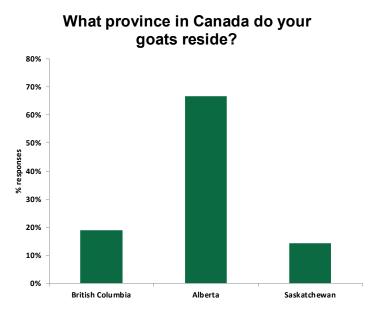
Lameness Survey of Goat Producers

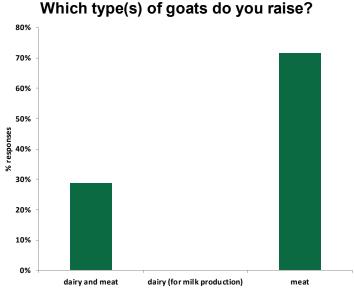
Contagious footrot is a bacterial infection common in sheep and goats that is caused by bacteria that live in the soil. The most commonly associated bacteria with ovine/caprine footrot are *Fusobacterium necrophorum* and *Dichelobacter nodosus*.

With the support of the Alberta Goat Association, we conducted a national survey to assess the importance of footrot disease in the sheep and goat livestock industries. We also assessed producer, producer organizations, and veterinarian willingness to support research for a Canadian-based footrot bacterin vaccine that would incorporate recent Canadian *F. necrophorum* and *D. nodosus* isolates.

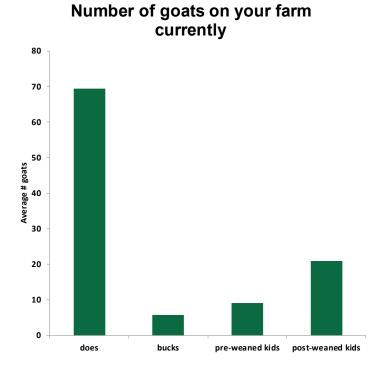


SURVEY: 21 PRODUCERS RESPONDED

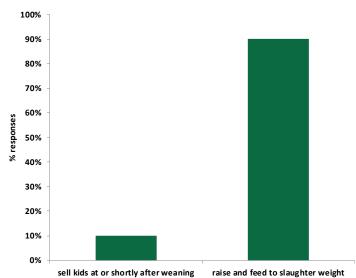




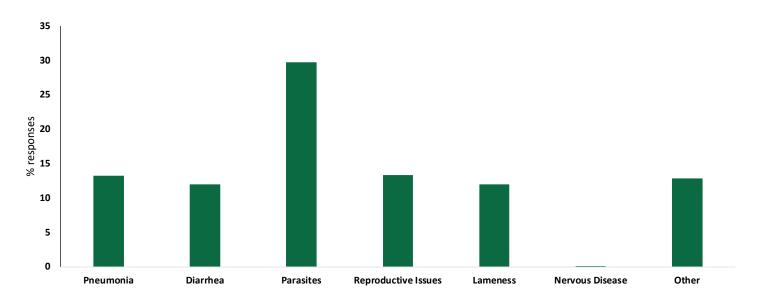




If you raise meat goats, do you sell your kids at or shortly after weaning or feed and finish to slaughter weight?

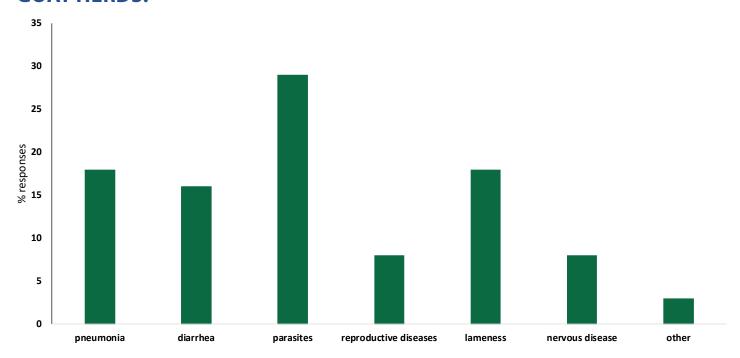


TOP 3 DISEASES OF CONCERN TO GOAT PRODUCERS:

