

DBD BULLETIN

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A Year in Review

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Three **Legionellosis webinars** are conducted as part of the Water, Sanitation, and Hygiene (WASH) webinar series. A partnership between DBD and the Waterborne Disease Prevention Branch, this three-part series focuses on outbreak investigation, detailing the major steps in investigating a Legionellosis outbreak. An estimated 300 professionals in state and local public health departments in 36 states participate in the webinars.

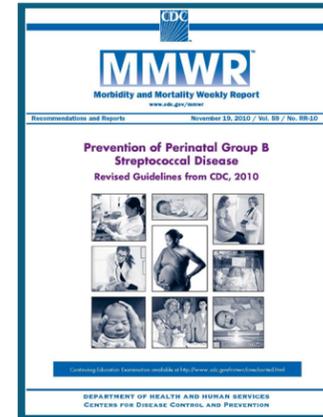


Photo: MMWR cover for the Prevention of Perinatal Group B Streptococcal Disease, Revised Guidelines from CDC, 2010

Tdap and meningococcal conjugate vaccine recommendations are updated by ACIP. It is now recommended that adults 65 years and older can receive Tdap, especially if around young infants; there is no recommended minimum interval between Tdap and last Td; and 7 to 9 year olds can get Tdap if not up-to-date. It is now recommended that adolescents who receive a dose of the meningococcal conjugate vaccine at age 11 or 12 years should get a booster dose at age 16 years. Final policy notes are on track to be published in MMWR in December.

New Group B Strep prevention guidelines are published by DBD, replacing the 2002 guidelines. These 2010 guidelines were developed using an evidence-based approach in collaboration with several professional associations. New resources and a website are launched at www.cdc.gov/groupBstrep. Refer to the November 19 issue of MMWR for more details.

An **External Review of DBD's Vaccinology Laboratories** is held in October. Nationally recognized vaccinology experts make recommendations for future operational activities.

The **2nd annual World Pneumonia Day** is November 12. DBD provides technical assistance to organize worldwide activities: Premiere showing of the Photoshare World Pneumonia Photo Exhibition at the New York Times Center during the United Nations Summit on the Millennium Development Goals and introducing the PneumoniaFighters! at DC transit stations, in Geneva, Switzerland, and at CDC Atlanta. The World Pneumonia photo exhibition is on display at the CDC Public Health Library and Information Center during November.



Photo: DBD epidemiology, laboratory and statistics staff at CDC Atlanta with the PneumoniaFighter! on World Pneumonia Day.

The **3rd annual Get Smart About Antibiotics Week** is November 15-21. DBD partners with local health departments, non-profit partners and for-profit partners to reach millions of people. Messages and resources for healthcare settings from CDC's Get Smart for Healthcare program are included for the first time. November 18 marks the first year of international collaboration, coinciding with European Antibiotic Awareness Day and an observance day in Canada.

The **"New Vaccines for Global Health" meeting** is held in London as part of the 350th Anniversary of the Royal Society. One of the invited international vaccine experts, DBD's director presents on "Introducing new vaccines in developing countries: Challenges of decision making and lessons learned from the Hib vaccine experience."

DBD responds to pertussis outbreaks across the country with Epi-AIDS in California, Minnesota and Ohio. In California, multiple teams of CDC staff collect patient data by visiting healthcare provider offices. In Minnesota, a team collects vaccine history and creates a massive database to analyze; DBD statisticians are integrally involved. In Ohio,



Photo: Emory University's Keith Klugman, MD, PhD and Rana Hajjeh, MD attending the 350th Anniversary of the Royal Society

the CDC team works with the state and local health departments to better understand the outbreak.

In 2010, **DBD initiates case-based surveillance** for laboratory-confirmed meningitis and completes enrollment of 25,000 subjects for the meningococcal carriage study in Burkina Faso.



