

Animal and Plant Health Inspection Service

# **Factsheet**

## Brucellosis – What You Need to Know to Protect Yourself, Your Family, and Your Employees

Brucellosis, also known an undulant fever, is an infectious disease caused by bacteria. People can get the disease when they have contact with infected animals or raw animal products. Brucellosis is not usually fatal to people, but may result in long-term illness and lasting health problems even after treatment.

#### Infected animals that can put people at risk include:

- **Pigs** Swine brucellosis was eliminated from domestic, commercial pigs in 2011. It is still present in the feral swine population. As a result, domestic pigs with outdoor access can still become infected from contact with infected feral swine. People most often become infected by helping an infected pig farrow (give birth).
- Cattle Brucellosis in U.S. cattle is rare, however, cases continue to occur in places
  where infected wildlife can spread the disease to cattle, such as the Greater Yellowstone
  Area. People are most often exposed when helping with calving, due to exposure from
  infected blood or tissues. Exposure can also occur from drinking raw milk from infected
  cattle.
- Wild pigs (feral swine) People can become infected through field dressing, handling raw meat, and exposure to blood from infected wild pigs.
- Elk, bison, deer, moose, and caribou Exposure routes for people are similar to those for wild pigs.
- Bears, wolves, coyotes and red fox Animals that feed on infected wildlife may become infected. People can become infected through field dressing the carcasses of these animals.
- **Dogs** Dogs can become infected by breeding with an infected dog or by eating infected animals or birthing products. An infected dog can spread the infection through the birthing process. People can be exposed by helping an infected dog give birth, and through contact with urine and other bodily fluids from infected dogs.

#### Symptoms of brucellosis infection in people include:

- Fever may come and go (undulate)
- Chills
- Headache
- Poor appetite
- Fatigue
- Pain in joints and/or muscles
- Weakness

Men can have swelling and pain in the testicles and prostatitis, and infection can cause women to have miscarriages. Untreated infections can lead to liver, heart, brain, and joint damage, and infertility.

### **Protect yourself**

**Tips for hunters** – see the Centers for Disease Control and Prevention Fact Sheet, <u>Hunters:</u> <u>Protect Yourself from Brucellosis</u>

#### Dog breeders:

- Insist that both male and female dogs are tested for brucellosis before breeding. Your
  veterinarian can take a blood sample from dogs and conduct a rapid test to screen for the
  disease. Your veterinarian should send the blood sample to a diagnostic laboratory for
  confirmatory testing.
- If testing was not done prior to breeding, wear latex or other impermeable gloves, eye protection, and an N95 rated or higher disposable face mask when helping a dog give birth. These face masks can also be referred to as a particulate face mask and should be fit tested to ensure that they properly protect the user. The masks are available in home improvement stores.
- For more information, see <u>Brucellosis and Dog Kennels: What Breeders Need to Know</u>

#### Pig breeders (pigs with outdoor access):

- Purchase or borrow breeding animals only from Validated brucellosis-free herds. Contact your local USDA APHIS Veterinary Services office for more information on becoming a Validated brucellosis-free herd.
- If you buy from a herd that is not Validated brucellosis-free, insist that all breeding animals in the herd of origin over 6 months of age are negative for brucellosis. This test should be done within 30 days before purchasing/borrowing any swine from the herd to your farm. The tests are good at finding infection in a group of animals, but do not work well on single animals and can miss infection.
- Keep your pigs away from feral swine by using double fencing and keeping fences in good repair. Check fences daily. If you see feral swine or evidence of feral swine (footprints, rubs on trees, droppings) contact your State veterinarian's office or USDA APHIS VS.
- Wear full-length disposable poly sleeves, eye protection, and N95 rated or higher disposable face masks (also called a particulate facemask) when helping sows give birth (farrow). Don't reuse face masks and remember to disinfect eye protection after helping with farrowing (with disinfecting wipes, diluted bleach solution, or other disinfectants labeled for killing bacteria).
- Wear latex or other impermeable gloves when handling piglets or aborted piglets.
- Dispose of dead piglets and fetuses by burial or off-site rendering/incineration to prevent spreading infection (for example, spread by scavenging predator animals). Check with your State Veterinarian's office to find out which methods are allowed in your state.
- Purchase feeder pigs from commercial herds, or from brucellosis test-negative herds (Validated brucellosis-free herds are tested negative at least every 10-12 months).
- Wash your hands with antibacterial soap and water after working with pigs.
- Shower and change your clothes after helping with farrowing or working with pigs. Wash and dry your clothes as soon as possible.

#### **Cattle breeders:**

- In areas where wildlife are infected, contact your local wildlife control agency or USDA APHIS Wildlife Services for more information on keeping wildlife away from your cattle.
- Cattle can become infected by contact with infected feral pigs. Keep feral pigs out of your cattle pastures by double fencing, keeping fences in good repair, and walking fence lines daily.
- In areas with infected wildlife or feral pigs, protect yourself from infection when helping a cow give birth. Protect yourself using similar safety steps as outlined for Pig Producers (protective clothing, showering, disposing of dead animals, etc.)

#### How to disinfect non-food surfaces, goggles, equipment:

- Clean off all organic matter (manure, dirt, etc.) then wash with a detergent if the item can get wet. This helps to remove all the organic matter.
- Use a disinfectant, prepared according to the label, which says it is effective against bacteria.
- A bleach solution is a good disinfectant for surfaces that won't be harmed by bleach. Mix 1 part bleach to 4 parts water [e.g. 1 cup (236 ml) regular bleach to 4 cups (946 ml) of water]. At this dilution, you will have to make up a new solution once a week as the bleach become less effective over time. Bleach doesn't work to disinfect surfaces that have organic matter, such as manure or mud on them. Be sure to clean surfaces well and wash them with detergent before applying the bleach solution.
- Follow the label instructions for how long the disinfectant has to sit (contact time). When the contact time is up, rinse and dry the disinfected surface. For a bleach solution, contact time is at least 10 minutes before rinsing or wiping dry.

\*Disposable face masks (N95 or higher) come in many shapes and sizes. One manufacturer's mask will fit differently than another's. A face mask can't protect you if it doesn't fit your face. If the mask doesn't form a tight seal with your face, contaminated air can leak in the mask. For full protection, you should be "fit tested" to find out which mask best fits your face. Contact your local health department for information on where to get fit tested.

#### For more information:

#### **Facts About Brucellosis**

https://www.aphis.usda.gov/animal\_health/animal\_diseases/brucellosis/downloads/bruc-facts.pdf

Brucellosis in Bison

https://www.aphis.usda.gov/animal\_health/animal\_dis\_spec/cattle/downloads/cattle-bison.pdf

Brucellosis

https://www.cdc.gov/brucellosis/

Fit Testing a Disposable Respirator

https://www.cdc.gov/niosh/npptl/topics/respirators/disp\_part/respsource3fittest.html