

USACHPPM
HEALTH INFORMATION OPERATIONS (HIO) UPDATE

28 March 2003

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.

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HOT TOPICS

BSE Update for 2003

21 March – ProMed has reported on the most recent update of the number of incidences of [BSE](#) Internationally. [Click here to view the update](#)

Caffeine Delays Exercise-induced Fatigue

19 March – The Times of India reported a new study has found that consuming caffeine, whether in the form of coffee or soft drinks, delays exercise-related fatigue because the popular stimulant blocks adenosine receptors. No previous research effort has examined the possible direct central nervous system (CNS) effects of caffeine on fatigue during prolonged exercise. Researchers at the University of South Carolina hypothesized that the blockade of adenosine receptors by caffeine may be the most likely mechanism of CNS stimulation and delayed fatigue. Their theory is based on the fact that adenosine is produced within the body and inhibits neuronal excitability and synapse transmission. Adenosine also inhibits the release of most brain excitatory neurotransmitters, particularly dopamine (DA), and may reduce DA synthesis. The major findings of this study, published in American Journal of Physiology-Regulatory, Integrative and Comparative Physiology, indicate that caffeine can act specifically within the CNS to delay fatigue, at least in part by blocking adenosine receptors, the researchers said. [View Article](#)

Clue to Nerve Poison Actions

19 March – BBC News reported a possible "Achilles heel" for chemical weapons has been found. Scientists have discovered how [organophosphate](#) chemicals act on nerves, raising new

possibilities for developing antidotes. The research adds weight to the argument that genetics may play a role in human susceptibility to organophosphates. The class of chemicals includes household pesticides as well as deadly nerve gases like sarin. The enzyme studied, which is called neuropathy target esterase, is involved in neural development. It is the target for selected organophosphorus pesticides and chemical warfare agents. Humans as well as mice have a gene for the enzyme, raising the possibility of developing some sort of treatment for pesticide poisoning or chemical weapon attacks. The research, carried out at the Salk Institute, La Jolla, is published in the online edition of the journal Nature Genetics. [View Article](#)

Community Study Demonstrates Keppra's Use in Various Pain Types

20 March – Eurekalert.com reported new data shows that the antiepileptic drug Keppra (levetiracetam), when used alone and in combination with other treatments, provided relief to more than 90 percent of patients with a range of pain syndromes, from migraine headaches to neck and back pain. The study of 400 patients, conducted by the Statesville Pain Associates of Statesville, N.C., was presented at the American Pain Society's 22nd Annual Scientific Meeting. Investigators determined that 372 of 400 patients involved in the study responded positively to Keppra, currently approved by the U.S. Food and Drug Administration for the adjunctive treatment of partial onset seizures in adults. [View Article](#)

Cumulative number of reported suspect and probable cases (SARS) As of 26 March, 2003

<u>Country</u>	<u># of Cases</u>	<u># of Deaths</u>	<u>Local transmission*</u>
Canada	19	3	Yes
China, Guangdong Province+	792	31	Yes
China, Hong Kong	316	10**	Yes
China, Taiwan	6	0	Yes
France	1	0	None
Germany	4	0	None
Italy	3	0	None
Republic of Ireland	2	0	None
Singapore	74	1	Yes
Switzerland	2	0	to be determined
Thailand	3	0	None
United Kingdom	3	0	None
United States	40 §	0	to be determined
Viet Nam	<u>58</u>	<u>4</u>	Yes
Total	1323	49	

Notes:

Cumulative number of cases includes number of deaths.

As SARS is a diagnosis of exclusion, the status of a reported case may change over time. This means that previously reported cases may be discarded after further investigation and follow-up.

*National public health authorities report to WHO on the areas in which local chain(s) of transmission is/are occurring. These areas are provided on the list of [Affected Areas](#).

+This is an updated report of cases from 16 November 2002 to 28 February 2003 in Guangdong Province. The number of cases was compiled from investigations as well as hospital reports and may include suspect as well as probable cases of SARS. [View Related ProMed Report](#).

