

Sheep Producer Survey on Lameness

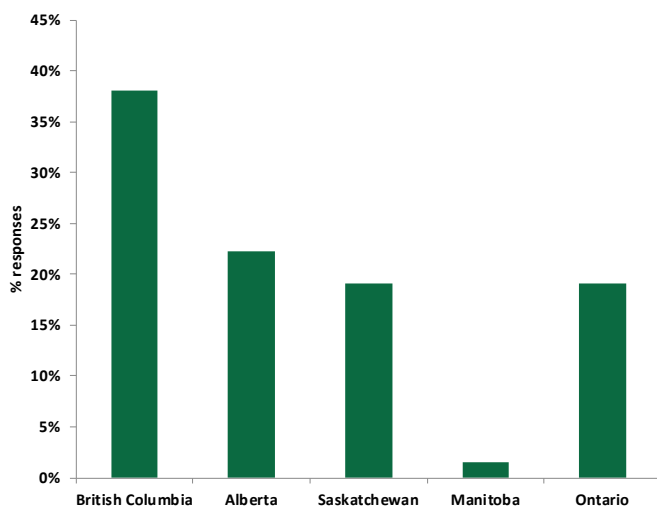


Contagious footrot is a bacterial infection common in sheep and goats that is caused by bacteria that live in the soil. The most commonly associated bacteria with ovine/caprine footrot are *Fusobacterium necrophorum* and *Dichelobacter nodosus*.

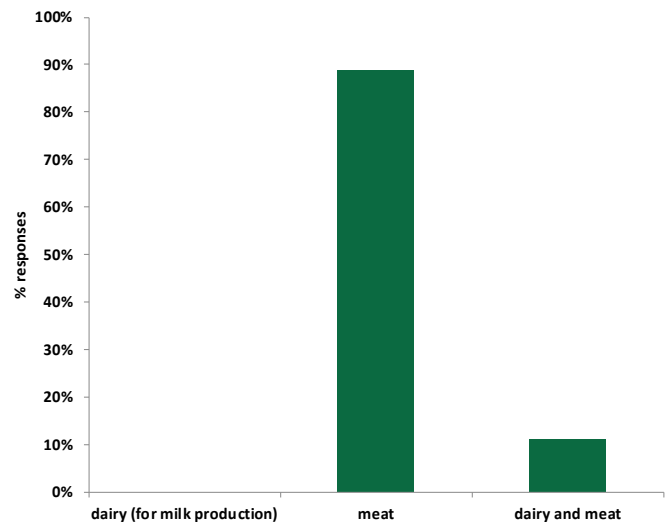
With the support of the Alberta Lamb Producers, we conducted a national survey to assess the importance of footrot disease in the sheep and goat livestock industries. We also assessed producer, producer organizations, and veterinarian willingness to support research for a Canadian-based footrot bacterin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

PRODUCER SURVEY: 63 RESPONDENTS

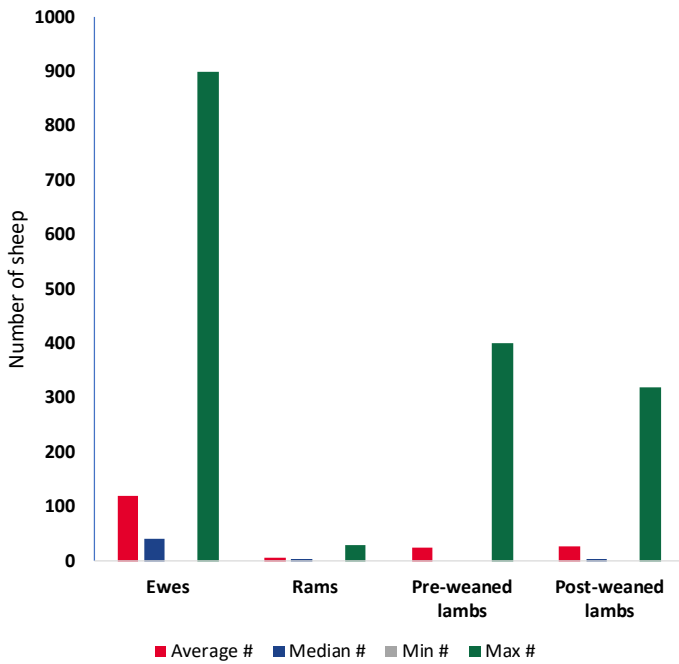
What province in Canada do your sheep reside?



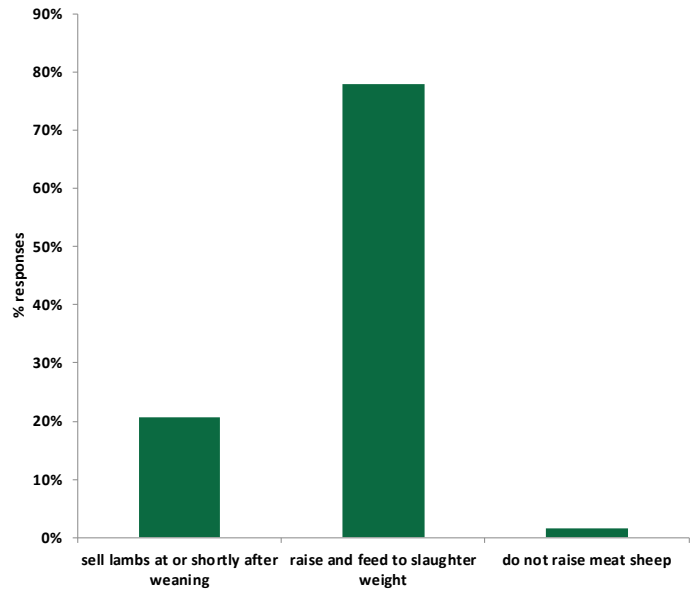
Which type(s) of sheep do you raise?



