NJ Communi-CABLE

JANUARY 2010

NJDHSS Enhances TB Testing Ability

By: Thomas Privett, Program Manager

The New Jersey Department of Health and Senior Services' Tuberculosis (TB) Program now has access to nucleic acid amplification (NAA) testing for the rapid identification of *M. tuberculosis* through the UMDNJ Public Health Research Institute (PHRI) in Newark. This testing enables identification of *M. tuberculosis* within one day of receipt of a clinical specimen, compared to several weeks for liquid media culture identification using a DNA probe. NAA testing achieves this advantage by amplifying (multiplying) existing DNA, rather than awaiting natural growth to produce sufficient DNA for culture identification by probe. This testing is FDA approved.

NAA testing is highly sensitive (95%) and highly specific (100%) for the identification of *M. tuberculosis* in smear-positive respiratory specimens. This means the likelihood of a false positive NAA test for *M. tuberculosis* when compared to the subsequent culture result is only 5%, but the possibility of a false negative result compared to culture is practically nil. NAA testing will not replace, but rather supplement, culture identification in instances when a more rapid result is advantageous. Culture remains the "gold" standard for confirmation of the presence of *M. tuberculosis* and will continue to be done to confirm the validity of NAA test results.

Three criteria must be met to qualify for NAA testing at PHRI through the TB Program. The patient **must** be:

- **Suspected** of having active TB disease (no prior positive culture for *M. tuberculosis*),
- Reported as **sputum smear positive** for AFB by the state TB laboratory, **AND**
- Under the medical supervision of a public health TB clinic.

The primary advantage of rapid detection of *M. tuberculosis* in the public health arena is the time and effort expended in contact investigations for smear positive TB suspects for whom active disease is later ruled out by the culture result. Sputum smears positive for AFB are a significant indicator of infectiousness. The public health department cannot wait weeks for a culture result before initiating a contact investigation, but could delay days for NAA test results. Contact investigations can be very labor intensive and sometimes involve congregate settings (i.e., worksites, schools, nursing homes).

Also being offered at PHRI is molecular drug susceptibility testing (DST). This testing results in the rapid detection of isoniazid and/or rifampin resistance. Molecular DST involves an examination of the DNA to look for mutations specifically associated with resistance to either isoniazid or rifampin. The results of molecular DST can be available in as little as one day after specimen receipt, rather than the month or more typically required for conventional DST results for these first-line drugs.

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Awareness Months

February

International Prenatal Infection Prevention Month

March

World Tuberculosis Day (24th)

Viral Hepatitis Advisory Board

By: Laura Taylor, Health Educator

The newly reconvened New Jersey Department of Health and Senior Services (NJDHSS) Viral Hepatitis Advisory Board participated in a conference call on November 5, 2009. The advisory board consists of representatives from state government (NJDHSS and New Jersey Department of Corrections), health care, clinical research, and community-based hepatitis organizations representing the various geographic regions within the state.

Members of the advisory board are appointed by the NJDHSS Commissioner because they have demonstrated interest and expertise in hepatitis.

The purpose of the advisory board is to provide advice and recommendations to the Commissioner regarding hepatitis C related matters. However, the board will now address all forms of viral hepatitis.

Updating the State's Viral Hepatitis Plan and Hepatitis Resource Guide is a priority task of the board.

The board was originally formed in 2003 in response to Chapter 357 of the Revised Statutes, enacted by the Senate and General Assembly.

Hepatitis Legislation

By: Laura Taylor, Health Educator

Did you know that there is new legislation surrounding viral hepatitis and liver cancer? HR 3974 is the Viral Hepatitis and Liver Cancer Control Act of 2009. The bill was developed to reduce the significant morbidity and mortality from end-stage liver disease and liver cancer caused by chronic hepatitis B and C. Its aim is to increase awareness prevention for the millions of people who are infected, with over 50% who are unaware that they have these viral diseases. The bill asks for $90,000,000 in 2011 to establish, promote and support comprehensive prevention, research, and medical management referral for hepatitis B and C. It asks for support of state health departments to do surveillance, prevention and immunization.

