STATE OF MARYLAND

DHMH

**Maryland Department of Health and Mental Hygiene**
201 W. Preston Street, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

**Office of Preparedness & Response**
Isaac P. Ajit, M.D., M.P.H., Deputy Director

# March 28, 2008
# Public Health & Emergency Preparedness Bulletin: # 2008:12
# Reporting for the week ending 03/22/08 (MMWR Week #12)

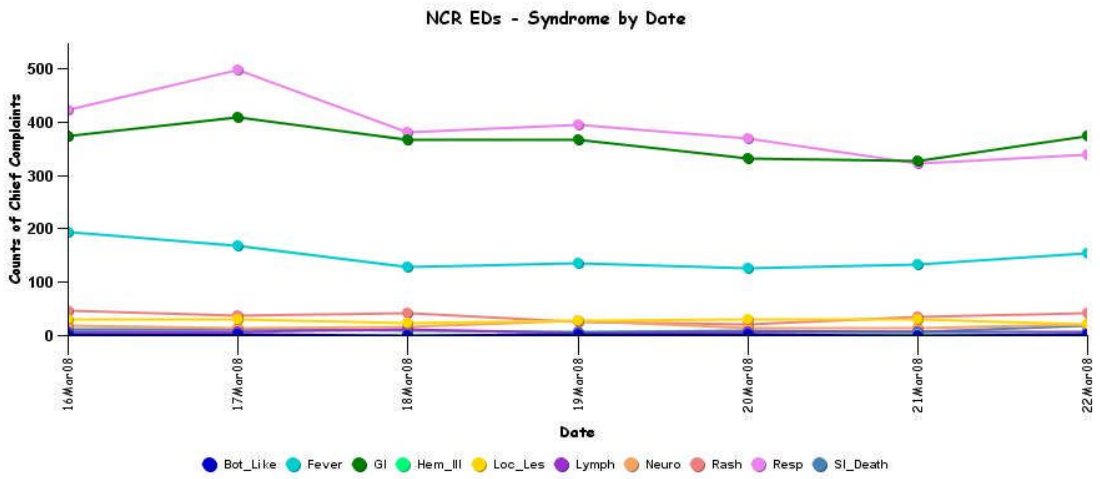
## CURRENT HOMELAND SECURITY THREAT LEVELS

