



PROGRAM UPDATE: AVIAN INFLUENZA IN GHANA

THE CURRENT SITUATION

In May 2007, Ghana became the eighth African country to confirm H5N1 avian influenza (AI) outbreaks in poultry. The disease was first reported in Africa in February 2006, when it was detected in Nigeria, and it has since been reported in Djibouti, Sudan, Niger, Burkina Faso, Core d'Ivoire, and Cameroon. Ghana's initial poultry outbreaks were detected mid-April 2007 on a farm near Tema. In May, additional affected farms were identified 320 km to the northwest of Tema in Sunyani, the capital of the Brong-Ahafo region. In June, a third outbreak site was identified in Aflao, which is in the Volta Region.

All three cities are geographically significant: Tema is a port city and a crossroads for several major east-west and north-south land routes. The surrounding area is also an important landing site for migratory birds from Europe, Asia, and the coastal regions of West Africa. Sunyani is considered the agricultural heartland of Ghana. Aflao is a busy town on the Ghana-Togo border, where a significant amount of traffic and movement of goods between the two countries occur.

To date, no outbreaks have been reported between the cities, nor has a clear epidemiological link among the outbreaks been established. The manner in which the H5N1 virus was introduced to Ghana is not clear; however, evaluation of the Ghana strain at the U.S. Naval Medical Research Unit (NAMRU) in Cairo suggests it is similar to strains earlier found in Cote D'Ivoire, Burkina Faso, and Nigeria.

EARLY INTERVENTIONS

The U.S. Government has been the lead donor in responding to AI internationally. USAID has provided the Government of Ghana with more than \$600,000 in funds and commodities,

including \$200,000 in emergency funds for management of the current outbreak. USAID has also provided significant technical assistance in support of Ghana's AI efforts.

In 2005, USAID supported the establishment of the National AI Working Group in Ghana. The following year, the group developed Ghana's National AI Preparedness and Response Plan. Therefore, Ghana had preparedness measures in place well before the 2007 outbreaks occurred. In fact, to protect its own flocks, Ghana had imposed a ban on poultry and poultry products imported from countries reporting AI outbreaks even before the disease reached Africa.

To help Ghana prepare for AI outbreaks, which became increasingly likely after it was detected in Africa, USAID made early investments to educate the public about AI. These efforts helped reduce the level of public panic and the resultant decline in poultry consumption that occurred as news about AI and its potential to reach Ghana spread.

Early USAID assistance in Ghana also included support for active disease surveillance, AI trainings for every veterinary officer in Ghana, capacity-building exercises for Ghana's Veterinary Services and Ministry of Health, and strengthened laboratory diagnostic capacity.

OUTBREAK RESPONSE: PREPAREDNESS AT WORK

In collaboration with the Ghana Health Service, the Ministry of Interior, and other government bodies, Ghana's Veterinary Service has mounted a vigorous response to the current AI outbreak. The National AI Working Group is coordinating efforts following the National AI Preparedness and Response Plan.

More than 10,000 birds were culled in outbreak containment efforts in Tema and nearby farms in Sunyani and Aflao. A ban on poultry movement in the Tema area that was implemented after the outbreak remains in force, and movement and sales of poultry around Sunyani has been restricted. More than 60 farms around the country have been assessed for sick and dying birds. Ghana's ministries of Finance and Agriculture have begun to compensate farmers for culled birds to minimize economic losses.

No human H5N1 AI cases have been identified in Ghana, but human surveillance efforts are being scaled up and workers on affected farms are being monitored for signs of illness. Stockpiles of Tamiflu have been built and additional efforts to improve readiness for potential human H5N1 AI cases are underway.

USAID has paid for the majority of expenses related to detection, culling, decontamination, and follow-up surveillance for Tema, Sunyani, and Aflao, and has bolstered efforts to help Ghana manage outbreaks. With U.S. Government partners, including the Centers for Disease Control and Prevention (CDC) and NAMRU, USAID joined Ghana Health Service officials on a mission to Brong-Ahafo and Ashanti, an adjacent region, to conduct a needs assessment and assist in outbreak response. The team visited local hospitals, poultry farms, veterinary facilities, and regional offices and developed a set of recommendations for future actions noting biosecurity and surveillance practices observed in the major poultry district of Dormaa Ahenkro could serve as a model for Ghana.

