What is Bluetongue?
Bluetongue is a disease of domestic and wild ruminants that is spread by insects (also called insect vectors), particularly biting midges of the Culicoides species. When midges bite previously infected animals (often cattle) they may become infected and spread the bluetongue virus (BTV) through their saliva when they bite another animal. Bluetongue can infect a range of domestic animals including cattle, bison, deer and goats and sheep. It may also affect animals in the wild including bighorn sheep, elk, mountain goats, mules, deer and pronghorn antelopes. Bluetongue most often results in mild, self-limiting infection but can cause severe disease and even death depending on the type of animal infected. Symptoms can include ulcers, sores, painful hooves, lameness and reproductive problems. The lips and tongue may be very swollen, causing the tongue to stick out from the mouth; the tongue is often bluish in color, giving the disease its name. Animals may lose weight because of difficulties eating.

How does Bluetongue affect Cattle?
While cattle (and buffalo) are considered to be the animals most commonly infected by bluetongue virus, visible signs of disease are not often seen. This is particularly true for cattle in areas where the virus has been present for some time. Mild symptoms such as fever and sometimes difficulties with reproduction are occasionally present. In Europe, a specific type of BTV (serotype 8) has resulted in more serious symptoms in cattle.

How is Bluetongue Disease Transmitted and Spread Among Cattle?
Cattle are important to the spread of BTV because the virus can reproduce inside cattle. When a previously infected animal is bitten again these insects can also become infected and the disease can spread. However, eventually infected cattle become immune and typically can only transmit the virus to biting insects for a few weeks.

The virus has been found in semen from infected bulls and can be transmitted to susceptible cows but this is not a significant mechanism of transmission. Virus can also be transferred through the placenta to the fetus. The BT virus is not transmitted through contact with animals or consumption of milk.

Does Bluetongue affect Human Health?
No. There is no risk to human health associated with bluetongue virus.

What is the Nature of the Recent Discovery of Bluetongue Virus in Canada?
The Canadian Food Inspection Agency (CFIA) has reported that on August 7, 2015, samples collected by a CFIA inspector from an animal in an establishment in Ontario as part of the ongoing national Bovine Serological Surveillance returned a positive result for Bluetongue. The positive animal did not show any clinical signs of the disease prior to slaughter. The farm of origin was confirmed to be located in southwestern Ontario. On September 2, 2015, subsequent test results from two herd mates that have never left the herd of origin indicate that bluetongue serotype 13 was present and transmission between animals has occurred in Ontario. The types of bluetongue considered endemic in the U.S. include serotype 13.

What Actions have been taken by the Government of Canada to control Bluetongue Virus?
Most of Canada is currently free of BTV. Over the past 30 years, there have been occurrences of bluetongue in the Okanagan Valley, British Columbia, which are believed to be the result of wind-borne introduction of infected midges from the U.S. In Canada, the presence of the virus is usually restricted to late summer and early fall, since conditions must be warm enough for the bluetongue virus to multiply within the midge (13°C to 35°C). Midge activity ceases with the first hard frost. There is currently no evidence that bluetongue is able to survive winter in Canada.

Canada tests for bluetongue as part of the national surveillance program and has informed the World Organization for Animal Health (OIE) of the finding of cases in southwestern Ontario.

There is no effective treatment for bluetongue although vaccines are available for certain types of the disease.
What is the Bluetongue Virus status of other Countries?

Bluetongue is known to be present in Africa, the Middle East and the Indian subcontinent, China, the United States and Mexico, Southeast Asia, northern Australia, Papua New Guinea and northern South America and most recently outbreaks have occurred in southern Europe. Due to climate changes and other environmental factors the number of countries and regions that report bluetongue may grow overtime.

What are the Trade Implications of the Discovery of Bluetongue Virus in Ontario?

The Canadian Food Inspection Agency has indicated that as a result of not being able to claim freedom for bluetongue, the CFIA has suspended several certificates for live ruminants and ruminant germplasm (semen and embryos) and certain animal products (including animal hides) due to current certificate requirements. These certificates will have to be renegotiated with the respective countries to meet requirements for bluetongue, and will become available as negotiations proceed. At this point it is confirmed that the United States and Mexican markets remain open as the virus is already endemic in these countries.

According to the World Organization for Animal Health (OIE) the following items are considered “safe commodities” meaning that they can be traded regardless of the BVT status of the country in which they were produced;

**Safe commodities***

When authorizing import or transit of the following commodities, Veterinary Authorities should not require any BTV related conditions regardless of the BTV status of the exporting country:

1) milk and milk products;
2) meat and meat products;
3) hides and skins;
4) wool and fibre;
5) in vivo derived bovine embryos collected, processed and stored in accordance with Chapter 4.7.

*Article 8.3.2.of the OIE Terrestrial Code