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DEPUTY CHIEF OF STAFF FOR OPERATIONS HEALTH INFORMATION OPERATIONS WEEKLY UPDATE

5 November 2001

RECENT ISSUES

1. **INHALATIONAL ANTHRAX** – **USA.** The cumulative number of confirmed inhalational anthrax cases associated with bioterrorism is ten, which is up from eight cases from the last weekly update. A New Jersey postal worker previously classified as a suspect anthrax case received a confirmatory diagnosis. Also a stockroom worker at the Manhattan Eye, Ear, and Throat Hospital was diagnosed with anthrax to which she succumbed on 31 October. The CDC reports no suspect cases at this time. The CDC also published a clinical evaluation algorithm for inhalation anthrax, which can be accessed in *Figure 2 at the end of the article* on the following website: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5043a1.htm#fig1. The following table provides a summation of confirmed inhalational cases.

Location	Florida	New York	New Jersey	DC metro area
No. Cases (deceased)	2(1)	1(1)	2	5 (2)

2. **CUTANEOUS ANTHRAX** – **USA.** The cumulative number of confirmed cutaneous anthrax cases associated with bioterrorism is seven, which is up from six cases from the last weekly update. The confirmed case was previously classified as a suspect case and involves a New York Post employee. Another five cases are classified as suspect cases. The CDC also published a clinical evaluation algorithm for cutaneous anthrax, which can be accessed in *Figure 3 at the end of the article* on the following website: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5043a1.htm#fig1. The following table provides a summation of cutaneous cases.

Location	Florida	New York	New Jersey	DC metro area
No. Confirmed Cases	0	4	3	0
No. Suspect Cases	0	3	2	0

3. ANTHRAX EXPOSURES – USA.

- Reports of positive anthrax letters were reported for mailrooms at the Pentagon, Veteran Affairs Medical Center, and Walter Reed Army Institute of Research. The US Post Office Stamp Fulfillment Center in Kansas City, a 300-acre underground complex, also reported positive anthrax testing, which was associated with mail received from the Brentwood postal facility. Reports of positive anthrax testing include Pakistan, India, Greece, Germany, and Lithuania.
- On 31 October, the CDC updated guidance (from 24 October) for protecting workers from anthrax exposure in areas where mail is handled. The guidance now includes a hierarchical order

of engineering controls, *administrative controls*, housekeeping measures, and personal protective equipment (PPE). Guidance is provided on PPE for both those who handle mail and for those who may be exposed to aerosolized particles. http://www.bt.cdc.gov/DocumentsApp/Anthrax/10312001/han51.asp.

- 4. **ANTHRAX FEDERAL TRADE COMMISSION.** The Federal Trade Commission issued a consumer alert on websites offering ciprofloxacin for sale to consumers entitled "Offers to Treat Biological Threats: What You Need to Know." The consumer alert can be viewed at the following website: http://www.ftc.gov/bcp/conline/pubs/alerts/bioalrt.htm
- 5. **ANTHRAX DECONTAMINATION.** EPA is expected to release a press statement this week regarding the use of chlorine dioxide in anthrax decontamination. The proposal is to use this gas to decontaminate the Hart Building, which would be the first such use of this gas. The Hart Building had positive tests of anthrax in the HVAC filters and on the first, fifth, sixth and ninth floors. Chlorine dioxide has been historically used for disinfecting 700-900 public water systems specifically to control odors and taste from algae and decaying vegetation. Although chlorine dioxide is a strong oxidant, the mechanism for disinfection is not well understood and appears to vary by type of organism. The gas is explosive in concentrations greater than 10 percent in air and is usually generated on site, i.e., not transported. EPA conducted a test of the gas using harmless bacteria in a sealed trailer in the Brentwood postal facility parking lot to assess efficacy.
- 6. **ANTHRAX EXPERIMENTAL NANOEMULSION.** Nanobio Corporation has one of four technologies that proved effective in decontamination studies conducted at Dugway, Utah in December 2000 against an anthrax surrogate. Nanobio Corporation is seeking emergency federal funding and is asking for expedited regulatory approval for its product known as NanoProtect. NanoProtect is a white liquid, which is sprayed or smeared onto people or equipment to kill a variety of microorganisms ranging from viruses, bacteria, and spores to fungi. The product could be available in six months. The company also reports research on a nasal spray. The technology was developed at the University of Michigan Medical School and was funded by the Defense Advanced Research Projects Agency (DARPA).
- 7. **ANTHRAX GENE SEQUENCING.** The National Science Foundation issued a \$200,000 grant to the Institute for Genomic Research to sequence the anthrax bacteria that infected the index case in the recent bioterrorism incidents.
- 8. NATIONAL LABORATORY TO COMBAT BIOTERRORISM GILMORE COMMISSION. The Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction, also known as the Gilmore Commission, released an advance executive summary on 1 November, which calls for the creation of a national laboratory to research, develop, and produce vaccines to combat bioterrorism. This and other proposals recommended by the Commission are covered under the category of "Improve Health and Medical Capabilities" in the complete advance executive summary, which can be accessed at: http://www.rand.org/nsrd/terrpanel/. The Commission's final report is scheduled for submission in December.

