

USACHPPM
HEALTH INFORMATION OPERATIONS (HIO) UPDATE

6 September 2002

The HIO Update provides information regarding global medical and veterinary issues of interest to the United States (US) Army. The update does not attempt to analyze the information regarding potential strategic or tactical impact to the US Army and as such, should not be regarded as a medical intelligence product. Medical intelligence products are available at <http://mic.afmic.detrick.army.mil/>. The information in the HIO Update should provide an increased awareness of current and emerging health-related issues.

HOT ISSUES	2
Airport Noise and Learning / Memory – University of Gavle, Sweden	2
Anthrax Mechanism of Action – <i>Science</i>	2
Anti-terror “Decision Analysis” Tool – Sandia National Laboratories	3
Bioweapons Program – Iraq.....	3
Chemical Security – EPA.....	3
Gonorrhea Test Kits Recall – FDA.....	4
Indoor Air Quality and Plants – University of Technology, Sydney	4
Lice and School Policy – American Academy of Pediatrics (AAP).....	4
Malaria – Loudoun County, Virginia.....	4
Pets and Allergy Risk – JAMA.....	5
Smallpox Immunity – <i>NEJM</i>	5
West Nile Virus (WNV) Transmission Investigation – CDC.....	5
Women and Smoking – Report of the US Surgeon General, 2001.....	5
USCENTCOM.....	6
Crimean-Congo Hemorrhagic Fever (CCHF) – Iran	6
Typhoid / Paratyphoid Fever – Tajikistan.....	6
USEUCOM.....	6
Dental Treatment, New – UK	6
Diarrheal Outbreak – Yugoslavia.....	6
Diarrhea / Malaria – Azerbaijan.....	7
Influenza – Madagascar	7
Legionnaires’ Disease – Spain	7
Meningococcal Meningitis – Africa.....	7
Q Fever – France	7
Rabies – Bosnia and Herzegovina.....	8
Spinal Cord in Frozen Beef – France and Germany	8
Surveillance Program for Group A Streptococcal (GAS) Disease – Europe.....	8
USJFCOM.....	8
Bubonic Plague – California	8
Chloramphenicol-Contaminated Honey – China Imports.....	8
Chronic Wasting Disease (CWD) – Minnesota	8
Eastern Equine Encephalitis (EEE) – Rhode Island.....	9
<i>E. coli</i> Outbreak – Oregon.....	9

Non-occupational HIV Post-exposure Prophylaxis (PEP) Guidelines – Rhode Island (RI)...	9
Oral Health Recommendations – DHHS	10
West Nile Virus Surveillance – US.....	10
USPACOM	10
Anthrax – Indonesia	11
Conjunctivitis – China.....	11
Conjunctivitis – South Korea	11
Dengue Fever – Bangladesh.....	11
Dengue Fever – Taiwan	11
Influenza – Australia	12
Nipah-like Virus – Bangladesh	12
Unknown Illness – India	12
West Nile Virus (WNV) – Australia.....	12
USSOUTHCOM	12
Dengue Fever – Cuba.....	12
Dengue Fever – El Salvador.....	13
Dengue Fever – Mexico	13
Dengue Hemorrhagic Fever (DHF) – Nicaragua	13
Unknown Illness – Argentina.....	13
West Nile Virus (WNV) Threat – Cuba.....	13

HOT ISSUES

Airport Noise and Learning / Memory – University of Gavle, Sweden

On 2 September, Reuters Health reported on a study published in *Psychological Science* 2002;13, in which scientists found that regular exposure to the loud noise that accompanies the take-off and landing of airplanes may impair learning and memory in children. According to the researcher, language-based cognitive skills were more vulnerable to noise than other cognitive skills. [[View report](#)]

Anthrax Mechanism of Action – *Science*

On 29 August, *Science* published a study online in which researchers found that *Bacillus anthracis* causes the death of macrophages by producing lethal factor (LF). LF selectively induces apoptosis of activated macrophages by cleaving the amino terminal extension of mitogen-activated protein kinase (MAPK) kinases (MKK) that activate p38 MAPKs. The authors reported that p38 is probably essential for synergistic induction of certain target genes that prevent apoptosis of activated macrophages. This dismantling of the p38 MAPK module enables *B. anthracis* to avoid detection by the immune system. The report is Park JM, Greten FR, Li ZW, and Karin M. Macrophage apoptosis by anthrax lethal factor through p38 MAP kinase inhibition. *Science* 2002 Aug 29; [epub ahead of print] [[View media report](#)]

