

West Nile Virus Year End Summary

James E. McGreevey,
Governor



Clifton R. Lacy, M.D.,
Commissioner

NJ Communi-CABLE

The New Jersey Department of Health and Senior Services (NJDHSS), in collaboration with local health departments and mosquito control agencies, the New Jersey Department of Environmental Protection and New Jersey Department of Agriculture, has successfully concluded its fourth year of West Nile virus (WNV) surveillance and reporting for the detection of viral activity among avian, mosquito, equine and human populations. As per the WNV Geographic Information System (GIS) surveillance and reporting application, WNV has been identified in all 21 counties in New Jersey in the 2003 season.

Surveillance highlights for the 2003 WNV season in New Jersey are provided below:

Avian – Information on approximately 1,472 birds was entered into the system; 777 of these birds were tested, with the others reported as bird sightings (if not submitted for testing) or labeled unacceptable for testing (if birds have decomposed or the reporting forms were incomplete). 509 of the birds tested positive for the presence of WNV. The NJDHSS stopped testing birds as of October 1, 2003, since at this point almost 100% of submitted birds were positive for WNV. Bird sighting reports continued to be received until the end of October for surveillance efforts.

Mosquito Pools – To date the Public Health and Environmental Laboratories (PHEL) have tested over 8,668 mosquito pools, reporting 356 positive pools from 21 different counties. The earliest WNV positive mosquito pools were recorded or detected around the first week of July. However, a positive Eastern Equine Encephalitis (EEE) mosquito pool was

detected earlier in the season during the last week of June.

Human – 265 patients with WNV-like illness were reported to the NJDHSS, with 191 approved for testing at PHEL. To date, New Jersey has reported 32 human WNV cases, with two fatalities (though cause of death for both was not listed as WNV infection). Symptom onset dates for these cases ranged from July 27 to October 15, 2003. Median age for positive cases was 56 years (range: 20 to 89 years); 52 percent of positive cases were females.

In addition, there were two cases of EEE reported in one two-year old child and a 78-year-old male. These were the first EEE human cases diagnosed in NJ residents since 1984.

Equine – As in previous years, the Department of Agriculture's laboratory performed WNV testing in horses exhibiting neurological signs around the State. To date they have reported 150 WNV positive horses from 16 counties. Eight horses were reported with EEE from four different counties.

Overall, the numbers of WNV cases among human and equine populations in the State are higher than the numbers observed last year. This trend was observed nationally with over 8,567 human cases reported to CDC, compared to 4,156 in 2002.

Additional information on WNV, including fact sheets, protection tips, and testing protocols, can be found at the NJDHSS website at <http://www.state.nj.us/health/cd/enceph.htm>, and national surveillance results can be obtained at the CDC website at <http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm>.

Preventing SARS, Influenza and Other Respiratory Illness

We are in the season. Not the holiday season, but the respiratory illness season. It officially began on October 1st and runs through the end of March. In addition to the usual infections such as influenza and common cold viruses, this year we have an added potential concern: the SARS coronavirus, the agent that causes Severe Acute Respiratory Syndrome.

Although we know that there will be millions of people who experience influenza and/or a cold this year, public health care officials cannot predict whether SARS will return as a threat to the public's health. But we need to be prepared and take action to prevent the transmission of this potentially highly lethal infection, particularly among the elderly and those with chronic illnesses. The steps we take will also help us prevent the spread of the more common infections.

Federal, state and local public health and health care organizations have developed plans to detect, control, and respond to an outbreak of SARS anywhere in the world. And since no new natural SARS cases have been reported since July, a single case would be considered a new outbreak. These plans include guidelines for early detection of suspect cases, protocols for isolation and potential quarantine of exposed individuals, new laboratory testing procedures, and coordinated communications strategies.

An important new approach to preventing the spread of the SARS coronavirus and other respiratory infections is Universal Respiratory Precautions or URP. These precautions are analogous to universal blood borne infection precautions that have been the standard of practice since HIV/AIDS first occurred in the early 1980s. The implementation of URP represents a paradigm shift in preventing disease in daily medical practice and assumes that every person with a respiratory illness is a potential source of serious respiratory infection that can be transmitted to others.

