Living With Poisonous Plants

The word POISON too often creates fear when it should suggest a warning. Many chemicals or common household substances used incorrectly, usually in the wrong quantity, can cause illness or even death; this is also true with certain plants. Left alone they are harmless. Bruised, crushed, or eaten in varying quantities, they may provoke effects which are upsetting, painful, or even fatal to man.

The plant is the product of a series of chemical reactions. These reactions produce useful materials such as carbohydrates, fats, proteins, enzymes, gums and resins as well as other chemicals which may adversely affect men or animals.

Plant chemicals are known to cause irritating reactions in the human body. Certain chemicals on leaf surfaces or in plant juices may be irritating to the skin, inducing blisters, swelling or reddening. They also sometimes effect chemical changes leading to light sensitivity, discoloration, and in extreme cases, an actual erosion of skin tissues.

Some other plant effects are strictly mechanical. Punctures or tears by spines, thorns, or the small protuberances on microscopic pollen grains may cause irritation, with subsequent swelling. Hypodermic-like hairs of the Stinging Nettle, for example, puncture the skin and forcibly inject a chemical which creates a sensation of violent pain or burning. Latex or milky juices of certain plants coagulating in the throat or drying on the skin produce an uncomfortable tightening sensation that could induce panic in the small child.

In some parts of a plant potentially injurious chemicals accumulate in quantity as storage products. This occurs in seeds or roots and occasionally in leaves. Thus, a small volume of the plant tissue may contain a relatively large amount of toxic material.

Man throughout his years on earth has learned by trial and error which plants threaten his well-being and has passed on this information. However, neither the modern botanist nor the physician can predict the possible human reaction to all plants nor the quantities of reputedly toxic ones necessary to cause illness.
Today there is an urgent need for public information and awareness of potentially hazardous plant materials. Our increased contact with them in and about the home, as well as in the country; the trend to using natural foods, to eating wild plants, to living off the land has led many people to try strange plants as food. Often mistakes have been made in identification, while in other cases plant products have not been prepared properly and illness and poisoning have resulted.

Although adults obviously are vulnerable, our primary concern is the inquisitive child. Relatively small amounts of potentially toxic material are necessary to cause severe or even fatal consequences in a small body, whereas the same volume might have little or no effect on a teenager or adult.

During the Second World War, staff members of the Arnold Arboretum produced survival manuals for the military forces and conducted training programs which led to the establishment of the air-sea rescue services. Special emphasis was placed on the edible and poisonous plants and animals of each area of operation, with simple general rules of safety included. For adults these guidelines are valid today in and around the home as well; however, children should be taught not to put any unknown plant material in their mouths.

Safety Rules

1. Avoid eating all plants that have milky or colored juices: this includes members of the Milkweed, Poison Ivy, Spurge and Poppy families. Needless to say, there are exceptions to all general rules, for the young shoots of the Milkweed plant are edible and even Lettuce has a milky juice.

2. Avoid all unknown white or red fruits. Poison Ivy, Poison Sumac, and some species of Baneberry have white fruits and are poisonous. Strawberries, Apples and Tomatoes are red, but these are known. The majority of unrecognized red fruits are potentially toxic.

3. Avoid eating wild seeds, for the seed of the plant usually has the greatest accumulation of chemical which may be toxic. In general the toxicity of plants is greatest in the storage organs of seeds, fruits, roots and tubers. Young plants or young fruits may be less toxic than the same parts in mature condition. However, some plant poisons are breakdown products, and wilted leaves may often be more dangerous than fresh material.

