

Disaster Response: OSHA's Role and Resources

David Ippolito
Director, Office of Science and
Technology Assessment

Protecting Avian Influenza Responders
September 18, 2007

Presentation Objectives

1. Overview of OSHA's Role in Disasters
2. OSHA's Role in the National Response Plan
3. AI Worker Protection Basics
4. OSHA's Resources

OSHA Role in Disasters

- **PROVIDE TECHNICAL ASSISTANCE**
 - World Trade Center Response (9/11/2001)
 - Anthrax Attacks (10/2001)
 - Hurricanes (2004) and (2005)
 - MN Bridge Collapse (07/2007)

OSHA's Technical Assistance Role in Disasters

- Characterizing Worker Exposures and Assessing Risk



OSHA's Technical Assistance Role in Disasters

- Coordinating and Providing Necessary Training
 - Awareness & PPE training at WTC
 - Worked with NIEHS to develop courses for hurricane recovery workers
 - Hurricanes 2004/5 Staging Areas Briefings – Utility Workers
 - Fact Sheets, Quick Cards, e-tool for Hurricane Recovery
- Developed Hurricane Health and Safety Plan (HASP)
- Mold

OSHA's Role

- **Collecting and Managing Worker Exposure Data**
 - Developed electronic database to capture/report data;
 - Sample results on OSHA website
 - Provided to Employees
- **Implementing a PPE Program**
 - 131,000 Respirators Distributed at WTC - fit test conducted on-site
 - Provided PPE to Responders as needed

World Trade Center



There needs to be a systematic and unified all hazards approach to the management of responder health and safety

