

Biosecurity – the best investment you can make

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From a once virtually unheard of term, 'biosecurity' is now an everyday word in the livestock industry. So what has been behind this increased emphasis on biosecurity?

In the poultry sector it is clear that human health concerns associated with the global emergence of H5:N1 highly pathogenic avian influenza were key in driving this process, but the industry was already committed to enhancing biosecurity long before the world was generally aware of H5:N1.

Scientific principles

Whether the motivation was to improve poultry health and welfare, maintain food safety standards or satisfy the demands of quality assurance schemes, the poultry industry around the world has always looked to adopt and improve biosecurity based on sound scientific and practical prin-

Boot dipping – for everyone and every time.



Isolation is key when choosing a location.

As this 'best practice' evolves, global standards continue to improve and this process is now taking a further step forward with the OIE promoting the concept of compartmentalisation.

It might seem impossible to isolate commercial poultry from microscopic disease agents, but risk assessment based biosecurity programmes are the key to success and embracing some relatively simple concepts can genuinely prevent disease outbreaks!

The majority, but not all, of biosecurity risks are associated with the poultry farm rather than the feed-mill or hatchery, and this is where the article focuses.

Environment

All farms should have a well defined perimeter to help everyone understand the areas where biosecurity controls need to be enforced. Use a secure perimeter fence or dense hedging.

It is vital to exclude unnecessary visitors. Keep gates locked at the entrance, and poultry houses should also be kept locked ensuring of course that nobody is working inside. On an existing farm there is often little that can be done to reduce the risks presented by the environment outside the farm perimeter.

However, when selecting the location of new facilities it is essential to consider bio-

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curity and ensure that the farm is well isolated from other commercial poultry operations and 'backyard' birds.

People

The first line of defence is to ensure that casual visitors are kept off the farm and out of the poultry houses.

Anyone that must come on to the farm should be made aware of the potential for introducing disease and be required to sign in a visitors' book and follow all biosecurity protocols such as hand sanitation, wearing 'on-farm' protective clothing and footwear.

It is also important to know what previous bird contact the visitor has had in the recent past! Controls at the entrance to the poultry house are particularly important where strict use of hand sanitisers, disinfectant foot-dips and/or boot change systems can significantly reduce the disease challenge to the birds.

In many parts of the world it is now common practice to 'shower-into' breeder farms and some regions have adopted this policy for their broiler operations.

Individuals that travel from farm to farm are a particular risk and visits to breeder flocks should be conducted before going on to broiler or layer flocks.

Schedules should also dictate that younger

flocks are visited before older flocks. Many companies now require that non-company personnel observe a period 'out of poultry' before they can visit their poultry facilities.

Breeder farms should have their own supply of dedicated 'on-farm' clothing. On-farm laundry is significantly more biosecure since clothing is not exposed to potential off-farm contamination.

Vehicles and equipment

If a vehicle does not need to enter the farm perimeter, keep it out. If it must come in, then thoroughly disinfect the exterior, sanitise the cab interior and ensure the driver follows the biosecurity programme.

Tools and equipment, particularly those that have been used on other farms, represent a major risk – so it makes sense for each farm to have as much of its own equipment as possible. This equipment needs to be stored in a biosecure area. Any specialist equipment that has to enter the poultry house should be cleaned and disinfected before use.

Biosecurity standards should not be relaxed during the 'out-time' between flocks. In fact this period is the best time to control rodents as they have limited food alternatives to rodenticide baits. Remember – contamination introduced during the out-time can persist and infect the next flock.

Bird contact

Permanent staff and visitors should be aware that direct or indirect contact with backyard poultry is a huge disease risk. Similar contact with other commercial poultry also represents a serious risk.

The potential presence of H5N1 avian influenza in wild bird populations also highlights the fact that indirect contact, for example through bedding materials, represents a genuine risk that needs to be controlled. Poultry houses should be bird-proofed to ensure that wild birds cannot come into contact with the flock, and the farm environment managed to ensure that it does not encourage wild birds to visit.

At flock depopulation, any birds left behind by the catching team should immediately be caught and humanely euthanised to prevent them acting as a disease reservoir.

Feed spillages can attract wild birds and rodents, so must be cleaned up immediately!

Rodents and insects

Rodents and insects, particularly flies and litter beetles, are capable of moving disease agents into the poultry house and so need to be controlled. Regular monitoring of bait stations to ensure constant availability of rodenticide is essential.

Managing the farm environment to elimi-



Controlling access to the poultry facility is critical (left) and if vehicles must enter the farm perimeter, ensure they are effectively disinfected (right).

nate areas that might harbour rodents is important and complete proofing of all farm buildings is essential if rodents are to be effectively controlled.

Summary

Biosecurity programmes should be tailored to the risks faced by the commercial operation and it is important to ensure that the biosecurity policy does not make it too difficult to complete routine duties. Be aware that if the system does become too com-

plex and unworkable, people will not comply with the programme – thus jeopardising the health and welfare of poultry on the farm. Keep it simple! Virtually all successful biosecurity programmes are underpinned by staff training which explains not only what has to be done but also ‘why’.

These training regimes in combination with reinforcement from experienced colleagues (particularly management personnel) are key to developing the ‘culture’ required to keep flocks healthy and disease free.

The effectiveness of a programme is not determined by the thickness of the proce-

dures manual but more the mindset of each individual that comes into contact with your birds. An individual who understands the goals and importance of adhering to the programme is far more likely to act appropriately than someone who complies just because they are told to.

Many companies have proved that even in the face of significant disease challenge, it is possible to maintain their disease-free status and in the competitive world in which we work, a good biosecurity programme may well be the best investment you can ever make. ■