4. Avoid all fruits which are three-angled or three-lobed and thereby eliminate the potential dangers of the Spurge, Soapberry, Horsechestnut, Amaryllis and Lily families. Some of
the world's most infamous poisonous plants belong to these families.
5. Avoid all bulbs that lack the smell of Onions or Garlic. Some members of the Lily and Amaryllis and related families with basal bulbs may kill you if eaten in quantity.
6. If you must experiment in eating unknown plant materials, it is a rule of safety to cook the plant parts in two changes of water. Then sample a small bit before consuming a lot. If the cooked material tastes unpleasant, don't eat it. Your own reaction may be the sensible one. Many plant poisons are watersoluble or destroyed by heat. Cooking and discarding two changes of water lessens the amount of poisonous material or removes it completely.

What To Do If Poisoning Is Suspected

Seek information as soon as possible. Plant poisons may cause an immediate reaction in the human body or may be delayed in their effects for several hours. Residents of cities that have poison centers or large botanical gardens may get information from either source. Look under "Poison" in the emergency pages of your telephone book. Before you call have a piece of the plant in your hand so you can give a description of it. The person answering will ask questions according to the time of the year, for he probably knows what poisonous plants are most conspicuous at each season in woodlands, cultivated out of doors, or in your home. His questions may involve the size of the plant, the presence of spines or thorns, the position of the leaves (opposing each other or alternating on the stem), the color of the fruit, seed or flower, and whether a juice is present or lacking. He will need to know the age or size of the child and how much he may have consumed. If you know a name for the plant, volunteer this information but remember that common names vary with locations. For example "Dog Berry" generally applies to a non-poisonous plant in Massachusetts and to a toxic plant in Maine. Frequently "Mayflower" and "May Apple" are confused (the latter may be poisonous) and "Ivy" can apply to a dozen different plants, some toxic and others harmless.

The doctor or the botanist who answers the call will recommend the action you should take. It is not always desirable or necessary to have the child vomit; when it is advised, don't hesitate. The direction will generally be to administer one tablespoon of Ipecac syrup for children over one year. This is an emetic which can be purchased without prescription in one
ounce quantities at drug stores and should be on hand for emergencies in every home with small children. If vomiting is not induced within fifteen minutes, a second dose of one tablespoon may be given; then notify your physician. If vomiting still does not occur, take the child to the emergency room of a hospital. In serious cases a doctor may wish to use special methods to clean out the stomach, or to keep the child under observation. Sometimes the irritating or potentially poisonous material would be spread if vomiting occurred. In such cases Ipecac syrup is not recommended, and the alternative suggestion is to dilute the substance by feeding the child. Some materials such as the latex of Spurges are best treated by feeding dry crackers or bread. In other instances involving plant oils, the recommendation may be for large amounts of peanut butter and jelly, cereal, or even ice cream.

This is a guide to the most common plants of woodlands, gardens, and homes which are potentially dangerous if misused. It is based on the collaboration of medical consultants and the staff of the Arnold Arboretum experienced in answering questions from residents of the northeastern states referred to us by the Boston Poison Information Center.

Obviously, not all potentially poisonous plants from this area or others can be included. We have omitted mushrooms, toadstools and fungi because there are poisonous mushrooms which are very difficult to identify. Always call the poison center for suspected cases of mushroom poisoning and carefully follow the advice of the specialist.

Comprehensive reference volumes are available for the person who wishes larger lists of edible or potentially toxic plants; such references form the bibliography of this guide.

As a service to the community at large, the Arnold Arboretum has just produced a 26-minute, color and sound educational movie on 78 poisonous plants. The film may be borrowed by groups wishing to show it for educational purposes. Reservations should be requested well in advance by writing to the Arnold Arboretum, Jamaica Plain, Mass. 02130.

RICHARD A. HOWARD
POISONOUS PARTS — The red and black seeds which contain a toxin, abrin, similar to snake venom. It begins to act in 12–72 hours.

SYMPTOMS — Vomiting, diarrhea, drowsiness, weakness, weak and fast pulse, circulatory collapse, coma and death.

The seed coat must be cracked before danger occurs; intact seeds will pass harmlessly through the digestive tract. However, a single damaged seed may be sufficient to kill a child.