Anti-terror “Decision Analysis” Tool – Sandia National Laboratories

On 20 August, Sandia National Laboratories in California reported that they are developing a sophisticated tool meant to assist government officials and others involved in an emergency response. The hub of the program is Sandia’s Visualization Design Center, a “war room” of sorts that allows users to better comprehend complex issues and situations. The program uses advanced computers, display systems and software tools that simulate an attack based on real and projected data. The program was first piloted against a biological attack of the San Francisco Bay Area, but is now being adapted to address other threats and applications. [[View report](#)]

Bioweapons Program – Iraq

On 3 September, the Johns Hopkins Division of Infectious Diseases posted a summary of available information on the bioweapons program of Iraq as reported by Richard Stone in *Science* 2000;297:1110. The information is based largely on [UN](#) inspections, which were suspended in November 1998, defectors, and other sources. (See table below) [[View report](#)]

Bioweapon	Comment
Botulinum toxin	19,000 liters of concentrated toxin including 10,000 weaponized
Anthrax	8,500 liters including 6,500 weaponized
Aflatoxin	2,390 liters concentrated including 1,580 weaponized
<i>C. perfringens</i> toxin	340 liters concentrated (specific toxin not defined)
<i>Camelpox</i>	Subject of research; some speculate that this could a “surrogate for its closest known kin, smallpox virus.” Possibly relevant is the observation that smallpox vaccine was produced and tested for potency in rabbits in 1990
<i>Rotavirus</i>	Subject of research
<i>Enterovirus 70</i>	Subject of research
<i>Yersinia pestis</i>	Speculation only
<i>Ebola</i> virus	A defector claimed there is a new laboratory devoted to this virus, but at least one inspector doubted this report

Review of available information on Iraq’s Bioweapons Program courtesy of [Johns Hopkins Division of Infectious Diseases](#)

Chemical Security – [EPA](#)

On 30 August, DENIX reported that EPA officials are trying to schedule a cabinet-level meeting to resolve a government-wide dispute over whether the agency has the authority to finalize a new initiative establishing mandatory security requirements for chemical and other industrial facilities. The agency is expected to argue that the Clean Air Act allows EPA to establish requirements calling on industry to reduce the likelihood of intentional sabotage by criminals or terrorists, in addition to preventing accidental releases. EPA has drafted a set of chemical security “principles” that are likely to spur the agency to ask facilities to conduct vulnerability assessments and take steps to

reduce the risk of a catastrophic release caused by a terrorist attack. The requirements would likely apply to all industries that fall under section 112(r) of the Clean Air Act. [[View report](#); requires registration]

Gonorrhea Test Kits Recall – [FDA](#)

On 30 August, the FDA reported that Abbott Laboratories, Inc., had initiated a worldwide recall of 32 lots of laboratory kits used to diagnose gonorrhea. The kits were shown to be unreliable because they may give false negative results. The tests kits were distributed to hospitals and laboratories from 11 January to 24 June 2002. The specified lots are available on the FDA website. [[View report](#)]

Indoor Air Quality and Plants – University of Technology, Sydney

On 28 August, ABC News reported that Sydney researchers found indoor plants improve the air quality of rooms with little or no airflow. Scientists found that common indoor potted plants such as the Peace Lily and the Kentia Palm improve indoor air by reducing levels of volatile organic compounds or VOCs. The study found that indoor plants reduced VOCs by up to 100% over 24 hours in a closed environment. [[View report](#)]

Lice and School Policy – American Academy of Pediatrics (AAP)

On 3 September, Reuters Health reported that the AAP stated that healthy children with head lice should not be barred from school but should avoid close head contact with other youngsters in the classroom. Currently, many schools have a “no nit” policy that bars kids with head lice or nits (lice eggs that may or may not be dead). According to the AAP, head lice are not a serious medical hazard and do not justify children missing weeks of school. The AAP recommended that head lice be treated with Permethrin 1%, a low-toxicity insecticide that is applied as a cream rinse to hair that has been washed and then towel-dried. Some lice have shown resistance to permethrin, which is believed to be due to mutations in the sodium channel of the lice’s nervous system. [[View Reuters report](#) or [view Science report](#)]

