# USACHPPM HEALTH INFORMATION OPERATIONS (HIO) UPDATE

### 28 May 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 <a href="http://mic.afmic.detrick.army.mil/">http://mic.afmic.detrick.army.mil/</a>. The information in the HIO Update should provide an increased awareness of current and emerging health-related issues.

HOT TOPICS	
Animal Outbreak System Updated	
Aspirin May Avert Breast Cancer	
Baby Born from Sperm Frozen 21 Years	2
Damage to Left Side Brain Raises Infection Risk	3
Green Tea Chemical Doesn't Help Against Old Plaques	3
Indoor Mold: Evidence Does Not Support Links to Wider Array of II	Inesses3
Only 10% of Funds Spent on Diseases Affecting 90% of People	
Treatment Combination Helps Paralyzed Rats Walk	
Vaccines Against Foodborne Disease on Horizon	
Zinc Speeds Pneumonia Recovery, May Boost Immunity	
FOCUS ON EPIDEMIOLOGY	5
Epidemiologic Clues to SARS Origin in China	5
Multifocal Transmission of Malaria Florida, 2003	
DoD-GEIS: Influenza Program	5
USCENTCOM	6
Avian Influenza Virus A (H10N7) Circulating among Humans in Egy	pt <i>e</i>
Sudan Outbreak Strain of Ebola Virus Not a Novel Strain	
WHO Confirms 19 Cases of Ebola in Southern Sudan	<del>(</del>
USEUCOM	7
Francistown Probes 2 Suspected Polio Cases	
Mass Food Poisoning Hits Ukraine	
Russia Heart Disease Mortality Comparable to Epidemic	
Russia: Research Scientist Dies of Ebola Fever in Lab Accident	
UK Firm Develops Test for Human 'Mad Cow' Disease	
USNORTHCOM	8
Algae Outbreak 'Unusual,' Worrisome	
Male Breast Cancer on the Rise	
Meningitis Diagnosed in Six Manhattan Students	
Mosquitoes in California Test Positive for West Nile	
Mysterious Beach Closures Linked To Contaminated Groundwater	
Prevalence of Herpes in Six Major U.S. Cities Shows High Rate of	
USPACOM	
New Outbreak of Bird Flu in Northern Thailand	
SARS Vaccine Volunteers Doing Well, China Says	
Undiagnosed Illness in the Cook Islands	

USSOUTHCOM	12
Brazil: Rabies Death Toll Rises to 22 in Para State	
Floods in Dominican Republic and Haiti	
Relief Teams Scramble as Caribbean Storm Toll Grows	

### **HOT TOPICS**

#### Animal Outbreak System Updated

24 May – The Scientist reported the international early warning system for animal disease outbreaks is scheduled for a full overhaul. The World Organization for Animal Health (OIE, for Office International des Epizooties) now divides diseases into List A and List B. "The intention was to give a degree of urgency to List A diseases, because of their rapid spread and significant economic importance. Countries had to report an occurrence on those diseases very rapidly. List B were either less important economically or had slower degrees of spread," said Alex Thiermann, president of the OIE code commission. "With time, the system was misinterpreted that diseases on List A were more important than List B," he added. OIE decided last year to replace these two lists with a single list and adopt the new list by 2005. This week, member nations will discuss what kinds of diseases belong on the list and how urgently OIE should be notified of outbreaks. One of the main reasons for the changes is that diseases such as BSE, Nipah, or Hendra, which affect humans as well as animals, "appeared for the first time but were not on the list of OIE, so were not reported immediately," said Arnon Shimshony, a ProMED-mail animal disease and zoonoses moderator. View Article

#### Aspirin May Avert Breast Cancer

26 May – The Washington Post reported that aspirin, which has already been shown to cut the risk for heart attacks, also appears to reduce the chances that women will be stricken by <u>breast cancer</u>, researchers reported yesterday. A study involving 2,884 women found that those who took aspirin on a regular basis were about 28 percent less likely to develop breast cancer than those who never used it. For the first time, researchers examined whether aspirin reduced the risk for particular types of breast cancer and found that, in fact, the protection appeared to apply only to cancers fueled by the hormone estrogen -- the most common form. Aspirin may interfere with estrogen's activity in the body. The study also tried to tease out whether other types of commonly used painkillers had similar effects. It found that ibuprofen also appeared to reduce the risk, although the effect was much smaller, and that Tylenol (acetaminophen) had no apparent preventive effect. View Article (registration required)