Photo: Isolates of Neisseria meningitidis and DNA specimens collected in Burkina Faso were shipped to the CDC Meningitis Laboratory in November. DBD Lab staff give a proud "thumbs up" as they prepare to start a series of lab tests as part of CDC's ongoing technical support for meningitis research and surveillance activities in sub Saharan Africa.

regards from
Rana...

Dear colleagues,

This bulletin reviews some of the major activities of the division, as well as major events that have relevance to our work. It's hard to believe another year just passed by, but it's also harder to imagine that so much work can be done in one year! We have helped with controlling multiple outbreaks of pertussis and continue to have people in the field right now in three states. Significant impact on policy has been made by providing support to multiple ACIP decisions and publishing updated recommendations for anthrax vaccine and revised guidelines for group B Strep prevention. We started a major neonatal sepsis etiology study in south Asia and trained laboratorians all over the world to better diagnose vaccine-preventable bacterial diseases. World Pneumonia and Meningitis Days and Get Smart About Antibiotics Week were celebrated. The division has been part of the accelerated introduction of pneumococcal vaccines in developing countries, and just this month, the launch of the long awaited meningococcal A conjugate vaccine in West Africa.

I just came back from Burkina Faso, where the meningococcal vaccine was officially launched. Watching the lines of people queuing up with their children to receive the vaccine was an amazing and most rewarding sight, but even more rewarding is knowing that our division has contributed significantly to bringing this vaccine to the meningitis belt countries, and saving thousands of lives from succumbing to a disease that's devastating to people, families and countries.

I would like to thank you for all your hard work that made such accomplishments possible and wish you very happy and restful holidays. We will need all our energy when we're back!

Rana



Photo: Rana Hajjeh, MD and Marsha Houston with PneumoniaFighters! in Washington, DC on World Pneumonia Day. PneumoniaFighters! distributed information at metro transit stations throughout Washington, DC, in Geneva, Switzerland and at CDC to call public attention to the need to prevent this disease that claims the lives of 1.6 million children younger than age 5 every year. CDC is a lead partner for coordinating this global activity.

PedvaxHIB® is fully available again in the U.S. for routine vaccination after a nationwide shortage. During the shortage, Division of Bacterial Diseases (DBD) staff closely monitor for increased cases of Hib disease and make temporary vaccine recommendations.

The **meningococcal conjugate vaccine, Menveo®, is licensed** by FDA on February 22. DBD staff contributed data and expertise to the first meningococcal conjugate vaccine recommendations in 2005, which Menveo® will follow. See the March 12 issue of MMWR for more details.



Photo: A vial of MenAfriVac™, manufactured by Serum Institute of India, Ltd.

With **American Recovery and Reinvestment Act** (Recovery Act) funds, the Association of Public Health Laboratories in collaboration with DBD, develops and conducts webinars on bacterial vaccine-preventable pathogens, including pertussis (454 participants) and pneumococcus (252 participants). This is followed up with a bacterial wet-lab training at CDC in October, hosted by DBD laboratorians.

Legionella is proposed to be added to Active Bacterial Core surveillance (ABCs). Over the next few months, several ABCs sites agree to participate.

The **13-valent pneumococcal conjugate vaccine (PCV13) is licensed** by FDA on February 24. On that same day, the Advisory Committee on Immunization Practices (ACIP) votes to recommend PCV13. DBD staff contribute data and expertise to help shape the vaccine recommendations that ACIP discusses and votes on. Refer to the March 12 issue of MMWR for more details.

MenAfriVac™ (meningococcal serogroup A conjugate vaccine), manufactured by Serum Institute of India Ltd., receives formal approval on January 24 and is now being manufactured at scale. Priced at just US\$ 0.40 per dose, MenAfriVac™ is expected to prevent 123,000 deaths over the next ten years across the meningitis belt. See Summer/Fall DBD Bulletin for more information.



Photo: State and local health department workshop participants prepare and pipet samples, primers, and probes for PCR plate setup in a biological safety cabinet in the CDC training laboratory during the wet-lab training.

