

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

**19 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. The remaining hospitalized cases - two DC metro area postal workers - were released from the hospital on 9 and 13 November after 20 and 25 days of hospitalization. The following table following this paragraph provides a summation of confirmed cases. On 8 November, the Emerging Infectious Diseases Journal published a preliminary report on the ten cases of inhalational anthrax to date. The article highlights the high survival rate during this outbreak – 60 percent – as compared to an expected survival rate of less than 15 percent. The report attributes the heightened alert status of health care workers and the use of epidemiological case investigation findings as successful contributing factors. The final, edited version will be published at a later date. The preliminary report is available at the following website <http://www.cdc.gov/ncidod/EID/vol7no6/pdf/jernigan.pdf>.

<b>Location</b>	<b>Florida</b>	<b>New York</b>	<b>New Jersey</b>	<b>DC metro area</b>
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. The confirmed cases are not likely to change categorization because treatment was performed and/or the condition resolved prior to definitive diagnostics.

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

3. **ANTHRAX EXPOSURES – USA.**

- On 16 November, the Centers for Disease Control and Prevention (CDC) released interim guidelines for anthrax prophylaxis in children and breastfeeding mothers and for treatment of children. The guidelines state that ciprofloxacin and doxycycline are recommended for prophylaxis and treatment of adults and children with anthrax exposures associated with bioterrorist events. However, amoxicillin is an option for prophylactic treatment of children and pregnant women and to complete treatment of cutaneous disease if sensitivity testing indicates susceptibility. Complete guidelines are available at the following website <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5045a5.htm>.

- The last individual suffering from anthrax due to bioterrorism developed symptoms on 25 October in New York City, and the source of the exposure remains unknown. The CDC cautions

the public and health care providers to remain vigilant for more cases, as the source of the bioterrorist attacks has not yet been identified. The CDC also recommends that veterinarians be vigilant for anthrax and/or other bioterrorism agents in animals particularly in the affected areas.

- The United States Postal Service (USPS) reports that 8,137 employees remain on a 60-day course of antibiotics for anthrax exposure from four contaminated letters discovered thus far.
- On 13 November, the CDC released recommendations for collecting surface environmental samples for culture. Types of procedures included bulk-sampling, surface sampling via non-cotton swabs (preferably), and collection using high-efficiency particulate air (HEPA) vacuum cleaners. The report is at <http://www.bt.cdc.gov/DocumentsApp/Anthrax/11132001/final42.asp>.
- On the 16 November, the CDC confirmed that two isolates were positive for anthrax from the outer surface of letters or packages sent in State Department pouches to the U.S. Embassy in Peru. CDC has not confirmed anthrax from any other international source, and no cases of bioterrorism-related anthrax have been confirmed in persons from countries other than the USA.
- On 16 November, the Occupational Safety and Health Administration announced its Workplace Anthrax Exposure Guidance, a tool to help employers assess risk. The anthrax matrix is shaped like a pyramid, which contains hyperlinks with specific information for each level of risk: green for low, yellow for medium and red for high risk. The guidance is available at <http://www.osha.gov/bioterrorism/anthrax/matrix/index.html>.

**4. CIPROFLOXACIN-RESISTANCE - CDC.** A study released in the September-October edition of the Emerging Infectious Disease Journal reported the incidence of ciprofloxacin-resistant *Enterbacter cloacae* and *Escherichia coli* increased from < 0.5 percent to 20.7 percent and < 0.5 percent to 64 percent respectively from 1996 to 1999 in a hematology unit in the Netherlands. The increase in incidence was primarily due to a population of severely neutropenic patients who had received ciprofloxacin as part of a selective decontamination of the gut intended to eliminate potentially pathogenic bacteria while maintaining anaerobic flora. This study demonstrates the use of various antibiotics, including ciprofloxacin, in the emergence of ciprofloxacin resistant strains. The full text is available at the following website <http://www.cdc.gov/ncidod/EID/vol7no5/vanbelkum.htm>.