### Baby Born from Sperm Frozen 21 Years

May 25 - HealthDayNews reported that in what's believed to be a world record, a healthy baby boy was born using sperm that had been frozen for 21 years, according to British researchers. "We believe this is the longest period of sperm cryopreservation resulting in a live birth so far reported in the scientific literature," Dr. Elizabeth Pease, a consultant in reproductive medicine at St. Mary's Hospital in Manchester, said in a prepared statement. "This case provides evidence that long-term freezing can successfully preserve sperm quality and fertility. This is important to know because semen stored by young cancer patients is undertaken at a time of great emotional stress when future fertility is unlikely to be an immediate priority," senior embryologist Greg Horne said. The father had five vials of his sperm cryopreserved at the age of 17, before treatment for testicular cancer that left him sterile. Some of his sperm was used to inseminate his partner's eggs when the couple decided to try to have children in 1995. The first attempt was unsuccessful and the couple began fertility

treatment, again using more of the stored sperm. In 2001, the woman successfully conceived during the couple's fourth attempt at IVF. She gave birth in 2002 at St. Mary's Hospital. <u>View Article</u>

#### Damage to Left Side Brain Raises Infection Risk

24 May – Reuters reported damage to the left side of the brain from a stroke or other cause has been linked to an increased risk of infection and now researchers may have uncovered one reason why. As reported in the Annals of Neurology, damage to the dominant side of the brain, which is the left side in most people, seems to suppress the immune system. This effect could make a person more susceptible to infection. The findings are based on a study of 22 patients who underwent brain surgery for epilepsy. Surgery on the dominant side resulted in a reduced number of various immune cells. Just the opposite occurred with damage to the nondominant side. Although similar findings have been shown in animal studies, the results in humans have been inconclusive, researchers note. View Article

#### Green Tea Chemical Doesn't Help Against Old Plaques

24 May – Reuters reported an antioxidant found in green tea called epigallocatechin gallate (EGCG) has been shown to block blood vessel plaques, but now, findings from an animal study indicate that EGCG only works against developing plaques not against ones that have been around for a while. These results may help explain why antioxidants haven't proven very effective in studies of patients with established plaques. "Most animal experiments evaluating the effects of antioxidants are started when the animals are young, while (human) trials typically enroll adult patients with varying stages of plaques," lead author Dr. Kuang-Yuh Chyu, from Cedars-Sinai Medical Center in Los Angeles, said in a statement. "This discrepancy supports speculation that antioxidant treatment affects early but not later stages of plaque development." In the new study, Chyu's team evaluated the effects of EGCG in mice with high cholesterol levels. New and old plaques were assessed after 21 and 42 days of treatment. The researchers' findings are published in Circulation: Journal of the American Heart Association. View Article

### Indoor Mold: Evidence Does Not Support Links to Wider Array of Illnesses

25 May – The CDC reported scientific evidence links mold and other factors related to damp conditions in homes and buildings to <u>asthma</u> symptoms in some people with the chronic disorder, as well as to coughing, wheezing, and upper respiratory tract symptoms in otherwise healthy people, says a new report from the Institute of Medicine of the National Academies. However, the available evidence does not support an association between either indoor dampness nor mold and the wide range of other health complaints that have been ascribed to them, the report says. Given the frequent occurrence of moisture problems in buildings and their links to respiratory problems, excessive indoor dampness should be addressed through a broad range of public health initiatives and changes in how buildings are designed, constructed, and maintained, said the committee that wrote the report. Read Report

### Only 10% of Funds Spent on Diseases Affecting 90% of People

25 May – Web India reported a new study has revealed that less than ten percent of the global funding for research is spent on diseases that are common among more than ninety percent of the population. The study which used the World Health Organization's 1999 list of the top 30 causes of global burden of disease also examined the randomized controlled trials published in six leading international general medical journals. It was found that only 16 percent of the published trials were highly relevant to international health. The study concluded that many conditions or diseases common

internationally were underrepresented in randomized controlled trials published in leading medical journals. However the study highlighted that the problem is not limited to researching the diseases. For many diseases that are rampant in the developing countries, the pressing issue is not to discover a cure, but to find the most effective means to deliver treatments that are already available. View Article

