



U.S. GOVERNMENT SUPPORT TO COMBAT AVIAN AND PANDEMIC INFLUENZA

South and Central Asia's first outbreak of the highly pathogenic avian influenza (HPAI) H5N1 virus occurred in wild fowl and poultry in Kazakhstan in July 2005. Other outbreaks of HPAI H5N1 in poultry followed beginning in early 2006 in Afghanistan, India and Pakistan, and were first reported in Bangladesh in spring 2007. Tens of thousands of birds have died or become infected, causing social and economic disruption with implications for the food supply as well as the incomes of business and individuals in the region. As of September 2008, there had been three human cases reported in Pakistan with one fatality and one non-fatal case in Bangladesh.

The United States combats HPAI H5N1 in South and Central Asian nations by working with governments and regional entities, and with international organizations such as the World Health Organization (WHO), the Food and Agriculture Organization (FAO), and the World Organization for Animal Health (OIE). Through the International Partnership on Avian and Pandemic Influenza, the United States works to elevate the issue on national agendas – and to coordinate efforts between affected nations in South and Central Asia and donors around the world.

To assist South and Central Asia in responding to avian influenza outbreaks and preparing for possible human pandemic influenza, the United States is supporting bilateral and regional programs.

As of December 2007, the United States had made country-specific contributions totaling \$20.3 million to eleven South and Central Asian nations and contributed nearly \$1.2 million in regional assistance programs.

The United States has provided funds for avian and pandemic influenza assistance in Afghanistan, Bangladesh, India, Kazakhstan, the Kyrgyz Republic, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan and Uzbekistan.

The U.S. Agency for International Development (USAID), the U.S. Department of Agriculture (USDA), the U.S. Department of Health and Human Services (HHS) – including the Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH) and the Food and Drug Administration (FDA) – the U.S. Department of Defense (DoD) including its Global Emerging Infection Surveillance and Response System (DoD-GEIS), represented by the Naval Medical Research Unit-3 (NAMRU-3), and its Armed Forces Research Institute of Medical Sciences (AFRIMS)- the U.S. Department of State (DOS), and the Broadcasting Board of Governors (BBG) contribute to the U.S. engagement in South

and Central Asia. Their efforts have focused on strengthening preparedness and response planning, assisting with field investigations of suspected human H5N1 cases, building South and Central Asian capacity in human and animal health, strengthening laboratory diagnostics, providing training to experts, increasing public awareness and information, and enhancing disease surveillance and detection. The Department of Defense provides medical technical assistance, laboratory-based disease surveillance and personal protective equipment (PPE). USAID has deployed non-pharmaceutical commodities, including PPE, for surveillance and emergency outbreak management throughout the region.

PREPAREDNESS AND COMMUNICATION

U.S. preparedness and communication assistance efforts to South and Central Asia include:

- Supporting preparedness and planning for avian and pandemic influenza response in eleven countries (USAID, HHS/CDC);
- Supporting infectious disease research and outbreak control and providing a workshop and materials in India (HHS/CDC);
- Concluding a cooperative agreement with India to enhance influenza surveillance and capacity building, and working through the Global Avian Influenza Network for Surveillance (GAINS) and other partners to strengthen surveillance in eight countries (HHS/CDC, USAID);
- Building, through WHO, regional capacity for avian influenza detection and control (HHS/CDC);
- Stationing HHS/CDC experts in Bangladesh and India to assist with outbreak response and offering advanced epidemiology training in Central Asia and India (HHS/CDC);
- Building awareness of avian influenza through communications materials and activities (USAID) and by conducting avian influenza workshops for Afghani, Bangladeshi and Indian journalists (DOS and BBG with HHS/CDC, USDA, USAID);
- Offering regional technical media workshops on pandemic influenza preparedness and human influenza infection and supporting risk communication training for public health officials from Bangladesh, Bhutan and Sri Lanka (HHS/CDC);
- Holding a workshop on good clinical practices for Indian health personnel and state authorities (FDA);
- Providing information through broadcasting and web pages in Dari, Hindi, Pashto and Urdu (BBG/USAID), Persian and Uzbek and other languages at www.voanews.com (BBG).

