



# NJ Communi- CABLE

Fall 2013

## 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.

Chris Christie, Governor  
Kim Guadagno, Lt. Governor  
Mary E. O'Dowd, MPH  
Commissioner

### COMMUNICABLE DISEASE SERVICE

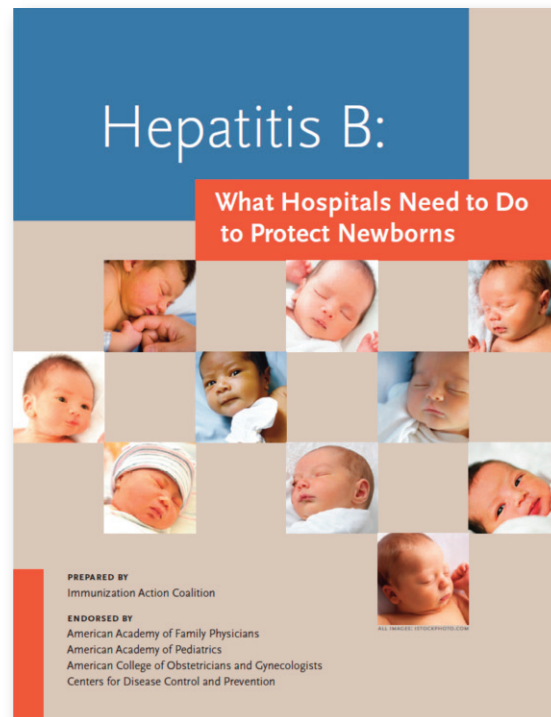
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State Epidemiologist/  
Assistant Commissioner  
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Editor, Research Scientist

## Hepatitis B: What hospitals need to do to protect newborns in New Jersey

By: Connie Wang, Intern and Andria Apostolou, Health Systems Integration Program Scholar

**H**epatitis B virus (HBV) is a blood-borne and sexually-transmitted virus that causes both acute and chronic hepatitis. The risk for chronic infection varies according to the age at infection and is greatest among young children. Approximately 90% of infants will remain chronically infected with HBV. By contrast, approximately 95% of adults recover completely from HBV infection and do not become chronically infected. Those chronically infected with HBV are not only at an increased risk of cirrhosis and primary hepatocellular carcinoma, but may also continue to transmit the virus to others.

HBV infection in a pregnant woman poses a risk to her infant, who may be exposed to the virus during birth and become infected. Perinatal HBV transmission, however, can be prevented by identifying HBV-infected pregnant women and providing hepatitis B immune globulin (HBIG) and HBV vaccine to their infants within 12 hours of birth. It is important that healthcare providers screen all pregnant women for hepatitis B surface antigen (HBsAg) during each pregnancy. The HBV vaccine is safe and effective. The Advisory Committee on Immunization Practices (ACIP)



[Click here to view the Immunization Action Coalition's Complete Guide: Hepatitis B: What Hospitals Need to Do to Protect Newborns](#)

recommends that all newborns receive a dose of HBV vaccine prior to hospital discharge. This recommendation is endorsed by the American Academy of Pediatrics, the American Academy of Family Physicians, and the American Congress of Obstetricians and Gynecologists. In addition, the birth dose coverage rate has been adopted as a measure of hospital quality by the National Quality Forum.

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# Infection Rejection: Bringing Infection Control Programs to Outpatient Dialysis Centers in New Jersey

By: Jason Mehr, CDC/CSTE Applied Epidemiology Fellow

**H**emodialysis is a necessary treatment for most patients with end stage renal disease and is typically delivered in outpatient centers that lack traditional infection control programs. To help protect this vulnerable patient population, New Jersey passed the following law in 2001, making it the first and only state to have such a regulation:

## New Jersey Administrative Code 8:43A-14.1

**“The administrator, or designee, shall ensure the development and implementation of an infection prevention and control program.**

**The administrator shall designate an infection control professional who shall be responsible for the direction, provision, and quality of infection prevention and control services. The designated person shall be responsible for, but not limited to, developing and maintaining written objectives, policies and procedures, an organizational plan, and a quality improvement program for the infection prevention and control service. The infection control professional may be a consultant; however, there must be a health care professional on site who is responsible for the day to day activities related to infection control.**

