



# Preventing Pneumonia in Wild Sheep

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ANIMAL HEALTH PROGRAM

## Animal Health Unit

The Animal Health Unit is responsible for health monitoring and diagnosis of disease in wildlife and domestic animals in Yukon. The staff provide expertise in laboratory services and in veterinary medicine to support public health and animal protection.

The Animal Health Unit and laboratory are at 10 Burns Road, Whitehorse, Yukon.

## Contact

Animal Health Unit

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## Protecting an iconic species

Wild thinhorn sheep are an iconic species in Yukon. The Yukon government is committed to minimizing the risk of pneumonia outbreaks occurring among wild sheep here.

Prevention is key. Creating conditions that minimize the risk of contact between domestic sheep and wild sheep is an important part of preventing the spread of micro-organisms that cause pneumonia in wild sheep.

In addition to domestic sheep, domestic goats can pose a high risk for transmitting harmful micro-organisms. Llamas and alpacas may carry the same viruses and bacteria. All recommendations in this Fact Sheet for domestic sheep also apply to goats, llamas and alpacas.

## Wild sheep vulnerable

Wild sheep have little resistance to bacteria and viruses found in the respiratory tract of healthy domestic sheep and goats. Pneumonia outbreaks have caused large die-offs of bighorn sheep in western Canada and the USA. As well, there can be reduced lamb survival for years following the outbreaks.

Yukon has the largest population of wild thinhorn sheep in Canada. While they prefer alpine meadows at high elevation (spring/summer) and south-facing slopes (winter), individual sheep do wander through valleys where farming occurs. Young rams seeking new wild herds may actually be attracted to domestic sheep.

## Keep domestic and wild sheep apart

Grants may be available to commercial farmers to offset the cost of fencing or livestock guardian dogs, which can help separate livestock from wild sheep. Reduce the risk of your livestock contributing to disease in wild sheep by:

- ▶ Considering livestock species other than sheep to raise for fiber, milk and meat production,
- ▶ Adding electric outrigger lines to the perimeter fences on sheep pastures to prevent nose-to-nose contact with wildlife,
- ▶ Considering double fencing the perimeter of sheep pastures (a 10-metre separation between fences is recommended),
- ▶ Using guardian dogs that discourage wildlife from approaching livestock,

## Pneumonia basics

Domestic sheep that do not show any signs of illness can still cause devastating disease outbreaks in wild sheep herds.

Thinhorn sheep do not have natural immunity to the bacteria and viruses carried by healthy domestic sheep.

Bacterial pneumonia has rapid onset with very severe illness and death of wild sheep of all ages.

Members of a wild sheep herd that survive a disease outbreak may experience very poor health and poor lamb survival for decades.

The viruses and bacteria that cause pneumonia can spread between wild herds even when there is minimal contact between herds.

- ▶ Reporting respiratory disease in your sheep to the Animal Health Unit
  - Investigation will help determine whether pathogens of concern are present
  - Support is available to implement control measures

## Yukon government actions

The Yukon government is committed to protecting the health of wild thinhorn sheep populations by undertaking the following actions, as recommended by veterinarians and biologists who work with wild sheep:

### Complete a risk assessment and baseline surveillance

- ▶ Gather available scientific information on risks to wild thinhorn sheep
- ▶ Test harvested wild sheep for micro-organisms of concern
- ▶ Ensure disease response guidelines are current and risk-based

### Respond to contact between wild and domestic sheep

- ▶ Encourage reporting of wild sheep sighted near livestock
- ▶ Quarantine and test wild sheep found in close proximity to domestic sheep
- ▶ Take measures to prevent exposed wild sheep from returning to their herds

### Encourage prevention efforts by Yukon farmers

- ▶ Provide access to funds to offset costs of control measures such as livestock guardian dogs and/or electric outrigger fences
- ▶ Encourage prompt reporting of any escaped livestock to the Agriculture Branch's Agriculture Development Officer

### Regulate livestock operations to effect separation

- ▶ Reject sheep grazing or agricultural land applications within a buffer zone around and above 1,000 meters elevation
- ▶ Stipulate separation conditions (fencing) for sheep on approval of agricultural land applications
- ▶ Require separation fencing on grazing applications for sheep
- ▶ Require reporting of respiratory disease in domestic sheep
- ▶ Prohibit use of goats, llamas or alpacas as pack animals in Yukon parks

**Report escape of livestock** (specifically sheep, goats, llamas and/or alpacas) to the Agriculture Development Officer (867-667-5838).

**Report sightings of wild sheep near livestock** to the Yukon government's TIPP line at 1-800-661-0525 or [www.env.gov.yk.ca/tipp](http://www.env.gov.yk.ca/tipp).

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