§Due to differences in the case definitions being used at a national level, probable cases are reported by all countries except the United States of America, which is reporting suspect cases under investigation.

**One death attributed to Hong Kong Special Administrative Region of China occurred in a case medically transferred from Viet Nam. [View Source](#), [View NY Times Article](#), [View CNN Article](#)

Doxycycline Induced Intracranial Hypertension

22 March – The British Medical Journal reported preventing [malaria](#) in travelers is difficult because of the widespread emergence of drug resistance and the increasing popularity of travel to endemic locations. Mefloquine is the most effective recommended antimalarial, but doxycycline is being increasingly used in areas where there is resistance to mefloquine or in patients who have side effects to this drug. [Intracranial hypertension](#) is a well-recognized side effect of tetracyclines and has been associated with the medium to long-term use of minocycline for acne vulgaris. This report describes two patients with acute onset of severe intracranial hypertension associated with doxycycline, in one instance causing permanent loss of most vision. [View Article](#)

Egg Cocktail May Prevent Food-Borne Illness

23 March – Reuters reported a blend of antibodies developed in the yolk of an ordinary egg might prevent the spread of common food-borne bacteria that kills thousands of Americans each year. Researchers at the University of Alberta in Canada found that hens injected with food-borne pathogens, such as *E. coli* bacteria, developed antibodies designed to fight the bacteria. The antibodies accumulated in the yolk of the hens' eggs. After injecting the hens with a variety of pathogens, scientists removed, processed and freeze-dried each of the resulting antibodies from the egg yolks. The antibodies were blended together to create a "cocktail" that scientists believe could target the most common food-borne germs. In early studies in a test tube, food-borne germs that came in contact with the antibody mix failed to multiply. Scientists said they were hopeful additional tests would show the antibodies could be sprayed onto food and hold germs at bay until they pass through the body. [View Article](#)

Gene Tests Could Scupper Bioterrorists

18 March – New Scientist reported a new gene-based technology may soon allow exposure to mystery biological weapons to be identified in a few hours. Experts say that if this early detection means treatment is highly effective, then the harm that can be caused by biological weapons would be substantially lessened, reducing their attractiveness to attackers. Marti Jett, at the Walter Reed Army Institute of Research in Silver Spring, Maryland, and colleagues identified unique patterns of gene expression in primates and pigs following exposure to a range of bioterror agents. They believe a handheld test for humans could be developed within a year or two. Jett told New Scientist that if victims of an anthrax attack, for example, were identified within 36 hours of low dose exposure they have a 100 per cent chance of survival, compared with only 50 per cent if diagnosis takes place after three days. [View Article](#)

Heart Patients Warned of Smallpox Vaccine

26 March – ABC News reported health officials are recommending people with heart disease not be vaccinated against smallpox as authorities investigate a possible link between the vaccine and heart problems. The vaccination has never been associated with heart problems before, but the warning and the investigation came Tuesday, after a Maryland woman died of a heart attack and six others became ill after being inoculated. Three of the seven people under investigation suffered heart attacks, including the Maryland woman who died, another woman who is now on life support and a third woman who was hospitalized and released. All three were health care or public health workers in their 50s. [View Article](#)

New Painkiller May Be Less Addictive Than Morphine

24 March – Reuters reported an experimental morphine-like drug appears to keep pain at bay without causing addiction and with fewer side effects than most narcotics, according to an animal study presented Monday at the American Chemical Society meeting in New Orleans. The unnamed drug, in a class of molecules called glycosylated enkephalins, has been tested in mice, and researchers said the results show it is two to three times more powerful than the painkiller morphine. In additional studies in mice, the drug produced significantly fewer side effects and was less toxic than morphine as it breaks down in the body. In tests to determine pain sensitivity, researchers found mice treated with the glycosylated enkephalin held their tails in hot water longer, on average, than mice treated with morphine, Polt said. The drug also triggered behavior that was consistent with less addiction. [View Article](#)

