

Producer perceptions of food-borne and zoonotic diseases – sheep & goats.

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Objectives

- Community-based participatory research
- Work *with* producers to understand:
 - Their perceptions of food-borne & zoonotic disease issues in their industry
 - How they would most like to receive results from research (i.e. preferred “knowledge translation” methods)



Objectives

- Use the results of this research, in consultation with our industry & producer partners to:
 - Develop a long-term research initiative on zoonotic diseases that will address industry's & producers' needs and concerns

Objectives

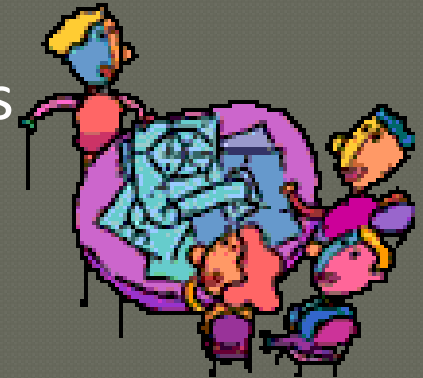
- Small ruminant industries are comprised of
 - Meat sheep
 - Meat goat
 - Dairy sheep
 - Dairy goat
- Considered separately



Focus groups

● Separate for different industries

- 6 meetings with a total of 40 participants
 - 2 meat sheep
 - 1 dairy sheep
 - 2 dairy goat
 - 1 meat goat
- Perceptions of food-borne and zoonotic diseases important to their industry
- How would they most like to receive results from research?



Postal Survey

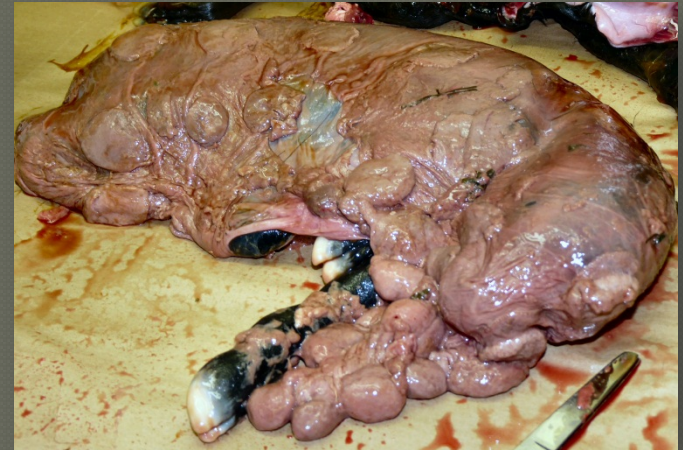
- Based on feedback from focus groups

Industry Group	Sampling Frame (Source, # producers)	Sample Size	Response Rate
Dairy Goat	OMAFRA, 255 producers	255	53.8%
Dairy Sheep	OMAFRA, 40 producers	40	32.4%
Meat Goat	OGBA & CMGA, 109 producers	109	60.6%
Meat Sheep	OSMA, 3500 producers	450	29.3%

Risk from 13 Zoonotic Diseases

- High level of concern

- Johne's disease
- Listeriosis
- E coli O157:H7
- Orf (soremouth)
- Q-fever (goat)
- Chlamydophila (goat)



- Uncertainty regarding campylobacter, giardia, salmonella, Q-fever (sheep), chlamydophila (sheep), listeriosis (dairy sheep)

Previous Zoonotic Illness?

- Contracted from animals or their products:
- Producers: **8.4% to 10.6%**
- Immediate family that works with the animals: **3.7% to 27.3%**
- Immediate family that does not work with the animals: **0 to 2.3%**
- Employee that works with the animals: **0 to 1.6%**

Previous Zoonotic Illness?

- Most common illnesses reported:
 - Orf (20 responses) & Ringworm (14 responses)
 - Q fever (4 responses)



Perceptions of Health Care:

- “My family physician is able to provide advice on diseases that sheep/goat producers might pick up from working with their animals.”
 - Majority of producers *disagreed/strongly disagreed* (52.5% to 71.4%)
- “It would be useful to provide rural family physicians with information on sheep/goat zoonotic diseases.”
 - Majority of producers *agreed/strongly agreed* (68.0% to 85.2%)

Confidence & Importance in Knowledge

● Food-borne diseases:

- ~15% to 33% of producers: “not at all confident”
- ~55% to 90%: very important/important that they receive more information

● Zoonotic diseases:

- ~15% to 36% of producers: “not at all confident”
- ~63% to 90%: very important/important that they receive more information

More Research On

Topic by Ranking (% of producers “want” or “really want”)

GROUP	#1	#2	#3
DAIRY GOAT	Listeriosis (68.2%)	Johne's Disease (66.4%)	Chlamydophila (64.9%)
DAIRY SHEEP	Johne's Disease (72.8%)	Listeriosis (63.7%)	Tie: (54.6%) Chlamydophila, Cryptosporidia, Orf, Salmonella
MEAT GOAT	Johne's Disease (81.9%)	E coli O157:H7 (78.6%)	Chlamydophila (77.1%)
MEAT SHEEP	Johne's Disease (64.0%)	Cryptosporidiosis (63.8%)	Listeriosis (63.2%)

Q-fever highly desired among dairy goat and meat goat producers (ranked 4th)

Preferred Methods of KTT Dissemination

- ◉ What all groups like
- ◉ Industry publications (74.0% - 95.6%)
- ◉ Face-to-face meetings (54.6% - 80.4%)
- ◉ Summaries by mail (77.0% - 91.7%)
- ◉ Paper copies of producer handbooks (82.4% - 91.7%)
- ◉ Summaries delivered by milk truck drivers (dairy only – 58.3% & 76.4%)

KTT Dissemination

- ◉ What they found less useful
- ◉ Summaries sent by email
- ◉ Summaries on industry websites (meat)
- ◉ Electronic versions of handbooks

What Have We Done Since?

- Developed information sheets on Johne's disease and Q-fever for producers
- Obtained research funding for (nearing completion):
 - Prevalence of *Coxiella burnetii* in sheep and goats and the people that care for them
 - Detection of Johne's disease in dairy sheep and dairy goat farms.

Immediate Future Plans

- Invited research participants, industry representatives and funding agencies to Small Ruminant Research day – January 31, 2013
 - Closed to press
 - Opportunity to face-to-face with researchers to learn what these results mean to their animals and people that care for them.

Acknowledgements

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Questions?

