

Interim Influenza Guidelines for Wildland Fire Responses

The U.S. Forest Service (FS) and Department of the Interior (DOI) in coordination with the National Wildfire Coordinating Group (NWCG) and Incident Emergency Medical Task Group (IEMTG) are working together to update *The Avian and Pandemic Influenza Response and Preparedness Plan for the Federal Wildland Fire Agencies*. In the interim, the NWCG is distributing this plan as guidance to Incident Management Teams (IMT) for dealing with the current influenza situation.

Home units will not mobilize personnel who have flu symptoms. IMTs must be trained and practiced in the correct use of influenza personal protective equipment (PPE) and know what measures are necessary if an influenza outbreak occurs. The wildland fire coordination and cache system needs to have the appropriate level of influenza type PPE readily available. Local caches should be prepared to supply influenza PPE for initial/extended attack, type 3 and 4 operations. National caches should be prepared to supply influenza PPE for larger incident support for type 2 and 1 operations. Influenza PPE may include: N95 respirators, N100 masks, nitrile gloves, disposable gowns, goggles, alcohol based hand cleanser, and any other supplies based upon the Center for Disease Control (CDC) guidance¹. Additionally, the CDC recommends personal hygiene including frequent hand washing can aid in lessening the spread of viruses; it is important to use these strategies to mitigate infection.

Being prepared enables our firefighters to work safely at their job without intrusive thoughts and worrying about the “what ifs”. Timely response and the use of accepted practices, including using the appropriate PPE and assessing all firefighting resources prior to mobilization will help reduce the number of cases and could keep incident personnel safe and healthy.

¹ Please keep in mind, if respirators are assigned, the employees must be fit tested and medically tracked. However, if they are distributed for voluntary use, an Appendix D Form must be read and signed by the user.

Pandemic Overview

A pandemic is a global disease outbreak. For example, an influenza pandemic occurs when a new influenza virus emerges for which there is little or no immunity in the human population, begins to cause illness and then spreads person-to-person worldwide.

A pandemic could be a prolonged and widespread outbreak that may require temporary changes in many areas of society. The outbreak may slow for several months, and then rapidly escalate during “flu season.” Being informed and prepared will help fire personnel take appropriate actions to mitigate their risk during a pandemic.

Incident personnel should be constantly reminded to practice good sanitation and personal hygiene measures to lessen the spread of infectious disease(s). These measures include:

- Proper hand washing (soap and water or a hand sanitizer),
- Cough/sneezing etiquette (into a tissue or your elbow),
- Social distancing (6 feet),
- Cleaning and sanitizing work areas and commonly handled materials, such as tools with a disinfectant.

This is true whether at their regular work assignment, on an initial attack incident, or in a fire camp. Fire camps, spike camps and other locations present additional challenges for the IMT with the risk of influenza potentially spreading through camp. For this reason, IMTs should work closely with the local public health agency whenever a fire camp is being set up so that they can be prepared ahead of time. An influenza risk assessment template is provided to assist IMTs with flu precautions and hazard control mitigations.

<http://www.nwccg.gov/influenza-guidelines/template.pdf>

GENERAL HEALTH AND SAFETY MEASURES FOR FIRE CAMPS

| Health and Safety Measures | Proper Conduct | Remarks |
|---|--|--|
| A. Influenza immunization | Annual influenza vaccination is encouraged for all personnel. | See your doctor for immunization. This may not protect you from influenza, but it will provide protection from the major flu viruses anticipated for the year. |
| B. Maintain good health habits | <p>Avoid close contact with individuals who are sick. Don't sit near someone who is sneezing or coughing unless you are protected.</p> <p>Avoid touching your eyes, nose or mouth unless you have just washed your hands. Use hand sanitizers, if soap and water is not available.</p> <p>Exercise regularly, avoid the use of tobacco products, maintain a healthy diet, and drink 6-8 glasses of water daily.</p> | Good health habits make your immune system stronger against common sickness. |
| C. Safe practices in base and spike camps when you are sick | <p>Stay in a separate room/area or if this is not possible, try to keep the sick person at least 6 feet away from others.</p> <p>Cover your mouth and nose with a tissue when you cough and sneeze. Dispose of contaminated tissues in waste containers. Sneeze into your elbow joint, if none are available.</p> <p>Make sure tissues are available in common areas (if you don't have tissues, cough or sneeze into your upper sleeve, NOT your hands). Always clean hands using hand sanitizer after coughing and sneezing. Avoid touching common surfaces and objects unless your hands have been sanitized.</p> | |

