USACHPPM
DEPUTY CHIEF OF STAFF FOR OPERATIONS
HEALTH INFORMATION OPERATIONS
WEEKLY UPDATE

13 November 2001

RECENT ISSUES

1. **INHALATIONAL ANTHRAX – USA.** The cumulative number of confirmed inhalational anthrax cases associated with bioterrorism is ten, which has not changed from the last weekly update. A New Jersey postal worker was released from the hospital on Monday, 5 November after 17 days of inpatient care. The following table provides a summation of confirmed inhalational anthrax 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 has not changed from the last weekly update. 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.**

- As of 9 November, the Centers for Disease Control and Prevention (CDC) reports that nationwide approximately 32,000 persons have received initial anthrax prophylaxis, of which 5,000 received a 60-day regimen. The CDC conducted a preliminary assessment for adverse events associated with anthrax prophylaxis in Florida. Of 490 survey participants, 19% reported one or more of the following symptoms: itching; breathing problems; swelling of face, neck or throat; and seeking medical attention for any adverse reaction related to the prophylaxis. There were no reports of anaphylaxis. Similar studies are underway in New York City, New Jersey, and the Washington, DC metro area.
- On 9 November, the CDC issued interim guidance on the investigation of and response to anthrax exposures. This guidance provides information on environmental surface sampling (directed, prospective and random) and the use of nasal swab cultures to determine recommendations for prophylaxis. This guidance provides examples of when to recommend prophylaxis and the closure of a facility: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5044a6.htm
- On 9 November, the CDC issued guidance for the clinical evaluation of individuals *not known* to be at increased risk for anthrax but who have influenza-like illness. This guidance has broad application and is available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5044a5.htm. Please note that this is different from previous guidance issued on 2 November, which was for the clinical evaluation of

individuals with possible anthrax. This guidance is embedded in the report which is available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5043a1.htm. The clinical evaluation of individuals with possible anthrax (2 November) also has a clarification, which is to consider chest computerized tomography (CT) if chest radiography diagnosis is uncertain. This information is available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5044a9.htm.

- On 7 November, the CDC released guidance on personal protective equipment (PPE) for *anthrax investigators*. The guidance is similar to that released on 25 Oct for *emergency responders*. PPE includes powered air-purifying full facepiece respirator with HEPA filter, disposable protective clothing with integral hood and booties, and disposable gloves made of lightweight nitrile or vinyl. This guidance can be found at the website listed below. http://www.bt.cdc.gov/DocumentsApp/Anthrax/Protective/Protective.asp
- Also on 7 November, the CDC released two new fact sheets for parents and health care providers (HCPs) to address anthrax exposure issues to children. The HCPs fact sheet contains useful information regarding pediatric doses for anthrax prophylactics. See the following website for more information: http://www.bt.cdc.gov/agent/Anthrax/factsheet.asp

4. **ANTHRAX CASE INVESTIGATIONS – FLORIDA.** On 6 and 8 November, the New England Journal of Medicine (NEJM) published the following articles early due to public health concerns. The first article is an overview on the recognition and management of the disease. A copy of this article is available at: http://www.hhs.gov/hottopics/healing/nejm110601a.pdf. The second article details the anthrax investigation in the index case. A copy of the article is available at: http://www.hhs.gov/hottopics/healing/nejm110801b.pdf. Both articles will appear in the 29 November edition of the NEJM.

5. **ANTHRAX DETECTION – MAYO CLINIC AND ROCHE DIAGNOSTICS.** Collaboration between the Mayo Clinic and Roche Diagnostics allowed the development of a rapid DNA test that detects anthrax in environmental or human specimens. Further information is available at http://www.roche.com/med-corp-detail-2001?id=710&media-language=e. Roche has submitted a request for expedited regulatory approval to the Food and Drug Administration (FDA). If approved, the Mayo Clinic predicts USA laboratories at the locations depicted on the following website could have access to the test as early as 9 November: http://www.mayo.edu/news/map.jpg.

6. **BIOTERRORISM RESPONSE – OTTAWA PLAN.** On 7 November, the World Health Organization (WHO) and seven countries ratified the Ottawa Plan, which was drafted by Canada. The plan increases international cooperation in bioterrorism preparation and response. Canada, France, Germany, Japan, Mexico, the USA, and the UK ratified the plan. The plan's seven main principles include: (1) joint cooperation in vaccine and antibiotic procurement; (2) dialogue engagement on regulatory requirements for vaccines specifically the smallpox vaccine; (3) joint sharing of emergency preparedness and response plans and consideration for joint planning and training; (4) improved linkages between BL-4 laboratories; (5) close cooperation on radio-nuclear preparedness and response; (6) joint sharing of surveillance data from national public health laboratories to include both general information and risk mitigation strategies on real or threatened food supply contamination; and (7) joint support for the WHO's disease surveillance network and for WHO's efforts to develop a coordinated strategy for disease outbreak containment.

