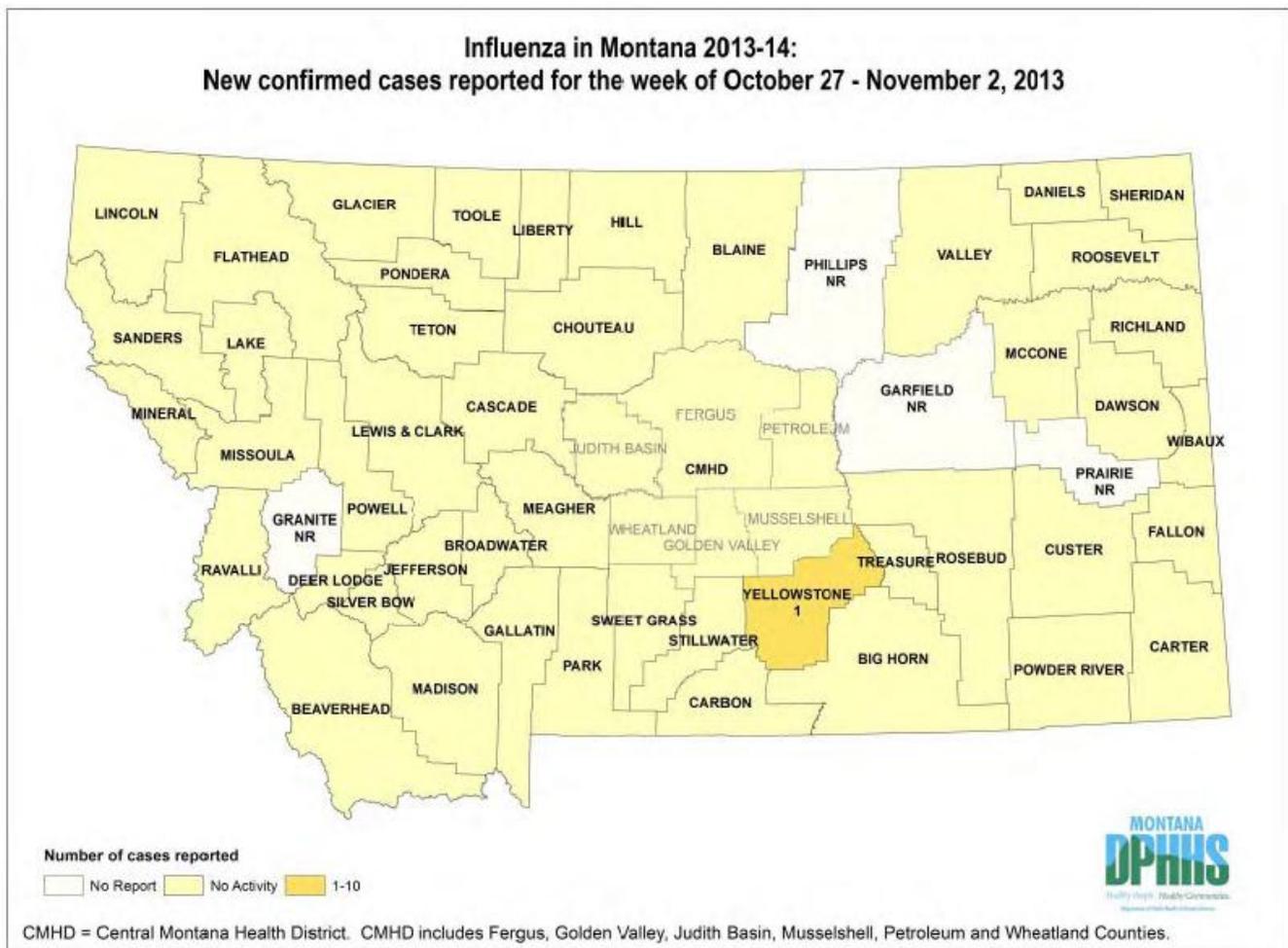
Confirmed Influenza Cases Reported as of 11/2/2013 (MMWR Week 44)



Montana's influenza activity level for the week ending on 11/2/2013 is defined as: **NO ACTIVITY**¹

Overview: Surveillance for the 2013–2014 influenza season officially began on October 1, 2013. The Montana Department of Health and Human Services (DPHHS) provides a weekly report throughout the influenza season that coordinates data from a variety of sources to give the most complete and up to date view of influenza activity for the state of Montana. Data in this report should be considered provisional, and may change as more complete data is received.

