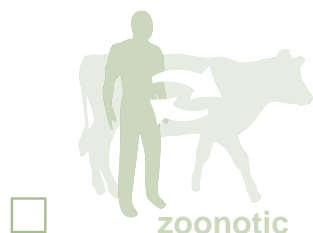
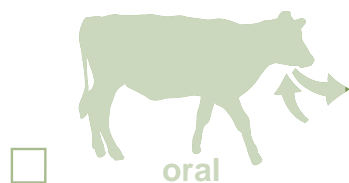
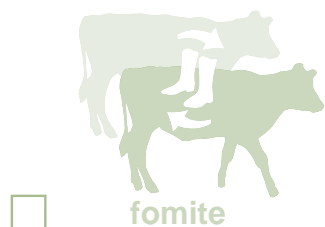


Contagious Bovine Pleuropneumonia

Prevention Practices

Route(s) of Transmission:



Introduction

Contagious bovine pleuropneumonia (CBPP) is a contagious bacterial disease that affects:

- Cows
- Domestic buffalo

Signs of illness in adult cattle include:

- Fever
- Cough
- Labored breathing
- Outstretched neck
- Wide stance of the front legs
- Loss of appetite
- Loss of body condition
- Decreased milk production

Signs of illness in young cattle include:

- Arthritis
- Lameness

This disease does not affect humans.

CBPP is transmitted to other animals through the following routes: aerosol and direct contact.

The following pages contain more information about CBPP. Prevention practices are also included.

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If you notice any signs of illness in your cattle that resemble CBPP, or unexplained illness or death, contact your local veterinarian immediately.

Contagious Bovine Pleuropneumonia (CBPP)

What is CBPP and what causes it?

Contagious bovine pleuropneumonia (plur-OH-new-MOAN-ya) is an easily spread respiratory disease of cattle caused by infection with the bacterium *Mycoplasma mycoides mycoides* (my-COplaz- MA my-COY-dees). *Mycoplasma mycoides mycoides* should not be confused with *Mycoplasma bovis*, the bacterium associated with mastitis and shipping fever in cattle. Contagious bovine pleuropneumonia is still a problem in Africa, Asia and occasionally Europe.

What animals get CBPP?

Cattle and less commonly, domestic buffaloes, can get contagious bovine pleuropneumonia.

How can my animal get CBPP?

Aerosol transmission occurs through breathing in infectious bacteria spread by the cough of infected cattle. Another route is **direct contact** with an infected animal's saliva, urine or fetal tissues and fluid. The cow can also transmit the infection to the unborn calf.

How does CBPP affect my animal?

After cattle are exposed to the bacteria, signs of illness can appear 1 to 3 months later and include fever, cough, labored breathing, outstretched neck, wide stance of the front legs, loss of appetite, loss of body condition and decreased milk production. The disease can cause death in 10-70% of the cases.

Some animals may show no signs of disease yet are still infectious to other cattle (carrier animals).

Calves are more likely to show signs of arthritis and lameness than respiratory illness.

Can I get CBPP?

No. People cannot become infected with the bacteria that causes CBPP.

Who should I contact, if I suspect CBPP?

In Animals –

Contact your veterinarian.

How can I protect my animal from CBPP?

CBPP is considered a foreign animal disease and has not been found in the United States since 1892. The best approach to prevention is surveillance.

Becoming aware of the clinical signs of the disease (severe respiratory disease in adults and lameness in youngstock) and the conditions resulting in the transmission of the disease (the introduction of infected animals into the herd) is the best way to protect your animals.

The best defense in a CBPP outbreak is to limit all contact with animals outside of your herd and quarantine all newly introduced animals for a period of time established with your herd veterinarian.

For More Information

CFSPH Technical Fact Sheets. Contagious Bovine Pleuropneumonia at <http://www.cfsph.iastate.edu/DiseaseInfo/>

USDA APHIS factsheet. Contagious Bovine Pleuropneumonia. http://www.aphis.usda.gov/lpa/pubs/fsheet_faq_notice/fs_ahpleuropneumonia.html



CBPP
is an easily spread
bacterial disease that
causes illness in animals.

