Purpose of this Message:
To remind MLS laboratories that it is now prime season for tick-borne diseases and to please report disease to MDH.

Action Items: None.

Tickborne Resources
For more information on tick-borne disease, please refer to the MDH site at:
http://www.health.state.mn.us/divs/idepc/dtopics/tickborne/index.html

Specific tick-borne disease information for medical providers, including notes on appropriate testing for Powassan virus and various tick-borne disease agents, is available at:
http://www.health.state.mn.us/divs/idepc/dtopics/tickborne/hcp.html

Report all tick-borne disease to MDH:
http://www.health.state.mn.us/divs/idepc/dtopics/reportable/forms/tickborneform.html

Background
Last winter’s heavy snowfall across Minnesota likely helped the survival of ticks that can carry disease, prompting state health officials today to urge precautions against tick bites.

Minnesota’s blacklegged ticks (also called deer ticks) were likely insulated from cold winter temperatures by deep snow in the wooded and brushy areas where the ticks are found, said David Neitzel, a tick-borne disease specialist with the Minnesota Department of Health. “We are currently finding large numbers of the adult blacklegged ticks at central and southeastern Minnesota field study locations and expect the immature nymph stage of the tick to become active very soon.”

The highest risk for exposure to disease-carrying ticks is typically from mid-May through mid-July when these small and hard to detect nymphs are active. “We expect that tick-transmitted disease risk will be high again this year, including in those places that are historically high risk,” Neitzel said. Those areas include wooded or brushy habitats in southeastern, central and north central Minnesota.

In 2013, a record 1,431 Lyme disease cases were reported in Minnesota residents. In addition, cases of human anaplasmosis and babesiosis were also high at 627 and 64, respectively. Besides these three commonly reported diseases, blacklegged ticks carry the agents for Powassan disease and a new form of human ehrlichiosis. American dog ticks (“wood ticks”), which are very common in spring and early summer throughout Minnesota, can carry Rocky Mountain spotted fever (RMSF). While RMSF is most common in the southern United States, a small number of RMSF cases have occurred in Minnesotans who did not travel outside the state.

PROTECT YOURSELF FROM TICK BITES
Know when you are in tick habitat; this is when it is most important to take precautions:

- Wooded or brushy areas for the blacklegged tick.
- Grassy or wooded areas for the American dog tick.
If you spend time outdoors in tick habitat, use repellent to reduce the risk of disease:

- **DEET**-based repellents (up to 30 percent DEET) can be applied to clothing or skin.
- Pre-treating fabric with **permethrin**-based repellents can protect against tick bites for at least two weeks without reapplication. This is an excellent option for people who frequently venture into wooded areas.

People who live, or spend time at cabins, on heavily wooded property often encounter ticks regularly and should consider managing their landscape to reduce their risk. Consider the following tick habitat management strategies:

- Keep lawns and trails mowed short.
- Remove leaves and brush.
- Create a landscape barrier of wood chips or rocks between mowed lawns and woods.
- Apply pesticide treatments in the spring or early summer along the edges of wooded yards and trails; follow pesticide label instructions carefully.

**PERFORM DAILY TICK CHECKS**

Perform tick checks after spending time outdoors in tick habitat. Check your body for ticks by searching your entire body for ticks. If you find a tick on you, remove it immediately.

Early detection of tick-borne illness is important to prevent potentially severe complications, so people should seek medical care if they develop symptoms that could be a tick-borne disease after spending time in tick habitat. Signs and symptoms of the various tick-borne diseases can include, but are not limited to, rash, fever, headache, fatigue, muscle aches, and joint pain or swelling. These symptoms can be associated with other diseases, so it is important for patients to mention possible tick exposures or time spent in tick habitat to their medical provider. Except for Powassan disease, which is caused by a virus, all of Minnesota's tick-borne diseases are treatable with antibiotics.

Thank you,

Emily Tron, MS, MT (ASCP)™
Program Advisor, Minnesota Laboratory System
Public Health Laboratory, Minnesota Department of Health
Phone: 651-201-5066
emily.tron@state.mn.us
www.health.state.mn.us/mls

This is an update from the Minnesota Department of Health – Public Health Laboratory (MDH-PHL) and the Minnesota Laboratory System (MLS). This message is being sent to MLS laboratory contacts serving Minnesota residents. You are not required to reply to this message.

**Please forward this to all appropriate personnel within your institution and Health System**

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