What are the principles of URP? They include early

provision of masks to individuals with respiratory illness while they sit in waiting areas; separation of these patients from patients without respiratory illness; and provision of masks or respirators and gloves to health care providers and insurance that they are used when patients are examined. URP also includes meticulous hand washing with soap and water before and after contact with ill individuals. These measures will minimize the transmission of respiratory illness, even without knowing whether the infectious agent is SARS coronavirus, a common cold virus or influenza virus. And in the case of influenza, we have another effective preventive measure: a flu shot.

Public health care officials want everyone to enjoy their holiday season and to remain healthy throughout the respiratory illness season. Everyone can take steps to ensure their respiratory health by getting vaccinated and implementing Universal Respiratory Precautions. We may not have cures for the illnesses caused by these infections but we can minimize their risk and impact. The responsibility falls on all of us to protect our families, our friends, our neighbors, our patients and ourselves.

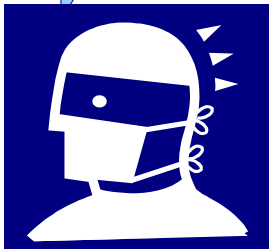


Commissioner Clifton R. Lacy, M.D. (second from right) explains the department's comprehensive SARS Preparedness Plan for the State of New Jersey. He was joined by State Epidemiologist and Assistant Commissioner Dr. Eddy Bresnitz (second from left), as well as Dr. John R. Middleton (far left), Chief Medical Officer, and Lourdes McGonigle (far right), an infectious disease nurse, both of Raritan Bay Medical Center.

**U
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P**

UNIVERSAL RESPIRATORY PRECAUTIONS

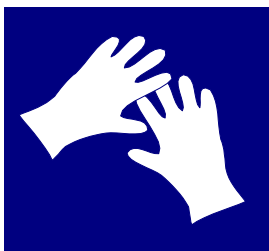
FOR HEALTH CARE SETTINGS



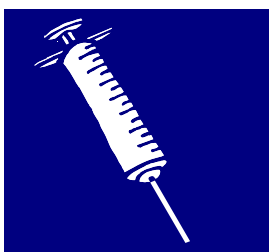
**COVER COUGHS AND
SNEEZES WITH TISSUES
OR SURGICAL MASKS**



**WASH HANDS
FREQUENTLY**



**WEAR GLOVES &
GOWNS AND REPLACE
OFTEN**



**GET YOUR FLU AND
PNEU VACCINES**

State SARS Plan Released

The NJDHSS recently released its SARS Preparedness & Response Plan on December 11, 2003. This planning document has been designed to ensure that New Jersey is prepared to implement an effective response before an outbreak of SARS potentially recurs. The response components in this plan will help minimize morbidity and mortality, and maintain the operation of essential community services in the event of an outbreak.

Two highlights of the plan are:

- **Universal Respiratory Precautions** that will reduce the transmission of all contagious respiratory illnesses, including influenza. For the public, Universal Respiratory Precautions involve the use of tissues or surgical masks to contain coughs and sneezes and frequent hand washing with soap and water. Public health care professionals may add eye protection and contact precautions, such as gown and gloves, when seeing patients with respiratory symptoms; and

- **Isolation & Quarantine** to prevent the transmission of SARS. Isolation is the act of separating ill persons from healthy persons and restricting their movements to stop the spread of illness. Quarantine applies to people who have been exposed and may be infected but are not yet ill. Separating exposed people and restricting their movements is intended to stop the spread of that illness. The legal basis for both of these practices is contained within New Jersey's statutes.



The plan was developed in close collaboration with partner organizations throughout the state and was reviewed by numerous individuals and organizations in the public and private sectors. It is organized to mirror the CDC's plan and can be found on the NJDHSS web page, www.state.nj.us/health/.

NJDHSS Bioterrorism Education Program Wins Award

On December 4, 2003, the 2003 Louise Chut Program of Excellence Award was presented by the New Jersey Society for Public Health Education (NJSOPHE) to Suzanne Miro, NJDHSS Communicable Disease Service Health Educator for "Taking the Terror Out of Bioterrorism." This program was created collaboratively between the NJDHSS and NJSOPHE. The 2001 anthrax attack was an unprecedented situation that caught the public and health educators off guard. Prior to the attack, New Jersey's health educators were poorly trained in issues relating to bioterrorism because there had never been a need for such knowledge. The anthrax attack was fraught with educational challenges both for professionals and the public. Ms. Miro established a Bioterrorism Committee within NJSOPHE to jointly develop a community bioterrorism education program and a health educator training program to fill the voids. As a result, 165 health educators were trained in the implementation of a program entitled "Taking the



Terror Out of Bioterrorism." This program was designed to teach the general public about bioterrorism-related diseases while allaying their fears by putting personal risk into perspective.

