

A close-up photograph of a person's hands holding a small green seedling in a pot of soil. The image is overlaid with a semi-transparent blue filter. The text 'AUGUST NIOSH & PESTS' is centered in white, bold, sans-serif font. Below the title is a thin white horizontal line.

AUGUST NIOSH & PESTS

August 8th , 2023

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A hand is shown holding a single leaf, with the background being a blurred blue-tinted image of foliage. The overall scene is presented with a semi-transparent blue overlay.

POISONOUS PLANTS

NIOSH

Poisonous Plants

- Contains urushiol, an oily irritant that causes blisters and itching, and can be aerosolized by burning
- The oil can be transferred from surfaces that have been in contact with it, like garden tools, gloves, outerwear, or animal fur.



Poison Ivy



Poison Oak



Poison Sumac



Poison Ivy

- Flowering in June & July
- Fruiting in Sept & Oct
- Slightly toothed leaves in groups of three
- Center leaf on a slightly longer stem than the two side leaves.
- Can be vining or shrubby



Poison Sumac

- Tall shrub or small tree
- Drooping clusters of uneven shaped green berries
- Leaf cluster of 7 -13 smooth leaflets arranged in pairs
- Thrives in wet, swampy regions



Poison Oak

- Not hardy in our region, but may persist in microclimates
- Similar to Poison Ivy's three-leaf cluster, with a more oak-like leaf shape
- Lighter colored on the bottom, with fuzzy hairs
- Often takes a shrub form



Poisonous Plant Exposure Prevention & Treatment



- Prevent:
 - Wear long sleeves, gloves, and pants tucked into socks
 - Learn to ID poisonous plants
 - Take extra caution when entering unmanaged areas
 - If you see something, say something!



- Treat
 - Wash the affected area with mild soap and water
 - Clean garden tools that may have encountered urushiol oils while wearing disposable gloves
 - Over-the-counter antihistamines and topical treatments like hydrocortisone

Poisonous Plant Facts



- Rashes can take 8 to 72 hours to form
- Urushiol can be present even in dead plants



- Medical help is necessary if contact occurs with eyes, sensitive areas, or is widespread over the body.

Sources

- <https://www.cdc.gov/niosh/topics/plants/default.html>
- <https://www.si.edu/stories/poison-ivy-primer>





SUN EXPOSURE

NIOSH Safety Training



Sun Exposure

- Ultraviolet (UV) rays are an invisible form of radiation present in sunlight
 - UVA
 - Most abundant
 - Penetrates beyond the top layer of skin
 - Damages connective tissues
 - Increases risk of skin cancers
 - UVB
 - Penetrates the skin less deeply than UVA
 - Increases risk for some skin cancers
 - UVC
 - Absorbed by the upper atmosphere, doesn't affect us

Sun Exposure



- Light-colored surfaces reflect sunlight and UV rays
 - Pavement, sand, buildings
- Certain drugs increase sensitivity to sunlight
 - Thiazides and other diuretics
 - Tetracycline (antibacterial acne medication)
 - Doxycycline (antibiotic)
 - Sulfa antibiotics (wound care, acne, UTI, ear infections, yeast infections)
 - Nonsteroidal anti-inflammatory drugs (NSAIDs) like ibuprofen

Sunburn

Dermal Symptoms

- Red, warm, tender skin
- Swelling
- Blisters
- Headache
- Fever
- Nausea
- Fatigue
- Skin Peeling

