



## **POISON OAK – “Leaves Three, Let It Be”**

You are walking along a wooded trail and stop to sample some nearby blackberries. You push aside a plant with beautiful, shiny leaves which grow in groups of three. Too late, you recognize your old enemy – Poison Oak. The next day you note an itchy, red rash which blisters and subsequently oozes. The rash worsens over the next five days, and then gradually improves over the next week or two.

An estimated 50% of Americans will develop an allergic rash, known as contact dermatitis, after exposure to poison oak. It is more common in adults, and is rare in very young children. The first time you contact the plant no visible reaction occurs, however, the small chemical molecules which make up the allergen penetrate the skin and sensitize specialized white blood cells called lymphocytes. Upon future exposure to these chemicals, these lymphocytes react with the resulting inflammation leading to itching, redness, and weeping blisters.

Very small amounts of this plant chemical, called Urushiol, can cause serious reaction. Urushiol is present in the leaves and stems of the plant. Thus, rubbing or crushing a leaf with give sufficient contact for an allergic reaction. Cases of poison oak occur most frequently in the spring, summer and early fall, but can occur in the winter from contact with the woody stems or from dead or decaying plant material. In addition, exposure to smoke from burning plants may cause allergic reactions. Urushiol is easy transferred from one object to another, so clothing or tools which touch the plants, or pets which have rubbed against them, can pass it to a person. The chemical can remain active for at least a year. Therefore, exposure to unwashed items which have contacted Urushiol will cause repeated problems for the sufferer. Contrary to popular belief, scratching or oozing of the rash will not cause spreading as Urushiol is not in the blister fluid. If it hasn't been washed off the skin, however, it can be transferred to other parts of the body. The rash cannot be passed from person to person unless the Urushiol is still present on the skin.

### **How is poison oak treated?**

The most essential thing is immediate washing within five minutes of known contact. In the woods, a running stream can be used. If washed off in five minutes, a reaction usually does not occur. If a longer time passes, washing is still important as it will prevent the spreading of the rash. All clothing should be washed, and remember to thoroughly clean belts and boots. Remember also, your dog was romping in the woods with you; he may have Urushiol on his fur. Tecnu may help as a cream barrier or cleansing soap immediately after exposure.

Mild cases of rash require little treatment. Wet compresses, calamine lotion, and hydrocortisone cream may be helpful. Oral antihistamines may relieve itching. If the rash is severe, on the face or genitals, or covers more than 20% of the body, one should see a physician who may prescribe drugs (including oral corticosteroids) to decrease itching and inflammation.

### **How poison oak can be prevented?**

First of all, learn what it looks like, and avoid it. Poison oak is shrub-like. It has leaves that are shaped somewhat like oak leaves, are in groups of three, and are shiny. The undersides of the leaves are much lighter green than the surface, and are covered with hair. There may be clusters of greenish or creamy white berries.