

James E. McGreevey,
Governor



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NJ Communi-CABLE

Hepatitis B and C are both serious blood-borne pathogens, but more is probably known about HIV than about either of these two infections. The three infections share similarities in modes of transmission, so prevention education should reference each disease.

Hepatitis B

The January 2, 2004 issue of the MMWR reports that **hepatitis B** incidence in the United States has declined steadily since the late 1980s, particularly among vaccinated children. In fact, from 1990-2002, incidence of reported acute hepatitis B declined 67%. The decrease was greatest among children and adolescents, demonstrating the effect of routine vaccination.

However, the decline was lowest among adults, who make up the majority of cases. In fact, hepatitis B infection incidence *increased* among adults in some age groups: up 5% in males age 20-39, 20% among males aged ≥ 40 , and up 31% in females ≥ 40 . Of cases for whom risk factor data were available, the proportion of heterosexuals who reported multiple sex partners increased from 14% to 29%, and the proportion of self-identified men who have sex with men (MSM) increased from 7% to 18% (comparing 1990 with 2002 data).

To reduce hepatitis B transmission, hepatitis B vaccination programs must target MSM, sexually active heterosexuals, intravenous drug users (IDUs), and other adults at high risk.

Hepatitis C

Hepatitis C (HCV) is now the most common blood-borne infection in the US, and the cause of over 40% of chronic liver disease. It has been called the “silent killer,” due to the fact that

many times, infected people are asymptomatic. In the past, exposure to blood and blood products was a major risk factor for development of hepatitis C infection. However, today the US blood supply is screened for hepatitis C, making the risk from a transfusion negligible.

Injection drug use (IDU) is now the dominant risk factor, causing 50-90% of hepatitis C infections. In fact, it is more easily transmitted by IDU than hepatitis B or HIV! IDUs have usually been infected with HCV several years before infection with HIV occurs. Acute infection is often asymptomatic, but chronic disease develops in 55-85% of acutely infected persons. Of those chronically infected, 10-20% will develop cirrhosis over a period of years; and of those, 1-5% will develop liver cancer.

Because persons with HCV can be asymptomatic, and may no longer be exposed to their former “risk factors,” they may not realize they are at risk for hepatitis C. Thus, most people have had the infection for many years upon diagnosis. In the US, 1.8% of the population is infected with HCV, but in some high-risk populations, that rate is much higher.

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NJDHSS Communicable

Disease Service

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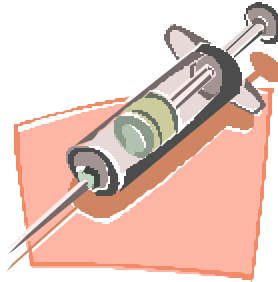
CDC Suspends Prevnar Doses

On February 13, 2004, the Centers for Disease Control and Prevention (CDC) recommended that health care providers temporarily suspend the routine use of the third and fourth doses of 7-valent pneumococcal conjugate vaccine (PCV7) when immunizing healthy children. This action was taken to minimize the likelihood of shortages until Wyeth Vaccines is able to restore production capacity. Since that recommendation was issued, PCV7 production has been much less than had been expected and shipments have been delayed resulting in shortages of vaccine. Widespread shortages may continue beyond this summer.

To further conserve vaccine, the CDC, in consultation with the American Academy of Family Physicians, the American Academy of Pediatrics, and the Advisory Committee on Immunization Practices, recommends that all health care providers **temporarily suspend routine use of both the third**

and fourth doses, effective immediately.

It is critical that all providers immediately follow this recommendation, regardless of their current vaccine supply. Providers should immediately inventory their existing stock, assess their patients' needs (age/high-risk condition) and plan accordingly. Children at increased risk of severe disease should continue to receive the routine, 4-dose series.

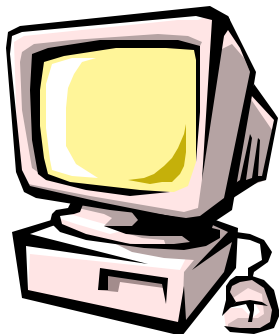


On March 2, 2004, the CDC published an MMWR article describing this revised recommendation which reflects the CDC's assessment of the existing national PCV7 supply and is subject to change if the supply increases. Updated information about the national PCV7 supply is available at <http://www.cdc.gov/nip/news/shortages/default.htm>.

