



Preparing for Flu

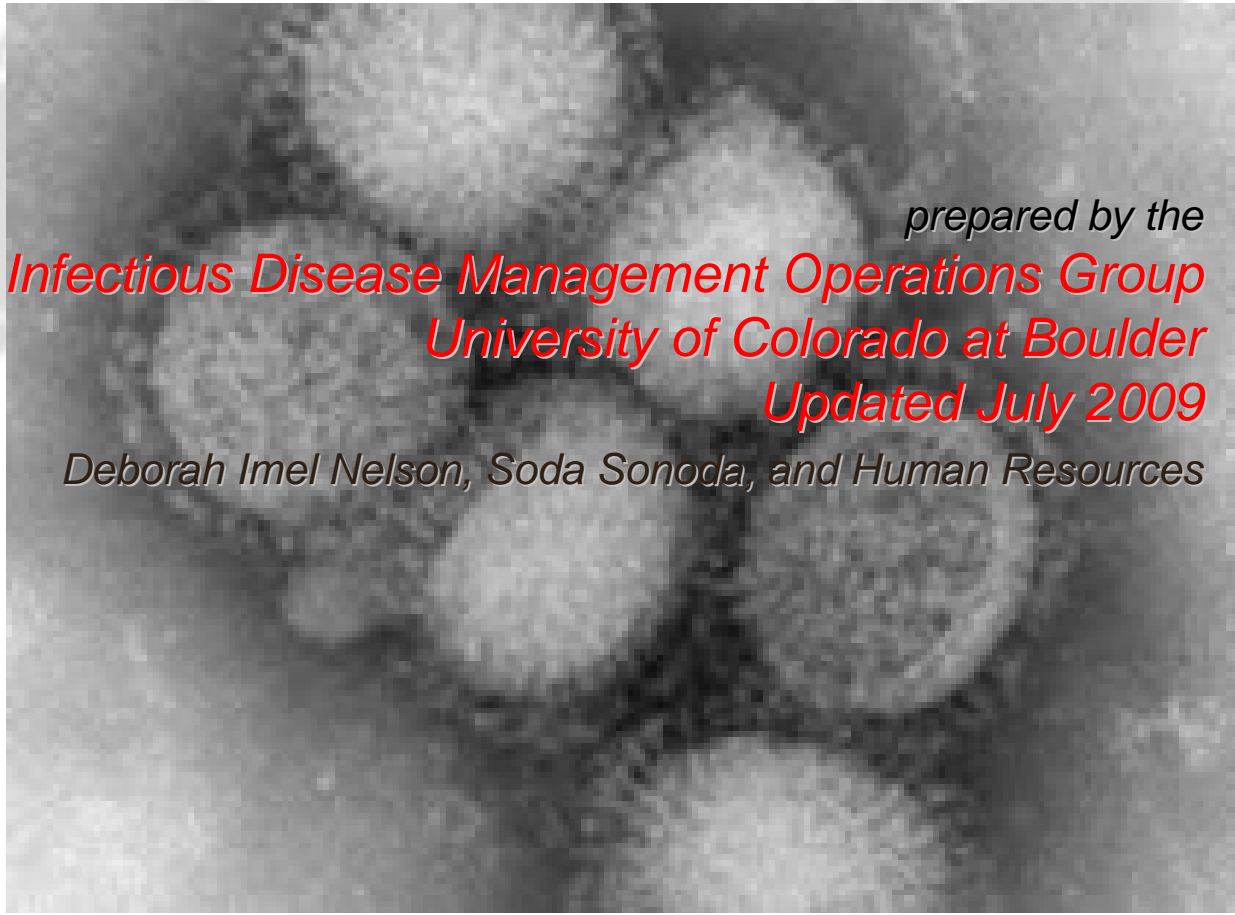
UNIVERSITY OF COLORADO AT BOULDER

Understand

Prevent

Prepare

CU-Boulder Plan



*prepared by the
Infectious Disease Management Operations Group
University of Colorado at Boulder
Updated July 2009
Deborah Imel Nelson, Soda Sonoda, and Human Resources*

Help make CU-Boulder a

**NO
FLU
ZONE**





Understanding flu

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H1N1 is here. There is NO cause for alarm, but there is cause for planning.

To best understand flu, it is important to understand the differences between seasonal flu and pandemic flu. We'll also talk about how flu is spread, how you can protect yourself, and what CU-Boulder is doing to prepare.

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What is seasonal flu?

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- Happens every year between November and March
- A contagious respiratory illness caused by influenza viruses
- 5–20% of the U.S. population gets the flu each year
- 30,000–50,000 people die from the flu in the United States each year
- Typical symptoms:
 - Sudden onset
 - Severe headache
 - Fever
 - Muscle/body aches
 - Red and watery eyes
 - Sore throat or progressive cough
- Each year, new vaccines are manufactured to match the strain believed to be the predominant flu for that year.