Seeds of Abrus are frequently used in jewelry, dolls and other souvenirs of the tropics.
POISONOUS PARTS — All parts contain a number of poisonous substances. The roots are particularly virulent.

SYMPTOMS — Tingling of the tissues of the mouth followed by numbness; a sensation of warmth in the stomach; nausea, frequently without vomiting; slowing of the pulse and respiration. Death may follow within a few hours of ingestion.

Monkshood is an ornamental garden perennial growing to 3 feet; its blossoms are deep blue or purple, and occasionally yellow or white. The common name aptly describes the blossom form.
Actaea spp. — Baneberry

POISONOUS PARTS — The roots and berries are the most poisonous parts.

SYMPTOMS — Severe stomach cramps, vomiting and diarrhea.

Baneberry is a perennial herb sometimes cultivated in the garden; when in fruit it is conspicuous in the woods. All species are poisonous.
POISONOUS PARTS — All parts contain needle-like crystals of calcium oxalate, as well as other chemicals.

SYMPTOMS — An intensely painful burning sensation in the mouth and throat, accompanied by swelling of the soft tissue in these areas; vomiting and diarrhea sometimes occur. Death may result from blockage of the windpipe due to swelling of the surrounding tissues.

Jack-in-the-Pulpit is a common plant in partly shaded, wet woods. The clusters of red fruits are conspicuous in the fall. Children sometimes eat the swollen underground base or the fruits.
**Buxus spp. — Box, Boxwood**

**POISONOUS PARTS** — The leaves and twigs contain a number of poisonous substances, including buxene.

**SYMPTOMS** — Stomach pains, diarrhea, vomiting, convulsion; and in extreme cases, death.

Box is commonly used as an evergreen hedging or edging plant in gardens from Boston southward. All species are poisonous.
POISONOUS PARTS — All parts contain needle-like crystals of calcium oxalate, as well as other chemicals.

SYMPTOMS — An intensely painful burning sensation in the mouth and throat, accompanied by swelling of the soft tissue in these areas; vomiting and diarrhea sometimes occur. Death may result from blockage of the windpipe due to swelling of the surrounding tissues.

Caladiums are plants commonly grown in summer for their colorful, variegated leaves. They also are sometimes used as house plants.

All species are poisonous.
POISONOUS PARTS — All parts contain a volatile oily substance called protoanemonin, which acts as an irritant to the skin or mucous membranes. In addition, several alkaloids may be involved.

SYMPTOMS — Irritation and inflammation of the soft tissue of the mouth, salivation, abdominal pain and diarrhea. Symptoms of alkaloid poisoning, such as nervousness and depression, also may occur.

Common to marshes and wet areas, Marsh Marigold is conspicuous in early spring for its showy, yellow flowers.
Cannabis sativa — Hemp, Marijuana

POISONOUS PARTS — The plants produce a resinous substance with narcotic properties.

SYMPTOMS — Exhilaration, delusion, blurred vision, loss of coordination, drowsiness and coma result from any form of ingestion.

Marijuana is found as a weed in waste ground.

Federal and state laws presently regulate the possession of Cannabis in any form.
POISONOUS PARTS — Leaves, bark and the attractive fruits with contrasting color of seeds and flesh.

SYMPTOMS — Vomiting, diarrhea, convulsions, chills and coma.

Bittersweet is a native, woody, deciduous vine often encountered wild as well as in cultivation. Its showy fruits are commonly collected in the fall for dried arrangements which should not be accessible to small children.

All species are poisonous.
Cicuta maculata — Water Hemlock

POISONOUS PARTS — All parts, particularly the roots, contain a yellowish viscid fluid or resinous solid called cicutoxin.

SYMPTOMS — Occur within 15–45 minutes, beginning with excessive salivation, then tremors of the limbs and sudden and violent convulsions. Unconsciousness and death follow.