Current Influenza Activity: One jurisdiction reported a confirmed influenza case for the week of October 27 – November 2, 2013; however, this case was acquired out of state. The following maps demonstrate influenza activity by case counts for the most recent reporting week, case counts for the flu season to date, and rates for the season to date (per 10,000 persons).



**Influenza in Montana 2013-14: Reported confirmed cases by County
Montana, YTD Week ending 11/2/2013**



Number of cases reported
 No Activity 1-10



CMHD = Central Montana Health District. CMHD includes Fergus, Golden Valley, Judith Basin, Musselshell, Petroleum and Wheatland Counties.

**Influenza 2013-14: Rates of confirmed cases by County
Montana, YTD Week Ending 11/2/2013**



Rates per 10,000 population
 No Activity 0.01 - 0.10



CMHD = Central Montana Health District. CMHD includes Fergus, Golden Valley, Judith Basin, Musselshell, Petroleum and Wheatland Counties.

Laboratory Surveillance: The Montana Public Health Laboratory (MTPHL) and partners report the number of specimens tested for influenza by Polymerase Chain Reaction (PCR) as well as the number of positives by influenza virus type and influenza A virus subtype. The table presented below contains data for MMWR Week 44.

Table 1. Influenza Types Confirmed by MTPHL and Partners [*]		
	Week 44	YTD
Number of specimens tested	68	325
Number of positive specimens (%)	0	0
Positive specimens by type/subtype		
Influenza A	0	0
2009 H1N1	1	1
Subtyping not performed	0	0
H3	0	0
Influenza B	0	0

^{*}Partner laboratories include: Benefis, Bozeman Deaconess Hospital, Kalispell Regional Medical Center, Missoula Community Hospital, St. Patrick's Hospital, and St. Vincent's Hospital.

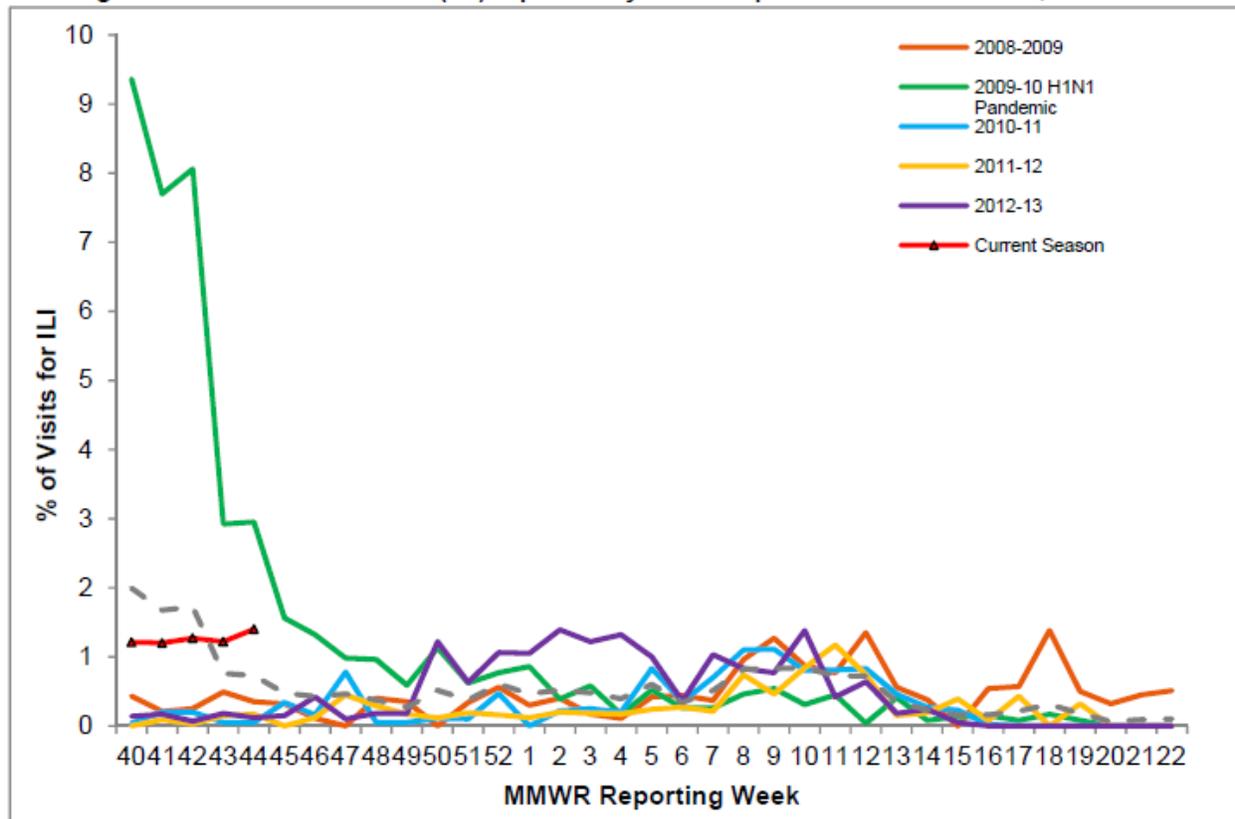
Influenza Hospitalizations: Influenza cases, including hospitalizations and deaths, are reportable to local public health in Montana. As of November 2, 2013, no influenza-associated hospitalizations have been reported. This is a rate of 0.0 per 100,000 population.

