Strengthening Surveillance, IEC and Procurement Planning to Address Avian Influenza in Georgia

Final Report Cooperative Agreement No. 114-A-00-06-00049-00

Submitted: April 25, 2007

1455 NW Leary Way Seattle, WA 98107-5136 USA Tel: 206.285.3500 Fax: 206.285.6619 www.path.org





I. Introduction

In May 2006, the USAID/Caucasus Mission awarded PATH \$400,000 to strengthen surveillance, information, education, communication (IEC) activities, and procurement planning to address avian influenza (AI) in Georgia. As specified in the proposal, PATH has established a partnership with a Georgian nongovernmental organization, Curatio International Foundation (CIF), to implement this activity.

Over the project period of June 2006 to April 2007¹, PATH and CIF closely collaborated with the government of Georgia and other stakeholders. Key partners included:

- Ministry of Labor, Health and Social Affairs (MoLHSA)
- Department of Public Health (DPH) and a network of regional and rayon Centers of Public Health (CPH)
- National Center for Disease Control and Medical Statistics (NCDC)
- World Health Organization/European Region (WHO/EURO) and WHO/Georgia office
- United Nations Children's Fund (UNICEF)
- World Bank
- US Defense Threat Reduction Agency (DTRA)
- Department of Health and Human Services/US Centers for Disease Prevention and Control (HHS/CDC)
- Ministry of Agriculture (MoA)
- AgVantage Project

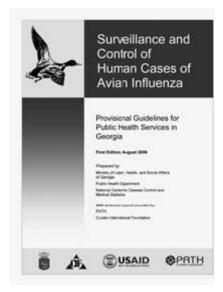
¹ The project was granted a no-cost extension from February 14, 2007 to April 14, 2007.

II. Main accomplishments

Development of an early warning system for humans and respective guidelines and procedures for surveillance and control of human cases of AI.

Surveillance and Control of Human Cases of Avian Influenza: Provisional Guidelines for Public Health Services in Georgia is the first resource for public health workers and medical professionals who may face H5N1 infections in Georgia. The manual includes comprehensive information on various influenza surveillance topics, including:

- Recommended case definitions and casenotification procedures.
- Case-validation methods, requirements, and procedures.
- Early warning systems, including routine and active surveillance.
- Protocols for case/outbreak investigation, control, and response.



• Recommendations for delivering infection prevention/community education messages.

The first edition of the guide is available for download from PATH's website at <u>www.path.org/publications/pub.php?id=1308</u>. The guide was revised in February 2007 to include updated surveillance procedures. The new (second) edition is currently used by Georgian public health services nationwide.

Training public health personnel and health care professionals in the new surveillance procedures and measures to control AI infection in humans.

Strengthening the health system's H5N1 surveillance capacity may have the greatest impact on the country's preparedness for an influenza pandemic. The team has provided training to 265 people–practically all public health personnel in the country. They have also trained 114 front line physicians covering a range of surveillance topics including how to detect unusual or unexplained events of acute respiratory illnesses, and how to ensure that appropriate laboratory and public health responses are triggered. Following the update of the technical guidelines, refresher training was provided to 93 public health workers around the country.

Development of AI communication guidelines ("talking points" and "message maps") followed by training for spokespersons and media representatives.

Because most IEC efforts in Georgia have focused on the general population, the team set out to raise awareness among the media, health authorities, and local government authorities. After developing talking points and communication guidelines for different epidemiological scenarios, the team trained 43 central and regional spokespersons and several media representatives to deliver accurate messages on a variety of AI topics including infection prevention measures and appropriate health care seeking behavior.

Procurement and delivery of surveillance and laboratory supplies. Development of an inventory and forecasting tool to strengthen laboratory preparedness and ensure coordination of laboratory supplies and personal protective equipment (PPE).

