Southwest Center

FOR AGRICULTURAL HEALTH, INJURY PREVENTION, AND EDUCATION

Thistle make A field guide sick

on dangerous plants from Arkansas, Louisiana, Oklahoma, New Mexico & Texas.

GENERAL FIRST AID

First, make an attempt to identify the plant.

This can help a great deal with getting the correct treatment.

Call 911 or the Poison Control Hotline

(1-800-222-1222) if necessary.

Identify symptoms, which can include:

- -Nausea/Vomiting
- -Extremes of salivation
- -Changes in skin color or condition, such as hives or paleness
- -Enlargement or shrinking of the pupils
- -Changes in breathing or blood pressure

Stop exposure to the poison.

If possible, ask the patient how much they swallowed and when. DO NOT induce vomiting.

If the substance is caustic, it will burn again on the way up. Monitor the condition of the patient, such as heart rate and consciousness.

If the patient loses consciousness, maintain their airway and place them in the recovery position. Unless advised by a professional, DO NOT administer any sort of homeopathic or home remedy that "neutralizes the poison."

Each poison is different and what may help with one can cause more harm with another.

REDUCING POISONINGS IN LIVESTOCK

With proper range management, plant poisoning of livestock is rare. Animals generally will not eat toxic plants, as they are usually unpalatable, low in nutrition, and unfamiliar as a food source. Overgrazing leads to loss of proper forage, and hungry animals will browse plants they would not otherwise consume. Johnson grass (Sorghum) is one to be watchful of, as it is good forage except up to two weeks after a frost, drought, or other stressful event.

REDUCING POISONINGS IN PEOPLE

Instruct children not to eat berries or fruits without identification. Do not eat any wild plant unless absolutely sure of its identification. Many toxic plants are closely related to common edibles and appear similar. When eating a wild plant for the first time, it is advisable to only eat it in small quantities to reduce dosage upon misidentification.

Bluebonnets/ Lupina Lupinus spp.

Health Risks: Mildly toxic to humans and livestock, has similar effects to nicotine.

Toxic Agent: alkaloids, lupinine

Description: Perennial herb with bright blue flowers and small oval leaves.

Geographic Region: Found in sunny areas in Southern OK, Northern and Eastern TX, LA



David R. Tribble, 10 April 2010 CC BY-SA 3.0

Clarence A. Rechenthin, hosted by the USDA-NRCS PLANTS Database

Bullnettle, Touch-me-not, Noseburn, Finger-rot, Nettles Cnidoscolus spp. (L), Urtica spp(R), Tragia spp. (bottom)

Health Risks: Entire plant covered in extremely sharp hairs that release an allergen when touched, causing pain, itching, and irritation. Baking soda could be a suggested remedy to symptoms.

Description: Three genera of 1-3 foot tall plants with small white flowers, toothed or lobed leaves, and obvious spines covering the stems and leaves

Geographic Area: Found in dry areas throughout OK, AR, TX, LA







Schyler 15 August 2010, CC BY-SA 3.0 By Mason Brock (Masebrock) - Own work, Public Domain, https://commons.wikimedia.org/w/index.php?curid=64884729 By Mason Brock (Masebrock) - Own work, Public Domain, https://commons.wikimedia.org/w/index.php?curid=38375039

Castor Plant, Castor Bean *Ricinus spp.*

Health Risks: Seeds are toxic if broken or chewed, whole seeds pass through the gut harmlessly. Contains the toxin Ricin, and as little as 4-8 seeds are a lethal dose for a human.

Toxic agent: ricin

Description: 6-12 foot tall shrub or tree, with toothed leaves, yellow and red flowers, and small spiky fruits, which dry and release hard, brown, mottled seeds the size of a bean Grown as an ornamental throughout the region

Geographic Region: Found in TX, AR, LA



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Cedar Juniperus spp.

Health Risks:

Berries, needles, and bark are toxic. Vomiting and diarrhea can occur if ingested, sawdust from the wood can cause labored breathing and other respiratory effects. Cedar asthma can occur with long term exposure to the dust, and may not take effect until years later. Severe cedar poisoning is rare.

Animal Risks:

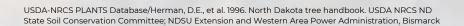
Cones can be eaten in limited quantities. Livestock will generally not eat it unless starving. If large quantity is ingested, activated charcoal may be given and vomiting may be induced.