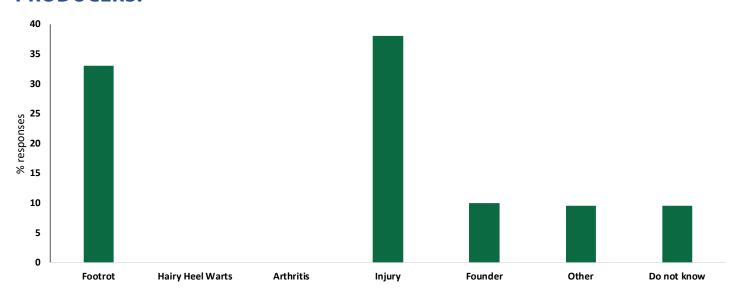


Other = Caseous Lymphadenitis, Johnes Disease, nutritional deficiencies, prolapses, pregnancy toxemia

TOP 3 DISEASES WHERE ANTIMICROBIALS MOST COMMONLY USED IN GOAT HERDS:

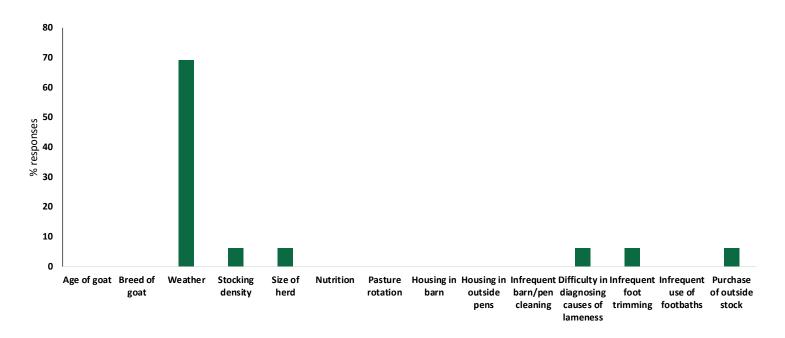


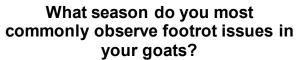
MOST COMMON CAUSE OF LAMENESS AS DIAGNOSED BY GOAT PRODUCERS:

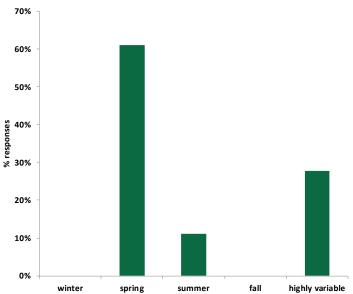


Other – failing to trim claws in a timely manner, no foot lesions in herd

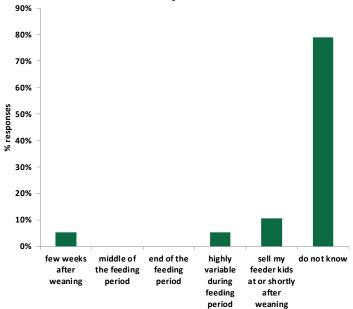
MOST IMPORTANT RISK FACTORS FOR FOOTROT:



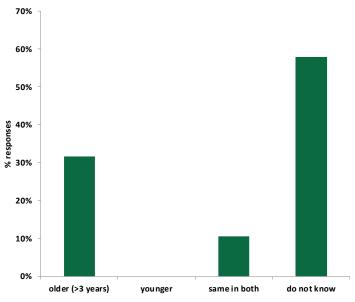




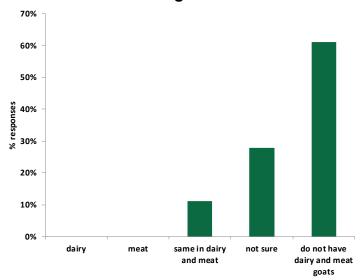
When after weaning, is footrot most observed in your feeder kids?



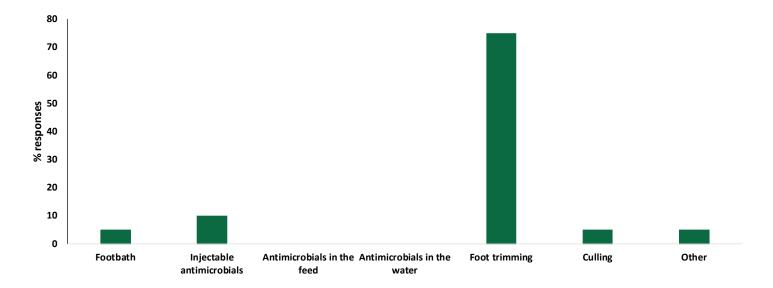
Do you observe footrot more commonly in older does/buck (≥ 3 years) than in younger does/bucks?



