USACHPPM HEALTH INFORMATION OPERATIONS (HIO) UPDATE

23 July 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.

NOTE: There will not be a Health Information Operations Update distributed 30 July 2004.

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HOT TOPICS

Cinnamon Oil Kills Mosquitoes More Effectively than DEET

16 July – Science Blog reported cinnamon oil shows promise as a great-smelling, environmentally friendly pesticide. It has the ability to kill larvae of the yellow fever mosquito, Aedes aegypti more effectively than DEET. The researchers also expect that cinnamon oil could be a good mosquito repellant, though they have not yet tested it against adult mosquitoes. Mosquitoes pose some major public health problems, carrying such deadly agents as malaria, yellow fever and West Nile virus. While conventional pesticide application is often effective in controlling mosquito larvae before they hatch, repeated use of these agents has raised serious environmental and health concerns. Cinnamaldehyde is the main constituent in cinnamon leaf oil and is used worldwide as a food additive and flavoring agent. A formulation using the compound could be sprayed just like a pesticide, but without the potential for adverse health effects -- plus the added bonus of a pleasant smell. View Article

Death by Mosquito

26 July – Time Online reported the rapid comeback of <u>malaria</u>. Malaria sickened 300 million people last year and killed 3 million — most of them under age 5. Countries in sub-Saharan Africa have suffered the brunt of this renewed assault. The death rate due to malaria has at least doubled among children in eastern and southern Africa; some rural areas have seen a heartbreaking 11-fold jump in mortality. Doctors have made remarkable progress over the past few years in the treatment of drugresistant malaria by combining several compounds — the most powerful of which cures 90% of patients in three days. Using several drugs at once, often in the same pill, greatly decreases the risk that the parasites will become resistant. Although nearly every developed country and most major international aid organizations have said they are ready to help finance artemisinin-based treatment in Africa, that support has not always been forthcoming. A more controversial but nonetheless effective method of reducing transmission is to spray DDT inside huts and other buildings. In 1996 the South African decided to phase out its use of DDT in residential spraying. The number of cases of malaria, which had been hovering between 8,000 and 13,000 a year, grew to 64,000 by 2000. When the government reintroduced DDT spraying in the middle of that year, the number of cases fell almost immediately. View Article

Melanoma Vaccine Enters Clinical Trials

20 July – News@Nature.com reported that a vaccine that could help patients recover from a common form of skin cancer is to undergo large-scale trials in Australia and Britain. The vaccine is designed to target melanoma, which is a deadly form of cancer that accounts for roughly 2% of new cancer cases in Britain each year. Melanoma commonly develops as a result of prolonged sun exposure, and if left untreated can spread to other parts of the body. Although melanoma is not caused by an infection, the body's immune system can still mount a defense against the cancerous cells. The new vaccine is essentially a synthetic form of a protein that teaches the immune system to look for tumors earlier on. Researchers inject the protein along with a drug that boosts its uptake by immune cells. View Article

New Tissue Tackles Cold, Flu

15 July – CBS News reported Kimberly-Clark Corp. said its anti-viral tissue will be on store shelves in time for the winter cold and <u>flu</u> season. The tissue serves no direct benefit to the person using it to blow his nose - and who already has a cold or the flu. Kimberly-Clark, it might seem, is counting on consumers' altruism - their desire to spare others from getting sick. "We're hoping to reduce the amount of the virus that gets spread," a spokesperson said. <u>View Source</u>

Seas Absorb Half of Carbon Dioxide Pollution

15 July – New Scientist reported the world's oceans have soaked up half of the carbon dioxide pumped into the air by human activities since the beginning of the industrial age. The gas is acidifying the seas and may harm marine life. Atmospheric CO2 has shot up from 280 parts per million (ppm) in 1800 to 380 ppm today. But that figure would be 435 ppm were it not for the oceans. "The oceans are producing this tremendous service to humankind by reducing the amount of carbon dioxide in the atmosphere, which can lead to global warming," says Chris Sabine, lead author of one study and an oceanographer at the US National Oceanic and Atmospheric Administration (NOAA) in Seattle. "But it's changing the chemistry of the oceans and may have consequences for marine ecosystems." View Article

