

USACHPPM

HEALTH INFORMATION OPERATIONS (HIO) UPDATE

23 April 2004

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 TOPICS	2
Allergy Season Arrives.....	2
'Baghdad Boil' Afflicts U.S. Troops	2
Bedbugs Bounce Back from Oblivion.....	3
Cholesterol Imperils Many Diabetics, Experts Say.....	3
Link between Gout and Alcohol Is Verified.....	3
Low-Dose Antibiotic May Curb Heart Disease Risk.....	3
Magnetic Therapy Helps Alleviate Stress Disorder.....	3
Microscission Could Replace Injections.....	4
Mild Iron Deficiency May Affect Thinking.....	4
More Than 8 Hours Sleep Too Much of a Good Thing.....	4
Myopericarditis Cases Complicate Acambis Smallpox Vaccine Trials.....	4
Number of Breaths Given During CPR May Be Linked to Survival.....	5
Prenatal Nicotine Primes Adolescent Brain for Addiction.....	5
'Presenteeism,' Accounts for up to 60% of Employer Health Costs.....	5
Sacral Spinal Nerve Stimulation for Fecal Incontinence.....	5
Study Shows How Vibrating Tools Damage Workers.....	5
WHO Advocates Taxes to Combat Obesity.....	6
FOCUS ON EPIDEMIOLOGY	6
Foot-and-Mouth Disease.....	6
DoD-GEIS: West Nile Virus.....	7
USCENTCOM	7
UNHCR to Close New Afghan Refugee Camps in Pakistan-Afghan Border.....	7
USEUCOM	8
'Aid Crisis Looming' in DR Congo.....	8
Meningitis Hits Gulu, Uganda.....	8
Niger: Vaccination Starts after Measles Epidemic Kills 149.....	8
One in 12 Children in Britain Risk Respiratory Diseases.....	8
USNORTHCOM	9
CDC to stockpile flu vaccine for children.....	9
Drug Makers Hope to Kill the Kick in Pain Relief.....	9
Government Considers New Smallpox Vaccine.....	9
Mental Health Symptoms Common at Pentagon after 9/11.....	10
New Efforts Needed to Address Cleanup after 'Dirty Bomb' Attack.....	10
New York Man Is Infected With Bird Flu.....	10
Smallpox Shots Didn't Harm 10 HIV-infected Troops.....	10
USPACOM	11

China Reports Fake Milk Killed Infants	11
China Reports Suspected SARS Case in Beijing	11
Chinese Firefighters Blow Up Tanks at Gas Leak Site	11
Nepal: Eight Die from Measles, Twenty-Five Infected in Dang	12
Obesity Seen as Serious Problem for Asian Youth	12
USSOUTHCOM	12
Follow-Up on Outbreak of Bat-Transmitted Human Rabies in Pará State, Brazil	12
Vaccination Week in the Americas Targets 40 Million People	12

HOT TOPICS

Allergy Season Arrives

20 April – The Miami Herald Tribune reported [allergy](#) season is under way and for sufferers, the sneezing may continue until next winter. The season's arrival is clear when yellow waves of pine pollen coat cars. It's not the pollen you see that causes the sneezing; however, it's what you don't see. The National Institute of Allergy and Infectious Diseases says that pine pollen is unusually heavy and sticky so typically does not hang in the air long enough for it to be inhaled. "Even though you see it, and it's covering everything, it's generally not the allergen that causes allergies," said Dr. Alex Yip, an allergist in Wilmington, N.C. Instead, the yellow dusting on cars is a sign that other trees are starting to pollinate. Airborne pollen is the culprit of seasonal allergies. Trees, grasses and weeds procreate by sending microscopic pollen into the wind where it travels for miles. Samples of ragweed pollen have been found 400 miles out to sea and 2 miles high in the air. Tree pollen is the first round of seasonal allergies. Grass pollen is next, followed by ragweed pollen. Most pollen continues to circulate throughout the summer months and into fall. About 20 million to 40 million Americans have seasonal allergies, according to the U.S. Department of Health and Human Services. The ailment is blamed for about 10 million lost days of school and work each year. [View Article](#)