Anthrax - Brentwood



NOLA - St. Bernard Parish Murphy Oil Spill



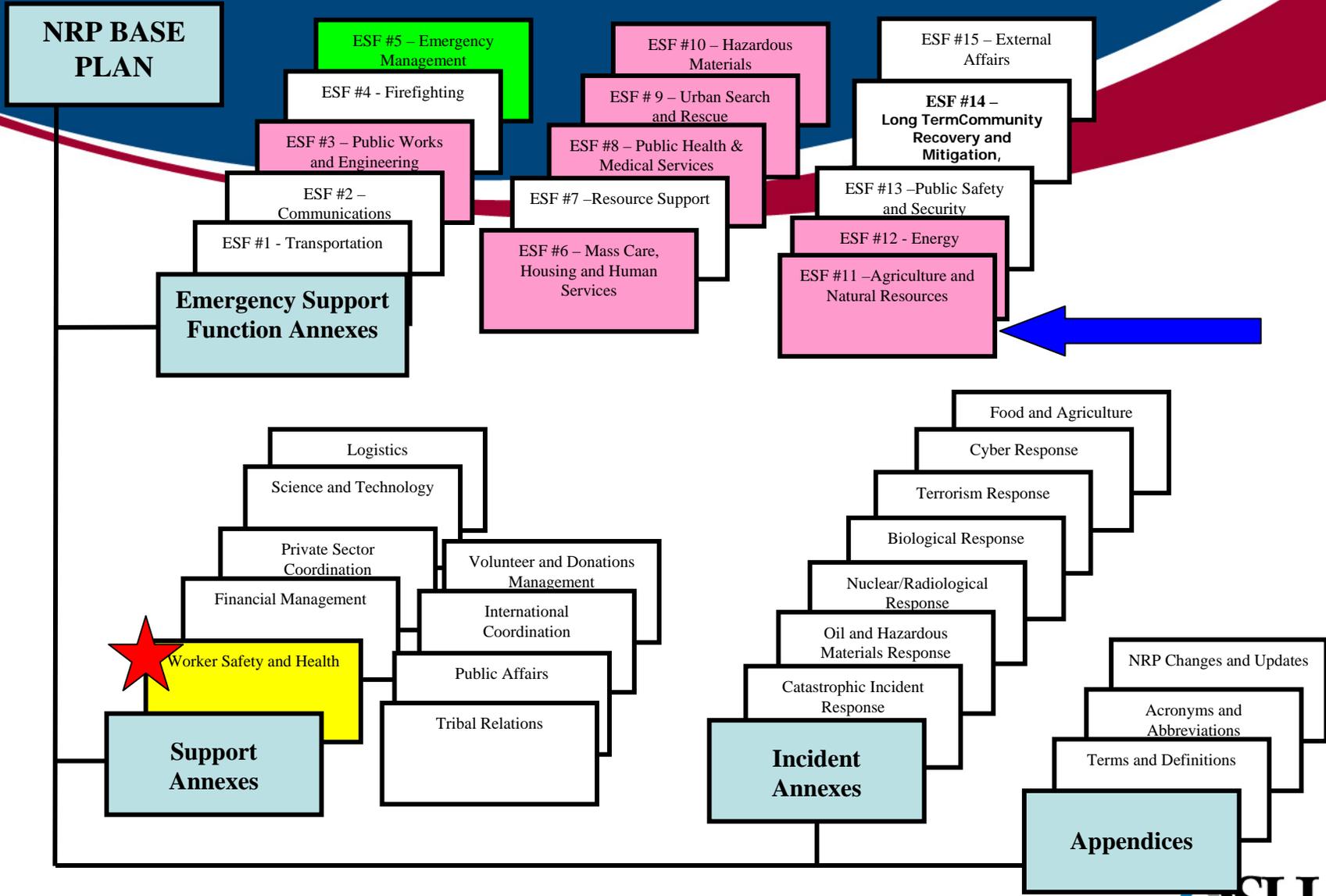
Debris Collection/Reduction



OSHA's Role under the National Response Plan (NRP)/FRAMEWORK

- Takes an “All Hazards” approach
- Is built upon the National Incident Management System (NIMS)
 - Incident Command Structure (ICS)
- Definition of Responder Expanded

OSHA's Current Role



Worker Safety and Health Support Annex

- Written to cover all emergency responder and recovery workers and all hazards
- Based on lessons learned from WTC
- Actual assistance for any specific incident will depend on the:
 - needs of the incident

Key Annex Concepts

- It addresses key activities that need to be coordinated to support the response.
 - Single Management System for the complex and overwhelming incidents
 - Multiple Jurisdictions
- The Annex does **not cover public** health and safety

Support Annex Pre-incident Coordination

- Utilize existing organizations e.g., National Response Team (NRT) and the NRT's Worker Safety and Health Sub Committee
- NRP Annex Worker Safety and Health Support Coordination Committee
- Work directly with Annex Cooperative Agencies like EPA, USACE, DOE, HHS (ATSDR, NIEHS and NIOSH), and DHS – FEMA and the USCG,

Support Annex Actions

- Support Actions **may** include:
 - Providing technical assistance at the JFO
 - 24/7 safety intervention and industrial hygiene worker monitoring
 - Coordinating and providing incident specific training
 - Developing and implementing a site-specific HASP
 - Managing a PPE program for responders
 - Collecting and managing worker exposure data
 - Working with labor unions, contractors regarding worker safety and health issues

Worker Protection Issues for Avian Influenza

- Employer Risk Assessment
 - Required by OSHA
 - Variety of responders w/different exposures (workers culling herds vs. health care providers)
 - Potential for hazards other than AI (e.g., culling, euthanizing and decon methods)
 - Site conditions and resource limitations

Worker Protection Issues for Avian Influenza

- Safe Work Practices and Personal Protective Equipment
 - Based on Risk Assessment
 - Combination of PPE, basic hygiene, and infection control practices - **all three....**
 - Decontamination/Disinfection
 - PPE, facility, equipment, other “contaminated” areas
 - Coordinated with CDC
 - Human Influenza Vaccination
 - Medical Monitoring/Anti-viral meds

Worker Protection Issues for Avian Influenza

- Worker Training & Education
 - Pre Incident
 - reinforce use of basic work practices and PPE
 - awareness of disease signs/symptoms in flock/staff/patients
 - During Incident
 - communicate incident-specific risks & requirements
 - reiterate use of basic work practices and train on assigned PPE
 - Antiviral medicine and vaccination
 - Post Incident
 - medical considerations

Released:
October, 2006

Available at:
www.osha.gov

Avian Flu

Avian influenza (AI) viruses infect wild birds and poultry (e.g., chickens). They are divided into two groups based upon the severity of the disease they produce in poultry: low pathogenicity AI (LPAI) viruses and highly pathogenic AI (HPAI) viruses. LPAI viruses occur naturally in wild birds but can spread to poultry where they generally cause minor illness. However, HPAI viruses are highly contagious and cause high mortality in poultry. While LPAI viruses pose little threat to human health, certain HPAI viruses have caused serious illness and even death. Of particular concern to public health are the HPAI H5N1 viruses that are spreading rapidly in some parts of the world. HPAI H5N1 viruses have caused the deaths of millions of birds and of over 140 people worldwide. These deaths have thus far been restricted to Asia, the Middle East, and Africa. As of October 2006, the HPAI H5N1 virus has not been found in the United States.

