

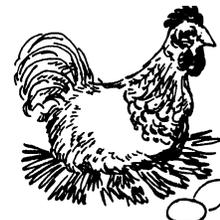


The University of Georgia

Cooperative Extension Service

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COMMERCIAL EGG TIP . . .

BIOSECURITY. DO YOU NEED TO GO TO A HIGHER LEVEL?

In a previous poultry tip it was concluded that there is no good way to depopulate a large cage layer house to contain an outbreak of highly pathogenic avian disease. In a case of potentially zoonotic disease, such as H5N1 avian influenza, existing depopulation methods may be unworkable because exposure of human workers to the pathogen would be too high. Even if a good depopulation method were available, it would be a nightmarish prospect if an egg company had to depopulate an entire multi-flock complex. The best alternative is to keep such diseases off the premises. This means the use of appropriate biosecurity measures.

People are naturally pragmatic. We will do what is necessary to achieve what is important, but are unwilling to put out extra effort for what we believe has little benefit. This is especially true if the extra effort is inconvenient and interferes with our daily activities. Unfortunately, biosecurity measures are inconvenient and do interfere with other things that must be done. Keeping doors locked, maintaining disinfectant foot baths at doorways, controlling direction of personnel movement between company-owned flocks according to bird age or risk of disease transmission, controlling personnel exposure to potential off-site sources of avian disease, wearing only dedicated footwear and clothing, showering between facilities, etc., require more personal commitment and attention to detail than most of us will exercise unless we are absolutely convinced of their necessity. So what level of biosecurity effort is necessary? This is not an easy question to answer, and can only be answered properly within each company according to its own circumstances and tolerance for risk. Too strict a biosecurity program may be unnecessarily expensive and difficult to maintain. Too lax a program overly exposes a company to serious economic loss. The right program will properly balance the potential damage of outbreaks of likely avian diseases against the efforts required to protect against them. The situation is a little like my personal choice whether to leave the doors of my car unlocked when I park it somewhere. If my car is old, I might feel less need to lock it up than if it were new because the consequences of it being stolen would have less impact on me. Similarly, for instance, it is quite rational that the biosecurity measures taken when removing spent hens from the layer house would be less than those exercised when removing a pullet flock from the pullet house because the economic value tied up in the younger birds is greater and more

PUTTING KNOWLEDGE TO WORK

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harm could be done by allowing them to be exposed to pathogens. Returning again to the example of my car, I am more likely to lock it up if I leave it in a busy city parking lot than if I park it at a friend's house in a quiet neighborhood. In this case, the value of my car does not change, but my worry about it being stolen does. Similarly, an egg producer who would not normally vaccinate, for instance, against *M. gallisepticum* would be quite rational to go to the expense of doing so if MG were found in the vicinity. The decision to take action against potential harm and the amount of effort undertaken, therefore, are functions of the risk of a harmful event occurring and the amount of harm done if the event occurs.

It may be time for egg companies to reweigh the risks and harms of potential avian diseases in light of new realities. If an indemnification program to compensate for flock depopulation were sufficiently robust, depopulation of a multi-age layer complex might be manageable, although maintenance of product flow and service of contracts would be awkward at best. Lacking a robust indemnification program, it might be wise to take another look at the cost of having to depopulate a house or a complex and ask if that cost would justify the price of a higher level of biosecurity. Psychologically, it can be hard to spend money and effort up front to minimize the risk of a rare, catastrophic event when the event itself seems distant and may never happen. However, biosecurity is a little like buying insurance. It is an inconvenient expenditure now that hopefully will prevent an economic tragedy. The commercial egg industry has, on the whole, improved its commitment to biosecurity over the last ten years, and egg companies have proven themselves able to manage many diseases by modest biosecurity measures to reduce inter-flock transmission of pathogens and relatively inexpensive vaccination programs. However, given the potential seriousness of a disease such as avian influenza, many egg companies might do more to protect themselves. Do the biosecurity measures taken at your farm or complex accurately reflect the seriousness of the harm that would be done if an outbreak occurred?

Since human traffic is the most likely vector to bring diseases onto poultry farms, control of human movement and reduction of pathogens carried by humans are likely to be the most effective ways to upgrade biosecurity. In addition to the items listed above, it might be wise in some cases to fence the facility and require entry through a monitored gate. It may be valuable to hire people with specific biosecurity responsibilities if existing employees are already busy or would have trouble being diligent with the biosecurity program. To improve the likelihood of compliance, training programs should help employees understand why they are being asked to obey a company biosecurity program. Some of these suggestions probably are already part of your biosecurity efforts and are mentioned here merely as reminders. Contact your state cooperative extension service for assistance in development of a comprehensive biosecurity plan for your facilities. However, even before entering into a serious planning process, there may be something you can do today or this week that would significantly improve the biosecurity of your facility. Ask yourself what is the next most important thing that you can do in this matter. It might be something simple.



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Extension County Coordinator/Agent

Consult with your poultry company representative before making management changes.

“Your local County Extension Agent is a source of more information on this subject”