Photo courtesy of FAO at www.fao.org

PREVENTION PRACTICES FOR CONTAGIOUS BOVINE PLEUROPNEUMONIA (CBPP)

If a case of contagious bovine pleuropneumonia (CBPP) is confirmed anywhere in the United States, it could spread rapidly across the nation. If any animal on your farm is confirmed to have CBPP, all susceptible animals (cattle, zebu cattle and water buffalo) on the farm will most likely be euthanized and disposed of in efforts to control the further spread of the disease.

There are steps you can take to help prevent CBPP from entering your premises. **Strict biosecurity practices** can help you and your neighbors **minimize the chances** that your animals will have to be destroyed.

A General Precautions handout (found on the CFSPH website) provides prevention steps to take on a daily basis.

The biosecurity practices outlined here should be put into place **immediately** if CBPP is confirmed anywhere in the U.S., and maintained until the U.S. is once again declared CBPP free.

General Precautionary Measures

Prevention measures to minimize the introduction and spread of CBPP onto your farm fall into three general categories.

1. Restrict or stop all animal movement to prevent entry or spread of the disease.
2. Use strict biosecurity measures for animals, animal products, vehicles, people and equipment.
3. Observe, detect and report any disease or unusual signs to your herd veterinarian as quickly as possible.

Specific steps you can take upon CBPP being confirmed in the United States are listed below. Many should already be in place on your farm but should be enhanced and more strictly enforced in the event of CBPP is confirmed in the U.S. This will minimize the chance of the disease being introduced onto your farm.

Farm Perimeter

- **Limit access to your farm.**
 - The entrance to your farm is a major control point.
 - Have only one gated entrance to the animal areas on your farm to better monitor and control all visitors and vehicles arriving at your farm.
 - Keep the gate locked when not in use.
- **Stop all movement of susceptible animals on and off of your farm.**
 - If CBPP is confirmed in the U.S., movement restrictions will most likely be implemented locally, regionally, and possibly nationally.

- Restrictions will depend on the extent of the outbreak.
- Treat each farm location as a separate unit and stop movement between these locations.
- This serves to not only minimize the spread of the CBPP but may prevent it from getting onto your farm.

- **Post signs at the farm entrance to inform visitors of procedures to follow on your farm. (see Appendix A)**

- Stay off this farm unless absolutely necessary.
- Honk before getting out of vehicle (to announce your arrival).
- Check-in with farm personnel upon arrival. (Direct visitors to "where" they should check-in).
- Follow farm biosecurity procedures.

Animals

Livestock

- **Do not allow your cattle within 2 miles of other cattle.**
 - CBPP can be spread through the air up to 2 miles so move your cattle to provide as much distance between herds as possible.
- **Monitor cattle closely and frequently for any developing illness or signs of disease.**
- **Educate yourself and train your employees to recognize the clinical signs of CBPP (photos found in Appendix B).**
 - Acute infection
 - Lack of energy, lack of appetite
 - Frothy salivation
 - Fever, cough
 - Increased breathing rate
 - Moaning while exhaling
 - Neck stretched out while coughing
 - Change in posture
 - Neck forward, legs apart
 - Elbows turned out
 - Chronic infection
 - Coughing with exercise
 - Extreme weight loss
 - Recurrent mild fever
 - Thin, depressed
 - Reluctant to move
 - Calves
 - Infected when they are born
 - Arthritis in several joints

PREVENTION PRACTICES FOR CBPP (CONT'D)



- **Contact your herd veterinarian immediately to examine sick animals.**
- **If you have both adults and calves on your farm and observe signs of pneumonia in adult cattle and arthritis in calves at the same time, contact your herd veterinarian for further investigation.**
- **Do not allow any animal to come into contact with urine, saliva, fetal membranes, or uterine discharge of suspect animals.**

People

Employees

- **Educate employees about CBPP.**

Neighbors

- **Discuss the threat of CBPP with your neighbors.**
- **Separate your cattle from your neighbor's cattle by at least 2 miles.**

Record Keeping

- **Maintain thorough and accurate records of animal movement.**
 - Document all animal movements, including the dates of introduction into the herd and where they came from, movements between separated units, etc.
 - Each farm location must be treated as a separate unit.
 - This information will be essential to help trace where the disease came from.