New Suspect in SARS Outbreak

25 March – New Scientist reported microbiologists have identified a second virus that may be involved in the deadly global outbreak of [SARS](#) raising the possibility that it may take more than one virus to trigger the disease. The second suspect virus was identified by a team led by Malik Peiris at the University of Hong Kong, which has managed to grow the virus in the lab. Peiris reported that under an electron microscope the virus resembled a member of the coronavirus family. This family includes viruses that cause one third of common colds. The Centers for Disease Control in Atlanta, Georgia, also announced on Monday that they had identified a previously unrecognized virus from the coronavirus family in SARS patients. Previously, another laboratory in Hong Kong, and others in Germany, Taiwan and Canada reported finding virus of the paramyxovirus family in SARS patients. The National Microbiology Laboratory in Winnipeg, Manitoba, claimed to have narrowed the virus type down still further to a paramyxovirus subtype called human metapneumovirus, or hMPV. Peiris says it is possible that a coronavirus and a paramyxovirus could be working together to cause SARS. [View Article](#) [View CDC Report](#)

Pesticide Link to Parkinson's

25 March – BBC reported a team from Virginia Polytechnic Institute studied levels of key chemicals in the brain of mice exposed to various levels of the insecticide permethrin. They found that the insecticide stimulated a reduction in levels of an important transmitter chemical called dopamine. [Parkinson's](#) symptoms such as the muscle rigidity, shuffling gait, and a rhythmic tremor have been linked to the loss of dopamine production in the brain. The researchers also found that exposure to permethrin was linked to increased production of a protein called alpha-synuclein. This protein is a major component of fibrous tangles called Lewy bodies, which are found in the brain of patients with Parkinson's. Exposure to low levels of the insecticide seemed to have a more immediate effect than exposure to higher doses, but the researchers believe this could be because high levels simply overwhelm the delicate systems within the brain, which takes time to come to terms with and react accordingly. The researchers now plan to examine the effects of longer-term exposure permethrin, and of exposure to another widely used pesticide, chlorpyrifos. Permethrin is used to treat clothes to repel and kill ticks and mosquitoes. It acts by strongly exciting the nervous systems of insects. The chemical is toxic at high levels and classified as a possible carcinogen by the US Environmental Protection Agency. [View Article](#)

Scientists Develop SARS Test

21 March – ABC News reported scientists believe they have developed a test for diagnosing the mysterious flu-like illness that has sickened hundreds in Asia a crucial step in slowing the disease's spread. Officials with the World Health Organization said the test still needs further experimenting, but if successful, it should be in the hands of doctors in a few weeks and available in key laboratories in a few days. A diagnostic test would make it possible for doctors to quickly weed out and isolate patients with the new disease called severe acute respiratory syndrome, or [SARS](#). It has made 350 people around the world ill and killed 10 people in the past three weeks, according to WHO figures. The development of the test involved isolating the germ from a sick patient and mixing it with blood from recovered patients. [View Report](#)

Specific Norovirus Responsible for Person to Person Spread

20 March – ProMed reported a new, highly transmissible strain of [norovirus](#) first associated with outbreaks on cruise ships is now wreaking havoc in long term care facilities, the Centers for Disease Control and Prevention (CDC) reports. Since July 2002, 41 per cent of outbreaks in which strains were characterized genetically at CDC have been associated with a single, newly identified strain of norovirus (formerly known as Norwalk-like virus). The strain has been found in various institutional settings over a wide geographic distribution, and no common source of the outbreaks has been identified. The finding of a predominant strain is unusual and contrasts with surveillance data from 1997 to 2000, which rarely detected identical strains from distinct outbreaks, CDC reports. The emerging pathogen has been dubbed the "Farmington Hills" strain, after the city in Michigan where the first cases were identified. The pathogen appears to be more transmissible than typical noroviruses. Though noroviruses are a common cause of food borne illness, the reports suggest that the high activity recently noted is occurring in closed settings, where person-to-person spread is the most likely mode of transmission. [View Report](#)
View [CDC MMWR Report](#)