NJDHSS SARS Plan Update

In January the Centers for Disease Control and Prevention (CDC) redesigned its website. As a result, many of their web page URLs have changed. Web links to the CDC within the New Jersey SARS Preparedness and Response Plan have been updated to reflect these changes. The SARS plan remains located on the NJDHSS web page at:

<http://www.state.nj.us/health/er/sars.htm>



NJDHSS Immunization Program Wins Award!

The New Jersey Immunization Information System (NJIS) was recognized and received the Connect Award at the Center for Disease Control and Prevention's (CDC) National Immunization Registry



Conference in Atlanta for outstanding achievement in establishing electronic interfaces with internal and external immunization partners to improve the receipt of immunization data.

NJIS electronically interfaces with Vital Statistics for Electronic Birth Certificates, Childhood Lead for lead test results, Medicaid for immunization records and CDC to send smallpox immunization data.

New Immunization Regulations Set for 2004!

The use of vaccines is one of the most important tools we have to prevent communicable diseases. It is still unfortunate, but true, that when prevention is working, it is almost invisible. Hence, there is a false sense of security within the general public that all is well and there is no need to continue to be vigilant regarding timely and effective immunizations. Fortunately the New Jersey Department of Health and Senior Services (NJDHSS), Vaccine Preventable Disease Program and staff are constantly aware of the deceptive stealth of communicable diseases, and thus remain active and vigilant toward preventing the 13 major childhood vaccine preventable diseases. As a result, a number of important new regulations this year deserve special attention.

- Effective September, 2004, every child born on or after January 1, 1998 must receive at least one dose of varicella vaccine or varicella combination vaccine, given on or after the 1st birthday, before first entrance into kindergarten, Grade 1, or comparable age entry in a special education program with an unassigned grade. Every child 19 months of age or older attending a child care center or preschool facility also will need to have received at least one dose of a varicella containing vaccine given on or after the 1st birthday. Children born on or after January 1, 1998 attending or transferring into a New Jersey school from another state or country, will also need to have received one dose of varicella containing vaccine. Children who present documented laboratory evidence, a physician's statement, or a parental statement of previous varicella disease shall not be required to receive varicella vaccine.
- Effective September, 2004, meningococcal vaccination will be required for new students who reside in on-campus housing and attend a four-year institution of higher education (public or private). Students can decline vaccination only through a medical or religious exemption. The law further requires all public and private four-year institutions to provide information about meningitis and the meningitis vaccine to all prospective students prior to admission. Schools

must make the vaccine available either through their student health center or through a contractual agreement with a community health care provider. The law does not require schools to pay for the vaccination.



- “Holly’s Law” was signed into law in January, 2004. It requires that prior to administering a second dose of the measles-mumps-rubella (MMR) vaccine to a child, a health care provider may give the child’s parent or guardian the option of consenting to the testing for antibody titers to determine whether or not the child has already developed immunity to MMR, in response to a previously administered dose of the vaccine. Those children with immunity would not require the second dose of MMR vaccine. Documented laboratory evidence of immunity from MMR shall exempt a child from further MMR vaccination. The NJDHSS will prepare, and is required to make available to all health care providers in the state, a pamphlet that explains the nature and purpose of the MMR vaccine and the antibody titer used to determine immunity.
- Effective September 2004, the NJDHSS will require hepatitis B immunization as a condition of enrollment in public and private schools for students in grades 9 through 12. While the law went into effect September 2003, due to unanticipated delays in the formal rule making process, full implementation and enforcement was extended to September 2004. The law reads: “Every child born on or before January 1, 1989 entering, attending, or transferring into a New Jersey school in grades 9 through 12 or in comparable age level special education program after September 1, 2003, shall have received three doses of hepatitis B virus containing vaccine, or alternatively any two doses of a hepatitis B containing vaccine licensed and approved for a two-dose regimen administered to 11 through 15 years of age.

New Immunization Regulations Set for 2004!

