

Updates from the Field

Protecting Health and Building Capacity Globally

Fall 2013, Issue 12

India's EIS Officers Investigate Mysterious Illness Affecting Children in Muzaffarpur

Submitted by: Dr. Kayla Laserson, Resident Advisor, India EIS Program

In May 2013, India's first Epidemic Intelligence Service (EIS) class of 7 officers travelled to Muzaffarpur district in the state of Bihar in northeast India. They went to investigate a recurrent outbreak of an unknown acute neurological syndrome (ANS) that causes swelling of the brain and seizures and can lead to death within hours of disease onset. There have been previous large outbreaks of ANS in Muzaffarpur in 2005, 2011 and 2012 affecting hundreds of young children. The outbreaks consistently occurred during the dry, hot months of May and June and primarily affected young children (2-5 years) who had seizures and/or altered mental status; 35-44% of the children died. This year there were 130 cases and 59 deaths.



EIS officer Dr. Kapil Goel interviewing the mother of a child with ANS in Muzaffarpur District, India.

cases declines dramatically with the onset of the monsoon weather and rains. A link among the cases has not been identified; each affected child in the last several years has been an isolated case in his or her village. Children affected are neither the youngest nor the oldest in their household. Almost all cases reside in rural sections of Muzaffarpur district, while very few patients are from urban centers.

During this year's outbreak, from May 17-July 21, the India EIS officers, under the direction of the India National Center for Disease Control (NCDC) of the Ministry of Health and Family Welfare, in collaboration with the U.S. CDC's Global Disease Detection Center in India, conducted prospective hospital-based surveillance for ANS at three referral hospitals in Muzaffarpur district. Identified ANS cases were enrolled in a nested case-control study to evaluate potential risk factors for illness and mortality.

The NCDC-led investigation was also assisted by CDC experts in Atlanta. Each Indian EIS officer spent at least 6 weeks on site, enrolling cases in surveillance, and enrolling cases

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Several EIS officers and health authorities from Muzaffarpur District and Dr. Jim Sejvar, the CDC Neuroepidemiologist who came to assist with the outbreak investigation, discussing the outbreak.

This part of India is the primary litchi (lychee fruit) growing area in the country. The peak of the outbreak has been noted to coincide with the litchi harvesting season, which has led to various hypotheses regarding associations between consumption or contact with litchis and the development of this acute neurologic illness. These potential associations have not been confirmed. Every year, the number of ANS

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Seeking Submissions...

If you would like your program to be featured in an upcoming issue of *Updates from the Field*, please send a 200-400 word summary of your program's activities and photos to Ruth Cooke Gibbs at icn6@cdc.gov.

Highlights of Investigations

An Up Close Look at Nipah Virus in Bangladesh

Submitted by: Sonia Hegde, MPH – ASPH Fellow, CDC Atlanta



A young boy with Nipah virus is receiving supportive care. There are currently no drugs or vaccines available to treat Nipah virus infection.



A hospital waiting area is lined with people suffering from Nipah virus infection.



A young child with Nipah virus is receiving supportive care. There are currently no drugs or vaccines available to treat Nipah virus infection.

As a second-year Association of Schools of Public Health (ASPH) Global Epidemiology fellow, I have spent approximately one year in Bangladesh, working with CDC's Global Disease Detection Center and leading a study of risk factors for infection by Nipah virus: a disease that causes encephalitis and severe respiratory distress and has a case fatality rate over 75% in Bangladesh. On a particular field visit for Nipah virus surveillance, a Bangladeshi medical epidemiologist and I finally reached the remote hospital where we sought to evaluate a patient with encephalitis. We found him: an unconscious boy, held in his mother's arms, saliva foaming at his mouth. His lips moved ceaselessly, mouthing silent screams of pain. We would not know for days whether his blood sample would test positive for Nipah virus. I carried out my investigative tasks: identifying his latest contacts, activities, approximate onset of illness, and possible exposures. I used the tools I was given to better understand his condition and to inform measures of prevention for this distressing encounter.

