



FAOAIDEnews

Avian Influenza Disease Emergency

Situation Update 60

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SMS Gateway data collection in Bangladesh

Bangladesh is conducting active Highly Pathogenic Avian Influenza (HPAI) surveillance in 150 out of 487 sub-districts as part of an USAID funded FAO project. A total of 450 Community Animal Health Workers (CAHW), 50 Additional Veterinary Surgeons (AVS) and 150 Upazilla Livestock Officers (ULOs) are using Short Message Service (SMS) gateway (i.e. method of sending and receiving SMS messages between computers and mobile phones) to collect data and report on disease and death in poultry. Since October 2008, 21 HPAI outbreaks out of a total of 35 have been detected through this active surveillance programme.

The SMS reporting structure is rather simple: at the end of the working day, each CAHW sends a SMS message with the total number of all investigated poultry (chickens, ducks and other birds) and their health status (the number of sick and dead birds) to the SMS gateway system. This data is used to; A) monitor trends in disease and mortality in poultry, and B) monitor who is working that day. Additionally, CAHWs send flash reports by SMS on suspected outbreaks according to a case definition. The system then automatically contacts the ULO in the same area by SMS, who initiates an investigation by sending an AVS or visits the suspect outbreaks him/herself. After the investigation, the ULOs and AVS send a SMS message to the gateway server to declare the suspect outbreak as negative or report that it may require further (diagnostic) tests.

Initially a Gateway server receiving these messages was located at the Department of Livestock Services in Dhaka, the capital. Currently the system is internet based. Specialised staff monitor the change in mortality and morbidity rates and perform spatial and temporal analysis against concurrent HPAI outbreaks and monitor the number of suspect cases and the results of the ULOs and AVS investigations.

The result of the analysis is submitted to the Chief Veterinary Officer, used in workshops to sensitise staff and farmers, donor meetings as well as in periodic project reporting. This real-time reporting using SMS has been contributing to effective HPAI outbreak response and control. The key to the success may be its simple approach and clearly defined work-sharing by using familiar tools (mobile phones).

Source: http://www.aphca.org/news/ai_newsletter/alert/ak132e00.pdf