

## Health Risks in the Wilderness

If you travel or hike in the wilderness, you should be aware of certain health risks. Make sure that you are prepared for the 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?

#### 3 T's for wilderness survival

Whether your activity is during the summer or winter, on land or water, remember the three T's and follow these simple steps:

#### Trip Planning

- Plan your travel route
- Know the terrain and conditions
- Check the weather
- Always fill out a trip plan. Visit AdventureSmart at [www.adventuresmart.ca/the-three-ts/#tripplanning](http://www.adventuresmart.ca/the-three-ts/#tripplanning)

#### Training

- Obtain the knowledge and skills you need before heading out
- Know and stay within your limits

#### Taking the Essentials

Always carry the essentials and know how to use them:

- Flashlight
- Fire making kit
- Signalling device (i.e. whistle)
- Extra food and water
- Extra clothing
- Navigational/communication devices
- First aid kit
- Emergency blanket/shelter
- Pocket knife
- Sun protection

Add other equipment specific to your chosen activity, season and location. For more information, see [www.adventuresmart.ca/the-three-ts/#takingtheessentials](http://www.adventuresmart.ca/the-three-ts/#takingtheessentials).

### What are Other Tips to consider?

#### Travel with a companion

A companion can give you a hand to overcome difficulties or emergencies.

#### Be prepared

Ensure everyone with you understands what to do in case of an emergency.

#### Don't depend solely on technology

Equipment failure and lack of reception are very possible in the outdoors. Consider carrying a map and compass as a backup.

### 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 found in any surface water, such as: lakes, streams and rivers can contaminate the water you use for drinking, eating and recreation.

Untreated water in the wilderness can have health effects such as diarrhea, abdominal cramps, nausea and/or vomiting, weight loss and fatigue lasting up to several weeks. People and certain domestic and wild animals can carry these parasites and bacteria.

Water quality and safety can also be affected by people practicing unhealthy backcountry hygiene. If proper toilets 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 higher elevations
- Filtering the water through a mechanical device that is rated to filter to 1 micron or smaller particle size
- 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 Disinfecting 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. Check for reported wildlife before going into their habitat. Park wardens, wildlife officers, and even signs posted at the trail head can help. Be alert and pay attention to wildlife and signs of animal activity.

When visiting wilderness areas, do not attempt to feed or touch any wild animals. Take special care to avoid contact with any animal that appears to be sick or dead. Remember that wild animals can carry various diseases. If a wild animal bites or scratches you, wash any wounds thoroughly with water and speak with your health care provider. You may need the tetanus vaccine.

Rabies is a very serious disease carried by a small percentage of bats in B.C. Do not touch live or dead bats. If you come in contact with a bat, wash any wounds thoroughly with soap and water under moderate pressure for at least 15 minutes. Report direct physical contact with a bat to your health care provider or local health unit immediately. Treatment must begin as soon as possible to prevent rabies, which can be fatal if left untreated.

### 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 a flea or tick bite.

Check your whole body for ticks, including folds of skin. 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 to submit it for testing through your health care provider. Put a cotton ball dampened with water in the container to

keep it alive. If you develop a fever or the area around the bite gets infected, the tick will help later with deciding how to treat you. 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 or Icardin on all uncovered skin and clothing. To protect against mosquito, insect and tick 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 #07a 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 \(Cyanobacteria\) Blooms](#)
- [HealthLinkBC File #52 Swimmer's Itch](#)

For more information on outdoor safety, search and rescue prevention and preparedness, and links to social media for current updates visit [www.adventuresmart.ca](http://www.adventuresmart.ca).

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



BC Centre for Disease Control  
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For more HealthLinkBC File topics, visit [www.HealthLinkBC.ca/healthfiles](http://www.HealthLinkBC.ca/healthfiles) or your local public health unit. For non-emergency health information and advice in B.C. visit [www.HealthLinkBC.ca](http://www.HealthLinkBC.ca) or call **8-1-1** (toll-free). For the deaf and hard of hearing, call **7-1-1**. Translation services are available in more than 130 languages on request.