**5. SMALLPOX REPOSITORY – USA.** On 16 November, the Department of Health and Human Services (DHHS) announced that the United States would not destroy its repository of smallpox virus until adequate medical tools are available to counter any future outbreak of this disease. The DHHS Secretary reported that he has already launched a process for rapid new production of smallpox vaccine. He also indicated that vigorous research is underway to develop new diagnostic and treatment capabilities, as well as the next generation of smallpox vaccines.

**6. BIOTERRORISM RESPONSE – UNITED STATES GENERAL ACCOUNTING OFFICE (GAO) REPORT ON CDC.** On 15 November, the GAO issued the report “The CDC’s Role in Public Health Protection” for the Committee on Energy and Commerce, House of Representatives. The report and testimony indicated that gaps exist in CDC’s activities, which could hinder responsiveness to a bioterrorist attack. The gaps were divided into two categories: research activities and preparedness activities.

- Gaps in research activities included the vaccine development and field-testing for infectious agents and rapid assay tests that allow field diagnosis of biological or chemical agents.

- The GAO reported gaps in all areas of preparedness activities, which included the upgrade of state and local surveillance and response capabilities; the need for augmentation of the 104 laboratories in the National Laboratory Response Network; the development of information systems to detect and respond to chemical and biological terrorist attacks; the need for advanced training for health care workers in the recognition and treatment of biological and chemical agents; and the augmentation of the National Pharmaceutical Stockpile.
- On 1 November, republicans introduced legislation to the U.S. House of Representatives that would provide \$1.5 billion to the CDC over five years to update research laboratories and provide enhanced security measures. If passed, this legislation would allow facility renovations five years ahead of schedule. These improvements would likely complement the military responsiveness to biological and chemical attack.

**7. GUIDE FOR CHEM-BIO EMERGENCIES – WORLD HEALTH ORGANIZATION (WHO).** The WHO added a hyperlink on its homepage this week to the draft technical guide, “Health Aspects of Biological and Chemical Weapons.” The draft guide was released 17 August, and the finalized version is expected in December 01. The guide was designed to provide guidance for the development of national response plans and is available at: [http://www.who.int/emc/pdfs/BIOWEAPONS\\_FULL\\_TEXT2.pdf](http://www.who.int/emc/pdfs/BIOWEAPONS_FULL_TEXT2.pdf).

**8. TERRORISM REFERENCES – NATIONAL ACADEMY PRESS (NAP).** The NAP has 26 full text reports available at <http://www.nap.edu/terror/> as part of the Terrorism and Security Collection. Topics include (1) [Chemical and Biological Terrorism: Research and Development to Improve Civilian Medical Response](#); (2) [Firepower in the Lab: Automation in the Fight Against Infectious Diseases and Bioterrorism](#); (3) [Improving Civilian Medical Responses to Chemical or Biological Terrorist Incidents Interim Report on Current Capabilities](#); (4) [Fluid Resuscitation: State of the Science for Treating Combat Casualties and Civilian Injuries](#). The NAP publishes free on-line reports for the National Academy of Sciences, the National Academy of Engineering, the Institute of Medicine and the National Research Council.

**9. NATIONAL ADVISORY COMMITTEE ON CHEMICAL, BIOLOGICAL, RADIO-NUCLEAR SAFETY, SECURITY AND RESEARCH – CANADA.** On 13 November, the Canadian Health Minister announced the formation of a national advisory committee to provide recommendations for preparation and response for potential terrorist incidents. The committee received the following charter: (1) provide guidance regarding preparation for and response to bioterrorism events; (2) provide recommendations for short- and long-range research and development plans for bioterrorism; (3) provide advice on diagnostics, health-related training, and personal protective equipment for first responders; (4) provide guidance on any health-related matters regarding bioterrorism. While the committee’s charter only refers to bioterrorism events, it may be inferred from the committee title that chemical and radiological events are included in this charter.