'Baghdad Boil' Afflicts U.S. Troops

18 April – CNN.com reported that doctors at Walter Reed Army Medical Center have seen 653 cases of cutaneous [leishmaniasis](#). Soldiers serving in sand-fly infested Iraq call it the "Baghdad boil." Leishmaniasis is caused by a tiny sand fly hosting a parasite that causes stubborn and ugly sores that linger for months. The sores are not painful or contagious, but left untreated they can last up to 18 months and leave permanent, burn-like scars. Since the flies bite exposed areas, many soldiers have sores on their necks, faces and arms. The lesions will eventually go away on their own and would not affect a soldier's ability to serve. Even so, the military thought it was important that soldiers with bad cases be flown out of Iraq for treatment so they wouldn't be disfigured. Walter Reed is one of only two hospitals where patients are sent because the 20-day treatment can only be done in a clinical trial setting as Pentostam is not licensed in the United States. Walter Reed doctors say it was almost inevitable that they would see a high number of cases this year. American forces arrived in Iraq during the peak season for sand flies and were in the field much longer. Many slept outside at night, exposing themselves at the sand fly's favorite feeding time. The Army is developing a treatment that can be used in the field. [View Article](#)

Bedbugs Bounce Back from Oblivion

14 April – BBC News reported [bedbugs](#) are on the increase in many developed countries, including the UK, research has found. The tiny blood-sucking insects were thought to have been virtually eradicated two decades ago. But an expert writing for the Institute of Biology believes they may have developed resistance to pesticides. Since 1995 there has been an unexpected increase in reports of infestation in Britain, the US and other developed countries. [View Article](#)

Cholesterol Imperils Many Diabetics, Experts Say

19 April – Reuters reported adults with Type 2 [diabetes](#) who have just one additional risk factor for heart disease should be taking medication to lower cholesterol levels, according to new guidelines from the American College of Physicians (ACP). Pooled data from 12 studies indicated that so-called statin drugs (e.g., Lipitor, Zocor or Crestor), along with another lipid-lowering agent gemfibrozil, led to a greater than 20 percent reduction in major heart-related events in patients with diabetes. Such treatment is also advised for patients with any significant risk factor for [heart disease](#), including age older than 55 years, high blood pressure, smoking, enlargement of the left ventricle of the heart, previous stroke, and peripheral arterial disease. The only patients with diabetes for whom these drugs seemed to provide little benefit were those with no risk factors for cardiovascular disease. The researcher also found that statins were extremely safe. [View Article](#)

Link between Gout and Alcohol Is Verified

16 April – The New York Times reported for the first time scientists have documented the age-old belief that alcohol intake strongly increases the risk of developing gout and that the risk is related to the type of alcoholic beverage consumed. Beer is more likely to lead to gout than spirits, but moderate wine consumption does not raise the risk. The findings suggest that unidentified nonalcoholic components in beer and spirits may play an important role in precipitating attacks of the disease, a form of arthritis. [View Article](#)

Low-Dose Antibiotic May Curb Heart Disease Risk

14 April – Reuters reported chronic inflammation is being thought of more and more as an underlying cause of [heart disease](#). Researchers now report that the antibiotic doxycycline, at doses below those needed to kill bacteria, reduce levels of a biomarker of inflammation called C-reactive protein (CRP). The researchers noted that doxycycline has the ability to inhibit various mediators of inflammation. To determine the potential protective effects of this agent, the researchers randomly assigned 50 people with coronary artery disease to treatment with sub-antimicrobial doses of doxycycline or to an inactive placebo pill. After 6 months, there was no significant difference between groups in heart-related deaths. However, in 30 participants who were evaluated, CRP was reduced by 46 percent in those given doxycycline. No change was seen in the placebo group. [View Article](#)

Magnetic Therapy Helps Alleviate Stress Disorder

16 April – Reuters reported new research suggests that repeat stimulation of certain brain regions with magnets can help alleviate the symptoms of [post-traumatic stress disorder](#) (PTSD), a debilitating psychiatric condition that can occur after exposure to life-threatening events, such as military combat or violent personal assault. In an earlier study, two patients with PTSD experienced improvements after treatment with magnetic stimulation, they add. In the current study, the group evaluated the therapeutic effects of low- and high-frequency magnetic therapy as compared with fake therapy in 24 patients with PTSD. High-frequency therapy had greater beneficial effects than low-frequency or fake

therapy. Patients in the high frequency group also showed far greater reductions in anxiety than did those in the low-frequency group. Several patients in both magnetic therapy groups reported improvements in sleep after being treated. [View Article](#)