**National:** **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
**Maryland:** **Yellow (ELEVATED)**

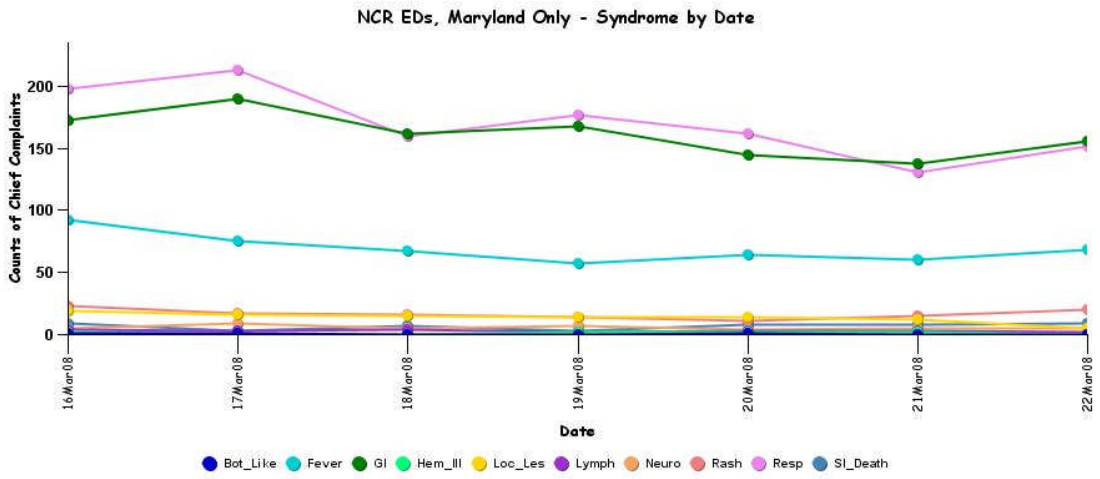
## SYNDROMIC SURVEILLANCE REPORTS

**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

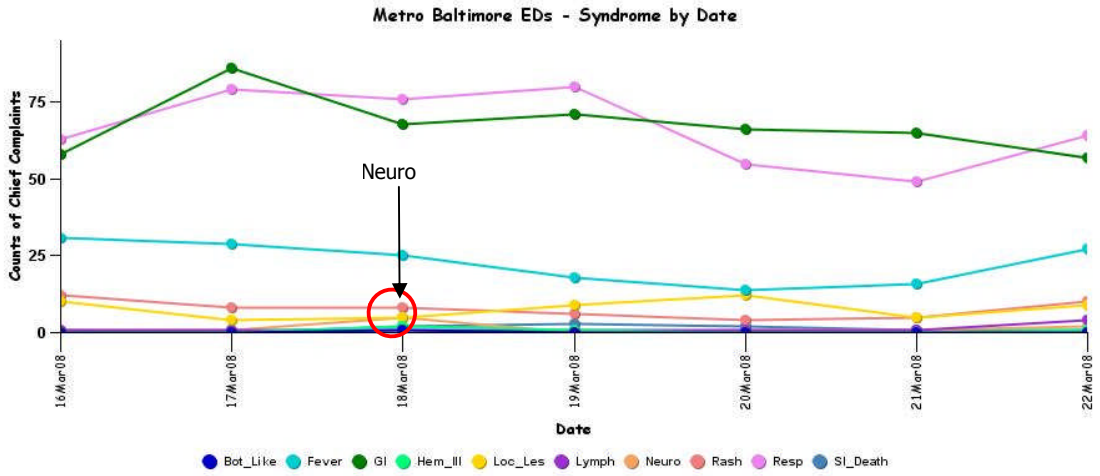
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.




* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system

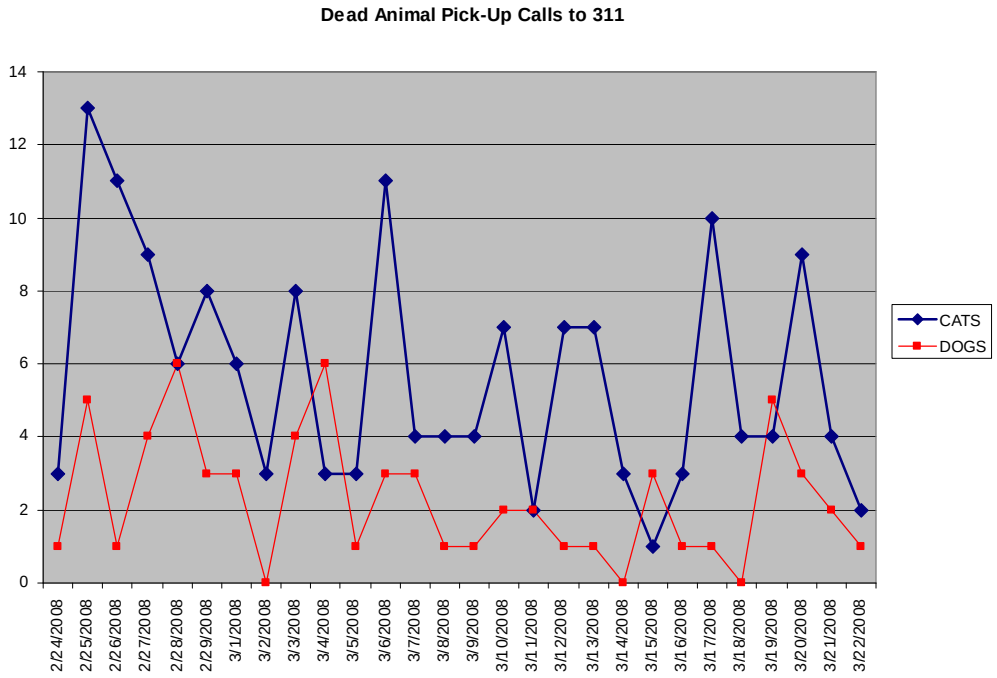



* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



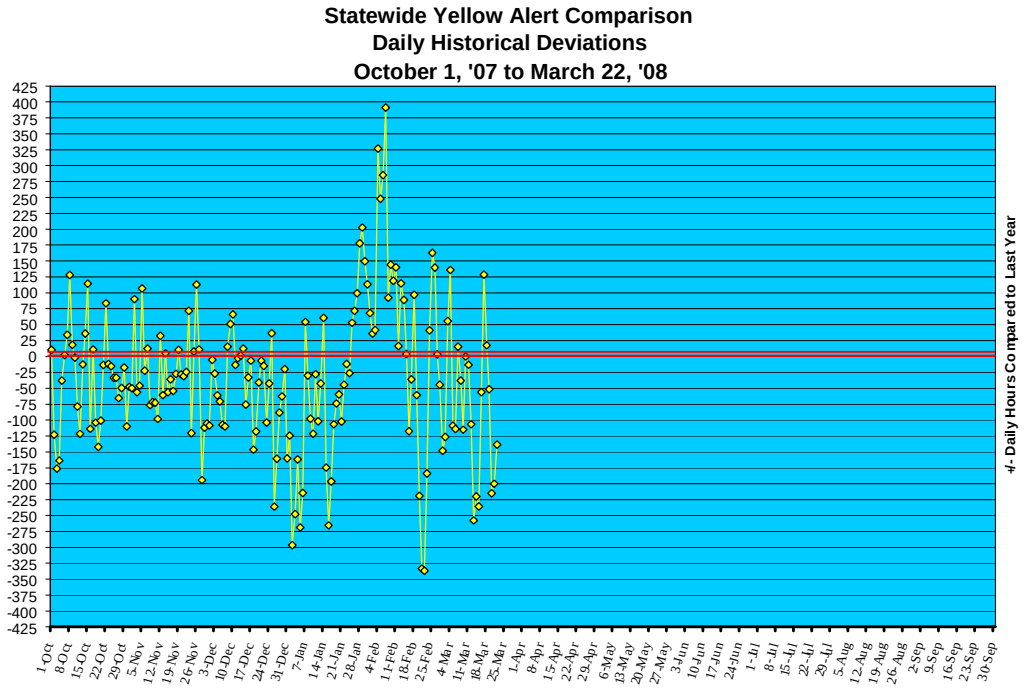

* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

**BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT:** No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.




## REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/06.



## REVIEW OF MORTALITY REPORTS

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to BT for the week.

## MARYLAND TOXIDROMIC SURVEILLANCE

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2008 did not identify any cases of possible terrorism events.

## REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

**COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

| **Meningitis:** | **Aseptic** | **Meningococcal** |
|---|---|---|
| New cases (Mar 16 – 22, 2008): | 16 | 0 |
| Prior week (Mar 9 – 15, 2008): | 3 | 0 |
| Week#12, 2007 (Mar 17 – 23, 2007): | 13 | 1 |

**OUTBREAKS: 4 outbreaks were reported to DHMH during MMWR Week 12 (Mar. 16-Mar. 22, 2008):**

**3 Gastroenteritis outbreaks**
1 outbreak of GASTROENTERITIS associated with a Trade Show
2 outbreaks of GASTROENTERITIS associated with Nursing Homes

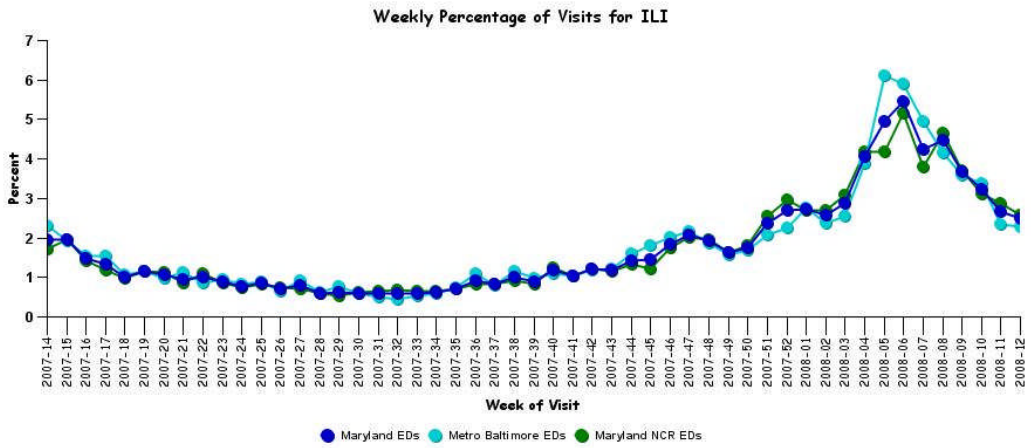
**1 Respiratory illness outbreak**
1 outbreak of RESPIRATORY ILLNESS associated with a Nursing Home