**The infection control professional shall have education or training in surveillance, prevention, and control of nosocomial infections. The infection control professional shall be certified in infection control (CIC) within five years of beginning practice of infection control and shall maintain certification through the Certification Board of Infection Control (CBIC).”**

The Centers for Disease Control and Prevention (CDC) had knowledge of this regulation and reached out to New Jersey Department of Health



**CDC Expert Commentary**  
Priti R. Patel, MD, MPH

### Video: Preventing Bloodstream Infection During Hemodialysis

(NJDOH) to request a study to evaluate the positive and negative aspects of this regulation on various stakeholders. Colleagues from the NJDOH Communicable Disease Service and the Division of Health Facilities Evaluation and Licensing responsible for licensing, inspection, and certification of dialysis centers, examined the growth of dialysis delivery in New Jersey.

A survey with three variations was developed for distribution to the primary stakeholders that are most affected by the regulation. These stakeholders included the NJDOH surveyors, dialysis facilities, and infection preventionists (IPs). The surveys were created to examine the nature of the arrangement between the IP and facility, the percentage of time the IP dedicates to each facility, the IPs responsibilities, and challenges of hiring qualified IPs.

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Get more information at <http://nj.gov/health/cd/handwashing.shtml>.

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# Update on Emergency Department Surveillance in EpiCenter™

By: Teresa Hamby, Data Analyst, and Victor Pomary, Intern

In 2005, the NJ Communi-CABLE included an article about the implementation of a new surveillance stream in the northeastern part of New Jersey. At that time, local hospitals in the Local Information Network Communication System jurisdictions, included in the US Department of Homeland Security's "Urban Area Security Initiative," were connected to an electronic surveillance system. At about the same time, Atlantic County separately contracted to connect the county's four facilities to the same system.

In 2011, with funding from the NJ Office of Homeland Security and Preparedness, the Communicable Disease Service (CDS) began expanding this capability for electronic emergency department (ED) chief complaint surveillance to all NJ acute care and satellite ED facilities. EpiCenter™ is now currently in place for 75 of the state's 81 EDs.

EpiCenter collects anonymous chief complaint and registration data from existing ED computer systems in clinical and other settings and displays them for hospital staff as well as public health departments. This surveillance

application monitors EDs for abnormal incidences of select infectious disease and other syndromes by examining these data. In addition, EpiCenter provides downloadable reports that are utilized by CDS staff for submitting daily ED volume and influenza-like illness surveillance data, saving 67 facilities from the process of manual data entry into a survey each day. The system is flexible with anomaly detection, investigation logs, charting and mapping capabilities. By expanding this system to include all of the ED's in New Jersey, the New Jersey Department of Health has been able to follow, in near real-time, disease patterns and trends to monitor for unusual activity.

EpiCenter, in practice, goes beyond communicable diseases. In early May 2013, two chemical spills occurred within high schools in Atlantic County. These incidents

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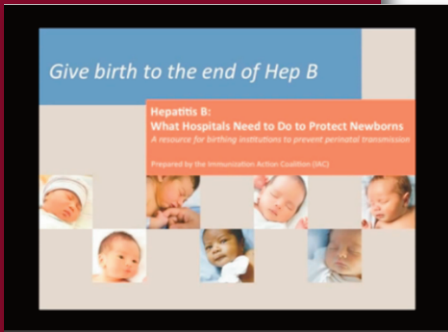
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*Hepatitis B, continued from page 1*



Watch the Immunization Action Coalition webinar about Hepatitis B prevention.

Administering a birth dose to all infants serves as a safety net to prevent perinatal infection among infants born to HBsAg-positive mothers who are not identified due to errors in maternal HBsAg testing or failures in reporting of test results. The birth dose also provides early protection to infants at risk for infection after the

perinatal period. Moreover, administration of a birth dose has been associated with higher rates of on-time completion of the HBV vaccine series and, in certain populations, improved completion rates for all other infant vaccines. Unfortunately, data from the 2011 National Immunization Survey indicates that only 47% of infants born in New Jersey receive the HBV vaccine within three days of birth, compared to 68% nationally.