Experiences like this bedside visit helped me to not only see the human face of the disease I was approaching as a public health problem, but also the practicality and usefulness of epidemiology. Intellectually, I knew that the scientific study that brought me to this child's bedside was important, that in the fullness of time it may alleviate the suffering not only of one patient, but could bring relief to many. But I also discovered that I couldn't address this sort of suffering as scientific inquiry alone; that we must master the art of caring and truly understanding another's condition so that we may one day better address the complexity of human needs. I looked at this Bangladeshi boy not as study material, but rather as a child in agony, the alleviation of whose pain is the greatest need in the world and whose pain we, as a scientific community, are working to prevent.

For further information, please contact Dr. Jeremy Sobel at qzs2@cdc.gov.

India's EIS Officers Investigate Illness

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and controls (both hospital and community) in the case control study. The teams collected demographic, clinical and exposure information from the study participants, and collected specimens from participants for testing for infectious diseases such as Japanese Encephalitis, West Nile virus, Nipah, Chandipura, and enteroviruses. To date, the cause for this illness has not been confirmed.

The Indian EIS officers will participate in data analysis, interpretation and dissemination of results. The EIS officers were all excited to have been part of this important investigation, learned a systematic approach to outbreak investigation, and will apply these skills to future investigations.

For further information, please contact Dr Padmini Srikantiah (pks6@cdc.gov), CDC India.

Highlights of Investigations

A John Snow Moment in a Small Rural Village in Vietnam

Submitted by: Dr. Alden Henderson, CDC Atlanta

During the 1840s and 1850s, a series of cholera outbreaks occurred in London and people thought that the outbreaks were caused by miasma or “bad air”. John Snow, an anesthesiologist who is now considered one of the fathers of modern epidemiology, talked to local residents and traced the source of the outbreak to a water pump on Broad Street, London. Snow used a dot map to show clusters of cholera around the pump. He also used statistics to show that the public works delivered sewage-polluted water from sections of the Thames River to homes near the Broad Street pump where the highest incidents of cholera occurred. Despite not knowing the exact cause of the outbreak, Dr. Snow presented his theory to city officials and the next day, the pump handle was removed. This action helped end the cholera epidemic in London. Last year, a similar event involving a disease of unknown etiology occurred in Ba Tờ, a small rural village in Central Vietnam.

In April 2012, newspapers reported 164 people had a mysterious skin disease that caused 8 deaths. Symptoms of the disease began with a rash on the hands and feet and in some patients, it caused liver damage and multiple organ failure. Several investigations were unable to find the cause of this disease.

In June of 2012, the Vietnam Ministry of Health conducted an intensive investigation that examined infectious and environmental causes. Residents from the Vietnam Field Epidemiology Training Program (FETP) were asked to conduct an epidemiological study to help understand the cause of the disease.

The epidemiological study reported a strong association with eating rice from the previous harvest. According to Vietnam FETP Resident Advisor, Tran Minh Nguyen, “We did not know if the cause of this disease (now called IPPH - idiopathic palmar-plantar hyperkeratosis) was the poor nutritional content of the rice or a poison or toxin in the rice. However, we felt that the rice was contributing to the disease because people who ate the rice were fifteen times more likely to become ill.”

As a result of this information, in August 2012, the Government of Vietnam began to provide rice and vitamin supplements to the residents of Quang Ngai and to date, very few new cases of IPPH have occurred. The Vietnamese government continues to monitor the situation in Quang Nai and bordering villages. With the hope of finding the exact cause of IPPH and preventing future outbreaks, the Vietnam-FETP continue to test rice for fungi and toxins caused by fungi and nutritional content.

For further information, please contact Dr. Alden Henderson
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A Vietnamese patient with IPPH lesions on his foot.



A Vietnamese physician examining a family with IPPH.



A Vietnamese patient with IPPH lesions on his foot.

Thailand's International FETP Launches Thailand-Burma Cross-border Surveillance Evaluation

Submitted by: Dr. Tippavan Nagachinta and Dr. Alden Henderson, CDC Atlanta

Since the revised International Health Regulations were put into place in 2005, ministries of health around the world are working collaboratively with WHO and other partners including CDC to strengthen their ability to have robust disease surveillance systems. These systems are critical to enabling countries to identify public health threats, provide rapid response, and control and prevent future outbreaks.