#### Treatment Combination Helps Paralyzed Rats Walk

23 May - USA TODAY reported that in a major step forward in research on spinal cord injuries, scientists in Miami stated that an innovative combination of treatments allowed paralyzed rats to regain up to 70% of their ability to walk. Researchers at the Miami Project to Cure Paralysis say they have found a way to promote the growth of nerve fibers in damaged spinal cords and prevent postinjury nerve death. Recent research has focused on transplanting cells from peripheral nerves outside the brain and spinal cord into the damaged area as a bridge across the injury. But new nerve fibers didn't go beyond the bridge because of problems such as growth-inhibiting molecules. The researchers devised a three-part approach that begins shortly after the injury occurs. The research did not involve the politically sensitive issue of stem cells but used cells from adult rats. The animals went from being able to take only occasional steps to walking in a coordinated way, with hind and fore paws working together. View Article

#### Vaccines Against Foodborne Disease on Horizon

24 May – EurekAlert reported that researchers are making promising steps towards the development of a number of vaccines against <u>foodborne disease</u>. John Gunn of the Ohio State University and his colleagues have developed a strategy using a live, crippled strain of *Salmonella* bacteria that do not cause disease and outfit it with "pieces" of other bacterial pathogens to stimulate immunity to multiple pathogens. The researchers modified the vaccine strain so that it also contains a gene from another foodborne pathogen, *Listeria monocytogenes*. When they administered the modified oral vaccine to mice, it protected them 100 percent against lethal doses of both foodborne bacteria. Sharon Wen and her colleagues at the Uniformed Services University of the Health Sciences announced they were one step closer toward the development of an edible vaccine against the most virulent forms of the *Escherichia coli* bacteria, known as shiga toxin-producing *E. coli*. These bacteria can cause mild to bloody diarrhea can result in kidney failure, brain damage and sometimes death. The researchers successfully transferred a modified version of one of the shiga toxin genes into tobacco plants. This plant-derived vaccine was effective in producing antibodies against the toxin when administered to mice. View Article

### Zinc Speeds Pneumonia Recovery, May Boost Immunity

24 May – The Lancet reported adding zinc to standard antimicrobial treatment may accelerate recovery from pneumonia. Pneumonia is a leading cause of mortality and morbidity in children less than five years old, especially in developing countries. A team of Bangladeshi researchers found that supplements of zinc shortened the time infants needed to stay in hospital to recover from pneumonia. Dr. Abdullah Brooks and colleagues from the International Centre for Diarrheal Disease Research randomly assigned 270 children between two and 23 months old with severe pneumonia to receive 20 mg zinc per day, or a placebo, in addition to standard hospital antibiotics. The children given zinc recovered from severe pneumonia an average of one day earlier than did those given placebo, and their average stay in hospital was one day shorter. Since a course of zinc treatment costs only \$.15, and one day in the study hospital costs \$25, the potential cost savings are substantial. View Article

## Focus on Epidemiology

### Epidemiologic Clues to SARS Origin in China

01 June – The Journal of Emerging Infectious Diseases published an article on the severe acute respiratory syndrome (SARS) origin in China. An epidemic of SARS began in Foshan municipality, Guangdong Province, China, in November 2002. Researchers studied SARS case reports through April 30, 2003, including data from case investigations and a case series analysis of index cases. A total of 1,454 clinically confirmed cases (and 55 deaths) occurred; the epidemic peak was in the first week of February 2003. Healthcare workers accounted for 24% of cases. Clinical signs and symptoms differed between children (<18 years) and older persons (>65 years). Several observations support the hypothesis of a wild animal origin for SARS. Cases apparently occurred independently in at least five different municipalities; early case-patients were more likely than later patients to report living near a produce market (odds ratio undefined; lower 95% confidence interval 2.39) but not near a farm; and 9 (39%) of 23 early patients, including 6 who lived or worked in Foshan, were food handlers with probable animal contact. View Article

#### Multifocal Transmission of Malaria --- Florida, 2003

The majority of malaria cases diagnosed in the United States are imported, usually by persons traveling from areas where malaria is endemic. However, small outbreaks of locally acquired mosquito-borne malaria continue to occur. During July--September 2003, an outbreak of malaria (eight cases of *Plasmodium vivax* malaria) occurred in Palm Beach County, Florida. During the same period, two patients were evaluated for malaria in neighboring Okeechobee County, approximately 75 miles from the Palm Beach County transmission area. One patient was thought to have acquired infection with the same parasite species (P. vivax), and concerns were raised about a possible link. To determine whether infection was acquired in Okeechobee County and whether a possible link existed to the Palm Beach County outbreak, the Florida Department of Health (FDOH) initiated an investigation. This investigation, determined that although initial laboratory results suggested local transmission, subsequent evaluation and testing confirmed the case as imported malaria. These findings underscore the importance of a rapid and thorough investigation of any malaria case suspected to have been acquired through local mosquito-borne transmission. View Article