In order to better assess HBV maternal screening and newborn vaccination practices within New Jersey, a survey was conducted between December 1, 2012 and January 30, 2013. This survey specifically targeted health care professionals including physicians (pediatricians, OB-GYNs and family practitioners), nurses, and nurse midwives practicing within NJ birthing hospitals. Of the 228 participants who completed the survey, approximately 38% of respondents lacked knowledge of the NJ birth dose coverage rates; only 8% correctly estimated the NJ birth dose rates. Seventy percent of participants indicated that there was a policy or pre-printed standing orders in their hospital for a universal HBV birth dose. Participants identified barriers to implementation of the universal birth dose including parental

refusal/hesitancy and infant primary healthcare provider not thinking that the hepatitis B vaccine is necessary for most of their patients. Education materials for parents as well as the medical community, and stronger policies and enforcement of policies were identified as ways to improve universal birth dose coverage.

During February through July 2013, the New Jersey Department of Health, Perinatal Hepatitis B Prevention Program, conducted a review of NJ birthing hospital policies regarding maternal HBsAg screening and infant HBV vaccination. Forty-two of the 53 birthing hospitals provided maternal screening or newborn vaccination policies for review. Of the hospitals providing policies, 36 provided screening policies and 38 hospitals provided vaccination policies. The policies varied in detail and quality. Thirty-one of the 36 screening policies mentioned screening upon admission of mothers with unknown HBV status; none mentioned standing orders for maternal HBsAg screening. Of the 38 hospital vaccination policies, 35 addressed infants born to HBsAg-positive mothers, whereas only 13 policies mentioned vaccination of infants born to HBsAg-negative mothers. Sixteen policies discussed a universal birth dose. None mentioned standing orders for administration of the universal birth dose, but one hospital that did not provide policies provided a standing order for administration of the universal birth dose. Among all policies received, only 14 policies had provisions for reporting HBsAg-positive mothers to state or local health department.

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*Hepatitis B, continued from page 4*

NJ birthing hospitals are strongly encouraged to review and update perinatal prevention policies and procedures to ensure they reflect the current standard of care. Hospitals should have policies and procedures in place, including appropriate standing orders, to ensure 1) administration of hepatitis B vaccine to all newborns weighing >2,000 g before hospital discharge and 2) identification of all infants born to HBsAg-positive mothers and infants born to mothers with unknown HBsAg status and properly initiate postexposure prophylaxis within 12 hours of birth. All healthcare personnel working with mothers and their newborns should be reminded of the importance of perinatal HBV prevention activities and the key role that delivery hospitals play in the national strategy to eliminate HBV transmission. For more information on sample text for policies and guidelines for developing admissions orders, please visit:

<http://www.immunize.org/catg.d/p2130.pdf>  
<http://www.immunize.org/catg.d/p2131.pdf>

**References**

New Jersey Department of Health, Perinatal Hepatitis B Prevention Program  
[http://www.state.nj.us/health/cd/hepatitisb\\_perinatal/techinfo.shtml](http://www.state.nj.us/health/cd/hepatitisb_perinatal/techinfo.shtml)

National Immunization Survey (NIS):  
<http://www.cdc.gov/vaccines/stats-surv/nis/default.htm#nis>

A Comprehensive Immunization Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices

(ACIP). Part 1: Immunization of Infants, Children, and Adolescents. MMWR 2005; 54: 1-32.

[www.cdc.gov/mmwr/preview/mmwrhtml/rr5416a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5416a1.htm)

Centers for Disease Control and Prevention, Hepatitis B Vaccination  
<http://www.cdc.gov/vaccines/vpd-vac/hepb/>

Immunization Action Coalition, Hepatitis B Birth Dose:  
<http://www.immunize.org/birthdose/>

HepB Moms: <http://hepbmoms.org/>

**Immunization Action Coalition: Give Birth to the End of Hepatitis B**

On July 16, 2013, the Immunization Action Coalition launched a major new project urging hospitals and birthing centers to “Give Birth to the end of Hep B.” The project is aimed at increasing implementation of the Advisory Committee on Immunization Practices’ recommendations to vaccinate every newborn against hepatitis B before hospital discharge. The initiative is endorsed by the American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, and the Centers for Disease Control and Prevention. The Immunization Action Coalition has also launched the Hepatitis B Birth Dose Honor Roll to recognize hospitals and birthing centers that have attained high coverage rates for administering hepatitis B vaccine at birth. To find out more information about the honor roll and to download the book “Hepatitis B: What Hospitals Need to Do to Protect Newborns” please visit:

<http://www.immunize.org/protect-newborns/>



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*Infection Rejection, continued from page 2*

The surveys were created and sent out electronically via Hippocrates, New Jersey’s emergency preparedness and response system. Questions for the surveys were created through focus groups containing IP consultants and partners at the Quality Insights Renal Dialysis Network, and NJDOH staff. Once the questions were created and contact lists were obtained, surveys were then sent to 135 outpatient dialysis facility administrators, 22 IPs, and four NJDOH dialysis surveyors. These participants were given 22 days for survey completion.

Response rates for the surveys varied with dialysis facility administrators completing 82% (111/135) of their surveys, while IPs completed only 41% (9/22) and NJDOH surveyors completed 75% (3/4).


The results of the surveys were informative and provided good insight into how the stakeholders viewed the regulation and its requirements. Dialysis facilities showed they met the requirement in a variety of ways and didn’t have difficulties finding a qualified IP to consult with. Additionally, facilities generally felt that the requirement did not present a costly burden, but did state that they could not financially support the spending of additional funds to further expand the requirement.

IPs consulting at these facilities proved to perform a wide array of tasks for facilities, but the majority (87%) do not visit facilities more than four times per

year. Additionally, most IPs and facility administrators believe their patients have experienced fewer infections and that staff have learned good infection control practices from the IPs. While 78% of IPs and 100% of NJDOH surveyors agree that the regulation should be expanded, a vast majority (80%) of facilities do not. Lastly, when asked if their dialysis facilities needed an IP, 72% (80/111) indicated “yes.”

While this was a small survey and responses not always consistent, stakeholders generally agreed that the regulation was not overly costly, and that IPs were a valuable resource for dialysis facilities. Both the dialysis facilities and NJDOH surveyors agreed that the IP designee has the most importance in providing good infection prevention.

There were a few limitations to this study. The response rate for the IP survey was low, partially because IPs from outpatient dialysis facilities located within hospitals didn’t view themselves as consultants. Also, as there was no reliable data regarding infection rates prior to this regulation, those surveyed were only able to provide their impressions as to any changes that occurred.

Despite these limitations, NJDOH recommends wider adoption of similar regulations to other states looking to have an increased presence of infection prevention and control in outpatient dialysis facilities. 



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*EpiCenter™*, continued from page 3

highlighted the need to strengthen statewide syndromic surveillance of illnesses caused by such exposures. In response to these spills, a new ‘chemical exposure’ classifier was created in EpiCenter to track future events by monitoring hospital data taken from ED visits. The primary objective behind creation of the new classifier was to provide local epidemiologists with prompt notification once EpiCenter detected any abnormal increases in the number of chemical exposure cases. The newly-created classifier is currently configured to send an immediate notification to local epidemiologists once two cases are recorded within a 24-hour window ending at midnight each day. Given that background levels across the state are around 0-1 cases per day, an alert threshold of two cases should be sensitive enough to flag



potential chemical exposure threats for further investigation without burdening local epidemiologists with excessive notifications.

For more information on this project or on ED surveillance in general, to contact either Teresa Hamby, MSPH, or Stella Tsai, PhD, CIH at (609) 826-5964 or via email at [teresa.hamby@doh.state.nj.us](mailto:teresa.hamby@doh.state.nj.us) or [stella.tsai@doh.state.nj.us](mailto:stella.tsai@doh.state.nj.us). 