SURVEILLANCE AND DETECTION

To assist South and Central Asia in building capacity for surveillance and detection, the United States is:

- Providing real-time polymerase chain reaction (RT-PCR) testing equipment and technical assistance to Afghanistan's Ministries of Health and Agriculture (DoD-GEIS/NAMRU-3);
- Conducting avian influenza laboratory diagnostics workshops for Bangladesh and Sri Lanka and sending advisers to Sri Lanka (USDA);
- Supporting the development of a national Disease Early Warning System in Afghanistan covering influenza and other reportable diseases (HHS/CDC, DoD-GEIS, NAMRU-3);
- Funding FAO regional preparedness tabletop simulations (USAID);
- Offering training in detection and response to medical and veterinary officials and providing rapid test kits and training for animal testing in Bhutan (DoD);
- Providing training in rapid response and laboratory testing in India, Kazakhstan, the Kyrgyz Republic, Tajikistan and Uzbekistan (USAID, HHS/CDC);
- Providing state-of-the-art reagents to the Indian Ministry of Health and Family Welfare for detection of HPAI H5N1, and assisting India to develop laboratory capacity and to establish an influenza surveillance network (HHS/CDC);
- Conducting workshops on surveillance, use of genetic databases and laboratory training (HHS/CDC);
- Supporting surveillance for detection of viruses with pandemic potential (HHS/NIH);
- Conducting surveillance training for officials in Kazakhstan (HHS/CDC);
- Providing diagnostic laboratory equipment to Pakistan, Tajikistan and Uzbekistan (USAID);
- Conducting training in avian influenza epidemiology, diagnostics and live bird markets for veterinary officials from Afghanistan, Bangladesh, India, Nepal and Pakistan (USDA);
- Supporting influenza research and training for regional scientists (HHS/NIH) as well as the International Center for Diarrheal Disease Research in Bangladesh (ICDDR/B, HHS/CDC);
- Providing regional training on influenza epidemiology, disease surveillance, and laboratory diagnostics for public health experts from eleven countries in the region (HHS/CDC);
- Providing surveillance, testing and assistance with specimen collection and analysis to Nepal, and technical assistance for surveillance and testing in Bhutan (DoD-GEIS/AFRIMS);
- Building laboratory capacity and giving training in influenza diagnosis and surveillance in Afghanistan, Kazakhstan, Kyrgyzstan, Pakistan, Tajikistan, Turkmenistan and Uzbekistan (DoD-GEIS/NAMRU-3); and

- Training 35 epidemiologists and laboratory scientists in Pakistan in avian influenza surveillance and outbreak detection and response (HHS/CDC).

RESPONSE AND CONTAINMENT

To help South and Central Asian nations respond to and contain avian and pandemic influenza outbreaks, the United States is taking the following actions:

- Sending a laboratory team to support the Pakistani National Institute of Health in documenting avian influenza transmission in a family cluster in January 2008 (DoD/NAMRU/GEIS; HHS/CDC's/Global Disease Protection Program);
- Strengthening human response capacity for avian and pandemic influenza in Afghanistan, India, Kazakhstan, Pakistan, Tajikistan and Uzbekistan (USAID, DoD-GEIS/NAMRU-3);
- Sending 33,900 personal protective equipment (PPE) kits and nine lab kits to Afghanistan, Bangladesh, India, Nepal, Sri Lanka and Pakistan for detecting and responding to avian influenza outbreaks, and supporting training in using the equipment (USAID);
- Providing training funds to establish mobile rapid response teams (RRTs) in India and Kazakhstan that can be deployed regionally (HHS/CDC);
- Supporting training of Indian trainers for RRTs and pandemic influenza preparedness (HHS/CDC);
- Supporting regional training in rapid response for public health workers from Bangladesh, India, Nepal, Pakistan and Sri Lanka, and country-level RRT training in Afghanistan (USAID);
- Providing technical assistance to India for avian influenza containment (HHS/CDC);
- Sending technical experts to assist Bangladesh with its 2007 poultry outbreaks, and providing technical and financial support to the FAO Crisis Management Center (CMC) for rapid response and capacity building in the region (USDA, USAID);
- Deploying technical experts to Bangladesh, India and Nepal to strengthen response capacity and coordination with national and local-level officials (USDA, USAID);
- Conducting avian/pandemic influenza outbreak response training in Afghanistan (DoD-GEIS/NAMRU-3);
- Deploying teams to Afghanistan, Kazakhstan and Pakistan in response to requests from health ministries, WHO and the Global Outbreak Alert and Response Network (GOARN) (DoD-GEIS/NAMRU-3);
- Conducting exchanges of experts in India and Bangladesh and supporting regional rapid response training for the military in Bangladesh (DoD-GEIS/AFRIMS).

The U.S. Government's official website on avian and pandemic influenza is www.pandemicflu.gov.

The South and Central Asian region encompasses: Afghanistan, Bangladesh, Bhutan, India, Kazakhstan, the Kyrgyz Republic, Maldives, Nepal, Pakistan, Sri Lanka, Tajikistan, Turkmenistan and Uzbekistan.