### DoD-GEIS: Influenza Program

26 May - At the annual DoD Global Influenza Surveillance Program meeting, held 19-20 May 2003 in San Diego, CA, Ms. Lynnette Brammer, MPH, representing the CDC, summarized and discussed the impact of DoD's influenza program. DoD influenza data and isolates from the military health system and DoD overseas laboratories are routinely shared with CDC and WHO. The AF Institute for Operational Health (AFIOH) at Brooks City Base, TX, heads the DoD influenza program, established from former AF "Project Gargle" as a DoD Executive Agency. DoD-GEIS provides funding and professional support for this program. During this season CDC requested and received 11 DoD samples of original clinical material for possible inclusion as vaccine seed viruses. In the US during the 2003-4 influenza season, there were 2,278 US specimens from DoD (from 27 states); of these, 748 were positive, representing 3% of all US positive isolates. Of the CDC's 121 sources of isolates this season, DoD ranked 8th in submissions. Because of minimal influenza B activity worldwide this season, there were few influenza B isolates available; DoD provided nearly half of all B isolates that were characterized by CDC. In addition to US isolates, DoD provided 237 international isolates from 13 countries, 5 in areas without national, WHO or other influenza surveillance capability. Without DoD there would be no laboratory-based surveillance for these areas of the world where US forces are

currently or potentially deployed. In addition to surveillance activities, AFIOH and the Naval Health Research Center (NHRC) initiated influenza vaccine efficacy studies this season (especially relevant given questions about this year's vaccine) and this will become a regular feature of future DoD influenza program activities. NHRC partners with AFIOH in the influenza program and conducts respiratory surveillance for military recruits and trainees through the Febrile Respiratory Illness Program. Information on these and other GEIS sponsored programs are available at the GEIS website

#### Other timely information can be found in:

The current issue of the Army Medical Surveillance Activity's Medical Surveillance Monthly Report

This week's Centers for Disease Control and Prevention's Morbidity and Mortality Weekly Report

### **USCENTCOM**

#### Avian Influenza Virus A (H10N7) Circulating among Humans in Egypt

23 May – ProMED reported that the National Influenza Center in Egypt and the WHO Influenza Collaborating Centre in the UK reported the isolation of Avian Influenza A (H1N7) from two human specimens. They refer to two infants, both aged one year, residents of Ismaillia, who recovered after presenting a fever and cough. The father of one of them is a poultry merchant who frequently traveled between Ismaillia and Damietta. In Damietta, avian influenza virus A (H10N7) was isolated from five wild ducks between 18 and 22 Apr 2004, from samples taken from a market of hunted migratory birds. Additional preliminary investigation tested negative in 75 human samples collected in Ismaillia and in 13 samples from migratory birds from the same market. No influenza outbreak has been reported among poultry in Egypt. At present, there are no public-health implications from this event. View Article

#### Sudan Outbreak Strain of Ebola Virus Not a Novel Strain

25 May – ProMED reported that the World Health Organization (WHO) dismissed fears that a new variant strain of the <u>Ebola virus</u> had emerged. The U.N. agency stated that a known form of the virus was responsible for the outbreak. <u>View Source</u>

#### WHO Confirms 19 Cases of Ebola in Southern Sudan

25 May – Reuters reported that 19 cases of the deadly <u>Ebola virus</u> have been confirmed in southern Sudan and five of the victims have already died from the infection, the World Health Organization (WHO) said. Health authorities in Yambio County in Western Equatoria province had reported patients suffering the symptoms associated with Ebola, which can kill up to 90 percent of its victims. The WHO said four patients were in isolation and health workers were monitoring 120 people believed to have had close contact with the victims. WHO spokesman Dick Thompson, speaking in Geneva, said "The epidemiological investigation is ongoing, we don't know the source of it yet or the complete extent." He said the medical aid group Medecins Sans Frontieres (Doctors Without Borders) was building an isolation ward to quarantine patients. Ebola, first identified in Sudan in 1976, starts with a high fever and headache and can lead to massive internal bleeding. It is passed on by infected body fluids and is

one of the deadliest and most feared diseases in the world. Two separate outbreaks in Congo Republic killed about 150 people last year. <u>View Article</u>