**MARYLAND SEASONAL FLU STATUS:**

Seasonal Influenza reporting occurs October through May. To date this season, there have been 3457 lab confirmed influenza cases in Maryland. Maryland's influenza activity level for this week is REGIONAL.

## SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



**PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO Pandemic Influenza Phase:** Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

**US Pandemic Influenza Stage:** Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

**WHO update:** As of March 18, 2008, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 373, of which 236 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

**AVIAN INFLUENZA, HUMAN (Viet Nam):** 17 Mar 2008, Viet Nam's National Hygiene and Epidemiology Institute said the country's latest human case of bird flu infection was an 11 year old boy from northern Ha Nam province, who died on Mar 14 after 4 days of treatment in Hanoi capital, the Viet Nam News Agency reported on Mar 17. The institute's tests showed that the boy from Thanh Liem district was infected with bird flu virus strain H5N1, the news agency quoted Nguyen Lap Quyet, director of the Ha Nam Health Department, as saying. The boy became ill on Mar 5, and was admitted to the Ha Nam General Hospital in the province on Mar 8, and the National Hospital of Pediatrics in Hanoi on Mar 11. In late February, 10 birds out of a chicken flock raised by the boy's family fell ill and died gradually. Then, his family slaughtered some healthy chickens of the flock for meals. Relevant provincial agencies have disinfected and detoxified the affected area, and selected samples from fowls in the area for bird flu testing. To date, Viet Nam has reported a total of 106 human cases of bird flu infections, including 52 fatalities, in 35 cities and provinces since bird flu started to hit the country in December 2003. According to the country's Department of Animal Health, Viet Nam currently has 11 localities with poultry affected by bird flu.

**AVIAN INFLUENZA (Viet Nam):** 17 Mar 2008, About 300 ducks have died of bird flu in the central province of Quang Nam, the province's People's Committee announced Sunday. Tests on the dead birds from a Thang Binh District farm were positive for the H5N1 virus. Local authorities incinerated all the infected ducks and destroyed chickens from nearby farms. The Zone Four Agency of Animal Health also confirmed bird flu in Quang Nam. Bird flu cases have previously been reported in the provinces of Quang Ninh, Hai Duong, Nam Dinh, Tuyen Quang, Ninh Binh, Vinh Long, Phu Tho, Ha Nam and Hanoi. Under local government regulations, a province is considered clear of bird flu if no new cases are reported during a 21 day period.

**AVIAN INFLUENZA, POULTRY (China):** 17 Mar 2008, An outbreak of bird flu in poultry has been reported in south China's Guangdong Province, the Ministry of Agriculture (MOA) said on Mar 16. The National Bird Flu Reference Laboratory confirmed the case, which occurred at a market in Liwan District of Guangzhou City on Mar 13. It was caused by the highly pathogenic H5N1 subtype of the avian influenza virus, the MOA said. The disease, which killed 114 domestic fowl and led to the culling of another 518, was brought under effective control after the MOA and provincial government took timely emergency measures. It was China's 5th bird flu outbreak in poultry this year. Others included one in the northwestern Xinjiang Uygur Autonomous Region, 2 in the south western Tibet Autonomous Region, and one in the south western Guizhou Province. Li Jinxiang, director of the MOA's veterinary department, on Mar 10, blamed the unprecedented snowstorm and cold snap that hit the country earlier this year for the outbreaks of bird flu. The bird flu virus was active in the cold weather, Li said on the sidelines of the annual session of China's top legislature. The official added the blizzards also made the virus easier to spread after damaging the living conditions of livestock and affecting their regular vaccination work, which is often conducted in February and March.