Water Hemlock may be a weed of hedgerows, ditches, or field margins. It is readily recognized by its clusters of thickened roots, the series of diaphrams of the pith at the base of the stem, and drops of yellow, oily fluid which secrete on surfaces of cut tissue.
Colchicum autumnale — Autumn Crocus

POISONOUS PARTS — All parts of the plant are equally and intensely poisonous.

SYMPTOMS — Burning pain in the mouth, intestinal pain, vomiting, diarrhea, reduced pulse, coldness of the extremities and prostration.

Autumn Crocus is commonly grown for its showy lavender flowers appearing without leaves in the fall. It is advertised for forcing to bloom without soil or water on a windowsill and thus is an object of curiosity to a small child.
POISONOUS PARTS — All parts contain a poisonous volatile oil called coniine.

SYMPTOMS — Occur within 15-45 minutes. Muscular weakness, dizziness, disordered vision, loss of muscular control and sensation in the extremities.

Poison Hemlock is a fairly common weed of hedges, ditches and waste land. The plant bears a resemblance to Queen Anne’s Lace or Wild Carrot in its white flowers, but is smooth throughout, not hairy. It has an unpleasant odor variously described as “mousey” or like cat urine; its taste also is offensive.
POISONOUS PARTS — All parts (leaves, flowers, berries, and underground portions) contain a poisonous substance called convallarin.

SYMPTOMS — The pulse and heart beat are slowed; vomiting and diarrhea may occur.

Lily-of-the-Valley is a common garden perennial or ground cover grown for its sweet-scented white flowers in spring. The red berries in late summer and fall are attractive to small children.
POISONOUS PARTS — All parts are highly toxic.

SYMPTOMS — Skin blisters from the juice; blisters of the soft tissues of the mouth from plant portions chewed and/or swallowed. Vomiting and diarrhea, with blood or mucus are common.

Two or three fruits may contain enough of the acrid juice to be fatal to a child.

Daphne is a shrub commonly grown for its fragrant lilac-pink flowers in early spring. The white, or red fruits are attractive to children.

Daphne cneorum, Rose Daphne, with spreading stems, evergreen leaves, and clusters of pink flowers in spring is equally injurious.
Datura spp. —
Jimson Weed, Thorn Apple, Angel’s Trumpet

POISONOUS PARTS — All parts contain several alkaloids which act on the human system. Approximately an ounce of any plant part constitutes the lethal dose for a child. Dust from seed pods causes what is called “corn picker’s eye”, a persistent dilation of the pupils.

SYMPTOMS — Intense thirst and disturbance of vision; rapid pulse and high blood pressure; delirium, violence, convulsion, coma, death.

Jimson Weed, Datura stramonium, is a common weed in rich soils around manure piles, animal enclosures, and the like. Several other species with large, white, trumpet-shaped flowers are cultivated in gardens for ornament and also are poisonous.
POISONOUS PARTS — Seeds and young plants contain substantial quantities of several harmful alkaloids.

SYMPTOMS — Salivation, vomiting, diarrhea, convulsion, coma.

Delphinium and Larkspur are commonly cultivated, usually blue-flowered annuals or short-lived garden perennials. Mature plants and flowers are less toxic than the young plants and seeds.

All species are poisonous.
POISONOUS PARTS — All parts contain needle-like crystals of calcium oxalate, as well as other chemicals.

SYMPTOMS — An intensely painful burning sensation in the mouth and throat, accompanied by swelling of the soft tissue in these areas. Vomiting and diarrhea also may occur. Death may result from blockage of the windpipe due to swelling of the surrounding tissue.

Commonly cultivated house plants often with variegated leaves, Dieffenbachias are recommended for areas of low light intensity. They should be kept out of the reach of small children. All species are poisonous.
Digitalis purpurea — Foxglove

POISONOUS PARTS — All parts (including the seeds) contain a number of harmful substances.

SYMPTOMS — Nausea and vomiting and a very slow pulse, followed somewhat later by rapid and/or erratic heart beat.