Squashing Mosquitoes Could Make You III

19 July – HealthTalk reported that people who squash mosquitoes against their skin could increase the risk of serious infection. Doctors in the US are warning people to avoid the natural response to squash the insects but instead recommend giving the bloodsuckers a flick. The warning comes after a 57-year-old Pennsylvania woman died in 2002 from a <u>fungal infection</u> in her muscles, called *Brachiola algerae*. The doctors indicated a simple mosquito bite could not have caused the infection, due to the fact that the saliva of a mosquito does not contain the fungus responsible for the infection. However, the fungus is found within the body of the insect. Writing in the New England Journal of Medicine, doctors believe the woman probably developed the infection by smearing body parts of the insect into a bite. View Article

Topical Cream for Skin Cancer

16 July – Health Day News reported the U.S. Food and Drug Administration has approved the topical cream Aldara (imiquimod), already approved to treat genital warts, to treat a mild form of skin cancer called superficial basal cell carcinoma (sBCC). The approval recommends the cream when the more preferred treatment method, surgical removal, is medically inappropriate, the agency said in a statement. In clinical studies, 75 percent of sBCC patients had no evidence of the cancer after 12 weeks of treatment with the cream, the FDA said. A separate study found that 79 percent of patients

were free of sBCC two years after treatment with the drug. Side effects noted during the trials included skin reactions at the treatment site, including redness, swelling, peeling, itching, and burning. Basal cell carcinoma is the most common type of skin cancer, affecting at least 800,000 Americans annually, the FDA said. View Article

When Hunger Hormone Rises, Periods May Stop

16 July – Reuters reported a hormone that triggers hunger may also play a role in the reproductive system. The hormone, known as ghrelin, may be involved in suppressing reproductive function when a woman is not eating enough. Ghrelin is known as the hunger hormone because people given the hormone in previous experiments became so hungry that they ate up to one third more food than usual. In normal-weight people, ghrelin levels surge before meals and decline afterward. People who are obese tend to have below-average levels of the hormone, while levels of the hormone are above average in people with the eating disorder anorexia nervosa. Scientists think that ghrelin levels rise in anorexics to signal that the body is not getting enough energy. The study included 32 women who exercised regularly. Some of the women had normal menstrual cycles, while others had amenorrhea. Other physically active women had periods, but they didn't ovulate. For comparison, the study also included several sedentary women with normal menstrual cycles. Levels of ghrelin were about 85 percent higher in physically active women who were not menstruating, but ghrelin levels were normal in women who were menstruating but not ovulating. View Article

Focus on Epidemiology

Anemia among Mothers and Children --- Azerbaijan, 2001

16 July – MMWR reported that in the early 1990s, the war between Armenia and Azerbaijan resulted in approximately 600,000 internally displaced persons and 200,000 refugees in Azerbaijan. After years of displacement and despite sustained humanitarian assistance, these internally displaced persons and refugees (IDP/Rs) are still coping with unfavorable living conditions and limited employment opportunities. A 1996 CDC survey in Azerbaijan revealed high rates of malnutrition and anemia among both the IDP/R and resident populations and prompted further study of the nutritional status of these populations. This 2001 survey of IDP/R and non-IDP/R mothers and children with anemia in Azerbaijan indicated that more than one third of mothers and children were anemic, with no significant difference in the overall prevalence between IDP/R and non-IDP/R populations. However, among the IDP/R population, anemia was associated with various socioeconomic factors such as education, socioeconomic status (SES) and area of residence. Future studies should focus on identifying causes for the high rates of anemia in Azerbaijan and developing effective interventions such as iron supplementation and behavior modification. View Report

DoD-GEIS: West Nile Virus

21 July - CDC reports that this year, as of 20 July, there have been 182 human cases of West Nile virus (WNV) disease from 12 states reported through ArboNET. Arizona and California continue to have the highest number of reported cases; 125 were reported from Arizona, 28 from California, 12 from Colorado, 4 each from New Mexico and Florida, 2 each from South Dakota and Texas. Iowa, Michigan, Nebraska, New York and Wyoming have each reported 1 case. Of the 182 cases, there have been four deaths and 75 have had neuroinvasive disease. WNV surveillance of blood donors, a program tested last year with detection by routine PCR testing of donated blood, is now being reported through ArboNET's website (see link below). In 2004, there have been 23 viremic donors

from Arizona (21), New Mexico (1) and Iowa (1). Additional information about national surveillance of WNV activity, including useful links to clinical, laboratory and other guidance is available from CDC and the US Geological Survey. Surveillance data by state and county for dead birds, veterinary cases, sentinel flocks and humans is regularly aggregated, updated and displayed. *Information on many "hot topics" such as WNV, Influenza (avian and human), Leishmaniasis and severe respiratory syndromes, including SARS, is available on the DoD-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