A scaled-up communications campaign targeting farmers, traders, health workers, and the general public was launched with USAID and UNICEF support following the outbreak. USAID has also provided full support for the establishment of an AI telephone hotline by the Ministry of Interior's National Disaster Management Organization, and a USAID-supported communications subcommittee has been working with the media to ensure accuracy of information released to the public, thereby reducing risk of panic. The ministries of Information, Agriculture, and Health have supported these efforts.

USAID is also providing training on the proper use of essential commodities, including personal

protective equipment (PPE) and decontamination kits, for surveillance and outbreak response workers across Ghana. USAID has provided Ghana 4,450 sets of PPE, 45 decontamination kits, two laboratory sample collection kits for response and diagnostic efforts, and 100 rapid antigen test kits. Activities to increase awareness about biosecurity measures for poultry farms have also been conducted.



Communications materials were developed to help inform the public in Ghana about AI risks, promote preparedness and healthy behaviors, and dispel rumors. Following fears about AI in surrounding countries, poultry consumption in Ghana dropped sharply, significantly affecting the poultry industry.

LESSONS LEARNED

With the National AI Preparedness and Response Plan in place before the AI outbreaks occurred, the Government of Ghana was better able to manage the AI outbreaks. Early interventions proved effective; the farmer who detected the original outbreak reportedly knew how to respond because of information he had learned through USAID's earlier communications activities in Ghana, and the veterinary service officer he contacted had received training and PPE from USAID. These early AI planning and readiness interventions facilitated quick outbreak response

efforts in Ghana, and USAID plans to continue working with the Government of Ghana and its partners to build on lessons learned for future interventions.

REMAINING CHALLENGES

Africa, which faces numerous health and development issues, is particularly vulnerable to the economic and human health threats posed by AI. In Ghana, the spread of AI has both economic and cultural consequences. Ghana's economy includes a dominant agricultural sector in the form of small-scale farming. Poultry do not only provide nutrition and income, but are also used for cultural purposes, such as bride price, gifts, and religious rituals. The Ghanaian Ministry of Food and Agriculture reports that most households in rural Ghana keep chickens and other poultry. Village chickens account for 60-80 percent of the national poultry population, with the greatest proportion (56 percent) in the northern part of the country – the Upper East, Upper West, and Northern regions. These informal poultry settings, commonly characterized as “backyard farms,” pose the greatest single challenge to effective control of the spread of the virus. Nearly all of the newly reported outbreaks in 2006 and 2007 have been among these small holdings.

Bans have been put in place to restrict movement and sales of poultry near outbreak areas; however, enforcement capacity is limited. In addition, porous international borders and imports from nontraditional routes threaten the enforcement of import bans. Surveillance and response capabilities and laboratory capacity in Ghana need to be improved. Moreover, accurate information is needed to help reduce the sense of public panic driven by sensationalized international and local press reports on AI.

NEXT STEPS

USAID is committed to continuing its support for the Government of Ghana in both veterinary and human health to help control and eliminate the current AI outbreak, prevent future outbreaks, and improve preparedness. One of USAID's primary goals is to harmonize different donor funding streams by working within a single, unified framework to avoid duplication and ensure that investments address priority needs. National and international teams have been reassessing the country's needs in light of ongoing response activities, and USAID is supporting efforts to

update the National AI Preparedness and Response Plan.

USAID has sent a program expert to Ghana to help assess current needs and both USAID's field office and the Washington-based AI team are outlining priorities for future investments to the country. These priorities include increasing bio-security through training and continuing to provide effective communications messages, especially those targeting farmers and poultry producers about ways to reduce risk for disease transmission.

REGIONAL RESPONSE

Just weeks after the H5N1 AI outbreak occurred in Ghana, reports of AI were confirmed in neighboring Togo. Experts fear Benin, which shares a border with Togo and is surrounded by countries that have experienced outbreaks, is also at very high risk.

USAID's West Africa Regional program is providing critical support for AI response in Togo and to readiness efforts in Benin. In Togo, the program has provided critical technical assistance for response and containment and is strengthening AI communications and training members of the media about reporting on the disease. In Benin, USAID is supporting enhanced planning and coordination for increased outbreak response capacity. USAID is also deploying essential outbreak commodities, including PPE and decontamination kits, to Togo and Benin.