



Regional experts gather for data management meeting

The MenAfriNet data management team held its 3rd annual meeting on July 22 in Burkina Faso. Data managers, epidemiologists, and experts from Burkina Faso, Mali, Niger, Chad, Togo, the Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO), and the Agence de Médecine Préventive (AMP) came together to discuss the data management action plan, each country's successes and challenges, the current application, and strategies for validating data.

During the first few days of the meeting, the group analyzed the strengths, weaknesses, and opportunities to both the current MenAfriNet 2015/2016 data management action plan and each country's individual data management action plan. Participants were able to explore implementation issues and make recommendations for the development of the 2016/2017 action plans, which were worked on throughout the remaining days of the meeting.

Meeting participants also had an opportunity to review the latest version

of the MenAfriNet data management system (MenAfriNet DMS Ver 1.1) that will be available in early 2017. A demonstration of the latest version highlighted system corrections to previous reported issues, how to use all updated and new modules, and simulated running a data analysis.

Finally, the group discussed short-, intermediate-, and long-term data access and repository plans. Currently, all implementing partners (WHO, CDC and AMP) have access to MenAfriNet-generated data through a secure data repository to promote the use of data for decision making and for the evaluation of MenAfriVac™ (MACV) and case-based surveillance.

The five-day meeting was a success with participants leaving with a number of recommendations and action items to work on. These recommendations formed will improve the quality of data generated through MenAfriNet surveillance and continue to provide evidence for the prevention and control of epidemic meningitis in sub-Saharan Africa.



New Website Launched!

MenAfriNet's new website launched in spring 2016. The website features:

- **Project history and background**
- **Surveillance feedback bulletins**
- **Newsletters**
- **WHO meningitis bulletins**
- **Publications list**

The website is being enhanced and expanded annually, please let us know what suggestions you have!

www.menafrinet.org



MenAfriNet expanding to Chad

In 2016, Chad was invited to join the MenAfriNet consortium expanding the network further into the central region of the "meningitis belt." Their invitation to join MenAfriNet is a result of their successful partnership and collaboration in MenAfriCar, the African Meningococcal Carriage Consortium, as well as a strong desire and commitment to strengthen case-based meningitis surveillance.

Chad, home to over 14 million people, documented its first meningitis outbreak in 1916. The most recent meningitis outbreaks, caused by *Neisseria meningitidis* serogroups A and W, occurred during 2009 through 2012. Chad was among the countries that participated in the first phase of MenAfriVac™ vaccination rollout and is currently

planning to integrate MenAfriVac™ and 13-valent pneumococcal conjugate vaccine (PCV13) into their routine immunization program.

During February and March 2016, members of MenAfriNet traveled to Chad to help develop a work plan and priorities for strengthening case-based meningitis surveillance. Four districts were selected to begin using updated case-based surveillance guidelines and tools and laboratorians were trained to use direct real-time PCR to confirm suspect cases.

In the coming year, Chad will receive additional training and support to help expand both surveillance and laboratory capacity.

Exploring meningococcal carriage in Burkina Faso

Since the mid-1800s, periodic waves of meningitis epidemics have occurred across the meningitis belt. Historically, about 8 in 10 cases of meningitis in the belt were caused by serogroup A *Neisseria meningitidis* (NmA). Just two years after a novel serogroup A meningococcal conjugate vaccine (MACV, MenAfriVac™) was introduced in Burkina Faso, NmA carriage, when a person has the bacteria in the back of their nose and throat with no signs or symptoms of disease, and disease disappeared, demonstrating the vaccine's impact on carriage, disease, and herd immunity.

While MACV has been very successful at reducing large-scale epidemics of NmA disease, it is still a new vaccine and there is limited information about the vaccine's long-term effectiveness. In 2015 and 2016, five cases of NmA were reported in Burkina Faso. Additionally, large-scale epidemics due to serogroup C *N. meningitidis* (NmC) occurred in neighboring Niger and Nigeria and Burkina Faso reported six laboratory confirmed NmC cases in 2015.

In order to learn more, Burkina Faso has partnered with CDC and the Norwegian Institute of Public Health for a new

evaluation of carriage of *N. meningitidis* and *N. lactamica* with the goal of:

- Understand long-term impact of MACV to guide vaccine policy
- Determine which strains of *N. meningitidis* are currently circulating
- Identify risk factors for carriage of other serogroups of *N. meningitidis*

In May 2016, the first round of the carriage evaluation began in 20 villages across two districts in Burkina Faso. More than 3,400 people were sampled, exceeding the target of 3,360 participants. A second round of sampling was completed in late October/early November.

Preliminary results and laboratory testing from the first round are still under analysis. Data from this investigation will help inform decision makers on vaccination strategies to maintain herd immunity and respond to non-NmA outbreaks.

