

Durham Region Health Department **FAX about...**



For Health Care Professionals

Echinococcus Multilocularis in Durham Region

Echinococcus multilocularis (E. multilocularis) was recently identified in a chipmunk in Oshawa. Ontario is considered an endemic area for E. multilocularis, creating the potential for human exposure. Since E. multilocularis became a Disease of Public Health Significance in Ontario in 2018, there have been no reported human cases in Durham Region, and only two (2) reported human cases in Ontario.

E. multilocularis is a parasitic infection in humans primarily transmitted through the accidental consumption of contaminated fecal matter of infected canids (coyotes, foxes, dogs). In endemic regions, people who have close contact with dogs that may consume infected rodents, or who may have increased contact with soil contaminated with canid feces (such as farmers, hunters, rural and suburban dog owners), are at increased risk.

Important preventive measures include good hygiene practices (especially handwashing) when handling wild or domestic canid feces or after exposure to areas where wild or domestic canids may have defecated. Routine (monthly) deworming of dogs that may be exposed to infected rodents can reduce the risk of infection in domestic dogs, as well as within-household exposure to parasite eggs from infected pets. This infection cannot be transmitted from person-to-person.

Action Requested

Consider *E. multilocularis* as a possible differential diagnosis in clients with non-specific symptoms who also handle wild or domestic canid feces. Humans infected with *E. multilocularis* are typically asymptomatic for the first 5-15 years after exposure before developing non-specific symptoms such as abdominal pain, malaise and weight loss. Alveolar echinococcus may occur where tumor-like cysts form in various parts of the body such as the liver. If left untreated, the disease can be fatal.

Testing and Diagnosis

Diagnosis is complex and based on serology for early stages of infection, and histopathology for later stages when lesions are found in the liver or other organs. Serologic testing for *E. multilocularis* is not performed in Canada but can be coordinated with approval by Public Health Ontario's microbiologist [Contact PHO's customer service (416-235-6556, 1-877-604-4567, or customerservicecentre@oahpp.ca) for approval].

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Reporting

E. multilocularis is a reportable Disease of Public Health Significance in Ontario. To report suspect and confirmed cases of *E. multilocularis*, please call:

• Phone: 905-668-2020 or 1-800-841-2729 ext. 7369

Confidential Fax: 905-666-1833

After Hours: 905-576-9991 or 1-800-372-1104

The <u>Diseases of Public Health Significance list</u> and <u>notification form</u> can also be found on the Durham Region Health Care Professional webpage (or <u>durham.ca/hcp</u>, Forms, Reporting, Diseases of Public Health Significance).

Additional information on *E. multilocularis* can be found <u>here</u> (or search the <u>Public Health Ontario</u> webpage for *E. multilocularis*).

October 8, 2024

