In early January, as reports of the spread of Zika virus gripped both the public and public health officials across the globe, the Government of India and CDC began quietly putting the core premises of the Global Health Security Agenda into practice: sharing expertise and resources to prepare for a potential threat.

In addition to trading research and background information, India’s National Centre for Disease Control (NCDC) put in a formal request to CDC for help building up India’s diagnostic capacity for Zika virus. Although CDC resources were focused on the epicenter of the outbreak in Latin America, CDC India worked with colleagues at CDC Fort Collins to get diagnostic kits and protocols and then dispersed them to all interested Indian partners, including NIV, NCDC, NIMHANS, and Manipal University. Private companies were engaged to provide the reagents needed to facilitate real-time PCR, and CDC’s Dr. Dan Garcia provided training on some of the diagnostic protocols.

Even though Zika hasn’t become a threat in India yet, NCDC and CDC India continue to work together to make sure labs across the country have the appropriate diagnostic materials and training to be ready—for Zika or whatever other viruses might be lurking down the line. This kind of cross-collaboration and exchange strengthens public health systems in both the US and India for the immediate threats and the unknown. That’s global health security in action!

Announcements - Upcoming Events

- The next GHSA Quarterly Meeting will be held on June 16. Please contact Prabha Krishnan (pkrishnan1@cdc.gov) for details.

- On June 14 NIV will host the National Laboratory Diagnostic Summit

- Training schedule for JE/NON JE AES Diagnostic Testing with NIMHANS:
  - Good Laboratory Practices, Reporting And Quality Assurance - Assam - June 1
  - Good Laboratory Practices - West Bengal - July 1/2nd week
  - Good Laboratory Practices - UP - July 3/4th week
  - Diagnosis And Detection Of Non - JE/AES Pathogens - NIMHANS - September 1st week

Please contact Dr. Ravi for more information (virusravi@gmail.com, 9343602246)
Updates by Action Package

- At our last quarterly meeting, the GoI decided to set up a Technical Steering Committee to coordinate administrative, financial and technical matters related to all GHSA funded projects in India. The Steering Committee was approved in April.

- NIRT received a revised award notice for their GHSA co-ag on February 4. They plan to expedite work on all activities to achieve the committed targets on time.

Antimicrobial Resistance

- AIIMS and CDC India developed modules for surveillance of central line-associated blood stream infections (CLABSI).

- On May 2, DGHT staff from CDC India prepared a Letter of Agreement with the Municipal Corporation of Greater Mumbai (MCGM) to initiate collaborative activities to address multi-drug resistant tuberculosis in Mumbai.

- All of the PI’s from AIIMS’ ICMR network met in April for the first time to discuss plans for surveillance of hospital acquired infections, laboratory assessments, and infection control and prevention.

Biosafety

- On March 19-20, NIV conducted on-site biosafety training at the National Dope Testing Laboratory, New Delhi. The 2-day workshop focused on "Biosafety Preparedness for handling potential biohazardous material in laboratory setting" and was conducted by Dr. DT Mourya and Dr. PD Yadav.

Emergency Management

- NIHFW conducted its first Rapid Response Team (RRT) training in mid-February with the support of CDC India’s Dr. Kayla Laserson, Dr. Ekta Saroha, Dr. Samir Sodha, and Dr. Rajeev Sharma.

- NIHFW compiled a database of trained RRT manpower, which includes 25 participants from 6 identified states.

- MOHFW and CDC have been working to strengthen capacity to prevent, detect & respond to public health emergencies of international concern at ports of entry. Training for medical & paramedical staff at sea ports on Ship Sanitation, Inspection & Issuance of Certificate is scheduled for May 18-20 in Mumbai & May 25-27 in Cochin.

Lab System Strengthening

- MoUs have been signed between NIV, Pune and all the VHF network laboratories. Viral hemorrhagic fever case investigation form and case definition criteria have been prepared and finalized.

- NIV has signed MOUs with all sites in the respiratory illness surveillance network, and Flu-Respiratory protocol and forms have been finalized.

- Manipal University and NIMHANS have set up an inter-lab quality control system, exchanging samples pathogens to ensure accurate testing.

Surveillance Strengthening

- Both Manipal and NIMHANS presented data and project descriptions at the GHSA meeting at CDC HQ on February 10 & 11.