After assessing the immediate need for commodities for influenza surveillance in humans, the team procured and delivered laboratory equipment, reagents, supplies capable of detecting new virus strains such as H5N1, and PPE. PATH has reinforced these activities by developing a database of laboratory and PPE items, as well as an inventory/forecasting tool that can be used to coordinate procurement of other commodities that may be needed.

III. Key workplan activities

PATH and CIF successfully fulfilled the project objectives as outlined in the approved work plan and developed a strong foundation for subsequent activities in this technical area. The work on technical standards and tools to support sentinel influenza surveillance provides a natural bridge to another AI assistance project in Georgia funded by HHS/CDC. As a result of the exceptional in-country cooperation, which allowed us to realize efficiencies in program implementation, we addressed additional MoLHSA/NCDC technical requests that went beyond the initial scope of work.

Workplan item	Description of work performed				
I. Surveillance/early warning system for humans					
Establish surveillance task force.	A multidisciplinary surveillance task force representing MoLHSA/DPH, NCDC, MoA, AgVantage, UNICEF, WHO, HHS/CDC, and PATH/CIF was formed in June 2006. At the first meeting, the task force endorsed the proposed strategic approach, work plan, and timeline of project activities. The group met three times during the following nine months to coordinate all pandemic influenza surveillance-related issues, provide advice on program activities, and review and endorse related technical materials and tools.				
Assess current practices and needs.	A joint PATH/CIF team met and interviewed principal stakeholders from government and partner organizations to carry out a rapid situation assessment, evaluate current policies and practices, and assess past and future contributions of various AI-related partners. As a result, outstanding program needs for a pandemic influenza surveillance system for humans have been identified. PATH developed a work plan <i>focusing on unmet needs</i> . The proposed plan was subsequently endorsed by the USAID Caucasus Mission.				
Develop standards on case detection, reporting, validation, investigation, analysis, outbreak response, feedback, etc.	Over 50 technical publications from various sources, including WHO, NCDC, CDC, HHS have been reviewed and have informed the development of recommendations regarding optimal standards for surveillance of H5N1 in humans. The recommendations were studied, modified, and finalized by the Georgian surveillance task force, taking into account national priorities and the structure of the country's surveillance services. Legal documentation supporting official use of the above standards nationwide is being developed by the MoLHSA and the Ministry of Justice.				
Develop training manuals and handbooks for CPH and health workers.	The team developed a document entitled, <i>Provisional Guidelines for</i> the Georgian Public Health Services on Surveillance and Control of Human Cases of Avian Influenza. The guidelines include				

