

Livestock abortion-associated zoonoses

Form Approved

OMB No. 0920-XXXX

Exp. Date: XX/XX/202X

Dear Veterinarian,

The Centers for Disease Control and Prevention (CDC) is conducting a survey of large animal veterinary practitioners across the United States. The goal of this survey is to better understand the circumstances and challenges large animal veterinarians experience when working up an abortion event in livestock. Information gathered will assist the CDC with future interventions in veterinary education to decrease occupational exposures to zoonotic infectious

disease, specifically those diseases associated with obstetric spread. In addition to aiding the development and improvement of educational materials, the data will be aggregated and published to aid in further dissemination of these findings.

Your participation in this survey is strictly voluntary; you can decide to stop at any time. All information collected will remain anonymous; we will not collect any personally identifiable information, such as your name or contact information. There are no negative consequences to you should you decline to participate or not complete the survey in its entirety.

This survey should take you approximately 15 minutes to complete.

The survey may be accessed at [insert URL].

If you have any questions or concerns about completing this survey, please contact: 404-718-5401 or imv5@cdc.gov.

The CDC thanks you for your time and involvement.

Public reporting burden of this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB Control Number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer, 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA 0920-XXXX

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14 ▶



Exit Survey

Are you currently a licensed clinical veterinarian that works with livestock?

Select ▼

← Previous

Finish later

Continue →

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14



Exit Survey

What is your age (years)?

Sex

What year did you graduate from veterinary school?

In what state(s) do you practice? (Select all that apply).

Which state do you primarily practice in? (Select only one).

What is your position in the veterinary practice?

- Owner/Partner Associate Relief Vet Consultant Other

Other, please specify

How many other veterinarians work at this practice?

How many hours per week do you generally work in practice?

- 0-19 hours/week 20-39 hours/week 40+ hours/week

During an average workweek, what percentage of time do you spend in contact with livestock?

- <25% 25% 50% 75% >75%

How would you classify your veterinary practice?

Select Other, please specify

Please indicate your practice type.

Select Other, please specify

What species of animal do you primarily treat? (Select only one).

Select Other, please specify

 Previous

 Finish later

Continue 

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14



Exit Survey

Please indicate how the following diseases are transmitted to humans. Select all that apply.

	Direct Contact	Fomite	Aerosol	Oral	Vectorborne	Other, specify
Brucellosis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Q fever	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Salmonella	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Leptospirosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Campylobacteriosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

In the past 12 months, how often were you contacted to consult or examine livestock that had aborted?

- 0 times 1-5 times 6-15 times 16-30 times >30 times

In the past 12 months, did you examine any livestock or consult with a client for the following reasons? Select all that apply.

- One uncomplicated abortion
- Large-scale abortion event
- Reproductive failure (e.g. too many open females)
- More abortions than expected
- Aborted fetuses that were abnormal in appearance
- Weak offspring were produced
- Female livestock required reproductive diagnostic work up or treatment
- Provide recommendations to prevent additional abortions

In the past 12 months, what percentage of abortions did you submit for diagnostic work up?

- 0% 1-5% 6-10% 11-20% 21-30% >30%

[← Previous](#)

[Finish later](#)

[Continue →](#)

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14



Exit Survey

In the past 12 months, what events served as a trigger to submit specimens for diagnostic work up for an abortion? Select all that apply.

- Abortion storm (acute)
- Increased incidence of abortions over a longer time period
- Introduction of new animals
- Zoonotic concern
- Other Other, specify

If you were to submit samples for diagnosis of the following diseases, which samples would you collect and submit? Select all that apply.

	Blood/serum	Milk	Placenta	Vaginal secretions	Aborted fetus	Feces	Other, specify
Brucellosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="text"/>
Q fever	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="text"/>
Salmonellosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="text"/>
Leptospirosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="text"/>
Campylobacteriosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input type="text"/>

Have you diagnosed (via laboratory confirmation) any of the following diseases in livestock in the past 5 years? Select all that apply.

- Brucellosis
- Q fever
- Salmonellosis
- Leptospirosis
- Campylobacteriosis

 Previous

 Finish later

Continue 

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14



Exit Survey

Select the reporting status for each animal disease in your primary state of practice. Select all that apply.

	Nationally Notifiable	State Reportable	Not Reportable	Not Sure
<i>Brucella abortus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Brucella suis</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q fever	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Salmonellosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leptospirosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Campylobacteriosis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Select the option that best describes your perceived occupational risk of acquiring the following zoonotic diseases in your primary work environment.