### **USEUCOM**

#### Bakwena Paramount Chief Tests For HIV

25 May – Mmegi Online reported that hardly two months after they arrived in Botswana, the US Peace Corps Volunteers have managed to woo the Bakwena paramount chief, headmen and other leaders to undergo HIV testing. The paramount chief Kgari Sechele led four of his headmen and some teachers to undergo HIV testing at the Molepolole Tebelopele Voluntary Counseling and Testing Centre. Kgari Sechele refused to disclose his status, saying he was not ready to do so. The idea to test the Bakwena royalty for HIV came from Thabo Marumo, a Prevention of Mother to Child Transmission program counselor in one of the local clinics. During their two-year stay, the 39 PCVs will help in the fight against HIV/AIDS. View Article

#### Francistown Probes 2 Suspected Polio Cases

24 May – ProMED reported that doctors at Nyangabgwe Referral Hospital have confirmed that they are investigating two possible cases of <u>polio</u> infection. The two children, aged 3 and 11 years, from Borolong, in the Tutume Sub-district, Botswana were in paralysis when they were brought in. Botswana's 13-year polio free-status was broken early in 2004 when a child in Ngami was found infected with the poliovirus. The hospital superintendent, Dr. Loeto Mazhani, said that that there are many illnesses which could present themselves through paralysis. He revealed that, previously, they investigated suspected cases of polio which turned out to be negative. Botswana does not have laboratories to make the necessary polio investigations. Thus, it will be about a month before the results are known. The poliovirus attacks the nervous system and can cause permanent muscle paralysis. If contracted in chest muscles, it can be fatal. Nigeria, India, Pakistan, Niger, Afghanistan, and Egypt are still fighting to eradicate polio. <u>View Article</u>

### Mass Food Poisoning Hits Ukraine

24 May – ProMED reported Ukrainian health officials say that workers with dirty hands using dirty instruments at state-run dairies caused an outbreak of <u>food poisoning</u> that has affected hundreds of Ukrainian children. Health Ministry spokeswoman Uliana Lozan said so far, over 800 children in three different regions of the country have been affected by the outbreak of food poisoning. She said that over half of those affected have been hospitalized. The capital Kyiv, in central Ukraine; Kharkiv, in the east; and Odessa, in the south are the main outbreak zones. Health officials shut down a state-run dairy after more than 200 children suffered symptoms of food poisoning. <u>View Article</u>

### Russia Heart Disease Mortality Comparable to Epidemic

24 May – Itar-Tass reported chief pediatric cardiologist of the Russian Health Ministry said in an interview with Itar-Tass that "1,200,000 people died of <u>cardiovascular diseases</u> over the past year – 100,000 more than in 2002". "The mortality from diseases of the heart and vessels can be compared to aftermaths of an epidemic," she said. She added that the "numbers of children with diseases of the heart and the circulation system have significantly increased. In 2003, 42,000 cases of such diseases have been registered in children aged to 18 years. Excessively high demands are posed in

kindergartens and schools, with which the children's immature organism cannot cope. Psychological discomfort, unsound nutrition, children's drug addiction and alcoholism -- all this leads to the increase in the rates of diseases of the heart and vessels among the rising generation." She said only early diagnosis and prevention could help the situation, but there is a chronic shortage of pediatric cardiologists. According to the Russian Association of Pediatric Cardiologists, "less than a thousand and a half of physicians of this specialty work in Russia, and there is one doctor per 20,000 children". View Article

#### Russia: Research Scientist Dies of Ebola Fever in Lab Accident

22 May – ProMED reported that a female scientist with the Vector State Scientific Centre of Virology and Biotechnology staff was accidentally injected while working with guinea pigs infected with <a href="Ebola virus">Ebola virus</a>. She was hospitalized in the dangerous infections department of a special hospital with the greatest possible level of biological defense. There were constant consultations with Health Ministry specialists regarding treatment. A doctor who has often been involved in treating patients with Ebola hemorrhagic fever in Africa was consulted. In spite of the treatment, the scientist died. An analysis of clinical materials is currently underway. The staff involved in the treatment and investigation of the patient will be kept under observation for 21 days: they will undergo a daily medical examination and twice-daily temperature measurement. The Centre was set up in 1974 to study dangerous virus pathogens and to develop treatment and diagnostic preparations in the interests of health care and defense. All viruses, bacteria and microbes known to be dangerous pathogens have been assembled within its walls. <a href="View Article">View Article</a>