Microscission Could Replace Injections

18 April – Eurekalert reported that oversized hypodermic needles could soon be a thing of the past. A new painless way of delivering drugs called microscission uses a stream of gas to bombard small areas of the skin with tiny crystals of inert aluminum oxide. The sharp particles remove the rough surface-layer of the skin, and create tiny holes, known as microconduits, in the underlying layers of the skin. The crystals and loosened skin are taken away with the gas flow. The whole process takes less than 20 seconds. Volunteers reported that the sensation they felt was like a gentle stream of air against the skin – much less painful than being pricked by a needle. Deeper microconduits that yield spots of blood would be useful for patients with diabetes, though. These patients have to regularly check the glucose level in their blood by pricking their finger with a needle. Microscission would provide a new and painless way to do this. [View Source](#)

Mild Iron Deficiency May Affect Thinking

20 April – MSNBC News reported women with even a small deficiency of iron may have a little more trouble thinking and remembering than those with adequate iron levels, U.S. researchers reported. They found that young women with mild deficiency but not medical anemia who took iron supplements for four months significantly improved their performance on tests of attention, short-term and long-term memory. They also did better on cognitive tasks. In addition, anemic women clearly had trouble on the tests of mental performance, the team at Pennsylvania State University reported. The more anemic a woman was, the longer it took her to complete the tasks. But when anemic women were given iron supplements, they also improved, the researchers told a meeting of the American Society of Nutritional Sciences, part of the Experimental Biology 2004 conference in Washington. [View Article](#)

More Than 8 Hours Sleep Too Much of a Good Thing

15 April – Reuters reported although the dangers of too little sleep are widely known, new research suggests that people who sleep too much may also suffer the consequences. Specifically, investigators at the University of California in San Diego found that people who clock up 9 or 10 hours each weeknight appear to have more trouble falling and staying asleep, as well as a host of other sleep problems, than people who sleep 8 hours a night. People who slept only 7 hours each night also said they had more trouble falling asleep and feeling refreshed after a night's sleep than 8-hour sleepers. [View Article](#)

Myopericarditis Cases Complicate Acambis Smallpox Vaccine Trials

13 April – CIDRAP News reported British biotechnology company Acambis plc has temporarily stopped recruiting volunteers for clinical trials of the cell-culture smallpox vaccine it is making for the US government because at least three cases of myopericarditis have occurred in one of the trials. The cases occurred in a phase 3 trial in which 1,132 volunteers who had never had a smallpox shot before were vaccinated with either the Acambis vaccine, called ACAM2000, or Dryvax, the currently licensed smallpox vaccine. The statement didn't say which vaccine the myopericarditis patients had received but an online report by the Financial Times said two of the cases were in Dryvax recipients. Three-quarters of the volunteers are receiving ACAM2000. [View Article](#)

Number of Breaths Given During CPR May Be Linked to Survival

16 April – Science Blog reported researchers have identified a factor that may improve cardiac arrest survival rates according to a first-of-its-kind study of paramedic response. Researchers found that some ambulance crews giving cardiopulmonary resuscitation (CPR) exceeded the American Heart Association's recommendation of 12 to 15 breaths per minute when treating cardiac arrest victims. "The overall survival rate in the United States from cardiac arrest is about 5 percent," said lead author Tom P. Aufderheide, M.D., professor of emergency medicine at the Medical College of Wisconsin in Milwaukee. "Excessive ventilation may be contributing to that poor outcome." [View Article](#)

Prenatal Nicotine Primes Adolescent Brain for Addiction

19 April – Eurekalert reported that prenatal exposure to nicotine inflicts lasting damage that might leave the brain vulnerable to further injury and [addiction](#) upon later use of the drug, according to animal research conducted by Duke University Medical Center pharmacologists. The team found in rat studies that exposure to nicotine in fetal development alters the brain structures and brain cell activity in regions critical to learning, memory and reward. In turn, those changes influence nicotine's effects on the brain during adolescence, a time when many smokers first take up the habit, the team found. The study in rats might provide a biological explanation for the high incidence of smoking among teens whose mothers smoked during pregnancy, the researchers said. While maternal smoking rates have dropped in recent years, approximately 25 percent of individuals in the U.S. have mothers who smoked during pregnancy. [View Article](#)

'Presenteeism,' Accounts for up to 60% of Employer Health Costs

20 April – Eurekalert reported that industry's productivity losses from employee absenteeism due to illness have been well and frequently documented. Now researchers have documented on-the-job slowdowns by workers with a variety of medical complaints, from hypertension to arthritis. Economists have coined a new word to describe the productivity-loss problem: presenteeism. Researchers estimate that companies' on-the-job productivity losses from presenteeism are possibly as high as 60 percent of the total cost of worker illness -- exceeding the costs of absenteeism and medical and disability benefits. Researchers noted that headaches, allergies, arthritis, asthma and mental health-related problems such as depression incur the greatest on-the-job productivity losses. [View Source](#)