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What is pandemic flu?

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- New flu viruses may enter the human population from animal populations, e.g., avian flu (wild birds) or swine flu (pigs).
- Viruses can “swap” genes, resulting in a mix of swine, human, and/or avian flu viruses.
- According to WHO (World Health Organization), a pandemic can start when:
 - A new flu virus emerges
 - Which can infect humans, causing serious illness, and
 - It spreads easily from human to human.
- Is H1N1 a pandemic flu? YES
- The current WHO phase of pandemic alert is 6.

Understand

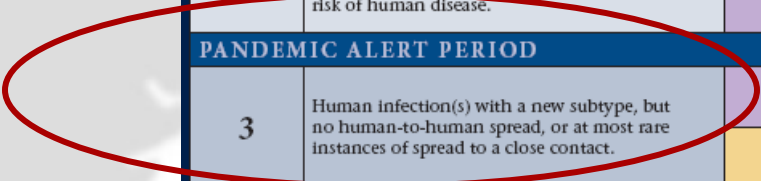




Early Spring 2009 (Avian flu)

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| WHO Phases | | Federal Government Response Stages | |
|------------------------------|---|------------------------------------|---|
| INTER-PANDEMIC PERIOD | | | |
| 1 | No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low. | 0 | New domestic animal outbreak in at-risk country |
| 2 | No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease. | | |
| PANDEMIC ALERT PERIOD | | | |
| 3 | Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact. | 0 | New domestic animal outbreak in at-risk country |
| | | 1 | Suspected human outbreak overseas |
| 4 | Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans. | 2 | Confirmed human outbreak overseas |
| 5 | Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk). | | |
| PANDEMIC PERIOD | | | |
| 6 | Pandemic phase: increased and sustained transmission in general population. | 3 | Widespread human outbreaks in multiple locations overseas |
| | | 4 | First human case in North America |
| | | 5 | Spread throughout United States |
| | | 6 | Recovery and preparation for subsequent waves |



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11 June 2009 (H1N1 flu)

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| WHO Phases | | Federal Government Response Stages | |
|------------------------------|---|------------------------------------|---|
| INTER-PANDEMIC PERIOD | | | |
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Understand

