



## Health Risks in the Wilderness

If you travel or hike in the wilderness, you should be aware of certain health risks and make sure that you are always prepared for what activity you are doing and where you are going. Always use well-marked trails when hiking and be sure to stay on them to avoid getting lost.

### How can I prepare for the wilderness?

There are several things you can do to prepare for the wilderness such as:

- Know your physical abilities and limitations and stay within them.
- Ensure that you have the skills required for the activity.
- Consider taking a course or extra training to better prepare yourself for different types of wilderness activities.
- Take time to pre-plan your trip whether it's a quick trail run in the local forest or a multi-day ocean kayak adventure.
- Complete a trip plan and leave it with someone responsible.
- Take the right equipment for the activity and season before heading out.
- Have and know how to use the 10 essentials for wilderness survival.

### 10 essentials for wilderness survival

These are supplies and equipment that will help prepare you for the wilderness. They include:

1. Navigational and communication aids such as a compass, map, charts, Personal Locator Beacon (PLB) or other alerting devices such as GPS, cellular phone, and hand held radio (Make sure all devices are fully charged)
2. Extra food and water (bring approximately 1 litre per person)
3. Extra clothing such as rain, wind, water protection and toque
4. First aid kit
5. Flashlight, spare batteries and bulb
6. Firemaking kit which should include waterproof matches or a lighter, firestarter or candle

7. Pocket knife
8. Emergency shelter such as an orange tarp or large orange garbage bag (These can also be used as signaling devices)
9. Signaling device such as a whistle or mirror to signal searchers if you become lost
10. Sun protection such as glasses, sunscreen, and a hat

Additional equipment you can bring:

- Proper footwear
- Duct tape for repairing gear
- Insect repellent and other toiletries as needed

Travel in groups of 3 or more whenever possible. This way, if someone is injured, then 1 person can stay while the other can get help.

### Is it safe to drink the water in the wilderness?

You should not drink water in the wilderness without treating it first. Parasites and certain bacteria can cause diarrhea, abdominal cramps, nausea and/or vomiting, weight loss, and fatigue lasting up to several weeks. These parasites and bacteria can be carried by people, as well as by certain domestic and wild animals. They can get into any surface water, such as: lakes, streams and rivers, and can contaminate water humans use for both drinking and eating, and recreation.

Water quality and safety can also be affected by people practicing unhealthy, backcountry hygiene. If proper toilet facilities are not available, human wastes should be buried far away from streams and other bodies of water.

When in the wilderness or backcountry, you may use water for drinking or brushing your teeth by:

- Boiling the water for at least 1 minute. At elevations over 2,000 meters (6,500 feet), boil water for at least 2 minutes to disinfect it. Water boils at a lower temperature at a higher elevation.
- Chemically treating the water before use.

Bleach does not work well in killing *Giardia* (beaver fever) or *Cryptosporidium* parasites. For more information, see [HealthLinkBC File #49b How to](#)

[Disinfect Drinking Water](#), [HealthLinkBC File #10 Giardia Infection](#), and [HealthLinkBC File #48 Cryptosporidium Infection](#).

## What can I do to stay safe if there are wild animals in the area?

We must respect the fact that the wilderness is home to wild animals. As visitors we must do our part to help conserve their natural habitat. Animals can be unpredictable and dangerous if you get too close, especially bears and female moose with calves. Learn about the animals and wildlife in the area you'll be travelling to, and check for reported wildlife before going into their habitat. Park wardens, wildlife officers, and even signs posted at the trail head can be of help. Be alert and pay attention for wildlife and signs of animal activity.

When visiting wilderness areas, do not attempt to feed or touch any wild animals. Special care should be taken to avoid contact with any animal that appears to be sick or dead. Always remember that wild animals can carry a variety of diseases. If you've been bitten or scratched by a wild animal wash any wounds thoroughly with water and speak with your health care provider. You may need to get the tetanus vaccine.

Rabies is a very serious disease carried by a small percentage of bats in B.C. Do not touch any live or dead bat, and report any physical contact with a bat to your health care provider. Treatment must begin as soon as possible to prevent rabies which can be fatal.

## How can I protect myself from fleas, ticks and other insects?

Fleas and ticks are tiny insects that can bite or burrow part way into your skin and draw blood out before dropping off. They can carry and spread some diseases. Speak with your health care provider if you have been bitten by a flea or tick.

If you find a tick attached to your skin, the best way to remove it is by grasping it with a pair of tweezers. Pull it gently, straight up and out. If its mouth parts are imbedded deeply, a health care provider may have to remove the tick. Wash the bite wound thoroughly with disinfected water and soap. Do not touch the tick with your hands. You may wish to save the tick in a small plastic or glass container (with a cotton ball dampened with water to keep it alive) to submit it for testing through your health care provider. It will help later with treatment decision if you develop a fever or the area around the bite becomes infected. See a health care provider if any illness occurs a few weeks after a tick bite.

Other insect bites may also cause concerns. Some people may have severe allergic reactions to bee and wasp stings. If you have an allergy to bee or wasp stings you should

carry appropriate medication as prescribed by your health care provider.

Mosquitoes may carry West Nile Virus or viruses that cause other diseases. To protect against insect bites, including ticks, use insect repellent containing DEET on all uncovered skin. To protect against mosquito bites, wear loose fitting, light-coloured, long-sleeved shirts and pants especially at dawn or dusk when mosquitoes are most active.

If you have any concerns about an insect bite, contact your health care provider or call **8-1-1** to speak to a registered nurse.

## For More Information

For more information on animal and insect health and safety, see:

- [HealthLinkBC File #01 Tick Bites and Disease](#)
- [HealthLinkBC File #07 Rabies](#)
- [HealthLinkBC File #88 West Nile Virus](#)
- [HealthLinkBC File #96 Insect Repellents and DEET](#)

For more information on wilderness health and safety, see:

- [HealthLinkBC File #26 Sun Safety for Children](#)
- [HealthLinkBC File #41a Health Advice for Travellers](#)
- [HealthLinkBC File #47 Blue-green Algae Blooms](#)
- [HealthLinkBC File #52 Swimmer's Itch](#)

For more information on wilderness activities and recreation, visit BC Parks [www.env.gov.bc.ca/bcparks/](http://www.env.gov.bc.ca/bcparks/).

For more HealthLinkBC File topics, visit [www.HealthLinkBC.ca/healthfiles](http://www.HealthLinkBC.ca/healthfiles) or your local public health unit.

Click on [www.HealthLinkBC.ca](http://www.HealthLinkBC.ca) or call **8-1-1** for non-emergency health information and services in B.C.

For deaf and hearing-impaired assistance, call 7-1-1 in B.C.

Translation services are available in more than 130 languages on request.



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