**10. MENTAL HEALTH CRISIS – AFGHANISTAN.** On 6 November, the WHO published a special report, “The Invisible Wounds: Mental Health Crisis in Afghanistan.” According to the report, one of the most prevalent reasons for patient visits at a local health center in the central highlands of Afghanistan is fear. The report also states that on a WHO mission to Pakistan, 30% of the Afghan refugees seeking medical care at local health facilities were presenting with

psychosocial complaints resulting from psychological problems. The WHO recommended consideration for psychosocial program support in international aid. The report is available at <http://www.who.int/disasters/repo/7399.pdf>. The WHO published an earlier report (29 October) on communicable diseases in Afghanistan in which the top three threats were listed as diarrheal diseases, acute respiratory infections, and measles. This report is also available at <http://www.who.int/disasters/repo/7391.pdf>.

**11. AFGHAN REFUGEES – UNITED NATIONS (UN).** On 15 November, the UN High Commissioner for Refugees warned of a possible influx of more Afghan refugees into neighboring states particularly Pakistan. The statement came after reports of thousands of Afghans fleeing Kandahar and Helmand. A new refugee camp in Pakistan, Roghani, opened on Sunday, 11 November. Since it opened, over 1,300 refugees were transferred from the staging facility Killi Faizo near the border. In spite of these transfers, Killi Faizo reported an influx of over 2,500 refugees.

**12. NATURAL-DISASTER RISK REDUCTION CONFERENCE – PAN AMERICAN HEALTH ORGANIZATION (PAHO).** The PAHO will co-sponsor a conference 4-6 December in Costa Rica as a follow-up meeting to the Third Summit of the Americas held in Quebec in April 2001. The conference will focus on approaches to and opportunities/challenges in hemispheric risk reduction. Emphasis is placed on sharing technology and information regarding developments in the capacity to forecast, prepare for and mitigate the potential impacts of disasters.

**13. HURRICANE MICHELLE – CENTRAL AMERICA AND CARIBBEAN.** Hurricane Michelle raced through Central America and the Caribbean during the first week in November affecting the following countries/islands: Honduras, Nicaragua, Costa Rica, Panama, Jamaica, Cayman Islands, and Cuba. The risk of vector-borne diseases increases substantially two to six weeks after a natural disaster unless measures are addressed early in the post-disaster period. The PAHO has a helpful booklet available entitled “Emergency Vector Control after Natural Disaster,” which is available at <http://www.helid.desastres.net/pdf/ph08ee/index.htm>.

**14. INFLUENZA SURVEILLANCE – USA.** The National Flu Surveillance Network reports that three new states are under influenza alert: Georgia, New York and Texas. Although Texas is classified overall as in an alert status, San Antonio is under an influenza warning. Seventeen states are under an influenza watch with five new states being added to the watch: Alaska, District of Columbia, Utah, Virginia, and Wyoming. There are four states that are showing activity during this week that were not showing activity during this time last year: Indiana, Nebraska, Virginia and Wyoming. For more detailed information by city and/or county, please see [Table 1](#). The influenza alert categories are epidemic, warning, alert, watch, first case and no activity. A warning status means that high numbers of cases are being reported daily, an alert status means that a moderate number of cases are being reported as consistently as every other day and a watch status means positive results have been reported in that state.

**15. INFLUENZA SURVEILLANCE – WORLDWIDE.** On 16 November, the WHO reported that the 2000-01 influenza season was mild to moderate and affected mostly schoolchildren and young adults. The primary subtype was influenza A (H1N1). Influenza B

co-circulated with influenza A (H1N1) and was the more predominate type during the latter part of the season. Influenza A (H3N2) was only associated with sporadic cases with outbreaks only reported in Africa and the Americas (Argentina and Chile). Overall, outbreaks were reported between November and August with northern hemisphere peaks between January and March and southern hemisphere peaks between May and June. The 2000-01 season was milder and shorter than the previous year particularly in the southern hemisphere.

**16. REVISED HIV GUIDELINES – CDC.** On 16 November, The CDC published recommendations from a CDC Working Group entitled, “Guidelines for Laboratory Test Result Reporting of HIV Type 1 RNA Determination.”