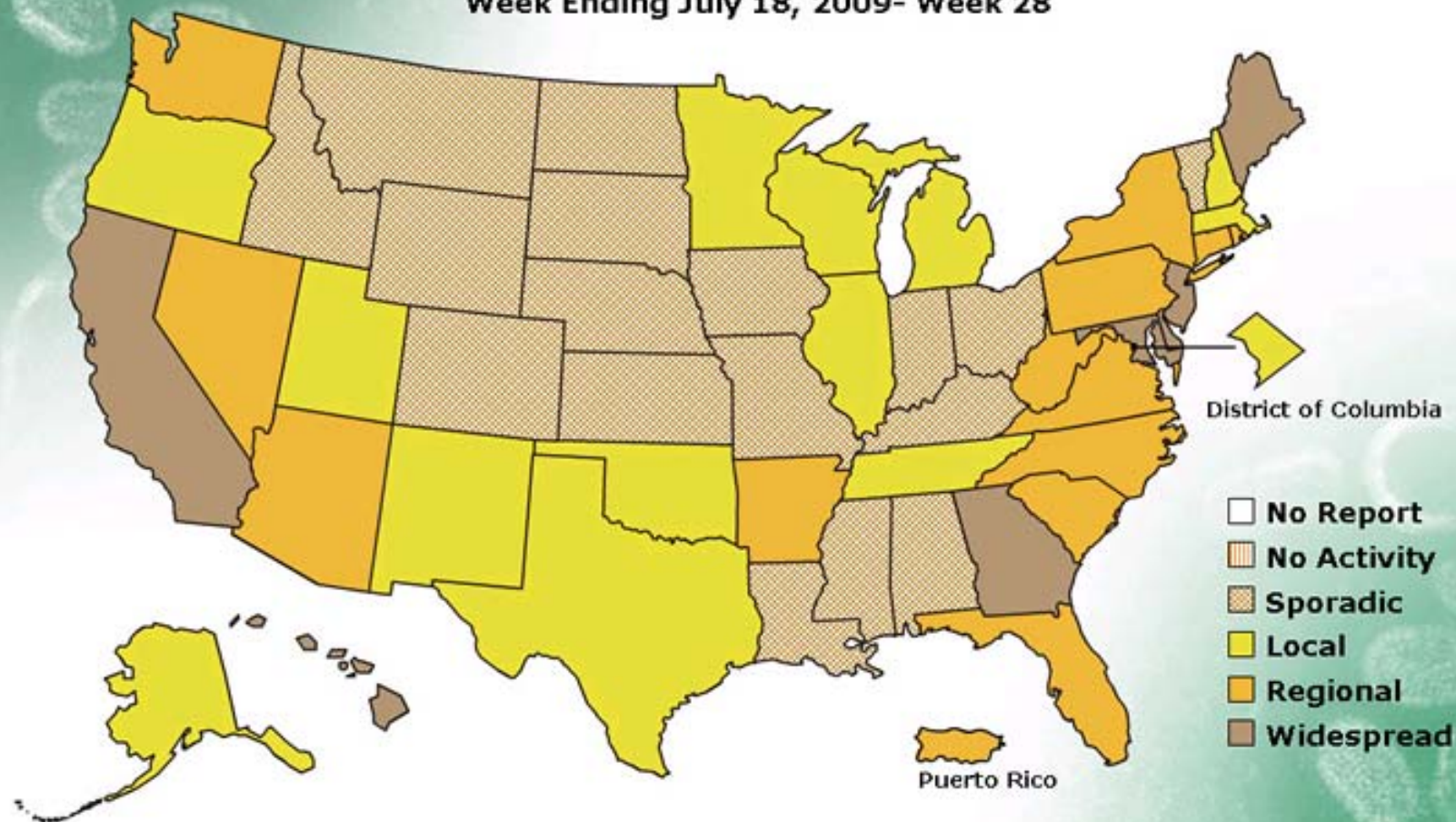


FLUVIEW



A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending July 18, 2009- Week 28



*This map indicates geographic spread and does not measure the severity of influenza activity.

As of 24 July 2009, there were 43,771 confirmed cases and 302 deaths in the U.S.



What is H1N1 flu?

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- What is novel H1N1 (swine flu)?
 - Novel H1N1 is a new influenza virus, first detected in people in the United States in April 2009.
 - This virus is spreading from person-to-person, probably in much the same way that regular seasonal influenza viruses spread.
 - It is now world-wide.

Source: <http://www.cdc.gov/h1n1flu/qa.htm>





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- Why is novel H1N1 virus sometimes called “swine flu”?
 - Many of the genes in this new virus are very similar to influenza viruses that normally occur in pigs in North America. However, this new virus has two genes from flu viruses that normally circulate in pigs in Europe and Asia and avian genes and human genes. Scientists call this a "quadruple reassortant" virus.

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- What are the signs and symptoms of this virus in people?
 - Similar to the symptoms of seasonal flu.
 - Include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue.
 - Sometimes diarrhea and vomiting.
 - Severe illnesses and death have occurred.

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- How severe is illness associated with novel H1N1 flu virus?

- Certain people are at higher risk of serious flu-related complications, including: young children and the elderly; children and adolescents who routinely take aspirin and who might develop Reyes syndrome if they catch influenza; pregnant women; immune-suppressed people (cancer patients, HIV, etc.); adults and children who have chronic illnesses (asthma, diabetes, heart disease, etc.); residents of long-term care facilities.
- Unlike seasonal flu, adults older than 64 years do not yet appear to be at increased risk of novel H1N1-related complications.





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- How does novel H1N1 flu compare to seasonal flu in terms of its severity and infection rates?
 - We don't know yet.
 - In the U.S., seasonal flu results in on average 36,000 deaths and >200,000 hospitalizations.
 - Of those hospitalized, 20,000 are children younger than 5 years old. Over 90% of deaths and about 60% of hospitalizations occur in people older than 65.
 - The largest number of novel H1N1 flu confirmed and probable cases have occurred in people between the ages of 5 and 24-years-old.
 - There are few cases and no deaths reported in people older than 64 years old.

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- How does novel H1N1 virus spread?
 - H1N1 virus is thought to spread in the same way as seasonal flu.
 - Mainly from person to person through coughing or sneezing by people with influenza.
 - Sometimes from touching something with flu viruses on it and then touching the mouth or nose.

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Droplet Generation from Sneezing

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Droplet Generation from Coughing

- Schlieren photography of cough by Professor Gary Settles, Penn State U



Thus the recommendations for social distancing!





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- How long can an infected person spread this virus to others?
 - Centers for Disease Control (CDC) believes that this virus has the same properties in terms of spread as seasonal flu viruses.
 - People may be contagious from one day before they develop symptoms to up to 7 days after they get sick.
 - Children, especially younger children, might potentially be contagious for longer periods.

