International Poultry Production

Poultryhealth BYTES

Your own reference source on poultry health

Number: 203

Avian influenza XXI

Controlling HPAI

Up until 1992 most developed countries eradicated HPAI epizootics or outbreaks in under 12 months using the traditional stamping out approach.

However, since 1992, some developing countries were unable to achieve immediate eradication by the traditional stamping out approach. The reasons for this included a failure to detect and eliminate all infected poultry. This was especially the case in countries operating live bird markets or with large duck populations, as in both these scenarios infection can go undetected unless intensive active surveillance is undertaken. In some countries difficulties in detection were compounded by late detection, thereby allowing the virus to become widespread.

Initial incursions of H5N1 HPAI into Thailand and Nigeria were not detected and the virus became widespread. Control programmes were eventually successful suggesting that other factors may be involved for viral persistence.

In China, Vietnam, Indonesia, Egypt and Bangladesh the prospect of virus elimination in the next decade or so is extremely remote.

Goals of an AI control strategy

Basically there three ultimate goals – prevention, management or elimination/eradication – with the goal depending on the country's or compartment's status.

If that status is one of freedom, the goal should be to prevent introduction from infected wild birds or poultry.

If the goal is to manage the disease, the main objective is to reduce the amount of circulating virus as this will usually reduce clinical disease and the negative impacts of infection on production.

Virus elimination is the usual ultimate goal of any avian influenza control strategy, but this may not result in eradication of the virus from an area. The outcome is usually dependent upon a combination of factors:

- Education, communication, public awareness and behavioural change.
- Changes in production and marketing systems that result in markedly improved biosecurity systems.
- Diagnostics and surveillance.
- Elimination of infected poultry.
- Decreasing host susceptibility and reducing viral shedding, usually by vaccination.