After outbreaks of Severe Acute Respiratory Syndrome (SARS) in 2002 and H5N1 influenza in 2003, Thailand's International FETP (IFETP), in collaboration with neighboring countries, established cross-border surveillance and outbreak response activities in 2009 and now conducts cross-border surveillance



Thai-Burmese FETP investigation team and Burmese public health officials at the Thai-Burmese surveillance meeting in Mae Sot, Tak Province, Thailand, July 19, 2013.



Thai-IFETP resident interviewing Myawaddy hospital staff during malaria surveillance evaluation, July 16, 2013.

investigations with neighboring countries (Laos, Cambodia, Vietnam, and Malaysia). Several cross-border surveillance investigations have been conducted shortly after the new cohort of IFETP residents complete their first 4-weeks of didactic training.

Malaria is endemic between the borders of Thailand and Burma and presents a concern of antimalarial drug resistance to the Thai Ministry of Public Health (MOPH) due to high mobility of the migrant population near the border. In June 2013 two Burmese medical officers supported by the U.S. President's Malaria Initiative participated in the IFETP and proposed an evaluation of malaria surveillance in the border region. In July, Thailand IFETP launched the Burma-Thailand cross-border surveillance evaluation of malaria at Mae Sot Hospital, Tak Province, Thailand and Myawaddy District Hospital, and a few rural health centers in Myawaddy, Kayin State, Burma. Three IFETP residents (2 from Burma and 1 from Vietnam) participated in this activity together with a team from the Thailand IFETP which consisted of Thai FETP training instructors and graduates, and local public health staff.



Team members interviewing Mae Sod Hospital epidemiologist, July 16, 2013.

The three IFETP residents reviewed data from the two hospitals in the border region. All available surveillance data on malaria from 1999-2012 were collected from the hospitals. IFETP residents analyzed the data according to the CDC guidelines for conducting a surveillance evaluation. The findings obtained from this surveillance evaluation were presented to health officials and international visitors on July 19, 2013. A plan to improve surveillance systems in both hospitals was presented with open discussion.

This international collaboration on surveillance activities indicates a strong partnership between the ministries of health in Thailand and Burma to strengthen the capacity of disease surveillance systems in both countries. Lessons learned from this cross-border activity will also improve the training program in field epidemiology and strengthen the cooperation and collaboration between the two countries to conduct future disease outbreak investigations together.

For further information, please contact: Dr. Tippavan Nagachinta at txn3@cdc.gov.

Officials from South Africa's National Department of Health and National Treasury meet with CDC about National Public Health Institute Development

Submitted by: Shelly Bratton, CDC Atlanta

CDC South Africa is working closely with the South African National Department of Health (NDOH) to strengthen its public health surveillance, epidemiology, outbreak response and public health workforce. The South Africa government is specifically focusing on public health priorities in the areas of communicable diseases, non-communicable diseases, cancer surveillance, injury and violence prevention, and occupational health and safety.

From August 19-23, a delegation of South African government officials and CDC South Africa staff visited CDC in Atlanta to better understand how national public health institute (NPHI) models are structured to maximize public health impact. CDC's Division of Global Health Protection (DGHP, proposed) coordinated the visit in partnership with the International Association of National Public Health Institutes (IANPHI). With funding from the Bill and Melinda Gates Foundation, CDC and IANPHI are working together to help countries develop or strengthen NPHIs. South Africa's exploration of potential policy options for an NPHI is also being funded through the Gates Foundation.

The South African team participated in seminars and meetings with senior CDC experts from across the agency to learn about the agency's history, governance, legislative authorities, innovative programs for disease prevention and outbreak response, and coordination mechanisms at CDC, the U.S. Department of Health and Human Services, and state health departments. In addition, the delegation learned about CDC's ability to leverage the private sector through public-private partnerships and the CDC Foundation. They also heard from IANPHI experts on the various models for NPHI development and organization based on the experience of IANPHI's >90 members. A senior official from the Public Health Agency of Canada, a key CDC and IANPHI partner, provided insights into how her agency was created following the SARS epidemic in 2003.