- 9. **ANTHRAX HOME TEST KITS US.** A number of companies are advertising home test kits for anthrax detection with price ranges of \$25-30. <u>Vital Living Products, Inc.</u> (VLPI), located in Matthews, North Carolina, announced a home test kit to detect anthrax bacteria or spores in air, water, or on surfaces would be available by Thanksgiving. It is available now for purchase on the Internet. The test involves mixing a red solution with water and letting it stand for 24 to 48 hours at room temperature. Warmer temperatures yield earlier results. A positive test result is yellow, and the false positive rate is expected to be five percent. <u>PRO-LAB</u> also has a home test kit that consists of a petri dish culture system.
- 10. **SMALLPOX VACCINATION CDC/WHO**. The CDC vaccinated approximately 140 personnel, members of epidemiological teams that are available for rapid response to investigate possible smallpox cases. The workers have investigated three cases, all of which were negative. Several educational broadcasts are available at the following CDC website and more upcoming education is expected this week on smallpox: http://www.bt.cdc.gov/VideoArchive.asp. The WHO published an excellent review of smallpox in the 2 November issue of the weekly epidemiological record, which can be accessed at the following website: http://www.who.int/wer/76 27 52.html.
- 11. **HOMELAND SECURITY PUBLIC HEALTH PREPAREDNESS.** The Department of Health and Human Services announced the creation of a new office, Office of Public Health Preparedness, which will coordinate national response to public health emergencies.
- 12. **INFLUENZA SURVEILLANCE NORTHERN HEMISPHERE.** The National Flu Surveillance Network reports that Connecticut, Florida and Indiana are now under influenza alert. All three of these states were previously under a watch and the increased status is primarily due to activity in New Haven, Miami, and South Bend. Eight states are under an influenza watch: California, Georgia, Illinois, New York, North Carolina, Tennessee, Texas, and Wisconsin. New York fell from an alert status and Georgia was added to the watch status primarily based on activity in Clayton, Georgia, which borders North and South Carolina. The influenza alert categories are epidemic, warning, alert, watch, first case and no activity. An alert status means that cases are being reported as consistently as every other day and a watch status means positive results have been reported in that state.
- 13. **INFLUENZA VACCINATION CDC.** CDC reports that there will be more flu vaccine this year than last, but there may be a delay in the delivery of some product. CDC has added a link on the influenza page to help address anthrax concerns during the flu campaign 2001-02. This information is available at: http://www.cdc.gov/ncidod/diseases/flu/fluvirus.htm
- 14. TUBERCULOSIS (TB) CENTRAL AND SOUTHCENTRAL ASIA. A report presented to the Society of General Microbiology last week stated that the BCG vaccine might not cover the Beijing genotype, which is believed to play a major role in the TB epidemic in Asia. The Beijing strains are more frequently resistant to important treatments such as isoniazid and streptomycin. The researcher indicated this strain might account for 80% of the circulating strains in China and 60% in the former USSR and Japan. It is unknown but possible that this strain is also in areas of military involvement in central and south central Asia. The WHO has expressed concern about potential TB outbreaks in Pakistan and Afghanistan, which are ranked

among the world's top 20 countries for TB cases. A relatively high percentage of cases in these two countries are also resistant to the most commonly used treatment regimens.