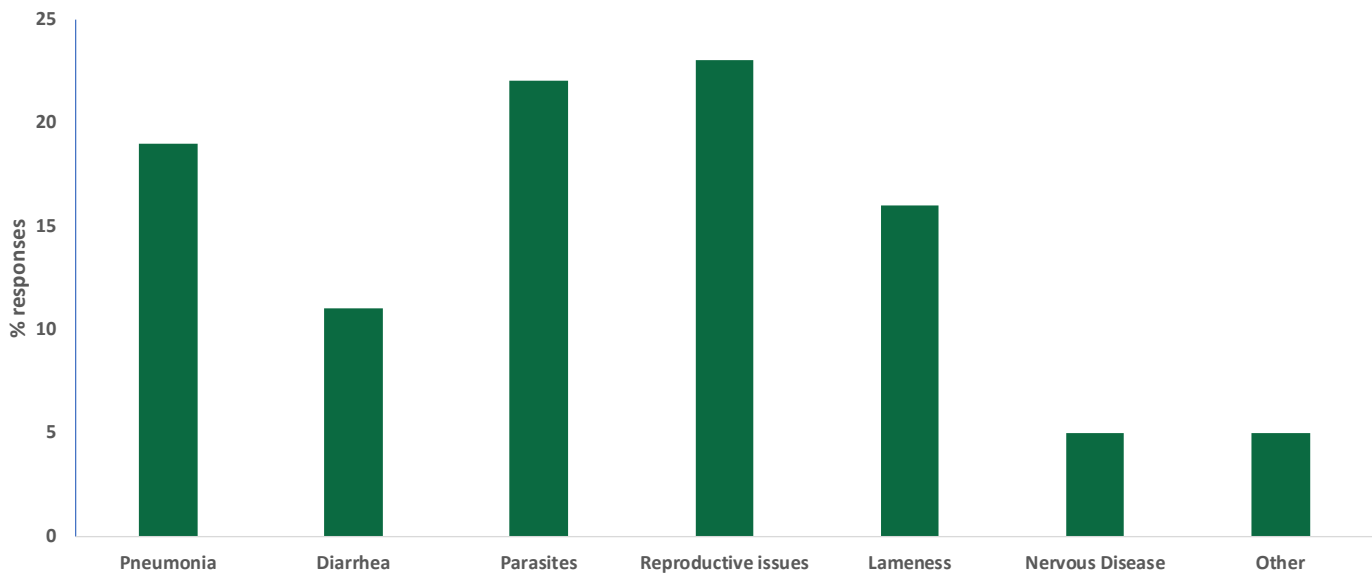
Number of sheep in your flock



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

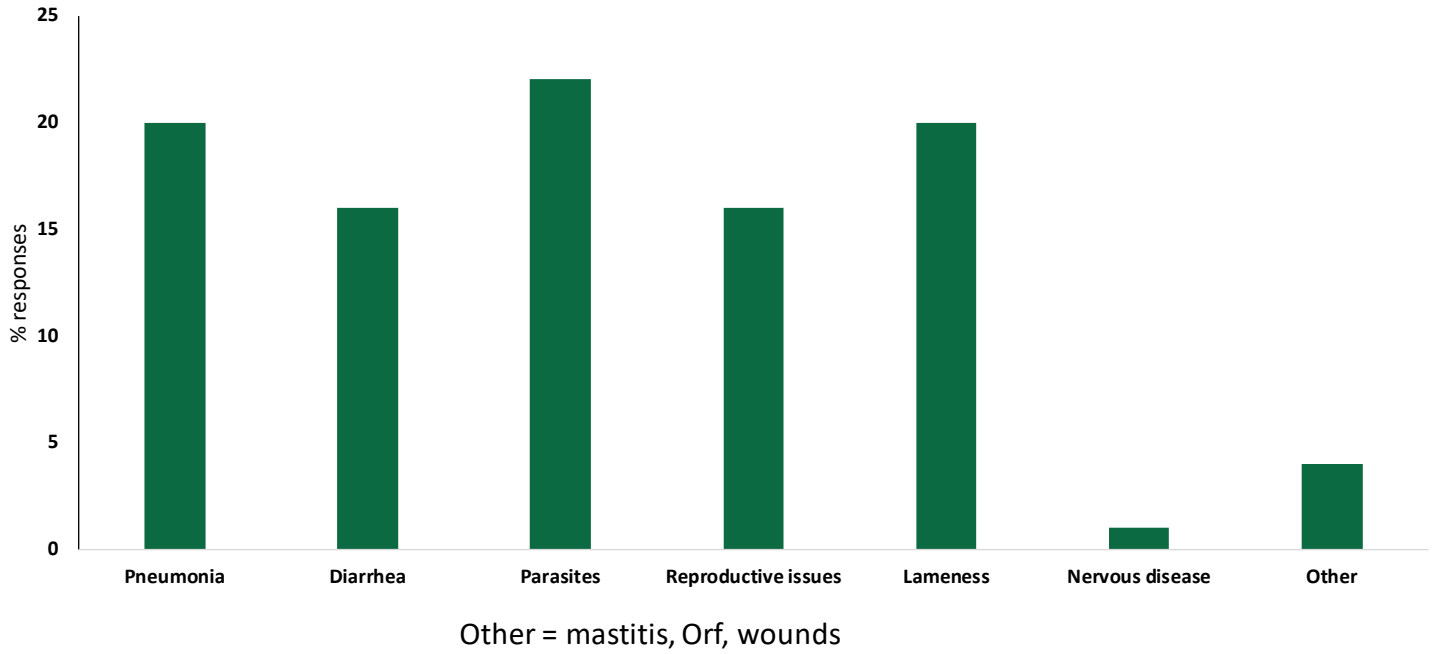


TOP 3 DISEASES OF CONCERN TO SHEEP PRODUCERS:

