

# SAFETY DIRECTOR BULLETIN

## POISON IVY & SUMAC

"Rhus plants (poison ivy, poison oak, poison sumac) are the most common cause of allergic contact dermatitis in the US. Rhus plants contain the potent antigen Urushiol, which will sensitize 60% to 80% of the persons who are exposed to it. Urushiol oil is the compound found in poison ivy, poison oak, and poison sumac to which many people are allergic. It may also be carried on the fur of pets, clothing, gloves, shoes, tools, or other objects and then transferred to the skin.

### Urushiol Oil is Potent

- Only 1 Nano gram (billionth of a gram) is needed to cause rash
- 1/4 oz. of Urushiol is all that is needed to cause a rash in every person on earth
- 500 people could itch from the amount covering the head of a pin
- 1 to 5 years is normal for Urushiol oil to stay active on any surface

Usually within 15 minutes of contact, the Urushiol binds to skin proteins. If it is washed off with soap and water before that time, a reaction may be prevented. After the antigen is fixed, however, it cannot be washed off or transferred to other areas.

The first symptom of poisoning is a severe itching of the skin. Approximately 24 to 36 hours after a sensitized person is exposed to the Urushiol, a blistering, itching rash develops. In severe cases, oozing sores develop. The rash spreads by the poisonous sap (Urushiol), not as the result of contamination from sores. The blood vessels develop gaps that leak fluid through the skin, causing blisters and oozing.

Poison ivy, western poison oak, and poison sumac have the poisonous sap (Urushiol) in their roots, stems, leaves and fruit. The sap is released when the plant is bruised, making it easier to contract Rhus-dermatitis in the spring and early summer when leaves are tender. The sap may be deposited on the skin by direct contact with the plant or by contact with contaminated objects. Severe cases have occurred from sap-coated soot in the smoke of burning plants.

**How do I identify the plants?** The compound leaves of poison ivy consist of three pointed leaflets; the middle leaflet has a much longer stalk than the two side ones. The leaflet edges can be smooth or toothed but are rarely lobed. The leaves vary greatly in size, from 0.31" to 2.16" in length. They are reddish when they emerge in the spring, turn green during the summer, and become various shades of yellow, orange or red in the autumn. Small greenish flowers grow in bunches attached to the main stem close to where each leaf joins it. Later in the season, clusters of poisonous, berrylike drupes, (stone fruit) form. They are whitish, with a waxy look.



**Immediate Treatment:** Skin should be cleansed gently with mild soap and water as soon as possible to remove any unabsorbed resin. Particular attention should be given to cleaning fingernails. Weeping vesicles should be dried using cool compresses. Commercial sprays, creams and wipes may help. It is important to seek medical evaluation should you have an allergic reaction.