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HEALTH INFORMATION OPERATIONS (HIO) WEEKLY UPDATE

3 April 2002

The HIO Weekly Update provides information regarding global medical and veterinary issues of interest to the United States (US) Army. The weekly 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 Weekly Update should provide an increased awareness of current and emerging health-related issues.

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HOT ISSUES

Anthrax Dispersal Model - Lawrence Berkeley Laboratory (LBL)

On 29 March, the LBL announced the development of a computer-based model that can be used to track the fate of airborne anthrax spores, which can be used to estimate exposures. Although the model is still under development and is primarily a research tool, the Lab believes that it can eventually be used to map real-world potential exposure cases. The model could also be used to focus decontamination. The report is at http://www.lbl.gov/Science-Articles/Archive/EETD-anthrax-dispersal-Sextro.html.

Anthrax Vaccine - Armed Forces Epidemiological Board (AFEB)

The AVIP recently posted the AFEB comment from their Winter 2002 meeting regarding the possible reintroduction of the anthrax vaccine to protect Armed Forces personnel now that additional FDA approved lots of the vaccine are available. The findings of the AFEB include: (1) no data found to indicate the vaccine is unsafe when administered according to the package insert, (2) range or reported side effects are in line with previously published reports and compatible with similar vaccines, (3) no convincing data found to demonstrate long-term adverse health risks to recipients of the vaccine, although additional studies are in progress, and (4) no reason to believe that vaccine does not offer protection to persons from any form of anthrax exposure, although data regarding efficacy with aerosolized anthrax spores rely on animal surrogates and very limited human studies. The AFEB also recommended the following to enhance the anthrax vaccination program: (1) develop enhanced educational programs, (2) maintain current vaccination tracking systems and continue to monitor for acute and latent vaccine-related morbidity, (3) develop a validation or auditing program for vaccine data entry, (4) assure a steady and uninterrupted supply of licensed vaccine, and (5) continue to support efforts to develop new generation anthrax vaccines that are less reactogenic and require less frequent dosing. The report is at http://www.ha.osd.mil/afeb/2002/2002-06.pdf.

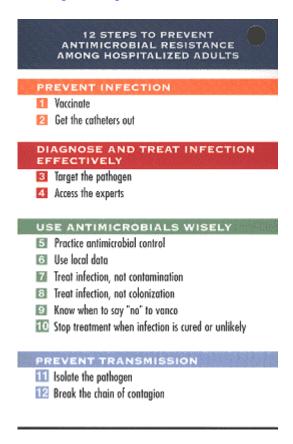
Anthrax Vaccine and Pregnancy - <u>JAMA</u>

On 27 March, the *JAMA* reported that a cohort study involving 4,092 women aged 17 to 44 years, who were stationed at Fort Stewart or Hunter Army Airfield from January 1999 through March 2000, found that anthrax vaccination had no effect on pregnancy and birth rates. The study did not have sufficient power to detect adverse birth outcomes

given the low incidence of adverse outcomes in the study. The report is at http://jama.ama-assn.org/issues/current/ffull/joc20240.html.

Antimicrobial Resistance Prevention Campaign - CDC

On 26 March, the CDC announced its campaign, "Prevent Antimicrobial Resistance," which is aimed at clinicians who treat hospitalized patients. The campaign centers around four key strategies with 12 specific action steps derived from evidence-based guidelines and recommendations (see pocket card below). The CDC will announce similar steps in the future for clinicians who care for dialysis patients, emergency room patients, obstetrical patients, critical care patients, pediatric patients, and patients in long-term care facilities. The pocket card, a PowerPoint presentation, and other materials are at http://www.cdc.gov/drugresistance/healthcare/tools.htm#factsheets.



International Conference on Emerging Infectious Diseases - CDC

On 2 April, the webcasts for the International Conference on Emerging Infectious Diseases were made available at http://www.cdc.gov/iceid. Major topics include current work on surveillance, epidemiology, research, communication and training, bioterrorism, and prevention and control of emerging infectious diseases in the US and abroad. Continuing education credits are available. The <a href="https://cdm.com/cdm.c