Sacral Spinal Nerve Stimulation for Fecal Incontinence

17 April – The Lancet published a study where researchers investigated the effect of sacral nerve stimulation on continence and quality of life. In a multicenter prospective trial, 37 patients underwent a test stimulation period, followed by implantation of a neurostimulator for chronic stimulation in 34. Effect on continence was assessed by daily bowel-habit diaries over a 3-week period and on quality of life. Frequency of incontinent episodes per week fell for both urge and passive incontinence during median follow-up of 23.9 months. Mean number of days per week with incontinent episodes also declined. Ability to postpone defecation was enhanced. The authors concluded sacral nerve stimulation greatly improves continence and quality of life in selected patients with morphologically intact or repaired sphincter complex offering a treatment for patients in whom treatment options are limited. [View Article](#) (registration required)

Study Shows How Vibrating Tools Damage Workers

19 April – Reuters reported workers who use vibrating tools for hours on end may suffer permanent damage, and two U.S. researchers said they think they can explain why. Their findings may point to a

way to reduce or even prevent this damage, which can leave sufferers with numb fingers especially susceptible to cold, they told a meeting of the American Association of Anatomists. The condition is called Hand-Arm Vibration Syndrome and it which begins with pain, tingling, numbness, and increased sensitivity to cold. In serious cases it can permanently damage dexterity. Dr. Sandya Govindaraju and Dr. Danny Riley of the Medical College of Wisconsin said they had detailed the damage done to cells, and found a common heart drug, nifedipine, may help prevent the damage. The constant vibration affects the arteries, causing them to constrict, which in turn may starve nerves.

[View Article](#)

WHO Advocates Taxes to Combat Obesity

20 April – The Financial Times reported that the World Health Organization (WHO) is continuing to advise governments to consider using taxes to help combat obesity, despite intense lobbying by the US and the worldwide food industry to water down its recommendations. In the final version of its draft global strategy on diet, physical activity and health, the WHO suggests governments should use fiscal measures to discourage consumption of too much sugar, salt and saturated fat. It stops short, however, of advocating specific "fat taxes" or subsidies for healthy foods. The draft also says governments should consider action to ensure that "food and beverage advertisements should not exploit children's inexperience or credulity". But in a concession to the powerful sugar lobby, the draft no longer contains any mention of a controversial joint report from the WHO and United Nations' Food and Agriculture Organization on obesity prevention. The report had drawn the ire of the sugar industry because it contained recommended goals for intakes of nutrients, including sugar. It said so-called "free" sugars should not account for more than 10 per cent of people's daily calorie intake. The Sugar Association, which lobbies for the US industry on nutrition issues, had threatened to put pressure on Congress to withhold US funding for the WHO unless the report was dropped. [View Source](#)

Focus on Epidemiology

Foot-and-Mouth Disease

April - Clinical Microbiology Reviews reports on [foot-and-mouth disease](#) (FMD), a highly contagious disease of cloven-hoofed animals. The disease was initially described in the 16th century and was the first animal pathogen identified as a virus. Recent FMD outbreaks in developed countries and their significant economic impact have increased the concern of governments worldwide. This review describes the reemergence of FMD in developed countries that had been disease free for many years and the effect that this has had on disease control strategies. The etiologic agent, FMD virus (FMDV), a member of the *Picornaviridae* family, is examined in detail at the genetic, structural, and biochemical levels and in terms of its antigenic diversity. The virus replication cycle, including virus-receptor interactions as well as unique aspects of virus translation and shutoff of host macromolecular synthesis, is discussed. This information has been the basis for the development of improved protocols to rapidly identify disease outbreaks, to differentiate vaccinated from infected animals, and to begin to identify and test novel vaccine candidates. Furthermore, this knowledge, coupled with the ability to manipulate FMDV genomes at the molecular level, has provided the framework for examination of disease pathogenesis and the development of a more complete understanding of the virus and host factors involved. [View Source](#)