To date, "Taking the Terror Out of Bioterrorism" has reached over 1,300 NJ residents. Surveys completed by the general public who attended this program to date indicate there was an increase in the public's:

- confidence in New Jersey's public health system to prepare for and respond to a biological attack;
- knowledge that public health measures can control an outbreak; and
- knowledge of bioterrorism-related diseases.

The program will be modified in early 2004 to reflect advancements that have been made in bioterrorism preparedness so that participants receive the most up-to-date information.

CDRS Corner

Never heard of the CDRS?

For those of you new to this corner, the Communicable Disease Reporting System or CDRS, is New Jersey's web-enabled, electronic reporting system for communicable diseases. CDRS is now in the second phase of a three-phase roll-out. The first phase incorporated the local health departments and the county Local Information Network & Communications System (LINCS) sites. The second phase includes hospitals and laboratories, and the third phase will reach out to the physicians throughout New Jersey. Eventually, hospital laboratories will have their data entered into the CDRS directly via a direct line feed, as the commercial laboratory LabCorp does presently. In the interim, hospital and lab personnel will be trained to key the data into the CDRS in the same manner as local and county health department personnel.

IMPORTANT!!

A Time for Cleaning

Year-end totals for reportable communicable diseases have to be approved by the State Epidemiologist by the end of the first quarter of the year following the data collection and transmitted to the Centers for Disease Control and Prevention (CDC).

Therefore, 2003 CDRS data needs to be "cleaned" which means making sure that all the follow-up has been done on open cases to ensure that the correct case status has been assigned to each case, that any duplications have been merged and errors have been corrected, or deleted, as appropriate. If you have any questions at all about this "cleaning" process, please contact the CDRS Coordinator immediately.

Training Available

Please note that as of January 1, 2004, weekly training sessions are scheduled at University Plaza I, 3635 Quakerbridge Road in Hamilton, NJ. Again, individuals can register for these 2 ½ hour training sessions by contacting the CDRS Coordinator directly. Perfect for new employees or for those who cannot afford to have their entire department leave at the same time for an on-site or local training session,

these weekly trainings offer hands-on experience doing data entry into the CDRS at a time that best fits into your department's schedule; be sure to have the person who will actually be doing your data entry attend the training session.

A New Module/Capability in the CDRS

The CDRS is being expanded to incorporate a surveillance module that will also enable public health personnel to report Influenza Like Illnesses (ILI) surveillance data and emergency department surveillance data that previously were tracked manually. Capability-specific training will be coordinated with the roll-out of this new module which is scheduled for the first half of 2004.

For questions regarding CDRS data cleaning or to arrange for training, please contact:

Marlene Bednarczyk, MSQSM
CDRS Coordinator
Marlene.bednarczyk@doh.state.nj.us
609-588-7500



CDRS Helpline:
1-800-883-0059

NJDHSS Communicable Disease Service

- Eddy Bresnitz, MD, MS, State Epidemiologist, Senior Assistant Commissioner
- Janet DeGraaf, MPA, Director, Communicable Disease Service
- Christina Tan, MD, Medical Director, Communicable Disease Service
- Suzanne Miro, MPH, CHES, Editor, Health Educator, Communicable Disease Service

Reportable Disease of the Quarter: Hepatitis A



Hepatitis A is an acute liver disease of viral etiology. The disease is typically characterized by abrupt onset of fever, malaise, anorexia, nausea, abdominal cramps and sometimes diarrhea.

Jaundice, dark urine and clay-colored stool may follow a few days after onset. The severity of symptoms may vary. Children under the age of six are often asymptomatic or may present with very mild symptoms. The duration of a typical case of hepatitis A is several weeks. The disease is rarely fatal and has no chronic carrier state.