World Hepatitis Day

By: Laura Taylor, Health Educator

Did you know that one in 12 people across the globe has hepatitis B or C? The theme of last year's World Hepatitis Day was "Am I Number 12?" That campaign raised awareness about the incidence of the disease and encouraged people to get tested. It was an effective way to communicate about the disease to a mass audience. World Hepatitis Day is scheduled for May 19, 2010. This year's campaign, "This is Hepatitis" aims to decrease stigma associated with viral hepatitis and focus on the impact of the disease.

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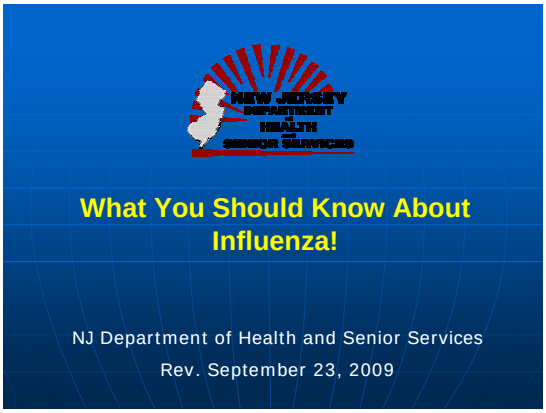
Team Health Races for the Cure...Again!

By: Rosemary Kidder, IZDP Program Coordinator

On October 4, 2009, New Jersey Department of Health and Senior Services (NJDHSS) employees, along with their family and friends, participated in the 2009 Central and South Jersey Susan G. Komen Race for the Cure at Six Flags Great Adventure. NJDHSS Team Health won the "Largest Government Team Award" with 127 members, quite an increase over last year's 62 participants. The team raised over $5,100 in donations, far surpassing the original goal of $2,500. Governor Corzine was in attendance and ran the race. He proudly wore the Team Health t-shirt while graciously having his picture taken with several Team Health members. Commissioner Howard gave a very inspiring speech and received the team award on behalf of Team Health. NJDHSS will continue its tradition of building an even larger team next year. Thanks to all for your support.

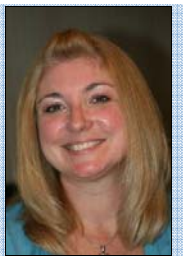
What You Should Know About Influenza!

The newly revised community influenza education program is now available by request. Previously known as "Influenza: Facing New Global Challenges," this presentation is designed to provide all the key facts about influenza for community groups. Information covered by the presentation includes: what is influenza, symptoms, how it is spread, seasonal vs. pandemic, how pandemics start, control methods including antiviral medications, social distancing and isolation of sick people. Additional focus is provided on preventive measures such as handwashing, covering coughs and sneezes and staying home when sick. Participants will learn how they can develop a personal influenza preparedness plan as well as where to find credible information about influenza. The program also includes newly added information about school closures and H1N1 testing. To arrange a presentation please contact your local LINCS agency Health Educator/Risk Communicator!



National SOPHE Board has NJ Presence

Suzanne Miro, Health Education Coordinator for the New Jersey Department of Health and Senior Services—Communicable Disease Service was elected as Secretary for the national Society for Public Health Education and began her two-year term at the SOPHE annual meeting on November 6, 2009 in Philadelphia, PA. Ms. Miro will serve as a voting member of both the SOPHE Board of Trustees and the Executive Committee and will also serve on the Personnel Committee and the Strategic Planning Committee.



NJDHSS Employee Installed as NJSOPHE President

Laura Taylor, Health Educator for the New Jersey Department of Health and Senior Services—Communicable Disease Service, began her term as President for the New Jersey Society for Public Health Education (NJSOPHE). The officer installation occurred at the NJSOPHE annual meeting in Basking Ridge, NJ on December 3, 2009.

H1N1 Communications Corner!

The New Jersey Department of Health and Senior Services has several new communication tools for influenza and 2009 H1N1 influenza. Many of our flu education materials have been translated into Spanish, and several have also been translated into Chinese, Polish, and Arabic. These materials can be found alongside their English counterparts on our website at http://nj.gov/health/flu/forfamilies.shtml and http://nj.gov/health/flu/generalinfo.shtml.

A new educational brochure entitled "Flu Basics: What You Need to Know to Stay Healthy During Flu Season" is now online. A limited print supply is also available. To order please contact the Communicable Disease Service at 609-826-5964.