| Health and Safety Measures | Proper Conduct | Remarks |
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| <p>D. Have a contingency plan for essential supplies.</p> | <p>Plan to have bottled water and non perishable food, PPE available when needed.</p> <p>Ensure that an appropriate number of hand washing stations are located through out the camp. Provide hand sanitizers for spike camps and place in sack lunch bags.</p> | <p>The supply chain may be interrupted and stores may have reduced stock of items for sale.</p> <p>At a minimum wash stations should be outside food areas, bathrooms, and near the medical unit.</p> |
| <p>E. Maintain good hand hygiene</p> <p>Hand washing training (Hand washing is a learned habit)</p> | <p>How to wash your hands properly with water and soap</p> <ul style="list-style-type: none"> • Remove jewelry • Wet hands with warm water • Apply clean soap • Vigorously scrub with soap all over your hands and under nails for at least 20 seconds • Rinse hands for at least 20 seconds under warm water • Dry hands completely with paper towel • Turn off tap with paper towel to avoid hands getting contaminated again • Throw paper towel into covered waste basket • Wash your hands frequently during the day <p>How to wash your hands using alcohol based hand sanitizer:</p> <ul style="list-style-type: none"> • Wet hands with sanitizer • Rub hands until alcohol is dried. <p>Insist that all camp personnel follow strict hand washing practices.</p> | <p>Water alone is not sufficient for proper hand washing.</p> <p>Use hand sanitizer</p> |

| Health and Safety Measures | Proper Conduct | Remarks |
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| F. Clean/disinfect surfaces | <p>Clean frequently touched surfaces and objects.</p> <p>Disinfect surfaces using disinfectant solution 1 part bleach to 10 parts water or 70% alcohol. Apply on surfaces. Rinse with water if chlorine was used, or let air dry if alcohol was used.</p> | <p>Wear gloves and use disposable wipes.</p> <p>Disinfectants may include 1% solution of household bleach (1.25 oz or about 8 teaspoons of 5.25% sodium hypochlorite solution in water) for hard, non-porous surfaces; 5% solution of household bleach for porous surfaces; 5% hospital grade Lysol™; or other EPA approved disinfectant.</p> <p>Addition of chlorine bleach provides an extra margin of safety.</p> |

| Health and Safety Measures | Proper Conduct | Remarks |
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| G. Educate incident personnel in personal hygiene. | During briefings and tail gate safety sessions discuss the importance of frequent and proper hand washing. Supply wash bins and hand sanitizer. | Use incident information officers to disseminate appropriate and consistent information. |
| H. Use PPE should any confirmed flu cases occur in camp. | <p>N95 respirators are recommended for caregivers who are interacting or caring for flu patients. <i>(If a voluntary N95 respirator is worn, an Appendix D Form must be read and signed by the user).</i></p> <p>http://www.nwccg.gov/influenza-guidelines/appendix_d.pdf. A mask should also be placed on the patient(s).</p> <p>Wear goggles and gloves as an extra margin of safety.</p> <p>Use personal hand sanitizer when using commonly touched objects, such as phone buttons, public washrooms, etc.</p> <p>Carry your own commonly used items such as a pen.</p> | <p>If the CDC has issued disease-specific guidance the diagnosed condition, review it for additional recommendations.</p> <p>Recommended PPE:</p> <ul style="list-style-type: none"> - N95 respirators, - N100 masks, - nitrile gloves, - disposable gowns, - goggles, - alcohol based hand cleanser, and - any other supplies based upon the Center for Disease Control (CDC) guidance². |
| I. Notify the local public health agency as soon as the fire camp is established. | Depending on the number of firefighters in camp, the local public health agency may assist in stockpiling PPE and anti-viral medication in case there is an outbreak of flu in camp. The public health agency may be able to assist with onsite care of those who are sick, and with disinfection issues. | The local public health agency should be contacted even if the camp is on Federal land. If contact information for the local agency is not available, contact the State public health agency. |

² Please keep in mind, if respirators are assigned, the employees must be fit tested and medically tracked. However, if they are distributed for voluntary use, an Appendix D Form must be read and signed by the user.

