

Poster topic 09

Poster 3

Highly pathogenic avian influenza surveillance on the Gangetic Plains, a cost-benefit analysis

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Despite considerable efforts to control and eradicate Highly Pathogenic Avian Influenza (HPAI), subtype H5N1, the disease remains present in South Asia. HPAI causes great economic losses to the poultry industry and still has the potential to trigger a human influenza pandemic. This study compares the effectiveness and costs of different HPAI surveillance systems. From the countries, India, Bangladesh, Nepal and Bhutan, the HPAI situation, the economy of the poultry industry, the losses caused by HPAI, the costs of surveillance and response and the effectiveness of the national and regional control programs are recorded and compared. India conducts extensive and frequent sero-surveillance in all 35 states. Weekly over 1000 diagnostic specimens are tested at an annual cost of US\$ 10 million. Bangladesh employs over 1000 community animal health workers and 60 veterinarians to conduct active surveillance, at a cost of US\$ 2 million yearly. Bhutan and Nepal rely on passive surveillance; Farmers, village leaders and community animal health workers report to state veterinarians. Costs of US\$20,000 (Bhutan) and US\$250,000 (Nepal) arise from awareness training. Bangladesh has reported most HPAI outbreaks and suffered the biggest economical losses. Although considerable disease control efforts nationally and regionally, HPAI remains endemic in the Gangetic Plains. The expensive active sero-surveillance in India has not detected any HPAI, instead the disease outbreaks were reported through passive surveillance. In Bangladesh, only 40% of all HPAI outbreaks are detected by the active surveillance system. The current Surveillance systems have contributed to disease control but not sufficient. Our findings suggest that the costs of surveillance in India and Bangladesh are not justifiable and disease control efforts should be re-evaluated.