As a result of the visit, the team identified potential quick actions to improve public health upon returning to South Africa, including working with partners to improve coordination of surveillance and TB control. According to Dr. Kistnasamy, "Our



August 21, South Africa delegation, CDC, and IANPHI meet with Dr. Theresa Tam from Public Health Agency of Canada. Back row, l-r: Goolam Manack, Allison White, Dennis Jarvis, Frew Benson, Shabir Madhi, Barry Kistnasamy; Front row, l-r: Shelly Bratton, Heidi O'Bra, Theresa Tam, Sue Binder, Rachel Eidex, Nancy Knight, and Mike St. Louis. Photo courtesy of Ken Johnson.



South Africa delegation meets with CDC Director, Dr. Thomas Frieden at CDC Headquarters in Atlanta, Georgia. From l-r: Frew Benson (NDOH), Goolam Manack (National Treasury), Dr. Frieden (CDC), (not visible) Barry Kistnasamy (NDOH), (head turned) Nancy Knight (CDC). Photo courtesy of Amanda J. Mills.

time in Atlanta helped us think through some of the challenges and opportunities we face and identify innovative ways to improve public health in South Africa. We are very grateful for our time with experts from CDC, IANPHI, the Georgia Department of Health, and the Public Health Agency of Canada and look forward to building upon these relationships as we move forward to enhance the health of all who live and work in South Africa."

For further information, please contact: Shelly Bratton at bwp8@cdc.gov.

WHO/HHS Workshop on Enhancing Communication around Influenza Vaccination Atlanta, CDC Tom Harkin Global Communications Center

Submitted By: Marie-Paule Kieny*, Daniel Miller^S, Asiya Odugleh-Kolev*, Claudia Nannei* and Alexandra Ganim^S

The Workshop on Enhancing Communication around Influenza Vaccination was held at CDC June 11-13, 2013 and was attended by more than 90 participants from 31 countries, representing national governments, vaccine manufacturers, healthcare professional associations, journalists and development partners. The objectives of the workshop were to:

- bring together key stakeholders to identify and discuss common concerns and challenges in communicating the importance and benefits of seasonal influenza vaccination, address misinformation and promote vaccine acceptance by health professionals and the public;
- provide a forum to discuss evidence-based mechanisms, best practices and effective models for strengthening national and regional communication capacities for influenza vaccination, including innovative use of media tools; and
- define national and regional priorities and options for building sustainable communication capacity for seasonal influenza and pandemic preparedness.

Positioned within the context of the World Health Organization's (WHO) Global Action Plan for Influenza Vaccination (GAP), the agenda flowed from expert opinion to reflection and discussion on the key topics covered. Presentations provided a background for: understanding the context; clarifying myths and facts; exploring vaccine refusal and confidence; uncovering specific communication assumptions; discovering communication science; and sharing lessons learned on capacity building experiences. The break-out sessions enabled in-depth discussions among participants and led to an agreement on common obstacles, success factors and recommendations for establishing an effective communication system in any country.

The outcome of the workshop was the establishment of a model for an effective national communication system to routinely develop and execute appropriate and relevant context-specific national communication plans and strategies for seasonal and pandemic influenza. The full workshop report, which will provide more detail about the development of this framework and insight into each content area, will be available at this website in Fall

Building blocks for an effective national communication system – proposed framework