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| J. Notification and tracking of suspected and/or confirmed cases of influenza. | Notification and tracking of suspected and/or confirmed cases of influenza will be the responsibility of the employing agency. | Follow agency specific tracking guidelines. |

Recommendations for Medical Unit Leaders and Medical First Responders

For purposes of this section, “EMS providers” means pre-hospital emergency medical services providers which includes unit medical leaders and fire line EMS personnel. EMS providers' practice should be based on the most current CDC influenza clinical recommendations and information from appropriate public health authorities and EMS medical direction.

Patient assessment (interim recommendations):

If there HAS NOT been influenza reported in the geographic area (<http://www.cdc.gov/>), EMS providers should assess all patients as follows:

- **Step 1:** EMS personnel should stay more than 6 feet away from patients and bystanders with symptoms and exercise appropriate routine respiratory droplet precautions while assessing all patients for suspected cases of influenza.

- **Step 2:** Assess all patients for symptoms of acute febrile respiratory illness (fever plus one or more of the following: nasal congestion/ rhinorrhea, sore throat, or cough).
 - If no acute febrile respiratory illness, proceed with normal EMS care.
 - If there are symptoms of acute febrile respiratory illness, then assess all patients who have traveled to a geographic area with confirmed cases of influenza within the last 7 days or close contact with someone with travel to these areas.
 - If there is potential for a travel exposure, don appropriate PPE for suspected case of influenza.
 - If no travel exposure, place a standard surgical mask on the patient (if tolerated) and use appropriate PPE for cases of acute febrile respiratory illness without suspicion of influenza (as described in PPE section).

If the CDC or State Health Department confirms influenza in the geographic area (<http://www.cdc.gov/>)

- **Step 1:** Address scene safety:
 - If public safety awareness points (PSAP) advises potential for acute febrile respiratory illness symptoms on scene, EMS personnel should don PPE for suspected cases of influenza prior to entering scene.
 - If PSAP has not identified individuals with symptoms of acute febrile respiratory illness on scene, EMS personnel should stay more than 6 feet away from patient and bystanders with symptoms and exercise appropriate routine respiratory droplet precautions while assessing all patients for suspected cases of influenza.
- **Step 2:** Assess all patients for symptoms of acute febrile respiratory illness (fever plus one or more of the following: nasal congestion/ rhinorrhea, sore throat, or cough).
 - If no symptoms of acute febrile respiratory illness, provide routine EMS care.
 - If symptoms of acute febrile respiratory illness, don appropriate PPE for suspected case of swine-origin influenza if not already on.

Personal Protective Equipment (PPE) (interim recommendations):

- When treating a patient with a suspected case of influenza as defined above, the following PPE should be worn:
 - Fit-tested disposable N95 respirator and eye protection (e.g., goggles; eye shield), disposable non-sterile gloves, and gown, when coming into close contact with the patient.

- When treating a patient that is not a suspected case of influenza, but who has symptoms of acute febrile respiratory illness, the following precautions should be taken:
 - Place a standard surgical mask on the patient, if tolerated. If not tolerated, EMS personnel may wear a standard surgical mask.
 - Use good respiratory hygiene – use non-sterile gloves for contact with patient, patient secretions, or surfaces that may have been contaminated. Follow hand hygiene including hand washing or cleansing with alcohol based hand disinfectant after contact.
- Encourage good patient compartment airflow/ventilation to reduce the concentration of aerosol accumulation when possible.

