

**A Message From Mike Ardaiz, MD, MPH, CPH,  
the U.S. Department of Energy's Chief Medical Officer:  
*Weathering This Storm Together***



As Chief Medical Officer, I would like to share with you my thoughts, recommendations, and encouragement as we rise to the challenge of contending with the present 2009 H1N1 influenza (swine flu) outbreak. It is increasingly clear that as sailors on this ship we may know as the U.S. Department of Energy (DOE), our ability to remain on course will rely upon our ability to work and communicate effectively about what we do and what we do not know.

Above all, I wish to reassure you that this is NOT the “Perfect Storm” and that we WILL weather this storm together.

**What We are Facing** – While this is not the long-anticipated avian (H5N1) influenza, we are facing an outbreak of a new 2009 H1N1 influenza (swine flu) virus with a particularly high rate of illness (i.e., attack rate) among those who are exposed through close contact. Although the virus responsible for the present influenza outbreak is genetically associated with and was initially derived from swine or pigs, it does have mixed genetic features, has been difficult to subtype beyond its recognition as an influenza A-type virus, and is regarded as a novel or new virus in terms of the susceptibility of the majority of individuals in our population (i.e., there isn’t already a protective level of “herd immunity” from past exposures). Consistent with other influenza viruses, however, there is a particularly short period of time (i.e., 1-3 days) between exposure to the virus and the onset of illness (i.e., incubation) which actually makes recognition of affected individuals and containment of the outbreak significantly easier than it might be for other viruses and certain bacteria. This influenza outbreak is NOT the “Perfect Storm.”

We recognize that inhalation is the most significant way in which individuals can become infected and that this virus is particularly easy to transmit through sneezing and coughing, consistent with the more common, seasonal influenza viruses our population ensures. Human behavior remains the single most important risk factor among individuals becoming ill. Through personal and workplace efforts to modify our behaviors and limit our exposures, we can dramatically reduce the impact of this and possibly later “waves” of the outbreak. In addition, there are a variety of countermeasures such as appropriately selected and fitted masks, FDA-approved anti-viral medications (as well as antibiotics to address the particularly lethal bacterial pneumonias which may develop in the wake of otherwise less dangerous viral pneumonias), and eventually a new swine influenza vaccination which are either currently available or will be available in the near future to support our efforts in behavioral modification. This influenza outbreak is NOT the “Perfect Storm.”

**How We Are Responding** – We at DOE Headquarters have been implementing the *DOE Internal Preparedness Plan for Infectious Diseases* throughout this week through the activities of the DOE Biological Event Monitoring Team (BEMT) which was established by the Deputy Secretary of Energy on March 29, 2006. Chaired by Mr. Glenn Podonsky, DOE’s Chief Health, Safety, and Security Officer, the DOE BEMT is a multi-disciplinary team consisting of experts in biological events (e.g., occupational medicine, infectious diseases, epidemiologic investigations, emergency operations, counterterrorism, security, and administration) which organizes **1)** biomedical expertise **2)** continuity programs, and **3)** emergency operations within the DOE Complex to address possible pandemic influenza, contagious disease, and bio-terrorism threats to the health, safety, and security of DOE employees and their families, as well as the ability of the Department to continue providing essential services to the nation.

The DOE BEMT convened in the early morning on Monday, April 27th to begin the difficult work of addressing the 2009 H1N1 influenza (swine flu) outbreak and its implications for the DOE workforce and their families. Principle members of the DOE BEMT are meeting daily and current activities include **1)** monitoring of CDC and other sources of epidemiologic and public health information **2)** exchange of information with DOE sites and site medical providers **3)** facilitating the MEDCON alert system. MEDCON is a site or multi-site-specific alert system which establishes a stratified or step-wise response to biological events on a scale of 7 (normal condition) to 1 (widespread pandemic throughout the United States) as follows:

**Medical Condition (MEDCON) Alert Matrix**

MEDCON Phase	General Criteria
7	<b>Normal Condition</b> – No unusual infectious disease threats (above background) known to be imminent.
6	<b>Initial Concern</b> – Increase in incidence of infectious disease threat within the world with the potential to impact DOE.
5	<b>Disease Outbreak</b> – Outside the continental United States, but directly impacting humans.
4	<b>Single-Locus or Cluster Outbreak</b> – Anywhere within the continental United States and border regions.
3	<b>Disease Cluster Confirmed or Suspected</b> - Within local State/region.
2	<b>DOE Outbreak</b> - At a Specific Site/Facility or Nearby Community.
1	<b>Widespread Pandemic</b> – Throughout the United States.

At present, the BEMT recommends that all DOE sites consider establishing an alert status consistent with MEDCON Phase 4 due to the presence of swine influenza clusters within the United States and its border regions. The exception at this time is the Savannah River Site (SRS) which has advanced to MEDCON Phase 3 based upon the identification of a cluster of 2009 H1N1 influenza (swine flu) cases in relatively close proximity to the site. As a result, SRS has begun to take the appropriate actions (e.g., assessing individuals arriving at the site for symptoms of the influenza, temporarily eliminating large gatherings of employees, canceling non-essential travel) to reduce the risk that SRS employees and their families will be impacted by the local outbreak.