Outbreak of Malta Fever Contained in Saudi Arabia

15 July – Arab News reported that Interior Minister Prince Naif demanded an immediate explanation on measures taken to contain the outbreak of Malta fever (brucellosis) in Jizan recently. Malta fever has infected adults and children as well as animals in the region. Citizens had complained to the local branch of the Agricultural Ministry and asked for their animals to be injected, but the authorities apparently failed to respond. The assistant deputy minister for preventive medicine in the Ministry of Health said that 25 cases of Malta fever had been recorded in the village in the Al-Reeth region between March and May. Malta fever is a zoonotic (transferable from animals to humans) bacterial disease that affects mainly goats, camels, dogs, and cattle. Transmission of the disease occurs by contact with infected meat, placenta of infected animals, or ingestion of un-pasteurized milk or cheese. The illness may be chronic and persist for years. All cases have been treated in Beesh hospital and no deaths were recorded. View Article

Pakistan: Anti-Smoking Law Having Little Impact

14 July – IRIN News reported that an anti-smoking law passed in Pakistan a year ago has proved inadequate, according to anti-tobacco activists. "The government should boost its tobacco control efforts by strictly enforcing the law. Also, the tobacco industry should be held accountable for its tempting advertisements which target the younger generation", said Dr. Ahsan Latif, head of the Pakistan Anti-Tobacco Coalition, an alliance of around 20 health-sector NGOs working for a smoke-free environment. The legislation, which came into force in July 2003, banned smoking in public places and on public transport vehicles as well as curbing the sale of cigarettes to those under 18. The law also outlawed the storage and sale of tobacco products within 50 meters of educational institutions and specified heavy fines and jail terms for violators. View Article

USEUCOM

21,000 Children Orphaned in 2003

16 July – The Namibian reported that an estimated 21,000 Namibian children lost one or both their parents last year alone, the majority of which were AIDS-related deaths. A new <u>Children on the Brink Report</u> tabled at this week's international <u>AIDS</u> conference in Bangkok said a similar number of children were living with chronically ill family members and would become orphans this year. The children who became orphans last year made up around 15 per cent of all Namibian orphans. In total, Namibia has 120,000 orphans - 12 per cent of all children in the country. Of the 120,000 orphans some 57,000 or 48 per cent lost their parents to AIDS. The report calls for the urgent development and expansion of family-based and community-based care for boys and girls who live outside of family care. Placement in residential institutions is best reserved as a last resort when better care options have not yet been developed or as a temporary measure pending placement in a family, the report states. View Source

Chemically Contaminated Package - The Netherlands

21 July - An employee of a Dutch postal company, TPG, fell ill after handling an item that he said contained a yellow powder. Initial tests ruled out anthrax contamination, but the mystery substance has not been identified. The postal item originated from a post box on the Prinses Julianalaan on the corner of the Alkmaar Medical Centre. The postal worker fell ill when collecting mail from the post box. But the man was well enough to drive to the TPG distribution center in Alkmaar North. The ill employee complained of breathing problems, and eye irritation, and was taken, as a precautionary measure, to the hospital. He was released several hours later and he was doing well. View Source

Finland: Outbreak of Newcastle Disease

20 July – ProMED reported an outbreak of the highly contagious Newcastle disease (ND) has been found in turkeys at a poultry farm in Luvia on the west coast. All of the farm's turkeys have been destroyed. All transportation of poultry is restricted in a 10-km quarantine zone around the farm. The source of the outbreak at the farm, just 10-km south of Pori, is not yet clear. After cattle slaughtering and production facilities at the farm have been disinfected, an inspection to determine whether the disease has been eradicated will be made in 3 weeks time. Newcastle disease was discovered in turkeys after blood tests carried out during routine health checks. The birds did not have the respiratory, digestive or nervous symptoms usually associated with the disease. Humans or other mammals are not affected, but it can kill almost all young birds. The virus is preserved well in the environment and spreads from one farm to another through birds, feed and people. View Article

Georgia: Rabies - Bovine, Human

21 July – ProMED reported that 15 cows have died of <u>rabies</u> in Upper Tianeti during the last 10 days. It is the first time that rabies virus has been discovered there. Veterinarians who discovered the epidemic were quick to give vaccinations, not only to the domestic animals, but to their owners as well. Consumption of dairy products, such as cheese, butter, and milk has been banned until the epidemic has been eliminated. According to the Chair of the Veterinary Department of Georgia, Levan Ramishvili, the main source of transmission of rabies is wild animals or dogs. "The same problem exists in Tbilisi too," he said, "because there are too many homeless dogs." There have already been