DoD-GEIS: West Nile Virus

21 April - [West Nile virus](#) (WNV) is established in the US as a seasonal epidemic in summer and continuing into the fall. Activity, as predicted, has already begun. In the US for 2003, 9186 cases of WNV were reported involving all but five states with 231 deaths; 6277 cases (68%) of WN fever (milder disease), 2739 (30%) WN meningitis or encephalitis and 170 (2%) clinically unspecified. Although transmission to humans is primarily from infected mosquitoes (from infected birds), an April 9, 2004 article in the Centers for Disease Control and Prevention's (CDC) MMWR summarized findings regarding transfusion-associated transmission (TAT) offering new insight into human WNV infection. WNV transmission has also been documented from transplants and during pregnancy and breastfeeding; there is no other evidence for person-to-person spread. Beginning in June 2003, blood-collection agencies began investigational use of WNV nucleic acid--amplification tests (NATs), screening all blood donations and identifying potentially infectious donations for quarantine and retrieval. Screening was performed on approximately 6 million units through December 2003, with the removal of at least 818 viremic blood donations from the blood supply. The report summarizes results of these screening tests during 2003 and describes six cases of WNV TAT that occurred from transfusion of components containing low levels of virus not detected by the testing algorithm. CDC concludes that screening for WNV improved blood safety but a small risk of acquiring WNV infection through transfusion remains. Regarding the blood donors, a donation that was repeatedly positive by NAT was considered to be from a presumptive viremic donor (PVD). Blood centers provided reports of PVDs to state health departments, which provided reports to ArboNET, the national arbovirus surveillance system. Complete information was available for 811 (99%) of these PVDs; six (1%) had West Nile viral encephalitis or meningitis subsequent to donation, 137 (17%) had West Nile fever (median age: 46 years, range: 17-76 years), and 654 (81%) remained asymptomatic. Of the PVDs reported to ArboNET, 691 (85%) were residents of nine states (Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming). These states accounted for 60% of reported cases of WNV encephalitis or meningitis. [Additional WNV Information](#). *Information on many "hot topics" such as Influenza (avian and human), Leishmaniasis and severe respiratory syndromes, including SARS, is available on the DoD-GEIS website <http://www.geis.ha.osd.mil>.*

USCENTCOM

UNHCR to Close New Afghan Refugee Camps in Pakistan-Afghan Border by September

19 April – BBC News reported Ruud Lubbers, United Nations High Commissioner for Refugees (UNHCR) Chief, said that all new refugee camps in Pakistan along the Afghan border would close by September this year. Citing Mr. Lubbers, BBC News reported that some 15 camps set up after the UN-led military operation in Afghanistan to oust the hardline Taliban regime, were home to some 200,000 people. These camps are in an area where Pakistani and US-led coalition forces have stepped up their operations against the remnants of the Taliban and al-Qaeda. UNHCR fears that the camps have been become recruiting grounds for militants lately, adding that although the penetration by militants was very limited, even a 5% recruitment rate could be significant given the overall population of these camps. [View Article](#)

USEUCOM

'Aid Crisis Looming' in DR Congo

20 April – BBC News reported a humanitarian crisis may be looming in the Democratic Republic of Congo, a UN agency has warned. Tens of thousands of illegal diamond mine workers have been thrown out of neighboring Angola in the latest wave of expulsions of foreign workers. They are arriving in a part of DR Congo with scarce food supplies and few aid provisions, says the UN Office for the Co-ordination of Humanitarian Affairs. With at least 2,500 people arriving daily in DR Congo, there is little food, water, non-food essentials and health provisions to go around. Aid agencies are scrambling to get emergency supplies to the area. [View Article](#)

Meningitis Hits Gulu, Uganda

One person died and 10 others were admitted to St Mary's Hospital Lacor, following the outbreak of [meningitis](#) in Gulu, Uganda. The district director of health services, Dr. Paul Onek, said the 10 cases were reported from Opit and Lalogi internally displaced persons' camps in Omoro County. "This type of meningitis is airborne and it can spread widely if not prevented early. Other types don't spread," he said. The symptoms included fever, headaches, stiffness of the neck and vomiting. He said they had started vaccinating people between the ages of three and 20 years. [View Source](#)

Niger: Vaccination Starts after Measles Epidemic Kills 149

15 April – IRIN News reported medical relief agency Medecins Sans Frontieres (MSF) said it had launched an urgent vaccination campaign against a [measles](#) epidemic in Niger that has led to more than 20,000 cases of the disease and 149 deaths in recent weeks. MSF said in a statement it had begun vaccinating and treating children between the ages of six months and five years in Niamey in conjunction with the Ministry of Health. The dense population in the city makes the risk of this extremely contagious disease spreading particularly high, MSF said in a press release. Other regions affected by the epidemic include Tahoua, Tillaberi and Dosso, which like Niamey are situated in the southwest corner of Niger. MSF said about 70 percent of all the measles cases had come from these three areas. [View Article](#)