Please check these sites often for updates!!! →

http://nj.gov/health/flu/h1n1.shtml
http://cdc.gov/h1n1flu/

Handwashing posters and vinyl mirror decals now available! Hurry while supplies last! Call 609-826-5964 to order!

NJDHSS Enhances TB Testing Ability

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Molecular DST is a proven technique for the rapid detection of resistance to isoniazid and/or rifampin, but is not yet FDA-approved. Despite this fact, it is used routinely in the states of New York, California and Florida. Conventional DST will continue to be performed on all initial *M. tuberculosis* cultures identified by the state TB laboratory.

If NAA testing is done at PHRI, then molecular DST for the rapid detection of resistance to isoniazid and/or rifampin will follow routinely. If NAA testing is not done at PHRI, the following criteria must be met to access this service:

- Conventional DST results are **not** available,
- Resistance to either isoniazid and/or rifampin is **suspected**, **AND**
- The patient is under the medical supervision of a public health clinic.

If resistance to both isoniazid and rifampin is identified by molecular DST, PHRI will routinely perform molecular DST to determine resistance to the fluoroquinolones. This is important as this class of drugs is routinely prescribed for the treatment of multi-drug resistant (MDR) TB.

The primary advantage of molecular DST is the early initiation of effective therapy for MDR-TB. This minimizes the duration of the infectious period, thus reducing transmission of MDR-TB in the community and decreases the likelihood of additional drug resistance in the index case due to an ineffective initial treatment regimen.

Both NAA testing and/or molecular DST at PHRI can be accessed by contacting Erick Cortes, MPH (TB Genotyping Coordinator/Laboratory Liaison) at erick.cortes@doh.state.nj.us or Karen Galanowsky, RN, MPH (TB Nurse Consultant) at karen.galanowsky@doh.state.nj.us to complete a laboratory requisition form. The TB Program will then work expeditiously to get the specimen from the state TB laboratory to PHRI.

In addition to these "special orders" for testing at PHRI, the TB Program will be referring certain specimens to PHRI on a routine basis. Molecular DST will be requested for all specimens determined by conventional DST to be resistant to either or both isoniazid and rifampin to confirm the validity of these test results. In addition, PHRI will conduct routine molecular DST for resistance to the fluoroquinolones on all initial isolates submitted there for the purpose of universal genotyping (approximately 96% of all initial isolates in New Jersey so far in CY2009). This surveillance project will provide important data regarding baseline levels of resistance to these drugs in New Jersey should clinical trials currently being conducted by the CDC result in the recommendation of a short course treatment regimen including a fluoroquinolone in the future.

PHRI is **not** a clinical laboratory, but rather a research laboratory. The results of NAA testing and/or molecular DST are reported for informational purposes **only**. The use of these results in treatment recommendations is at the discretion of each individual clinician.

The NJDHSS Communicable Disease Service includes:
Infectious and Zoonotic Disease Program (IZDP)
Vaccine Preventable Disease Program (VPDP)
Sexually Transmitted Disease Program (STDP)
Tuberculosis Control Program (TBCP)

We're on the Web!
www.nj.gov/health/cd/index.html

Past issues of the NJ Communi-CABLE are available online at http://www.nj.gov/health/cd/newsletter.htm.

Communicable Disease Service Mission Statement

Our mission is to prevent communicable disease among all citizens of New Jersey, and to promote the knowledge and use of healthy lifestyles to maximize the health and well-being of New Jerseyans.

We will accomplish our mission through our leadership, collaborative partnerships, and advocacy for communicable disease surveillance, research, education, treatment, prevention and control.

World Hepatitis Day 2010

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Quick Hepatitis Facts

- Hepatitis C is a silent killer, and it may show no signs or symptoms and may cause irreversible liver damage.
- Persons infected with hepatitis B or hepatitis C may not learn of their infection until 10 to 30 years later when complications arise from chronic viral hepatitis.
- Hepatitis C infection is the largest single cause for liver transplantation and one of the principal causes of liver cancer and cirrhosis.
- There are now more than 20,000 people in the United States waiting for a liver transplant, but there are currently only about 4,900 livers available each year.
- Vaccinations exist for hepatitis A and hepatitis B, and there is a need to promote immunizations, especially for those who are infected with other hepatitis viruses.

The Communicable Disease Service has moved.
Our new address is:
135 East State Street, Trenton, NJ 08625-0369
609-826-5964