7 cases of rabies in human, all of them fatal. Out of the 24,000 reported cases of human contacts with animals in 2003, approximately 75 percent were dog bites. <u>View Report</u>

Locust Swarms Invade Mauritania

19 July – BBC News reported Mauritania has appealed for urgent international aid to combat swarms of locusts entering the country. Large numbers have been moving from their spring breeding areas in northwest Africa towards Mauritania, Senegal and Mali. They could be the worst swarms in 15 years, the UN Food and Agriculture Organization says. Mauritania says seven regions have been hit, and it has proposed a \$5m program to treat the affected areas. Rural Development Minister Ahmedou Ould Ahmedou submitted a plan to treat some 3,000 square kilometers but said this could be a conservative estimate. Summer rains have started in the area, which means the insects will lay more eggs as they travel. Swarms could eventually reach the Darfur region of Sudan, where conflict has already created a major humanitarian crisis. Locusts can eat their own weight in food every day, which means a single swarm can consume as much food as several thousand people. View Article

Ukraine: Odessa Markets Closed by Typhoid Outbreak

21 July – ProMED reported that markets in the Odessa region of Ukraine have been closed, after 11 people were hospitalized with <u>typhoid fever</u>. Local health officials said they are monitoring the situation and have banned street sales of food. The Interfax news agency reports the Odessa health service is disinfecting places visited by those infected with the disease. The Itar-Tass news agency says the infected persons come from throughout the region. <u>View Source</u>

Women in Lesotho Prove Easy Prey for H.I.V.

20 July - The New York Times reported on the AIDS pandemic among young women in Ha Thetsane. Thousands of women have fled Lesotho's impoverished countryside to seek jobs as garment workers. But the average wage for such jobs is seldom enough to sustain a worker and allow her to send money to the family she left behind. Thus men support them in exchange for sex. Experts refer to such desperate arrangements by the dry term "transactional sex." This is one reason, though hardly the only one, that in Lesotho H.I.V. infects one in four men aged 15 to 24 - and one in two women. A confluence of factors - including culture and the destitution that turns sex into currency - has transformed AIDS here from an indiscriminate killer into a plague against women. In sub-Saharan Africa, including Lesotho, women are 57 percent of the infected. That portends a collapse in African farming, much of it conducted by women. It suggests that millions of AIDS orphans - there are 100,000 in Lesotho, up 32,000 in two years - will have no women to care for them. It has already ravaged the ranks of nurses. H.I.V. easily passes through vaginal mucous membranes, especially the immature membranes of girls and young women - and in much of sub-Saharan Africa, early sex is the norm. The larger reason, however, is that few African women have a say in sex, or in any other lifechanging decisions. In Lesotho, married women are legally minors, unable to open a bank account or own property without a husband's approval. Men decide all sexual matters, down to the number of children a wife will bear. View Article (registration required)

Zimbabwe: Kwashiorkor on the Increase

19 July – IRIN News reported that further evidence of urban vulnerability in Zimbabwe has emerged in the capital, Harare, with an increase in the number of kwashiorkor cases. Instances of diagnosed kwashiorkor have risen by 11.1 percent. A total of 621 cases were treated of which 97 percent were children under the age of five. The symptoms of kwashiorkor, a nutritional disease caused by inadequate protein consumption, include a bloated stomach and spindly arms and legs, and can result

in death if not treated. Once patients have been diagnosed they are treated and rehabilitated, while affected children are added to a supplementary feeding scheme run in urban areas. Rising unemployment, a declining economy, poor harvests and the scarcity of some basic commodities have been blamed for the poor nutritional status of children. For children under six years, in some instances, children in Harare were worse off than their rural counterparts. The malnutrition affecting children was also affecting their parents.