Malaria – Loudoun County, Virginia

Two Loudoun County, Virginia teenagers have contracted vivax malaria in recent weeks. Officials said a 15-year-old boy and a 19-year-old woman who had not traveled abroad and who live about a mile from each other in suburban eastern Loudoun were probably bitten and infected by mosquitoes that had sipped blood from someone who contracted malaria overseas. They are not believed to be “airport cases,” where infected mosquitoes are transported on aircraft from endemic areas. The occurrence of these cases has further raised concerns about mosquito borne disease already heightened from West Nile virus. [[View report](#)]

Pets and Allergy Risk – [JAMA](#)

On 27 August, the [NIH](#) reported that a study in the 28 August issue of the JAMA found that children raised in a house with two or more dogs or cats during the first year of life may be less likely to develop allergic diseases as compared with children raised without pets. The high pet exposure early in life appears to protect against not only pet allergy but also other types of common allergies, such as allergy to dust mites, ragweed, and grass. [[View report](#)]

Smallpox Immunity – [NEJM](#)

On 30 August, the Center for Infectious Disease Research and Policy (CIDRAP) reported that the results of a small study were presented in a letter in the 29 August issue of the *NEJM* which found the immunity induced by smallpox vaccination may last 35 years or longer. The researchers assessed the response of CD8+ T-lymphocytes from 14 people and found there was little loss of response to challenge with *Vaccinia* virus. The report is Frelinger JA and Garba ML. Responses to smallpox vaccine (correspondence). *NEJM* 347(9); pp 689-90. [[View CIDRAP report](#)]

West Nile Virus (WNV) Transmission Investigation – [CDC](#)

On 1 September, the CDC reported that an investigation is ongoing regarding the possibility that blood transfusion or organ donation may have transmitted WNV infection to four recipients of organs from a single donor. All four persons received organs from a Georgia resident who died in early August following a motor vehicle accident. Two Georgia residents received organs from this donor. Both became ill with fever and encephalitis. One patient remains hospitalized and the other patient died. Autopsy specimens were consistent with WNV or related virus infection. Two Florida residents also received organs from the donor. One developed fever and is now recovering at home. The other developed a neurological illness and remains hospitalized. Specimens from this patient tested positive for WNV infection. All remaining blood products from blood donors whose products were used on the organ donor are being recalled. [[View report](#)]

Women and Smoking – Report of the US Surgeon General, 2001

On 30 August, the [CDC](#) published the second report of the US Surgeon General devoted to women and smoking. According to the report, the US is in the midst of a full-blown epidemic of smoking in women. Lung cancer, once rare among women, has surpassed breast cancer as the leading cause of female cancer death in the US, now accounting for 25% of all cancer deaths among women. Although women and men who smoke share excess risks for diseases such as cancer, heart disease, and emphysema, women also experience unique smoking related disease risks related to pregnancy, oral contraceptive use, menstrual function, and cervical cancer. [[View report](#)]

USCENTCOM

Crimean-Congo Hemorrhagic Fever (CCHF) – Iran

On 27 August, ProMED reported that preliminary results from a study indicate that 41 people were infected with CCHF in Iran during the period January to July 2002, including six who died with severe hemorrhagic symptoms. During this period, the patients were from seven of the 28 provinces of Iran. However, the majority of suspected patients came from Sistan va Baluchistan, at the frontier with Pakistan and Afghanistan, where numerous cases have been seen previously. The other provinces with cases are Isfahan, Tehran, Khuzestan, Chaharmahal va Bakhtiari, Yazd, and Fars. According to the authors, CCHF emerged in Iran in late 1999 and can now be considered endemic. Sera continue to be analyzed. [[View report](#)]

Typhoid / Paratyphoid Fever – Tajikistan

On 29 August, [AFMIC](#) reported that at least 276 cases of typhoid/paratyphoid fever were reported in the capital city of Dushanbe with 88 cases among children. Media sources have reported wide variations in the number of cases. The source of the infection was reportedly contaminated water from the Varzob River after recent heavy rains and damage to infrastructure. Additionally, 20 Tajik troops stationed in Vance near the Afghan border have been hospitalized with typhoid/paratyphoid fever. Preventive measures were reportedly not widely implemented due to lack of funds. [[View report](#); requires registration]