Isolation precautions:

- Standard and Contact precautions plus eye protection should be used for all patient care activities for patients being evaluated or in isolation for influenza. Maintain adherence to hand hygiene by washing with soap and water or using alcohol-based hand sanitizer immediately after removing gloves and other equipment and after any contact with respiratory secretions. Non-sterile gloves and gowns along with eye protection should be donned upon entry of the medical unit. (See <http://www.cdc.gov/ncidod/dhqp/ppe.html>)
- Respiratory protection: All EMS personnel who enter the medical unit where patients are in isolation for influenza should wear at a minimum a disposable N95 respirator or equivalent. Respiratory protection should be donned upon entry. Use of N95 respirators requires fit testing and a medical evaluation of the user; this must be conducted in accordance with OSHA requirements.
- See also: The October 2006 “*Interim Guidance on Planning for the Use of Surgical Masks and Respirators in Healthcare Settings during an Influenza Pandemic*”
<http://www.pandemicflu.gov/plan/healthcare/maskguidancehc.html>

Infection Control (interim recommendations):

EMS personal should always practice basic infection control procedures including equipment decontamination, hand hygiene, cough and respiratory hygiene, and proper use of FDA cleared or authorized medical PPE.

- Immediately, transport patients who have flu symptoms out of camp to a local clinic or hospital for testing.
- Pending clarification of transmission patterns for this virus, EMS personnel who are in close contact with patients with suspected or confirmed influenza cases, should wear a fit-tested disposable N95 respirator, disposable non-sterile gloves, eye protection (e.g., goggles; eye shield), and disposable gown, when coming into close contact with the patient.
- All EMS personnel engaged in aerosol generating activities (e.g., endotracheal intubation, nebulizer treatment, and resuscitation involving emergency intubation or cardiac pulmonary resuscitation) should wear a fit-tested disposable N95 respirator, disposable non-sterile gloves, eye protection (e.g., goggles; eye shield), and gown, unless EMS personnel are able to rule out acute febrile respiratory illness or travel to an endemic area in the patient being treated.
- Alternatives to nebulizer medications should be used if appropriate for the situation.
- Oxygen administration for suspected patients should be administered via a non-rebreather mask.
- All patients with acute febrile respiratory illness should wear a surgical mask, if tolerated by the patient.

EMS Transfer of Patient Care to a Healthcare Facility

When transporting a patient with symptoms of respiratory illness, incident personnel should notify the receiving healthcare facility so that appropriate infection control precautions may be taken prior to patient arrival. Patients with respiratory illness should wear a surgical mask, if tolerated. Incident personnel involved in the transfer of patients with suspected or confirmed influenza should use standard, droplet and contact precautions for all patient care activities. This should include wearing a disposable N95 respirator, wearing disposable non-sterile gloves, eye protection (e.g., goggles; eye shield), and gown, to prevent conjunctival exposure. If the transported patient can tolerate a facemask (e.g., a surgical mask), its use can help minimize the spread of infectious droplets in the patient care compartment. Encourage good patient compartment vehicle airflow/ventilation to reduce the concentration of aerosol accumulation when possible.

Interim Guidance for Cleaning Transport Vehicles after Transporting a Suspected or Confirmed Influenza Patient

The following are general guidelines for cleaning or maintaining transport vehicles and equipment after transporting a suspected or confirmed swine-origin influenza patient. This guidance may be modified or additional procedures may be recommended by the Centers for Disease Control and Prevention (CDC) as new information becomes available.

Routine cleaning with soap or detergent and water to remove soil and organic matter, followed by the proper use of disinfectants, are the basic components of effective environmental management of influenza. Reducing the number of influenza virus particles on a surface through these steps can reduce the chances of hand transfer of virus. Influenza viruses are susceptible to inactivation by a number of chemical disinfectants readily available from consumer and commercial sources.

After the patient has been removed and prior to cleaning, the air within the vehicle may be exhausted by opening the doors and windows of the vehicle while the ventilation system is running. This should be done outdoors and away from pedestrian traffic. Routine cleaning methods should be employed throughout the vehicle and on non-disposable equipment. (Refer to the table on page 5, Section F.)

For additional detailed guidance on vehicle decontamination incident personnel may refer to "Interim Guidance for Cleaning Emergency Medical Service Transport Vehicles during an Influenza Pandemic" available at:

http://www.pandemicflu.gov/plan/healthcare/cleaning_ems.html

Reference List for Emergency Plans and Other Resources

www.pandemicflu.gov

www.hhs.gov/pandemicflu/plan

www.cdc.gov/flu

www.OSHA.gov/Publications/influenza_pandemic.html

www.doi.gov/pandemicflu

<http://www.nwccg.gov/teams/shwt/iemtg/index.html#>