reasons for increases in zoonotic infections (over 75% of emerging infections are zoonoses) include an increasing world population, a reduction in natural habitat for many animals, changes in animal husbandry, and globalization, (3) advances in surveillance systems using web-based technology are still heavily reliant on clinician reporting due to the high cost of active clinical surveillance, (4) lack of standardized data coding in healthcare systems particularly laboratory systems was cited as an obstacle to the rapid development of electronic surveillance, (5) international linkages will become increasingly important as globalization of the food supply and the development of new methods of food production, such as aquaculture, are bringing new diseases into local foodchains, (6) the emergence of antimicrobial resistance, especially fluoroquinolones, (7) the value of pooling international data on foodborne outbreaks was demonstrated by a new European network for foodborne viruses, (8) use of molecular methods to define the extent of national/international outbreaks and to aid investigation, and (9) the problems associated with re-emerging human infections such as dengue fever worldwide and trypanosomiasis in Africa. The report is at http://www.phls.co.uk/publications/CDR%20Weekly/PDF%20files/2002/cdr1302.pdf.

MRE Pocket Sandwiches - Solider & Biological Chemical Command (SBCCOM)

On 28 March, the US SBCCOM announced approval of the first pocket sandwiches, pepperoni stick and barbeque chicken, for the MRE. These shelf-stable sandwiches are comparable to Hot Pocket[®] sandwiches in size, calories, and appearance, but the major difference is in the processing, which allows the food to meet the <u>DoD</u> Combat Feeding Program's minimum shelf life requirements of three years at 80 degrees F or six months at 100 degrees F. The sandwiches were developed using intermediate moisture technology instead of the normal thermal processing in retort pouches. Controlling water activity and acidity levels provides preservation. Oxygen scavenger (tri-laminate) packets also control the amount of oxygen in contact with the food. The shelf-stable sandwiches were acceptable to soldiers who tried them, and they met <u>FDA</u> food safety requirements. Other varieties under consideration are a pizza pocket, sliced beef in barbeque sauce, tuna or chicken salad, ham and cheese, and peanut butter and jelly. The same technology is being applied to a new program in combat breakfast foods. The report is at http://www.natick.army.mil/pao/2002/02-10.htm.

Poliomyelitis - Global Eradication Status

On 29 March, the <u>CDC</u> reported three densely populated countries - India, Pakistan, and Nigeria - represent the major poliovirus reservoirs with sustained transmission expected through 2003. Ten countries documented indigenous transmission of wild poliovirus type 1 during 2001, a decrease from 20 countries in 2000. The ten countries are Afghanistan, Angola, Egypt, Ethiopia, India, Niger, Nigeria, Pakistan, Somalia, and Sudan. Wild poliovirus type 2 was last detected in October 1999. The CDC report is at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5112a1.htm.

Poliomyelitis - Circulating Vaccine-Derived Poliovirus (cVDPV)

On 29 March, the CDC reported that poliomyelitis cases due to cVDPV type 1 were confirmed in Haiti and the Dominican Republic from July 2000 to July 2001 and in the Philippines during 2001. The virus in all locations demonstrated more than 2% genetic sequence difference from the parent Sabin virus (VP1 region of genome) and probably circulated for greater than two years before being detected. Public health investigations suggest that low vaccination coverage is allowing cVDPVs to circulate and revert to wild-type characteristics. Mass vaccination campaigns with oral polio vaccine appear to have interrupted cVDPV circulation in Hispaniola and are underway in the Philippines. On 8 March, the Philippines Department of Health (DOH) released a press statement that stated US military medical personnel were available to help with the anti-polio campaign. The DOH report is at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5112a1.htm

Prions in Skeletal Muscle, NOT - France

On 27 March, the NewScientist.com reported that French government scientists were unable to find prions in muscles from several BSE or scrapie-infected animals including mice, sheep, goats, and cows. Additionally, peripheral nerves and lymphoid tissue from the cows also came up negative for prions. According to the report, the results are to be discussed in more detail at a meeting of France's top BSE specialists on 11 April. The report also contained comments from an UK government official, who stated that a much larger ongoing experiment had been under way for five years in Britain and had shown no evidence of BSE infectivity of muscle. The French assessment was in response to a study published in the 19 March edition of the *Proceedings of the National Academies of the Sciences*, which found that mouse skeletal muscle can propagate a surrogate prion and accumulate substantial titers of these pathogens, particularly in the muscles of the hind limb. The NewScientist.com report is at http://www.newscientist.com/news/news/news.isp?id=ns99992099.

