

Safety Short

Bad Plants - Poison Ivy, Poison Oak and Poison Sumac

The most common problems with poisonous plants in Maine arise from contact with the sap oils of plants that cause an allergic skin reaction—**poison ivy, poison oak, and poison sumac**.

Poison ivy, poison oak, and poison sumac release an irritating oil, called Urushiol, when the leaf or other plant parts are bruised, damaged, or burned. Urushiol can stay active on any surface for up to 5 years. When the oil gets on the skin, it causes an allergic reaction. Most people exposed develop an itchy red rash with bumps or blisters. The rash may impede or prevent a person from working. Burning these poisonous plants can be very dangerous because the allergens can be inhaled smoke can cause lung irritation.

Any workers who spend time outside such as foresters, parks and recreation, groundskeepers, gardeners, painters, pavers, construction workers, laborers, mechanics are at the greatest risk of exposure. Firefighters who battle forest fires are at additional risk because they could potentially develop rashes and lung irritation from contact with damaged or burning poisonous plants.

Plant Identification: The old saying "**Leaves of three, Let it be**" is a helpful reminder for identifying poison ivy and oak, but not poison sumac which usually has clusters of 7-13 leaves. Even poison ivy and poison oak may have more than three leaves. Being able to identify these poisonous plants are key to avoiding exposure.



Poison Ivy: Eastern poison ivy is typically a hairy, ropelike vine with three shiny green (or red in the fall) leaves budding from one small stem.



Poison Oak: Typically a shrub with leaves of three, similar to poison ivy. May have yellow or green flowers and clusters of green-yellow or white berries.



Poison Sumac: Woody shrub that has stems that contain 7-13 leaves arranged in pairs. May have glossy, pale yellow, or cream-colored berries.



Exposure

- Workers may become exposed through:
- Direct contact with the plant
- Indirect contact (touching tools, animals, or clothing with plant oils on them)
- Inhalation of irritants in the smoke from burning plants

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Symptoms

- Signs or symptoms associated with dermal contact with poisonous plants may include:
- Red rash within a few days of contact
- Possible bumps, patches, streaking, or weeping blisters (blister fluids are not contagious)
- Swelling
- Itching

Protect Yourself

- Wear long sleeves, long pants, boots, protective clothing, and gloves.
- Wash exposed clothing separately in hot water with detergent.
- Barrier skin creams, such as lotion containing bentoquatam, may offer some protection.
- After use, clean tools with rubbing alcohol or soap and lots of water. Plant oils can remain active on the surface of objects for up to 5 years. Wear disposable gloves during this process.
- Do not burn plants or brush piles that may contain poison ivy, poison oak, or poison sumac. Inhaling smoke from burning plants can cause severe respiratory problems.
- When exposure to burning poisonous plants is unavoidable, employers should provide workers with a NIOSH-certified half-face piece particulate respirator rated R-95, P-95, or better. These respirators should protect against exposure to burning poisonous plants, but will not protect against all possible combustion products in smoke, such as carbon monoxide. *NOTE: Firefighters require specialized PPE not discussed here.*
- Respirators must be worn correctly and consistently throughout the time they are used. **Respirators must be used in the context of a written comprehensive respiratory protection program** (see OSHA Respiratory Protection standard 29 CFR 1910.134).

Treatment

Workers who have come in contact with poisonous plants should:

- Immediately rinse skin with rubbing alcohol, specialized poison plant washes, degreasing soap (such as dishwashing soap) or detergent, and lots of cold water.
- Rinse frequently so that wash solutions do not dry on the skin and further spread the plant oils.
- Scrub under nails with a brush.
- Apply wet compresses, calamine lotion, or hydrocortisone cream to the skin to reduce itching and blistering. Follow the directions on any creams and lotions. Do not apply to broken skin, such as open blisters.
- An antihistamine such as diphenhydramine (Benadryl) can be taken to help relieve itching. Follow directions on the package.
- If children come in contact with work clothing contaminated with plant oils, a pediatrician should be contacted to determine appropriate dosage of medication.
- In severe cases or if the rash is on the face or genitals, seek professional medical attention.
- Call 911 or go to a hospital emergency room if the worker is suffering a severe allergic reaction, such as swelling or difficulty breathing, or has had a severe reaction in the past.

Another plant that can cause a severe skin irritation is Giant Hogweed. Please refer to our [Giant Hogweed Safety Short](#) for additional information.

Information and Picture References: CDC-NIOSH, US Dept. of Agriculture.