


Using Bear Pepper Spray

Bear pepper spray is the most effective means of repelling an attacking grizzly or black bear in a non-toxic, non-lethal manner. Although common sense might suggest that guns would provide greater personal protection, research and experience indicates that human-bear encounters that do not involve firearms are less likely to result in injury to a human or bear.

According to a [U.S. Fish and Wildlife Service report](#) , law enforcement agents and experienced hunters who use firearms to defend themselves suffer injury about 50 per cent of the time, while people defending themselves with bear spray escape injury most of the time and injuries that did occur were less severe (U.S. Fish and Wildlife Service). University of Calgary's Dr. Stephen Herrero found [similar results](#). This is why bear spray is often carried in the backcountry by biologists, professional guides and hikers/campers.

"Even a skilled marksman with steady nerves may have a slim chance of deterring a bear attack with a gun." - U.S. Fish and Wildlife Service

Buying Bear Spray: Purchasing Guide

- **strength:** spray should have a minimum concentration of 0.857% capsaicin
- **container size:** spray should be **at least** 225 grams or 7.9 ounces of net weight
- **type of sprayer:** spray pattern should be in a cloud/cone pattern
- **length of spray:** spray should last at least 8 seconds
- **range:** spray should have a range of 5 meters or about 16 feet
- **not all “pepper sprays” are the same:** ensure that you are using a bear deterrent spray, not a personal defence product designed for use on people or dogs
- **number:** try to carry at least two canisters per group
- **shelf life:** should have a shelf life of 4 years after initial purchase
- **registration:** registered as a product under the Pest Controls Product Act
- **certification:** in Canada, bear spray does not have to be certified or tested. Therefore, it is essential that you purchase your spray from a reputable company.

Reputable companies

The Get Bear Smart Society recommends: [Frontiersman](#), [Counter Assault](#), [Defense Aerosols](#) (Yukon Magnum and Bear Defence Professional) and [UDAP](#). You can also purchase a survival kit at [MaceCanada.com](#).

How bear spray works

The aerosol can shoots bursts of atomized capsaicin (a red pepper derivative) up to eight metres, though the spray is most effective at short range. Bear pepper spray causes the membranes of the eyes, nose and lungs of a bear to swell and the result is a nearly total, yet temporary, loss of sight and severe restriction of breathing. To be effective, bear spray has to hit the eyes and nose of the bear. Most times, bears that are sprayed leave the area allowing you time to recede.

How to use bear spray

Always carry bear spray so that it is readily available to you, preferably in a holster worn on a belt or pack. If you are in an area where you might easily surprise a bear, carry the bear spray in hand. If you encounter a nearby bear, remove safety clip, hold the can in two hands, and extend your arms in readiness. If a bear is approaching or charging you, use the spray to deter the bear.

- aim toward the approaching bear; adjust angle for wind direction
- steady your arm and depress trigger with thumb
- deploy in 2 – 3 second bursts when the bear is 30 feet away;
- aim the spray slightly above his head as gravity will effect the placement of the spray
- try not to use the entire contents as more than one application may be needed
- spray again if the bear continues to approach; this time aim for the face
- once the bear has retreated or is busy cleaning itself, leave the area as quickly as possible, but do not run; alternatively, get to an area of safety, such as a car
- NOTE: using hiking poles makes it difficult to use your bear spray - the straps interfere with holding the can of spray

Watch the video [here](#) of an approaching bear that is sprayed.


When to replace your bear spray

Bear sprays can become compromised if the seal that holds the propellant (usually nitrogen) deteriorates. This reduces the ability of the product to project the spray effectively when you really need it. For this reason, you should replace your bear spray:

- after it has been discharged for any reason
- if it has been left in extreme temperatures (above 50° C or below freezing)
- if the can has passed its expiry date.

Warnings

- Bear spray is explosive and some bear sprays are extremely flammable

- When transporting bear spray, always make sure the safety is securely in place and will not fall out. Bear spray should never be transported inside the passenger area of any vehicle or airplane unless in a [fully sealed, enclosed container](#) 
- Bear spray should not be sprayed on objects such as tents or humans. This type of use has no deterrent effect on bears. In fact, it has been reported that some bears may be [attracted to bear spray](#).
- Wind speed and direction can affect the effectiveness of bear spray. If the wind is blowing in the users face the spray will contaminate the user and not the bear. In addition, if there is a cross-wind the bear may not receive a full application of the spray. Prior to deployment of the spray, if possible move to where the wind direction is more favourable.

Accidental Contamination

The inflammatory properties of the bear spray will affect humans in a similar way as it does bears. A person contaminated with bear spray will experience the mucous membranes of the eyes, nose and lungs to swell and be irritated. The eyes will involuntarily close and tear, the nose will run profusely coughing will result. Use the following guidelines to de-contaminate upon an accidental contamination:

- Wash all affected areas with cool clean water
- Remove contact lenses
- Wash all contaminated clothing ASAP
- Be aware of hypothermia in cool weather conditions
- Take short shallow breaths to avoid breathing in the spray

It may take up to 15 – 20 minutes before relief from the symptoms are felt. If the symptoms persist seek medical attention.

Remember

Nothing can replace good sense and proper safety measures. People whose activities may possibly put them in a situation where they may encounter a bear or other wild animal should educate themselves and be aware of the potential for an attack. Bear spray is ideal for personal defence use when hunting, camping, fishing, hiking and biking or whenever enjoying the great outdoors in bear habitat.

Review this material before embarking into bear country. Being mentally prepared will help you should you require the use of your bear spray.