Turmeric Stems Liver Disease

21 March – The Times of India reported a new study has found that curcumin, an essential ingredient of curry, prevents alcohol-related liver damage. The study on rats has found that the substance that gives the spice turmeric its distinctive yellow color, stopped the changes caused by excessive alcohol consumption that lead to liver disease. The research was published in the American Journal of Physiology — Gastrointestinal and Liver Physiology. [View Article](#)

USEUCOM

Croatia: 2 Outbreaks of Trichinellosis

24 March – ProMed reported in February 2003 there were 2 outbreaks of [Trichinellosis](#) in east Croatia, i.e., east Slavonia. The first outbreak was in Vukovar with 4 patients from 2 families (8 members in total). The source of the infected meat was a domestic pig in which *Trichinella spiralis* was confirmed by trichinelloscopy. The second outbreak was near the city of Osijek, also in east Slavonia. There were 20 patients with clinical symptoms of trichinellosis; about 100 people came in contact with the suspect meat. The source was also domestic pigs, but from 3

different locations. *Trichinella spiralis* was confirmed by veterinary examination of the suspect meat. [View Report](#)

Uganda: 23 Dead in Cholera Outbreak

26 March – IRIN News reported an outbreak of [cholera](#) has hit Uganda's western border district of Bundibugyo, killing 23 people over the past month, according to a senior health official in the district. William Sichauna, the Bundibugyo district director of health services, told IRIN on Wednesday that 235 cholera cases had been received in the local hospital over the past month. Of these, 23 had died. According to the medical officer, the epidemic had its origins in neighbouring Democratic Republic of Congo (DRC) and was being spread by civilians who were crossing the border into Uganda. Sichauna told IRIN that the district had received crucial supplies from the government, but efforts to control the outbreak were frustrated by the inability to reach the source in eastern DRC. [View Article](#)

USCENTCOM

Kenya: TB Infection Rate Up

22 March – AllAfrica.com reported the annual rate of [Tuberculosis](#) infections in the country has risen from 73,000 in 2001 to 82,000 last year. Director of the Center of Respiratory Diseases Research, Dr Jeremiah Chakaya, noted that these numbers only take into consideration cases that were reported in Government health institutions and mission health care systems. He said Kenya has a rapidly expanding private health sector that is now a key player in provision of health services and the burden of TB cases seen in this sector is unknown because the private sector in Kenya has not been reporting cases to the National Leprosy and Tuberculosis Control Program (NLTP) like they should be. Chakaya said the primary reason for the increase is HIV/AIDS, which reduces the body's defenses allowing entry of germs into the body. Other reasons are rapid urbanization, poverty, inadequate sanitation, ventilation and lighting, nutritional problems, lack of access to adequate health care and overcrowded public transport. He said Kenya has adopted the WHO recommended [Directly Observed Short Course \(DOTS\)](#) strategy for the control of TB and this strategy needs political commitment to avail sufficient resources to enact the program.

Pakistani and Afghani Drug Users at High HIV Risk

24 March – Eurekalert reported a majority of Pakistani and Afghani male drug injectors lack basic knowledge of HIV and the risk factors that lead to infection, according to a study conducted by the Johns Hopkins Bloomberg School of Public Health. The researchers found that only 16 percent of the study participants were aware of the existence of [HIV or AIDS](#). In addition, they said many study participants admitted taking part in high-risk behaviors such as needle sharing and unprotected sex. Very little is known about HIV prevalence and its risk factor in Afghanistan. The study, "HIV Knowledge and Risk Behaviors among Pakistani and Afghani Drug Users in Quetta, Pakistan," is among the first to report the HIV risk behaviors among drug users from Afghanistan and will appear in the 01 April issue of the Journal of Acquired Immune Deficiency Syndromes. [View Article](#)