### UK Firm Develops Test for Human 'Mad Cow' Disease

26 May – Yahoo! News reported that the British diagnostics company Microsens has developed the first blood test that can detect abnormal proteins that cause the human version of "mad cow disease." The firm's Seprion technology can detect abnormal prions, a type of protein, in the blood of patients with so-called variant <a href="Creutzfeldt-Jakob Disease">Creutzfeldt-Jakob Disease</a> (CJD), it said. Britain destroyed 3.7 million cattle in the 1980s and 1990s after an epidemic of bovine spongiform encephalopathy (BSE) popularly dubbed "mad cow disease." The disease has been linked to CJD, a condition that causes paralysis and death in humans. Although there have been relatively few deaths caused by eating contaminated meat, recent research has suggested the disease can lie dormant in the blood for years and that it can be passed on in a blood transfusion. View Article

### **USNORTHCOM**

### Algae Outbreak 'Unusual,' Worrisome

22 May – Omaha.com reported for the first time, toxic algae has been confirmed in Nebraska in high enough amounts to raise concern - and not just at one lake, but at six. And while there is much that health and environmental officials have yet to learn, they say they have seen enough to alert people that caution is needed around algae-filled lakes. What is worrisome to state officials is that high concentrations have been found in so many lakes and that the outbreak is occurring so early in the season. Typically, outbreaks don't occur until mid- to late summer. Algae in lakes south of Omaha may have caused the deaths of as many as five dogs and may have sickened several others. While people can become ill from the algae, no serious problems have been seen. Two people have developed skin irritation from possible exposure at Buccaneer Bay, said Marla Augustine of the Nebraska Department of Health and Human Services. View Article

#### Male Breast Cancer on the Rise

24 May – Cancer Facts reported the rate of <u>male breast cancer</u> is on the rise and the disease in men is usually detected when the tumors are bigger, have spread and may be more aggressive, compared to diagnosis of the disease in women, concludes the largest study ever conducted of male breast cancer. According to the American Cancer Society, the incidence of the disease in men has increased from about 1,500 cases in 2001 to about 1,600 cases in 2004. The research team led by Dr. Sharon H. Giordano, assistant professor in the Department of Breast Medical Oncology at The University of Texas M. D. Anderson Cancer Center, say the findings suggest both that breast cancer in men may have some important biological differences from the female disease, and that men are seemingly less aware than they should be that they can develop breast cancer. <u>View Article</u>

#### Meningitis Diagnosed in Six Manhattan Students

22 May – The New York Times reported city health officials said that they were investigating two small clusters of <u>viral meningitis</u> at two Manhattan high schools. Health officials said that two students at Stuyvesant High School in Lower Manhattan had contracted the virus, which is contagious but generally not life threatening, in recent weeks. The Department of Education said the illness was diagnosed this month in four students at the La Guardia High School of Music and Art and Performing Arts, near Lincoln Center. Dr. Annie Fine, a medical epidemiologist with the City Health Department, said the students were doing well: two were still hospitalized but expected to be discharged soon, two were back in school and two were recovering at home. She said two infected Stuyvesant students know each another, and the La Guardia students also know one another. But it is not clear whether the outbreaks in the schools are linked. <u>View Article</u>

#### Mosquitoes in California Test Positive for West Nile

26 May – Yahoo! News reported that mosquitoes from Pico Rivera have tested positive for the West Nile virus, the first such laboratory results in Los Angeles County, according to health officials. The finding, combined with the discovery of several birds that died from the disease in recent weeks, prompted officials to warn residents that California could be in for a large number of human cases this summer. The virus, which is transmitted from infected birds to people through mosquito bites, appeared in California last year, where three human cases were confirmed. In most instances, infected people show either mild flu-like symptoms or none at all. In a small percentage of cases, however, the disease can progress to potentially life-threatening encephalitis or meningitis. View Source

### Mysterious Beach Closures Linked To Contaminated Groundwater

22 May - EurekAlert reported that every summer, coastal communities from Maine to California are forced to temporarily close some of their most popular beaches because of unsafe levels of bacteria in the water. Typically, these sudden bacterial blooms disappear, only to return without warning later in the season. In many cases, health officials are unable to pinpoint the cause of the contamination, leading frustrated beachgoers to blame everything from offshore sewage pipes to passing cruise ships. But according to a new study by Stanford University scientists, the source of some of these unexplained pollution events may lie just a few feet below the sand, in <a href="contaminated groundwater">contaminated groundwater</a> that discharges into the surf zone, particularly during periods of extreme tides. <a href="View Article">View Article</a>