Season to date, there have been no deaths attributed to influenza. Table 2 presents influenza hospitalizations and deaths for the week ending November 2, 2013.

Table 2. Influenza Hospitalizations and Deaths — Montana, Week Ending 11/2/13				
Hospitalizations		Deaths (Season to Date)		
Current Week	Season to Date	Pediatric	Adult <65 years	Adult >65 years
0	0	0	0	0

Influenza-like Illness (ILI): The U.S. Outpatient ILI Surveillance Network (ILINet) is a national system that conducts surveillance for Influenza-like illness (ILI) in outpatient healthcare facilities. ILI is defined as a fever (temperature of 100° F or greater) and cough and/or sore throat. Currently, 11 facilities participate in ILINet in Montana. For the week ending 11/2/2013, 1.4% of patient visits were due to ILI in Montana compared to 1.4% in the United States.

Percentage of Influenza-Like Illness (ILI) reported by sentinel providers — Montana, Selected seasons



¹**Influenza Activity:** State health departments report the estimated level of geographic spread of influenza activity in their states each week through the **State and Territorial Epidemiologists Reports**. States report geographic spread of influenza activity as no activity, sporadic, local, regional, or widespread. These levels are defined as follows:

- **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.

For additional information on influenza activity in Montana, please contact your local health department or the Department of Public Health and Human Services' Communicable Disease Epidemiology Section at (406) 444-0273 or visit

<http://www.dphhs.mt.gov/influenza/index.shtml>.

CDC Influenza Division Key Points November 8, 2013

In this document:

- [Summary Key Messages](#)
- [FluView Activity Update](#)
- [Oseltamivir-Resistant Influenza Virus](#)
- [Influenza-Associated Pediatric Deaths](#)

Summary Key Messages

- This week's FluView shows that seasonal influenza activity remains low across the United States. (See [FluView Activity Update](#).)
- Increases in influenza activity across the U.S. are expected in the coming weeks.
- If you have not gotten your flu vaccine yet this season, you should get one now. It takes about two weeks after vaccination for antibodies to develop in the body that protect against influenza virus infection.
- While how well the flu vaccine works can vary, the Centers for Disease Control and Prevention (CDC) recommends a yearly flu vaccination as the first and most important step in protecting against flu and its potentially serious complications.
- Flu vaccination can reduce flu illnesses, doctors' visits, missed work due to flu, as well as prevent flu-related hospitalizations and deaths.
- You need this season's influenza vaccine to protect against influenza viruses most likely to circulate and cause illness this season.
- More than 113 million doses of flu vaccine had been delivered in the United States as of mid-October with manufacturers projecting total production of 138-145 million doses this season.
- Some children 6 months through 8 years of age require 2 doses of flu vaccine. The second dose should be given at least 28 days after the first dose. Your child's health care provider can tell you whether two doses are recommended for your child. Flu vaccines are offered in many locations, including doctor's offices, clinics, health departments, retail stores, pharmacies, health centers, and by many employers and schools.
- There are several flu vaccine options available for the 2013-2014 flu season. Traditional flu vaccines made to protect against three different flu viruses (called "trivalent" vaccines) will be available this season. In addition, this season, flu vaccines made to protect against four different flu viruses (called "quadrivalent" vaccines) also will be available.
- With regard to trivalent vaccine, in addition to the traditional seasonal flu shot available for people 6 months and older, a flu shot that is egg-free is available for

people 18 through 49 years of age, a high dose flu shot is available for people 65 and older, and an intradermal flu shot is approved for people 18 to 64 years of age.