- NIMHANS signed a MoU with the West Bengal Directorate of Health Services for the initiation and implementation of JE surveillance at four sites across the state (Siliguri, Jalpaiguri, Burdwan and Bankura). STM, Kolkata will serve as the apex laboratory for these sites.

- NIMHANS has standardized the Plaque Reduction Neutralization Test (PRNT) for JE, which will help with the discordant results in ELISA.

BY THE NUMBERS:
GHSA in India 2015-2016

- OUTBREAKS: 31
- PROJECT SITES: 34 in 14 states
- PEOPLE TRAINED: 2500+
Updates by Action Package (continued)

- On March 7-21, NIE led a meeting with CDC India, CDC Atlanta and other key stakeholders of the GHSA Model District project in Tiruvallur to develop and finalize work plans.
- AIIMS rolled out the new CLABSI surveillance protocol at the JPNA Trauma Center. Data will be available on a monthly basis moving forward.
- A team from CDC’s Special Pathogens Branch visited NIV, Pune during November 18-21. Discussions focused on viral hemorrhagic fever case investigation, case definition criteria and forms, surveillance, diagnostics and outbreak response program for the endemic hemorrhagic pathogens in India (CCHF, KFD and Nipah). The team will return on June 13.
- Manipal University has established a unique transport system to get its AFI study samples from remote areas to the Manipal Centre for Virus Research, which utilizes WhatsApp and the local bus routes.
- Manipal has fully established a central online case history database, used by all of the current AFI study sites.
- Manipal and CDC’s AFI surveillance project added new study sites in Jharkhand and Maharashtra, bringing the surveillance network to 15 sites in 7 states total. The first case in Jharkhand was enrolled in mid May.

Workforce Development

- Staff has been recruited for the AIIMS Center of Excellence. The first round of staff training has been completed at the AIIMS Trauma Center.
- NIE and CDC India held a two-day Emergency Operations Center (EOC) training for state and district level health professionals in Tamil Nadu as a part of the Tiruvallur model district project. Topics included an introduction to EOCs and an overview of the benefits and outcomes of an EOC network.
- NIHFW finalized the development of the 3-month Frontline Epidemiology Training curriculum. The inaugural workshop trained 27 people from 16 districts in Rajasthan, including Deputy CMHOs and epidemiologists.

Connections: Managing the Masses at the Ujjain Kumbh Mela

How do you keep everyone safe during a 6-week religious gathering that’s bigger than the Rio Olympics and on par with the Haj? With a lot of preparation, communication, and cross sector cooperation.

In anticipation of the millions of worshippers planning to descend upon Ujjain for Simhasth 2016, partners from RD Gardi Medical College, the District Health Administration, AIIMS, PGI Chandigarh, CDC India and Emory University worked together to train 1200 people in first aid, emergency response, and the surveillance and management of water borne, food borne, vector borne and respiratory infections during mass gatherings.

The training was modeled after similar workshops for the Nasik Kumbh Mela, which wrapped up without a single negative public health event. This time the multi-agency team went even further, helping to establish a field Emergency Operations Centre (EOC), with India EIS officers on hand for public health surveillance. This EOC helped share real-time daily disease surveillance data and information from partner agencies, including RD Gardi Medical College and NIE. By all accounts, the Ujjain Kumbh Mela was a public health success—and the teamwork that made it so a stellar model for future mass gathering preparations across India.
Updates by Action Package (continued)

- NIHFW and CDC are continuing to review and adapt the training material for the first Public Health Management (PHM) Program. The training module will be piloted in the near future.
- Plans to significantly expand the India EIS are underway.
- India EIS officers Dr. Amol Patil and Dr. Priyakanta Nayak were chosen to present their work at CDC’s annual EIS Conference in Atlanta on May 4. Dr. Nayak was honored for the best oral presentation out of all the international presenters. Congrats to both on representing the India EIS well!

Zoonoses

- NIE continued to foster collaboration between Animal Husbandry, Dairying and Fisheries (DADF), National Institute of High Security Animal Diseases (NIHSAD), and NIVEDI to help establish the FETP-Veterinary training program.

The Last Word

“As horrible and tragic as the Ebola crisis was, in West Africa, many more people died of non-Ebola causes while the outbreak was taking place.”

- Dr. Keith Martin, Director, Consortium of Universities for Global Health