Smallpox Vaccine - Dilution Study Results

On 28 March, the <u>DHHS</u> announced results from a key clinical trial, which indicated the existing 15.4 million doses of smallpox vaccine (Dryvax, Wyeth Laboratories) could successfully be diluted up to five times (77 million doses) and retain its potency. The clinical study, along with the pilot study, was posted on 28 March by the <u>NEJM</u> and will be published in the 25 April hardcopy edition. The results of the study demonstrated that current stocks of vaccine could be diluted to a titer of about 10^{7.0} pfu per millimeter. Titers between vaccine lots vary, and the lower success rate in the pilot study was thought to be due to dilution of a lot with a lower titer. Common adverse events that occurred included: satellite lesions, regional lymphadenopathy, fever, headache, nausea, muscle aches, fatigue, and chills. Generalized and localized rashes, including two cases of erythema multiforme, were also observed. The studies are at http://nejm.org/earlyrelease/index.asp.

Smallpox Vaccine - Stockpile Status

On 29 March, the <u>DHHS</u> announced that it intends to obtain 75-90 million doses of smallpox vaccine produced by the French pharmaceutical company Aventis Pasteur, Inc., and stored in a secured location since 1972, provided the decades-old vaccine supply is proven safe and effective. The <u>VOA</u> reported that the stored vaccine was frozen at the Aventis American headquarters in Pennsylvania when the US stopped routine smallpox vaccinations. The DHHS is coordinating efficacy studies with Aventis, and the initial results appear encouraging. If the vaccine has proven efficacy, then the <u>NIH</u> would conduct clinical trials to determine the safety and effectiveness of the vaccine. If testing were acceptable, the <u>FDA</u> would then classify the vaccine as an investigational new drug, which would be available for emergency use through the sponsoring organization, the <u>CDC</u>. This vaccine could be added to the 77 million doses of licensed vaccine currently in the stockpile. In addition, the DHHS has contracts with Acambis, Inc., to obtain 209 million doses of new vaccine by the end of this year. The contract gives DHHS the option to obtain additional vaccine quickly if needed. The report is at http://www.hhs.gov/news/press/2002pres/20020329.html.

Volcanic Eruptions and Health Risks - PAHO

The PAHO recently posted two videos for healthcare personnel in reference to volcanic eruptions. The first video discusses the main health risks resulting from volcanic eruptions and points out that although lava and rocks do pose a grave danger, the less spectacular and more dangerous pyroclastic flow or mudflows have actually caused the greatest number of deaths and injuries. The second video is centered on health sector preparedness and prevention plans and measures to minimize the damage caused by volcanic eruptions. The videos are at http://www.paho.org/English/PED/volcano.htm.

USCENTCOM

Foot and Mouth Disease - Syria

On 1 April, ProMED reported 11,600 Syrian sheep were returned from the Al-Haditha border agricultural quarantine station in Saudi Arabia after clinical and laboratory tests revealed they were infected with foot and mouth disease. The report is at http://www.promedmail.org/pls/askus/f?p=2400:1001:164502::NO::F2400_P1001_BAC_K_PAGE,F2400_P1001_PUB_MAIL_ID:1010,17857.

Measles-like Illness - Pakistan

On 31 March, the Pakistan News Service (PNS) reported 12 children died over three days due to an outbreak of a disease that resembles measles in Umerkot and Golarchi, Pakistan. The report stated that measles-like spots appeared on the body and within a few days, the child was dead. On 1 April, ProMED reported that a fatal rash disease occurred in this same area during this same time last year, but the disease was reported as "smallpox." No further information is available. The report for the PNS is at

http://www.paknews.com/main.php?id=14&date1=2002-03-31 and ProMED is at http://www.promedmail.org/pls/askus/f?p=2400:1001:162709::NO::F2400_P1001_BAC K_PAGE,F2400_P1001_PUB_MAIL_ID:1000,17855.

Medical Kits - Israeli Physicians

On 30 March, the <u>BMJ</u> reported that Israeli Health Ministry's national advisory council on trauma will convene soon to hear debate and make recommendations about whether individual physicians should be equipped with an emergency medical kit to save the lives of the wounded in case they chance by an attack. Advocates state that a simple kit such as one containing a cell phone to call for ambulances, bandages, a physician's identification tag, and a resuscitation mask, could save lives. Physicians opposing the move feel that ambulance paramedics can reach any accident site in sufficient to time to treat wounded and are trained for this type of field response while most ordinary physicians are not. The report is at http://bmj.com/cgi/content/full/324/7340/756/g.

