

Operating Guideline # 224

Warm Weather Hazards

September 29, 2019



PURPOSE:

The purpose of this Operating Guideline (OG) is to acquaint Muskoka Lakes Fire Department personnel with some of the common hazards associated with working outdoors in Muskoka and to offer preventative measures to reduce the exposure related risks.

ISSUE/RATIONALE:

Illnesses that can be attributed to bug bites, snake bites and exposure to other toxins are becoming more and more prevalent in Ontario. Blacklegged ticks that can transmit Lyme disease, mosquitoes that can carry West Nile virus and venomous rattlesnakes are all possible in Muskoka. Hazardous plants that can cause painful skin reactions from inadvertent exposure by skin contact can be found in this area as well. This OG is to be used as a guide for staff in selecting the most appropriate protective measures in order to minimize the risks and prevent unwanted exposure to the aforementioned hazards.

General

1. One of the most effective preventative measures one can take to reduce the opportunity for unwanted exposure to any toxin or bite is to wear issued personal protective clothing (PPC) including eye protection.

Ticks

2. Take additional steps to protect yourself from the risk of contracting Lyme Disease by:
- a. Wearing light-coloured clothing under your PPC to discover ticks easily.
 - b. Wearing long sleeve shirts and long pants.
 - c. Tuck your pants into your socks.
 - d. Use a bug (tick) repellent that contains 20 to 30% "DEET"
 - e. Avoid bushy areas and long grass if possible.
 - f. Immediately after outdoor work do a total body inspection for ticks.
 - g. Shower soon after being outdoors.
 - h. Check any equipment or gear that you may have brought with you for ticks.
 - i. Put clothes in the dryer for one hour on high heat to kill any ticks.
 - j. If you find any ticks, report this to your company officer

3. Prompt removal of attached ticks (within 24 to 36 hours) can decrease the risk of infection. For information on the removal of ticks/treatment, visit:

<http://www.health.gov.on.ca/en/ms/lyme/default.aspx>.

Mosquito's (and Other Insects)

4. Take the following steps to protect yourself from the risk of contracting West Nile virus or being bit/stung by other insects:

- a. Wearing light-coloured clothing.
- b. Wearing long sleeve shirts and long pants.
- c. Tuck your pants into your socks
- d. Use a bug (tick) repellent that contains 20 to 30% "DEET"
- e. Take particular care at dawn and dusk, when mosquitoes are most active.
- f. Do not disturb any hive or nests encountered.

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5. Be alert to likely mosquito breeding sites at the fire station. Where possible, eliminate standing water in yards, parking lots, ditches, tires, debris and flat roofs on a regular basis.

Snakes

6. Be aware that rattlesnakes can be encountered during firefighting operations in our area. If alerted to the presence of a rattlesnake, carefully retreat from the area of the snake and warn others of the snake's presence.

7. Take the following precautions to avoid unwanted contact:

- a. Do not stick your hands down holes, under rocks and ledges or into brush
- b. Don't sit down on tree stumps or logs without first checking inside as snakes sometimes take refuge in these.
- c. Step on and not over. When you need to cross logs and rocks, it is sensible to step on the objects rather than straight over them. This way, you can spot a rattlesnake that may be sheltering under it and can take evasive action quickly.
- d. Look before you leap. Take care where you land your feet. A foot coming straight down next to, or on top of a snake is asking for a bite. Snakes rely on vibration to hear and while they can sense you coming if you have stomped about loudly enough, they cannot deal with removing themselves fast enough if you blaze up a trail quickly and provide little warning of your approach.
- e. Move out of the way. If you do walk into the range of a rattlesnake, calmly back off as quickly and quietly as you can.
- f. Take care around water. Rattlesnakes can swim. Anything resembling a long stick might be a rattlesnake.
- g. Do not provoke a rattlesnake. Angering a snake will result in one response — you become its target. Remember — a snake is defending itself from attack in such a case and if you poke it with sticks, throw stones at it, kick at it or do silly little jigs around it, you are asking for trouble. And worse still, there may well be a difference in the venom between an angered rattlesnake and one reacting quickly in self-defense — the toxicity may be increased, whereas a surprised rattlesnake may only bite without injecting venom (possible, not certain). Whatever the strength of the venom, an angered rattlesnake will be more likely to keep striking.

8. If bitten by a rattlesnake,

- a. Remain calm. Even if it was a venomous snake, there is a chance that no venom or poison has even been injected into the bite.
- b. Call 911. Rest and wait for instructions. Remain calm and move as little as possible. This will slow the spread of venom.
- c. Wash the bite area with soap and water if possible.
- d. Remove any jewelry or anything tight from the bitten limb.
- e. Immobilize the limb.
- f. Call the Ontario Poison Centre as soon as possible
- g. Check your immunization status and obtain a tetanus shot if needed.
- h. If you think you or someone you know has been bitten by an Eastern Massasauga Rattlesnake, go to hospital by ambulance.
- i. Do not apply a tourniquet or anything tight.

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- j. Do not apply ice.
- k. Do not cut or suck on the bite area.
- l. Do not try to catch or kill the snake.
- m. Do not take any pain medicine containing aspirin or ibuprofen.

Hazardous Plants

9. There are a variety of hazardous plant species in the outdoors in and around Muskoka. These include poison ivy, poison oak, giant hogweed, wild parsnip and stinging nettle. There is some concern that these plants when exposed to fire can be an inhalation hazard as the smoke/fumes emitted can blister the airways and lungs – STAYING OUT OF SMOKE/FUMES should be considered as the primary strategy to avoid exposure in this manner. Consider wearing respiratory protection if warranted. Similarly, the sap of some of these noxious weeds can contain toxic compounds – avoid contact with the sap which can cause serious rashes, burns or blisters to the skin (especially when exposed to the ultraviolet light from the sun – a hazard on sunny and cloudy days). Any contact with the eyes can lead to temporary or permanent blindness. Reactions can involve mucus membrane exposure which can result in airway occlusion.

SEE ALSO http://www.omafra.gov.on.ca/english/crops/facts/noxious_weeds.htm for more information regarding noxious weeds in Ontario.

10. Take the following steps to prevent an unwanted exposure:

- a. As a routine practice, always wear appropriate PPC including eye and hand protection and potentially, respiratory protection.
- b. Never touch or brush up against any of these plants with bare skin.
- c. If accidental exposure occurs, remove and bag contaminated clothing, transporting it to the station outside of the apparatus cab for professional cleaning.
- d. Remove clothing carefully to avoid contact with sap that may be on your clothing.
- e. Remove protective eyewear last.
- f. Wash all equipment that has touched the plant, sap or oil.
- g. Avoid using power tools near the plant (or burning the plant) – damage can release toxic sap or oil.

11. If accidental skin exposure occurs:

- a. Wash the affected area immediately with soap and **cold** water.
- b. Stay out of sunlight and cover up exposed areas
- c. Seek medical attention immediately.

RESPONSIBILITY:

It is the responsibility of all staff to be familiar with the content of this Operating Guideline and adhere to its provisions.

REFERENCES:

- <http://www.labour.gov.on.ca/english/hs/pubs/lyme.php>
- <http://www.labour.gov.on.ca/english/hs/faqs/wmv.php>
- http://www.labour.gov.on.ca/english/hs/pubs/hazardous_plants.php
- Section 21 Committee Guidance Note GN-3-5