Foxglove is a common garden biennial or short-lived perennial. Children sometimes pick the drooping tubular flowers and suck the nectar from their base. This is a practice which should be discouraged.
Euonymus spp. —
Burning Bush, Spindle Tree, Wahoo

POISONOUS PARTS — Leaves, bark and the attractive fruits with contrasting color of seeds and flesh.

SYMPTOMS — Vomiting, diarrhea, convulsions, chills and coma.

Euonymus are shrubs or evergreen vines; their fruits are frequently collected in the fall and used for dried arrangements. Such arrangements should be kept out of the reach of small children.

All species are poisonous.
Euphorbia marginata — Snow-on-the-Mountain

Euphorbia pulcherrima — Poinsettia
Euphorbia milii — Crown of Thorns

POISONOUS PARTS — All parts contain a milky juice composed of substances which may cause mild to severe dermatitis.

SYMPTOMS — Rash or blistering of the skin; severe irritation of the mouth, throat, and stomach; vomiting and diarrhea.

Snow-on-the-Mountain is cultivated in the garden as a hardy annual. The leaves are commonly variegated or white on the margins.

Although the florist’s Poinsettia is probably one of the least noxious Euphorbias, its seasonal abundance and availability in the home make it important. It should be placed where small children cannot reach it.

Crown of Thorns is a spiny house plant bearing clusters of red flowers.
POISONOUS PARTS — The leaves and berries contain a substance which may cause poisoning.

SYMPTOMS — Excitement, labored breathing, diarrhea, and coma.

English Ivy has numerous forms, some hardy and used as ground covers, or to climb on brick walls; others, not hardy, are grown as house plants.
Ilex spp. — Holly

POISONOUS PARTS — Leaves and berries contain a bitter substance.

SYMPTOMS — Vomiting and diarrhea; stupor.

Berried sprigs of Holly are commonly used as household decorations during the Christmas season. As they dry, the leaf and berry stalks become very brittle, shedding freely. Great care should be taken that small children do not eat the tempting berries.

Hollies are woody shrubs or trees, evergreen or deciduous, which are cultivated for their berries, and for general landscape purposes.

All species are poisonous.
POISONOUS PARTS — All parts, including the flowers, are poisonous.

SYMPTOMS — Salivation, vomiting, staggering walk, convulsions, difficult breathing, paralysis.

Mountain Laurel is a popular cultivated evergreen shrub bearing large clusters of white and pink blossoms in spring. *K. angustifolia* and *K. polifolia*, Lambkill and Bog Laurel, respectively, are common in the wild in New England and also are potentially toxic. Children have been poisoned by sucking on the flowers to obtain nectar “honey” or by making a play “tea” from the leaves.
POISONOUS PARTS — All parts, but particularly the flowers and seeds, contain a substance called cystine.

SYMPTOMS — Vomiting, convulsions; in severe cases, death.

A member of the Pea family, this as all others should be regarded with suspicion. While garden beans and peas are wholesome and nutritious, the seeds and/or foliage of many such as Precatory Bean, Wisteria, Lupine, and Loco Weeds are definitely injurious or cause fatality.

The Laburnum is a showy shrub or small tree. Its clusters of pendant, yellow flowers have prompted its popular name.

All species are poisonous.
POISONOUS PARTS — Leaves and fruits. The green, unripened fruit is most virulent.

SYMPTOMS — Vomiting and diarrhea, muscular weakness, collapse.

Lantana is a tropical shrub commonly cultivated in the house and out-of-doors. In the north, berries are not usually produced in the house, but outside in summer they may be plentiful. Children should be discouraged from eating them.
Ligustrum spp. — Privet

POISONOUS PARTS — Leaves and berries may cause problems.

SYMPTOMS — Vomiting and diarrhea.

Privet is a common shrub used for hedges. Clippings should not be left lying on the ground and children should be discouraged from putting either the leaves or the fruits in their mouths.

