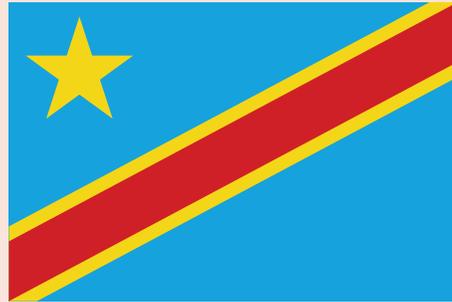
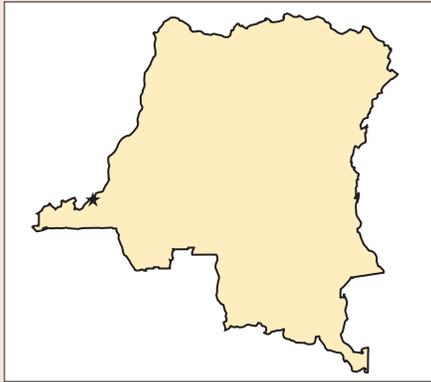


Democratic Republic of Congo



- **Capital:** Kinshasa
- **Area:** 2,344,858 sq km
- **Population:** 73,599,190 (July 2012 est.)
- **Age Structure:** 0-14 years: 44.4% (male 16,031,347/female 15,811,818); 15-64 years: 53% (male 18,919,942/female 19,116,204); 65 years and over: 2.6% (male 767,119/female 1,066,437) (2011 est.)
- **Life Expectancy at Birth:** Total population: 55.74 years; male: 54.28 years; female: 57.23 years (2012 est.)
- **Infant Mortality Rate:** Total: 76.63 deaths/1,000 live births; male: 80.36 deaths/1,000 live births; female: 72.79 deaths/1,000 live births (2012 est.)
- **Literacy Rate:** Total population: 67.2%; male: 80.9%; female: 54.1% (2001 est.)
- **GDP:** \$25.19 billion (2011 est.)
- **GDP per Capita:** \$300 (2011 est.)

Highlights

Influenza surveillance activities in the Democratic Republic of Congo (DRC) include:

- Presentation of the project to political authorities who adopted the initiative.
- Selection of sentinel sites.
- Training of site staff.
- Procurement of laboratory supplies and reagents.

U.S. CDC Direct Country Support

Surveillance of avian and pandemic influenza in DRC began in 2006, with a cooperative agreement between the U.S. Centers for Disease Control and Prevention (CDC) and the Kinshasa School of Public Health (KSPH). The agreement *Surveillance and Response to Avian and Pandemic Influenza* covered the period from October 2006 to September 2011. The project aimed to improve DRC's capacity in surveillance, diagnosis, and provision of rapid response to avian and pandemic influenza.

The KSPH managed this project in collaboration with the Ministry of Health (MOH) Fourth Directorate and the National Influenza Laboratory.

The MOH Fourth Directorate instituted an integrated disease surveillance system, providing weekly routine reporting on 13 diseases that have epidemic potential, including influenza. This weekly surveillance is done in collaboration with the National Institute Biomedical Research (INRB), DRC's National Influenza Laboratory. CDC's support permitted the country to set up an influenza sentinel surveillance system.

The MOH revised the avian influenza national plan. Sentinel surveillance sites were strengthened by providing the necessary supplies and equipment for influenza specimen collection, storage, packaging and transportation. The DRC influenza laboratory was supported by receiving a set of equipment and reagents. Thus, its capacity for influenza diagnosis was improved.

Surveillance

In order to prepare DRC for a potential avian influenza outbreak event, the national surveillance system has been strengthened and seasonal influenza has been added to the list of diseases to be reported to the World Health Organization (WHO). The country has set up 10 sentinel sites. However, only five are operational and located in Kinshasa. There are two influenza-like illness (ILI) sites, and three ILI and severe acute respiratory infection (SARI) sites.

The sentinel surveillance sites submit samples and reports of suspected cases of influenza to the INRB. Weekly reports on the number of suspected cases of influenza and the actions undertaken are written and disseminated by the MOH Directorate in charge of disease surveillance.

Health care providers from sentinel sites are managed by a pool of supervisors including clinicians and medical biologists previously trained by the project. The supervisors aim to ensure adequate performance in the detection of cases, reporting, sampling and case management.

Surveillance Activities

- The MOH, in collaboration with CDC, revised the influenza surveillance protocol.
- Five trips were organized from Kinshasa to Brazzaville. Those trips aimed to prepare the implementation of influenza surveillance activities in Republic of Congo.
- A total of 3,075 influenza suspect cases were reported by sentinel sites; among them, 2,159 (70.2%) were ILI cases.
- The influenza coordination committee organized four monthly meetings.
- Twelve supervisory inspections were done in Kinshasa sentinel sites, and two were done in Brazzaville sentinel sites.
- The MOH Fourth Directorate produced 52 weekly reports.

Laboratory

INRB is well equipped and currently uses four trained staff to analyze samples in real time using RT-PCR testing. In Kinshasa, samples are collected daily from sentinel sites and delivered to INRB by car.

Laboratory Activities

- INRB tested 2,960 influenza specimens. Among them, 197 (6.7%) were positive: 191 (6.5%) for influenza A and 6 (0.2%) for influenza B. Concerning the 191 influenza A viruses, 121 (63.4%) were seasonal influenza A (H3N2), 51 (26.7%) were influenza A(H1N1)pdm09, and 19 (9.9%) were unclassified by real-time RT-PCR.
- The laboratory sent unclassified specimens to a WHO Collaborating Center through the Kenyan CDC team.

Preparedness

The avian influenza national plan, developed in 1996, was last revised in October 2009 by the avian influenza national technical committee. The aim was to adapt this plan according to the current epidemiologic context and available resources.

Training

- INRB staff members were trained on isolation of influenza virus on MDCK cells and influenza serology in Kinshasa.
- The Kinshasa and Brazzaville national laboratory managers were trained in laboratory management.
- Sentinel site staff members from the Republic of Congo were trained in influenza case definitions and specimen collection, packaging and transporting.
- Refresher training was organized for Kinshasa sentinel site staff members.
- The National Influenza Laboratory deputy director was trained on how to write scientific articles.

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