

BIOTERRORISM PREPAREDNESS UPDATE



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HIGHLIGHTS

Centers for Disease Control and Prevention (CDC) and Health Resources and Services Administration (HRSA) 2005-06 Guidance

Applications for both the CDC and HRSA grant funds, for the grant year beginning at the end of August, 2005 were submitted on July 13, 2005. Development of the application was a tremendous effort that included the contributions of many individuals from both state and local levels. The Emergency Preparedness Office (EPO) would like to thank all of the health officers, health executives and Joint Advisory Committee representatives who generously gave of their time to help with the planning and writing of the grant applications. EPO staff will now begin working on the Guidance for the Local Health Departments (LHD) to be released in the near future. Should you have any questions regarding the applications or the upcoming LHD Guidance document, please contact your EPO Project Officer.

Avian Influenza (H5N1)

Last month's Bioterrorism Preparedness Update highlighted the role of enhanced surveillance in detecting and quickly containing early cases of suspect avian influenza (H5N1) as a reliable starting point for pandemic influenza response plans. While surveillance of avian sources for likely exposure and transmission needs to be enhanced among poultry and other fowl flocks, the need to identify potentially infected persons and quickly evaluate them is just as timely. The role of clinicians and public health practitioners will be essential for intervening early with the first human cases.

To date, the majority of human avian influenza A (H5N1) infections have been identified in Asia. Limited, but not sustained, direct person-to-person transmission of H5N1 keeps us at the pandemic imminent phase of readiness for a worldwide influenza outbreak. From January 2004 through June 28, 2005, 54 persons died out of the 108 reported human cases of H5N1. All of these influenza viruses were genetically avian species, and most of the reported human cases infected with H5N1 gave a history of direct exposure to sick poultry (which were infected with H5N1).

CDC and the World Health Organization (WHO) continue to recommend enhanced surveillance for H5N1 infections in travelers with unexplained illness returning from countries that have had H5N1 infections in either humans or poultry.

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This monthly report of bioterrorism preparedness activities and information from the California Department of Health Services contains information on programs and policy that may be secure or confidential. This communication is intended exclusively for the use of local health departments, should be considered privileged, and not distributed further.



Signs and symptoms for hospitalized patients that should alert the health provider to inquire more closely include:

- radiographically confirmed pneumonia, acute respiratory distress syndrome (ARDS), or other severe respiratory illness for which an alternate diagnosis has not been established, AND
- history of travel within 10 days of symptom onset to a country with documented H5N1 in poultry or humans.

Testing for H5N1 should be considered on a case-by-case basis, in consultation with state and local health departments, for hospitalized or ambulatory patients with:

- documented temperature of >38°C (>100.4°F), AND
- one or more of the following: cough, sore throat, shortness of breath, AND
- history of contact with poultry (e.g., visited a poultry farm, a household raising poultry, or a bird market) or a known or suspected human case of H5N1 in an H5N1-affected country within 10 days of symptom onset.

Reported symptoms of H5N1 in humans have ranged from typical influenza-like illness (ILI) (e.g., fever, cough, sore throat, and muscle aches) to eye infections (conjunctivitis), pneumonia, acute respiratory distress, and viral pneumonia. For poultry handlers and others in close constant contact with poultry, a history of conjunctivitis with ILI should raise the index of suspicion even further. WHO provides interim recommendations for the protection of persons working with animals potentially infected with highly pathogenic influenza viruses, and Occupational Health & Safety Administration (OHSA) provides guidelines for protecting workers.

As providers evaluate patients meeting the CDC criteria, they should contact their local health department to arrange for special testing to rule out H5N1 (at the state public health viral laboratory). If the patient does not warrant hospitalization, they should be advised to remain at home, avoiding work, school and contact with the public, to monitor their symptoms closely and

to report immediately if their symptoms worsen. A follow up phone inquiry is helpful to assess the patient's progress, as well as to inform them promptly of their laboratory results.

The interpandemic and pandemic influenza alert periods provide an excellent opportunity to encourage patients, especially among hard to reach, at risk, and special populations, to receive influenza vaccination. During a pandemic outbreak, the season influenza viruses will still be circulating among the public.

Additional information can be found at the following websites:

CDC. Update: Influenza Activity---United States and Worldwide, 2004-05 Season. MMWR 2005;54(25);63-634
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5425a3.htm>
<http://www.cdc.gov/flu/avian/gen-info/pandemics.htm>

CDC Avian Influenza Health alert for providers and travelers:
<http://www.cdc.gov/flu/avian/professional/han020405.htm>
http://www.cdc.gov/travel/other/avian_flu_ah5n1_031605.htm

Protecting workers against Avian influenza links:
http://www.who.int/csr/disease/avian_influenza/guidelines/en/
<http://www.osha.gov/dsg/guidance/avian-flu.html>

CDHS Immunization Branch Pandemic Influenza link:
<http://www.dhs.ca.gov/ps/dcdc/izgroup/pandemic.htm>

Paul Duffey Receives On the Front Line Award

The American Public Health Laboratories (APHL) has recently presented the On the Front Line Award to Dr. Paul Duffey. Dr. Duffey is the Chief of the Immunoserology and Biologics Section of the Microbial Diseases Laboratory (MDL) for the California Department of Health Services (CDHS). In addition to over 25 years of work for the MDL, Dr. Duffey has provided leadership for the Biologic Capacity component of the CDC grant, including establishment of the California Laboratory Response Network (LRN).

The On the Front Line award is given to individuals and organizations who have made significant contributions to APHL, its membership and mission. Please join us in congratulating Dr. Duffey on this prestigious accomplishment.

