

# Cleaning and Disinfection on the Farm

## BIRTH ASSISTANCE EQUIPMENT

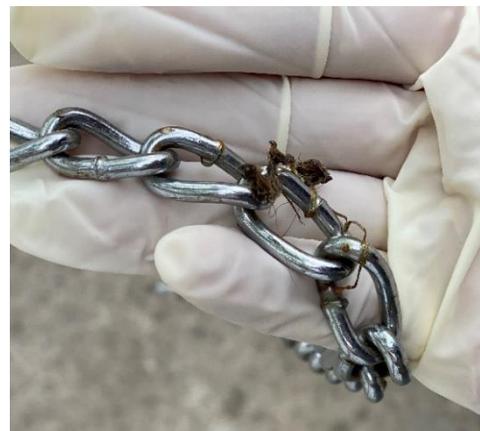


Proper cleaning and disinfection of reusable birth assistance equipment is critical to prevent the potential spread of disease-causing organisms to animals and people. Follow these tips to minimize disease risks from birth assistance equipment on your operation.

### WHY IS BIRTH ASSISTANCE EQUIPMENT A DISEASE RISK FOR ANIMALS AND PEOPLE?

Cleaning and disinfecting reusable birthing equipment (e.g., obstetrical (“OB”) chains or straps, mechanical pullers, and hooks) between each use is critical to prevent disease spread between animals or from animals to people.

Contamination of these items with birthing materials, blood, urine, and feces, during deliveries can spread disease to other animals, to other areas of the operation or even to you or other people. Diseases such as Q fever, chlamydiosis, leptospirosis, and brucellosis are a few examples. Work with your veterinarian to learn about the most important diseases for your herd or flock, and what products to use for cleaning and disinfection.



*Photo from Renée Dewell, Iowa State University*

### DISINFECTATION CHALLENGES WITH BIRTH ASSISTANCE EQUIPMENT

Some types of birthing assistance equipment can cause potential disinfection challenges.

- Stainless steel equipment (e.g., obstetrical chains) is generally easier to clean and disinfect than nylon straps; however, careful attention is needed for crevices and inner loopings.
  - Some disinfectant products (e.g., some oxidizing agents, such as peracetic acid), can be corrosive to steel.
  - If used to disinfect birthing equipment, items must be rinsed well with water after the process.
  - If steel equipment isn't rust resistant, it should be dried thoroughly with a clean cloth or paper towels to prevent rusting.
- Nylon obstetrical straps can be challenging to clean and disinfect because the weaving of the material can hide debris and organisms.
  - Soak and scrub straps in warm soapy water. Rinse well to remove soap and organic material.
  - Select a disinfectant product that will not damage nylon.
  - Soak the straps in properly diluted disinfectant solution for the full contact time recommended to ensure best results.

- Items made of cotton (such as cotton rope) are not recommended for birthing equipment use.
  - Cotton fibers are hard to clean and disinfect thoroughly because the material can absorb birthing fluids and other contaminants.
  - If you do use cotton materials, refer to the "[Laundry C&D tip sheet](#)" for helpful guidance.

## WASHING BIRTH ASSISTANCE EQUIPMENT

- Most equipment can be washed with dishwashing detergent that includes degreasers and warm water.
- Whenever possible, wear gloves (disposable or rubber) when cleaning and washing equipment.
- Remove as much visible contamination as possible before placing equipment in the soapy water.
- Lather and scrub all surfaces until all visible contamination is removed. Soaking may be needed to loosen and remove all hair, oils, birthing materials, and other residue.
- Once all visible contamination is removed and equipment has been washed with soapy water, rinse all items with plenty of clean water.



## DISINFECTING BIRTH ASSISTANCE EQUIPMENT

- Work with an animal health professional, such as your veterinarian or extension personnel, to select the best disinfectant to fight diseases of concern on your operation.
- Disinfect equipment after washing and rinsing. The disinfection step helps kill potential disease-causing bacteria and viruses that even the best cleaning steps can leave behind.
- Follow recommendations for any safety gear needed, such as gloves, masks or goggles. Read and fully understand the disinfectant directions before beginning the disinfection process.
- Dilute bleach solutions may be used for some items. A 1:32 solution (i.e., ½ cup bleach to 1 gallon of water) is a common dilution for general disinfection purposes. If resistant organisms, such as *Coxiella burnetii* (i.e., agent causing Q fever) are suspected, a stronger solution of 1:10 (i.e., 1-1/2 cups bleach to 1 gallon water) may be needed.
- Give the disinfectant solution time to do its job. Be sure items are soaked or covered by the disinfectant solution for the entire recommended contact time. After disinfecting, rinse all surfaces with plenty of clean water, and allow the item to dry thoroughly. Disinfection for some steel chains could also include baking in a brown paper bag at 400°F for 30 minutes.



Photos from Renée Dewell, Iowa State University

- Store cleaned, disinfected, and dried items in a container or area that will prevent contamination before its next use.
- Clean and disinfect sinks and any equipment (e.g., brushes, buckets, drying towels) used to clean and disinfect the birthing equipment.

## WASH HANDS AFTER HANDLING EQUIPMENT

- Hands can become contaminated from handling birth assistance equipment. Many reproductive diseases of ruminants can infect people. Always wash your hands thoroughly with soap and warm water after handling birth assistance equipment. Whenever possible, wear protective gloves.



*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](#)

**Acknowledgement:** Development of this material was made possible through a grant from the U.S. Department of Agriculture (USDA), National Institute of Food and Agriculture (NIFA), North Central Region SARE program (AWD-021794-00001) and the National Animal Disease Preparedness and Response Program (NADPRP) (AWD-025393-00001). Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the USDA.