View Article

USNORTHCOM

American Diet Too Heavy on Meat, Study Finds

15 July – Reuters reported despite warnings from the government, health groups and doctors, more than 70 percent of Americans still eat too much meat and fat and too few vegetables. They published a survey showing 72 percent of Americans still centered their meals on animal fats, leaving little room for the vegetables that prevent not only <u>cancer</u> but <u>heart disease</u> and perhaps a range of other diseases, too. A survey of 1,000 adults asked what they had eaten the night before and how much. The survey, with a margin of error of three points, showed that only 27 percent were eating the recommended proportion of plant food to animal food. Even when the people surveyed ate vegetables, they had too few and often the least nutritious kinds. Only 6 percent said they had eaten a salad the night before. Of those, 19 percent ate salads loaded with meat and cheese. <u>View Article</u>

Bush signs BioShield legislation

21 July - CIDRAP News reported that President Bush signed the bill establishing Project BioShield, a \$5.6 billion, 10-year program to speed the development of drugs and vaccines to combat the effects of biological, chemical, nuclear, and radiological agents. The program guarantees that the government will buy promising drugs and vaccines for agents such as smallpox and anthrax, which probably would not be profitable otherwise. It also empowers the government to authorize emergency use of medical measures that have not won normal Food and Drug Administration (FDA) approval. Bush said, "The Department of Health and Human Services has already taken steps to purchase 75 million additional doses of an improved anthrax vaccine for the Strategic National Stockpile. Under Project BioShield, HHS is moving forward with plans to acquire a safer, second generation smallpox vaccine, an antidote to botulinum toxin, and better treatments for exposure to chemical and radiological weapons." View Article View Bush's statement

Cuba to Help Caribbean Fight AIDS

19 July – BBC News reported the Cuban government has offered to train nurses and doctors throughout the Caribbean as part of the region's fight against <u>AIDS</u>. Cuba also says it will provide antiretroviral drugs to its neighbors at well below market prices. The offer has been enthusiastically accepted by representatives of Caricom - a Caribbean regional grouping. Only sub-Saharan Africa has higher HIV infection rates than the Caribbean. But Cuba, the region's largest island, has largely escaped the disease. It has one of the world's very lowest infection rates. That is for a combination of reasons. One is that when HIV was first discovered, Cuba controversially quarantined those it found to be carrying it. The Communist-led island also has the advantage of a good public health system and a largely non-traveling, non-drug injecting population. Cuba says it will give scholarships to 50 doctors a year from across the Caribbean to study in its hospitals. It is also proposing to build training

centers on neighboring islands and sell its home-produced anti-retroviral drugs at highly competitive prices. <u>View Article</u>

FBI Imposes October Deadline to Make a Case in the 2001 Anthrax Poisonings

20 July – ABC News reported that FBI agents returned to search the U.S. Army's biological weapons labs at Fort Detrick, Md., as part of a last-ditch effort by the bureau to make a case in the 2001 anthrax attacks. The FBI has self-imposed a 1 Oct deadline for its agents to build a case that will stand up in court, officials said. After matching the anthrax used in the deadly attacks with anthrax at the Army facility, investigators now hope to further narrow the hunt among the hundreds of researchers who have worked at the Fort Detrick labs. The labs at Fort Detrick were once the workplace of former government weapons scientist Dr. Steven Hatfill, who has been called a "person of interest" in the case. Hatfill has repeatedly and strongly denied any involvement. The FBI has essentially taken over the so-called "hot zone suites," where work with infectious substances is conducted. A team of more than 20 agents have been at the base since last Friday, focused on labs in two buildings. "[They're] trying to see if there are any spores in the environment, spores that might have been released while somebody was theoretically making anthrax," said Jerry Hauer, an expert on biological and chemical terrorism and director of public health preparedness at the Department of Health and Human Services. View Article

Medicare Says Obesity May Now be Covered

16 July – The Washington Times reported that the U.S. government has determined that <u>obesity</u> may qualify a person for federal Medicare aid. The Centers for Medicare & Medicaid Services said it is dropping language that had led the agency routinely to deny coverage for weight-loss therapies. Though not all weight-loss therapies are reimbursable, the move opens the door to payments covering stomach surgery, diet programs and behavioral and psychological counseling." Obesity is a critical public health problem in our country that causes millions of Americans to suffer unnecessary health problems and die prematurely," Health and Human Services Secretary Tommy G. Thompson said in announcing the long-awaited decision." With this new policy, Medicare will be able to review scientific evidence in order to determine which interventions improve health outcomes for seniors and disabled Americans who are obese." Private insurance companies, which often pattern their coverage after Medicare, welcomed the decision and signaled companies will take their cues from Medicare. View Source