Cleaning and Disinfection

- **Clean isolation areas and replace bedding regularly. Scrape surfaces and clean with high pressure hot water and detergent.**
- **Rinse and then disinfect with household bleach as it is effective at killing CBPP. (See Appendix C)**
- **Dispose of bedding and manure in a place inaccessible to your animals.**

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PREVENTION PRACTICES FOR CBPP

APPENDIX A



Sample signs to post at the farm entrance in the event of a CBPP outbreak in the U.S.
(Available from your state livestock extension specialist or the CFSPPH web site at www.cfspph.iastate.edu)



Additional signage available from private companies
(Those listed below are available from Gempler's).

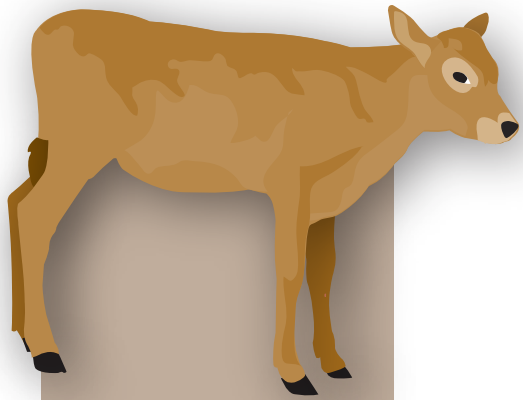


PREVENTION PRACTICES FOR CBPP

APPENDIX B



IMAGES OF CONTAGIOUS BOVINE PLEUROPNEUMONIA Signs of Illness in Cattle



Infected when
they are born
Arthritis in several joints

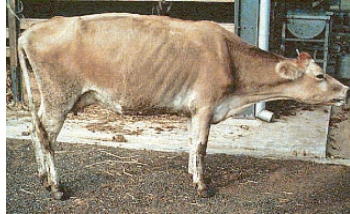


Signs in Calves

photo courtesy of Danelle Bickett-Weddle

photo courtesy of www.fao.org

Acute Signs



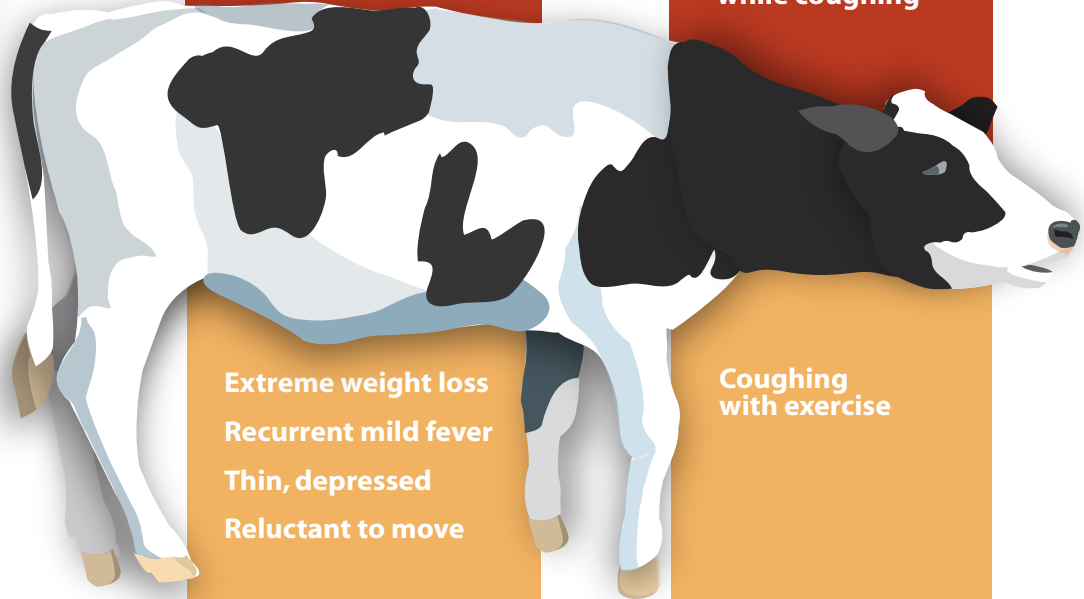
Lack of energy, lack of
appetite, fever, cough
Change in posture
Legs apart
Elbows turned out