One in 12 Children in Britain Risk Respiratory Diseases

17 April – Bmj.com reported that one in 12 children in England, Wales, and Scotland were at increased risk of developing diseases such as bronchitis, tuberculosis, or asthma because of their poor housing, according to a report on the impact of housing on child health. The report says that one million children were living in housing that was damp, cold, or infected or in temporary accommodation. Children with asthma were twice as likely to be living in damp housing as children without asthma. In addition, children living in poor housing were more likely to experience disturbed sleep, accidents, and infectious diseases. Children in homeless families living in hotels were twice as likely to be admitted to accident and emergency departments with burns and scalding as children living in permanent accommodation. An estimated 11% of childhood accidents were considered to result from poorly designed housing or dangerous fittings. The housing charity, Shelter, has launched a campaign that will use various activities, including working with health specialists, over the next two years to highlight the effects of poor housing on child health. [View Article](#)

USNORTHCOM

CDC to stockpile flu vaccine for children

16 April - CIDRAP News reported that the CDC plans to buy 4 million doses of [influenza](#) vaccine this year in an unprecedented step to prevent the kinds of shortages that occurred last season. Plans call for buying 4 million doses of vaccine this year and another 4 million next year, at a cost of \$40 million each year. The stockpile is intended for children and will be acquired through the Vaccines for Children Program, he said. The program provides free vaccines to physicians who care for uninsured and underinsured children, according to the CDC. Last year many areas ran out of injectable flu vaccine by early December. [View Article](#)

Drug Makers Hope to Kill the Kick in Pain Relief

20 April – The New York Times reported that drug makers are working on ways to prevent abuse of prescription opiate painkillers by reformulating pills with added ingredients. According to the Substance Abuse and Mental Health Services Administration, more Americans abuse prescription opiates than cocaine and the abusers far outnumber those who misuse tranquilizers, stimulants, hallucinogens, heroin, inhalants or sedatives. After marijuana, pain pills are the drug of choice for America's teenagers and young adults. Five or six years ago pharmaceutical companies began putting very large doses of opiates into slow-release formulations to help the 50 million Americans with chronic pain. A person who swallows such a pill feels no euphoria but is relieved of pain for up to 24 hours. It was thought that the drugs would not be abused because addicts would not be tempted by sustained release painkillers. Unfortunately, addicts quickly found that they could grind the pills, swallow or snort the powder and get a high dose of opiates delivered directly into their bloodstreams. To counter abuse, drug makers are developing ways to reformulate prescription painkillers. Purdue Pharma, which makes OxyContin, is thinking of adding a second drug, called an opiate antagonist, that neutralizes the effects of the opiate. A patient who swallowed the drug would get full pain relief, as intended. But if someone tampered with the pills, the antagonist would be released. A second approach is to mix in a chemical irritant like capsaicin, the main ingredient of hot chili peppers. [View Article](#) (registration required)

Government Considers New Smallpox Vaccine

15 April – The Washington Post reported that, buoyed by promising results in animal experiments, government officials are contemplating buying massive quantities of a new type of [smallpox](#) vaccine to supplement the national stockpile already assembled in the aftermath of the Sept. 11, 2001, attacks. Scientists believe that unlike any of the vaccines now available, the new vaccine may be effective in protecting against the deadly infectious disease without the risk of serious -- and occasionally lethal -- side effects. Efforts to develop the new vaccine, underway for several years, have taken on an air of urgency after safety concerns stalled a 2003 campaign to vaccinate millions of health care professionals and emergency workers who might be first to respond to a biological attack. As doubts grow about the existing vaccines, scientists are increasingly optimistic about the prospects for the experimental vaccine, called Modified Vaccinia Ankara, or MVA. Scientists say recently conducted studies using MVA on mice and monkeys indicated the vaccine is both effective and safe. [View Article](#) (registration required)

Mental Health Symptoms Common at Pentagon after 9/11

16 April – Science Blog reported a study where about 40 percent of the 4,739 Pentagon personnel screened for mental health disorders in the four months after the September 11, 2001 terrorist attacks were at high risk for problems such as generalized anxiety, panic attacks, depression, [post-traumatic stress disorder](#) or alcohol abuse. Nearly 21 percent of the individuals screened in the study also said the attacks impaired their daily functioning, according to the report in the American Journal of Preventive Medicine. "A substantial number of survey respondents reported emotional distress" after the attacks, epidemiologist Nikki Jordan, M.P.H., of the [US Army Center for Health Promotion and Preventive Medicine](#) and colleagues conclude. Although the reported rates of distress are high, the researchers say, they are "comparable to rates seen in other populations after terrorist attacks." Jordan and colleagues offered a comprehensive survey addressing possible exposures and health outcomes following the attack to all Pentagon personnel between October 2001 and January 2002. Most of the participants found to be at high risk for mental problems reported symptoms consistent with generalized anxiety, panic attacks or depression. About 8 percent were at high risk for post-traumatic stress disorders and less than 3 percent were at risk for alcohol abuse. More than half of the personnel who screened positive for the mental health high-risk groups were at risk for two or more of these disorders. [View Article](#)