Physicians Warn of Brewing "Superbug" Crisis

22 July – Medical News Today reported that the government must act quickly to invigorate pharmaceutical investment in antibiotic research and development. Otherwise, doctors won't have drugs to protect Americans against antibiotic-resistant infections—a rapidly growing and often deadly problem. That is the key message of the report, Bad Bugs, No Drugs: As Antibiotic Discovery Stagnates ... A Public Health Crisis Brews, which the Infectious Diseases Society of America (IDSA) presented to Congress and federal policymakers. This year, nearly 2 million people in the United States will acquire bacterial infections while in the hospital, and about 90,000 of them will die, according to estimates from the Centers for Disease Control and Prevention (CDC). More than 70 percent of the bacteria that cause these infections will be resistant to at least one of the drugs commonly used to fight them. In a growing number of cases, these bacteria are resistant to many approved drugs. For many patients, there simply are no drugs that work. Resistant bacteria such as methicillin-resistant Staphylococcus aureus (MRSA) are beginning to strike healthy people outside of hospitals. The number of new antibiotics in the pipeline to treat these infections is drastically declining.

Pharmaceutical companies have drastically cut back their antibiotic development efforts because of the challenges to making antibiotics profitable. <u>View Article</u>

Quebec Probes Link between Illnesses, Tainted Beef

21 July – The Globe and Mail reported health officials are investigating whether six people admitted to hospital, including one person who died, all are linked to tainted ground beef that had to be withdrawn from groceries in Quebec's cottage country, north of Montreal. In two separate recalls affecting four stores in the Laurentians area, meat had to be withdrawn because it contained the <u>E. coli</u> O157:H7 bacteria. Three people were admitted to hospital as a result of ingesting meat purchased at Marché André Martel, in Saint-Eustache. In addition, there were three cases of *E. coli* poisoning in the area, including an elderly woman who has died, though it has not been confirmed yet whether her death was caused by the bacteria. Officials are still trying to determine whether those three cases are linked to tainted meat. <u>View Article</u> (registration required)

Salmonella Toll One of Largest in Recent Years

22 July – PostGazette.com reported that the number of <u>salmonella</u> cases in Pennsylvania linked to a regional outbreak grew by 40 yesterday to 170, putting it on track to become one of the larger salmonella outbreaks in the United States since 1997. The outbreak was linked last week to food sold at Sheetz convenience stores, with investigators putting the focus on lettuce and tomatoes. An attorney representing 60 people sickened in the outbreak reported yesterday that Sheetz has agreed to pay the costs of victims' medical bills and lost wages. State health officials expect the outbreak numbers will continue to grow for the next several days, meaning it is certain to join the ranks of those salmonella outbreaks that resulted in 200 or more people getting sick. Maryland officials were reporting 30 cases of people who had salmonella and contact with Sheetz, in West Virginia, 19 people had salmonella and ate at Sheetz in June or July; and in Ohio, 13 people had salmonella with a Sheetz food history. View Article

Scientists Worry that Rift Valley Fever Could Reach US

21 July - CIDRAP News reported that Rift Valley fever (RVF), a mosquito-borne disease that can kill humans and animals could cause devastating outbreaks in the United States. The hemorrhagic fever virus has remained largely confined to Africa, with brief forays into the Middle East. Experts say it's hard to measure the likelihood that the disease could reach the United States but mosquitoes found in the US are known to be suitable hosts. RVF sickens more exposed people and kills more people per infection than West Nile fever. RVF is also more easily spread by aerosol, potentially exposing more veterinarians, lab workers, farmers, or others to the disease. RVF can affect a variety of livestock. People can contract the virus from mosquitoes or by exposure to infected blood or fluids. Most RVF victims suffer only flu-like symptoms with fever and muscle aches. Serious illness can cause hemorrhaging, brain inflammation, liver abnormalities, vision loss, and death. The overall mortality rate for RVF in people is less than 1%. View Source

Study Debunks Gulf War Bacteria Theory

20 July – CNN News reported a year on powerful antibiotics did nothing to relieve the chronic health problems reported by Gulf War veterans, demolishing the theory that <u>Gulf War syndrome</u> is caused by a bacterial infection. Researchers have found that veterans of the Persian Gulf War in 1990 and 1991 are more likely to suffer from a range of chronic symptoms, including memory and thinking problems, debilitating fatigue, severe muscle and joint pain, depression, anxiety, insomnia, headaches and rashes. However, the cause has proved elusive. Theories include stress, bacterial infection, chemical

or biological weapons, pollutants from burning oil fields, depleted-uranium munitions, and vaccinations for anthrax and other potential biological weapons. The VA researchers studied 491 Gulf War veterans who complained of symptoms and who were found to have a bacterium called Mycoplasma in their bloodstream that was suspected to be the culprit. The veterans were randomly assigned to take either the broad-spectrum antibiotic doxycycline or a placebo daily for a year; neither the patients nor their doctors knew who was getting what. The antibiotics at best did nothing, and at worst may have caused harm, the researchers concluded. The side effects included nausea and sun sensitivity. View Article