USEUCOM

Dental Treatment, New – [UK](#)

On 7 August, the BBC reported that UK dentists have started to use a revolutionary treatment, which does away with the need for injections, drilling, and fillings. The treatment, called Healozone, uses a blast of ozone gas to kill bacteria. The procedure consists of a rubber cap being fitted to the tooth. Ozone gas is then applied to the tooth through an airtight seal created by the cap. Within 10 to 40 seconds the gas eliminates all of the bacteria in the tooth. By killing the acid-producing bacteria, the procedure allows the mineral content of saliva to repair the tooth over time. [[View report](#)]

Diarrheal Outbreak – Yugoslavia

On 28 August, ProMED reported that *Shigella sonnei* was the cause of the diarrheal outbreak now involving at least 300 persons in Topola. The outbreak is believed to be due to broken water pipes. The water supply remains shutdown and an outside source of water is being supplied to the area. [[View report](#)]

Diarrhea / Malaria – Azerbaijan

On 29 August, [AFMIC](#) reported that 17 Azeri soldiers stationed in Sarur District in the western Naxcivan Autonomous Republic have been hospitalized with malaria. In addition, “dozens” of soldiers stationed in Goranboy Rayon reportedly developed dysentery after failing to boil drinking water. [[View report](#); requires registration]

Influenza – Madagascar

On 30 August, the [WHO](#) reported the epidemic of influenza in Madagascar was due to influenza A/Panama/2007/97-like (H3N2). This is the same strain that was associated with influenza epidemics worldwide during 2001-02. The observed increase in excess mortality compared to previous years appeared to be due to widespread transmission and not an especially virulent influenza strain. Most deaths occurred outside of health facilities and disproportionately affected young children. [[View report](#)]

Legionnaires’ Disease – Spain

On 27 August, *The People’s Daily* reported three new cases of Legionnaires’ disease in Matara, Catalonia, which increased the number of infected people to 124 including two deaths. Sanitary authorities closed the Cortes and Graena municipal tourist attraction in southern Granada, Andalucia, after finding a Legionnaires’ disease case there. It will remain closed for 15 days. [[View report](#)]

Meningococcal Meningitis – Africa

On 29 August, Health Canada reported that meningitis outbreaks have been reported in the following African countries: Burkina Faso, Burundi, Niger, Rwanda, and Tanzania. There are 13 recognized serogroups of *Neisseria meningitidis*. The groups A, B, and C account for roughly 90% of outbreaks of meningococcal disease; groups Y and W-135 are less common causes of infection. Serogroup A has historically been the main cause of epidemic disease worldwide and still dominates in Africa. Vaccines are available for A, C, Y, and W-135. Based on available information, serogroup A is being reported in Burundi, Niger, and Tanzania. Serogroup W-135 is being reported in both Niger and Burkina Faso. [[View report](#)]

Q Fever – France

On 3 September, ProMED reported that as of 30 August, 22 confirmed cases of Q fever were reported, out of a suspected 79 clinical cases, in residents of or visitors to the Chamonix Valley in the French Alps. The location is a popular ski area and most of the cases are residents of the town Chamonix. The source of the current outbreak is unknown, but previous outbreaks were reportedly associated with (1) bird droppings, (2) sheep and wind, and (3) ingestion of raw goat milk products. [[View report](#)]

Rabies – Bosnia and Herzegovina

On 29 August, [AFMIC](#) reported at least 15 laboratory-confirmed cases of animal rabies have occurred in the Federation of Bosnia and Herzegovina Administrative Area since May. Most of the cases have occurred in foxes. [[View report](#); requires registration]

Spinal Cord in Frozen Beef – France and Germany

On 3 September, the [UK](#) reported that it had found spinal cord in frozen beef imported from France and Germany. Bovine spinal cord is classified as specified risk material (SRM) and is therefore among those parts of the animal most likely to contain [BSE](#) infectivity. [[View report](#)]