PPE: face mask or respirator

Description:

AKA juniper, evergreen tree or bush reaching up to 40 ft tall creates blue, berry-like cones

Geograph<mark>ic Regi</mark>on: Eastern OK and TX. and AR. LA





Health Risks:

Edible berries, mildly toxic stems and roots, causing vomiting and diarrhea in large quantities

Toxic agent: cyanoglycoside, sambunigrin

Description: 10 ft tall shrub with long, pinnate leaves, round clusters of small, white flowers in summer and drooping clusters of small purple-black berries in fall

Geographic Region: Found throughout Eastern and Central OK, AR, Northern LA

Jimsonweed/Thornapple Datura spp.

Health Risks: Highly toxic to humans and livestock, causing distorted vision, convulsions, hallucinations, coma, and death

Toxic agent: tropane alkaloids

Description: Large, rough plant with toothed leaves, large, showy white or purple flowers, and spiny fruits up to two inches long

Geographic Area: Found throughout OK, NM, TX, AR, LA in open areas with rich soils, often grown as an ornamental



Rick P. Datura innoxia, 26 January 2006, CC BY 2.5

Larkspur/Delphinium Delphinium spp.

Health Risks: Toxic to humans livestock, causing arched back, drooling, convulsions, collapse, and causing death within hours due to paralysis of the respiratory system

Toxic Agent: diterpenoid alkaloids



Description: Tall, perennial herb, easily identified by showy blue, purple, or white flowers with a background facing "spur." Most of these are small, sparse plants, so it is unusual for an animal to get a large enough dose to have health risks.

Geographic Region: Sunny area throughout OK, AR, Northeast TX

Mesquite Prosopis glandulosa

Health Risks: Beans are toxic to cattle, symptoms develop gradually after ingestion over period of months, including constant, painful chewing, even when there is nothing in the mouth, partial tongue paralysis, swollen salivary glands, bulging eyes, and death. Horses can get impaction colic from ingestion as well.

Toxic agent: high sugar content that, together with inadequacy in other dietary factors, alters rumen microflora, inhibits cellulose digestion and contributes to rumen stasis and impaction. B-vitamin synthesis is inhibited. Ketosis and starvation follow in severe cases.

Description: Small, scraggly tree with bean pods 8 inches long, making more beans in drought years

Geographic Region: Found in Western OK, Western LA, TX, Eastern NM and other dry areas



Milk Weeds/ Antelopehorns *Asclepias spp.*

Health Risks: Toxic to humans and livestock causing vomiting and diarrhea, may be followed by seizures, kidney or liver failure, and death.

Toxic Agent: Cardiac glycosides, resinoid galtoxin

Description: Tall, fleshy plants with small, brightly colored flowers in clusters. Oblong leaves, seed pods full of fluff and secretes white latex when cut or broken.

Geographic Region: Found throughout OK, TX, AR, LA, NM in open areas



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Mimosa/Silktree Albizia julibrissin

Health Risks: Beans toxic to cattle and sheep, causing exaggerated response to stimuli, drooling, twitching, convulsive seizures, and death

Toxic agent: neurotoxic alkaloid

Description: 40 foot tall tree, often wider than it is tall, with small round compound leaves, pink and white filamentous flowers, and long, flat bean pods

Geographic Region: Native to Asia, but can be found wild throughout OK, TX, NM, LA, AR



By Famartin - Own work, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=27898495



Mistletoe Phoradendrn leucarpum

Health Risks: Toxic to humans and livestock, causing vomiting, diarrhea, and low blood pressure.

Toxic Agent: phoratoxin, tyramine

Description: A parasitic plant that lives in the branches of trees with thick, leathery leaves and small, white berries.

Use caution when bringing it into the house as a decoration, as berries can fall and be ingested by children. It is recommended to remove berries before keeping the plant around children or pets.

Geographic Region: Found in trees throughout OK, TX, AR, LA, NM

Phoradendron leucarpum on Arizona sycamore. US Forest Service photo, no author or copyright noted

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Database

Monkshood/Wolfsbane/Blue Rocket Aconitum spp.

Health Risks: Toxic to humans and livestock, with symptoms showing almost immediately, mild poisonings causing gastrointestinal issues and burning, numbness, or tingling in the mouth and face. More severe poisonings cause pronounced motor weakness, excitability, dizziness, high blood pressure, and cardiac arrhythmias. Skin contact can cause nausea and headaches.

Toxic agent: aconite

Description: Up to four foot tall herb with forked leaves and large, hooded flowers that are usually purple or blue but are sometimes white.

Geographic Region: Found in Northern NM and in the OK Panhandle



By Bernd Haynold - Self-photographed, CC BY 2.5

Poison Hemlock Conium maculatum

Health Risks: Extremely toxic to humans and livestock, dry plants less so, causing increased heart rate, difficult urination and thus failure of the kidneys, respiratory paralysis, hypothermia in calves, and death.