7. **BIOTERRORISM DEFENSES – USA.** George Mason University hosted the "Biological Weapons: Threat and Defense" conference on 8-9 November. Advanced Biosystems, Inc., a subsidiary of Hadron, Inc., helped to sponsor this conference. One of the conference highlights was medical prophylaxis and treatment of casualties. Hadron, Inc. recently received an NIH grant in this area. The company's research objectives that were reported to NIH included the design of "novel therapeutic strategies, that can be implemented soon after a bioterrorist event, to prevent the germination of [anthrax] bacterial spores in vivo . . .arrest or interrupt the spread of infection in vivo, and/or neutralize – or block – the synthesis of toxins . . .that damage host tissues early during infection." Further information on this new technology is available on Hadron, Inc.'s website at: http://www.hadron.com/press/nihanthrax.shtml.

8. **SMALLPOX THERAPEUTICS – CDC**. The CDC is expected to release details of its plan for responding to an outbreak of smallpox in the near future. In the January-February 2001 issue of *Emerging Infectious Diseases*, the CDC reported 274 antiviral drugs were screened for activity against variola, monkeypox, cowpox, camelpox and vaccinia viruses using two cell culture assays. In these trials, cidofovir was evaluated against 31 strains of variola, which yielded no evidence of cidofovir-resistant strains. In this study three compounds had therapeutic indices greater than 1,500, ten compounds had therapeutic indices greater than 200, and cidofovir had indices greater than ten. Further in vitro testing is ongoing. A problem with in vivo research is in finding an animal that replicates the classic human disease.

9. **INFLUENZA SURVEILLANCE – USA.** The National Flu Surveillance Network reports that Florida and Indiana remain under influenza alert. This is primarily due to activity in Miami (with milder activity in Jacksonville and New Smyrna Beach) and South Bend. Thirteen states are under an influenza watch: Arkansas, California, Georgia, Illinois, Kansas, Louisiana, Nebraska, New York, North Carolina, Pennsylvania, South Dakota, Tennessee, and Texas. Six states were added to the watch status primarily based on activity in Little Rock, Arkansas; Norton, Kansas; Bogalusa, Louisiana; Hastings, Nebraska, Pittsburgh, Pennsylvania; and Roscoe, South Dakota. There are three states that are showing activity during this week that were not showing activity during this time last year: Indiana, Nebraska, and Tennessee. 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.

10. **INFLUENZA SURVEILLANCE – USA AND CANADA**. On 9 November, the WHO reported that for the month of October influenza-like illness in the USA remained below the national baseline of 1.9%. Influenza A non-subtyped, A (H3N2), and B viruses were isolated from sporadic cases. The first outbreak of the 2001-02 season was detected in Canada during the third week in October, and three of six clinical specimens detected influenza A, no subtype.

11. **DENGUE FEVER – HAWAII.** Cumulative, confirmed cases rose from 74 to 78 as of 9 November with three new cases in Maui and one case in Oahu. Cumulative totals for each island are: Maui = 59; Oahu = 14; and Kauai = 5. Six suspect cases (2 on Maui and 4 on Oahu) and 350 reports of illness remain under investigation.

12. **WEST NILE VIRUS (WNV) 2001 – USA.** As of 6 November, the year-to-date cumulative total for 2001 is 43 human cases of WNV encephalitis or meningitis in Florida (10), New York (10), Connecticut (6 with 1 death), Maryland (6), New Jersey (6 with 1 death), Pennsylvania (3), Georgia (1 death), and Louisiana (1 death). The dates of onset ranged from 13 July to 7 October and the median age was 70.5 years (range 36-90 years). The CDC and the United States Department of Agriculture (USDA) have discrepancies in the year-to-date cumulative total horse infections. The USDA has mapped the current confirmed cases at the following website: http://www.aphis.usda.gov/oa/wnv/wnvmap.pdf. A large cluster is clearly evident on the Georgia-Alabama-Florida borders. A conditional license was granted for an American Home Products, Inc., vaccine on 1 August. Increased veterinary surveillance and preventive measures are warranted through the winter as this disease may likely be transmitted year round in the more temperate areas.

13. **AIDS-DRUG PATENT – WORLD TRADE ORGANIZATION (WTO).** Brazil, India, and the USA are expected to square off at the WTO meeting being held in Doha, Qatar on 9-13 November. At issue is the manufacture of proprietary AIDS drugs at low costs but in violation of USA drug company patents. Brazil and India will likely appeal for international support in requesting an increased flexibility of WTO intellectual property laws (also known as TRIPS) to allow countries to produce AIDS drugs in light of the current epidemic. The USA's successful bid in a reduced cost for ciprofloxacin from Bayer will likely be a negative factor for the USA.

14. **HIV SUBTYPE RESISTANT TO AZT – USA.** A recent article in the Proceedings of the National Academy of Sciences Early Edition reported a "substantial" prevalence of HIV-1 virus with a mutation that allows resistance to AZT among a treatment-naive study population. The article is available at http://www.pnas.org/cgi/reprint/241300698v1.pdf.

