The Kahnawake Animal Protection department would like to advise the community of the confirmed presence of **Heartworm disease**, **Lyme disease**, along with **Canine Parvovirus**.

Heartworm disease is a parasite that can infect the heart and lungs and pose a very serious threat to both indoor and outdoor dogs. Heartworm is a disease caused by a worm transmitted to dogs by mosquitoes carrying immature heartworms that they get from biting animals infected by the parasite. The complete maturation of the heartworms, from larvae to adulthood, takes five to seven months. These parasites can live for up to five years. Adult heartworms can grow to be as long as 14 inches and up to 100 or more can be living at one time. Symptoms include: Coughing from the lung damage, jaundice from liver damage, and weakness from damage to other organs may develop. Clinical signs include coughing, exercise intolerance, weakness, difficulty breathing, and fainting following exercise, if the dog is able to exercise at all. Eventually, congestive heart failure can develop. In severe cases, sudden death can occur following exercise. Heartworm preventive medications are available from your local veterinarian and are nearly 100 % effective in preventing heartworm disease. Heartworms in dogs are easy to prevent, but difficult and costly to cure. That's why prevention is so important.

**Lyme disease** is caused by corkscrew-shaped bacteria that are carried by ticks which transmit the infection when they feed on animals and humans. The bacteria live in mice, deer and other small mammals. The disease can caused generalized illness in animals and **humans**. Symptoms of Lyme disease in dog are arthritis, which causes sudden lameness, pain and sometimes swelling in one or more joints. Other symptoms that may be seen include fever, lack of appetite, dehydration, inactivity and swollen lymph nodes. Lyme disease in dogs often responds well to antibiotics. The disease usually regresses rapidly in response to treatment. There is a vaccine approved for use in dogs but only in epidemic areas.

Symptoms of the disease in humans usually happen in three stages, although not all patients have every symptom. The **first** sign of infection is usually a circular rash called erythema migraines or EM. This rash occurs in about 70-80 per cent of infected people. It begins at the site of the tick bite after a delay of three days to one month and can persist for up to eight weeks. Typical signs of skin irritation such as itchiness, scaling, pain, swelling, or exudation are **not** normally associated with EM. Other common symptoms include: Fatigue, chills, fever, headache, muscle and joint pain and swollen lymph nodes. If untreated, the **second** stage of the disease, known as disseminated Lyme disease, can last up to several months and include: Central and peripheral nervous system disorders, multiple skin rashes, arthritis and arthritic symptoms, heart palpitations, extreme fatigue and general weakness. If the disease remains

untreated, the **third** stage can last months to years with symptoms that can include recurring arthritis and neurological problems. Fatalities from Lyme disease are very rare.

Canine Parvovirus type 2 is a highly contagious and serious disease caused by a virus that attacks the gastrointestinal tract of puppies, dogs and wild canids (foxes, wolves, coyotes). It is spread by direct dog to dog contact and contact with contaminated feces (stool), environments and people. The virus can also contaminate kennel surfaces, food and water bowls, collars and leashes, and the hands and clothing of people who handle infected dogs. Symptoms of Parvovirus can include lethargy, loss of appetite, fever, vomiting and severe often bloody diarrhea. Vomiting and diarrhea can cause rapid dehydration and most deaths from Parvovirus occur within 48 to 72 hours following symptoms. All dogs are at risk, but puppies less than four months old and dogs that have not been vaccinated are at an increased risk. Vaccination and proper disposal of feces (stool) are important to preventing Parvovirus.

The Kahnawake Animal Protection will be holding a vaccination clinic at the end of May and are also working to organize a subsidized spay and neuter clinic.

If you suspect or think you have any signs or symptoms of Lyme disease, please see your physician.

If you have any concerns due to signs or symptoms in your pet, please have them seen by a veterinarian immediately. The animal protection office would appreciate knowing if anything is found. For any questions or concerns, please contact Deidra Whyte at (450) 632-0635.