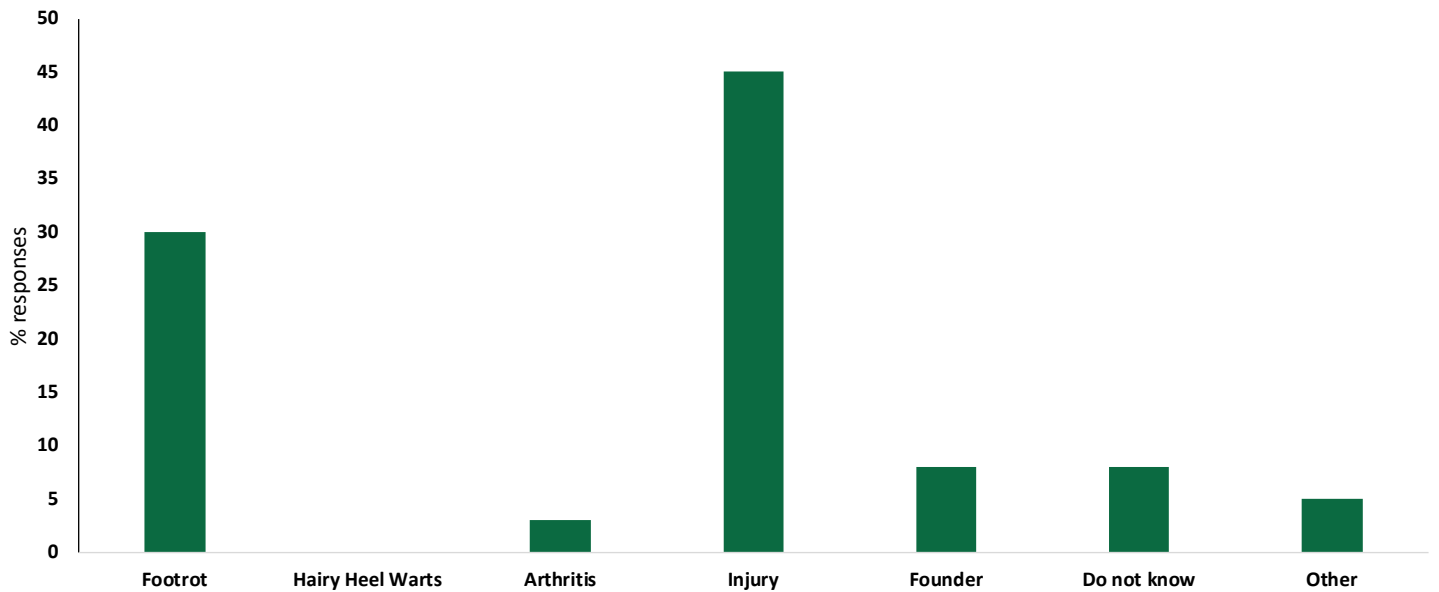


Other = mastitis, injuries, metabolic diseases, mineral deficiencies, caseous lymphadenitis, Orf

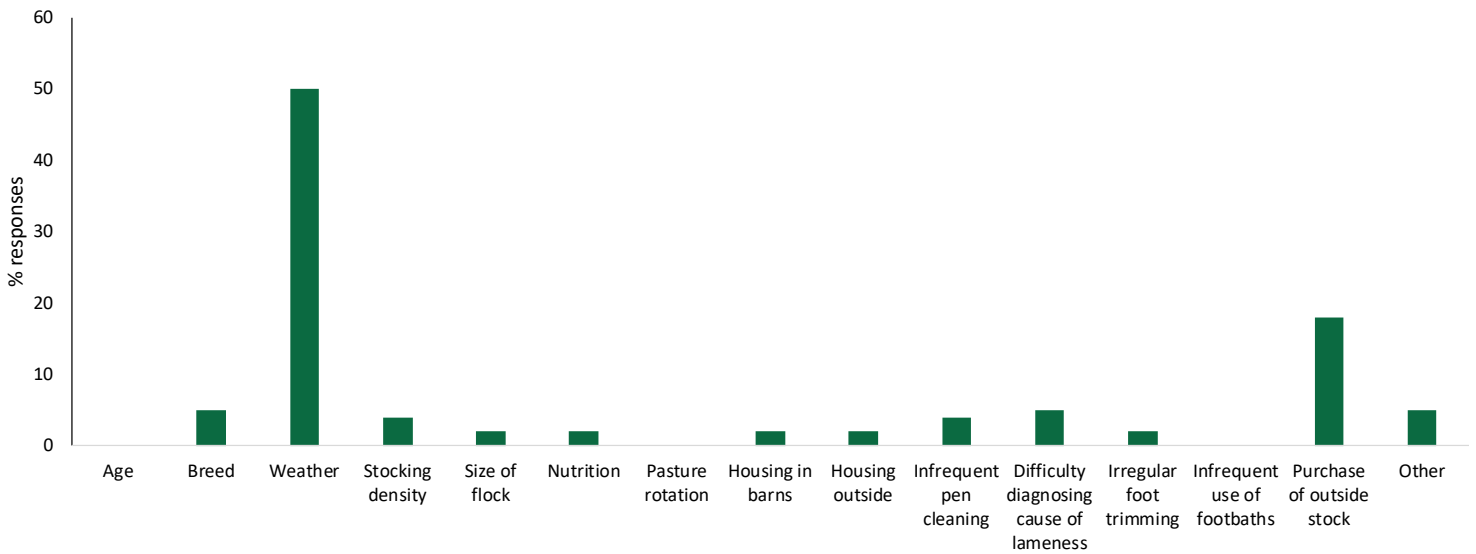
TOP 3 DISEASES WHERE ANTIMICROBIALS MOST COMMONLY USED IN SHEEP FLOCKS:



MOST COMMON CAUSE OF LAMENESS AS DIAGNOSED BY SHEEP PRODUCERS:

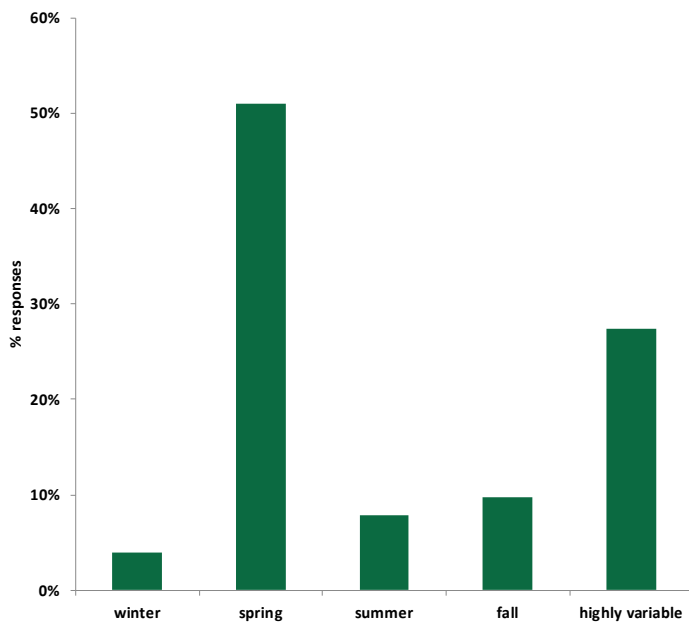


MOST IMPORTANT RISK FACTORS FOR FOOTROT:

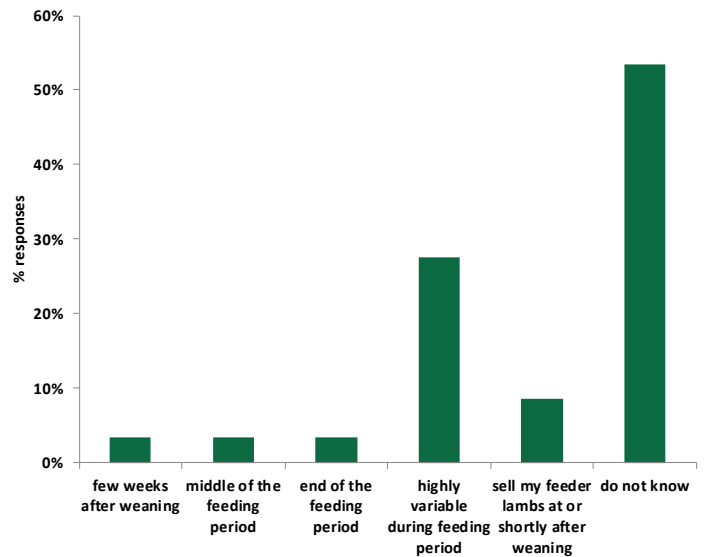


Other = never had footrot

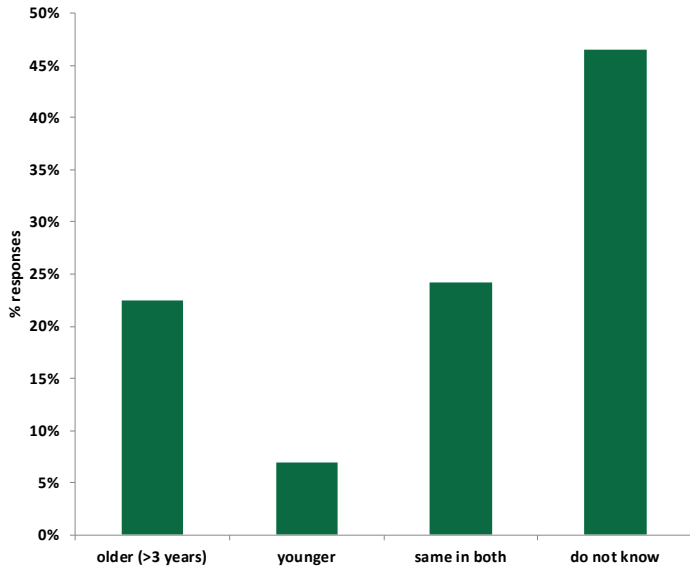
What season do you most commonly observe footrot issues in your sheep?



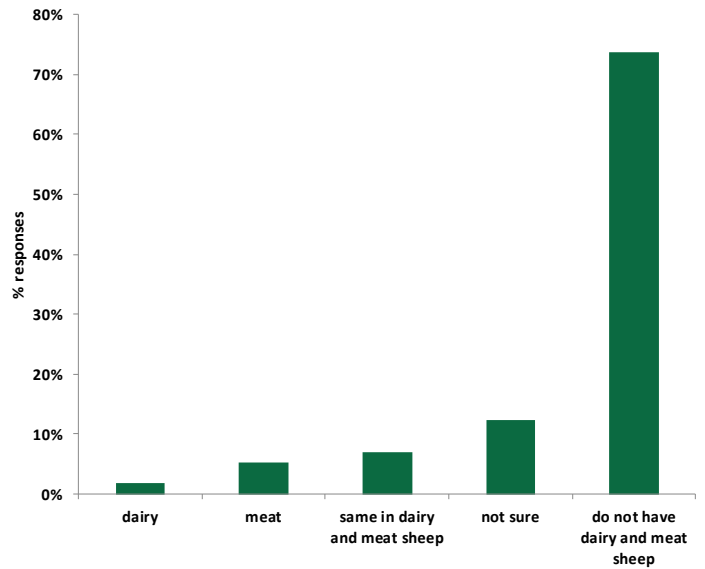
When after weaning, is footrot most commonly observed in your feeder lambs?