Reported Violations of Medical Neutrality - Israel and Gaza

On 28 March, the Physicians for Human Rights reported a five-person medical delegation was sent to Israel, Gaza, and the West Bank to investigate allegations of violations of medical neutrality. The Israeli Defense Force had earlier reported that an ambulance driver, who was employed by the Palestinian Red Crescent Society, was arrested after discovery of a bomb in his ambulance located outside Ramallah. The presence of a bomb in a medical vehicle represents a grave breach of international humanitarian law and gross misuse of the Red Crescent emblem and the neutral status it bestows. The report further stated that the incident places individuals who are in need of emergency care and the legitimate medical workers who serve them at grave risk of being fired upon and killed, as has happened in five recent cases. The report is at http://www.reliefweb.int/w/rwb.nsf/9ca65951ee22658ec125663300408599/b8de30ea23d2ba4749256b8b000d74af?OpenDocument.

USEUCOM

Cholera - Malawi

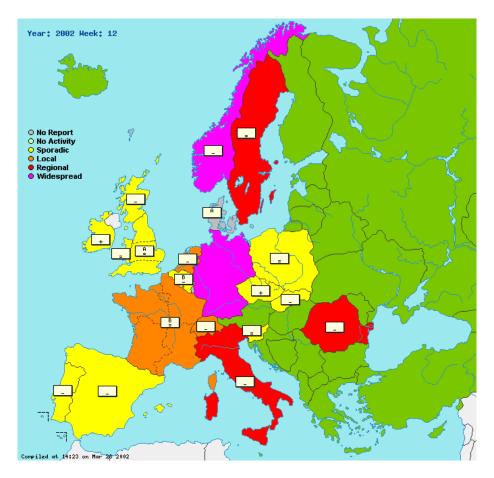
On 26 March, the WHO reported a total of 22,023 cases of cholera with 609 deaths (case fatality rate 3%) since the beginning of the outbreak on 28 October 2001. This is an increase of 19,628 cases and 567 deaths since the last report on 22 February. The southern region has reported 69% of the cases thus far. Laboratory reports have confirmed *Vibrio cholerae* O1. Cholera is a waterborne disease that is common in rural areas of Malawi during the rainy season from October to April. Chlorination of water supplies is underway in the affected communities and hygiene education has been increased. The report is at http://www.who.int/disease-outbreak-news/n2002/march/26march2002.html.

Euthanasia Law - Netherlands

On 1 April, the <u>VOA</u> reported that the Netherlands became the first country to allow euthanasia or assisted suicides. The law formalizes a practice that has been tolerated in the Netherlands for decades. Under the law, doctors can help end the lives of terminally ill patients, but must obey certain rules or be liable for prosecution. A patient must be undergoing unbearable suffering, be aware of all other medical options, and have sought a second opinion. The request to die must be made voluntarily while the patient is of sound mind. An independent commission (consisting of a legal scholar, a physician, and an ethics expert) is to review each case to ensure that guidelines were followed. Last year, Belgium's Senate approved a bill that would allow doctors, under certain conditions, to assist people who want to die.

Influenza Surveillance – Europe

For week 12, 18-24 March, the <u>EISS</u> reported the spread and intensity of influenza activity decreased or remained stable. Widespread influenza activity was reported in Germany and Norway while the geographic spread ranged from sporadic to regional in other countries. Influenza A was the dominant type across Europe. Influenza B was dominant in five countries: Belgium, France, Italy, Spain, and Switzerland. The report is at http://www.eiss.org/cgi-files/bulletin_v2.cgi?display=1&code=61&bulletin=61.



Meningococcal Meningitis - Burkina Faso

On 1 April, the <u>UN</u> reported the meningococcal meningitis epidemic in Burkina Faso now involved 4,758 cases and 672 deaths (case fatality rate 14%). This is an increase of 1,179 cases and 128 deaths since the <u>WHO</u> report of 20 March. Two more health districts reached the epidemic threshold of 10 cases per 100,000 inhabitants bringing the total to 15 districts. Health officials are attributing the severity of the disease to the recent appearance, for the first time in Burkina Faso, of the W135 serogroup. Officials believe the introduction of the serogroup was from Muslims returning from pilgrimage to Mecca in 2000. Vaccination for the W135 serogroup was not historically given in Burkina Faso. The report is at http://www.irinnews.org/report.asp?ReportID=27038.