New Efforts Needed to Address Cleanup after 'Dirty Bomb' Attack

15 April – Eurekalert reported that a new study suggests that current regulations for environmental remediation are inadequate to deal with a dirty bomb attack. If the United States fell victim to a dirty bomb attack, a number of conflicting regulations from different agencies could hamper attempts to clean up the site and restore order. The [Department of Homeland Security](#) is coordinating efforts to develop new Federal guidance specific to such events. A radiological dispersal device or "dirty bomb," combines conventional explosives with relatively easy-to-obtain radioactive materials from industrial or medical applications. Several studies have suggested that a dirty bomb attack would not cause extensive casualties, but would be more likely to spread panic and economic disruption, leaving a potential environmental mess in its wake. Federal, state and local officials are developing emergency response plans, but there are no common standards outlining safe contaminant levels after the cleanup of a dirty bomb. The Department of Homeland Security has formed an interagency working group, which includes representatives from eight Federal departments and agencies, to develop new guidance for cleaning up after any dirty bomb attack. The group is expected to report its findings later this year. [View Article](#)

New York Man Is Infected With Bird Flu

20 April – ABCNews.com reported that health officials have confirmed that a Westchester County man was infected with a strain of flu that normally affects birds only the second such case reported in the United States. The man reported to Westchester Medical Center in November with symptoms including fever and cough. Doctors tentatively identified a human flu strain in sputum samples taken from the man, but sent the samples to the federal CDC for confirmation. Scientists at the CDC said in March they had identified the virus as H7N2, a strain of [avian flu](#). The identification was confirmed after the man's blood was tested for antibodies. The diagnosis raised questions because the man apparently did not work with birds or poultry. [View Article](#)

Smallpox Shots Didn't Harm 10 HIV-infected Troops

15 April – CIDRAP News reported ten US military personnel were found to be HIV-positive after they received smallpox shots in 2003, but they were not harmed by the vaccine, according to a new online

report in Clinical Infectious Diseases. The US military and civilian smallpox vaccination programs exclude HIV-infected people because the vaccinia virus in the vaccine can cause serious complications in those with impaired immunity. The soldiers escaped harm probably because their immune systems had not yet been seriously compromised by [HIV](#), according to the report. All ten men had a normal "take," or major reaction, to the shot, with normal healing of the lesion and no unusual side effects, according to the article. After their test results were received, the ten soldiers underwent HIV evaluations, which found them to be asymptomatic. Their mean CD4 T cell count was 483 cells per cubic millimeter. The report says the risk of vaccinia complications is likely to be low for HIV-positive people with CD4 cell counts greater than 200 cells per cubic millimeter. [View Article](#)

USPACOM

China Reports Fake Milk Killed Infants

20 April – ABCNews.com reported that dozens of infants in eastern China have died from malnutrition from drinking fake milk formula with virtually no nutritional value. Up to 200 babies who were fed the formula developed what doctors called "big head disease," causing the infants' heads to grow abnormally large while their bodies wasted away. Some babies died within three days of being fed the formula, while others were hospitalized after parents discovered their children were sick. In some formula the protein accounted for a mere one-hundredth of the total amount, or about one-eighteenth of the standard content, said a specialist with the Fuyang Health Department's Food Supervision Bureau. Important minerals such as iron and zinc were completely missing, said the specialist. Local officials who raided markets in Fuyang over the weekend seized thousands of bags of suspect formula, including products without health board approval stamps or those that had passed their use-by date. Most listed factory addresses far from Anhui. Inspectors recorded at least three dozen different brands of fake formula, the reports said. [View Source](#)