#### Prevalence of Herpes in Six Major U.S. Cities Shows High Rate of Infection

24 May – Market Wire reported according to a recent study of 36 primary care physician offices in relatively affluent suburban areas of six U.S. cities, one in four people tested positive for the virus that causes genital herpes, despite the fact that only four percent of all those tested reported a history of the condition. As the study shows, genital herpes infection rates were high even among suburban, educated and mid to high-income populations. The overall weighted HSV-2 seroprevalence was 25.5 percent -- that means 1 in 4 people tested positive for the virus that causes genital herpes. The seroprevalence ranged from 13.4 percent in the 18-29-year age group, to 25.2 percent (30-39 years), to 31.2 percent (40-49 years) and 28.0 percent (50-59 years). Seroprevalence among women (28.3 percent) was greater than that among men (22.0 percent), and was consistently higher across all age groups. Of the 1,387 people that tested positive for genital herpes, only 12 percent knew they were infected. The results of this study were published in this month's issue of Sexually Transmitted Diseases. View Article

### **USPACOM**

#### Cholera Kills Two People, Hospitalizes Many in Chennai, India

20 May – The Hindustan Times reported that two people have died of <a href="cholera">cholera</a> and 440 others, many with symptoms of the disease, were admitted to Government Communicable Disease Hospital in Chennai. Of those admitted, 260 have been discharged after treatment, and 182 remained as inpatients, including 55 cholera cases. Most of the patients came from the areas of Otteri, Pattalam and Pulianthope, all in north Chennai. <a href="View Article">View Article</a>

### Diarrhea Kills 12 People in Three Bangladesh Districts

20 May – News from Bangladesh reported that <u>diarrhea</u> claimed 12 lives in the Gopalganj, Bandarban and Kishor-eganj districts in the past week. The previous week diarrhea had claimed the lives of five children and attacked 559 people. Dr Sayfuddin Ahmed, Resident Medical Officer (RMO) of Gopalganj Sadar Hospital that every day 15 to 20 diarrhea patients are being admitted to the hospital. He said an acute shortage of cholera IV saline and necessary drugs has been prevailing in his hospital. The worst affected areas are Pathalia, Basbari, Gamadanga, Dugapur, Raghunathpur, Dharabashail, Kandhi, Tangrabhola, Uzani, Nazanikandhi and Bathuria. <u>View Source</u>

### Last SARS Patient Discharged from Beijing Hospital

21 May – Utusan Online reported that a 49-year-old physician, the last patient in China's latest <u>SARS</u> outbreak, has been discharged from a Beijing hospital. All nine cases in China's latest outbreak were traced to a Beijing research laboratory that handled the virus. The outbreak began in April with two lab workers who may have contracted the virus on the job. Other patients included a nurse who treated one of the lab workers and the nurse's parents. The mother of one lab worker died. The World Health Organization has declared the outbreak contained. WHO experts are still trying to figure out how the lab workers were infected. SARS first emerged in the southern province of Guangdong in late 2002. It killed 774 people worldwide and infected more than 8,000 before abating in July 2003. In December and January, China reported four cases in the southern province of Guangdong, and all of those patients recovered. View Article

#### New Outbreak of Bird Flu in Northern Thailand

26 May – Canada.com reported a new outbreak of <a href="bird-flu">bird flu</a> has killed hundreds of chickens at a research farm in northern Thailand, an official said, in a re-emergence of the disease that had appeared to be on the wane. Agriculture Ministry officials have culled 1,575 chickens at the Chiang Mai University farm in Chiang Mai province after being informed about the outbreak by the university. The farm, which is in an isolated area, has been quarantined. It contained various other avian species, including waterfowl, but no symptoms or deaths were recorded among them. Thai officials said that the government was all but certain the country was free of bird flu, after the last area to suffer an outbreak was declared safe at the end of a 21-day monitoring period. However, the latest infection in Chiang Mai is believed to have started on May 22 when about 473 chickens died of bird flu-like symptoms. <a href="View Article">View Article</a>