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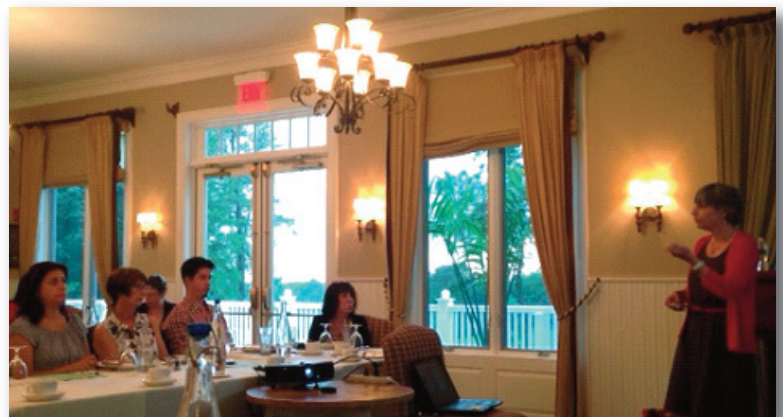
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**As part of New Jersey's Safe Injection initiative, "Keeping the Infection Out of the Injection," Dr. Barbara Montana and the injection safety team presented two evening presentations for regional oncology staff in June. The program was tailored to address specific issues commonly raised in oncology settings and described local and national outbreaks of infections associated with outpatient oncology**



**practices. More than 50 New Jersey oncology professionals attended the workshops.**

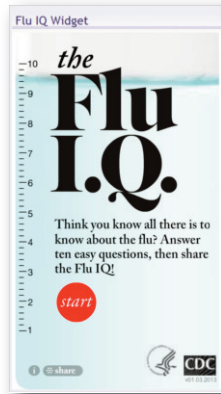




## Resources for the 2013-2014 Influenza Season

Each flu season, certain myths about influenza and the flu vaccine abound. These myths can challenge health care providers (HCP) who wish to protect their patients through vaccination. The following materials can help HCPs debunk myths about influenza and the flu vaccine and educate their patients:

- **The Flu I.Q. widget—an interactive quiz to test flu knowledge.**



Place the Flu I.Q. Widget on your Web site, portal home page or on your blog to help others raise their flu I.Q.!

<http://tinyurl.com/kro4gbw>

- **Web Applications:** New Jersey Department of Health (NJDOH) partnered with Rutgers University and an e-learning company to develop two web applications: “Get Flu Savvy” and “Operating Under the Influenza.” “Get Flu Savvy” users start with a 104.5-degree fever and lower their temperature to normal by navigating a road map back to health which includes taking flu challenges,



reading historical facts, watching videos about the flu, learning how to prevent the flu, and finally, learning what to do if they become infected. The second website, “Operating Under the Influenza,” is a flu simulation game that tracks the business community of City Town as a flu pandemic hits. To play “Get Flu Savvy, visit

[www.getflusavvy.com](http://www.getflusavvy.com); Operating Under the Influenza” go to <http://njlmn.rutgers.edu/jsp/ext/pf/g/index.jsp>

- **Flu Basics Brochure:** This brochure provides basic information about flu symptoms, prevention, and treatment. It is available online in English [http://www.nj.gov/health/flu/documents/flu\\_basics\\_eng.pdf](http://www.nj.gov/health/flu/documents/flu_basics_eng.pdf) and various other languages [http://www.nj.gov/health/cd/flu/other\\_lan.shtml](http://www.nj.gov/health/cd/flu/other_lan.shtml)
- **Flu Posters:** The CDC has free educational posters available to target special populations such as pregnant women and other high-risk populations available at <http://wwwn.cdc.gov/pubs/ncird.aspx#Flu>

The NJDOH, Vaccine Preventable Disease Program, also offers activity books and materials which target the pediatric population. For more information, please contact 609-826-4860.

### Flu Basics

What you need to know to stay healthy during flu season



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In The NEWS.....

### Antibiotic Resistance

#### CDC's Annual Get Smart Campaign

During November 18-24, 2013, the annual Get Smart About Antibiotics Week will be observed. As in past years, the effort will coordinate work of the Centers for Disease Control and Prevention (CDC) "Get Smart: Know When Antibiotics Work" campaign, state-based appropriate antibiotic use campaigns, non-profit partners, and for-profit partners during a one-week observance of antibiotic resistance and the importance of appropriate antibiotic use. As with past observances, messages and resources for improving antibiotic use in healthcare settings from CDC's Get Smart for Healthcare campaign will be included. Get Smart for Healthcare is a program housed in CDC's National Center for Emerging and Zoonotic Diseases. The 2013 observance also marks the fourth year of an international collaboration, which will coincide with European Antibiotic Awareness Day.