Workplan item	Description of work performed
	recommendations and procedures on how to promptly identify, report,
	confirm, and classify potential cases of AI in humans; analyze data; investigate and respond to cases and outbreaks; and improve other
	aspects of an early warning system for humans. The second
	(updated) edition of the guidelines was developed early in 2007 to
	include feedback from public health workers, comments from
	WHO/EURO, and the latest international recommendations. Per
	NCDC/MoLHSA's request, sections on sentinel surveillance and
	recommendations on seasonal influenza immunizations (not included
	in the original edition) were developed as well. The second edition of the document was endorsed by WHO. A Russian version has been
	developed for use by minority population groups.
Print materials. Train CPH and	The manuals have been printed and disseminated to public health
health workers; focus on district	workers throughout the country. Selected NCDC, DPH, and regional
level.	DPH epidemiologists (nine individuals in total) were targeted during
	the initial training of trainers phase. This was followed by workshops
	throughout the country through which 252 CPH workers and 114
	health care workers were trained in the H5N1 surveillance
	procedures. As soon as the second edition of the guidelines became available, a refresher training in the updated surveillance protocols
	was carried out for 93 public heath officers from all over the country.
Adjust existing software application	Per NCDC request, a software application to support functioning of
to include influenza caused by a	sentinel influenza surveillance has been developed. The basic version
new subtype.	was introduced to the NCDC and will serve as another bridge
	between the USAID and HHS/CDC avian influenza projects. Should
	fine-tuning be required after the end of the term of this activity,
	PATH is committed to providing the input necessary to complete the task.
Monitor and evaluate performance.	Several rounds of monitoring visits were carried out in a number of
Provide on-the-job assistance as	high-risk rayons by five teams of experts composed of NCDC, PHD,
needed. Refine the system based on	and regional CPH experts. The teams visited infectious disease
user feedback.	hospitals or rayon hospitals, pediatric or rayon polyclinics, randomly
	selected ambulatory care facilities, and the CPH office in each rayon
	to provide technical and procedural clarifications and explanations to
	the staff. Results of the monitoring visits and focus group discussions
	related to remaining operational barriers were summarized in a report that provided a number of recommendations on future directions and
	ways to address the identified gaps. Findings of these visits were also
	presented at the surveillance task force meeting that emphasized what
	modifications to the system and procedures needed to be adopted to
	improve performance.
Disseminate methods, results, and lessons learned.	In addition to regular surveillance task force meetings, the team provided periodic updates to the mission, MoLHSA, the Office of the
	Prime Minister, and other AI partners such as the World Bank. The
	technical guidelines were shared with and endorsed by WHO/EURO.
	The document was disseminated through the PATH.org website, and
	hard copies were disseminated to partners within and outside of the
	country. The project accomplishments, challenges, lessons learned,
	and outstanding needs were also presented to the USAID/Washington
	strategic planning and evaluation advisor and to a group of colleagues from USAID's Europe and Europia and Africa bureaus
	from USAID's Europe and Eurasia and Africa bureaus.

Workplan item	Description of work performed		
II. Procurement			
Assess immediate need to procure commodities to support surveillance.	PATH held consultations with the Government and major donors/partners such as World Bank and DTRA to develop a tentative purchase list that addressed an immediate need to support surveillance. The list was finalized based on government feedback.		
Coordinate specifications with existing surveillance activities.	Upon finalizing product quantities and specifications, quotations were solicited from suppliers and freight forwarders, followed by a procurement review of offers received. Negotiations with Binax Corporation for the BinaxNOW Influenza A & B Rapid Test resulted in budget savings that were used to procure additional needed items.		
Procure and deliver required commodities.	Commodities worth \$50,000 (including shipping) have been successfully procured according to the government list and delivered to Georgia.		
Develop a master inventory of all commodities required to support surveillance of pandemic influenza.	A database of laboratory and PPE items needed to support surveillance have been developed and submitted to the National Center for Disease Control. An inventory tool called <i>Pipeline</i> developed by John Snow, Inc. has been modified and introduced to NCDC experts to enhance forecasting of needs and to coordinate procurement of other commodities by other donors.		
III. Information, education, c			
Develop essential talking points for spokespersons on various scenarios	"Talking points" for spokespersons were developed in consultation with a broad range of national and international experts. The focus was on how the pandemic can affect Georgia and the most important actions people can take now to prepare themselves for, respond to, and mitigate a potential disaster.		
Roundtables with national and regional authorities to review approaches for message delivery.	A roundtable to review approaches to delivering messages was held at the MoLHSA. CIF conducted several workshops targeting more than 100 regional and rayon health officials and headquarters representatives. Workshop topics included the national preparedness plan, the report of the government response to the threat of AI, coordination of donor assistance, hospital preparedness, and availability of various IEC materials.		
Conduct workshop with media representatives.	Twenty-four media representatives (from newspapers, news agencies, TV and radio stations) as well as 11 central health officials, 32 regional health officials and 111 regional and rayon headquarters representatives were trained to deliver accurate communication and risk reduction messages.		
Develop guidelines for health workers on communication with the public and involvement of population in surveillance.	AI communication guidelines for health workers were developed as a chapter of the <i>Guidelines on Surveillance and Control of Avian</i> <i>Influenza in Humans</i> (see above). The team also adapted and disseminated USAID's key message points for farmers and the general population on bird-to-bird, bird-to-human, and human-to-human transmission of AI.		
Instruct CPH and health workers on how to communicate surveillance training information to the public.	As specified above, the training reached more than 300 CPH and healthcare workers. In addition to the above activities, project staff also contributed to discussions and the development of an AI communications strategy under the leadership of the UNICEF country office.		