- The guidelines highlight the fact that HIV viral load that is measured using the same plasma and two different assays can differ by more than two-fold. Thus, it is imperative that a clinician be aware of which assay was used when interpreting HIV viral load results. HIV viral load tests are used to monitor clinical status after an HIV diagnosis. The Human Retrovirus and Hepatitis C Laboratory Testing Conference endorsed the following recommendations at a conference held 6-9 March 2000: laboratory report forms will include (1) test kit name, manufacturer, and version; (2) results reported as a value in copies/mL and  $\log_{10}$  transformation (e.g., 500,000 copies/mL and  $\log_{10} = 5.7$ ); (3) results reported as less than the lower limit of quantification for the test kit being used (e.g., < 400 copies/mL or < 50 copies/mL); (4) results reported as greater than the upper limit of quantification for the test kit being used (e.g., > 750,000 copies/mL or > 500,000 copies/mL). Some laboratories were reporting results more than or less than the detection limits of the assays.
- The guidelines also indicate that two of the three assays used in the USA underdetects and underestimates non-B subtypes, e.g., A, E, F, and G. The report indicates that the Bayer HIV-1 RNA 3.0 Quantitative Assay (bDNA) *probably* quantifies RNA of different HIV-1 subtypes accurately due to the redundancy of multiple probes.
- The guidelines also reference a 1999 CDC Report, which recommended nationwide HIV surveillance to include reporting detectable RNA viral loads. The guidelines recommend that states adopt regulations to require reporting of viral loads to public health departments. These new reporting requirements may affect military medical treatment facilities in some states as early as next year.

**17. AIDS-DRUG PATENT – WORLD TRADE ORGANIZATION (WTO).** On 14 November, the WTO officially announced two declarations and one decision from its meeting in Doha, Qatar. The “Declaration on the Trips Agreement and Public Health” will allow countries countering pandemics such as AIDS, tuberculosis, and malaria to better access discounts on pharmaceuticals. Specifically the agreement will allow countries to challenge the pharmaceutical firm to cut prices under the threat of having their patent broken. Brazil was a key force in coordinating the agreement. The WTO public health declaration is available at [http://www-chil.wto-ministerial.org/english/thewto\\_e/minist\\_e/min01\\_e/mindecl\\_trips\\_e.pdf](http://www-chil.wto-ministerial.org/english/thewto_e/minist_e/min01_e/mindecl_trips_e.pdf). New members in the WTO at this meeting were China and Taiwan.

**18. DENGUE FEVER – HAWAII.** Cumulative, confirmed cases rose from 78 to 84 as of 16 November with three new cases each in Maui and Oahu. Cumulative totals for each island are: Maui = 62; Oahu = 17; and Kauai = 5.

**19. COCCIDIOIDOMYCOSIS – UTAH.** On 16 November, the CDC recommended that health care providers should be alert for coccidioidomycosis in persons who reside in or who have traveled to Utah and may have been exposed to dust from disturbed soil. This comes in light of a focal outbreak of coccidioidomycosis in 10 archeological workers who were sifting soil at a dig in northern Utah during June. Four National Park Service employees were subsequently infected in September after performing trail maintenance. These cases extend the northern border for this pathogen by 200 miles and highlight the importance of respiratory protection (e.g., NIOSH-approved N95 respirators that are properly fit and worn) when dust exposure is expected in endemic areas. The [geographic distribution](#) for *Coccidioides immitis* was updated by the U.S. Geological Survey to CDC and is provided at the end of this document.

**20. WEST NILE VIRUS (WNV) 2001 – USA.** The first cases of human WNV were confirmed this past week in Massachusetts and Alabama. Two males in Massachusetts were confirmed with the infection and one male in Alabama. One of the patients in Massachusetts and the patient in Alabama succumbed to their infection in October. An additional male was confirmed as a WNV fatality in New Jersey. The patient was hospitalized in August and succumbed to his infection on 4 October. The CDC is only now confirming these cases due to laboratory prioritization for anthrax case investigations. The CDC provided a [geographical distribution](#) of WNV infection provided at the end of this document.