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- Exposures Not Thought to Spread Novel H1N1 Flu

- Preparing or eating pork
- Drinking treated water
- Exposure to swimming pools, spas, water parks, interactive fountains, and other treated recreational water venues

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- What can I do to protect myself from getting sick?
 - There is no vaccine available right now to protect against novel H1N1 virus.
 - Follow CDC “everyday precautions.”
 - CDC is currently recommending that only people with underlying health conditions be treated with antivirals.

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- Take these everyday steps to protect your health:
 - Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
 - Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based cleaners are also effective.
 - Avoid touching your eyes, nose or mouth.
 - Try to avoid close, face-to-face contact with sick people.
 - Stay home if you are sick for 7 days after your symptoms begin or until you have been symptom-free for 24 hours, whichever is longer. This is to keep from infecting others and spreading the virus further.

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- Other important actions that you can take are:
 - Follow public health advice regarding school closures, avoiding crowds and other social distancing measures.
 - Be prepared in case you get sick and need to stay home for a week or so.
 - Purchase a supply of over-the-counter medicines, alcohol-based hand rubs, tissues and other related items NOW to avoid the need to make trips out in public while you are sick and contagious.

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- What is the best way to keep from spreading the virus through coughing or sneezing?
 - If you are sick, limit your close, face-to-face contact with other people as much as possible.
 - Stay home for 7 days after your symptoms begin or until you have been symptom-free for 24 hours, whichever is longer.
 - Cover your mouth and nose with a tissue when coughing or sneezing.
 - Put your used tissue in the waste basket. Then, clean your hands, and do so every time you cough or sneeze.



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- If I have a family member at home who is sick with novel H1N1 flu, should I go to work?
 - Employees who are well but who have an ill family member at home with novel H1N1 flu can go to work as usual.
 - These employees should monitor their health every day, and take everyday precautions
 - If they become ill, they should notify their supervisor and stay home.
 - Employees who have an underlying medical condition or who are pregnant should call their health care provider for advice, because they might need to receive influenza antiviral drugs to prevent illness.

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- What is the best technique for washing my hands to avoid getting the flu?
 - Washing your hands often will help protect you from germs. Wash with soap and water for 15-20 seconds, or clean with alcohol-based hand cleaner.
 - When soap and water are not available, alcohol-based disposable hand wipes or gel sanitizers may be used. Rub your hands until the gel is dry.
 - Use a paper towel to turn off faucets and open the door.

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- What should I do if I get sick?

- Stay home and avoid close, face-to-face contact with other people – do not leave your home except to seek medical care. This means avoiding normal activities, including work, school, travel, shopping, social events, and public gatherings.
- **If you have severe illness or you are at high risk for flu complications**, contact your health care provider or seek medical care. Your health care provider will determine whether flu testing or treatment is needed.





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- What should I do if my roommate or officemate gets sick?
 - Unfortunately, we will not be able to provide another room for you or for your roommate.
 - The sick person should stay home and avoid close, face-to-face contact with other people, leaving home or the room in the residence hall only to seek medical care. He/she should wear a mask if possible.
 - Follow all the “everyday precautions,” being especially careful to avoid close, face-to-face contact, and scrupulously washing your hands.
 - If possible, you can help your roommate by ensuring that he/she receives food from Dining Services (if on campus), or that others prepare (if off campus).
 - If you are at high risk for flu complications, contact your health care provider or seek medical care. Your health care provider will determine whether flu testing or treatment is needed.





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- In children, emergency warning signs that need urgent medical attention include:

- Fast breathing or trouble breathing
- Bluish or gray skin color
- Not drinking enough fluids
- Severe or persistent vomiting
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Flu-like symptoms improve but then return with fever and worse cough
- Very high fever



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- In adults, emergency warning signs that need urgent medical attention include:
 - Difficulty breathing or shortness of breath
 - Pain or pressure in the chest or abdomen
 - Sudden dizziness
 - Confusion
 - Severe or persistent vomiting
 - Flu-like symptoms improve but then return with fever and worse cough

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- Are there medicines to treat novel H1N1 infection?
 - CDC is recommending no treatment for normally health adults with flu.
 - The current priority use for influenza antiviral drugs is to treat severe influenza illness.

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- What is CDC's recommendation regarding "swine flu parties"?
 - "Swine flu parties" are gatherings during which people have close contact with a person who has novel H1N1 flu in order to become infected with the virus.
 - CDC does not recommend "swine flu parties" as a way to protect against novel H1N1 flu in the future.

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- How long can influenza virus remain viable on objects (such as books and doorknobs)?

- Studies have shown that influenza virus can survive on environmental surfaces and can infect a person for up to 2-8 hours after being deposited on the surface.

- What kills influenza virus?

