

# Q fever Safety at Livestock Birthing Exhibits: Information for Operators and Managers

Livestock birthing exhibits can be a meaningful experience for visitors of all ages. However, it is important for organizers and attendees to know that many animals, such as goats, sheep, and cattle, can have diseases that make people sick. Q fever is one of these diseases, making it important for heightened awareness for animal birthing center operators and guests.

## What is Q fever?

Q fever is a disease caused by a bacteria that can result in fever, fatigue, chills, muscle pain, pneumonia, and may lead to miscarriages in pregnant women. A small portion of people with Q fever will go on to develop long-term infections, which can be life-threatening if not treated.

## How do people get Q fever?

People become exposed when they breathe dust or air particles contaminated by animal waste. People are also exposed when they come in contact with infected animal body fluids, particularly placenta, birth fluids, and newborn animals. Other animal products such as feces, urine, milk, and blood can also serve as sources of Q fever.



## Which people are especially vulnerable to Q fever and therefore should avoid working at birthing exhibits?

- Pregnant women
- People with weakened immune systems (such as those with AIDS; cancer and transplant patients who are taking certain immunosuppressive drugs; and those with inherited diseases that affect the immune system)
- People with heart valve disease or other heart problems

## In order to decrease the likelihood of Q fever transmission, birthing exhibit staff should:

- Use dedicated clothing and boots for work in birthing areas to prevent bacteria from leaving the exhibit areas on boots or clothing.
- Promptly remove placenta, bedding and any other materials contaminated with birthing fluids from the birthing exhibit area.
  - » Exhibit design should allow disposal of these materials without travel through public areas.
  - » If possible, remove bedding then clean stalls when birthing exhibit is closed for public viewing.



- Wear disposable gloves, plastic arm-length sleeves, goggles, boots, and respiratory protection (N95 recommended) when:
  - » Assisting with animal births.
  - » Cleaning birthing areas.
  - » Disposing of birth products and animal waste from the birthing area.
- Be trained and certified to wear a respirator.\*
- Wash hands with soap and water right after working with animals, bedding, feed, or other materials in the birthing area.
- Refrain from bringing food or beverages into the animal area.



### Operators and Managers should design and manage birthing exhibits such that:

- Visitors cannot touch any birthing animals including newborn animals, birth products (placenta), or dirty bedding.
- Hand washing stations are readily available and well-stocked at exits.
  - » If hand washing stations are not available, ensure an alcohol-based hand sanitizer that contains at least 60% alcohol is available.
- No eating, drinking, or smoking is allowed in the animal area.
- Exhibits are located in properly ventilated areas.
  - » If outdoors, protection from wind gusts should be considered.
  - » If indoors, avoid placing exhibits near air ventilation intake ducts as Q fever can spread through contaminated air and dust particles.
  - » Ideally, exhibits should be held in areas permanently designated for animal use. Multi-use facilities should be thoroughly disinfected following use as an animal birthing area.
- Dirty bedding and animal birth products are removed from the exhibit as soon as possible using safe waste disposal methods.
- The exhibit is closed if any abortions or stillbirths are observed.
  - » Operators and managers should work with their veterinarian to determine the cause of abortions or stillbirths.



### Operators and Managers should post staff and signage advising visitors to:

- Wash hands immediately upon their exit from the exhibit, even if they did not touch animals.
- Do not eat, drink or smoke in the animal exhibit area.
- Be aware that animals can carry germs that can make people sick.
- Closely monitor children, especially those under 5 years of age, around animal exhibits.
- Be aware of the increased risk of illness for groups such as pregnant women, people with weakened immune systems, and persons with heart valve disease or other heart problems.

**\*Talk to your doctor first about whether it is safe for you to wear a respirator.**

For more information about Q fever please visit:

[www.cdc.gov/qfever](http://www.cdc.gov/qfever), <http://nasphv.org/Documents/AnimalContactCompendium2013.pdf>, or [http://www.nasphv.org/Documents/Q\\_Fever\\_2013.pdf](http://www.nasphv.org/Documents/Q_Fever_2013.pdf)