- With regard to quadrivalent vaccine, standard dose nasal spray vaccines are available for healthy, non-pregnant people 2 through 49 years of age, and standard dose flu shots also are available.
- CDC does not recommend one flu vaccine over the other. The important thing is to get a flu vaccine every year.

FluView Activity Update

- According to this week's FluView report, flu activity remains low across the nation, though increases in activity are expected in the coming weeks.
- Below is a summary of the key indicators for the week ending November 2, 2013:
 - For the week ending November 2, the proportion of people seeing their [health care provider](#) for influenza-like illness (ILI) remained below the national baseline. All 10 U.S. regions reported ILI activity below region-specific baseline levels.
 - One state (Mississippi) experienced moderate ILI activity. Three states (Arkansas, Kentucky, and Louisiana) experienced low [ILI activity](#). Forty-six states and New York City experienced minimal ILI activity. The District of Columbia did not have sufficient data to calculate an activity level. ILI activity data indicate the amount of flu-like illness that is occurring in each state.
 - Two states (Alaska and Alabama) reported regional [geographic influenza activity](#). Puerto Rico and four states (Mississippi, South Carolina, Texas, and Virginia) reported local activity. The District of Columbia, Guam, and 34 states reported sporadic influenza activity. Ten states reported no influenza activity. The U.S. Virgin Islands did not report. Geographic spread data show how many areas within a state or territory are seeing flu activity.
 - Data regarding influenza-associated hospitalizations for the 2013-2014 influenza season are not yet available, but will be updated weekly later in the season.
 - The [proportion of deaths](#) attributed to pneumonia and influenza (P&I) based on the 122 Cities Mortality Reporting System remained below the epidemic threshold.
 - Two [influenza-associated pediatric deaths](#) that occurred during the 2012-2013 season were reported to CDC during the week ending November 2, 2013. One of the deaths was associated with an influenza A (H3) virus. The other death was association with an influenza A virus for which the subtype was not determined. These deaths bring the total number of reported pediatric deaths for the 2012-

2013 season to 169. At this time, no influenza-associated pediatric deaths have been reported for the current (2013-2014) flu season.

- Nationally, the percentage of [respiratory specimens](#) testing positive for influenza viruses in the United States during the week ending November 2 increased slightly to 4.9%. During the last three weeks, the regional percentage of respiratory specimens testing positive for influenza viruses ranged from 0.7% in the Northeast to 9.7% in the Southeast.
- [Influenza A \(H3N2\), 2009 influenza A \(H1N1\), and influenza B viruses](#) have all been identified in the U.S. this season. During the week ending November 2, 167 of the 201 influenza-positive tests reported to CDC were influenza A viruses and 34 were influenza B viruses. Of the 62 influenza A viruses that were subtyped 30.6% were H3 viruses and 69.4% were 2009 H1N1 viruses.
- CDC has antigenically characterized four influenza viruses, including three 2009 influenza A (H1N1) viruses and one influenza B viruses, collected since October 1, 2013.
 - All three of the influenza A (H1N1) viruses tested were characterized as A/California/7/2009-like. This is the influenza A (H1N1) component of the Northern Hemisphere quadrivalent and trivalent vaccines for the 2013-2014 season.
 - The one influenza B virus tested belonged to the B/Yamagata lineage of viruses, and was characterized as B/Massachusetts/02/2012-like. This is an influenza B component for the 2013-2014 Northern Hemisphere quadrivalent and trivalent influenza vaccines.
- Since October 1, 2013, CDC has tested 37 2009 influenza A (H1N1), six influenza A (H3N2), and one influenza B virus sample for resistance to neuraminidase inhibitors. While the majority of the tested viruses showed susceptibility to the antiviral drugs oseltamivir and zanamivir, two 2009 H1N1 virus proved resistant to oseltamivir, but were sensitive to zanamivir. High levels of resistance to the adamantanes (amantadine and rimantadine) persist among 2009 influenza A (H1N1) and A (H3N2) viruses. Adamantanes are not effective against influenza B viruses.
- [FluView](#) is available – and past issues are [archived](#) – on the CDC website.

Note: Delays in reporting may mean that data changes over time. The most up to date data for all weeks during the 2013-2014 season can be found on the current [FluView](#).

Oseltamivir-Resistant Influenza Virus

- Influenza viruses can sometimes develop resistance to antiviral medications.