- 15. **DENGUE FEVER HAWAII.** Cumulative, confirmed cases rose from 69 to 74 as of 2 November with one new case each in Maui and the Big Island and three new cases in Oahu. Five suspect cases (2 on Maui and 3 on Oahu) and 310 reports of illness remain under investigation. A case in Pahoa is the first confirmed case on the Big Island. The state health department is emphasizing environmental measures in its latest campaign, which designates Sunday as clean-up day: http://www.hawaii.gov/doh/dengue/dengue_cleanup_day.html. According to a CDC entomologist investigating the epidemiology of the outbreak, the cases are primarily due to *Aedes albopictus*, which prefers woodland habitats rather than urban areas.
- 16. **ST LOUIS ENCEPHALITIS LOUISIANA.** During October, an outbreak of St. Louis encephalitis, the first since 1998, occurred in Louisiana. Since 8 August 69 people, most in the Monroe area, were hospitalized and at least three died. A case of West Nile Virus was recently reported in Louisiana. Both of these diseases produce similar symptoms: headache, fever, fatigue, dizziness, photophobia and confusion. St. Louis encephalitis is a rare and incurable disease that causes inflammation of the brain, muscle weakness, seizures, and loss of consciousness. Influenza season and anthrax concerns will likely complicate diagnoses.
- 17. **HIV/AIDS DRUG FDA.** On Friday, 26 October, Gilead Sciences received FDA approval for its antiretroviral agent VireadTM (tenofovir disoproxil fumarate). Viread is the first nucleotide analogue reverse transcriptase inhibitor approved for the treatment of HIV when taken with other antiviral agents. As a nucleotide, Viread remains in cells for longer periods of time than many other antiretroviral drugs, allowing for once-daily dosing. The Viread dosage is 300 mg orally with a meal. In controlled clinical studies, Viread reduced HIV in the blood for up to 48 weeks. Viread reduced viral load even in patients whose HIV had developed resistance to other antiretroviral drugs in a multi-center, placebo-controlled Phase III study involving 552 patients.
- 18. **TOXIC MOLD CASE TEXAS.** A state judge affirmed an earlier jury decision, which awarded a homeowner \$32 million in a verdict against Farmers Insurance Group. The problem began with a water leak in the residence but resulted in mold growth throughout the house. Texas Tech University is using the site in a scientific study.
- 19. **CHRONIC WASTING DISEASE (CWD) COLORADO.** Veterinary officials are investigating the movement of elk from an infected farm in Colorado. The elk may have been shipped to more than a dozen states. CWD is a transmissible spongiform encephalopathy that affects free-ranging deer and elk. The origin and mode of transmission for CWD is unknown. The USDA issued an emergency declaration effective on 21 September regarding the threat of CWD to the livestock industry. The declaration allowed \$2.6 million in funds to implement a CWD surveillance and indemnity program. CWD is endemic in free-ranging deer and elk in isolated locations of southeastern Wyoming, northeastern Colorado, and southwestern Nebraska. Positive captive elk herds have been identified in Colorado, Montana, Nebraska, Oklahoma, and South Dakota. All positive herds are under state quarantines.

20. **FOOT AND MOUTH DISEASE (FMD)** – **IRELAND AND FRANCE.** The USDA added Ireland and France to the list of countries determined to be free of FMD on 2 November. This change is disease status relieves some import restrictions; however, these countries remain under other import restrictions both for bovine spongiform encephalitis and their proximity to and trade with FMD-affected regions.

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