The BEMT has been communicating with our partners at the Centers for Disease Control and Prevention (CDC) and at Federal Occupational Health (FOH) to ensure that both contractor and Federal employees are benefiting from the best possible information and medical recommendations. In addition, several members of the BEMT are active participants in inter-agency discussions. These include the *National Biodefense Science Board* created under the authority of the Pandemic and All-Hazards Preparedness Act of 2006 to provide expert advice and guidance to the U.S. Department of Health and Human Services (HHS) regarding public health emergency preparedness and response and the *Interagency Pandemic Vaccine Prioritization Working Group* which was established to provide HHS with guidance for prioritization of the distribution and administration of both pre-pandemic and pandemic influenza vaccines based on various pandemic severity and vaccine supply scenarios. These communications are essential to ensuring that DOE employees and their families are receiving occupational health services consistent with the latest recommendation of HHS.

**What Employers Can Do** – Although much of the existing guidance pertains directly to members of the general public, the Occupational Safety and Health Administration (OSHA) has provided specific guidance for employers to reduce the likelihood that the risk of employees developing swine influenza:

- Review and update your pandemic plans as necessary.
- Keep your employees informed of where they can obtain agency-specific updates.
- Encourage employees to stay home if they are sick to avoid spreading influenza and other germs.

The following table provides a selection of measures employers should consider to further mitigate the workplace risks at this juncture of the swine flu outbreak:

**DHS’ Pandemic Influenza: Preparedness, Response, and Recovery: Guide for Critical Infrastructure and Key Resources**

Issues	Supporting Actions
<b>1) Reduce risk and protect workers and their families.</b>	Implement actions and policies to reduce overall and specific “risk” and protect the workforce from internal and external contacts.
<b>2) Virtual operations.</b>	To build a more flexible worksite, establish and implement creative policies and actions, including promoting telecommuting; providing “batch-loading” tasks; and installing remote handling and delivery capabilities (i.e., drive-up windows).
<b>3) Information technology support.</b>	Implement preparedness actions to enhance IT support for telecommuters to provide sufficient computer and telephone equipment, lines, and bandwidth at the business and intermediary telecommunications systems.

<b>4) Manage worker shifts.</b>	Practice “ghost-shift changes” wherever possible, with workers going off duty leaving the workplace before the new shift enters.
<b>5) “Safe” workers.</b>	Set up a process to track and deploy workers recovering from influenza to perform high-risk, essential services.
<b>6) Dedicated transportation.</b>	Identify worker transportation requirements. For those essential workers without options or for those who rely solely on public transportation, establish a means of dedicated transportation to/from work while maintaining necessary infection control processes (e.g., social distancing and surface cleaning).
<b>7) Business and worker insurance.</b>	Review, revise, and implement insurance for workers, including providing adequate health insurance, business interruption insurance, and liability insurance for home care or dedicated transportation.

**What Employees Can Do** - There are everyday actions that can help prevent the spread of germs that cause respiratory illnesses like influenza. Take these everyday steps to protect your health:

- Cover your nose and mouth with a tissue when you cough or sneeze.
- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleaners are also effective.
- Avoid touching your eyes, nose or mouth. Germs are spread this way.
- Avoid close contact with sick people.

If you get sick with influenza-like symptoms, stay home from work and contact your personal physician and limit contact with others to keep from infecting them. If, however, you live in areas where 2009 H1N1 influenza (swine flu) cases have been identified or exposed to travelers returning from affected areas and become ill with influenza-like symptoms, including fever, body aches, runny nose, sore throat, nausea, or vomiting or diarrhea, contact your health care provider. Your health care provider or public health department will determine whether influenza testing or treatment is needed depending upon the circumstances.

In addition, the following aspects of health should be carefully considered and reviewed with personal physicians as needed:

- A nourishing, non-allergenic diet
- Liberal fluid intake
- Adequate rest and sleep
- Reasonable physical activity and exercise

In addition, the following potentially harmful exposures should be carefully considered and reviewed with personal physicians as needed:

- Overexertion
- Volatile chemical exposures
- Extremes of temperature
- Tobacco products

**For Additional Information** - Information on pandemic and 2009 H1N1 influenza (swine flu) is available through the CDC which has recently updated their website to include a “questions and answers” format (see attached document). Otherwise, please go to the following websites or resources:

- **CDC 2009 H1N1 influenza (swine flu) home page:**  
<http://www.cdc.gov/swineflu/whatsnew.htm>
- **World Health Organization 2009 H1N1 influenza (swine flu):**  
<http://www.who.int/csr/disease/swineflu/en/index.html>.
- **OSHA’s *Guidance on Preparing Workplaces for Influenza Pandemic*:**  
[http://www.osha.gov/Publications/influenza\\_pandemic.html](http://www.osha.gov/Publications/influenza_pandemic.html)
- **DHS’ National Strategy for Pandemic Flu and associated documents:**  
[http://www.dhs.gov/xprevprot/programs/editorial\\_0760.shtm](http://www.dhs.gov/xprevprot/programs/editorial_0760.shtm)

**We Can Assist You** – For specific questions or concerns regarding the recommendations of the BEMT, please contact the following individuals:

- Mike Ardaiz, MD, MPH, CPH [michael.ardaiz@hq.doe.gov](mailto:michael.ardaiz@hq.doe.gov) (301) 903-9910
- Bonnie Richter, PhD, MPH [bonnie.richter@hq.doe.gov](mailto:bonnie.richter@hq.doe.gov) (301) 903-4501