- Antiviral resistance means that a virus has changed in such a way that the antiviral drug is less effective in treating or preventing illnesses caused by the virus.
- Influenza viruses constantly change as the virus makes copies of itself. Some changes can result in the viruses being resistant to one or more of the antiviral drugs that are used to treat or prevent influenza.
- Resistance of influenza A viruses to antiviral drugs can occur spontaneously or emerge during the course of antiviral treatment.
- Antiviral resistance is detected through laboratory testing.
- CDC reports specimens collected and tested through national surveillance as well as additional specimens tested at public health laboratories who share testing results with CDC.
- For the week ending November 2, 2013 (week 44), two oseltamivir-resistant 2009 H1N1 viruses were reported, bringing the total number of oseltamivir-resistant viruses to two for this season.
- Oseltamivir resistance among 2009 H1N1 viruses is rare.
- The majority of 2009 H1N1 viruses circulating in the United States remain susceptible to the neuraminidase inhibitor antiviral medications, oseltamivir and zanamivir.
- The oseltamivir-resistant virus has a single known mutation in the neuraminidase protein of the virus (H275Y) that seems to confer oseltamivir resistance. The two viruses reported in week 44 also have this mutation.
- CDC and state and local partners will continue to watch influenza viruses closely for possible emerging patterns of antiviral resistance in addition to watching for antigenic changes.
- Two FDA-approved influenza antiviral medications are recommended for use in the United States during the 2013-2014 influenza season: oseltamivir (Tamiflu®) and zanamivir (Relenza®). More information about antiviral drug resistance can be found at <http://www.cdc.gov/flu/about/qa/antiviralresistance.htm> and <http://www.cdc.gov/flu/antivirals/index.htm>.
- Information on the monitoring of antiviral resistance of influenza viruses to oseltamivir and zanamivir is updated weekly in the CDC FluView surveillance report, which is available at: <http://www.cdc.gov/flu/weekly/>.

Influenza-Associated Pediatric Deaths

- Two pediatric deaths that occurred during last season (2012-2013) were reported to CDC during the week of October 27 - November 2, 2013 (Week 44).

- A total of 169 influenza-associated pediatric deaths have now been reported for the 2012-2013 season from Chicago [2], New York City [5], Puerto Rico [1], Washington DC [1], and 38 states (AL [1], AR [4], AZ [4], CA [14], CO [5], DE [1], FL [9], GA [3], HI [2], IA [1], IL [2], IN [5], KS [2], KY [2], LA [2], MA [5], MD [5], ME [1], MI [7], MN [4], MS [1], NE [1], NH [3], NJ [7], NM [4], NV [3], NY [9], OH [7], OK [2], PA [1], SC [5], SD [3], TN [3], TX [20], UT [5], VA [2], WA [1], and WI [4]).
- At this time, no flu-associated pediatric deaths have been reported for the current (2013-2014) flu season.
- A pediatric death is a death in a person younger than 18 from an illness associated with infection with an influenza virus.
- A review of the available pediatric death reports from the 2012-2013 season indicates that:
 - Of the 162 deaths in which the child's medical history was known, 56% occurred in children who had underlying medical conditions that placed them at high risk of developing serious flu-associated complications. However, 44% had no recognized underlying health problems.
 - The proportions of pediatric deaths that occurred in unvaccinated children and among children with underlying medical conditions that placed them at high risk from flu complications are largely consistent with what has been seen in the past.
- Since 2004, when flu-associated pediatric deaths became a nationally notifiable condition, the number of deaths reported to CDC each season has ranged from 35 (2011-2012 season) to 169 pediatric deaths during the 2012-2013 season.
- During the 2009 H1N1 pandemic — April 15, 2009 to October 2, 2010 — 348 pediatric deaths were reported to CDC.
- These deaths are a somber reminder of the danger flu poses to children.
- The single best way to protect against seasonal flu and its potential severe consequences is to have children receive a seasonal flu vaccine each year.
- Vaccination is especially important for children younger than 5 years of age and children of any age with an underlying medical condition like asthma, a neurological or neurodevelopmental disorder, or immune suppression. These children are at higher risk of serious complications if they get the flu.
- Yearly vaccination also is especially important for people in contact with high risk children in order to protect the child (or children) from the flu.
- Even previously healthy children can become seriously ill if they get the flu.
Laboratory-confirmed influenza hospitalization data reported during the 2012-2013 flu

season indicated that approximately 46% of children hospitalized with the flu had no identified underlying medical conditions.