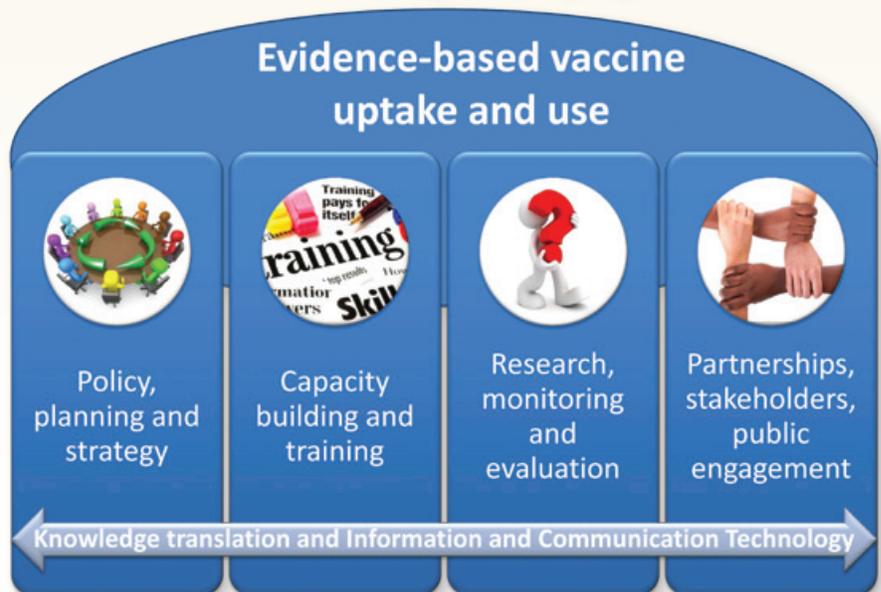


Diagram 1: Building blocks for an effective national communication framework to improve and strengthen seasonal and pandemic influenza.

2013: [http://www.who.int/influenza_vaccines_plan/news/workshop_communication_influenza_vaccination_11_13_june_2013/en/index.html].

The Workshop on Enhancing Communication around Influenza Vaccination is part of a series of workshops organized by the U.S. Department of Health and Human Services (HHS) Office of Global Affairs and WHO Health Systems and Innovation Cluster to support the GAP and global influenza pandemic preparedness. The GAP promotes the expansion of influenza vaccine production capacity, including the establishment of new production facilities in countries and regions previously lacking capacity to ensure rapid and equitable access to influenza vaccines in the event of a pandemic. It also promotes evidence-based national policy development to increase access, up-take and use of influenza vaccines and research for the development of better influenza vaccines.

*World Health Organization

^SUS Department of Health and Human Services

CDC Identifies a Novel Poxvirus in Georgia, July 2013

Submitted by: Dr. Juliette Morgan, Dr. Mary Reynolds and Justin Williams, CDC

The U.S. Centers for Disease Control and Prevention (CDC) is coordinating with the National Center for Disease Control and Public Health of Georgia (NCDC) to investigate the discovery of a new Poxvirus that so far has affected two individuals.

On July 5, 2013, the U.S. CDC's Global Disease Detection Center in Tbilisi, Georgia was contacted by personnel from the NCDC requesting assistance in diagnostic evaluation of a shepherd suspected of having cowpox. Cowpox is caused by a virus which belongs to the family of Poxviruses. These viruses can cause disease in domestic animals such as cows and sheep, which can be transmitted to humans by direct contact with infected animals such as skin exposure to infected udders during milking. The human disease can be confused with cutaneous anthrax (anthrax that enters the body through cuts or sores in the skin).

The shepherd was evaluated clinically by a local physician and later referred to an infectious diseases hospital where biological samples were collected after consultation with CDC experts in Atlanta. Two weeks later, a second shepherd from the same district—a close contact of the first—presented with a similar illness. Clinical specimens were collected from



CDC orthopox expert Darrin Carroll along with a local mammologist dissecting a rodent in a field lab designed to test for orthopox. Photo by Giorgi Turabelidze.

the second shepherd and both sets of specimens were shipped to the Poxvirus laboratory at CDC in Atlanta. Both shepherds reported, prior to becoming ill, having had direct contact with cows that had pox lesions on their udders. Each summer both shepherds take their cattle to graze in the foothills of the Caucasus Mountains near the border with Russia.

The specimens arrived at the U.S. CDC Poxvirus laboratory on July 18, and the tests confirmed the presence of a virus belonging to the family of Poxviruses in the genus Orthopoxvirus, however the virus was found to be very different from other characterized Orthopoxvirus species. The Orthopoxvirus genus includes viruses that can cause severe illness and death, such as the smallpox virus (variola) which was eradicated through an effective program of surveillance, containment and vaccination.

The discovery of a new poxvirus is notable for several reasons.

- As a new virus, it is not adequately captured by current rapid diagnostic tests, therefore new tests need to be developed to identify this new poxvirus.
- The medical and epidemiologic features of these poxvirus infections have not been defined.



