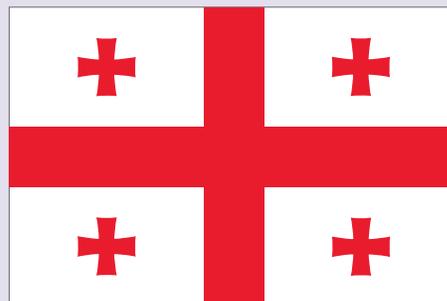


# Republic of Georgia



- **Capital:** Tbilisi
- **Area:** 69,700 sq km
- **Population:** 4,570,934 (July 2012 est.)
- **Age Structure:** 0-14 years: 15.6% (male 383,856/female 333,617); 15-64 years: 68.3% (male 1,511,844/female 1,620,727); 65 years and over: 16% (male 293,143/female 442,687) (2011 est.)
- **Life Expectancy at Birth:** Total population: 77.32 years; male: 73.99 years; female: 81 years (2012 est.)
- **Infant Mortality Rate:** Total: 14.68 deaths/1,000 live births; male: 16.58 deaths/1,000 live births; female: 12.59 deaths/1,000 live births (2012 est.)
- **Literacy Rate:** Total population: 100%; male: 100%; female: 100% (2004 est.)
- **GDP:** \$24.51 billion (2011 est.)
- **GDP per Capita:** \$5,400 (2011 est.)

## U.S. CDC Direct Country Support

Fiscal Year 2011 is the fifth year of the U.S. Centers for Disease Control and Prevention (CDC) cooperative agreement with the National Center for Disease Control and Public Health of Georgia (NCDC Georgia). The agreement is titled *Surveillance and Response to Avian and Pandemic Influenza by National Health Authorities outside the United States*.

The purpose of the award was to improve laboratory, epidemiologic and preparedness capacity for surveillance and response to avian and pandemic influenza. Major goals of the cooperative agreement included: 1) improving laboratory capacity and infrastructure for virologic surveillance of influenza; 2) enhancing epidemiologic capacity and infrastructure for disease surveillance; 3) developing and establishing sentinel, laboratory-based surveillance; and 4) developing, training, and testing local rapid response and containment teams.

The following significant achievements have been made since the cooperative agreement began:

- The National Influenza Lab (NIL) at NCDC Georgia was recognized by the World Health Organization (WHO) as a National Influenza Center (NIC) in 2007.
- An influenza sentinel surveillance system has been established throughout the country.
- Quality assurance measures have been developed and implemented in the laboratory and at the surveillance sites.
- The influenza surveillance system has been enhanced by conducting annual rounds of surveillance system monitoring and trainings of epidemiologists and clinicians in influenza epidemiology and surveillance.

## Surveillance

All activities conducted from FY 2006 to FY 2010 became a platform for the fifth budget period of the project. During FY 2011, all objectives were focused on strengthening already established systems and structures.

Before 2011, Georgia had non-sentinel sites (mostly for laboratory surveillance) in high-risk areas and one large sentinel site in Tbilisi at the largest outpatient clinic. Since 2011, two additional sentinel sites for severe acute respiratory infection (SARI) cases have been established.

In the fifth budget period, multiple rounds of visits by monitoring teams were reduced to one visit to all districts of Georgia. During the visits, National Monitoring Teams monitored the completion of reporting, notification and registration forms. They also assessed the progress made as a result of the on-the-job trainings held during previous monitoring activities. The assessment was performed using questionnaires developed during the previous budget periods.



*A demonstration of personal protective equipment (PPE) use, Georgia.*

### **Surveillance Activities**

- Sentinel sites received data and routine surveillance was monitored by the Project Management Unit. The sentinel surveillance system precisely reflected trends reported by the national routine surveillance system.
- NCDC staff monitored 75 health care facilities in ten regions to reveal gaps and challenges in the influenza surveillance system. Results of the previous surveillance system monitoring showed that on-the-job training and monitoring were useful and effective; reporting from districts has been improved.
- Circulation of seasonal influenza viruses [influenza A (H1N1) and influenza B] were detected during the 2010–2011 influenza season in Georgia.
- Data received from sentinel and laboratory surveillance were entered into EuroFlu on a weekly basis.
- Sentinel and non-sentinel sites were provided with all necessary equipment and supplies, including liquid nitrogen, for adequate storage and transportation of collected specimens. A project vehicle transported specimens from sentinel sites to NCDC.
- The NCDC rapid response team (RRT), which was established in 2008, was active during the pandemic as well as the post-pandemic influenza season, which was more severe than the pandemic.

- The abstract “Epidemiological characteristics of laboratory confirmed fatal influenza cases during the 2009–2010 and 2010–2011 influenza seasons in Georgia” was prepared using sentinel surveillance data. The abstract was submitted and accepted for the Fourth European Influenza Conference held in Malta on September 11–14, 2011.

## **Laboratory**

The NIL was established at NCDC in 2006. Laboratory capacity was strengthened as a result of staff training on RT-PCR testing, virus isolation and hemagglutination inhibition, and the procurement of essential equipment and supplies. Since the 2009 H1N1 pandemic, all specimens are tested by RT-PCR.

### **Laboratory Activities**

- A total of 3,210 specimens were tested for influenza at NIL from October 2010 to October 2011. Among them 2,067 specimens collected from SARI cases and 1,143 from influenza-like illness (ILI) cases; from SARI specimens 409 samples were found to be positive for 2009 H1N1, 506 were positive for influenza B and 19 for non-subtyped influenza A.
- Twenty samples from the specimens collected during 2010–2011 flu season were sent to the WHO Collaborating Center in London for virus isolation, sequencing and resistance screening.
- Two lead specialists from the NIC were trained on influenza antiviral susceptibility at the National Institute of Public Health and Environment, Netherlands. It is proposed that in FY 2012 the method will be established at the NIC.
- The capacity for influenza surveillance at the NIL was enhanced with the implementation of gene sequencing.

## **Preparedness**

A national preparedness plan was developed in 2006 and approved by the Ministry of Health (MOH) in 2009. This plan was activated during the pandemic with great success. In FY 2011, some parts of the plan were updated and a new version should be approved next year.

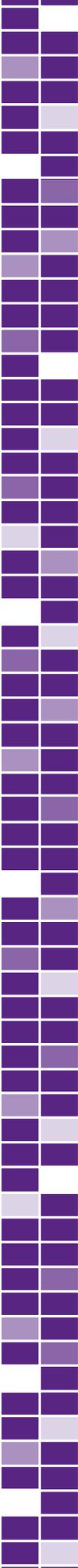
### **Preparedness Activities**

- The influenza surveillance guidelines were updated in FY 2011.
- Some large hospitals in high-risk areas that do not participate in sentinel surveillance were provided with influenza rapid tests for the diagnosis of SARI cases.

## **Training**

Georgia hosted the following training activities in 2010:

- During monitoring visits to sentinel surveillance sites, on-site surveillance training was conducted for epidemiologists responsible for risk-assessment, registration and reporting in order to improve their skills and strengthen the system.



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