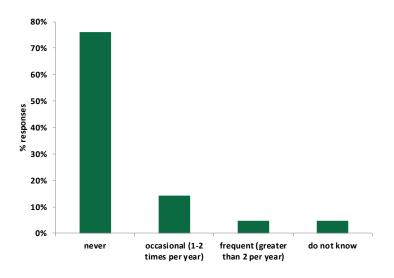
If you have both dairy and meat goats, do you observe more footrot in your dairy goats than in your meat goats?



WHAT IS THE MOST EFFECTIVE TREATMENT FOR FOOTROT IN YOUR HERD?

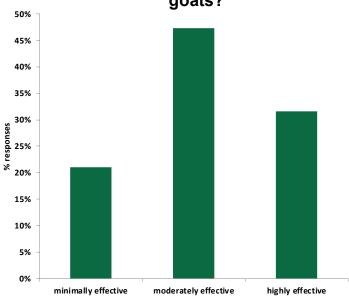


How common are outbreaks of footrot in your goat herd?



Outbreak = treating ≥ 10% of the animals in a group e. g., pen or pasture, within a week.

How effective do you think antimicrobials are to treat footrot in goats?



TREATMENT FOR FOOTROT:

% goats treated for footrot:

Breeding Does: 22%

Breeding Bucks: 10%

Pre-weaned Kids: 0%

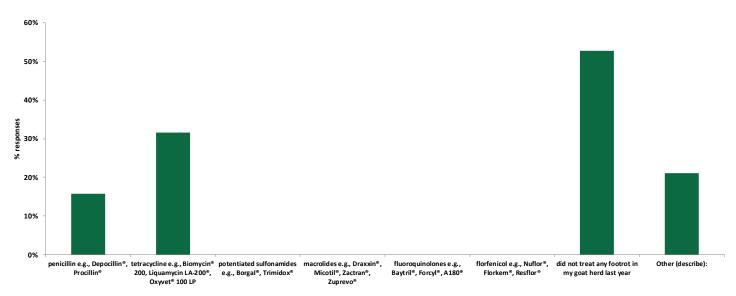
• Post-weaned Kids: 0%

- 33% of producers did not know how many animals were treated for footrot
- Footrot culling rate: 0%, but 30% of producers did not know
- Footrot mortality rate: 1 herd reported 10%, rest 0%, but 10% did not know



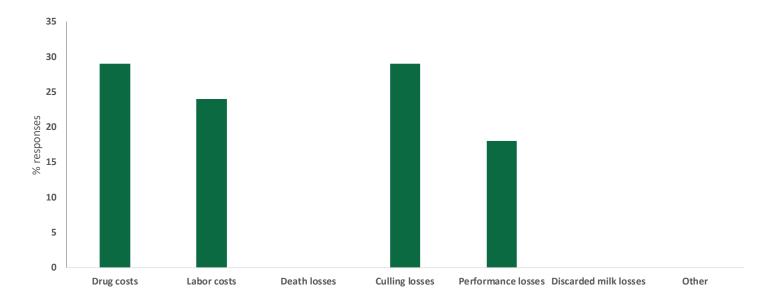
Photo credit: Alberta Goat Association

DURING THE LAST YEAR, WHAT ANTIMICROBIALS DID YOU USE TO TREAT FOOTROT IN YOUR GOATS?

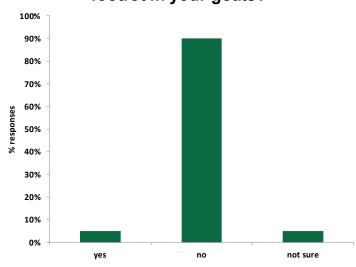


Other = topical copper spray

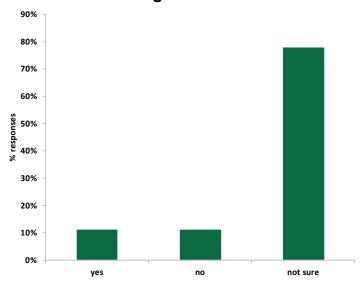
MOST IMPORTANT ECONOMIC LOSSES FROM FOOTROT:



Have you ever used an autogenous vaccine i.e., vaccine made from bacterial isolates from your herd or other local herds to prevent/control footrot in your goats?