Although HPAI H5N1 viruses have the potential to develop into pandemic viruses if they acquire the ability to pass readily from human-to-human, thus far, there has been only very limited transmission between humans. This document provides interim guidance for protecting employees who may be exposed if there is an outbreak of HPAI H5N1 in the United States. For the most up-to-date information on the occurrence of HPAI H5N1 outbreaks throughout the world, as well as other HPAI virus outbreaks that may also pose a hazard to human health, consult the Department of Health and Human Services (HHS) web site at www.avianflu.gov.

Symptoms of Avian Influenza (AI) in Humans

Range from: fever, cough, sore throat and muscle aches; to diarrhea, eye infections, pneumonia and severe respiratory diseases; and other severe and life-threatening complications.

The symptoms of avian influenza may depend on which virus caused the infection but often are similar to those associated with human seasonal influenza.

Individuals with these symptoms may be experiencing an illness other than influenza. Therefore, laboratory tests can be used to confirm avian influenza infection in humans.

How People Become Infected

So far, most cases of avian influenza infection in humans have resulted from direct contact with infected poultry (e.g., domesticated chickens, ducks, and turkeys) or contact with surfaces soiled with discharges from their mouths, beaks, or with feces. Other possible means of infection include consuming raw or undercooked poultry or poultry products and inhaling contaminated poultry particles (e.g., this could occur during butchering).

Eating properly handled and cooked poultry and eggs is safe. Cooking poultry to an internal temperature of 165°F and eggs until they are firm throughout kills the AI virus.

Employees at Potential Risk of Exposure

- Poultry employees involved in eradication activities (for example, depopulating poultry);
- Animal handlers (other than poultry employees);
- Laboratory employees;
- Health care workers treating patients with known or suspected avian influenza viruses;
- Food handlers;
- Airport personnel with close exposure to passengers suspected of being avian influenza-infected; and
- Travelers on temporary work assignments abroad in areas affected by HPAI H5N1 outbreaks.

Avian Flu “Quick Card”

- General Precautions
- Poultry Employees
- Animal Handlers
- Food Handlers
- Laboratory Employees
- Healthcare Workers

Released: October, 2006



Protect Yourself Avian Flu General Precautions

Avian flu is a viral disease and it can be very contagious and even deadly in poultry (e.g., chickens). Of great concern are the highly pathogenic avian influenza (HPAI) H5N1 viruses that have killed millions of birds and infected humans in other countries. If these viruses are detected in the U.S. or if you travel on work assignments or are employed in countries that have HPAI H5N1 outbreaks, take appropriate precautions.

Avian Flu Symptoms in Humans

Range from fever, cough, sore throat and muscle aches; to diarrhea, eye infections, pneumonia and severe respiratory diseases. The symptoms of avian influenza may depend on which virus caused the infection but are often similar to those associated with human seasonal influenza.

How Humans Are Infected

- Contact with sick poultry or surfaces soiled with discharges from their mouths or beaks, or with feces.
- Inhaling contaminated particles from poultry.

Treatment

Some prescription antiviral drugs may be effective.

General Precautions

- Wash hands thoroughly and frequently, for 15-20 seconds, preferably with soap and water.
- Avoid contact with possibly infected poultry.
- Avoid consuming uncooked or undercooked poultry or poultry products.

Precautions When Exposed

- Use appropriate personal protective equipment (PPE):
 - ♦ Disposable gloves or gloves that can be disinfected;
 - ♦ Protective clothing (long-sleeved coveralls with a water-proof apron);
 - ♦ Disposable shoe covers or those that can be disinfected;
 - ♦ Safety goggles; and
 - ♦ Wear at least the minimum level of respiratory protection, N95 or higher respirator.
- Employees should remove all PPE at work to avoid taking contaminated items home.

Additional Guidance

- Get the seasonal flu vaccine.
- If you develop flu-like symptoms, stay at home except to get medical attention.

For more complete information:



Guidance Document

Released: October,
2006

Available at:

www.pandemicflu.gov

www.osha.gov

OSHA Guidance Update on Protecting Employees from Avian Flu (Avian Influenza) Viruses

The image features the OSHA logo, which consists of a stylized 'O' with a blue and grey circular design inside, followed by the letters 'S', 'H', and 'A' in a white, serif font. The background is a close-up of the American flag, showing the stars and stripes. The text 'OSHA' is prominently displayed in the upper half of the image.

OSHA

adds value to business,
work and life.

QUESTIONS ?