Brucella abortus

No risk Slight risk Moderate risk High risk

Brucella suis

No risk Slight risk Moderate risk High risk

Q fever

No risk Slight risk Moderate risk High risk

Salmonellosis

No risk Slight risk Moderate risk High risk

Leptospirosis

No risk Slight risk Moderate risk High risk

Campylobacteriosis

No risk Slight risk Moderate risk High risk

Previous

Finish later

Continue

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14



Exit Survey

Select the option that best indicates how often you advise clients on the following topics.

Personal Protective Equipment (PPE) use while assisting during parturition

Never Rarely Sometimes Frequently Always

PPE use while handling aborted materials

Never Rarely Sometimes Frequently Always

Proper disposal of aborted tissues and contaminated materials

Never Rarely Sometimes Frequently Always

Personal hygiene practices following exposure to obstetric materials (e.g. hand washing)

Never Rarely Sometimes Frequently Always

Purchase of disease free replacement stock

Never Rarely Sometimes Frequently Always

Breeding to disease free animals to avoid spread of disease

Never Rarely Sometimes Frequently Always

Quarantine of newly purchased animals

Never Rarely Sometimes Frequently Always

Farm biosecurity practices to prevent disease and disease spread

Never Rarely Sometimes Frequently Always

Disinfection of contaminated equipment or facilities

Never Rarely Sometimes Frequently Always

Zoonotic diseases of concern, specifically brucellosis, Q fever, salmonellosis, leptospirosis, or campylobacteriosis

Never Rarely Sometimes Frequently Always

← Previous

Finish later

Continue →

Livestock abortion-associated zoonoses

◀ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 ▶



Exit Survey

During a ROUTINE veterinary examination, which personal protective equipment (PPE) do you wear when you perform the following activities? Select all that apply.

	Gloves	Rubber boots	OB Sleeves	Protective clothing (e.g. coveralls)	Surgical mask	Respirator (e.g. N95)	Googles or face shield	Do not wear PPE
Handling an adult animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handling a neonate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conducting a rectal exam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conducting a vaginal exam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assisting with parturition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Performing a cesarean section	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handling an animal with hemorrhage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handling birth products or aborted tissues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Performing a necropsy on an animal or fetus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

◀ Previous

📄 Finish later

Continue ▶

Livestock abortion-associated zoonoses

◀ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 ▶



Exit Survey

During a veterinary examination where a ZONOTIC DISEASE IS SUSPECTED, which PPE do you wear when you perform the following activities? Select all that apply.

	Gloves	Rubber boots	OB Sleeves	Protective clothing (e.g. coveralls)	Surgical mask	Respirator (e.g. N95)	Googles or face shield	Do not wear PPE
Handling an adult animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handling a neonate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conducting a rectal exam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conducting a vaginal exam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assisting with parturition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Performing a cesarean section	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handling an animal with hemorrhage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handling birth products or aborted tissues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Performing a necropsy on an animal or fetus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

← Previous

Finish later

Continue →

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 **9** 10 11 12 13 14



Exit Survey

At any time in your career, has a medical care provider diagnosed you with acute brucellosis (non-vaccine strain), Q fever, salmonellosis, leptospirosis, or campylobacteriosis due to suspected animal contact?

Yes No

Which disease(s) were you diagnosed with? Select all that apply.

Brucellosis Q fever Salmonellosis Leptospirosis Campylobacteriosis

Was brucellosis confirmed by a diagnostic laboratory?

Select

Was Q fever confirmed by a diagnostic laboratory?

Select

Was salmonellosis confirmed by a diagnostic laboratory?

Select

Was leptospirosis confirmed by a diagnostic laboratory?

Select

Was campylobacteriosis confirmed by a diagnostic laboratory?

Select

Previous

Finish later

Continue

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Exit Survey

Indicate your level of awareness with the Compendium of Veterinary Standard Precautions for Zoonotic Disease Prevention in Veterinary Personnel.

Not aware Slightly aware Somewhat aware Moderately aware Extremely aware

Which personal protective equipment (PPE) do you have access to at your practice?
Select all that apply.

- Gloves
- OB sleeves
- Rubber boots
- Disposable shoe covers
- Reusable protective clothing (e.g. coveralls, lab coat)
- Disposable protective clothing (e.g. Tyvex-style coveralls, lab gown)
- Surgical Mask
- Respirator (e.g. N95)
- Goggles
- Faceshield
- None

How often is PPE readily available and accessible to you?