Surveillance Program for Group A Streptococcal (GAS) Disease – Europe

On 29 August, the *Eurosurveillance Weekly* reported that a new European Commission Framework Five surveillance program for severe GAS disease, Strep-EURO, would be launched on 1 September 2002. The aim of the 36-month program is to enhance understanding of the epidemiology of GAS invasive disease in Europe. Public health institutes from the Czech Republic, Cyprus, Denmark, Finland, Germany, Greece, Italy, Sweden, Romania, and the [UK](#) will participate. [[View report](#)]

USJFCOM

Bubonic Plague – California

On 29 August, ProMED reported that bubonic plague in two squirrels and one cat forced the early closure of Donner Memorial State Park near Truckee, California. The health department is trapping animals and dusting for fleas. Plague is endemic in rodents in the southwestern parts of the US, including Colorado, New Mexico, Arizona, and California. [[View report](#)]

Chloramphenicol-Contaminated Honey – China Imports

On 28 August, the [FDA](#) and US Customs Service announced that they have discovered bulk imports of Chinese honey that were contaminated with low levels of chloramphenicol (CAP), a potentially harmful antibiotic and unapproved food additive. Customs is now stopping all suspect bulk honey imports into the US to determine if they contain CAP. [[View report](#)]

Chronic Wasting Disease (CWD) – Minnesota

On 1 September, ProMED reported that Minnesota animal health officials have confirmed Minnesota's first case of CWD. The CWD occurred in a farm-raised elk that tested positive after dying mysteriously. The remainder of the herd has been quarantined. CWD was once only found in a small area of Colorado and Wyoming, but

has now spread through elk ranches and wild deer and elk herds to Canada, Kansas, Montana, Nebraska, New Mexico, Oklahoma, South Dakota, and Wisconsin. Disease eradication measures have included slaughter of thousands of captive elk in Colorado and killing of thousands of deer in Wisconsin. The [WHO](#) warns against eating any part of a deer or elk with CWD. Health officials in Minnesota and Wisconsin are working with the [CDC](#) to investigate the deaths of three men, two from [CJD](#) and the one from Pick's Disease, another neurological disorder. The men knew one another and ate at wild game feasts hosted by one of them. [[View report](#) or [view WHO recommendations](#)]

Eastern Equine Encephalitis (EEE) – Rhode Island

On 23 August, the *Boston Globe* reported that Rhode Island had its first case of EEE this year in a horse from Exeter. Findings suggest there are mosquitoes in the area carrying the virus, though none have been found. It is rare for humans to be infected, but the virus is fatal 50-60% of the time. Six people have been infected with EEE since 1983 in Rhode Island. The last person was infected and died in 1998.

***E. coli* Outbreak – Oregon**

On 27 August, the Oregon Public Health Services reported that the current Lane County outbreak of *E. coli* O157 infection is the largest in the state's history with 42 confirmed cases. An intense epidemiological investigation is ongoing, but health officials state they know the exposure occurred at a fairground. It is believed that animal exhibits could be the source of the disease. Health officials stated that it was highly important that those responsible for animal exhibits make handwashing facilities available to visitors, and place them in a prominent area. Handwashing facilities should be fully equipped with soap, running water, and disposable towels. Information regarding the risk of pathogen transmission from animals should also be posted. [[View report](#)]

Non-occupational [HIV](#) Post-exposure Prophylaxis (PEP) Guidelines – Rhode Island (RI)