photo courtesy of www.fao.org

Acute Signs



Increased
breathing rate
Moaning while
exhaling
Neck stretched out
while coughing



Extreme weight loss
Recurrent mild fever
Thin, depressed
Reluctant to move

Chronic Signs

Coughing
with exercise

Chronic Signs



Disinfectant for Contagious Bovine Pleuropneumonia

Note: Before disinfecting, all surfaces must be cleaned. This includes removing any visible material such as manure, bedding and feed.

Product	Dilution	Mixing Instructions	Comments
Sodium hypochlorite 5.25% (NaOCl) (household bleach)	3%	2 gallons of bleach to 3 gallons of water. Mix thoroughly.	Not effective when area/objects are not clean; unstable in warm, sunny conditions.

CONTAGIOUS BOVINE PLEUROPNEUMONIA (CBPP) PREVENTION PRACTICES CHECKLIST



General Precautionary Measures

- Y N Have you restricted or stopped all animal movement on or off your farm to prevent entry or spread of CBPP?
- Y N Do you use strict biosecurity measures for animals on your farm?

Farm Entrance and Perimeter

- Y N Do you limit access to your farm?
- Y N Do you have only one gated entrance to the animal areas on your farm to better control and monitor visitors and vehicles?
- Y N Do you keep the gate locked when not in use?
- Y N Have you posted signs at the farm entrance to inform visitors to stay off your farm unless absolutely necessary?
- Y N Do you require visitors to check-in with farm personnel upon their arrival?
- Y N Do you require visitors to follow your farm's biosecurity procedures?

Animals- Livestock

- Y N Are cattle housed so that they are at least 2 miles away from other cattle?
- Y N Do you closely monitor animals every day for any developing illness?
- Y N Have you educated yourself about CBPP and the signs of infection?
- Y N Have you educated your employees about CBPP and the signs of infection?
- Y N Do you make sure that no animal comes into contact with urine, saliva, fetal membranes or uterine discharges of suspect animals?

CONTACT YOUR HERD VETERINARIAN IMMEDIATELY IF ANY UNUSUAL SIGNS OF ILLNESS ARE OBSERVED.

CBPP PREVENTION PRACTICES CHECKLIST (CONT'D)



Record Keeping

- Y N Do you maintain thorough and accurate records of animal movement?
- Y N Is each farm location treated as a separate unit?
- Y N Do you know the health status and the source of the animal(s) brought onto your farm?
- Y N Do you only bring animals onto your farm if they are proven to be from CBPP-free areas?

Neighbors

- Y N Have you discussed the threat of CBPP with your neighbors and determined precautions you can take together to protect your farms from becoming infected?

Cleaning and Disinfection

- Y N Do you remove dirt and organic material (bedding, manure) before applying disinfectants?
- Y N Do you know the common disinfectants that will kill CBPP (e.g. household bleach)?
- Y N Do you dispose of bedding and manure so that livestock or wildlife do not have access to it?

Conclusion

Total number of: Yes responses _____ No responses _____

If you have 1 or more No responses, you have identified areas for improvement on your farm. Not all questions are equal in their risk of disease transmission, so it is important to work with your veterinarian to develop a management plan addressing the biggest risks first. This will help minimize the chance of CBPP from entering your farm. Each farm will be unique in their ability to prevent disease transmission because management styles, herd sizes and finances vary.