China Reports Suspected SARS Case in Beijing

22 April – Reuters stated that China reported the first suspected [SARS](#) case in Beijing since a deadly outbreak last year, saying a nurse was being treated for symptoms of the disease and that more than 170 people were under observation. Five people who had close contact with the 20-year-old nurse had developed symptoms, including a fever, and had been isolated, the official Xinhua news agency said, citing the health ministry. The woman, a nurse at Jiangong Hospital in Beijing surnamed Li, had fallen ill with symptoms of SARS on April 5 and was moved to People's Hospital on April 14. She was being held in isolation and treated at Ditan Hospital in Beijing. Authorities placed 171 people who had had close contact with the nurse under medical observation, Xinhua said. Severe Acute Respiratory Syndrome first emerged in the southern province of Guangdong late in 2002, spread to Beijing and on to more than 30 countries, infecting about 8,000 people and killing nearly 800. China confirmed four cases of Severe Acute Respiratory Syndrome in Guangdong early this year, the first since a world outbreak was declared over in July. All of them recovered. [View Article](#)

Chinese Firefighters Blow Up Tanks at Gas Leak Site

18 April - Yahoo! News reported that firefighters used armor-piercing grenades to blow up three gas tanks and stop a deadly chlorine leak in southwestern China that had forced thousands to flee, state media reported. Armored vehicles rolled up to the plant in Chongqing, where the leak and subsequent blasts had left nine dead or missing, firing several rounds and destroying the three tanks, Xinhua news agency said. The drastic measure was undertaken after attempts to set off a controlled

explosion by firing rockets and high-caliber bullets at the leaking gas tanks had failed earlier in the day. A total of 150,000 people were evacuated after a large amount of gas began leaking from the Tianyuan Chemical Industry Plant followed the next day by a series of explosions. The blasts erupted after company officials, rushing to deal with the leakage, tried to empty the chlorine tanks by pumping out the gas, Xinhua quoted rescue officials as saying. The officials were among the dead. The chemical plant is one of the largest in China producing caustic soda and is able to make 60,000 tons of the substance a year. [View Article](#)

Nepal: Eight Die from Measles, Twenty-Five Infected in Dang

17 April – Kantipur Online reported eight children including an infant (3 days to 8 years of age) have died and twenty-five others are seriously infected with [measles](#) in Deukhuri valley in the Dang district. The disease spread over the Rajpur and Bela Village Development Committees during the last week. [View Article](#)

Obesity Seen as Serious Problem for Asian Youth

16 April – VOA News reported obesity is becoming a problem for Asia's urban youth, particularly in China and Hong Kong where overweight children may be twice as likely to develop diabetes as fat children in the west. In Asia, fast and plentiful food, along with more sedentary lives, is contributing to sharp increases in obesity and obesity-related disease like diabetes, cancer and heart disease. [View Article](#)

USSOUTHCOM

Follow-Up on Outbreak of Bat-Transmitted Human Rabies in Pará State, Brazil

15 April – Pan American Health Organization's EID Weekly Update reported follow up on the outbreak of bat-transmitted human [rabies](#) detected in the city of Portel, state of Pará, Brazil, in January 2004: the last report on 8 April indicates that 8 cases have been confirmed since the 2 April update, bringing the total to 13 cases of confirmed human rabies. Another 4 people are considered suspected cases, of which 2 have died. Test results will be available shortly. Among the new confirmed cases, the first occurred on 2 March and the last on 1 April. This situation constitutes the largest reported outbreak of human rabies transmitted by bats in the entire country. The causes of this extremely rare event are currently being investigated by the Department of Health of the state of Pará, the Department of Health Surveillance and the state Department of Agriculture. The bat attacks occurred mainly during the months of September and October 2003. In the meantime, these episodes have been frequent in the rural area of the Acuti Pereira River, where the affected persons reside. Initial evaluations indicate the existence of more than one colony of bats in the affected localities. [View Article](#)

Vaccination Week in the Americas Targets 40 Million People

20 April – BBC News reported health workers in every country in the Western Hemisphere will target millions of children, many in isolated areas, during a historic Vaccination Week in the Americas, starting April 24. Coordinated by the Pan American Health Organization (PAHO), the weeklong events, April 24-30, will focus on the children normally left behind, those living in rural border regions, and the most vulnerable groups, including women and the elderly. While most of the countries will vaccinate against measles, polio, rubella and congenital rubella syndrome, others will seek to prevent influenza and neonatal tetanus. According to preliminary plans, the countries of South and Central America, Mexico and the Caribbean will vaccinate some 40 million people, mostly children. The

United States and Canada will participate by promoting the benefits of immunization, especially among children. The dates coincide with National Infant Immunization Week, sponsored by the CDC.
[View Article](#)

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: Lorraine Bell, DrPH, MSN
Lorraine.Bell@APG.amedd.army.mil

Eileen Resta
eileen.resta@amedd.army.mil

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