Georgian regional veterinarian and a local shepherd, getting a sample from a previously symptomatic cow, to test for the novel orthopox virus.

- Potential impacts to agricultural production and risks to agricultural workers need to be defined.

CDC-Georgia is coordinating the investigation with subject matter experts from the CDC's Poxvirus and Rabies Branch*, and with experts from NCDC, to:

- lead the human case investigation, including interviewing the shepherds and conducting active human case finding;
- train Georgian staff on lab tests and transfer appropriate technology to the Lugar Center in Georgia. The Lugar Center is a cooperative laboratory effort between the U.S. and Georgian governments;
- search for the source of the virus among local animals;
- brief relevant staff and reach consensus on the investigation approach with NCDC and the Ministry of Agriculture's National Food Agency and National Laboratory;
- engage the National "One Health" Task Force who will participate in the field work;
- involve graduates from the U.S. CDC Tbilisi Field Epidemiology and Laboratory Training Program (FELTP) in the health and agricultural sectors of the investigation;
- strengthen laboratory-based surveillance activities; and
- measure the agricultural impact.

Due to the support of the CDC Global Disease Detection Center in Georgia, CDC subject matter experts, and the close U.S. Government collaboration with NCDC, as demonstrated through these ongoing efforts to investigate this novel virus, emerging and re-emerging diseases can be quickly detected and comprehensive strategies put in place to prevent illness and save lives.

* The Rabies and Poxvirus Branch is in CDC's National Center for Emerging and Zoonotic Infectious Diseases/Division of High Consequence Pathogens and Pathology.

For further information, please contact Dr. Juliette Morgan, jtm7@cdc.gov.

The Haiti Field Epidemiology Training Program (FETP) Graduates its Second Cohort

Submitted by: John Ngulefac, CDC Atlanta

In the wake of the earthquake and subsequent outbreak of cholera, it quickly became clear that epidemiological support for Haiti's Ministry of Public Health and Population (MSPP) was needed. Enhancing MSPP's response to future outbreaks includes strengthening the collection and evaluation of surveillance data, and enhancing response to possible outbreaks of disease.

A little over a year after the earthquake, CDC through support from the Health Systems Reconstruction Team within CDC's Emergency Response and Recovery Branch began identifying and screening candidates for the Haitian Field Epidemiology Training Program (FETP), which mirrors CDC's Epidemic Intelligence Service program. It utilizes a three-tiered structure with a curriculum tailored to the resident's work functions at the local, departmental, and national levels of government.

On July 24th, 2013, Haiti celebrated the graduation of eleven residents from the nine-month intermediate level of Haiti's three-tiered FETP. The graduation ceremony was attended by more than 40 participants from MSPP and CDC. Speakers included the Director General of Haiti's MSPP, Dr. Guirlaine Raymond Charité, the CDC-Haiti FETP technical advisor, Dr. Nadia Phaimyr Jean Charles and speakers from both CDC Haiti and CDC Atlanta. During her speech, the Director General stated: "This training is important in the eyes of the highest authority of the Ministry when we consider the role that epidemiological surveillance must play in the improvement of the population's health. This training meets a need...to strengthen epidemiological surveillance developed by DELR with the support of its partners..."

During the ceremony, Dr. Andrecy Lesly Liverdieu, president of the graduating class, thanked the Haitian and U.S. governments for accepting them into the program and for providing funding for their participation. On behalf of his classmates, he promised their readiness, pledged themselves to be the ambassadors of the program, and re-affirmed their willingness to improve public health in Haiti.

The graduates received their diploma after nine months of intensive class and field work. The residents have worked on several activities including surveillance, outbreak investigations, and scientific studies. They also submitted abstracts to international conferences. Recently, the Haiti FETP



Director General of Haiti's MSPP, Dr. Guirlaine Raymond Charité providing remarks during the Haiti-FETP graduation ceremony, July 24, 2013.



Haiti-FETP residents responding to a cholera outbreak in Haiti in February, 2013.



FETP Coordinator, Dr. Patrick Dely providing remarks during the Haiti-FETP graduation ceremony in Port-au-Prince, Haiti, July 24, 2013.