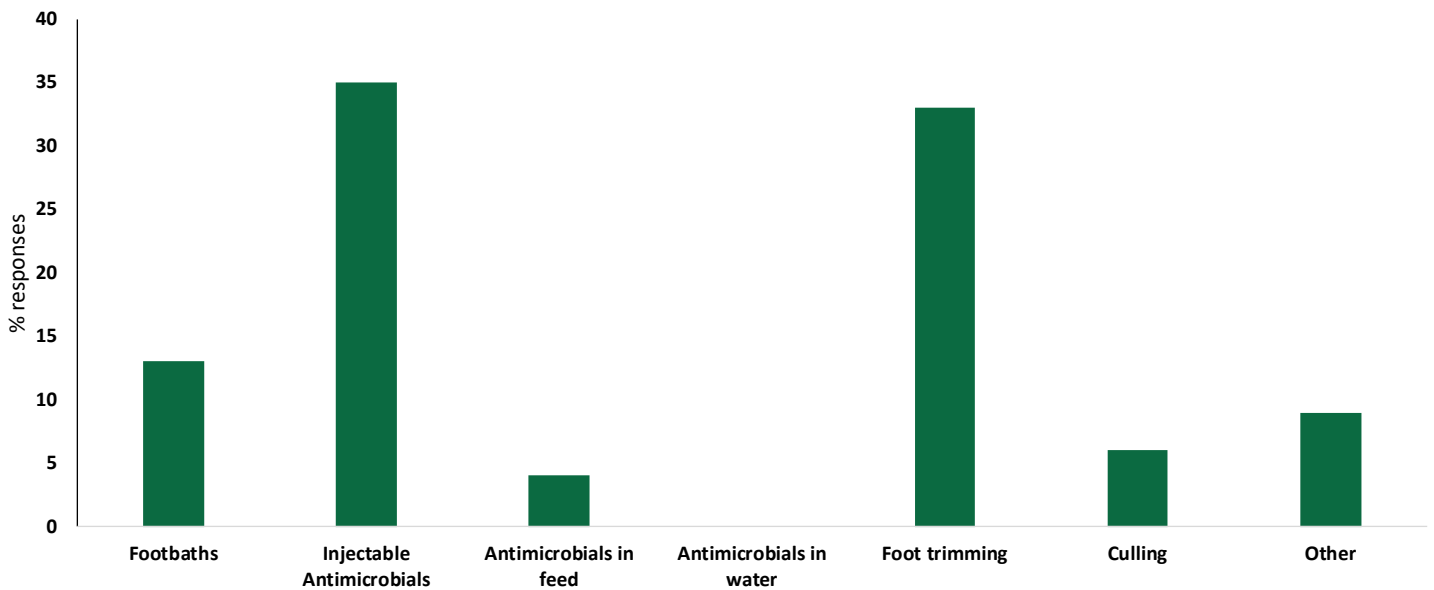
Do you see footrot more commonly in older (greater than 3 years) ewes/rams than in younger ewes/rams?



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

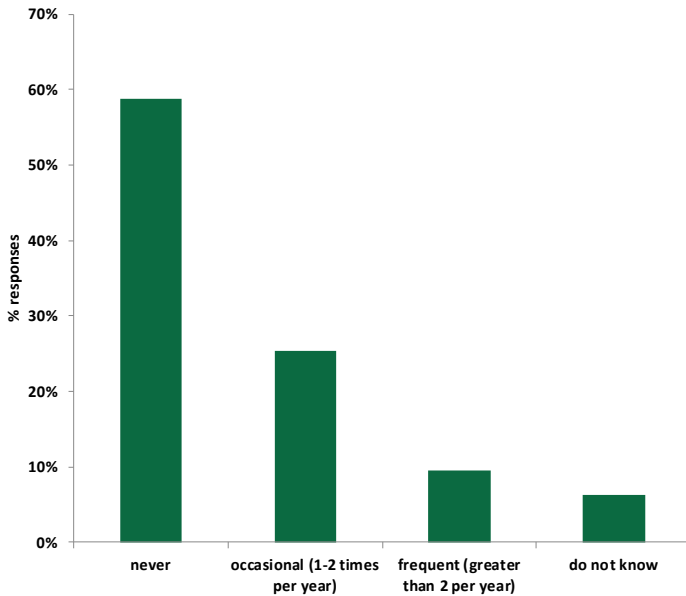


WHAT IS THE MOST EFFECTIVE TREATMENT FOR FOOTROT IN YOUR HERD?:



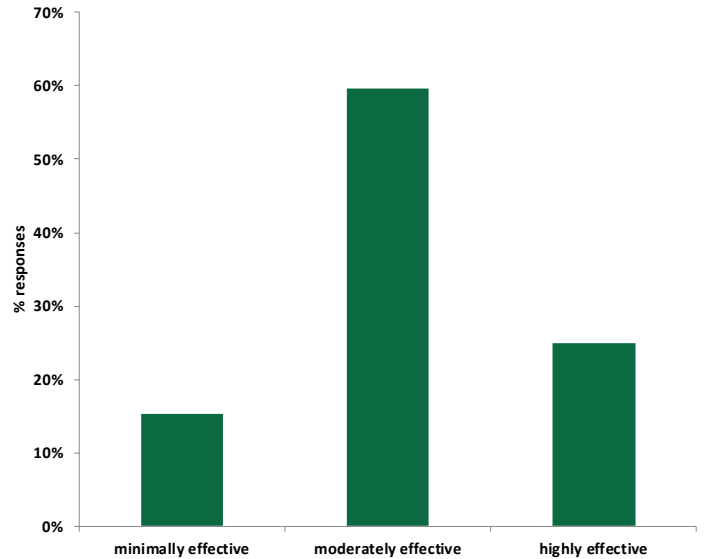
Other = anti-inflammatories, foot wrap, segregation, clean facilities, weather < 10C

How common are outbreaks of footrot in your sheep flock?



Outbreak = treating $\geq 10\%$ 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 your sheep?