Red Cross Fears Basra's Drinking Water May Run Low

24 March – The Washington Post reported the International Committee of the Red Cross (ICRC) said drinking water could soon run low in the Iraqi city of Basra, scene of fierce fighting between British and U.S. forces and Iraqi defenders. The main Wafa al-Qaed water treatment plant on the northern edge of Basra has been out of action due to a power outage since Friday and although other plants were able to supply some 40 percent of usual needs, the quality of the water was poor, the ICRC said. Adequate drinking water is vital for the local population because daytime temperatures in Basra, Iraq's second largest city can soar toward 104 degrees Fahrenheit, she said. Basra has a population of about 2 million. [View Article](#)

USNORTHCOM

Anthrax Attack Could Kill 123,000

18 March – BBC News reported an [anthrax](#) weapon aimed at a major city could kill at least 123,000 people even if every victim received treatment, experts have calculated. US researchers have used a computer model to predict the devastation that would result from the launch of an anthrax bomb or missile on a city the size of New York. The figures are based on what would happen if a bomb containing one kilogram of anthrax spores was dropped on a city of 10 million inhabitants. The projected number of fatalities is based on the assumption that antibiotics would not be administered for 48 hours until the first symptoms appeared. If it proved possible to distribute drugs more quickly, then the death toll could be substantially reduced. However, they warn that inadequacies in the current US emergency response plan may make such a rapid response unlikely. [View Article](#)

Blood-Clotting Product in Military First Aid Kit

26 March – Reuters reported first aid kits used by the U.S. Marine Corps now include QuikClot, a product designed to stop severe wound bleeding. So far, the Marines have purchased 15,000 packets of QuikClot, and the military organization is currently seeking congressional funds to increase that number to 202,000. Kits will most likely first be given to frontline soldiers fighting the war in Iraq. Studies have shown that in up to 90 percent of cases, fatally wounded soldiers die on the battlefield, before they are able to reach a medical facility for treatment. Half of the deaths are due to excessive bleeding, and about 10 percent of the time, the bleeding is from wounds in the leg and other extremities. QuikClot is designed to let soldiers contain their own bleeding until they can be reached and properly treated by medics. The product consists of coarse grains that can be poured into a wound. The mineral-based grounds "scavenge water molecules" leaving behind blood-clotting platelet cells and other factors. It should be noted almost all of the experiments conducted with QuikClot, assume the blood vessel is exposed but this is not always the case. [View Article](#)

FDA Issues New Security Guidance as Part of Operation Liberty Shield To Protect the Food Supply

19 March – The FDA announced as part of its continuing efforts to ensure the safety and security of the nation's food supply, the availability of four guidance documents designed to help

manufacturers minimize the risk of tampering or other malicious, criminal or terrorist actions. FDA also announced increased surveillance of domestic and imported foods, and enhanced collaboration with other government agencies, as part of its Liberty Shield initiatives. Operation Liberty Shield (www.dhs.gov) is a comprehensive national plan designed to increase protections for America's citizens and infrastructure while maintaining the free flow of goods and people across our border with minimal disruption to our economy and way of life. [View Article](#)

Female HIV Infection Rising

19 March – BBC News reported the number of women becoming infected with HIV is fast catching up with the number of men, research has found. Healthcare analyst Isis Research found that this was mainly due to the fact that 51% of newly diagnosed HIV patients contracted the virus through heterosexual contact, compared with just 36% through homosexual contact. Ten years ago, the split was 28% heterosexual against 38% homosexual. The rest of cases contracted HIV through non-sexual contact. Experts are warning that this shift towards heterosexual infection carries with it the risk that increasing numbers of babies will be born to HIV positive mothers. [View Article](#)

