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MONTHLY NEWSLETTER FOR THE CANADIAN SHEEP INDUSTRY

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Shared vision an essential step to industry growth

By Jennifer MacTavish, CSF Executive Director

Every year we take this time to review the issues and activities that the Canadian Sheep Federation has been focusing on over the past 12 months. This review of activities updates the member organizations and producers on how the CSF is working on their behalf. It's also a good opportunity for the industry to use the information to set its 'forward view' to fuel a prosperous decade as we move forward toward 2020.

During the course of this past year, the CSF has focused its discussions with producers and its activities on the need to increase production and ensuring Canadian producers can maintain access to their markets. After six years of consistent flock depopulation, there is a need to start increasing production before the infrastructure that keeps the industry in business erodes.

The declining ewe population in this country has meant a sharp reduction in the number of lambs being processed and this is compromising Canadian shepherds' ability to meet the growing demand for our product. Without an increase in domestic production, the Canadian industry is in danger of becoming marginalized. What does this mean? It will become even more difficult to find processors that are prepared to invest in facilities to process lambs; there will be

even fewer veterinarians; and it will be even harder to gain access to medications. It also means Canadian producers are losing their market share -- something that's extremely difficult to regain once lost.

While lamb has the highest growth potential of any red meat category in Canada, consumers do have other protein options. So it is important for the industry to ensure that lamb is available to consumers.

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2010 CSF Annual General Meeting

November 1-4 2010 in Calgary including a Bus Tour to Sunterra Meats

For more information, or to view the Agenda, visit
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Shared vision continued

Quite simply, in order to keep customers consuming lamb, and provide for the growing demand, more lambs are needed.

This is not something that only Canadian sheep producers are facing; producers around the world are grappling with flock reductions just as opportunities arise from the growing international demand for lamb.

The need to increase production is coming at the same time as producers are facing challenges such as predation, rising input costs, value of alternative uses of agricultural land, increased regulation and the difficulty of accessing quality breeding stock and genetics with a shrinking ewe flock.

It is for this reason that industry organizations, including the CSF, need to address the issues that producers are facing and work to ensure that producers have access to the programs and tools required to maintain and grow their markets. This is why the CSF has been focused on activities such as traceability, on-farm food safety, predation and scrapie prevalence.

For the industry to be able to conquer the challenges it faces, the need for an open dialogue between the producers and the organizations that represent them is growing increasingly important.

Over the past 20 years, CSF has worked hard to develop a national perspective for our industry; one that we share with stakeholders who help to shape the course of our industry. Never before has a strong national voice been of such importance for our industry. With so many issues impacting producers across the country at so many levels, a shared vision is an essential step on the road to growth and prosperity. CSF, provincial organizations and producers working together can make this happen.

Implementation of RFID Tags

By Jennifer MacTavish, CSF Executive Director

The announcement for mandatory RFID tags by January 1, 2012 continues to generate a lot of discussion and questions from producers. This is valuable dialogue especially since the implementation of RFID tags positions the sheep industry to be able to meet the obligations for traceability.

Until the traceability is implemented, it is worth reiterating that on the day at which the non-RFID sheep tags would be revoked, (expected on January 1, 2012), all sheep will need to be identified with a CSIP RFID tag. The only thing that a producer is required to change is to use a different type of tag and tagger (a CSIP RFID tag and corresponding tagger in place of the CSIP Ketchum Kurllock tag). The Shearwell data set tags are \$1.80 the Allflex button tags are \$2.98 and the Allflex paired tag (button + dangle tag) are \$3.48.

OTHER POINTS THAT PRODUCERS SHOULD BE AWARE OF:

- They will not be required to purchase a reader
- The requirements for tagging sheep will remain the same. So animals will only need to be tagged when they leave the farm of origin. This means that producers will have the option of using another on-farm management tag, if they choose.
- RFID tags can be applied to animals that have another CSIP tag (i.e., Ketchum tag) already applied. The producer, however, will be responsible for cross-referencing the tag numbers.

More information will be made available as the Canadian Sheep Identification Program evolves.



*Canadian Livestock Genetics Association
Association canadienne de l'industrie du bétail et de la génétique*

First Shipment of Canadian Sheep to Russia

On September 13, 2010, 150 head of Canadian sheep touched down in Russia, heralding the next step in a task begun by Brian Atkinson almost 5 years ago. Linking up with the right people in Russia, working with the Governments of both countries on the health certificate and enduring the effects of the global economic crisis are only some of the challenges faced so far but, the first shipment has arrived!