Dr. Roc Magloire, Director of the Direction of Epidemiology, Laboratory and Research (DELR) providing remarks during the Haiti-FETP graduation ceremony, July 24, 2013.



Haiti-FETP Cohort 2 graduating class of 2013.

residents played a critical role in confirming and containing a cholera outbreak in Croix-des-Bouquets, a locality in the West Department.

With the graduation of these eleven residents, the three-tiered Haiti FETP program has now trained 60 public health leaders in basic level and 23 residents in the intermediate level.

For further information, please contact Dr. Nadia Phaimyr Jean Charles at xfg6@cdc.gov.

IDSR Training in the Democratic Republic of Congo Embraces the One Health Approach to Public Health

Submitted by: Monique Tuyisenge-Onyegbula, CDC Atlanta

For more than a decade, Member States within the World Health Organization (WHO) Regional Office for Africa (AFRO) have been implementing the Integrated Disease Surveillance and Response (IDSR) strategy for improving their public health surveillance and response systems. IDSR targets the leading causes of illness, death and disability, and is designed to strengthen the linkages for detecting, confirming and responding to disease threats at community, health facility, district and national levels.



From left: Dr. Wat'senga Laya of the Congolese National Police, John Ngulefac of FELTP, CDC, Dr. Sudiakonga Djonga of the Congolese National Police and Monique Tuyisenge-Onyegbula of IDSR, CDC. Photo courtesy of Monique Tuyisenge-Onyegbula.

The Democratic Republic of Congo (DRC) is one of the 47 AFRO Member States that has been implementing the IDSR strategy and has also adapted and adopted the revised IDSR Technical Guidelines which countries use as a reference for policy, processes and training development and incorporates the expanded scope of the International Health Regulations (IHR 2005). The goal of the DRC's Direction de Lutte Contre la Maladie (DLM) (Department for Disease Control) is to have an operational and strong disease surveillance system for timely detection and response to the leading causes of illness, death and disability in the country.

In July, 2013, IDSR and Field Epidemiology Training Program teams from the Centers for Disease Control and Prevention (CDC)'s Division of Global Health Protection (proposed) were invited to conduct an IDSR training in Kinshasa in collaboration with DRC's DLM using the French language version of the revised IDSR Technical Guidelines and training materials. The training was facilitated by Monique Tuyisenge-Onyegbula from CDC's Global Health Security Branch, John Ngulefac from CDC's Field Epidemiology Training Program Branch (FETPB) and Dr. Yassa Daniel, DRC's FELTP Resident Advisor. The participants in the course came from several ministries including the Public Health, Animal Health, Environment and Conservation ministries, as



Dr. Kebella Ilunga Benoit, DRC's Director of Disease Control (la Direction de Lutte Contre la Maladie (DLM)) presenting the main findings and recommendations of an investigation of a recent Ebola outbreak in Isiro. Photo courtesy of Monique Tuyisenge-Onyegbula

well as from the Congolese Armed Forces and Interior (Congolese National Police) ministries.

The training incorporated the goal of the One Health approach to increase collaboration across disciplines and improved understanding and response to a range of health issues. DRC frequently suffers from cycles of conflict and violence by armed groups. Training the police force in IDSR objectives about disease priorities, reporting, data thresholds and response, extends these critical capabilities to civilian populations not served by public health programs. Often, in hard-to-reach and post-disaster areas in the DRC, the police are more able to access or are already present in these areas and can contribute to more timely detection and reporting of public health threats. Dr. Kebella Ilunga Benoit, Director of DRC's DLM remarked, "During a recent Ebola outbreak in Isiro, civilian doctors from the DLM did not have access to patients in parts of the country, so information and samples were transported to National Reference laboratories via the police and military doctors who were deployed to the areas." Dr. Yassa Daniel added that "when you train the military and police force of a country, you have actually trained the community".

For further information, please contact Monique Tuyisenge-Onyegbula at von8@cdc.gov.



IDSR training attendees, July 1-5, 2013 at the Blood Transfusion Center, Kinshasa, DRC. Photo courtesy of Monique Tuyisenge-Onyegbula.