Ethiopia

Overview

With the support of CDC, influenza surveillance in Ethiopia was initiated in 2008. The first cooperative agreement between the Federal Ministry of Health (MOH)–Ethiopian Health and Nutrition Research Institute (EHNRI) and CDC began in August 2007. EHNRI continues to build laboratory and epidemiologic surveillance capacity to determine seasonality and burden of influenza disease in Ethiopia. EHNRI also improved capacity of laboratories to detect influenza viruses through training for laboratorians and surveillance officers. In 2009, an emergency operating center under the emergency public health management directorate was established.

Highlights

- Entered surveillance data from sentinel sites into database and descriptive data analysis was conducted by time, place, and person.
- Submitted an abstract for a poster presentation at the Options for the Control of Influenza Conference – the abstract was accepted.
- Provided alert message to public health units on H7N9 influenza.
- Distributed influenza sentinel surveillance guidelines and communication materials to sentinel sites.

Surveillance

Sentinel surveillance has the potential to provide more complete data about some of the epidemiologic characteristics of severe acute respiratory infection (SARI) and influenza-like illness (ILI). Ethiopia has selected 20 priority diseases with mandatory reporting. Among those required to be reported immediately are avian-human influenza, pandemic influenza, and severe acute respiratory syndrome (SARS). In Ethiopia, currently eight sentinel sites (five SARI sites and three ILI sites) are actively working. All sites have received training, laboratory supplies and budget to run influenza surveillance related operations.

Surveillance Activities

- Compiled and entered surveillance data into database using Epi-info statistical software.
- Monitored the quality of surveillance data based on gaps identified and provided feedback to the reporting sentinel sites.
- Developed weekly public health emergency management bulletin and shared with partners and government organizations.
- Conducted Influenza Technical Working Group meetings.
- Hosted a CDC Atlanta expert who visited the national surveillance unit located at the Public Health Emergency Management Center (PHEMC), national influenza laboratory, and sentinel sites to provide technical assistance and feedback.
Laboratory
The National Influenza Laboratory (NIL) at EHNRI is the only laboratory capable of influenza diagnostic testing in the country. The laboratory became functional in June 2009. The NIL has worked closely with CDC to establish a state-of-the-art laboratory. Routine testing of respiratory samples collected through the SARI/ILI sites commenced in 2009. Collaboration between human and animal health laboratory staff is also being supported.

Laboratory Activities
- Provided laboratory supplies and cost estimates for the newly selected SARI sentinel sites in four regions.
- Provided onsite technical assistance to most sentinel sites weekly.
- Received throat swab specimens from sentinel sites each week.
- Collected a total of 1,006 specimens, of which 999 were tested at NIL by PCR, with 284 testing positive for Influenza; 93 for Flu B, 63 A/seasonal H3, and 128 were influenza A (H1N1) pdm 2009.
- Reported laboratory results to WHO AFRO weekly.

Preparedness
An overhaul of the entire health sector was carried out in 2009, during which new organizational structures were set up, including PHEMC. This center is responsible for preparedness, early warning and response to any public health emergencies including avian and human influenza (AHI) and pandemic influenza. The newly established body is now situated at EHNRI in order to spearhead epidemiological surveillance of diseases and events with the EHNRI laboratory providing technical support.

Preparedness Activities
- Conducted a training workshop in September 2013 to review annual activities and provide training on influenza surveillance to medical directors, focal persons, and surveillance and laboratory experts from different levels.
- Developed sustainability plan for influenza surveillance system.
- Printed and distributed 300 Influenza Sentinel Surveillance Guidelines to the sentinel sites.
- Printed and distributed 2,000 SARI (in English) and 4,000 ILI brochures (2,000 in Amharic and 2,000 in English) for health workers at the sentinel sites.

Training
- Provided on-site orientation to all new SARI sites on specimen collection, storage and transportation, how to report using both case-based and weekly aggregated report formats.
- Provided orientation on H7N9 for department heads and experts from regional Public Health Emergency Management Centers, Regional Public Laboratories, Disease Prevention and Health Promotion Directorates during PHEM Annual Review Meeting (April 2013).
- Provided a two day training for 40 health workers from former and newly identified influenza surveillance sentinel sites, regional laboratories and PHEM Centers (September 2013).
- Conducted technical review meeting in October 2012 to strengthen sentinel of surveillance activities.