

DISINFECTANTS AGAINST AI VIRUS

IMPORTANT

Before disinfecting any surface, make sure it is thoroughly clean first. *Cleaning* is the most important word in the term “Cleaning and Disinfection” (C&D). Disinfectants do not work, or work poorly, if dirt and feces are present. You are wasting your time and money applying disinfectant to dirty things.

Thoroughly spray cleaned surfaces with the disinfectant solution. Wash off boots with water (pressurized with soap if available) and make sure there is no adhering mud and feces to them before stepping into a disinfecting foot bath. Change foot bath solution frequently; change immediately if it becomes highly contaminated with dirt and feces.

Place hand sanitizer stations at entrance of buildings and pens. Alcohol-based sanitizers are effective against AI virus. Get in the habit of disinfecting your hands every time you enter and leave.

Below are listed a few disinfectants that are effective in inactivating the AI virus. Use them for general disinfection of equipment and in foot baths. Choose the disinfectant that works best in your operation as far as cost and availability; however, do not mix disinfectants. Always follow specific safety precautions listed on the product container. The choice of which disinfectant to use is less important than having things clean first. Remember that disinfectants are only a part of your complete biosecurity firewall.

Household bleach (5% sodium hypochlorite)

Advantages:

- Inexpensive and readily available
- Effective in hard water
- Can be used in a wide range of dilutions between 1:10 and 1:100

Disadvantages

- May bleach clothing in higher concentration range
- Corrosive; long term use may degrade rubber parts.
- Rapidly deactivated in organic matter
- Inactivated by soap and detergents

Product use

Add 1 quart bleach to 6 gallons water. (This is a 1:25 dilution, which equals 200 ppm sodium hypochlorite.)

Use as a general disinfectant and for foot bath.

Iodine solutions

Advantages

- Stable in storage
- Relatively safe
- Effective with soap and detergents

Disadvantages

- May be hard to find
- Corrosive
- May stain clothes and some surfaces

Product use

For buildings and equipment use 1 oz added to 5 gallons water.

Phenols

Advantages

- Works in presence of organic matter and hard water
- Residual

Disadvantages

- May be toxic to animals
- Can cause skin and eye irritation – wear appropriate personal protective equipment (gloves, mask)

Product use:

Example 1 = **BioSentry® Biophene™** (Neogen Corporation)

For cleaning surfaces use 0.5 to 1.5 oz/gallon water

For boot bath use 1 oz/gallon water

Example2 = **1-Stroke Environ®** (Steris® Corporation)

Use for foot bath and general disinfection of surfaces

Add one-half fluid ounce/gallon of water solution.

Oxidizing agents

Disadvantage

- May damage various metals

Product use:

Example = **Virkon® S** (Dupont™)

For surface and equipment disinfection

Add ¾ cup to 5 gallons of water (1:100 dilution)