**AVIAN INFLUENZA (Turkey):** 19 Mar 2008, Veterinary officials in Turkey have confirmed an H5N1 avian influenza outbreak in the western part of the country near the border with Greece, according to a report on Mar 18 from the World Organization for Animal Health (OIE). The virus struck 22 backyard chickens at a village near Ipsala in Edirne province, according to the OIE report. The remaining 16 birds were destroyed. Turkish officials listed fomites, which could involve contamination spread by humans, vehicles, or animal feed, as the source of the outbreak. Turkey's last H5N1 outbreaks occurred over several weeks in January and February 2008 at 6 sites, all of which involved backyard poultry. The OIE report on the outbreaks said the source of the virus was contact with wild species. All of the previous outbreaks occurred near villages along the Black Sea, an area that officials from the United Nations Food and Agriculture Organization (FAO) have said is vulnerable to H5N1 outbreaks, because surrounding countries are a winter home to migratory birds from Siberia and often have poor separation between wild and domestic birds.

**AVIAN INFLUENZA (Laos):** 19 Mar 2008, Government officials in Laos reported a fresh H5N1 outbreak in chickens in Luang Namtha, in the northwestern part of the country near the border with China and Myanmar, Vietnam News Agency (VNA) reported on Mar 19. Yong Chanthalangsy, the country's foreign ministry spokesman, told VNA that 800 birds were destroyed in a 2-mile radius around the affected village, and that the outbreak is the 6th to strike the area in the past month. In mid-February, Laos reported that the H5N1 virus had reemerged in poultry after about a year's hiatus.

**NATIONAL DISEASE REPORTS:**

No new disease reports related to the CDC Critical Biological Agents reported during the week of Mar 16 – 22, 2008.

**INTERNATIONAL DISEASE REPORTS:**

**BRUCELLOSIS, OVINE (Russia):** 17 Mar 2008, One of the sheep farms in the Odintsovo district of the Moscow region was found infected with a dangerous disease agent, brucellosis. "The case is not exceptional and the situation is under control; no room for hysteria and panic," said the Odintsovo District's chief veterinary officer, Vladimir Motoshin, in an interview. As explained by Motoshin, in December 2007, a farmer introduced 100 sheep from the Volgograd region without the prescribed permits and in violation of all veterinary rules. On Feb 29, 2008, the Odintsovo veterinary office was informed on the strange behavior of animals on the Kozlov farm. The Head district veterinarian visited the site on the same day and issued an official order to put the farm and the village Solmanovo under quarantine. A police post was established on the location. Out of 82 tested animals, 25 were found brucellosis positive. Prior to the established diagnosis, 18 sheep were gone. The owner said that they had been consumed by the family, stating that they were not sold in Moscow. Currently, the Kozlov family members and all neighbors are being examined. The Prosecutor's office has been informed about the case, since the farmer had managed to transport animals across nearly half of Russia without proper documentations, passing through tens of police posts. As the farmer explains, he successfully offered bribes in every road post. After the final analysis, the unaffected sheep will be sent to an abattoir and slaughtered for meat, while the infected sheep sent to a rendering plant. Vladimir Motoshin underlined once more that there is no danger to animals or humans as of today. (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**TULAREMIA (Thailand):** 18 Mar 2008, Tularemia killed a woman in Thailand, marking the country's first reported case of the disease. The 37 year old from Prachuap Kiri Khan Province, about 200 miles south of Bangkok, died late last month (February) and the cause of her death was confirmed by laboratory tests in the USA, said an official at the Public Health Ministry today. Disease Control Department director-general Thawat Sundarachan said the woman, whose name was withheld, had kept a number of rabbits in her house and could have been infected by Francisella tularensis, the bacterium that causes the disease, probably through an aerosol of body secretions from her infected pets. Dr Thawat dismissed concerns about an outbreak, saying that there is no threat of human-to-human transmission and that relatives of the dead, who live under the same roof, should not worry. Cancer might have made the woman too weak to fight the disease, he said. Tularemia, also known as rabbit fever, is caused by a bacterium found in animals, especially rabbits and hares, and is treated with antibiotics. Tularemia is endemic in many parts of the world, including North America, Eastern Europe, China, Japan and Scandinavia, according to the World Health Organization in Geneva. (Tularemia is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