Monkeypox - Democratic Republic of the Congo (DRC)

On 22 March, ProMED reported three epidemic foci of monkeypox in the DRC. As of 19 March, 293 cases/suspect cases with 23 deaths (case fatality rate 8%) were reported in Equateur, a northwest province in the DRC. The report is at http://www.promedmail.org/pls/askus/f?p=2400:1202:164393::NO::F2400_P1202_CHE_CK_DISPLAY,F2400_P1202_PUB_MAIL_ID:X,17798.

Q Fever - Bosnia

On 26 March, the Agence France-Presse reported that 15 <u>UN</u> staff members serving in Bosnia were infected with Q fever and had displayed symptoms similar to severe influenza. Disease reservoirs of Q fever include sheep, cattle, goats, cats, dogs, birds, ticks, and some wild animals. The mode of transmission is commonly by inhalation of the rickettsia on airborne dust. The infected UN staff worked in an office located near to a sheep farm in Livno, a southwestern Bosnian town. The staff members were treated with antibiotics and are recovering. Q fever has affected Livno in the past and some local residents were reportedly also infected by this latest outbreak. The report is at http://www.ptd.net/webnews/wed/bn/Qbosnia-un-health.R-et_CMQ.html.

Depleted Uranium (DU) - Serbia and Montenegro

On 27 March, the <u>UN</u> Environment Programme [sic] (UNEP) announced widespread, but low-level, DU contamination at five sites in Serbia and one site in Montenegro, which were struck by DU munitions during the 1999 Kosovo conflict. The UNEP study concluded that the DU does not present immediate radioactive or toxic risks for the environment or human health. These findings are consistent with the UNEP's 2001 DU study in Kosovo. Using advanced monitoring equipment, the UNEP found DU particles were still in the air. The UNEP recommended that authorities carefully consider how DU-targeted sites are used in the future as major soil disturbances could result in an increased health risk. The UNEP also recommended the local population be informed about DU issues. The biggest long-term concern was the possible contamination of ground water by corroding penetrators. Penetrators are ammunition tips made from

DU. The report recommended that ground water sources be monitored annually and all DU sites be posted and fenced off to preclude access to children. The report is at http://postconflict.unep.ch/publications/duserbiamont.pdf and the Kosovo report is at http://balkans.unep.ch/du/reports/uranium.pdf.

USJFCOM

Blastomycosis - North Carolina

On 27 March, the North Carolina Department of Health and Human Services released a statement urging people in Duplin County with persistent lower respiratory tract symptoms to see their doctors for testing and possible treatment. The announcement came after the seventh case of blastomycosis in Warsaw, which is located in the southeastern portion of the state. The cases included four high school students, two men aged 30-39, and one 82-year old man, who died on 21 March after one month in the hospital. Symptoms of blastomycosis generally include flu-like illness with fever, chills, productive cough, shortness of breath, muscle pain, joint stiffness and pain, or chest pain. Weight loss and skin rash or skin lesions may also be present. The source of the infection has not been determined for this outbreak, but spores of the fungus occur naturally in moist soil in the southeastern US and other regions. The report is at http://www.dhhs.state.nc.us/pressrel/3-27-02.htm.

Gas Mask Distribution - Alabama

On 28 March, the *Montgomery Advertiser* reported that the federal government would fund the first mass distribution of gas mask-like safety gear to civilians on US soil. About 35,000 east Alabama residents who live near the Anniston Army Depot (ANAD) would receive the safety gear and training on its use. Funding would also cover safety gear for 500 police, firefighters, and emergency management workers who would respond to any on-site accident. The chemical weapons incinerator at the ANAD is scheduled to begin trial burns of nerve gas in September. The report is at http://www.montgomeryadvertiser.com/1news/alabama/032802_incinerator.html.