The shipment consisted of a total of 150 head of Suffolks and Dorsets that were sourced from 23 producers in BC, Alberta, Saskatchewan and Ontario. The animals were between 8 and 12 months of age with about 10 percent being males and the rest open females.

Brian Atkinson is the owner of Atkinson International (a partner in CAN-SEG) and is on the Board of CLGA. Brian worked very closely with Bill Shore of Willjill Farms Inc. and Gary Smith and Kate Kolstad of Alta Exports International Ltd. Alta was shipping 152 head of Aberdeen Angus cattle to Russia and the sheep went on the same plane.

This is but one demonstration of the demand that exists internationally for Canadian sheep genetics. CLGA congratulates its members for this accomplishment and thanks the Government of Canada for working with us to overcome market access barriers.

Minister Ritz has just returned from Turkey where he and his Turkish counterpart agreed to expedite the resolution of outstanding market access issues for Canadian small ruminants and cattle. CLGA is cooperating with CFIA on an incoming technical mission from the Gulf Cooperation Council in October that we hope will clear the way for cattle and small ruminant access to Saudi Arabia and the United Arab Emirates. These are just two examples of current activities.

The Canadian Livestock Genetics Association is a nationwide, not-for-profit trade association representing the market access and animal health interests of those involved in the sale, service and promotion of livestock genetics both domestically and internationally.

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Auditors trained and ready to go!

By Barb Caswell, Interim National Coordinator, On-Farm Food Safety

On August 9-11, 2010, the Canadian Sheep Federation offered the Sheep-specific Auditor Training Course, as part of the requirements to become a trained auditor for the Food Safe Farm Practices program. The course, held in Regina, Saskatchewan, covered a range of topics from the basics of sheep production; to the creation and administration of the FSFP program, through to a full knowledge of the program's requirements in terms of good production practices and record keeping. The objective of the course is to train professionals to audit farms for the specific requirements of the FSFP program. To be fully registered on the program, producers are required to undergo one full audit of their farm every four years, as part of the program's audit cycle. In between full audits, the producer must submit documentation for yearly reviews of their on-farm records and self-declarations of their continued implementation.

The training requirements of an auditor for the FSFP program were reviewed by the On-Farm Food Safety Technical Committee and approved by the CSF Board in March 2010. The program, including management and administration, are reviewed under the Canadian Food Inspection Agency's On-Farm Food Safety Recognition Program (OFFSRP). In preparation of the Phase II review of the FSFP management by CFIA, the auditor training requirements must be in line with the requirements of the recognition program, while ensuring professional individuals who will maintain the FSFP program's credibility.

The requirements stipulate training to become a FSFP auditor, as well as the necessary ongoing requirements to ensure our auditors remain up-to-date on advances in on-farm auditing as well as our program requirements.

In order to take the Sheep-specific Auditor Training course, potential auditors must have:

- A combination of post-secondary and field related experience;
- A generic course in Hazard Analysis Critical Control Points (HACCP); and,
- A generic auditor training course.

Another Farm Registered on the Food Safe Farm Practices Program

The CSF is pleased to announce that as of August 12, 2010, Twin Boulder Naturally achieved registered status on the CSF Food Safe Farm Practices program. Twin Boulder Naturally is owned and operated by John and Beth Gaschler just North of Oxbow, Saskatchewan.

The FSFP audit lasted approximately 2 hours and examined several areas of good production practices covered by the FSFP program, such as animal health products and feed, water and bedding. The records pertaining to these practices were also reviewed. The Gaschler's were gracious enough to allow the seven auditors participating in the Sheep-specific Auditor Training course, held in Regina August 9-10, to observe the audit being performed as part of completing their training requirements.

John and Beth were extremely committed to demonstrating the practices used on their farm to help ensure a safe food product. Congratulations John and Beth!



Auditors continued

During the current Sheep-specific course, we had participants from British Columbia, Saskatchewan, Manitoba, Ontario and Newfoundland. This is a huge success for the program, as for the first time we now have auditors available nationally for producers looking to become registered on the program. An additional benefit is many of the participants were coming with experience as auditors for other programs. In anticipation of the increasing importance of food safety programming and program uptake, and the recognition of the need to make efficient use of producers' time and money, we hope to have auditors available that can complete audits for multiple food safety programs.