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Unvaccinated children born on or before January 1, 1989 entering, attending, or transferring into a New Jersey school in grades 9 through 12 on or after September 1, 2003 who have not completed the hepatitis B vaccine series are eligible to attend school in provisional status following receipt of the first dose of any hepatitis B vaccine dose. The child granted provisional status shall receive the second dose of hepatitis containing vaccine no later than three months after receiving the first dose and shall receive the third dose no later than 12 months following the first dose. If the child is age eligible to receive the two-dose regimen, the second and final dose shall be received no later than six months following the first dose. Documented laboratory evidence of hepatitis B disease or immunity will constitute a medical exemption. Students can decline through a valid medical or religious exemption.”

Other items of interest include:

- The New Jersey Immunization Information System (NJIIS), also known as the immunization “registry,” contains over 720,000 records of children and over 4.5 million records of doses administered. There are approximately 1,000 medical professionals enrolled and actively using the NJIIS. For more information please see our website at:

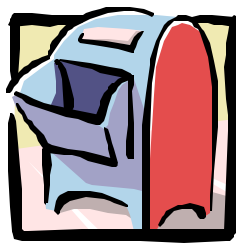
<http://njiis.doh.state.nj.us/njiis/index.htm>

- The New Jersey Vaccines for Children Program (VFC), continues to add new provider sites. Nine new providers enrolled in VFC in January 2004, bringing the total number of VFC provider sites in New Jersey to 1,162.

The US Postal Service Installs Biohazard Detection System

In response to the 2001 anthrax attack and in an effort to protect the health and safety of its employees and customers, the United States Postal Service has commissioned the development of the first rapid test for biohazards in the mail system called the Biohazard Detection System (BDS). The BDS employs state-of-the-art technology to detect anthrax in the mail stream.

Using sophisticated DNA technology, the BDS continuously tests air samples collected in a hooded cabinet that surrounds an Advanced Facer Canceled System (AFCS). If an envelope containing anthrax spores passes through the AFCS, spores would become airborne. These spores are then automatically concentrated into a sterile water solution, injected into a cartridge, and are subjected to a polymerase chain reaction (PCR) test.



The BDS has been subjected to extensive testing and research. The Executive Office of Science and Technology Policy created an interagency work group that reviewed the performance of the BDS and confirmed that this is the best possible system the Postal Service can offer. In June 2002 the first prototype BDS was installed in the Baltimore Processing and Distribution Center and has been operating successfully.

Eight postal processing and distribution centers in New Jersey are slated to have the BDS installed beginning in April of this year.

The BDS is a significant advancement in countering the threat of bioterrorism via the postal system. By having rapid testing capability, an immediate emergency response can be launched if a positive sample is detected. This will greatly improve health protection and anthrax prevention efforts.

CDRS Corner

CDRS Participation is on the Rise!

To date, all 114 local health departments, including the 22 LINCS sites, have access to CDRS and can report communicable diseases electronically. Sixty-eight of the 84 acute care hospitals throughout the state also have access to the system. Almost 23,000 cases were entered in the web-enabled system in 2003 – this number includes all case statuses (open, confirmed, probable, possible, and not a case). Forty-six percent of the 2003 cases were entered electronically via a direct line feed from LabCorp, 28 % were entered at the local level and 26 % were entered by NJDHSS staff. This shows a huge increase and redistribution over the 2002 numbers: almost 15,000 cases, of which 22 % were entered by LabCorp, 11% were entered at the local level and 67 % by NJDHSS staff. Training is on-going and we will continue to actively market the system in an effort to acquire new users.

New Geocoding Capabilities

In the January 16th release, a geocoding function was added to CDRS which allows for the mapping of cases based on patient address locations. The geocoding function will utilize the patient's home address to allocate the case report to the appropriate local health department's jurisdiction for follow-up investigation. If there is no address entered for the patient, then CDRS will use the physician's address. If the physician address is missing, it will use the hospital's address. Please be aware that prioritization by address can affect which jurisdiction the case falls under, so it is best to enter the patient's address.