**CHOLERA, ACUTE WATERY DIARRHEA (Somalia):** 18 Mar 2008, A number of people have died in the town of Beletweyne, the Hiran regional capital in central Somalia, following an outbreak of acute watery diarrhea (AWD), medical sources said on Mar 17. "At least 3 people have been confirmed dead from the disease in Beletweyne," said Nahashon Erupe, the program coordinator for the International Medical Corps (IMC), in Beletweyne. Erupe said 516 cases of AWD had been recorded between Feb 16 and Mar 9. The IMC, he added, had set up a treatment center on Mar 12 and suspected it was dealing with an outbreak of cholera, being the lead humanitarian agency for cholera response in the area. A local humanitarian worker, who requested anonymity, said the situation in Beletweyne was stabilizing but expressed concern for outlying villages. In the village of Omaad, 50 km north of Beletweyne, 4 people in a family of 12 were reported to have died of AWD. "Unfortunately, we are having difficulties in accessing some of these villages due to lack of transport or insecurity or both," the aid worker said. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**CHOLERA (Angola):** 19 Mar 2008, On Mar 18, the health authorities in Angola's central Huambo province declared a cholera outbreak in the provincial capital city, following the death in the last 5 days of 9 people at Bom Pastor suburb. Huambo city health director, Jaime David Muenhombo, said the samples sent to the national laboratory of public health, in Luanda, indicate the existence of cholera, at a time the cases of the disease tend to rise in the surrounding areas of the provincial capital. Jaime David Muenhombo said a center for treatment of the disease has been opened in Huambo Central Hospital, where 21 cases have been recorded. According to him, there are medicines and other means to control the spread and treat the disease in the region. Also in Angola, 3 people, including 2 children, died of cholera last week in Luacho locality, Baia Farta district, central Benguela province. The local chieftain, Jose Costa Seculo said the deaths where recorded at home and that in the same period another 12 cases were recorded in the same locality. An awareness campaign on preventive measures is underway so as to avoid more deaths. Meanwhile, the heavy rains falling in the region may worsen the situation. In southern Cunene province, 8 new cases of cholera have been reported in the last 24 hours by Ondjiva hospital by a health official on Mar 19. Nurse Francisco Alberto mentioned the poor hygienic condition and the lack of treatment of water by residents as the main source of the disease. Francisco Alberto stated that, with these new cases, the number of people with the disease in the hospital stands at 17, including 3 children. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**CHOLERA (Viet Nam):** 20 Mar 2008, 15 acute diarrhea patients who all ate raw vegetables have been verified as being positive for cholera. The Health Ministry, thus, will seek sources of raw vegetables that have the Vibrio cholerae bacterium

in the 3 provinces that have cholera patients. On Mar 19, the Health Ministry reported 2 more cholera patients in Hai Phong, raising the total number to 6 in this location. According to experts, cholera patients in Hanoi, Hai Phong and Ha Tay all ate raw vegetables. In Hai Phong, all cholera patients ate raw vegetables bought at An Duong market which come from Kien An and An Lao vegetable-planting areas in Hai Phong and Kim Thanh area in Hai Duong province. Health experts tested some vegetable samples taken from the 3 provinces but they didn't discover the Vibrio cholerae bacterium. The Health Ministry, thus, asked scientists to test water sources and fertilizer taken from vegetable-planting areas. According to Deputy Health Minister Trinh Quan Huan, many farmers still use human excrement as fertilizer, and this is the source of Vibrio cholerae bacterium and many viruses which can cause digestive diseases. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

**OTHER RESOURCES AND ARTICLES OF INTEREST:**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

**Avian, human flu co-infection reported in Indonesian teen**
This report describes the first case-report of a human with both influenza A H5N1 and H3N2 co-infection. The 16 year old Indonesian girl tested positive for both avian influenza H5N1 and the seasonal flu strain H3N2 at the Indonesian National Institute of Health Research and Development in April 2007.
(http://www.cidrap.umn.edu/cidrap/content/influenza/avianflu/news/mar1708coinfect.html)

**********

**NOTE**: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Heather N. Brown, MPH
Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
201 W. Preston Street, 3rd Floor
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: HBrown@dhmh.state.md.us