Influenza Surveillance – DoD

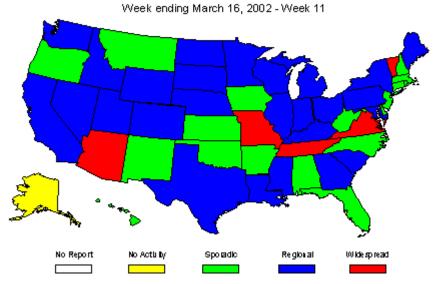
The DoD Worldwide Influenza Surveillance Program is a laboratory-based influenza surveillance program managed by the Air Force. As of 28 March, 511 (19%) of 2,640 submitted specimens have been identified as positive for influenza since the start of the influenza season (29 September): 488 (95%) were influenza A and 23 (5%) were influenza B. Nine (45%) of the 20 isolates identified during the past week were from Little Creek Naval Air Base, Virginia. Five (71%) of the seven influenza B isolates identified during the past week were also identified from this same installation. Of the 488 influenza A isolates, 101 (21%) have been subtyped, and 95 (94%) were influenza A (H3N2) and 6 (6%) were influenza A (H1N1). Further info, including data from the CDC and international sites, is available at: https://pestilence.brooks.af.mil/Influenza/

Note: Some users may experience difficulty accessing this link directly from this document; if this occurs, copy and paste the hyperlink in your browser address bar.

Influenza Surveillance - US

The <u>CDC</u> report for the week ending 16 March (week 11) indicated that during this week overall national visits to physicians for influenza-like illness were 2.0%, which is above the national baseline of 1.9%. Deaths attributed to pneumonia and influenza were 9.3%, which is above the epidemic threshold of 8.2% for this week. For week 11, laboratory reports indicated 276 (19.8%) of 1,395 respiratory specimens were positive for influenza: 45 influenza A (H3N2), 1 influenza A (H1N1), 38 influenza B, and 192 influenza A viruses with unspecified subtype. Since 30 September, 11,041 (15.9%) of 69,323 submitted specimens were positive for influenza: 10,741 (97%) were influenza A and 300 (3%) were influenza B. Of the 10,741 influenza A viruses, 3,084 (29%) were subtyped with the following results: 3,045 (99%) were influenza A (H3) and 39 (1%) were influenza A (H1) viruses. The CDC classified influenza during week 11 of the 2002 influenza season as in the map below. The report is at http://www.cdc.gov/ncidod/diseases/flu/weeklyarchives/weekly11.htm.

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists



Picture courtesy of the CDC at http://www.cdc.gov/ncidod/diseases/flu/weeklyarchives/weekly11.htm.

Missile Fuel Converted into Fertilizer - Georgia

On 28 March, the <u>VOA</u> reported that the Organization for Security and Cooperation in Europe is supervising the conversion of missile fuel into fertilizer for soil in western Georgia under the program "Melange Project." Melange is a highly unstable missile fuel component. The project aims to reduce the ecological impact of dismantling former Soviet Union bases in Georgia. Officials from the project said that hundreds of tons of

toxic waste from the Soviet era remain throughout Georgia. Governments from the Netherlands, Germany, Turkey, and Britain are contributing money and experts to the project. The report is at http://www.osce.org/news/generate.php3?news_id=2374.

Nominees for Key Health Posts - White House

On 26 March, President Bush announced his nominee to lead the NIH is Elias Zerhouni and as the next Surgeon General (SG) is Richard Carmona. Dr. Zerhouni, an immigrant from Algeria, is the Executive Vice Dean of the John Hopkins University School of Medicine, the Chairman of the Department of Radiology and Radiological Sciences at Johns Hopkins, and a Professor of Radiology and Biomedical Engineering. The President stated that Dr. Zerhouni would be at the forefront of efforts to promote biomedical research with a careful regard for the bounds of medical ethics. Dr. Carmona has a diverse background as an Army Green Beret in Vietnam, a decorated police officer in Pima County, Arizona, a SWAT team member, a nurse, and a physician. Dr. Carmona currently serves as the Clinical Professor of Surgery and Clinical Assistant Professor of Family and Community Medicine at the University of Arizona. He is also the chairman of the state of Arizona Southern Regional Emergency Medical System. The President stated that the SG would address three urgent issues: (1) response to the threat of bioterrorism, (2) an initiative that focuses on prevention and life-long healthy living as a key component to medical care, and (3) an initiative to decrease alcohol and drug abuse especially in students. The report is at http://www.whitehouse.gov/news/releases/2002/03/20020326-3.html.