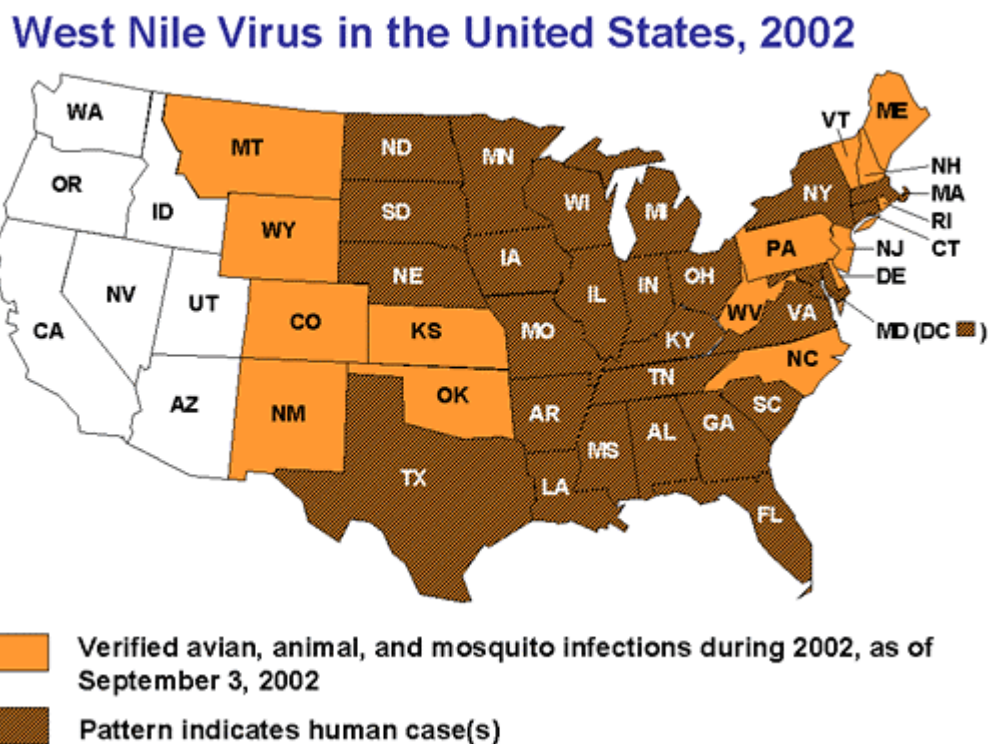
On 23 August, the Rhode Island Department of Health released *Non-occupational HIV PEP Guidelines for RI Healthcare Practitioners*. Non-occupational HIV PEP (HIV NPEP) is typically employed after sexual assault, consensual sex, and needlestick injuries to at-risk patients who are not healthcare personnel. New York State and California have state guidelines for implementing HIV PEP after sexual assault. Since 1998, Australia and six European countries each have adopted HIV NPEP guidelines. The US currently does not have national guidelines for HIV NPEP. In 1998, the CDC reviewed the subject of HIV NPEP, but did not issue formal guidelines governing its use. The [CDC](#) does have an HIV NPEP Registry; information is available at [HIV PEP Registry](#). [[View report](#)]

Oral Health Recommendations – [DHHS](#)

On 30 August, the [CDC](#) reported that the Task Force on Community Preventive Services convened by the DHHS had issued an oral health report in the *American Journal of Preventive Medicine* (Volume 23, No. 1S) in which it strongly recommended school-based dental sealant programs and community water fluoridation to prevent tooth decay. [\[View report\]](#)

West Nile Virus Surveillance – US

On 3 September, the [CDC](#) reported the 673 human cases (32 deaths) in 28 states have been reported during 2002 to Arbonet or compiled in direct communication with state/local health officials. Two cases have been reported from Oklahoma that are not reflected in the map below. [\[View report\]](#)



Map courtesy of the [CDC](#) at <http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm>.

USPACOM

Anthrax – Indonesia

On 29 August, [AFMIC](#) reported that an outbreak of anthrax had occurred among five farm workers, who were exposed to an infected cow at a slaughterhouse. Anthrax is endemic throughout the country. [[View report](#); requires registration]

Conjunctivitis – China

On 27 August, the *China Daily* reported that the ophthalmology departments of hospitals in Guangzhou, capital of South China's Guangdong Province, were congested with people suffering from conjunctivitis. An outbreak has been afflicting the city for more than 10 days. Health officials believe the recent humid weather in the city has helped the disease spread. Conjunctivitis was also spreading during the past month in Haikou, in South China's Hainan Province, where more than 7,000 people were reportedly infected. [[View report](#)]

Conjunctivitis – South Korea

On 3 September, the Agence France-Presse reported that about 166,000 South Korean students have been infected with viral conjunctivitis. The outbreak has resulted in the closure of 68 elementary, middle, and high schools. North Gyeongsang province was the worst affected with 30,625 students at 435 schools infected with the disease. Health officials said Typhoon Rusa, which plowed across South Korea on 31 August, accelerated the epidemic outbreak. [[View report](#)]