FOOTROT DISEASE INCIDENCE:

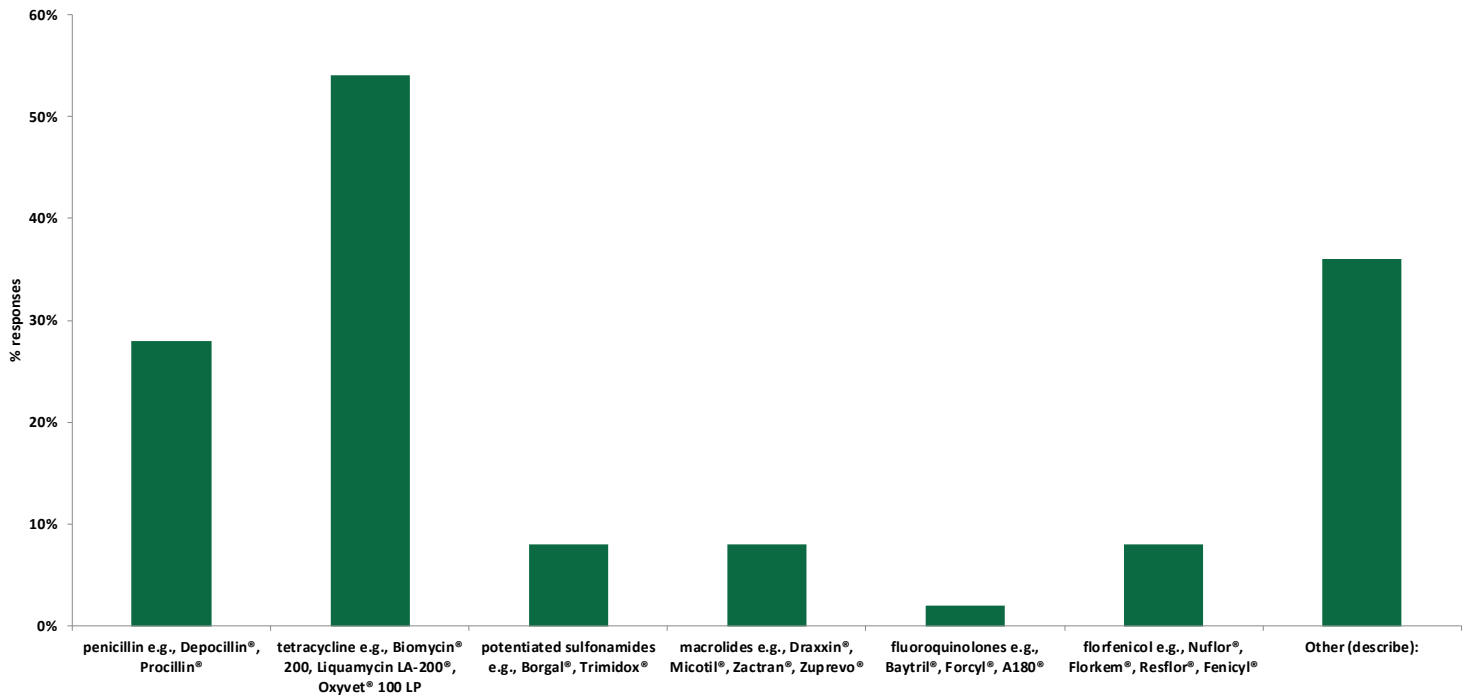
- Breeding ewes: 7% (max: 90%)
- Breeding rams: 7% (max: 100%)
- Pre-weaned lambs: 1% (max: 15%)
- Post-weaned lambs: 5% (max: 100%)
- 6% of producers did not know

AVERAGE CULLING RATE: 1%; although 8% of flocks culled 1% to 20% of ewes/rams for footrot; 14% of producers did not know

MORTALITY RATE (median): 0% (10% of producers did not know)

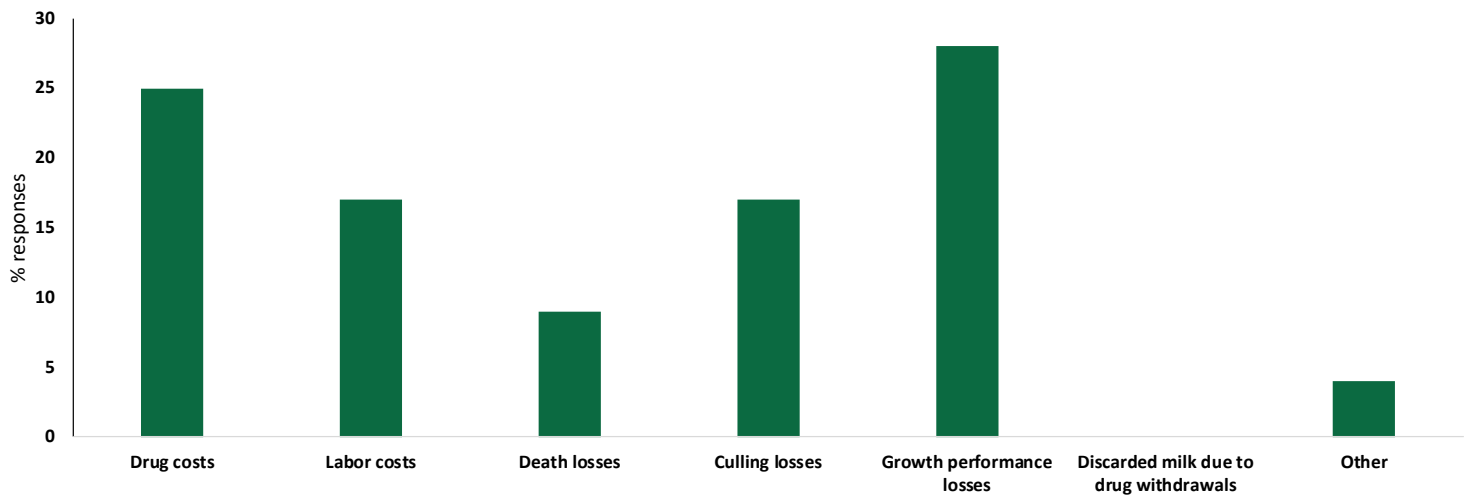


DURING THE LAST YEAR, WHAT ANTIMICROBIALS DID YOU USE TO TREAT FOOTROT IN YOUR SHEEP?:

