

## Avian Flu

Health Protection Agency/Food Standards Authority 15<sup>th</sup> Feb 2007.

### **Possible transmission of H5N1 avian influenza virus from imported Hungarian turkey meat to the UK**

An outbreak of H5N1 in factory farmed turkeys has been controlled through a policy of containment and slaughter. No vaccination of poultry was involved. The outbreak originated in Hungary but there was no identifiable breach of H5N1 control regulations or other duties.

Virology has demonstrated a high probability that the outbreak of H5N1 at a farm at Upper Holton Suffolk UK had its origin in an outbreak in Hungary; the strains of virus were almost identical. The Hungarian outbreak (in geese in mid January) was already subject to strict controls of animal, meat and waste movements and it was proposed that meat imports from Hungary had carried the virus to the UK.

The report noted that:

- The outbreak in Upper Holton had occurred in several isolated sheds but that overt disease was present in only one shed. Infected birds were slaughtered before ill health was manifest.
- No disease had been observed in wild birds in the vicinity.
- Meat imports to Upper Holton had originated from areas of Hungary that were outside the local protection and surveillance zones.
- Turkey muscle would have very low levels of viral contamination compared with visceral organs.
- Contamination levels would decrease with time since slaughter.
- Effluent from the site was safely contained and was to be treated before discharge into the river Wang.
- The total throughput for the cutting plant at Holton between 1 January and 2 February 2007 from all sources was 4,656,027 kg. 5% had originated in Hungary.
- Meat Hygiene Service inspections had noted and communicated several non-compliances in January 2007 but had been satisfied with the way these had been addressed.

#### Conclusions

The outbreak was very probably associated with the Hungarian outbreak but not via contaminated dressed meat. More likely it had been carried by some other means e.g. unclean vehicles or clothing. Containment and decontamination measures in the UK seem to have been successful and there was no significant risk to the public or employees.

#### Comment

Virology services had very quickly identified the most likely source of infection but in spite of intensive investigation no fault for the propagation of the virus had been identified. The continuous evolution of H5N1 means that different regional strains (10 km area) can be readily identified but the work required to identify a precise location would be very significant.

Virus can remain viable in moist waste for tens of days. Controls in Hungary should have ensured that vehicle wheels and clothing associated with poultry in the protection zone were decontaminated. Hygiene standards vary.

Losses for the incident are thought to exceed £1million. If the disease had spread to wild birds the losses would have been much more significant; bio-security measures in this industry are not universally applied.

[Related fact: English Zoos are to be allowed to vaccinate birds against avian influenza, especially birds which are kept as part of global conservation measures. Vaccinated birds would not be permitted to leave the zoo, but their offspring would].