- Flu-associated deaths in children younger than 18 years old should be reported through the Influenza-Associated Pediatric Mortality Surveillance System. The number of flu-associated deaths among children reported during the 2013-2014 flu season will be updated each week and can be found at <http://www.cdc.gov/flu/weekly/>.
- Additional information about the pediatric deaths, including basic demographics, underlying conditions and week and place of death, for the 2013-2014 season as well as past influenza seasons, is available through the Influenza Associated Pediatric Mortality application of FluView Interactive at <http://www.cdc.gov/flu/weekly/fluviewinteractive.htm>.

2012 Final Pertussis Surveillance Report

Notice to Readers:
Final 2012 Reports of Notifiable Diseases
 August 23, 2013 / 62(33)

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6233a6.htm?s_cid=mm6233a6_w

Incidence of Reported Pertussis, By State

	Incidence (per 100,000)	No. of Cases
ALABAMA	4.4	212
ALASKA	48.3	353
ARIZONA	17.2	1130
ARKANSAS	8.4	248
CALIFORNIA	2.1	795
COLORADO	28.8	1494
CONNECTICUT	5.1	182
DELAWARE	6.2	57
D.C.	4.1	26
FLORIDA	2.3	575
GEORGIA	3.2	318
HAWAII	5.2	73
IDAHO	14.7	235
ILLINOIS	15.7	2026
INDIANA	6.8	441
IOWA	56.5	1736
KANSAS	30.7	887
KENTUCKY	15.2	666
LOUISIANA	1.6	72
MAINE	55.5	737
MARYLAND	6.3	369
MASSACHUSETTS	9.8	648
MICHIGAN	8.6	845
MINNESOTA	77.0	4142
MISSISSIPPI	2.6	77
MISSOURI	13.5	815
MONTANA	54.6	549
NEBRASKA	12.9	240
NEVADA	4.1	112
NEW HAMPSHIRE	20.4	269
NEW JERSEY	15.7	1395
NEW MEXICO	44.3	924
NEW YORK	24.2	2715
NEW YORK CITY	5.5	456
NORTH CAROLINA	6.3	612
NORTH DAKOTA	30.6	214
OHIO	7.7	893
OKLAHOMA	4.0	154
OREGON	23.2	906
PENNSYLVANIA	15.2	1945
RHODE ISLAND	10.8	113
SOUTH CAROLINA	4.7	224
SOUTH DAKOTA	8.4	70
TENNESSEE	4.7	305
TEXAS	8.5	2218
UTAH	55.7	1591
VERMONT	103.0	645
VIRGINIA	7.6	625
WASHINGTON	71.3	4916
WEST VIRGINIA	4.6	85
WISCONSIN	120.2	6880
WYOMING	10.8	62
TOTAL	15.4	48,277

Source: MenInGItis and Vaccine Preventable Diseases Branch, Division of Bacterial Diseases, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention, at 404-639-3158

Weeks 1-52, 2012 CDC/NCIIRD/DBD/MVPDB

Reported Cases: 2011 and 2012

Weeks 1-52, 2011 18,719
 Weeks 1-52, 2012 48,277

Reported Case Profiles, 2012 By Age, Weeks 1-52

Age	No. of Cases	%	Age Inc /100,000
< 1 yr	4994	10.3	126.7
1-6 yrs	8280	17.2	34.1
7-10 yrs	9532	19.8	58.5
11-19 yrs	14440	29.9	38.0
20+ yrs	10436	21.6	4.5
Unknown	595	(1.2)	N/A
Total	48277	100.0	15.2*

*Total age incidence per 100,000 calculated from 47,682 cases with age reported.

2012 Reported Pertussis Deaths By Age

Age	Deaths [†]
Infants, aged < 3 months:	15
Infants, aged 3-11 months:	1
Children, 1-4 years:	2
Adults, aged 55+ years:	2
Total	20

[†]Deaths reported through NNDSS to CDC.
^{††}11 of the 20 deaths were male.

DTaP Vaccination History of Pertussis Cases

Age	Unk	0 doses	1-2 doses	3+ doses	Total
	No. (%)	No. (%)	No. (%)	No. (%)	No.
6-11 mo	320(26)	131(11)	230(19)	539(44)	1220
1-4 yrs	1613(28)	540(9)	233(4)	3404(59)	5790
5-6 yrs	630(25)	180(7)	60(3)	1620(65)	2490
Total*	2563(27)	851(9)	523(5)	5563(59)	9500

*Percent calculated from total cases aged 6 months to 6 years, n=9,500.

National Center for Immunization and Respiratory Diseases
 Division of Bacterial Diseases