15. **REVISED HIV COUNSELING, TESTING, AND REFERRAL (CTR) GUIDELINES – CDC.** The CDC will host a satellite broadcast on 15 November, which will discuss the key recommendations in the "Revised Guidelines for HIV Counseling, Testing, and Referral" published on 9 November, which is available at http://www.cdc.gov/mmwr/PDF/rr/rr5019.pdf. Some of the changes covered by this new revision include (1) specific strategies for making HIV CTR more accessible; (2) acknowledgement of provider flexibility in implementing the guidelines; (3) recommended risk-screening strategies to target CTR services in low prevalence settings; and (4) discussions on ways to improve the quality of CTR services. Information on the broadcast is available at http://www.cdcnpin.org/broadcast/current/2001/1115/start.htm.

16. **STEM CELL REGISTRY – NATIONAL INSTITUTES OF HEALTH (NIH).** On 7 November, the NIH released a notice of criteria for federal funding of research on existing human embryonic stem cells. In order to facilitate adherence to this criteria, NIH has established a stem cell registry, which is available on the NIH homepage at http://escr.nih.gov. All requests for federal funding must cite a human stem line that is listed on the NIH registry. Currently 11 companies have 72 stem cell lines registered with NIH.

17. **DIALYZERS RECALL – FOOD AND DRUG ADMINISTRATION (FDA)/BAXTER INTERNATIONAL.** On 5 November, Baxter International, Inc., released information on the probable cause of recent deaths involving the A, AF and AX series dialyzers, which are involved

in a global recall. The A and AF series dialyzers were initially recalled in the USA on 18 October. Further information is available from the FDA at: http://www.fda.gov/cdrh/recalls/dialyzers110701.html or at the company's website: http://www.baxter.com/customers/products_svcs/renal_therapies/recall/index.html

18. **RADIATION RISKS WITH COMPUTED TOMOGRAPHY (CT) SCANS FOR PEDS PATIENTS – FDA.** The FDA released a public health notice on 2 November (published on 7 November) regarding increased radiation risks in pediatric and small adult patients. While recognizing the benefits of CT scans in diagnoses and treatments, FDA stresses the importance of eliminating unnecessary radiation exposure in these patients by: (1) optimization of CT settings, i.e., reduce tube current, use table of tube-current settings based on patient weight, and increase table increment or pitch; (2) reduction in the number of multiple scans with contrast material; and (3) elimination of inappropriate referrals for CT. The full notice is available at: http://www.fda.gov/cdrh/safety/110201-ct.html.

19. **FOOT AND MOUTH DISEASE – GLOBAL PLAN.** On 6 November, the United Nations Food and Agriculture Organization (FAO) called for a global plan to control epidemics citing foot and mouth disease as an example. Members at the FAO Conference in Rome called for a system for tracking animal diseases similar to the Global Information and Early Warning System for food crops. The proposed system would incorporate the official reporting network of the Office International des Epizooties (OIE), disease investigations, epidemiological and laboratory studies to improve international early warning. A global animal disease reporting system would greatly augment military medical intelligence resources.

20. **INTERNATIONAL TREATY ON PLANT GENETIC RESOURCES – FAO.** The FAO approved the International Treaty on Plant Genetic Resources for Food and Agriculture at the FAO Conference on 3 November. The treaty will become legally binding when ratified by at least 40 states. According to FAO, the treaty, which was promulgated by Venezuela, provides "a framework to ensure access to plant genetic resources and to related knowledge, technologies, and internationally agreed funding."

21. **SALMONELLA RAPID TEST – LAWRENCE LIVERMORE NATIONAL LABORATORY (LLNL).** The LLNL recently released information regarding the development of a rapid-detection technique for salmonella, which allows detection in two days versus four to 14 days by current FDA-approved tests. The laboratory predicts that with refinement, the future tests may only take two hours. LLNL reports that a rapid test for plague that uses similar technology helped to confirm a naturally occurring outbreak in Northern Arizona within four hours. For further information see http://www.llnl.gov/llnl/06news/NewsReleases/2001/NR-01-10-08.html. The University of California for the US Department of Energy operates LLNL.

22. "**MEDICAL SMART HOME" – CENTER FOR FUTURE HEALTH.** Researchers at the University of Rochester's Center for Future Health are developing a "medical smart home," which consists of several prototypes undergoing testing. Examples include a (1) conversational computer that serves as a personal medical advisor; (2) a software and camera system used as a gait monitor; (3) a smart bandage that detects certain types of bacteria in food or wounds instantly; (4) a melanoma detector; (5) a rash identifier; and (6) an infrared-based tool that

observes patterns of normal activity and monitors for sudden changes that might be indicative of disease. Some of these research initiatives may have military application. Further information is available at http://www.urmc.rochester.edu/pr/News/cffh.html.

23. **TRAVEL WARNING – TURKMENISTAN.** The State Department issued a travel warning for Turkmenistan on 7 November citing ongoing concerns in neighboring Afghanistan. The travel warning joins those for Uzbekistan, Tajikistan, and Pakistan all issued in September.

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