Dengue Fever – Bangladesh

On 1 September, ProMED summarized articles from *The Daily Telegraph* and the Agence France Presse in which it was reported that on 24 August Bangladesh's military was ordered to help contain the outbreak of dengue fever. The military would set up temporary camps if needed and help in keeping the city "clean." On 26 August, the total number of people hospitalized countrywide stood at 3,233 and the death toll had risen to 36 people. The government reported that the number of cases is continuing to rise. About 3,000 liters of Malathion is used daily for fogging. In 2000, Bangladesh reported 5,551 people contracted the disease and 93 people died, while a dengue outbreak last year claimed 44 lives. [[View report](#)]

Dengue Fever – Taiwan

On 1 September, ProMED summarized a report from World News Connection in which Taiwan has reported 1,109 confirmed cases of dengue fever throughout the island. Kaohsiung County, Kaohsiung City, and Pingtung County jointly accounted for 1,093 cases, of which 20 were DHF. Also, a third case of dengue fever was reported in Taipei on 22 August. The Taipei City health department began free blood tests for passengers from southern Taiwan at the Taipei Railway Station in an effort to prevent the disease

from further spreading in the city. Taipei is continuing its anti-dengue campaign, including “sterilizing ditches” in various residential neighborhoods. [[View report](#)]

Influenza – Australia

On 30 August, the [WHO](#) reported that as of 3 August, epidemic influenza has continued in several regions of Australia where outbreaks have been associated with both influenza A and B viruses, with a predominance of influenza A. To date, only subtype A (H3N2) has been isolated. [[View report](#)]

Nipah-like Virus – Bangladesh

On 30 August, the [WHO](#) reported preliminary findings of an investigation into an outbreak of a severe encephalitic illness in Meherpur, Bangladesh in April-May 2001. The cause of the outbreak was determined to be Nipah or a closely related virus. [[View report](#)]

Unknown Illness – India

On 1 September, ProMED reported that a disease causing fever has struck in two Bankura villages affecting 1,000 residents in the past three days. Residents of Laxmi Sagar and Alkadhara reported high fever with nausea. Bankura is a district town of West Bengal State. [[View report](#)]

West Nile Virus (WNV) – Australia

On 4 September, the *Sydney Morning Herald* reported that a trotting stallion, imported from Canada last month for breeding, was confirmed to be infected with the WNV. The horse was transported from Canada with a two-day layover in Chicago. The investigation will attempt to determine where the horse was infected. This is Australia’s first reported case of WNV. Horses are considered a “dead-end” host, meaning that mosquitoes are not able to extract enough of the virus from the horse’s bloodstream to pass it on to other animals or humans. [[View report](#)]

USSOUTHCOM

Dengue Fever – Cuba

On 1 September, ProMED reported that several medical and paramedical personnel returning from international missions in South America have been hospitalized with dengue fever in Cuba. Health authorities also found 39 foci of *Aedes aegypti* in Santos Suarez, a district of Havana. Sanitary brigades are fumigating this zone and will likely extend spraying beyond this district. [[View report](#)]

Dengue Fever – El Salvador

On 29 August, ProMED reported that dengue virus type 4 has been detected in an eight-year-old girl from the eastern Salvadoran province of San Miguel. The emergence of this type of dengue virus poses a serious risk for the thousands of Salvadorans who have already been infected by serotypes 1, 2, and 3. The last case of dengue type 4 was in 1995. This interval is long enough to pose a serious threat especially to children who were infected previously with any of the other three types. As of 21 May 2002, the only Latin American country that had reported DEN-4 to [PAHO](#) was Colombia. A total of 3,939 cases of classic dengue fever and 285 cases of [DHF](#) have been detected in El Salvador during 2002. [[View report](#)]

Dengue Fever – Mexico

On 1 September, ProMED reported that as of 31 August, health authorities had confirmed 24 cases of dengue fever and two cases of [DHF](#) in Mexico state, which borders Mexico City. In addition, 13 cases of dengue fever and two cases of DHF were confirmed in Morelos state, which is on the southern border of Mexico City. Health officials were spraying mosquito breeding grounds in an effort to keep the disease away from the metropolis of 18 million. Health officials estimate that nearly 3,005 people throughout Mexico have contracted dengue fever since January 2002, and 424 have been treated for DHF. [[View report](#)]