'Superbug' Kin Infects Athletes, Kids

15 July – WashingtonPost.com reported that a drug-resistant "superbug" found in hospitals has a close cousin that is affecting athletes, prisoners and small children in growing numbers across the United States. Methicillin-resistant Staphylococcus aureus or MRSA can become fatal if not treated with the right antibiotics, said Daniel B. Jernigan of the Centers for Disease Control and Prevention. "MRSA is showing up in places it had never been seen before -- as a predominant cause of skin disease among children in some regions of the country, as clusters of abscesses among sports participants, as the most common cause of skin infections among inmates in some jails, and among military recruits and, rarely, as a severe and sometimes fatal lung or bloodstream infection in previously healthy people," Jernigan said. Most commonly it takes the form of an abscess or boil, and doctors routinely try to treat it with penicillin-based antibiotics, Jernigan said. These will not work. In hospitals, MRSA resists almost everything but an intravenous antibiotic called vancomycin. But community-acquired MRSA can be treated with antibiotics including doxycycline and co-trimoxazole, sold under the brand name Bactrim. View Source (registration required)

Teen Birth Rate Hits Record Low

16 July – HealthDayNews reported that in the federal government's annual report on the well-being of America's children the teen birth rate has hit a record low, youth are less likely to commit or be the victim of violent crime, and the overall death rate has decreased for children and young teens. These factors are somewhat offset by a rise in the percentage of children who are overweight. There has also been a small increase in the percentage of low birth weight babies, the infant mortality rate and the percentage of children living in poverty. The adolescent birth rate has been declining since 1991, when there were 39 births for every 1,000 girls aged 15 to 17. In 2002, it was down to 23. The percentage of children victimized or committing a serious violent crime (murder, rape, robbery or aggravated assault) dropped from 15 per 1,000 youths aged 12 to 17 in 2001 to 11 in 2002. Teen smoking has fallen to the lowest level (15.8 percent of 12th graders) since data started to be collected in 1975; the chickenpox vaccine reached an all time high of 81 percent coverage in 2002; coverage with the Hepatitis B vaccine was 90 percent; and child mortality a declined from 18 deaths for every 100,000 children aged 5 to 14 in 2000 to 17 per 100,000 in 2001. But the impact of these successes is overshadowed by the prevalence of childhood obesity, up from 6 percent for the period 1976-80 to 16 percent for 1999-2002. View Article View the Full Report

USPACOM

HIV Spreading Tentacles Fast In Asia

22 July – New Kerala reported that with one in every four new <u>HIV</u> infections in the world occurring in Asia, the continent is poised to outnumber infections in sub-Saharan Africa in the next six years. US

Congressman James A. Leach made the observation to the House International Relations Committee's sub-committee on Asia and the Pacific. Quoting health experts, Leach said by 2010 Asia would have more people with HIV than the 30 million in sub-Saharan Africa today. "Even if Asia avoids high infection rates," Leach said, "health experts stress that a low prevalence rate in a large country -- such as China or India -- can spell disaster and have major ripple effects through the region." Leach noted that Myanmar, Thailand and Cambodia have the highest rates of HIV infection outside Africa. View Article

Mongolia has Diagnosed 10 Anthrax Infections

21 July - The Mongolian Disease Control and Disaster Prevention Bureau reported that 7 people in the province had reported having fever, and, that an additional 3 persons had been diagnosed with anthrax. During the period from the end of June 2004 to the beginning of July 2004, 10 people had come down with fever and had had symptoms consistent with anthrax infection. As a result, martial law had been enforced in the county. The milk supply area had been disinfected, and cattle in the area had been vaccinated. Confirmation of the source of infection is still pending. During the first half of 2004, 20 people were diagnosed with anthrax in Mongolia, the majority being infected through domestic animals (animals from household farms). View Article

