

## Human cases of H5N1 avian influenza in indonesia: The need for international assistance

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Since 2003, 321 confirmed human cases of H5N1 avian influenza (AI) and 194 deaths worldwide have been reported to the WHO as of August 2007. More cases occurred in Indonesia than in any other country, accounting for approximately one-third of cases worldwide.

The Government of Indonesia responded to the epidemic by establishing the “Indonesia National Committee for Avian Influenza Control and Pandemic Influenza Preparedness,” a ministerial-level committee, and developing the “National Strategic Plan for Avian Influenza Control and Preparedness for Human Pandemic Influenza 2006-2008.” The government’s most noted step has been the Avian Influenza Campaign, conducted in collaboration with the Government of Japan and UNICEF, using TV and radio public service announcements, free public concerts, education for journalists, print materials (Figure 1), and other media to promote simple, effective habits that can reduce the risk of contracting bird flu and detect suspected cases earlier. A surveillance system for human cases of AI is still being established by the Ministry of Health with programs targeting district health offices to train AI surveillance officers who are responsible for locating suspected cases at hospitals, health centers, and communities, reporting them to the government, and liaising with the community. In addition, the ministry appointed two national, eight regional, and 34 sub regional laboratories as reference laboratories and 100 hospitals as AI referral hospitals.

According to reports published by the Health Ministry, 105 confirmed cases and 84 fatalities have been reported since 2003, indicating a higher fatality rate than in other countries. A review of 28 cases, including 23 deaths, out of 30 human cases of AI, including 26 fatalities, with adequate information that were reported from January 2007 to August 2007 indicated that 10 cases (35.7%) lacked any clear contact to dead or sick birds; of the 23 fatalities, 15 cases (65.2%) were diagnosed postmortem as H5N1 with RT-PCR. Of note is that some cases involved no clear contact to dead or sick birds and more important is the fact that the majority of the cases were diagnosed



**Figure 1.** IEC material used in Indonesia with four key messages printed on the fingers: 1) “Don’t touch sick or dead poultry,” 2) “Wash your hands and cooking accessories before use,” 3) “Keep poultry separate from people” and 4) “If you notice influenza-like symptoms and fever after coming in contact with poultry, visit a health center.”

as H5N1 postmortem. Since a delay in detection, diagnosis, and treatment leads to a delay in the chance to contain probable pandemic influenza, these findings suggest that challenges remain in the form of establishing early case detection in humans and mechanisms of early diagnosis.

In Indonesia, the surveillance system for humans as is integrated with the surveillance system for animals and laboratory networks must be enhanced along with capacity building. Additionally, Indonesia’s financial and technical needs are a global issue that the international community needs to be better informed about. Although some believe that the threat of AI and pandemic influenza will pass in the near future, the belief that the H5N1 virus cannot be transmitted to humans is no longer valid and human experience with pandemics such as Spanish influenza should not be forgotten.

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