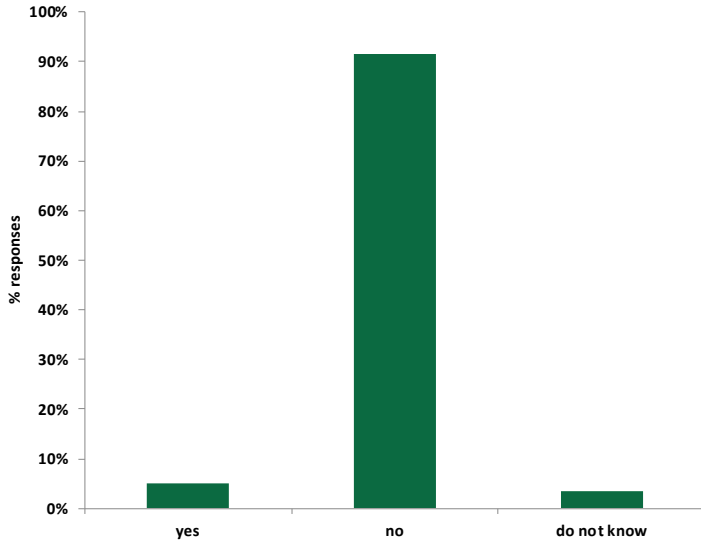


Other = hydrogen peroxide, copper spray, poultice clay wrap, didn't treat any

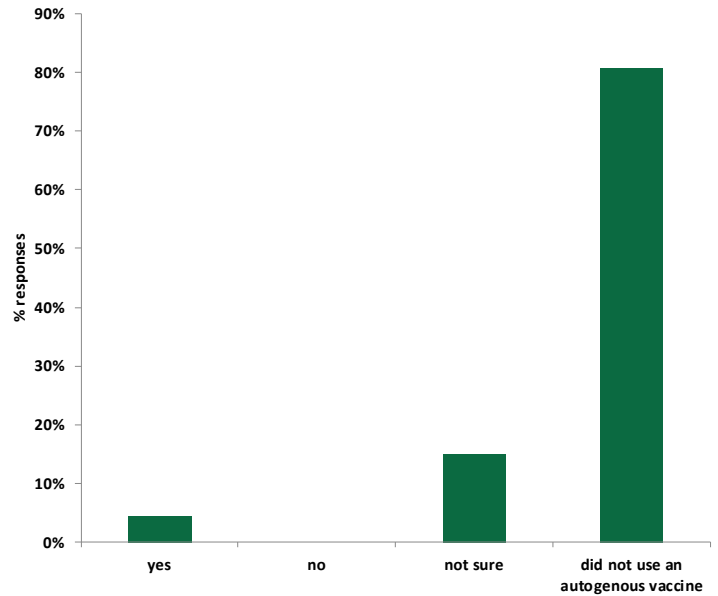
MOST IMPORTANT ECONOMIC LOSSES FROM FOOTROT:



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



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



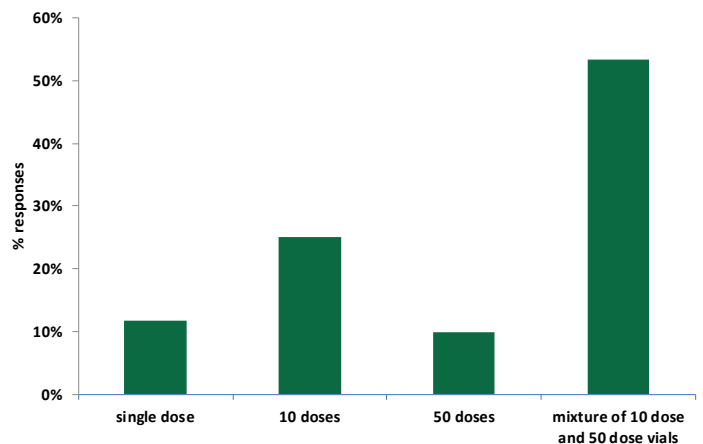
4% of producers used the bovine footrot vaccine (Fusogard™) and thought it helped reduce footrot

VACCINE PRODUCTION:

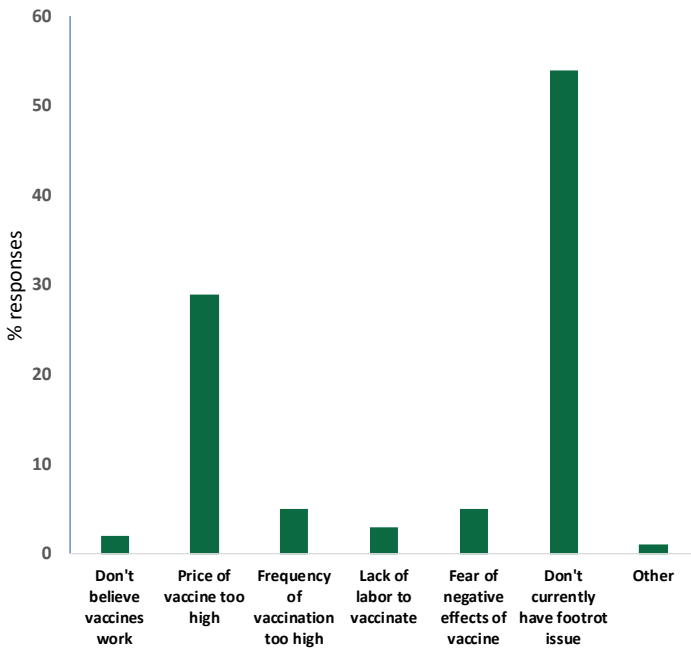
What is the maximum annual price per head that would be cost-effective for you to pay for a footrot vaccine for your sheep?