The New Jersey Department of Health encourages all public health care partners to participate in this observance to raise awareness of appropriate antibiotic prescribing and proper use. Please contact Suzanne Miro, Sr. Health Communication Specialist at [suzanne.miro@doh.state.nj.us](mailto:suzanne.miro@doh.state.nj.us) to order free educational materials for your agency. For more information and access to many planning tools and educational materials visit [www.cdc.gov/getsmart/](http://www.cdc.gov/getsmart/) or [www.cdc.gov/hai](http://www.cdc.gov/hai).

#### New Report About Antibiotic-Resistant Germs

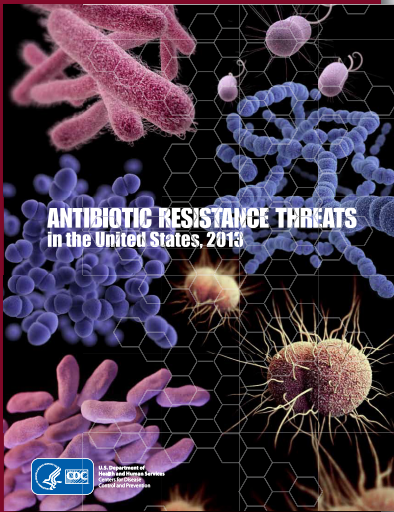
A new report, *Antibiotic Resistance Threats in the United States, 2013* gives a first-ever snapshot of the burden and threats posed by the antibiotic-resistant germs having the most impact on human health.

Each year in the United States, at least 2 million people become infected with bacteria that are resistant to antibiotics and at least 23,000 people die each year as a direct result of these infections. Many more people die from other conditions that were complicated by an antibiotic-resistant infection.

Antibiotic-resistant infections can happen anywhere. Data show that most happen in the general community; however, most deaths related to antibiotic resistance happen in healthcare settings such as hospitals and nursing homes. For more information and to view the report visit <http://www.cdc.gov/drugresistance/threat-report-2013/>

#### New Guidelines for Management of Acute Otitis Media

The American Academy of Pediatrics (AAP) is updating its guidelines for treating acute otitis media (AOM), the type of ear infection that is one of the most common illnesses in U.S. children. The evidence-based clinical guideline, "The Diagnosis and Management of Acute Otitis Media," published in the March 2013 Pediatrics and released online Feb. 25, provides recommendations to physicians managing uncomplicated AOM in children ages 6 months through 12 years. Compared to the previous guidelines issued in 2004, the new guidelines highlight more stringent criteria to use in making an accurate diagnosis of AOM, which will enable clinicians to prescribe antibiotics most effectively. The guidelines include recommendations for treatment with antibiotics and pain relievers, or observation alone, based on the child's age and severity of symptoms.



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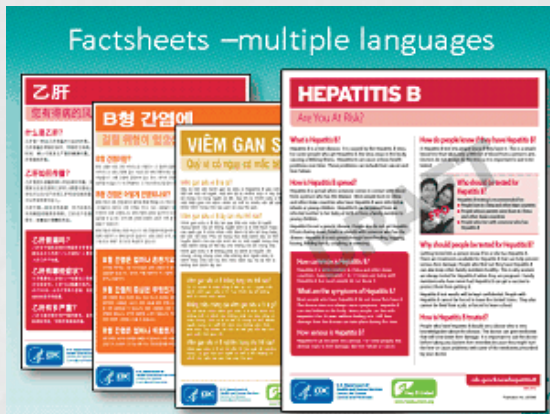
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## CDC/DVH Know More Hepatitis Campaign

Be sure to visit the CDC Division of Viral Hepatitis (DVH) website at [www.cdc.gov/knowmorehepatitis](http://www.cdc.gov/knowmorehepatitis) to view new educational fact sheets for your use. For outreach to promote hepatitis B testing among Asian and Pacific Islander (API) populations, fact sheets are available in multiple languages. Also available are fact sheets and posters to promote hepatitis C testing for people born from 1945-1965. Buttons and badges for you to put on your websites can be found on the DVH website.



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