First Revised Guidelines Since 1994 on Tuberculosis

20 March - The American Thoracic Society (ATS), the U.S. Centers for Disease Control and Prevention (CDC), and the Infectious Diseases Society of American (IDSA) announce the release of the first completely revised guidelines since 1994 for the prevention, control, diagnosis, and treatment of [tuberculosis \(TB\)](#). First published in 1971, the jointly developed guidelines are intended to advise both public health programs and health care providers in all aspects of the clinical and public health management of tuberculosis in low incidence countries. The new guidelines focus on the latest aspects of therapy, including drug administration, the use of fixed-dose combination preparations, the monitoring and management of adverse effects, and drug interaction. Directly observed therapy is advised for patients because of the higher rates of treatment completion. [View Article](#)

Government Reports New Low in Tuberculosis

20 March – ABC News reported the number of [tuberculosis \(TB\)](#) cases in the United States last year dropped by nearly 6 percent to an all-time low. The Centers for Disease Control and Prevention (CDC) said 15,078 cases of TB were reported last year, a 5.7 percent drop from 15,989 in 2001. The decline was attributed to better public health prevention services. The CDC also said the national TB rate 5.2 cases per 100,000 people is the lowest recorded in the United States since reporting began in 1953. However, federal health officials said, TB rates among blacks are nearly eight times higher than for whites and are twice that of Hispanics. "Closing the gap in tuberculosis rates is essential if tuberculosis is to be eliminated in our country," said Dr. Kenneth Castro, director of the division of tuberculosis elimination at the CDC. [View Article](#) [View MMWR Report](#)

Health Officials Say U.S. Flu Season Mild

20 March – Reuters reported federal health experts described the 2002-2003 [flu](#) season in the United States as mild, although they noted a number of severe outbreaks had occurred among school children. The Centers for Disease Control and Prevention said data collected from state

and local health authorities indicated the flu season, which generally runs from October to April, had peaked in early February. "The percentage of pneumonia and influenza deaths has been below the epidemic threshold each week during Sept. 29 to March 8," the Atlanta-based CDC said in a weekly report. [View Article](#)

HHS To Test Use of Handheld Device Network for Transmitting Urgent Information about Biological Agents to Clinicians

21 March – The Department of Health and Human Services (HHS) reported it will begin testing a system using handheld personal digital assistants (PDAs) for transmitting urgent information about biological agents to clinicians. The three-month pilot test of the PDA network is designed to gauge the best ways for federal officials to communicate effectively with front-line clinicians in the event of a bioterrorist attack. The project will evaluate how and when clinicians download this urgent information and whether they find it useful to receive it via their PDAs. The test message will contain a special memo on the highest threat (category A) biological diseases/agents, which include anthrax, botulism, plague, smallpox, tularemia and viral hemorrhagic fevers, including Ebola. The message will also include Web links for clinicians to go to for additional information about diagnosing and treating the conditions caused by the biological agents. Clinicians will be able to save this information to their PDAs for future reference. [View Report](#)

Is Nation Ready for Botulinum Attack?

25 March – CNN reported federal officials fear the nation is both vulnerable to a [botulism](#) attack and ill prepared should one occur. Easy to find and easy to produce, botulinum toxin is the most poisonous natural substance on Earth. In the hands of a bioterrorist, a single gram -- the weight of a paper clip -- could kill more than 1 million people. The toxin easily poisons those who eat it, and experts fear terrorists could infect the nation's food supply and sicken thousands, making the 2001 anthrax attacks-by-mail seem minor by comparison. The government only has enough antitoxin available to treat victims of a small attack -- one official put the inventory at more than 1,000 doses. The issue takes on particular urgency as the United States wages war with Iraq. In 1995, Iraq told the United Nations that it had made more than 5,000 gallons of botulinum toxin and loaded much of it into bombs and warheads. Inspectors believe Saddam Hussein actually has materials capable of producing twice as much toxin -- enough to kill the entire human population three times over. Dr. Anthony Fauci of the National Institutes of Health reported his agency is making this its highest priority. Researchers are also working on a new, genetically engineered antitoxin, which could be easily and quickly reproduced in large quantities, but that is still at least a few years away. Federal officials are also considering taking over a California program that is the sole producer of antitoxin for children. Gov. Gray Davis has proposed eliminating the program because of California's budget crisis. [View Article](#)