Pre-Diabetes Screening - DHHS

On 27 March, an expert panel convened by the DHHS and the American Diabetes Association (ADA) recommended that physicians begin screening overweight people age 45 and older for pre-diabetes during regular office visits by using the fasting blood glucose test or the oral glucose tolerance test. The panel also recommended screening for overweight adults under age 45 if they have one or more of the following risk factors: (1) family history of diabetes, (2) low HDL cholesterol and high triglycerides, (3) high blood pressure, (4) history of gestational diabetes or birth to a baby weighing more than nine pounds, or (5) belong to a minority group. "Pre-diabetes" is defined by the DHHS and ADA as a condition in which blood glucose levels are higher than normal but not yet diabetic. The report stated that most people with pre-diabetes go on to develop type 2 diabetes within 10 years. The panel recommends screening because (1) blood glucose levels in the pre-diabetes range puts a person at a 50% greater likelihood for having a heart attack or stroke, (2) type 2 diabetes can be delayed or prevented through modest lifestyle improvements, and (3) for many people modest lifestyle changes can return elevated blood glucose levels to the normal range. The report is at http://www.hhs.gov/news/press/2002pres/20020327.html.

Rickettsialpox mimics cutaneous anthrax - NYC Department of Health

The NYC Department of Health recently issued an update on communicable disease activity in NYC that included the description of two cases, who had a clinical history consistent with cutaneous anthrax infection, but who were diagnosed with rickettsialpox (Rickettsia akari) infection. Clinical presentation in both cases included an ulcerating lesion with central dark eschar and surrounding erythema and mild induration (see photos below). Associated symptoms included fever, muscle aches, and headache. The generalized papulovesicular rash typically seen with rickettsialpox infection was not noted. A biopsy of the skin lesion and a serum sample were obtained for lab testing in both cases as part of an evaluation for potential anthrax infection. The diagnosis of rickettsialpox infection was determined by immunohistochemical stain of the skin biopsy tissue. CDC tests for anthrax were negative. Neither patient had an obvious exposure to rodents and/or mites. Rickettsialpox is an underdiagnosed infection with an unknown prevalence and geographic distribution. Clinicians are encouraged to include rickettsialpox infection in the differential diagnosis of cutanous lesions with an eschar. Laboratory confirmation is essential to determine the cause of cutanous lesions with an eschar. The report is at http://nyc.gov/html/doh/html/cd/02md6.html#ric and a fact sheet on rickettsialpox is at http://nyc.gov/html/doh/html/cd/cdrick.html.



Eschar of patient with rickettsialpox. Courtesy of http://nyc.gov/html/doh/html/cd/02md6.html#ric.

Service Dogs for Persons with Seizure Disorders - Florida

On 21 March, the Florida legislature passed a bill that will make service dogs legal for persons with seizure disorders. If the Governor signs the bill, Florida will be the first state to adopt this use of service dogs. Seizure alert or seizure response service dogs react to a seizure event during the earliest stages to warn the patient of an impending seizure event. Although the seizure-alert capabilities of these animals remain controversial, the seizure-response capabilities include: vocal alert, physical contact alert, activation of the emergency medical system, and vocal or physical alert of others.

The University of Florida, College of Veterinary Medicine (CVM), has initiated a study to evaluate the abilities of seizure alert dogs. Information on the CVM study is at http://www.vetmed.ufl.edu/ufmrg/dog/ and on the Florida bill is at <a href="http://www.leg.state.fl.us/session/index.cfm?Mode=Bills&SubMenu=1&Tab=session&Bl_Mode=ViewBillInfo&BillNum=2210&Chamber=Senate&Year=2002&Title=%2D%3EBill_%2520Info%3AS%25202210%2D%3ESession%25202002.

Surgeon Shortage Predicted - Archives of Surgery

On 29 March, the <u>VOA</u> reported on an article in the *Archives of Surgery*, which stated that if a recent trend continues, the number of students interested in becoming surgeons would again decline. Medical educators say there is no shortage of surgeons yet, but they are concerned. Last year was the first year in which the number of general surgery residencies available to US students exceeded the number of applicants. Foreign-born students eventually filled 68 positions that were left open. The *Archives of Surgery* stated that if there is a shortage of surgeons ahead, it is probably about ten years away.