#### Possible Dengue Outbreak in American Samoa

19 May – The Pacific Islands Report stated that the Department of Health in American Samoa says the hospital has noticed a recent rise in the number of patients with <u>dengue</u>-like symptoms. It also says four highly suspect cases have been identified in the last few weeks. The department says the territory has no record of current cases, which suggests the start of an outbreak. The last outbreak was in 2001 with over 3,000 cases reported at the hospital within a 3-month period. To prevent another large outbreak in the territory, health officials recommend that everyone immediately inspect around their homes and clear any debris that may collect water in which mosquitoes can breed. <u>View Source</u>

#### SARS Vaccine Volunteers Doing Well, China Says

26 May – VOA news reported that China says four volunteers are in good health, several days after being injected with an experimental vaccine for <u>SARS</u>. The official news agency, Xinhua, reported that the three men and one woman, all university students, have been undergoing blood tests and temperature checks since their injections on Saturday. China says it is the first country to test a SARS vaccine on humans. All four volunteers are to be monitored over the next six months. They are the first of 36 volunteers to test the vaccine. All of them are between the ages of 21 and 40. It is not clear when the next round of injections will take place. Scientists caution that even if these tests are successful, it will be at least a year before a SARS vaccine is ready for the general public. China was the hardest hit by an outbreak of SARS mostly concentrated in Asia in late 2002 and early 2003. Of some 8,000 reported infections, 5,000 were in China and 350 Chinese died of the illness. View Article

### Undiagnosed Illness in the Cook Islands

21 May – The Pacific Islands Report stated that an undiagnosed illness that has struck the local population in the Cook Islands is raising concern. The illness, which causes skin irritation, has been affecting people on the southern coast of Rarotonga, for several months. The government is bringing in overseas scientists to investigate the illness, first thought to be caused by soil contamination or an algal bloom in the lagoon. The problem has impacted the tourism industry. The Prime Minister, Dr. Robert Woonton, has appointed a task force that he will chair, to investigate and understand the situation. View Article

### USSOUTHCOM

#### Brazil: Rabies Death Toll Rises to 22 in Para State

20 May – ProMED reported that a 58-year old man died of <u>rabies</u> in the University Hospital Joao de Barros Barreto bringing the total number of rabies deaths in Para state to 22. Ten cases were laboratory-confirmed; the others were clinically and epidemiologically compatible with the diagnosis of rabies. Sixteen were from Portel, Marajo Island; yesterday's case was the sixth from Curupati, in Viseu Township. Six other patients were admitted to the same hospital with suspected rabies, but have recovered. Doctors consider that they developed psychosomatic symptoms resembling rabies after learning of the diagnosis in relatives or neighbors. <u>View Article</u>

#### Floods in Dominican Republic and Haiti

26 May – CBC News reported the death toll from the floods devastating the border region between the Dominican Republic and Haiti on the island of Hispaniola has risen to over 500. Hundreds more people are missing and feared dead, while 13,000 people have been made homeless in the Dominican Republic alone. Flooding and mudslides follow two weeks of sustained rain, which is expected to continue. As the number of deaths mount, morgues are overflowing and bodies are being buried in mass graves. The total number of Dominican dead is 360 so far. On the Haitian side of the border, at least 140 were reported dead and many more missing. While the full scale of the disaster remains to be seen, it is already clear that the current devastation is among the worst to have hit the Caribbean island of Hispaniola in the last 100 years. United States and Canadian troops, part of a multi-national peacekeeping force in Haiti, have joined the rescue efforts. View Article

#### Relief Teams Scramble as Caribbean Storm Toll Grows

27 May – Reuters reported the discovery of more than 1,000 bodies in a remote Haitian village pushed the death toll from flash floods to nearly 2,000 and a U.S.-led security force joined in emergency relief efforts on Thursday bringing clean water and supplies to storm-ravaged Hispaniola. The U.S. forces, originally brought to restore order to Haiti, joined the country's interim government, the United Nations and other international agencies in a furious push to provide relief to stricken towns in Haiti and the Dominican Republic, which share the Caribbean island of Hispaniola. The toll in Haiti stood at about 1,660, while 300 bodies have been recovered in the Dominican Republic, mostly in the town of Jimani near the Haitian border. 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 <a href="http://chppm-www.apgea.army.mil/Hioupdate/">http://chppm-www.apgea.army.mil/Hioupdate/</a>.

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

Eileen Resta eileen.resta@amedd.army.mil

Approved:
<a href="Mailto:Kevin Delaney">Kevin Delaney</a>
Chief, Health Information Operations (410) 436-5217 or DSN 584-5217