A final indicators chart that corresponds with the monitoring and evaluation (M&E) plan that was provided with the workplan is included in Annex 1. All M&E plan targets have been reached.

IV. Conclusions

During the project period, the H5N1 epidemiological situation in Georgia has remained stable, and no human or animal infections were registered.

Field visit findings and focus group discussion results indicate that despite the accomplishments of this project, the following gaps remain:

- Many district commissions working on highly pathogenic AI are weak and inefficient, and some do not function at all. Roles and responsibilities of local institutions and health care professionals in the event of an emergency or a response operation are not clearly defined. In some districts, the situation is further complicated by limited human and financial resources to carry out human AI surveillance activities and response measures.
- While the project team developed technical standards and guidelines and trained all public health officers in the country, the majority of health care providers remain untrained. The 2006–2007 reorganization of the public health service dramatically reduced the motivation and ability of epidemiologists to provide training to health care workers.
- Surveillance documentation and forms were missing in many health facilities. Many CPH offices and health facilities have not been equipped with PPE in sufficient quantities or even equipped at all. In addition, staff has not been trained in PPE use.

PATH recommends that future donor support be directed at addressing these gaps as well as advancing the development of response procedures related to a potential pandemic. These include procedures for deploying and moving drugs and commodities within an affected area, recommendations on the use of antiviral drugs for chemoprophylaxis and treatment, and recommendations on the use of pre-pandemic and pandemic vaccine. Refresher training of public health workers, simulation surveillance and response exercises to refine the knowledge and skills, as well as ongoing technical assistance to health providers in the field, are vital interventions to offer.

PATH and CIF have greatly appreciated the opportunity to provide assistance to Georgia through the current project, and we fully understand the remaining scope of work that is required to adequately prepare the country for an influenza pandemic. We are interested in continuing to cooperate with USAID, the government of Georgia, and other partners on any future projects of a similar nature.

Annex 1: End-of-project status of monitoring and evaluation plan targets

These indicators have been designed to track key outputs and outcomes that are consistent with the Global Agency Avian Influenza M&E plan.

As demonstrated by the chart below, by the end of the project all targets have been reached.

Indicator	Target	Source	Status as of 4/15/07
Number of individuals (CPH and health facility workers) trained and certified to identify suspected cases of H5N1 human infections and/or promptly initiate case investigation in accordance with WHO standardized procedures.	120 CPH workers and 100 health workers.	Program reports.	265 public health workers from the central regional and rayon levels and 114 physicians have been trained.In addition, 93 public health workers received refresher training in the updated procedures in March 2007.
Standardized procedures adopted and implemented (including case definition, protection measures, etc.) for suspected human H5N1 case investigation.	Introduced by 9/30/06. Implemented by 2/14/07.	Survey: 5 randomly selected CPH.	Surveillance procedures have been developed and introduced nationwide.
Georgia is implementing an AI early warning system for humans.	Designed by 9/30/06. Implemented by 2/14/07.	Survey: 5 randomly selected CPH.	Procedures to strengthen the early warning system have been developed and introduced nationwide.
Number of persons trained (government/health officials, media representatives, CPH and health workers) to deliver accurate and transparent AI reporting, mass communication and risk reduction	20 officials, 20 media representatives, 120 CPH workers &100 health workers.	Program reports.	 24 media representatives; 11 central, 32 regional health officials; and 111 regional and rayon headquarter representatives have been trained. 256 CPH workers and 114 physicians received guidance on communications issues during
Number of commodity units purchased.	Commodities worth \$50,000 per request of the Government.	Program reports.	surveillance training workshops. All commodities have been delivered.