USPACOM

Brucellosis - New Zealand

On 15 March, the New Zealand Ministry of Agriculture and Forestry (MAF) reported a traceback investigation was underway to determine the source of a case of undulant fever that was confirmed in an Auckland man for which biochemical profiling suggested the causative agent was *Brucella suis*_biovar 3. *Brucella suis* had not been previously identified in New Zealand livestock; previous human cases were due to exposure outside the country. The current case had not traveled outside of New Zealand for ten years. In December 2001, the case did purchase two pigs that were killed and butchered in a home-kill operation for the consumption of two family feasts. If direct evidence of livestock infection is confirmed, the MAF plans to suspend export certificates of pig meat and pig products. The report is at http://www.maf.govt.nz/mafnet/press/150302bru.htm.

USSOUTHCOM

Dengue Fever - Cuba

On 28 March, the Washington Post reported that President Fidel Castro announced the end of the dengue fever outbreak in Cuba after an intense campaign was launched on 12 January, which involved spraying pesticides up to "several times a week." According to the report, the outbreak was considered a matter of national security, which led to fines of residents who refused to allow fumigation of their homes. The report is at http://www.washingtonpost.com/wp-dyn/articles/A29146-2002Mar28.html.

Dengue Fever - Easter Island

On 27 March, Health Canada reported that over 130 suspect cases of dengue fever were reported for the first time on Easter Island, a remote island over 12,000 miles west of the Chilean mainland. All of the cases were reported in the only city of Hanga Roa. Dengue fever has not been reported in mainland Chile. The report is at http://www.hc-sc.gc.ca/pphb-dgspsp/tmp-pmv/2002/df0327_e.html.

Dengue Fever - Ecuador

On 31 March, ProMED reported that Ecuador had declared a state of public health and economic emergency in two Andean states and the coastal states, areas severely affected by intense rainstorms beginning in February. Epidemics of dengue/dengue hemorrhagic fever (DHF) and malaria are reportedly present. The source also reported that as of 26 March, 816 cases of suspected dengue fever had occurred, 23 of which had been confirmed, including two cases of DHF. An additional 21 cases of suspected DHF are being investigated. The report is at http://www.promedmail.org/pls/askus/f?p=2400:1001:164301::NO::F2400_P1001_BACK_PAGE,F2400_P1001_PUB_MAIL_ID:1010,17852.

Malaria - Costa Rica and Panama

On 28 March, <u>AFMIC</u> reported 400 cases of malaria in western Panama, of which at least 50% were imported from Costa Rica. The report (requires registration) is at http://mic.afmic.detrick.army.mil/.

Yellow Fever - Bolivia

On 26 March, ProMED reported the entire populations of Yapacani, San Juan, and San Carlos in Bolivia are being immunized regardless of previous vaccination status, physicians are receiving additional training in the treatment of yellow fever, and house spraying with insecticide has started in Yapacani, San Carlos, and Santa Fe. Control teams are assessing Buenavista. These actions are in response to an outbreak of yellow fever, which now involves four confirmed cases, including two deaths. At least three more suspect cases are undergoing testing. The report is at http://www.promedmail.org/pls/askus/f?p=2400:1001:164393::NO::F2400_P1001_BACK_PAGE,F2400_P1001_PUB_MAIL_ID:1010,17825.

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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ACRONYMNS

AFMIC - Armed Forces Medical Intelligence Center

AVIP - Anthrax Vaccine Immunization Program

BMJ - British Medical Journal

BSE – Bovine Spongiform Encephalopathy

CDC - Centers for Disease Control and Prevention

CDR – Communicable Disease Report (England)

CME - Continuing Medical Education

DHHS - Department of Health and Human Services

DoD - Department of Defense

EISS – European Influenza Surveillance Scheme

FDA - Food and Drug Administration

HDL - High-density Lipoprotein, Cholesterol

JAMA - Journal of the American Medical Association

MRE - Meals, Ready-to-Eat

NEJM - New England Journal of Medicine

NGO - Non-governmental Organization

NIH – National Institutes of Health

NYC - New York City

PAHO - Pan American Health Organization: http://www.paho.org

SWAT - Special Weapons and Tactics

UK - United Kingdom - England, Northern Ireland, Scotland, and Wales

UN - United Nations

USAID - United States Agency for International Development

USAMRIID - United States Army Medical Research Institute for Infectious Diseases

USDA - United States Department of Agriculture

USGS - United States Geological Survey

VA - Veteran's Administration

vCJD - variant Creutzfeldt-Jakob Disease

VOA - Voice of America, an international multimedia broadcasting service funded by the US Government

WHO - World Health Organization

WMD - Weapons of Mass Destruction