**21. GYNECARE INTERGEL ADHESION PREVENTION SOLUTION – LIFECORE BIOMEDICAL, INC.** On November 19, the FDA approved the Gynecare Intergel Adhesion Prevention Solution. The solution is for use in surgery to help reduce post-operative adhesions in women undergoing open gynecologic surgery. The product is approved for open gynecologic surgery only. In laparoscopic surgery, Gynecare demonstrated higher infection rates as compared to a standard irrigating solution. The product is not recommended for use in patients with cancer, patients with pelvic or abdominal infections, or during pregnancy.

**22. POST-WEANING MULTI-SYSTEMATIC WASTING SYNDROME (PMWS) – UK.** The most recent epidemic to hit the UK is PMWS, which can cause sudden death or a chronic, wasting disease in pigs. Over 250,000 pigs have been slaughtered in the swine fever and foot and mouth disease outbreaks, but another 300,000 are at risk from PMWS. The virus is very resistant and is possibly spread by fomites and/or the wind. A study is ongoing to determine the role of birds as a vector, which seems likely.

**23. BOVINE SPONGIFORM ENCEPHALOPATHY (BSE) – SLOVENIA AND SLOVAKIA.** On 13 November, the World Organisation [sic] for Animal Health received a laboratory report of a five-year-old cow testing positive for BSE on Western blot. The animal was classified as a suspect case. The cow is located on a small farm with nine other animals. The farm has been quarantined and an investigation is underway. On 14 November, an emergency report from Slovakia indicated that a six-year-old cow was confirmed positive for BSE on Western blot and Platelia Bio-Rad tests. This is the third BSE case in Slovakia. The farm was quarantined, eleven animals destroyed, and an investigation is ongoing in reference to the feed used on the farm.

24. **NEWCASTLE DISEASE – AZERBAIJAN.** On 8 November, the World Organisation [sic] for Animal Health received an emergency report of laboratory-confirmed Newcastle disease in chicks of which approximately 1,200 have succumbed to the infection. The country has initiated quarantine, a stamping-out policy, and vaccination.

25. **JEOPARDIZED FOOD SECURITY – SOMALIA.** The Food and Agriculture Organization (FAO) of the United Nations released a special alert on 13 November regarding floods and drought affecting the food security of Somalia. According to the report, Somalia is experiencing the lowest rainfall in seven years while areas in the South were evacuated when rivers overflowed from heavy rains in the highlands of Ethiopia. Reports indicate that over 800,000 people are crowding around feeding centers with some 300,000 vulnerable people in danger of starvation. The next season harvest is not until August 02.

26. **FOOT AND MOUTH DISEASE (FMD) – UGANDA.** On 8 November, the World Organisation [sic] for Animal Health received an emergency report of a clinical diagnosis of FMD in over 200 cattle in Uganda. Laboratory results are pending. The infection is believed to have spread due to illegal movement of cattle from an infected area. Quarantine and ring vaccination are being performed.

27. **TOXIN GENE DISCOVERED – CHLAMYDIA.** A report in the online early edition of the Proceedings of the National Academy of Sciences details information about the discovery of a gene in *Chlamydia trachomatis* that codes for cell destruction. The gene helps to explain why some chlamydial strains cause chronic illness and presents the possibility of a future antitoxin to combat trachoma and sexually transmitted disease effects. This research also highlights how DNA sequencing can be used in the fight against infectious disease. The full report is available at <http://www.pnas.org/cgi/content/full/241377698v1>.

28. **RADIOPROTECTIVE GENES – NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES.** The National Institutes of Health (NIH) released information on the discovery of 107 new genes in a diploid (yeast) cell that protected against gamma radiation and provided resistance to both ultraviolet light and anti-cancer drugs (bleomycin and camptothecin). The 107 genes were classified as non-essential genes, but the authors state that these genes may be essential when an environmental stressor like radiation is added. The news release is available at <http://www.nih.gov/news/pr/nov2001/niehs-18.htm> and the complete article is available in the 18 November edition of the journal *Nature Genetics*.

29. **TRAVEL WARNING – KYRGYZ REPUBLIC.** On 19 November, the State Department issued a travel warning for the Kyrgyz Republic citing ongoing concerns in neighboring Afghanistan. The travel warning joins those for Uzbekistan, Tajikistan, Turkmenistan, and Pakistan.