After you have entered the data for the patient and hit the submit button, CDRS will present various geocoding options according to how accurately the geocoding function can locate the address. A perfect match will result in a mapped version being presented on the screen and a case ID number being assigned to the case. If there are several options, they will be presented with a probability percentage assigned to each proposed match. You will be able to see a map of the site to see if it is physically located where you think should be. If you are still in doubt, you will also be able to choose the centroid (center point or middle) of the municipality, county or zip code for each of the options previously presented. Once you have chosen the option that, in your

opinion, best fits the case scenario and have submitted the report, the case will be mapped and appear in the appropriate health department's jurisdiction. If you have chosen incorrectly and the case appears on the wrong health department's screen, you can easily readdress it to show the appropriate municipality and it will then appear on the correct health department's screen. If you choose to not geocode because you are unsure which option is the correct one, the case will go to the "Unknown County's" jurisdiction and no one will see it unless DHSS personnel go and specifically look for it there. So, if you get a report showing up on your screen that you believe should not be there, check the address, see if it has been allocated to the wrong municipality and, if so, please re-route it to the correct one by clicking on the correct municipality and resubmitting the report. Together, as a team, we will eventually be able to sort it all out.

For background information about what geocoding is and what information is required to geocode an address, please click on the "Geocoding Notes" at the bottom of any page in CDRS. For guidance with the data entry process, call the CDRS coordinator.

Update Your Web Browser to Internet Explorer 6.0

Having the geocoding function added to CDRS has changed the browser requirements. You now need the 6.0 version in order to have the geocoding function operate properly. You can readily access this updated version on the Internet. [Please note that CDRS does not operate using Netscape Navigator as the browser.]

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

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

For CDRS Helplines:
800-883-0059 (toll free)
609-588-7551 (local)

Hepatitis B and C

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For instance, the New Jersey Department of Corrections estimates that 30—40% of inmates are HCV positive. Drug treatment facilities may have rates of 50% and higher. Since January 1997, there have been 6,682 reported cases of HCV in NJ, but there are probably many more which have not yet been diagnosed or have not been reported.

Currently, recommended treatment consists of interferon and ribavirin. More medication options should be available in a few years, but there are supplementary measures which should be considered. These include:

- Hepatitis A and B vaccines, if not previously vaccinated
- Abstinence from drinking
- Drug treatment, if needed

More information on both hepatitis B and C can be found at www.cdc.gov/hepatitis. The HCV case definition can be located in the online NJDHSS communicable disease manual at www.state.nj.us/health/cd/manual/chapters.shtml.

Smallpox Spot

On February 11, 2004 at the New Jersey Hospital Association, the NJDHSS Bioterrorism Unit provided a half-day training on “Coordinating a Smallpox Vaccination Clinic”. The audience (240 attendees) was comprised of local and state health department personnel and individuals from acute care hospitals.

Each participant received a comprehensive planning manual, which included checklists, job descriptions and sample clinic layout plans to assist in planning a pre-event smallpox vaccination clinic. The training covered the logistical and clinical aspects involved in planning and implementing a smallpox vaccination clinic, as well as incorporated lessons learned from the 23 clinics that were held in New Jersey during 2003.

An electronic version of the pre-event planning manual will be available on the NJDHSS website in the near future. The pre-event smallpox vaccination clinic manual was developed as part of New Jersey’s overall emergency preparedness and response efforts. Plans are underway to develop a mass immunization/post-event manual, in collaboration with the Strategic National Stockpile staff.

Important Smallpox Notice!!!

The NJDHSS Bioterrorism Unit is offering a half-day smallpox vaccinator and “take” reader training for registered nurses, physicians, and pharmacists with licenses to practice in New Jersey. Due to an overwhelming response, the workshop is designed as a “train the trainer” and participants may be asked to train other individuals as smallpox vaccinators in the future. Additional trainings will be offered at selected LINCS agencies. Contact the Health Educator/Risk Communicator within your county/jurisdiction for more information.



Jo Foster, Bioterrorism Nurse Consultant, and Carol Genese, Bioterrorism Coordinator take a break at the Smallpox Vaccination Clinic.

2003-04 Influenza Season Summary

The week of March 8, 2004, the Centers for Disease Control and Prevention announced that the annual influenza season had peaked and was likely concluded for this year. This confirms what the NJDHSS Communicable Disease Service weekly surveillance efforts had been registering since the first of the year. Accordingly, this is an opportune time for all involved to assess our activities of this past influenza season and to begin to plan for next year.