Optical Symptoms

- Redness
- Dryness
- Pain
- Gritty feeling



Sunburn First Aid

Treatment

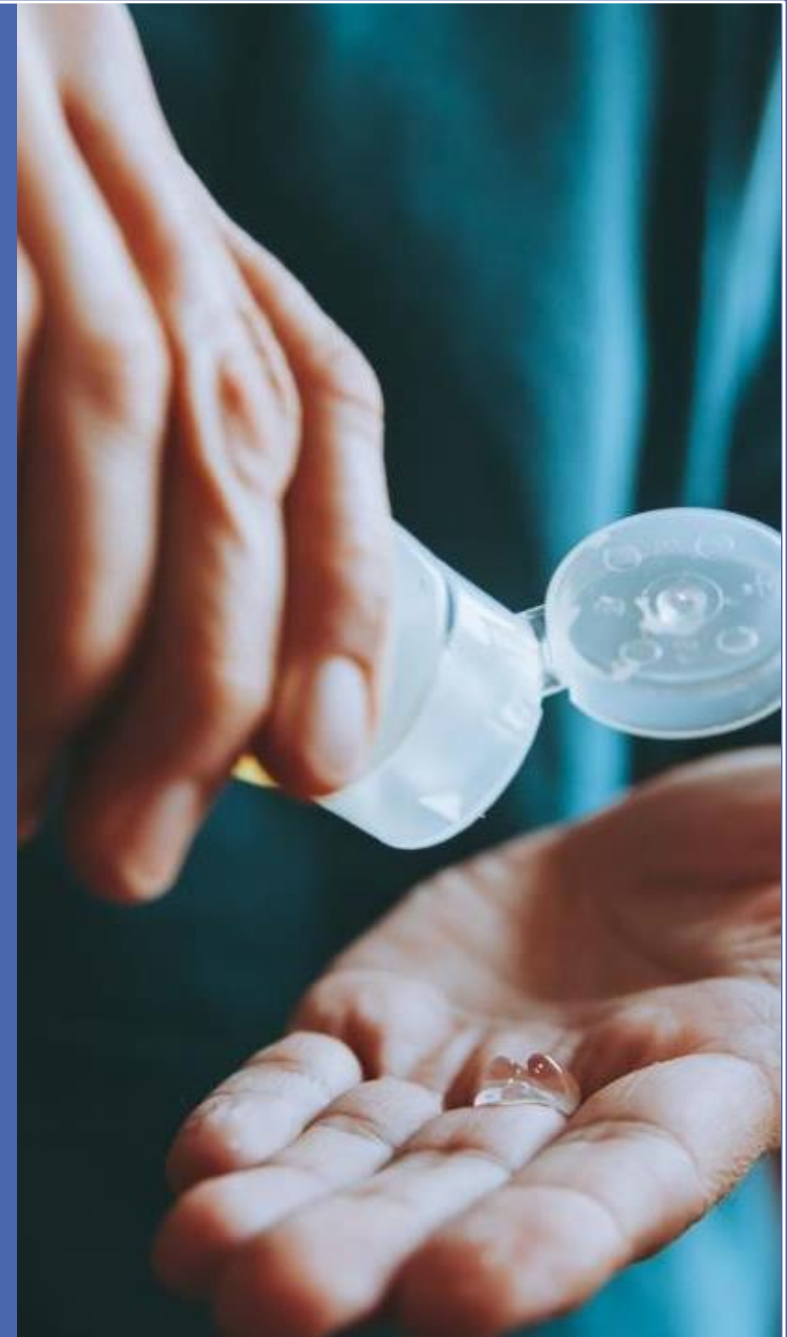
Aspirin, acetaminophen, and ibuprofen to relieve pain and headache, and reduce fever

Drink water

Cool baths or applying cool wet compresses

Avoid additional sun exposure until sunburn resolves

≥1% hydrocortisone cream can help reduce burning, swelling, and speed healing



Skin Cancer

- The most common forms of cancer
 - Basal cell carcinoma
 - Squamous cell carcinoma
 - Melanoma
- Very treatable when caught early
- Potential skin cancer indicators
 - Irregular borders on moles (ragged, notched, or blurred edges)
 - Moles that are not symmetrical (one half doesn't match the other)
 - Colors that are not uniform throughout
 - Moles that are bigger than a pencil eraser
 - Itchy or painful moles
 - New moles
 - Sores that bleed and do not heal
 - Red patches or lumps

Protecting Yourself

A background image showing two individuals in protective gear, including wide-brimmed hats and gloves, working outdoors. They appear to be handling a large, dark, tarp-like material on a lawn in front of a house. The image is overlaid with a semi-transparent blue filter.

- Wear sunscreen with SPF minimum of 15
 - SPF refers to the amount of time that a person will be protected from a burn caused by UVB rays
 - SPF 15 allows a person to stay out in the sun 15 times longer than no protection without burning.
 - Apply ~20 minutes before sun exposure
 - Reapply every 2 hours, or more often with heavy perspiration
 - Some SPF may be less effective when applied with insect repellent
- Wear SPF clothing or clothing with a tight weave to its fabric
- Wear wide-brimmed hats and UV-rated sunglasses with side panels
- Take breaks in the shade

Sources

- <https://www.cdc.gov/niosh/topics/sunexposure/default.html>



POWDERY MILDEWS

Ew.



Powdery Mildew

- A common name for a variety of fungal diseases that are common this time of year
 - Different types of fungus affect different types of plants
- Symptoms
 - Grayish dots or patches that eventually grow to encompass the entire leaf, stem, or in cases of extreme infection, the entire plant.
- Spread
 - Via spores produced by the fungus being splashed with water or blown by wind.



Powdery Mildew

- Prevention
 - Weeding out plants that could crowd, causing favorable conditions, or hosting mold
 - Pruning plants to increase airflow through their canopy
 - Watering at the base, not through the foliage
 - Planting resistant varieties

SCALE

Double ICK!

Scale

- Feed on plant sap with piercing-sucking mouthparts
- Secrete sticky honeydew that coats everything below
- Honeydew attracts other pests, wasps, etc
- Honeydew also hosts sooty molds, which can cause black buildup





Scale

- Adults are immobile, permanently attached to the host plant
 - Armored scales
 - Soft scales
- Adults are often immune to chemical treatments
- Small volumes are not a problem, but they can multiply quickly.
 - 2 generations in a season mostly

Scale

- Species specific to certain plants



Magnolia Scale



Pachysandra Scale



Pine Scale

Scale

- Treatment
 - There are horticultural soaps that can kill juveniles, but the timing is essential
- Prevention
 - Identify scale
 - Remove affected portions of plants with scale