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

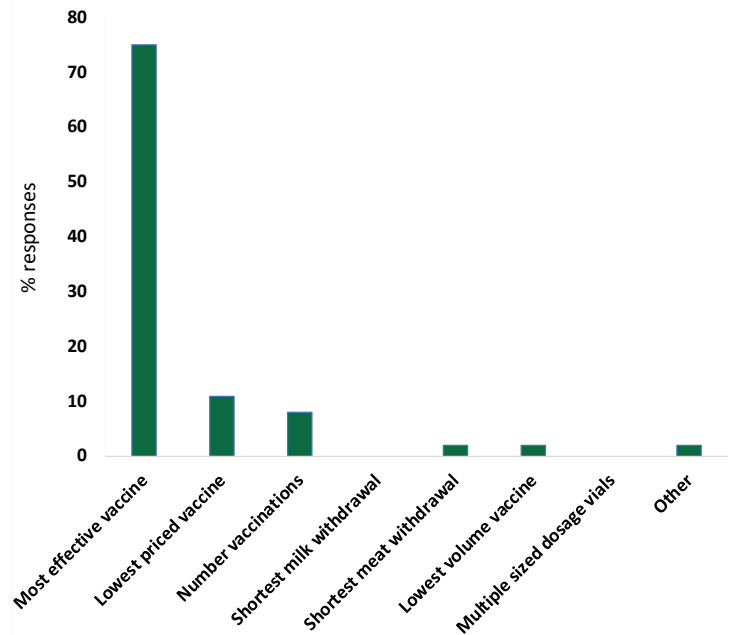


Main reason limiting use of footrot vaccine



Other – trying to create footrot resistance other way

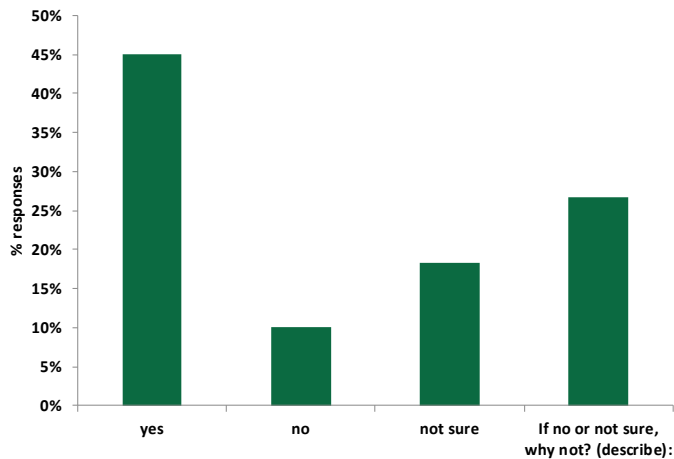
If a choice between imported footrot vaccine or Canadian footrot vaccine, what would you base your decision on?



Other – whichever vaccine available 1st

CANADIAN FOOTROT VACCINE:

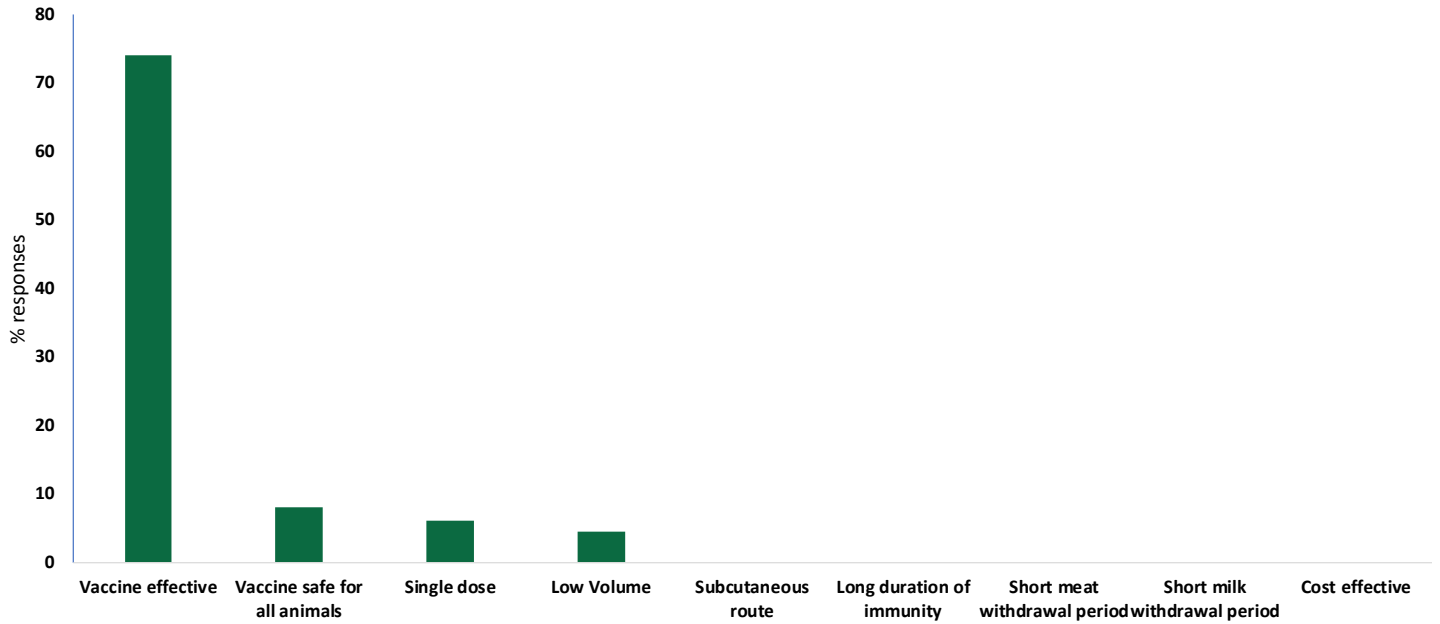
If a footrot vaccine for sheep were available in Canada, would you use it?



REASONS IF NO OR NOT SURE:

- Don't have a footrot issue
- Would use it if I got a footrot problem
- Would depend on the cost of the vaccine
- Would depend if literature indicates vaccine effective
- We cull heavily for footrot, so our flock has good feet
- Only have a few cases

CANADIAN FOOTROT VACCINE ATTRIBUTES VALUED BY SHEEP PRODUCERS:



PROJECT TEAM:

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

ACKNOWLEDGMENTS:

- Alberta Lamb Producers
- Participating sheep producers
- Canadian Animal Health Surveillance System
- Funding support from RDAR and VIDO



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.

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JULY 2022