Our current auditor training requirements make it easier for those auditing for other programs (e.g. Verified Beef Program, poultry on-farm food safety programs, organic, animal welfare programs, etc) to become auditors for the FSFP program.

In addition to completion of the Sheep-specific Auditor Training Course, participants were able to stay on for an extra day to complete a shadow audit. A shadow audit is where a newly trained auditor observes an experienced auditor perform a full audit. The last step in becoming a fully trained auditor is completing a witness audit, where newly trained auditors complete a full audit on their own and are observed by an experienced auditor.

Our current trainees will hopefully complete their witness audits over the next year as producers looking to be audited are identified across the country.

In the picture, our CSF Sheep-Specific Auditor Training participants and the farm owners, John and Beth Gaschler pose for a quick photo op at their farm outside of Oxbow, Saskatchewan.



(Photo from left to right): Beth Gaschler (Twin Boulder Naturally), John Hemsted (ON), Lyle McNicholl (MB), Barb Caswell (National OFFS Coordinator), Tom Cassan (ON), John Gaschler (Twin Boulder Naturally), Aaron Neufeld (SK), Margaret Hall (BC), Barb Jensen (SK), Paul Dunphy (NL)

If you are interesting in more information on the Food Safe Farm Practices Program or looking for additional information on becoming a FSFP program auditor, contact the CSF National On-Farm Food Safety Coordinator at barbara@cansheep.ca. Thanks to John and Beth Gaschler of Twin Boulder Naturally for allowing us to use their first program audit as a training opportunity for our new auditors, and to the Saskatchewan Sheep Development Board for assisting with setup for the course.



A Follow Up on Atypical Scrapie

By Courtney Denard, National Scrapie Coordinator

In a recent issue of the Canadian Sheep Federation's 'Points of View,' a producer commented on the fact that atypical scrapie has shown up in New Zealand along with other countries throughout the world. This same producer wondered if the Canadian sheep industry, through genetic selection, is selecting sheep that may be susceptible to atypical scrapie.

I would like to take the opportunity to follow up on these comments and provide some further information on atypical scrapie.

Atypical scrapie (also known as Nor 98) is a distinct brain condition in sheep and goats that is completely unrelated to classical scrapie. The evolving international scientific view on Nor 98 is that it is a spontaneously occurring degenerative brain condition in older sheep and goats.

Nor 98 differs from classical scrapie in its clinical, neuropathological and biochemical features. Most cases have been detected in apparently healthy sheep by post-mortem examination during routine slaughter in European sheep.

The United Kingdom Spongiform Encephalopathy Advisory Committee (SEAC) has concluded that, "On the basis of a number of characteristics, Nor 98 can reliably be distinguished from classical scrapie." Their statement goes on to say, "on the basis of emerging data, it may be more appropriate to consider atypical scrapie as a distinct Transmissible Spongiform Encephalopathy (TSE) of small ruminants and not simply a variant of what is now called scrapie."

Nor 98 has been found in a number of countries since it was first identified in Norway in 1998. It has been found at very low incidence rates - approximately one in 1,000 sheep tested.

The Canadian Food Inspection Agency reports six cases of Nor 98 in Canada since 2007.

In October 2009, it was reported that a sheep originating from New Zealand (a certified scrapie free country) had been tested positive for Nor98. Reports on the incident state that "a single New Zealand sheep brain (which had been sent to Europe as part of a program providing brains to assist the EU in developing testing for scrapie) tested positive for Nor 98. This is indicative that the condition is present in New Zealand and is expected to be at a similar prevalence to other countries where it has been detected. International evidence shows every country that has specifically tested its sheep for the condition has found it."

Because Nor 98 has been internationally recognized as a separate disease from classical scrapie, New Zealand's livestock populations remain internationally recognized as scrapie free. There is scientific consensus, including that from Health Canada, that there are no associated human health concerns or food safety issues from Nor 98.

When it comes to genotyping and genetic selection, there is no established genetic susceptibility or resistance to Nor 98. It has been found that some animals which were positive for atypical scrapie had genotypes identified as resistant to classical scrapie.

There is some association with phenylalanine (F) at codon 141 and histidine (H) at codon 154 in cases of Nor 98, but further research is needed to establish if there is genetic susceptibility or resistance to Nor 98.