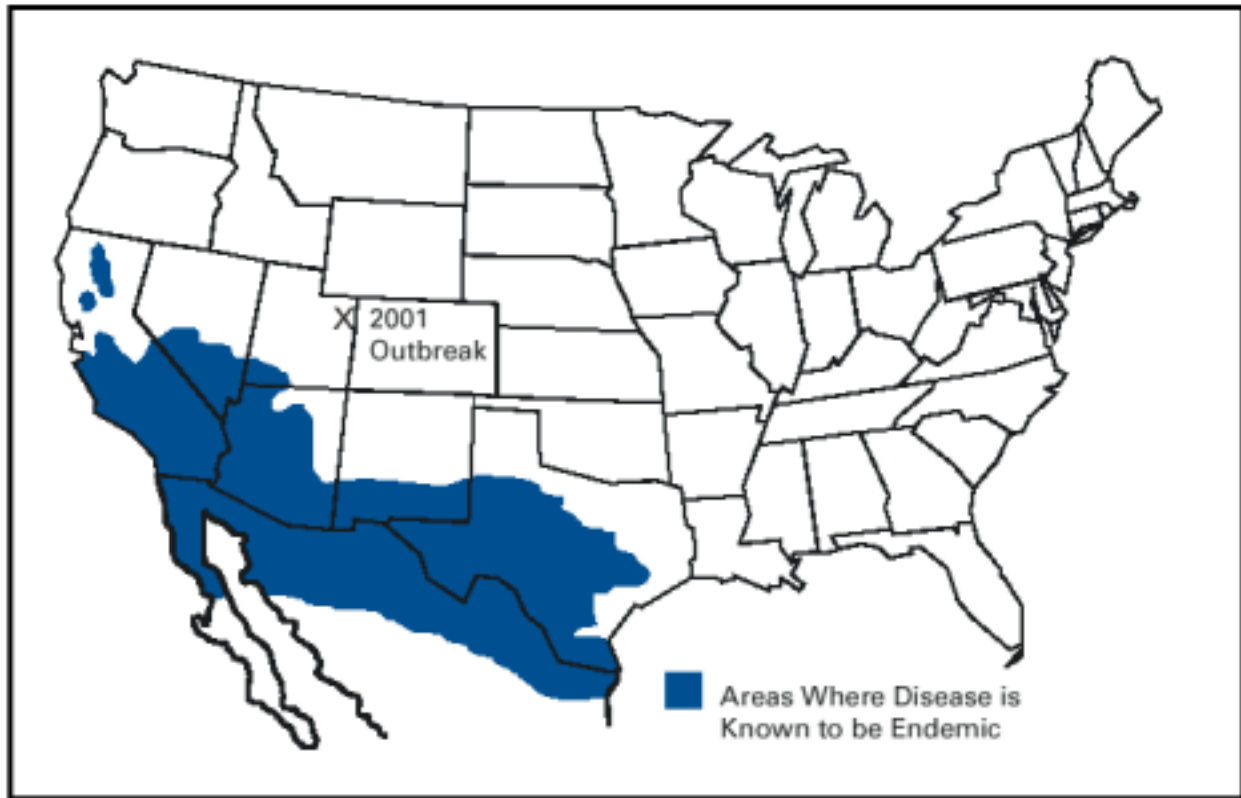
POC KEVIN DELANEY/MCHB-CS-OHI/584-5217  
<mailto:Kevin.Delaney@APG.amedd.army.mil>

Count	State	Influenza Category			
		Watch	Alert	Warning	Epidemic
1	AL	Anchorage			
2	AR	Little Rock			
3	CA	Mammoth Lakes/ Fresno/Long Beach			
4	DC	DC			
5	FL	Dade County/New Smyrna Beach/ Jacksonville			
6	GA	Clayton	Fayetteville		
7	IL	Lake Zurich			
8	IN	Richmond	South Bend		
9	KS	Norton			
10	LA	Bogalusa/Metairie/ New Iberia			
11	NE	Hastings			
12	NC	Brevard/Huntersville			
13	NY	Kings and Nassau Counties	Queens County		
14	PA	Pittsburgh			
15	SD	Roscoe			
16	TN	Knoxville			
17	TX	Austin/Houston/Texarkana		San Antonio	
18	UT	Salt Lake City			
19	VA	Reston			
20	WY	Lander			