Humans with active infections, whether symptomatic or not, are the reservoir for the hepatitis A virus. The disease is spread from person-to-person via the fecal-oral route of transmission. Persons may become infected by ingesting contaminated foods, or on rare occasions, contaminated water. Contaminated shellfish have been implicated in outbreaks of hepatitis A, as well as ready-to-eat food such as sandwiches and produce. These implicated food items are often contaminated by an infected food handler. Contamination of food products can also occur at the source of production. This appears to have been the case in the recent outbreak in western Pennsylvania linked to green onions imported from Mexico.

The incubation period for hepatitis A ranges from 15-50 days, with an average of 28-30 days. Infected individuals are most infectious 14 days prior to symptom onset to 7 days after onset of symptoms. All close contacts of a confirmed hepatitis A case should be advised to get prophylactic hepatitis A immune globulin (IG) ideally within 14 days of exposure to the infected individual or contaminated source. When IG is administered within 14 days of exposure, it is 80-90% effective in preventing hepatitis A infection.

Vaccine to protect against hepatitis A is available. Vaccination is recommended for individuals deemed to be at high-risk for contracting hepatitis A. These individuals include those traveling to or working in countries with endemic rates of hepatitis A, illegal drug users, men who have sex with men, persons with chronic liver disease and persons who receive clotting factor concentrates. Hepatitis A vaccine is not recommended for use as post-exposure prophylaxis.

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Smallpox Spot

As part of the ongoing smallpox preparedness and response efforts, NJDHSS is working with acute care hospitals in the development and revision of smallpox plans. Hospitals are currently revising their plans with the assistance of a tool developed by NJDHSS. All facilities will also participate in an exercise, which will test their smallpox plan, by the August of 2004.

The NJDHSS Bioterrorism Unit has written a manual entitled "Coordinating a Smallpox Vaccination Clinic" for LINCS agencies and acute care general hospitals. This manual is a step-by-

step guide for individuals to effectively plan and implement a vaccination clinic. Checklists and reproducible materials are included. The manual will be distributed at a half-day training on January 27, 2004.

For general questions regarding this training, contact the NJDHSS Bioterrorism Unit at 609-588-7500.



Our Mission

The mission of the Division of Epidemiology, Environmental and Occupational Health is to protect the citizens of the State and the visiting public from hazards found in the environment, home, and workplace through appropriate surveillance, intervention, education, and outreach.

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The NJDHSS Communicable Disease Service Includes:

- Infectious & Zoonotic Disease Program (IZDP)
- Vaccine Preventable Disease Program (VPDP)
- Sexually Transmitted Disease Program (STD)
- Tuberculosis Program (TBP)

Past editions of the NJ Communi-CABLE are available on the Communicable Disease Service website:

<http://www.state.nj.us/health/cd/index.html>

Notice of Vacancy: Public Health Representative 3

Under supervision of the Foodborne Disease Coordinator, the Public Health Rep. will supervise one Technical Assistant 3, analyze and prepare reports identifying foodborne disease clusters to ensure early detection and response to possible disease related bioterrorism events, and act as liaison to the Public Health and Environmental Laboratories and hospital laboratories.

Requirements: Graduation from an accredited college or university with a bachelor's degree. One year experience in a communicable disease-related health or social service program

If interested and you would like the full job vacancy announcement, please contact Gail Zoerner at 609-588-7500.

Reportable Disease of the Quarter: Hepatitis A cont...

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The main objective in following up a case-patient of hepatitis A is to determine whether the case-patient is likely to spread the infection to others and if so, to prevent further transmission. Special attention should be given to the investigation of infected individuals associated with or working in food service facilities, healthcare settings, institutional settings, and daycare facilities. Investigation of hepatitis A cases should include obtaining information about the case-patient's involvement at any of these types of facilities as well as the involvement of any close contacts. Infected individuals should be given information on how to prevent the further transmission of hepatitis A through the

implementation of good hygienic practices (e.g. proper hand-washing).

Hepatitis A is a reportable disease in accordance with the provisions of N.J.A.C 8:57 and is immediately reportable in institutional settings. A confirmed case of hepatitis A is determined by the presence IgM antibodies against the hepatitis A virus (IgM anti-HAV) in the blood, which is indicative of a current infection. The presence of IgG antibodies (without the presence of IgM anti-HAV) is indicative of a past infection and immunity to hepatitis A.

Additional information on hepatitis A, including the case definition and fact sheets can be obtained at www.state.nj.us/health and www.cdc.gov.