

Appendix H

Human Health Implications and Precautions for Avian Influenza in Poultry

Hazards

Avian Influenza (AI)

- a) Avian Influenza infection in humans is rare but when it does occur, usually presents as a mild to moderate conjunctivitis with, more rarely, mild to moderate flu-like symptoms.
- b) In exceptional cases, the disease may be more serious and the virus has been implicated in the death of 120 people in counties with HPAI in poultry.
- c) There is also some very limited evidence of human-to-human transmission to immediate family members.

Routes of Infection

In diseases caused by these agents, the eyes are particularly vulnerable to infection from airborne infective particles or rubbing eyes with hands after handling infective material.

Infection of other systems, e.g. lungs, is most likely to occur through inhalation of dust from fecal material.

Risks

Highly Pathogenic Avian Influenza is not currently present in the US. Should AI be confirmed in the US, there could be a risk of exposure among those dealing with cases. The risk varies depending on the strain of virus. Not all strains are infectious for humans while others could be more infectious than those previously experienced.

People at Risk

Where there is an infectious agent present, the following may be at risk:

- a) Farmer / owner / occupier and their staff and families
- b) Personnel required to undertake inspection of poultry or their products
- c) Personnel collecting samples from suspect cases
- d) Staff handling samples
- e) Appraisers
- f) Contractors
- g) Staff handling carcasses for disposal
- h) Personnel involved in epidemiological inquiries, tracings and surveillance.

Factors affecting Risk

The risk is related to the husbandry and housing system of the flock and to the density of disease agent. The greatest risk may come from large numbers of infected birds in enclosed, high population density accommodations especially if there is inadequate ventilation.

- a) The risk is lower where there are fewer infected birds, good ventilation and open accommodation, e.g. backyard flocks.
- b) Any work that stirs up litter or dust e.g. culling or cleaning and disinfection of poultry sheds may increase the risk of infection by inhalation or ingestion.
- c) Following slaughter of infected birds the density of infective material in places where poultry were present will decline.
- d) Carcasses and blood are likely to be infective at the time of sampling though the risk may be low and may be reduced further if high standards of personal hygiene are followed during sample handling.
- e) The highest risk of exposure is likely to those working in the same environment as live, infected birds and exposure to infection will increase with time spent in this environment. The risk from residual infection after depopulation is immediately reduced by preliminary C&D and should be negligible after effective secondary C&D.