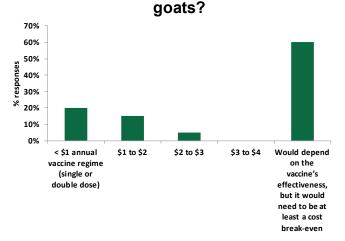


If yes, do you believe the autogenous vaccine reduced disease rates for footrot in your goats?

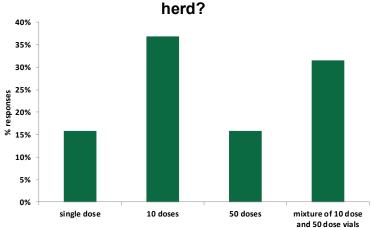


VACCINE PRODUCTION:

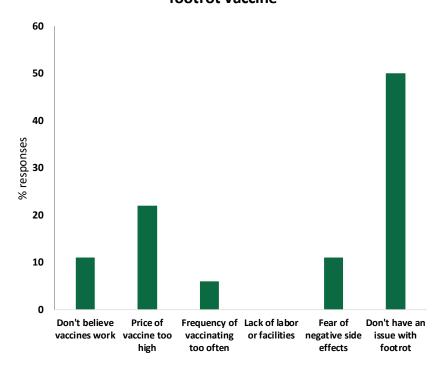
What is the maximum annual price per head that would be cost-effective for you to pay for a footrot vaccine for your



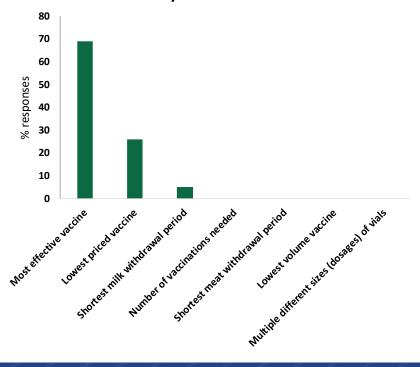
What size of dosage vials of footrot vaccine would work best for your goat operation based on the size of your



Main reason that would limit your use of a footrot vaccine

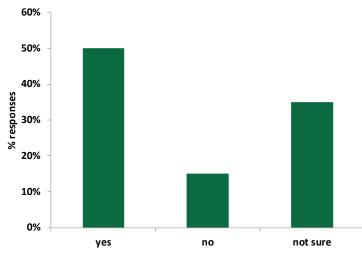


If a choice between imported footrot vaccine or Canadian footrot vaccine, what would you base your decision on?



CANADIAN FOOTROT VACCINE:

If a footrot vaccine designed for goats were available in Canada, would you use it?



PRODUCER RESPONSES ON SINGLE MOST IMPORTANT ATTRIBUTE OF A CANADIAN CAPRINE FOOTROT VACCINE:

- Producer responses on single most important attribute of a Canadian caprine footrot vaccine:
- Effective: 71%
- Safe: 6%
- Single dose: 11%
- Long duration of immunity: 6%
- Cost effective: 6%
- Route SC, low volume, short meat/milk withdrawal period: 0%

PROJECT TEAM:

- Dr. Jose Perez-Casal
- Dr. Joyce Van Donkersgoed
- Dr. Karen Schwartzkopf-Genswein

ACKNOWLEDGMENTS:

- Alberta Goat Association
- Canadian Animal Health Surveillance System
- Participating goat producers
- Funding support from RDAR and VIDO



Photo credit: Alberta Goat Association

VIDO receives operational funding from the Government of Saskatchewan through Innovation Saskatchewan and the Ministry of Agriculture and from the Canada Foundation for Innovation through the Major Science Initiatives for its CL3 facility.

FOR MORE INFORMATION CONTACT:

Jose Perez-Casal

Project Leader
jose.perez-casal@usask.ca

Andrew Van Kessel

Director of Research

andrew.vankessel@usask.ca

www.vido.org

JULY 2022