- Heat (167-212°F [75-100°C])
- Chemical germicides, including chlorine, hydrogen peroxide, detergents (soap), iodophors (iodine-based antiseptics), and alcohols are effective against human influenza viruses if used in proper concentration for a sufficient length of time.





- What surfaces are most likely to be sources of contamination?
 - Droplets from a cough or sneeze of an infected person move through the air. Germs can be spread when a person touches respiratory droplets from another person on a surface like a desk, for example, and then touches eyes, mouth or nose before washing hands.
- How should waste disposal be handled to prevent the spread of influenza virus?
 - Tissues and other disposable items used by an infected person be thrown in the trash. Additionally, persons should wash their hands with soap and water after touching used tissues and similar waste.

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- What household cleaning should be done to prevent the spread of influenza virus?
 - Keep surfaces (especially bedside tables, surfaces in the bathroom, kitchen counters and toys for children) clean by wiping them down with a household disinfectant according to directions on the product label.
- How should linens, eating utensils and dishes of persons infected with influenza virus be handled?
 - Linens, eating utensils, and dishes belonging to those who are sick do not need to be cleaned separately, but these items should not be shared without washing.
 - Linens should be washed with household laundry soap and tumbled dry on hot setting. Avoid “hugging” dirty laundry, and wash hands after handling.
 - Eating utensils should be washed either in a dishwasher or by hand with water and soap.

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- When will vaccines be available in the U.S.?
 - At the current time, we don't know. The U.S. is committed to testing the vaccine before distributing it widely.

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- When will the H1N1 vaccine be available on campus?
 - The CDC, Colorado Department of Public Health and Environment (CDPHE), and our local health department anticipate H1N1 vaccine to be available for populations at highest risk for developing complications sometime in the late Fall season. Since vaccine is not anticipated to be widely available at first, the initial distributions will be to those who are most at risk for hospitalizations from flu. The university will be following CDC guidelines for distribution and will make the vaccine available according to those guidelines.
 - Since it is highly likely that seasonal flu strains will be circulating at the same time as H1N1, all staff, faculty and students are recommended to get the seasonal flu vaccines to decrease the likelihood that a person will be multiply or simultaneously infected with seasonal and H1N1 flu.





CDC: If Vaccine is available...

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- pregnant women,
- people who live with or care for children younger than 6 months of age,
- health care and emergency services personnel,
- persons between the ages of 6 months through 24 years of age, and
- people from ages 25 through 64 years who are at higher risk for novel H1N1 because of chronic health disorders or compromised immune systems.
- The groups listed above total approximately 159 million people in the United States.

<http://www.cdc.gov/media/pressrel/2009/r090729b.htm>





CDC: If Vaccine is limited...

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- pregnant women,
- people who live with or care for children younger than 6 months of age,
- health care and emergency services personnel with direct patient contact,
- children 6 months through 4 years of age, and
- children 5 through 18 years of age who have chronic medical conditions.

<http://www.cdc.gov/media/pressrel/2009/r090729b.htm>





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- Who is in charge of medicine in the Strategic National Stockpile (SNS) once it is deployed?
 - Local health officials have full control of SNS medicine once supplies are deployed to a city, state, or territory.

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- Can faculty/staff get tested for flu A at Wardenburg Health Center (WHC)?
 - WHC is primarily a student health resource. Faculty/staff who believe they have flu should visit their own health care providers.
 - WHC can test to determine if a flu is an A or B flu. H1N1 is one of many types of A flu. Only the CDPHE can determine if an A flu is H1N1. They are only conducting that test on people who have been hospitalized.
 - WHC is encouraging faculty/staff to get tested at their own health care providers.





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- Can faculty/staff get seasonal flu vaccines at WHC?
 - Yes, staff can get vaccinated for seasonal flu at WHC, or at one of the regular seasonal flu clinics around campus, payable by cash or check.
 - However, since WHC does not do third party billing, it will most likely be cheaper or more convenient for staff and faculty to obtain their seasonal flu shots via their regular health care provider.

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- Can faculty/staff get H1N1 flu vaccines at WHC?
 - H1N1 vaccine will be made available via our local health department according to the CDC's recommendations.
 - Current priority risk groups are pregnant women, household contacts of children < 6 months, health care workers, emergency medical services personnel, children and young people from 6 months to 24 years old, non-elderly adults with underlying conditions or medication conditions that increase their risk.
 - We will know more as the vaccine becomes available.