The **2nd annual World Meningitis Day** takes place on April 24. On April 20, the Meningitis and Vaccine Preventable Diseases Branch is honored at the 2010 National Meningitis Association Gala, Give Kids a Shot! in New York City. The National Meningitis Association educates families, medical professionals and others about bacterial meningitis and prevention approaches to the disease.

The **PCV13 vaccine efficacy study starts** — supported with funding from the Recovery Act. This study will enroll patients with pneumococcal disease (who have received PCV13) caused by vaccine-preventable serotypes to determine the vaccine's percent efficacy.

A **pertussis epidemic is declared** by the California Department of Public Health and DBD responds with multiple Epi-AIDS, ethnic media roundtables, a radio media tour, press interviews and other technical support. See Summer/Fall DBD Bulletin for more information.

A pilot test on the **World Health Organization (WHO) assessment tool** for invasive bacterial diseases is conducted by DBD staff in Latvia.

MenAfriVac™ is prequalified by WHO in June. Infant pre-licensure studies for which DBD is testing sera are on track for completion in 2011.



Photo: Gloria Carvalho, PhD in a pre-assessment meeting with colleagues from the Infectology Center of Latvia, familiarizes them with the assessment tool for invasive bacterial diseases.



Photo: Amanda Faulkner records a voiceover for a "how to" video on specimen collection for pertussis testing, one of the new pertussis tools created in 2010.

Relevant Major Events

DBD plays a key role in taking **MenAfriVac™** from development to public health availability. The vaccine is introduced nationwide in Burkina Faso in December with introduction campaigns scheduled for Niger and Mali by the end of the year.

Bill and Melinda Gates announce a \$10 billion 10 year commitment to help research, develop and deliver vaccines for the world's poorest countries.

Updated anthrax vaccine adsorbed (AVA) recommendations are published. DBD epidemiologists lead the Working Group. Laboratorians and statisticians contribute data and expertise, including implementing and analyzing the clinical trials to help shape the vaccine recommendations that ACIP discussed and voted on in 2009. See the July 23 issue of MMWR for more details.

The **International Conference on Emerging Infectious Diseases** is held July 11-14 in Atlanta. DBD's director is the co-chair of the scientific committee and DBD's associate director for science is a member of the committee. Many staff from DBD attend and present at the conference. See abstracts at www.iceid.org.

Pilot safety introduction campaigns of MenAfriVac™ are completed this fall and find no concerning safety signals. A team from DBD is on the ground in Burkina Faso for the official launch of the largest meningitis vaccine campaign in history.



Photo: While EIS Officer George Nelson is in Quetzaltenango, Guatemala, pharmacists use PDAs to complete surveys about antibiotic prescribing and dispensing practices. This project is aiming to decrease inappropriate antibiotic use throughout Guatemala.

Get Smart Goes Global: DBD introduces a program in Egypt and Guatemala. See the 2nd Quarter CDC Global Health E-Brief for more information.

The **ANISA (Aetiology of Neonatal Sepsis in South Asia) study** is funded by the Bill & Melinda Gates Foundation. Taking place in three countries in South Asia (Bangladesh, India and Pakistan) that account for more than a third of all neonatal deaths, DBD is a co-PI of the study that will improve neonatal survival in the region and beyond by describing aetiology of community acquired young infant infections, antibiotic sensitivity of bacterial pathogens, and risk factors for infection. Staff throughout NCIRD are involved in the study.

Photo: In Burkina Faso in December, a young boy receives MenAfriVac™, while others line up for their turn. By mid-December, 6 million people are vaccinated.



DBD 2010 FAST FACTS

11 Epi-AIDS

1 World Premiere Photo Exhibit

4 Podcasts

10 Videos

10 International Lab Trainings

6 Fact Sheets

5 Health-e-Cards

2 CDC Global Health E-Briefs

2 CDC Connects Articles

3 Websites

3 Health Observances Celebrated

20+ Awards

4 New EISOs