

MALI



A laboratory technician working at CVD-Mali.

OVERVIEW

Influenza surveillance in Mali is carried out through a cooperative agreement between CDC and the Center for Vaccine Development of Mali (CVD-Mali). The agreement began in 2013 and is intended to assess and improve the national influenza surveillance of Mali. Surveillance is conducted using sentinel sites located in two regions and in the capital city of Bamako. The agreement has strengthened influenza surveillance in Mali and supported capacity building that has enhanced the level of preparedness and response of the country.

SURVEILLANCE

Influenza is on the list of reportable diseases in Mali. Prior to the Center for Vaccine Development of Mali's (CVD-Mali) clinical research on influenza in 2009, there was no surveillance system to monitor influenza activity. In May 2009, CVD-Mali was named the National Influenza Center (NIC) of Mali and acquired necessary equipment and reagents. The first laboratory-confirmed cases of influenza revealed that influenza A (H1N1)pdm09 virus had arrived in Mali. When the country was awarded the cooperative agreement, the project was presented to health authorities to endorse the initiative. Currently, influenza surveillance is conducted at three SARI sites and five influenza-like illness (ILI) sites.

HIGHLIGHTS

- Procured laboratory supplies and reagents.
- Assessed the national epidemiological surveillance system.
- Enhanced the national influenza surveillance protocol.
- Selected and activated sentinel sites.

SURVEILLANCE ACTIVITIES

- Trained sentinel site staff on influenza case definition, sample collection, and shipment.
- Developed a centralized database to integrate clinical and laboratory data.
- Performed regular supervisory visits to influenza sentinel sites in Sikasso and Mopti (monthly) and Bamako (weekly).
- Collected samples and case report forms from sentinel sites in Sikasso and Mopti and sent them to the NIC.
- Shared weekly reports with sentinel sites, the Ministry of Health, CDC, and WHO Country Office, and entered information into FluNet.



Dr. Boubou Tamboura and Dr. Adama Mamby Keita at the Grants Proposal Writing Workshop in Johannesburg, South Africa.



Photo taken during a site visit in 2015.

LABORATORY

Before the cooperative agreement, the NIC in Mali had the capacity to test for influenza viruses. The cooperative agreement supports the laboratory by providing logistical and technical support to sentinel sites. Laboratory supplies received from CDC have helped strengthen surveillance activities.

LABORATORY ACTIVITIES

- Conducted IATA training regarding procedures for shipment of dangerous goods for laboratory staff.
- Provided extensive training to NIC laboratorians on influenza virus typing, subtyping, PCR, RT-PCR, and reverse genetics techniques.
- Participated in WHO's External Quality Assessment Project (EQAP) for the detection of influenza virus type by RT-PCR with successful results (100%).

PREPAREDNESS

Pandemic influenza preparedness and planning has advanced considerably in Mali. The Ministry of Health implemented an integrated disease surveillance and response system which will soon include influenza. Mali developed a national strategic plan for influenza surveillance and response. Sentinel site staff were trained on suspected case detection and NIC laboratory capacity has improved.

TRAINING

- Participated in the Grant Management Training in Madagascar.
- Acquired IATA certification training for seven NIC staff members.
- Trained trainers in collaboration with CDC.
- Trained select sentinel staff members (laboratory technicians, nurses, doctors, and epidemiologists).
- Invited to present at the ANISE Meeting in Cape Town, South Africa (December 2014).
- Participated in a Grants Proposal Writing Workshop in Johannesburg, South Africa (Laboratory Head, NIC and the Project Coordinator).
- Participated in a training workshop on Laboratory Diagnosis of Influenza and other Emerging Respiratory Viruses, November 2013 in Accra, Ghana (Laboratory Technician).

INFLUENZA VACCINE ACTIVITIES

The goal of Mali's NIC is to introduce a seasonal influenza vaccination program within the next five years. In order to achieve this goal, we will identify barriers to achieving the introduction of a seasonal influenza vaccination. By the end of year five of this cooperative agreement, we will gather data on influenza disease burden and seasonality. These data will be used as tools to advocate for vaccine introduction, specifically for high risk groups such as pregnant women and children.