Vets warned of growing risk of deadly disease for sheep

Source: <http://business.scotsman.com/business/Vets-warned-of-growing-risk.6521505.jp>

The reappearance of a viral disease which can result in ewes aborting or even dying has triggered the Scottish Agricultural College into alerting vets throughout Scotland of the symptoms of an attack of maedi visna (MV). So far this year, SAC have identified 11 cases of MV infection in flocks compared with only about three cases annually.

According to Brian Hosie, veterinary service manager with SAC Consulting, MV is not always something practice vets think of when presented with a problem flock.

"Despite feeding, sheep with MV infection lose condition, some will abort lambs and others may die. Many things can have affects like these on sheep so MV is not always on any vets' radar," he said.

He instanced the case of Isle of Wight farmer Andrew Hodgson, the owner of a 1,500 ewe commercial flock, who has estimated that MV reduced his flock's output by 20-40 per cent at a cost of £30,000-£50,000 a year.

Hodgson's problems dated back to FMD in 2001 when he had to buy in local replacements. The batch did not last long, they performed poorly, quickly lost condition and some died. The symptoms did not return for seven years. "Looking back," Hodgson says, "I can now recognise some of the classic symptoms of Maedi Visna."

Hosie encouraged flockmasters to consider their biosecurity, especially since infection has also been found in a group of sheep during their first qualifying test to join a MV accredited flock.

The breakdowns so far this year have involved sheep from Texel, Charollais, Zwartble, Clun Forest, Border Leicester, Mule and Beltex cross breeds.

Lewis McClinton, chief executive of the Suffolk Sheep Society, described the increase in confirmed cases as a "wake-up call" for sheep farmers.

"I would strongly advise pedigree flocks to participate in the MV accreditation scheme and urge commercial ram buyers to source rams from accredited flocks."

A voluntary British MV accreditation scheme has existed for more than 20 years. Run by SAC, it provides a ready source of certified virus-free animals. It involves some 2,500 member flocks, offering accredited sheep from 64 different breeds.

However, with so few major outbreaks, some producers have taken the view that the threat posed by MV is not serious. Earlier this year there was a call to remove the division made at all local shows where MV and non MV sheep are shown.

Hosie warned that any reduction in vigilance or controls could have devastating results. "If this view was to prevail and the currently high membership of the scheme was to decline, there is every reason to suspect that MV would have the impact here that it already has on the continent".



Johne's Disease in Sheep

Sinclair, J.¹, Jones, A.¹, Menzies, P.¹, Jansen, J.²

¹Department of Population Medicine, Ontario Veterinary College, University of Guelph, ²Ontario Ministry of Agriculture, Food and Rural Affairs

What is Johne's Disease?

Johne's Disease (JD) is caused by the bacteria *Mycobacterium avium* subspecies paratuberculosis (MAP) and can affect all ruminants (e.g. deer, cattle, sheep, goats, llamas and alpacas). The bacteria is very slow growing and usually takes more than 1 to 2 years to cause sufficient damage to see disease in the animal. The damage inevitably reduces the animal's ability to absorb nutrients from their feed and so infected animals eventually have severe weight loss – always leading to starvation and death. MAP is a hardy bacteria that is shed in the manure and can survive on pasture, in water and on barn surfaces for many months at a time, in many cases for more than a year.

How Does JD Spread?

Animals become infected by: ingesting bacteria in manure that contaminates pasture, feed or water sources; drinking infected colostrum or milk from an infected dam; from udders contaminated with manure; and, occasionally, directly to the foetus in the womb from the pregnant dam. The younger the lamb is when it ingests the bacteria and the more bacteria that it ingests, the earlier and more severe the disease. Animals infected as adults may never show disease but may shed the bacteria in the manure and infect others. Sheep and goats can become infected with MAP at any age, but young-stock, particularly newborns, are most susceptible. Infected animals will intermittently shed MAP in their feces for months to years before developing disease.

Once disease develops, animals continuously shed large amounts of bacteria in their manure. The result is an increasing build-up of MAP on the farm, resulting in more and more animals being infected if nothing is done to control the disease. There are different strains of MAP for different species. Sheep and cattle don't tend to cross-infect each other. Goats are susceptible to both sheep and cattle strains, but are more likely to show clinical signs of disease if infected with the cattle strain.