Dengue Hemorrhagic Fever (DHF) – Nicaragua

On 1 September, ProMED reported that La Prensa (Nicaragua) had reported the first death due to DHF in 2002. On 24 August, a nine-year-old boy was hospitalized in the Ocotal hospital and died two hours later. The Ministry of Health has reported almost 1,100 cases of dengue fever in 2002 in the Department of Nueva Segovia. Other townships severely affected are Jicaro, Quilali, Jalapa, and Wiwili. [[View report](#)]

Unknown Illness – Argentina

On 2 September, ProMed reported that the Argentinean Ministry of Health has asked for help from the state government of (neighboring) Santa Catarina, Brazil, to identify the virus or bacterium that has left hundreds of people sick. This suggests that an epidemic is in Misiones Province. No further information was given. [[View report](#)]

West Nile Virus (WNV) Threat – Cuba

On 29 August, [AFMIC](#) reported that Cuba has expressed concern over the possibility of WNV entering the country. More than 60 species of birds migrate along flight paths that originate in Florida and the Gulf Coast US and cross Cuba en route to Central and South America. The mosquito vector for WNV is known to exist in Cuba. [[View report; requires registration](#)]

Please contact the below-listed POC for suggested improvements and/or comments regarding this report. This report is also available on the USACHPPM website at <http://chppm-www.apgea.army.mil/Hiupdate/>.

POC: Barbara E. Davis, DVM, MPH, Dipl. ACVPM
<mailto:Barbara.Davis1@APG.amedd.army.mil>

Approved:
[Kevin Delaney](#)
Chief, Health Information Operations
(410) 436-5217 or DSN 584-5217

ACRONYMS

ACIP - Advisory Committee on Immunization Practices
AFMIC - Armed Forces Medical Intelligence Center
AFIS – American Forces Information Service
AP – Associated Press
ATP – Adenosine Tri-phosphate
ATSDR – Agency for Toxic Substances and Disease Registry
AVIP - Anthrax Vaccine Immunization Program
BCG - Bacille Calmette-Guerin Vaccine against Tuberculosis
BMJ – British Medical Journal
BSE – Bovine Spongiform Encephalopathy
CDC – Centers for Disease Control and Prevention
CDR – Communicable Disease Report (England)
CFR – Case Fatality Rate
CJD – Creutzfeldt-Jakob Disease
DARPA – Defense Advanced Research Projects Agency; <http://www.darpa.mil/>
DENIX – Defense Environmental Network & Information eXchange [sic]
DHF – Dengue Hemorrhagic Fever
DHHS – Department of Health and Human Services
DoD - Department of Defense
DOE – Department of Energy
DOS – Department of State
DTRA – Defense Threat Reduction Agency
EPA – Environmental Protection Agency
ESSENCE – Electronic Surveillance System for the Early Notification of Community-Based Epidemics
EU – European Union
FBI – Federal Bureau of Investigation
FDA – Food and Drug Administration
GPS – Global Positioning System
HIV/AIDS – Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
IDP – Internally Displaced Persons
IFRC – International Federal of Red Cross and Red Crescent Societies
IND – Investigational New Drug
IRIN - Integrated Regional Information Networks, part of the [UN](#) Office for the Coordination of Humanitarian Affairs (OCHA).
JAMA – Journal of the American Medical Association
NAS – National Academies of Science
NEJM – New England Journal of Medicine
NGO - Non-Governmental Organization
NIH – National Institutes of Health
NIOSH – National Institute for Occupational Safety and Health
OCHA – United Nation’s Office for the Coordination of Humanitarian Affairs
OIE – World Organisation [sic] for Animal Health
OSHA - Occupational Safety and Health Administration
PAHO – Pan American Health Organization
PNAS – Proceedings of the National Academy of Sciences
SCIEH – Scottish Centre [sic] for Infection and Environmental Health
TB – Tuberculosis
TSE – Transmissible Spongiform Encephalopathy
UK – United Kingdom – England, Northern Ireland, Scotland, and Wales
UN – United Nations
UPI – United Press International
USAMRIID - United States Army Medical Research Institute of Infectious Diseases
USDA – United States Department of Agriculture
USPSTF – United States Preventive Services Task Force
vCJD - variant Creutzfeldt-Jakob Disease
VOA – Voice of America, an international multimedia broadcasting service funded by the US Government
WHO – World Health Organization
WMD – Weapons of Mass Destruction