Swine Fever in Pigs - Indonesia

20 July – ProMED reported classical <u>swine fever</u>, also known as "hog cholera," has affected thousands of domestic pigs since April 2004 in Mimika regency, Papua, killing at least 8700 animals. The highly contagious virus was first detected in the villages of Kwamki Lama, Utikini, Djayanti and Kwamki Baru, but its presence was only confirmed a few months later by researchers at the Veterinary Investigation and Examination Body. The virus affects both domestic and feral pigs but humans are not affected. According to AR Puntadewa, head of the Animal Husbandry Office in Papua, the virus was spreading rapidly throughout Mimika, where at least one pig died daily. "It is the first case in Papua. Pigs in Papua have been free of deadly viruses and other contagious diseases for years," he said. He suspected that the virus was probably imported to Papua in November 2003 among hundreds of pigs from several regencies. View Article

Thailand's Bird Flu Outbreak Spreads

16 July – ITV.com reported that Thailand's fresh outbreak of <u>bird flu</u> is continuing to spread but is believed to be under control in Vietnam and China. Bird flu has now reached 15 of Thailand's 76 provinces since the first recurrence just over a week ago. The fresh outbreak, in what was the world's fourth biggest chicken exporter before the earlier epidemic, has devastated the Thai industry and hit the stock market, which fell almost 1 per cent. There have been no reports of anyone in China, Vietnam or Thailand falling ill from bird flu in the latest outbreaks, officials in the three countries said. Officials in China and Vietnam said their outbreaks had been contained and no new cases had been reported. <u>View Article</u>

U.N. Sends Aid to Bangladesh to Avert Epidemics

16 July – Reuters reported U.N. aid agencies said they were distributing food and water purification tablets in Bangladesh, where they fear monsoon floods will spark epidemics such as <u>cholera</u> and <u>dysentery</u>. About 12 million people in South Asia -- from Bangladesh to India and Nepal -- have been affected by torrential rains that are reportedly the worst in 15 years, according to the United Nations Children's Fund (UNICEF). The U.N. agency, which has already distributed 500,000 water purification

tablets in the country, will send another one million tablets from its warehouse in Copenhagen. The U.N. World Food Program has begun distributing high-energy biscuits to 14,800 people in three hard hit districts of northern Bangladesh, spokesman Simon Pluess said. A U.N. disaster response team has also begun a three-day mission to assess the region's humanitarian needs, he said. View Article

USSOUTHCOM

Bovine Brucellosis - Panama

21 July – ProMED reported that cattle farmers in the province of Chiriqui are on alert, after an outbreak of bovine <u>brucellosis</u> on a property located in the community of Potrerillos, in the district of Dolega. According to government sources, 60 animals were found positive for *Brucella abortus*. 27 of the animals have been destroyed. This is a worrying situation, because *B. abortus* is transmissible to humans and to other animals. <u>View Article</u>

Mycobacteriosis, Plastic Surgery – Brazil (Sao Paolo State)

19 July – ProMED reported Health Surveillance of Campinas, Sao Paulo state, reported the laboratory confirmation of two more cases of <u>non-tuberculosis mycobacteriosis</u>, causing localized infection in women receiving silicone breast implants, bringing the number of confirmed cases to 14. Up to the present, 40 patients have reported problems with their implants: the above mentioned 14 with laboratory-confirmed mycobacteriosis; 10 with infection clinically compatible with mycobacteriosis, but lacking laboratory confirmation; 6 cases of infection with other bacteria; 4 with non-infectious post-surgical complications; and 6 still under investigation. All the cases were operated on before April 2004, when the outbreak was first reported. Investigations are continuing to attempt to locate the source of the contamination. View Article

Staph Aureus (MRSA), Community Acquired - Uruguay

20 July – ProMED reported the Uruguayan Public Health Ministry has declared an alert because of the spread of a <u>Staphylococcus aureus</u> strain resistant to antibiotics to other areas of the country. In the area surrounding Montevideo, 51 cases were reported in June 2004. 174 cases have been reported so far in 2004, and more than 1,000 cases have been reported since the first occurrence of the disease in 2001. Patients develop cutaneous lesions (i.e., an abscess or furuncle) and the disease is disseminated by skin contact. Julio Vignolo, Vice-Director for Health in the Public Health Ministry, is currently heading an investigative team to centralize all data. The *Staphylococcus aureus* strain implicated in this outbreak is spreading to other provinces throughout the country. The most worrisome fact about this bacterium is its resistance to most commonly used antibiotics. 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/Hioupdate/.

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