Diagnosing JD

Post-mortem of adult sheep with chronic wasting is the best way to diagnose JD. For this reason, it is best to have your veterinarian submit samples to a diagnostic laboratory to confirm the diagnosis. Manure and blood may also be tested. Testing manure takes 2 to 3 months, as the bacteria are very slow growing and in the pre-clinical stages, shedding of bacteria is intermittent, so the test may be falsely negative. Testing blood is faster, but many animals don't produce antibodies until late in the infection. It is estimated that < 40% of infected animals will test positive. When determining if the flock is infected, it is best to test all adults > 2 years of age, not just those you think have disease. Keep in mind that if one individual tests positive it means that likely many animals are actually infected (Figure 1). This "iceberg effect", i.e. if one animal is ill – many more are infected in the flock, is critical to understand when trying to control or eradicate this disease.

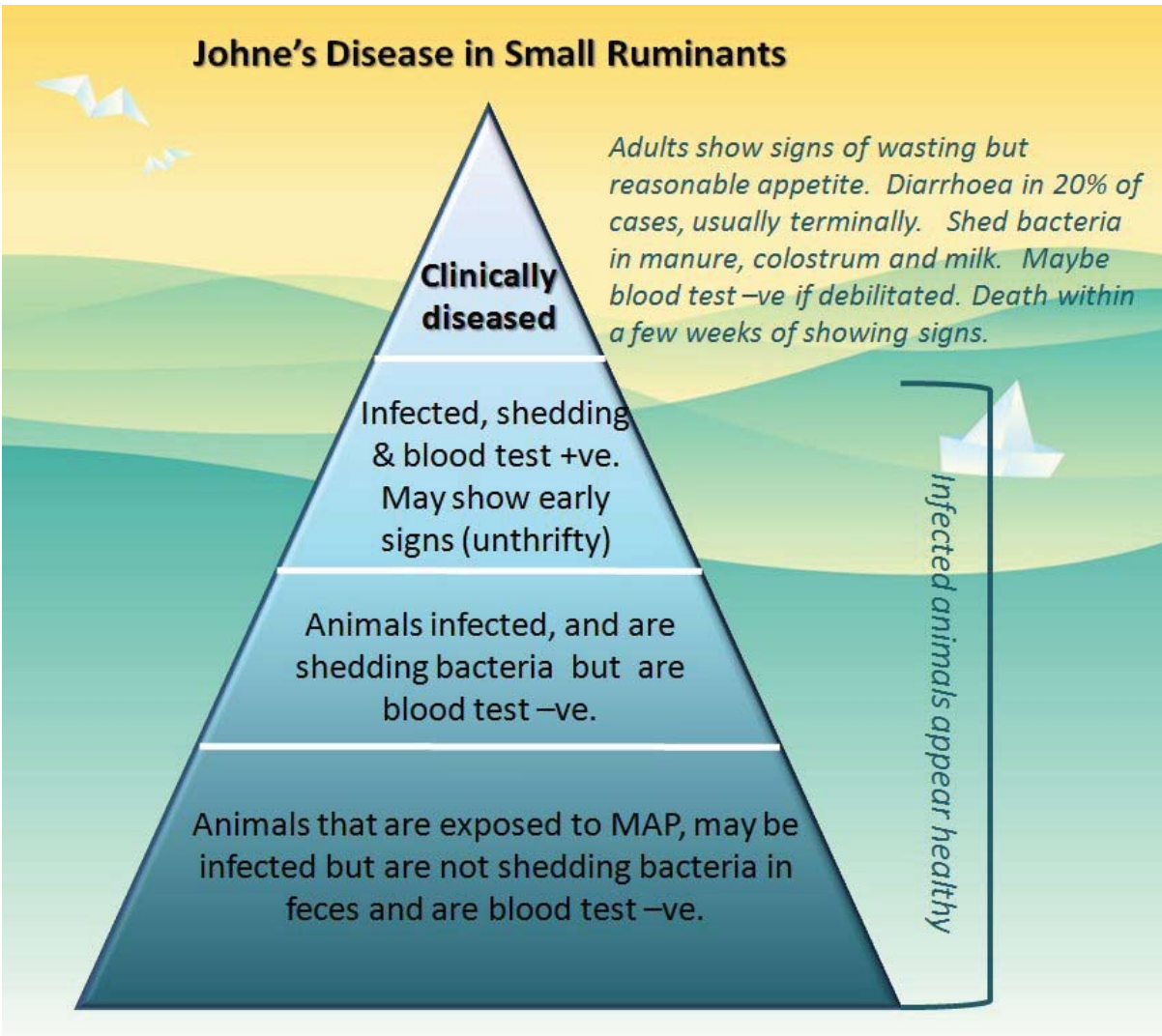


Figure 1. The animals that are showing signs of JD are only the 'tip of the iceberg'. It is estimated that for every clinical animal in a flock, 15 more are infected and shedding bacteria.