Toxic agent: pyridine alkaloids

Description: Tall perennial herb, with lacy foliage very similar to that of carrots, small white flowers in umbrella shaped clusters, and a hollow stem that is purple or red at the bottom. Visually very similar to and easily confused with the unrelated water hemlock, which is even more dangerous.

Geographic Region: Native to Europe and North Africa, but can be found throughout OK, LA, AR, TX, NM in wet areas or disturbed soil



William & Wilma Follette @ USDA-NRCS PLANTS Database / USDA NRCS. 1992.Western wetland flora: Field office guide to plant species. West Region, Sacramento, CA.





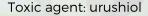
Ivy (L), Oak (R), Sumac (bottom)

Poison Ivy, Poison Oak, Poison Sumac *Toxicodendron spp.*

Health Risks:

Produces rash-causing urushiol oil, touching the plant or objects that have come in contact with the plant

causes an itchy red rash that usually goes away after 5-12 days if left untreated.



Wash oil off skin with soap and cold water, the sooner the better. Then use corticosteroids to mitigate symptoms. Clothes or objects that have touched the plant should be washed as well as the oil remains effective even after long periods of time.

Description: Either a 4 ft tall bush or as a trailing or climbing vine producing leaves in groups of three and making small, yellow flowers in late summer and grey berries in fall. Leaf shape is highly variable, even within the same plant. Leaves will be very soft and delicate, and stems will be tough and woody. Poison sumac will have leaves in groups of 5-7.

Geographic Region: OK, TX, AR, LA, Poison Oaks in sandy forest soil and Poison Sumac in swampy area.



Pokeberry/Pokeweed/Poke Salad *Phytolacca americana.*

Health Risks: Entire plant is highly toxic to humans and livestock, causing vomiting, diarrhea, respiratory issues, and spasms.

Toxic agent: saponins

Description: Large, fleshy plant with long, pointed leaves and large, dark purple strings of berries. Younger stems and leaves can be made edible by rinsing and boiling several times.

Geographic Region: OK, AR, LA in Eastern and Southern TX in part shade

Ragweed, Kingshead, Burrobush *Ambrosia spp.*

Health Risks: Plant produces large amounts of airborne pollen, responsible for up to half of all cases of allergy related rhinitis. Pollen release peaks midday and is lowest in early morning. Heavy rain removes pollen from the air.

Allergenic agent: The major allergenic compound in the pollen has been identified as Amb a 1, a 38 kDa nonglycosylated protein composed of two subunits. It also contains other allergenic components, such as profilin and calcium-binding proteins.

Description: 4-8 foot tall plant with variable leaves and large flower spikes and small burs

Geographic Region: Found throughout AR, TX, OK, LA, NM



By Le.Loup.Gris - Own work, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=16684567

Water Hemlock/Cowbane Cicuta maculata

Health Risks: North America's most toxic plant. Poisonous to humans and livestock, ingestion of ANY QUANTITY causes very likely death and, if the individual survives, permanent neurological damage. Causes muscle tremors, salivation, convulsions and death in as little as fifteen minutes, even in large animals.

Toxic agent: Cicutoxin

Description: White tuberous roots, similar to and often mistaken for parsnips, with tall, lance-shaped leaf clusters, umbrella shaped flower clusters, and hollow stems filled with yellow liquid that turns reddish-brown when exposed to air

Geographic Region: Found in wet areas throughout OK, TX, AR, LA, NM



William Melhorn, Cicuta maculata, 4 April 2010, Public Domain

Wild Onions Allium spp.

Health Risks: Mildly toxic, pastures full of onions are often grazed without issue. All cultivated onions share the toxic chemical, which destroys red blood cells. It is not known why the toxin varies in concentration, but occasionally after heavy ingestion of onions or the leaves, cattle, horses, and especially cats will develop jaundice, weakness, red or brown urine, and sometimes death.

Toxic agent: N-propyl disulfide

Description: Strongly scented, white, yellow, or purple underground bulbs that give rise to tall, narrow leaves and small, yellow or white flowers

Geographic Region: Found throughout OK, TX, NM, AR, LA in various conditions, bold wild and cultivated





Wisteria frutescens

Health Risks: Toxic to humans and livestock, causing vomiting and diarrhea.

Toxic agent: lectin, wisterin glycoside

Description: Small, woody vine, producing light purple flowers in late spring with small, pointed leaves

Geographic Region: Southeastern OK, AR, LA, in wet area

Robert H. Mohlenbrock, hosted by the USDA-NRCS PLANTS Database/USDA SCS. 1991. Southern wetland flora: Field office guide to plant species. South National Technical Center, Fort Worth.

Photos & information courtesy of:

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ASPCA Toxic Plants

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