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Avoiding *Conflusion*

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| Seasonal Influenza | Pandemic Influenza | Avian Influenza | H1N1 Influenza |
|--|--|--|---|
| Group of viruses that infect humans | A novel virus that infects humans, spreads quickly all over the world | Group of viruses that infect birds (and occasionally humans with bird contact) | A novel virus that is infecting humans all over the world |
| Occurs yearly (in winter) | Occurs only a few times each century | Occurs sporadically in humans | First appearance of this virus |
| Vaccine available | No vaccine available | No human vaccine available | Vaccine not yet available |
| Very young and very old people are most at risk of serious illness | People of <u>all</u> ages may be at risk of serious illness and death, because humans have no immunity | People of <u>all</u> ages may be at risk of serious illness and death, because humans have no immunity | Only humans born in or before 1918 have immunity. Young people and those with underlying health conditions are at greater risk. |





Preventing flu

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We can't prevent the spread of flu.

We can slow it down, and minimize the chances that you'll get the flu.

There are simple measures you can take to reduce your risk:

1. Get a seasonal flu shot
2. Practice good respiratory etiquette:
 - Cover your nose and mouth when you cough or sneeze
3. Avoid close, face-to-face contact with sick people
4. Stay home from work or class when you are sick
5. Wash your hands with soap and water
 - When not available, use alcohol-based hand sanitizer

Prevent





What could H1N1 flu mean at CU-Boulder?

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- **WORST CASE SCENARIO:**
 - The CO Department of Public Health and Environment is planning for 25% of the population to become infected with H1N1.
 - This could lead to up to 40% absenteeism due to own illness, caring for others, death
- What could this mean in Boulder?
- Local schools close
- Some campus operations suspended; critical operations continue
- Interruption to basic services such as food deliveries, public transportation, and health care availability

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How do we prepare?

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It is essential that all departments update their business continuity plans.

If moderate to serious H1N1 hits CU-Boulder, how will your department continue to function within the campus community?

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Business Continuity Planning

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Things to keep in mind:

- Departments may experience up to 40 percent absenteeism.
- Identify essential personnel and functions for long-term disruptions.
 - Cross-train employees.
 - Identify ways to “trade” workers between departments.
- Plan and test methods for employees to work from home, if possible.
- Department heads may need to institute liberal leave policies so that ill employees don’t come to work and infect others.
- Guidance is being developed by the human resources department.

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Business Continuity Planning

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Things to keep in mind (continued):

- Departments need to identify critical functions and resources and plan accordingly.
- Departments may need to stock up on Personal Protective Equipment (PPE) such as masks and gloves as appropriate; contact Environmental Health & Safety (EH&S) for guidelines.
- Researchers should plan how to continue time-sensitive projects.
- Teachers should plan how instruction will be delivered. Students should not be penalized for missing class due to illness.

For guidance on business continuity planning, contact Jennifer.Rodriguez@colorado.edu .

For guidance on research or academic continuity, contact Deborah.Nelson@colorado.edu.

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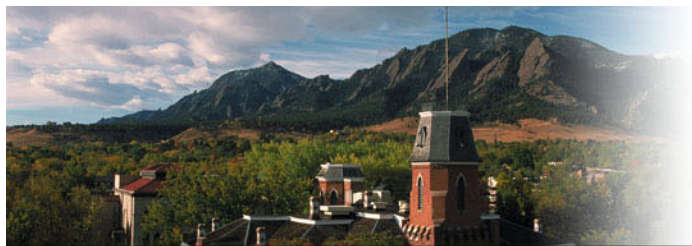
Human Resources Policies

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- We will operate under current policies:
 - Employees should use sick leave to cover absences if they are ill, or if they need to miss work to care for a sick child.
 - Prior to return to work, employees could be asked to provide a note from a health care worker that they are no longer contagious.

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HR Questions

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- Office of Labor Relations
 - 303-492-0956

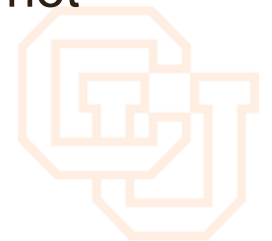




In the Residence Halls

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- Will we be informing staff when we have H1N1 cases in dorms?
 - No. We won't be able to tell when a student or staff member has H1N1 or seasonal influenza. Colorado Department of Health and Environment will not test specifically for H1N1 virus unless a patient has already tested positive for influenza A and is hospitalized. Non-hospitalized patients will not be tested for H1N1 flu, even if they test positive for flu A.
 - Also, if we do have a hospitalized case of H1N1 who originates from a dormitory, we will not be able to tell staff any identifying information about the patient, in accordance with federal confidentiality laws. At this point in time, this type of flu is not more virulent than regular seasonal flu.