NEWS NOTES

Australian Scientists Develop Rapid Test for Avian Flu

Australian scientists have developed a rapid test to detect avian influenza, or bird flu. The new test would reduce the time taken to detect the virus from three weeks to one day.

This is a Real Time PCR test, which is many times faster than the existing culture process currently used throughout the world. The test will be able to detect 15 different strains of bird flu, including the strains that are transferable to humans.

University of California, Los Angeles (UCLA) Awarded More than \$6 Million for Biodefense and Infectious Disease Research

UCLA has been awarded more than \$6 million over four years by the National Institute of Allergy and Infectious Diseases to support research for countering threats from bioterrorism agents and infectious diseases. UCLA will be a major component of the Pacific Southwest Center for Biodefense and Emerging Infectious Diseases Research, a consortium of more than a dozen universities and research institutes in California, Arizona, Nevada and Hawaii.

To read the full article, please click on: <http://www.medicalnewstoday.com/medicalnews.php?newsid=25817>.

TRAINING

Second Annual Core Infectious Disease Emergency Readiness (CIDER) Summer Intensive Program (SIP)

August 1-12, 2005, the UC Berkeley Center for Infectious Disease Preparedness (CIDP) will hold a 2-week intensive, interdisciplinary program covering the core knowledge, skills, and abilities necessary for public health professionals to detect, investigate, and respond to a public health infectious disease emergency. CIDER SIP is the culmination of CIDP's year-long effort to enable collaboration, disseminate information, investigate, and prepare the public health workforce, allied professionals, and students interested in a career in public health preparedness to respond to microbial threats.

Participants can enroll in any or all components of the CIDER Program. Offerings include eight 3-hour workshops, two 1.5-week courses, as well as a 2-day interdisciplinary exercise. The full informational brochure and registration form can be viewed at <http://www.idready.org/docs/cider-brochure.pdf>.

Risk Communication Course

This self-instructed course, developed by the Pan American Health Organization, will orient the learner on the theory and methodology of risk communication. Please view the following link for more information: <http://www.cepis.ops-oms.org/tutorial6/i/index.html>.

RESOURCES

Preferred Learning Formats for Public Health Information and Training

Highlights from a study completed by the Public Health Foundation for the CDC demonstrated a number of issues regarding the usage of CD-ROMs, web casting, DVDs and other formats for public health training. The study determined the following:

- New formulas to estimate the total viewers for each CD-ROM and videotape training product ordered.
- How customers use these products - how many duplicate it, organize group viewing sessions, integrate it into a course, etc.
- Learning formats that these customers prefer, such as CD-ROMs, DVDs, web-based training, and quick reference guides.
- Significant differences in product uses and preferences according to work setting, such as governmental public health agencies, academic/educational institutions, healthcare services, and private industry.

You can read more highlights at <http://www.phf.org/phworkforce.htm> or download the full report at <http://www.phf.org/Reports/audience-estimation.pdf>.

Fact Sheets on Terrorist Attacks

The National Academies, in cooperation with the Department of Homeland Security, is preparing fact sheets on four types of terrorist attacks. The fact sheets are designed primarily for media representatives as part of the project News and Terrorism: Communicating in a Crisis, though they will be helpful to anyone looking for a clear explanation of the fundamentals of science, engineering, and health related to such attacks.

The fact sheets are a product of the National Research Council Division on Earth and Life Studies.

[Biological Attack](#) (pdf file, 277 KB)

Where do biological agents originate?

What's the difference between "infectious" and "contagious"?

How long after exposure will symptoms appear?

[Chemical Attack](#) (pdf file, 72 KB)

What are the different origins of toxic chemicals that could be used?

How do chemical toxicities vary?

[Radiological Attack](#) (pdf file, 68 KB)

What are radiological dispersal devices, a.k.a. "dirty bombs"?

How are they different from nuclear bombs?

What are their physical and psychological health effects?

[Nuclear Attack](#) (pdf file, 192 KB)

What is radioactive fallout, and how is it dangerous?

What are the short term and long term effects of radiation exposure?

What is the likely size of a nuclear explosion from an attack by terrorists?

Cutaneous Radiation Injury: Fact Sheet for Physicians

Injury to the skin and underlying tissues from acute exposure to a large external dose of radiation is referred to as cutaneous radiation injury (CRI). For more information on what physicians need to know about the presentation, diagnosis, and treatment of patients with cutaneous radiation injury, please see: <http://www.bt.cdc.gov/radiation/crphysicianfactsheet.asp>.

Disabilities Summary Report

The U.S. Department of Labor has released a report entitled, "Emergency Preparedness for People with Disabilities: An Interagency Seminar of Exchange for Federal Managers." The report summarizes proceedings from a December 2003 seminar and is a source for developing, implementing and maintaining emergency preparedness plans for people with disabilities. Copies of the report are available from the Office of Disability Employment Policy at <http://www.dol.gov/odep>.

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<http://org.cahan.ca.gov/org/Documents/BTPrepUpdates/>

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If there is no CAHAN administrator in your jurisdiction, go to <http://www.dhs.ca.gov/epo/HAN%20Programs/EPOCAHANSignup.html> and fill out the form online. If you wish to register as a Local BT Focus Area lead; e.g., a "C" lead for "Bio Lab Capacity", go to <http://www.dhs.ca.gov/epo/HAN%20Programs/EPOBTRegistration.html> with a PIN obtainable from your local health officer or local BT staff, or send your request to EPOInfo@dhs.ca.gov.