Never Sometimes Often Always

Does your practice provide training on when and how to use, care for, and maintain your PPE?

Yes No Unsure

Previous

Finish later

Continue

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14



Exit Survey

Do you wear a respirator?

Select

What type of respirator do you use?

- Filtering facepiece (e.g. N95 or P100)
- Elastomeric half-facepiece respirator
- Full facepiece elastomeric respirator
- Powered air-purifying respirator
- Other Specify

Is there a written respirator program available at your practice?

Yes No Unsure

Is there an identified staff member who is responsible for the respirator program?

Yes No Unsure

Have you been medically cleared by your physician to wear a respirator?

Yes No Unsure

Have you received respiratory fit-testing to identify what model of respirator to wear?

Yes No Unsure

Please indicate where you were last fit tested for the respirator.

Select

Other, specify

Have you been trained on when to use the respirator, limitations, care and maintenance, and conducting user seal checks?

Yes No Unsure

Previous

Finish later

Continue

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14



Exit Survey

Indicate the level of importance the following motivators have for your decision to use personal protect equipment (PPE).

Concern for personal safety

Not important Moderately important Very important

Concern for spreading disease to other humans

Not important Moderately important Very important

Concern for spreading disease to other animals

Not important Moderately important Very important

Concern for liability

Not important Moderately important Very important

Adherence to workplace policy

Not important Moderately important Very important

Concern about pregnancy/ability to conceive

Not important Moderately important Very important

Please indicate other motivators to PPE use not listed above.

← Previous

Finish later

Continue →

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14



Exit Survey

Indicate the level of concern you have towards each potential barrier to PPE use.

Cost of Equipment

Not concerned Moderately concerned Very concerned

Negative perceptions of other towards PPE

Not concerned Moderately concerned Very concerned

Inconvenience of taking the gear with you in the field

Not concerned Moderately concerned Very concerned

Inconvenience of disposal or disinfection after use in field

Not concerned Moderately concerned Very concerned

Inconvenience of wearing PPE

Not concerned Moderately concerned Very concerned

Belief that it is unnecessary

Not concerned Moderately concerned Very concerned

Unsure how to use PPE properly

Not concerned Moderately concerned Very concerned

Unsure what PPE to use for a specific situation

Not concerned Moderately concerned Very concerned

Decreased safety due to mobility or visibility while in use

Not concerned Moderately concerned Very concerned

Please indicate other barriers to PPE use not listed above.

Previous

Finish later

Continue

Livestock abortion-associated zoonoses

1 2 3 4 5 6 7 8 9 10 11 12 13 14



Exit Survey

What resource(s) do you consult for information on zoonotic diseases? Select all that apply.

- Textbooks Journal articles CE/Conference Webinars
- Vet Organization website (e.g. AVMA) Government website (e.g. CDC, USDA)
- Colleagues Vet professional website (e.g. VIN, DVM360)
- Vet school website Other specify

What topics would you like to receive more continuing education opportunities? Select all that apply.

- PPE use Zoonotic diseases
- Regulatory reporting requirements Infection control
- Other specify

Through which resources would you like to receive educational materials? Select all that apply.

- Textbooks Journal articles CE/Conference Webinars
- Vet Organization website (e.g. AVMA) Government website (e.g. CDC, USDA)
- Vet professional website (e.g. VIN, DVM360) Vet school website
- Other specify

Previous

Finish later

Print

Submit Survey

Livestock abortion-associated zoonoses



Thank you for taking time out of your busy schedule to complete this survey. The knowledge gained from responses like yours will help improve and enhance zoonotic disease education and prevention strategies targeted to veterinarians.

Please visit the following websites to learn more about specific zoonotic diseases and occupational health recommendations.

Brucellosis <https://www.cdc.gov/brucellosis/veterinarians/index.html>

Q fever <https://www.cdc.gov/qfever/index.html>

Salmonellosis <https://www.cdc.gov/healthypets/diseases/salmonella.html>

Leptospirosis <https://www.cdc.gov/leptospirosis/index.html>

Campylobacteriosis <https://www.cdc.gov/campylobacter/index.html>

Veterinary Safety and Health <https://www.cdc.gov/niosh/topics/veterinary/>

Respirators <https://www.cdc.gov/niosh/topics/respirators/>

Veterinary Standard Precautions <http://www.nasphv.org/documentsCompendiaVet.html>