Source: Dr. Paula Menzies

Effects of JD in an Infected Flock

Chronic wasting of adults is the most important sign, but is not specific for JD. Affected animals are usually > 2 years of age but sometimes as young as 18 months old. The animal will have an appetite until late in the disease. Affected animals are often anaemic and have bottle jaw due to severe debilitation. Unlike cattle, diarrhoea is not a common finding. A stressful event such as lambing may hasten onset of clinical disease. Once signs are evident, death follows in a week or two. Animals with signs should be euthanized and sent for post mortem to confirm if JD is present. Diseases with similar signs can include gastrointestinal parasitism, maedi visna, internal abscesses due to caseous lymphadenitis or any chronic infection. The prevalence of JD in sheep and goats in Canada remains unknown, but a University of Guelph study is now underway to help determine this in dairy sheep and dairy goats, and to help investigate potential risk factors. Annual losses due to JD in a sheep flock can vary from 1-15%, and are mainly due to premature culling because of poor body condition and reduced production.



Preventing and Controlling JD

JD is usually introduced into a flock through purchase of infected replacements. Young animals may appear healthy at purchase and could test negative if < 2 years of age, but can be shedding MAP for up to 18 months before showing signs. It is possible that an infected ram, purchased as a yearling and sold after 2 years of breeding as a 3 year old, can infect the flock and be sold to slaughter before showing any signs of disease. The disease will then show up 2 to 4 years later when animals born during his tenure grow up infected.



Figure 2. A sheep with clinical JD, appears unthrifty and thin.

Source: Dr. Paula Menzies

Keep a closed herd/flock	Because of the poor sensitivity of diagnostic tests and the long incubation period, keeping a closed herd/flock is the best way to prevent the introduction of infected animals. Purchase from sources that are known to be low risk for JD. Request the breeder's biosecurity protocol, whether they test for JD, and if they do - what the results were. Quarantine and testing are no guarantee that the animal is not infected.
Remove infected animals quickly	Quarantine and test any animals showing signs of JD; severely wasted animals should be sent for a post-mortem exam by a veterinary pathologist. Cull any test-positive animals to slaughter.
Reduce exposure of young-stock to bacteria shed in the manure	Keep feed equipment, feed and water troughs free of manure. Routinely dump sediment that gathers at the bottom of water troughs. Reduce manure on udders, as this will help avoid fecal-oral transmission when lambs are nursing, either by shearing or crutching (remove wool from udder and escutcheon). Remove the lambs immediately after birth; this will reduce their exposure to adult manure. For those left with their dam, keep the environment clean and well bedded and have an area that is free of adult manure where the lambs can camp (e.g. creep area)
Prevent young-stock from ingesting contaminated colostrum or milk	This is only possible for artificially-reared lambs. If possible, feed colostrum from test-negative animals or from healthy older ewes. When collecting colostrum, clean the udder thoroughly. Heat treat colostrum by warming to 140°F (60°C) for 60 minutes. Heat evenly, in small batches, then freeze and label. Do not feed unpasteurized milk, use either pasteurized milk or milk replacer (batch pasteurization - 145°F (63°C) for 30 minutes; or, flash pasteurization - 162°F (72°C) for 15 seconds). Avoid pooling colostrum from several dams.
Prevent spread of MAP on your farm	Sell young-stock of dams diagnosed with JD directly to slaughter, as they may have contracted JD in utero, from infected milk/colostrum, or from being exposed to their infected mother's manure. Provide clean, dry environments for lambing. Use deeply bedded, clean pens that are free of manure for birthing. Clean the pen after the group has finished lambing, or if the pen becomes contaminated with manure. MAP is susceptible to 5 minutes of exposure to a phenolic germicidal detergent (e.g. 1Stroke Environ, Steris); this will help to reduce the number of MAP in the environment. All visible manure must be removed from the surface before applying the product.



In Conclusion

Johne's disease is a welfare and health issue for the animals it affects, and an economic concern for producers. If we are able to keep the prevalence at a low level or eliminate it all together by improving diagnostic methods and changing management practices, this will be of great benefit to both small ruminant producers and their animals.

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Recognition



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