Cleaning and Disinfection on the Farm

NEONATAL FEEDING EQUIPMENT

Cleaning and disinfecting neonatal feeding equipment helps protect young animals from disease. Follow these steps to minimize disease transfer.

CLEAN AND DISINFECT NEONATAL FEEDING EQUIPMENT

Proper cleaning and disinfection of feeding equipment used for young animals (neonates) is important to prevent illness in these susceptible animals. This process should be used for any equipment used to feed young animals, including bottles, nipples, tubing equipment, creep feeders, chick feeders, buckets, and feeding tubes.

The following cleaning and disinfection instructions, when done properly, will greatly decrease the risk of transmitting diseases to young animals from feeding equipment.

- Immediately after use, rinse the inside and outside of the equipment with warm water (~100-110°F).
  - This helps to prevent dirt and/or residual feed, milk, colostrum, or formula from drying on the equipment, which can encourage bacterial growth and make the cleaning process more difficult.
  - **Avoid using water hotter than 120°F for items used to feed milk.** Using very hot water to rinse items can cause the protein in the milk or milk replacer to attach to the equipment and form a film that allows the growth of disease-causing bacteria.
  - **Avoid using water below 93°F.** Colder water temperatures can cause fats to solidify, which will make disinfection more difficult.
- After rinsing and removing all visible contamination, soak the equipment for 20-30 minutes in hot water (at least 130°F) containing 1% chlorinated alkaline clean-in-place (CIP) detergent. Use the CIP detergent according to label directions.
- Next, disinfect the equipment using a hot (~140°F) solution of water and a chlorine dioxide product (this is NOT the same as bleach).
- Be sure to scrub all crevices well with a bottle brush.
- While scrubbing, carefully inspect equipment and discard any cracked or damaged items which can be hard to clean and may harbor disease-causing bacteria.
- Rinse with an acid sanitizer-warm water (~100-110°F) solution.
  - This reduces the pH on equipment surfaces to eliminate any bacteria not removed during cleaning.
  - Dilute acid sanitizers according to label directions.

Top: Rinse and remove debris; Middle: Soak in water-detergent solution: Bottom: Check for cracks or damage. Photos from Renée Dewell, Iowa State University

- Let the washed and rinsed items air dry completely on a clean surface.
  - Drying further aids in destroying microorganisms.
  - Avoid using items again before they are completely dry.
  - Avoid stacking wet items together.
  - Do not set items on dirty or potentially contaminated surfaces, such as the floor or ground.

Photo from Renée Dewell, Iowa State University

Additional information on cleaning and disinfection and farm biosecurity can be found on the Center for Food Security and Public Health (CFSPH) website.

- Cleaning and Disinfection Resources
- Farm Biosecurity Resources

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