Severe Acute Respiratory Syndrome: CDC Report of Suspected Cases Under Investigation in the United States as of 26 March, 2003

California	10	Missouri	2	Texas	3
Connecticut	1	Mississippi	1	Utah	3
Hawaii	3	New Jersey	1	Virginia	3
Illinois	1	New Mexico	1	Wisconsin	1
Kansas	1	North Carolina	2	Total	45
Maine	2	New York	4		
Massachusetts	1	Pennsylvania	2	View Source	
Michigan	2	Rhode Island	1		

Study to Look at Vets and Cold War-Era Bioweapons

21 March – Reuters reported a study is under way to determine if Cold War-era military experiments that may have exposed U.S. troops to biological and chemical warfare agents caused veterans to suffer long-term health effects. The experiments, which were military secrets for years, became the subject of publicity and were partially declassified by the Pentagon last fall. Those disclosures revealed that some 5,100 U.S. servicemen participated in a series of tests in which ships, often manned, were sprayed with biological or chemical warfare agents or other agents used to simulate them. The tests were part of a program known as Shipboard Hazard and Defense (SHAD). The program was part of a larger Defense Department weapons review called Project 112 that took place between 1962 and 1973. Active warfare agents including sarin and VX nerve gas were also used in SHAD tests, but were never sprayed on manned vessels, according to the Pentagon. Military health officials have said that they do not believe that personnel involved in SHAD tests were in any short-term or long-term danger.

[View Article](#)

Suspected Foodborne Outbreak at National Shrine in Missouri

20 March – ProMED reported more than 200 people who became ill after meals at the National Shrine of Our Lady of the Snows may have suffered from [norovirus](#) infection, an ailment that recently plagued cruise ships, St Clair County health officials said. So far, only two people have tested positive for norovirus infection, but officials believe that the 205 people who reported illness after meals at the shrine may also have suffered from the virus because they reported similar ailments. County officials said they are unsure how the virus was spread at the shrine near Belleville. [View Article](#)

US Body Reviews Errors in Emergency Departments

22 March - The British Medical Journal reported about 2000 medication errors in hospital emergency departments are reported annually in the United States, a new report says. The US Pharmacopeia, an independent non-governmental organization that monitors drug safety, has now made a series of recommendations aimed at lowering the number of errors. The organization had analyzed data on medication errors held on its national databases, which contain more than 360,000 reports of such errors since 1998. In 2001, hospitals reported more than 2000 medication errors in emergency departments. The data show that, compared with other hospital departments, fewer emergency department mistakes are picked up before they reach the patient. US Pharmacopeia found that in the emergency departments, 23% of errors were intercepted before reaching patients, compared with 39% in other areas. [View Article](#)

USPACOM

Australia: Dengue Outbreak Total Reaches 120 in North Queensland

24 March – ProMed reported the [dengue fever](#) epidemic in the northern Queensland city of Cairns continues to spread, with the number of cases rising daily. Some 120 residents have now been infected by the potentially deadly mosquito-borne illness. The list of areas affected is also growing, with the suburbs of Machans Beach and Westcourt the latest added. Most confirmed cases are still in the inner suburbs of Parramatta Park and Manunda where the first cases were detected almost a month ago. Environmental officers from Thursday Island in the Torres Strait have arrived to help the health authorities in Cairns to contain the outbreak. [View Report](#)

