## **Bird Flu – Cleaning and Disinfection**

Avian Influenza (AI) is a group of viruses that can infect domestic and wild birds. AI viruses can be classified by their ability to cause illness and death. Highly pathogenic AI is extremely infectious, can cause high death loss and can spread rapidly from flock to flock. Low pathogenic AI produces a less dangerous form of the illness. Cleaning and disinfecting will help prevent diseases such as bird flu. There are many different kinds of products that can be used to help prevent or control diseases.

Chemicals that kill germs are called germicides. When a product kills, the suffix "cide" is used in the term. When it keeps an organism from growing, it is called "static." For example, a bacteriostatic product prevents growth of bacteria. The label of the product will tell you what it does. Antiseptics and disinfectants are two types of products that can be used to help control the spread of disease. Antiseptics slow the growth of germs on the skin. Disinfectants kill or stop the growth of germs on objects. The flu virus responds well to most antiseptics and disinfectants. However, it is hard for these products to work in places that have visible dirt, like feces or bird droppings. Washing and cleaning dirt off of skin and surfaces is an important first step before disinfection.



## **Hand Washing**

Washing hands often and properly is the best way to stop the spread of disease. Wet your hands with warm running water. Add soap and rub hands together. Clean front and back, between fingers, and under nails for 20 seconds. Rinse and dry with a clean paper towel, then use the towel to turn off the water. Alcoholbased wipes or hand sanitizers are an option if hands are not very dirty. Sanitizers reduce the number of germs to a safe level but do not kill all of the organisms.

## Cleaning Surfaces, Buildings and Pens

First, brush or sweep away all visible dirt such as feces, feed, dust, and litter using a dry cloth or broom. Remove all equipment, and clean separately. Soak and wash all surfaces. A detergent or sanitizer can be added to the wash water. Once a surface is washed, rinse surfaces at a low pressure with clean water.

## **Disinfection**

The bird flu virus can die in the environment. Viruses are killed by strong acids or bases, heat (90° F for three hours or 100° F for 30 minutes), and dryness. Chlorine bleach solutions, household ammonia, iodine-containing solutions, and dilute acids are a good way to kill the viruses. There are over 90 approved disinfectants made to be used against bird flu. Classes of disinfectants that will kill the virus include phenolics (e.g. One Stroke Environ), quaternary ammonium compounds (e.g. Roccal), and oxidizing agents (e.g. Virkon). A complete list of products is available at: http://www.epa.gov/pesticides/factsheets/avian\_flu\_products.htm.

When using a disinfectant, read the entire label and follow the directions. Clean the surface thoroughly, then dilute the disinfectant to the right concentration, wet all surfaces with the disinfectant, and allow enough contact time for the disinfectant to work.

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