Information for Students

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- Students are being asked to self-screen for any flu symptoms upon arrival to campus. If they have symptoms, they will be encouraged to be tested for flu A and to stay isolated from others through their infectious period.
- If you, as an HDS staff member, exhibit symptoms or signs of the influenza-like illness, please follow the above procedure.
- There is no recommendation to treat anyone with H1N1 (swine) flu who is otherwise healthy. Only people who have or have been exposed H1N1 (swine) flu AND have risks for complications from flu are recommended to be treated with anti-flu medications





Advice for Students

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1. Avoid close contact with people who are ill.
2. Stay home when you are sick.
3. Cover your mouth and nose anytime you cough or sneeze.
4. Wash your hands frequently.
5. Avoid touching your eyes, nose or mouth unless you have washed your hands.
6. Do not share utensils, water bottles or chapstick.
7. Practice other good health habits.

We are also recommending that students get regular seasonal flu shots so that they don't get both flus at the same time.

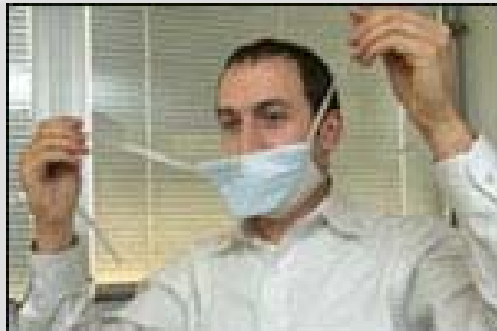




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Respirators

- N95 masks provide protection against flu for workers who are in close contact with sick people as part of their normal work duties.



- Surgical masks help prevent the spread of flu virus from infected people.





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Gloves

- Do you know how to properly remove contaminated gloves?





Personal Preparation

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- Have a family emergency communication/contact plan.
- Practice flu prevention techniques to minimize the spread of germs and prevent infection:
 - Flu shot
 - Respiratory etiquette
 - Social distance
- Have food, medical, and emergency supplies on hand.
- Wash hands frequently.

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For More Information...

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- Flu Planning Checklist for Individuals and Families:
 - <http://www.flu.gov/plan/individual/checklist.html>

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To plan for a pandemic:

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- Store a two-week supply of water and food.
- Periodically check your regular prescription drugs to ensure a continuous supply in your home.
- Have any nonprescription drugs and other health supplies on hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes, and vitamins.
- Talk with family members and loved ones about how they would be cared for if they got sick, or what will be needed to care for them in your home.
- Volunteer with local groups to prepare and assist with emergency response.
- Get involved in your community as it works to prepare.

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- To limit the spread of germs and prevent infection:

- Teach your children to wash hands frequently with soap and water, and model the correct behavior.
- Teach your children to cover coughs and sneezes with tissues, and be sure to model that behavior.
- Teach your children to stay away from others as much as possible if they are sick. Stay home from work and school if sick.

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Items to Have at Home

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Examples of food and non-perishables:

- Ready-to-eat canned meats, fish, fruits, vegetables, beans, and soups
- Protein or fruit bars
- Dry cereal or granola
- Peanut butter or nuts
- Dried fruit
- Crackers
- Canned juices
- Bottled water
- Canned or jarred baby food and formula
- Pet food
- Other non-perishable items

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Items to Have at Home

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Examples of medical, health, and emergency supplies:

- Prescribed medical supplies such as glucose and blood-pressure monitoring equipment
- Soap and water, or alcohol-based (60-95%) hand wash
- Medicines for fever, such as acetaminophen or ibuprofen
- Thermometer – digital – and don't share!
- Anti-diarrheal medication
- Vitamins
- Fluids with electrolytes
- Cleansing agent/soap
- Flashlight
- Batteries
- Portable radio
- Manual can opener
- Garbage bags
- Tissues, toilet paper, disposable diapers

Prepare





UCB Infectious Disease Plan

UNIVERSITY OF COLORADO AT BOULDER

- Infectious Disease Planning Committee
- Departments: BC Plans
- Elements:
 - Monitoring
 - Communications
 - Preparations
 - Training
 - Response / recovery

CU-Boulder Plan





CDPHE / BCPH

UNIVERSITY OF COLORADO AT BOULDER

- *“...responsibility ... to implement the most appropriate, community-based control measures, including issuing isolation and quarantine orders and closing down large gatherings (e.g., events or schools).”*






Response Modes

UNIVERSITY OF COLORADO AT BOULDER

Mode Response Level Description

| | |
|---|--|
| 0 | Normal operations. Plan and prepare. |
| 1 | On alert. Review plans. Inform target audiences. |
| 2 | Low-level response. |
| 3 | Medium-level response. |
| 4 | Maximum response. |