Table 1: Influenza Surveillance as reported by the National Flu Surveillance Network



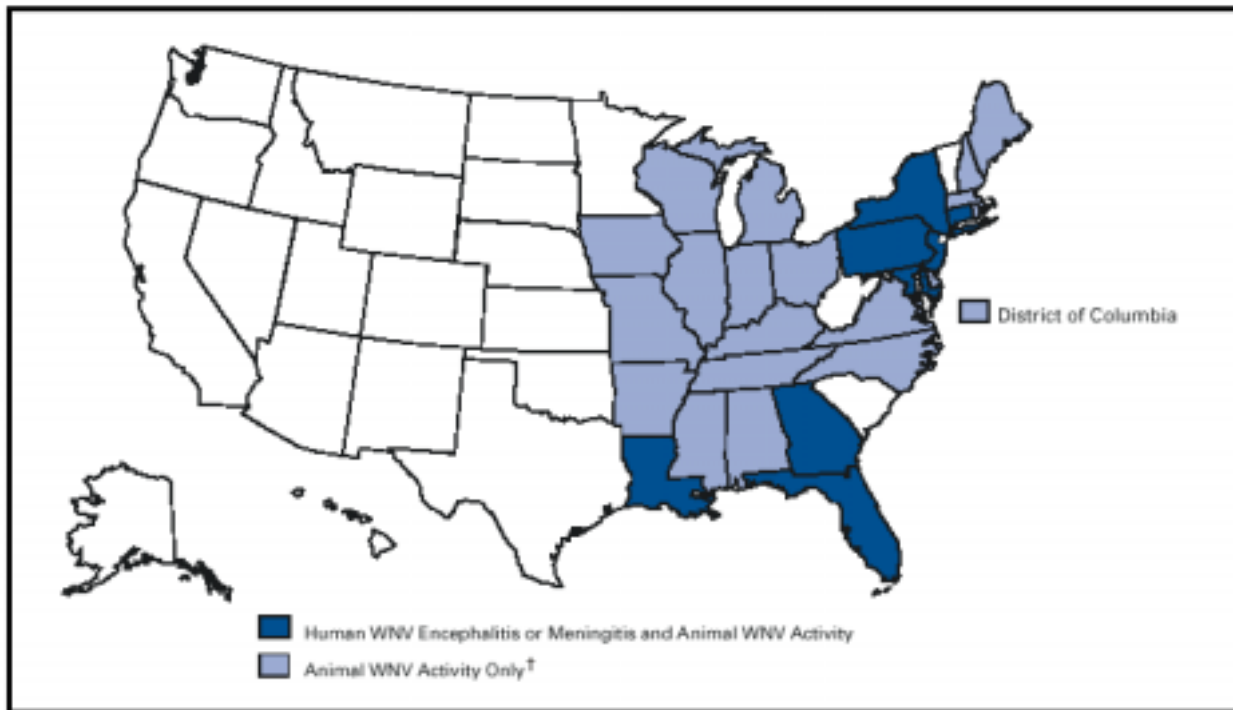
**FIGURE 1. Geographic distribution of *Coccidioides immitis* and location of coccidioidomycosis outbreak — Utah, 2001**



Source: U.S. Geological Survey.

Courtesy of: The Centers for Disease Control and Prevention. Coccidioidomycosis in Workers at an Archeologic [sic] Site – Dinosaur National Monument, Utah, June-July 2001. MMWR 2001; 50: 1005-8.

**FIGURE 1. Areas reporting West Nile virus (WNV) activity — United States, 2001\***



\* As of November 13, 2001.

<sup>†</sup> Mississippi reported WNV infection only in a horse.

Courtesy of: The Centers for Disease Control and Prevention. Weekly Update: West Nile Virus Activity – United States, November 7-13, 2001. MMWR 2001; 50: 1013-14.