Influenza was notable this year for its unusually early and explosive national appearance. Beginning with large outbreaks in the Western United States, with attention particularly focused upon pediatric mortality, the disease rapidly spread to NJ such that by the early weeks of November we were experiencing significant illness statewide. Fortunately, by the end of 2003, the influenza season in NJ had largely passed. Coupled with the dramatic start to the influenza season was a national vaccine shortage due to a markedly increased consumer demand. Additionally, a new recommendation from ACIP to offer vaccine to all children 6 months to 23 months of age fueled a rise in usage of the available influenza vaccines. The new intranasal product, FluMist, with a number of restrictions on its use, did not seem to fill a significant "niche" and indeed its future production is in question at this time.

The predominant national strain of Influenza A was the newly recognized variant "Fujian" serotype. In the NJ lab testing experience this year this was also almost exclusively the only influenza strain identified. Influenza B was extremely rare as well. Epidemiologic follow-up tests are being done to ascertain the effectiveness of this past year's vaccine against this new strain, but it seems to be less than we would have hoped for. However, next year's influenza vaccine will contain this new serotype as one of the two "A" antigens. The NJPHEL processed nearly 70 submitted influenza specimens for serotyping and additional laboratory confirmatory tests were received from hospitals and labs around the state.

Statewide influenza-like illness (ILI) surveillance efforts were notably enhanced this past season. The regional LINCS agencies all reported weekly upon several parameters including emergency department visits, nursing home illness rates, school absenteeism and summaries provided by "sentinel providers" in community health settings. Additionally, this year a Respiratory Syncytial Virus (RSV) active surveillance system was begun based upon hospital laboratory reporting of test results. RSV is an important "influenza-like" virus in its clinical expression and historically

parallels influenza in its annual epidemiology. Our results were very noteworthy and have enabled us to better characterize the NJ experience with "influenza-like" illnesses. We were pleased to note that our strategy of utilizing multiple surveillance parameters to validate the weekly ILI state profile seems to have been quite successful. Our data closely reflected the reported national experience, as well as that of our neighboring states. Additionally, we were able to demonstrate the parallel epidemiology of Respiratory Syncytial Virus lab activity with the ebb and flow of ILI activity. We are also using the continued RSV lab data submission to formally pinpoint the end of the "RSV season" so that prophylaxis of vulnerable infants may be discontinued.

Interestingly, despite the dramatic onset of the influenza season in 2003-2004, final tabulations by the CDC reveal it to have been no more severe than in recent years. Even the number of pediatric deaths nationally (approximately 130) was in line with historical experience. NJ experienced one known/reported pediatric death associated with confirmed influenza infection.

For the upcoming year, NJDHSS will continue to coordinate with its regional partners and stakeholders to refine our surveillance and reporting capacity. It is especially important that we develop a more comprehensive system of "capturing" important data being generated in many primary care sites which use the new rapid influenza tests that are available. Surveillance efforts will also be enhanced to better assess severe cases of febrile respiratory disease in NJ for influenza viruses as a routine procedure. These actions will further enable NJDHSS to identify unusual seasonal activity of influenza, the early appearance of a more virulent strain or, most importantly, even the presence of a new human pathogenic strain such as one of the avian influenzas or another possible pandemic strain.

As a state, we have done well in ensuring that our most vulnerable senior population has been protected each year from influenza and its complications. This next season will see an even greater emphasis on more universal vaccination of healthy infants and young children in recognition of their tremendous disease burden as well. Our next focus from a public health standpoint should be to raise the influenza vaccine coverage rate among women in the second or third trimesters of pregnancy. This cohort, and their fetuses, are uniquely susceptible to mortality from influenza infection in our historical experience. Yet, less than 12% of those eligible received influenza vaccine this past season.

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 (STDP)
- 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>

Welcome to new NJDHSS Communicable Disease Service Staff!!

Maria Palmero: Public Health Representative 2 at the Newark STD clinic.

Nicole James: Clerk for the Communicable Disease Reporting System.

Kim Bernini: Clerk for the Communicable Disease Reporting System.

Shereen Brynildsen: Epidemiologist for Infectious and Zoonotic Disease

Patricia Tretter: Senior Clerk Typist for the West Nile Virus program.

Carol Barr: Senior Technician MIS for the Bioterrorism unit.

Roseanne Midura: Clerk Typist for the Immunization Program.