South Korea: Hog Cholera Spreading to 18 Regions

15 March – ProMed reported further outbreaks of [hog cholera](#) were detected yesterday at 5 farms in Wanju, Kimje, and Iksan of North Cholla Province, and in Haman of South Kyongsang Province, the Ministry of Agriculture and Forestry said. By turn, the areas where outbreaks have been identified increased to 35 farms in 18 cities and counties in 6 provinces, according to the ministry. However, the outbreak is expected to spread rapidly, since 3 of 55 hogs in a livestock artificial insemination center in Kimje, North Cholla Province tested positive yesterday for the porcine disease, according to the ministry. A livestock farming company, Sangwon Pig Development Co. in Kimpo, Kyonggi Province has been identified as the origin of the virus. So far, some 29,370 of 53,880 pigs raised at the farms in question have been slaughtered in an effort to contain the disease. The ministry has vaccinated some 2.28 million hogs, or 67 percent of the 3.42 million at or near the farms, with anti-cholera vaccine. [View Report](#)

Thailand: Border Camps on High Alert After Death of 4 Refugees

21 March – ProMed reported after the deaths of 4 people from [viral meningitis](#) in Thailand at a refugee camp in Umphang district, border refugee camps throughout the country are increasing their disease control measures. In recent weeks, health officials have traveled to Umphang with vaccines, medical kits, and other medicines to help stem the spread of the disease. On Tue 18 Mar 2003, the provincial public health office urged residents of Mae Sot, Mae Ramat, Tha Song Yang, Phop Phra, and Umphang districts to be alert for signs of the disease. The symptoms, which at first can resemble a cold or the flu, include headaches, vomiting, stiff neck, sensitivity to light, and aching joints. [View Report](#)

Vaccine for Deadly Ant Sting

20 March – BBC News reported people allergic to ant stings can be immunized against potentially fatal reactions. The [jack jumper ant](#) is responsible for around 90% of severe reactions to ant venom in southeastern Australia. Researchers from the Royal Hobart Hospital in Hobart, Tasmania, found immunizing people with venom, so they become desensitized to it, means they do not experience an allergic reaction if they are stung. In contrast to normal immunizations, where a person's immune system is primed to produce antibodies against a substance, this treatment aims to tell the body not to react, so people will not have a severe

reaction if they are stung. Venom immunotherapy (Vit) has some potential to prevent deaths and can result in striking improvements in the quality of life of affected individuals. Sixty-eight healthy people who were allergic to jack jumper ants, *Myrmecia pilosula*, were either given Vit or a dummy injection. Jack jumper stings were given one week later in the resuscitation room of a hospital casualty department. No severe reactions were seen among those given the Vit treatment. In comparison, three-quarters of those given the placebo treatment had a severe reaction to the stings. [View Article](#)

Wild Poliovirus Type 2 Reference Strains Isolated in India

23 March – ProMed reported [wild poliovirus type 2](#) (wP2) circulation has not been detected globally since October 1999. In mid-December 2002, wP2 isolation was reported from a stool specimen collected on 24 Nov 2002 from a case of acute flaccid paralysis (AFP) in Western Uttar Pradesh (WUP), India. Since then, an additional 4 wP2 were reported from AFP cases in WUP and one from Gujarat. Laboratory tests determined that all viruses reported are closely related to widely available reference strains of wP2 (MEF-1), and unrelated to wP2 found in any part of the world over the past 2 decades. A joint Government of India and World Health Organization investigation has been initiated to determine the source of the MEF-1-related viruses in the specimens. Concurrent with this investigation, plans will be developed to assess and strengthen laboratory containment procedures in India. Already planned large-scale immunization rounds in northern India will be carried out in April and June, following the national immunization rounds in January and February, as part of polio eradication activities in India. [View Report](#)

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Brazil: Yellow Fever In Howler Monkeys Suspected

22 March – ProMed reported two howler monkeys have been found dead within the past 3 weeks in Miguelopolis, in the Rio Grande valley in the Franca region of Sao Paulo state, Brazil, on the border with Minas Gerais state. Since then 1.7 million people have been vaccinated against [yellow fever](#) in an intensified campaign that will continue up to the end of March 2003. Organs from the animals are being tested at the Adolfo Lutz Institute in Sao Paulo. The city of Ribeirao Preto is also on the alert, since it is in an area of transition for the disease. [View Report](#)

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