Risk Assessment Tool

UNIVERSITY OF COLORADO AT BOULDER

Severity
of
disease

Likelihood of Exposure



| | World | USA | CO | UCB |
|------------------|-------|-----|----|-----|
| Mild | 0 | 0 | 1 | 1 |
| Moderate | 0 | 1 | 2 | 3 |
| Serious | 1 | 2 | 3 | 4 |
| Life-threatening | 2 | 3 | 4 | 4 |

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Factors which Influence Mode

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1. Proximity of nearest case
2. Severity of disease
3. Required public health interventions
4. Availability of treatment
5. Permanent health impacts
6. Public perception issues






Response Actions by Transmission

UNIVERSITY OF COLORADO AT BOULDER

| Response Mode | Droplet | Aerosol | Surface | Food/ Water | Vector |
|---------------|---------|---------|---------|----------------|--------|
|---------------|---------|---------|---------|----------------|--------|

| | | | | | |
|---|---|--|--|--|--|
| 0 | Plan and prepare. Continue to gather information and promote awareness. | | | | |
|---|---|--|--|--|--|





Response Actions by Transmission

UNIVERSITY OF COLORADO AT BOULDER

| Response Mode | Droplet | Aerosol | Surface | Food/ Water | Vector |
|---------------|---------|---------|---------|----------------|--------|
|---------------|---------|---------|---------|----------------|--------|

| | | | | | |
|---|---|--|--|--|--|
| 1 | Inform and educate target audience on appropriate response. | | | | |
|---|---|--|--|--|--|






Response Actions by Transmission

UNIVERSITY OF COLORADO AT BOULDER

| Response Mode | Droplet | Aerosol | Surface | Food/ Water | Vector |
|---------------|---|---|---|----------------------------------|-------------------------------|
| 2 | Susceptible persons avoid crowds. Social distancing. Masks. | Susceptible persons avoid crowds. Social distancing. Masks. | Signage posted at restrooms, kitchens, high-use public areas. | Review food handling techniques. | Review housekeeping practices |





Response Actions by Transmission

UNIVERSITY OF COLORADO AT BOULDER

| Response Mode | Droplet | Aerosol | Surface | Food/ Water | Vector |
|---------------|---|---|---|---|-----------------------------|
| 3 | Health-care workers use N95 masks. Patients use surgical masks. Barriers for high-contact jobs. | Ditto for droplets. Ventilations systems for high- and low-pressure areas. | Alcohol-based hand gels provided. Gloves for personnel with public contact. | Food and water analyzed for purity. Boil water. | Control vector populations. |



Response Actions by Transmission

UNIVERSITY OF COLORADO AT BOULDER

| Response Mode | Droplet | Aerosol | Surface | Food/ Water | Vector |
|---------------|---------|---------|---------|----------------|--------|
|---------------|---------|---------|---------|----------------|--------|

4

All non-essential operations cancelled / postponed. Protective equipment mandatory.





Task Assignments

UNIVERSITY OF COLORADO AT BOULDER

- Deans, Directors, Department Heads
 - Plan for up to 40% absenteeism
 - Identify critical functions, assign responsibility
 - Inform EMOG, Policy Group





Direction and Control

UNIVERSITY OF COLORADO AT BOULDER

- CU-Boulder will retain direction and responsibility for its own operations, personnel, resources, and facilities.
- Line of succession
 - Chancellor
 - Senior Vice Chancellor
 - Policy Group (VC Administration)





Business Continuity Planning

UNIVERSITY OF COLORADO AT BOULDER

- Plan for up to 40% absent.
- Departments **MUST** identify essential functions and personnel **EVEN IF CAMPUS IS CLOSED.**
- Should cross-train for critical functions.
- Quarantine and isolation information campaign to assist HDS.





[Selected] Overall Campus Operations

UNIVERSITY OF COLORADO AT BOULDER

- Many students will remain on campus and will need housing and food.
- H&DS will handle isolation, support cases.
- Disruptions: all service sectors, power, delivery of food and fuel.
- Each work unit will inventory and ensure essential supplies and equipment.





New Task Force

UNIVERSITY OF COLORADO AT BOULDER

- Infectious Disease Task Force has been formed
 - Student Affairs (Housing & Dining), Wardenburg, Disability Services, faculty (UCB, UCHSC), Student Rec Center, health experts
- Goal to review and update UCB Infectious Disease Plan
- First draft generated





Infectious Disease Operations

UNIVERSITY OF COLORADO AT BOULDER

- Management Plan
 - Policies / Guidelines
 - Orientation and Student/Parent Communications
 - Medical and Health Care
 - External and Internal Communications
 - Operations Issues, including Education and Training
- We are working closely with our partners on and off-campus to ensure flu readiness for Fall 2009!





UNIVERSITY OF COLORADO AT BOULDER

- Questions??

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CU-Boulder Plan