All species are poisonous.
POISONOUS PARTS — All parts contain active principles.

SYMPTOMS — Vomiting, diarrhea, trembling, convulsions.

Daffodils are bulbous plants widely cultivated for their yellow flowers in early spring. The juice of the leaves and flower stalks also may cause a dermatitis.

All species are poisonous.
POISONOUS PARTS — All parts are toxic. A single leaf is potentially a lethal dose for an adult.

SYMPTOMS — Nausea, vomiting, stomach pain, weakness, abnormal heart beat, and coma, usually beginning several hours after ingestion. Death may follow within 24 hours.

Oleander is a shrub commonly cultivated in warm temperate regions for its flowers. It is occasionally grown as a large house plant in the north.
Philodendron spp.

POISONOUS PARTS — All parts contain needle-like crystals of calcium oxalate, as well as other chemicals.

SYMPTOMS — An intensely painful burning sensation in the mouth and throat, accompanied by swelling of the soft tissues in this area. Vomiting and diarrhea also may occur. Death may result from blockage of the windpipe due to swelling of the surrounding tissues.

Philodendrons, both the climbing and rosette forms, are commonly used in the home and in public buildings to produce an “exotic” effect in areas of low light intensity. In the home, at least, they should be placed out of reach of small children and pets.

All species are poisonous.
Phoradendron serotinum — Mistletoe

POISONOUS PARTS — The white berries are particularly toxic.

SYMPTOMS — Vomiting, diarrhea, convulsions, coma.

Sprigs of Mistletoe are used for Christmas decoration. As they dry, the stalks of berries and leaves become brittle and shed readily. They should be placed so that small children cannot obtain the detached berries.
Phytolacca americana — Pokeberry

POISONOUS PARTS — All parts are poisonous.

SYMPTOMS — Burning sensation in the mouth. In one to two hours, stomach cramps, vomiting, diarrhea, prostration, salivation, dimness of vision, and convulsions.

A common herbaceous weed in disturbed areas, Pokeberry may grow to 8 feet in height.

The young shoots (6-12 inches long) when boiled in two changes of water are considered good greens for the table. The berries are attractive to children because of the "squashy" consistency and deep purple stain. However, three or four berries may sicken a child and ten can seriously affect an adult. Allegedly, they are edible when cooked.
Prunus virginiana — Chokecherry

POISONOUS PARTS — All parts contain a substance which can be converted to hydrocyanic acid. Particularly dangerous are the bark and wilted leaves.

SYMPTOMS — Difficulty in breathing, paralysis, prostration, convulsions, coma, and death.

Since the wilted leaves are most dangerous, broken and pruned branches and twigs should be gathered and disposed of. The flesh of the fruit is safe (though “puckery”); the kernels of the seeds should be avoided.

Chokecherries, weedy trees growing to 10 feet, usually are found along roadsides and in disturbed areas; they sometimes are cultivated.
Ranunculus spp. — Buttercup

POISONOUS PARTS — Stems and leaves contain a number of substances which may irritate the mouth and stomach. The juice also may blister the skin of sensitive persons.

SYMPTOMS — Irritation of mouth and throat, excessive salivation, colic, diarrhea, depression, slow pulse.

Buttercup is an herb, usually bearing bright yellow flowers, which is most common in wet meadows. The leaves may be mottled with silver and usually are much dissected.

All species are poisonous.
POISONOUS PARTS — The green, expanded, leaf blade contains calcium oxalate.

SYMPTOMS — Stomach pain, vomiting, weakness, coma and death result from large amounts. Muscular weakness and twitching, slowed respiration, weak pulse, coma, and death occur from small amounts.

Rhubarb is a commonly cultivated vegetable. Leaf blades must not be eaten either raw or cooked under any circumstances.
POISONOUS PARTS — All parts, including the flowers, are poisonous.

SYMPTOMS — Salivation, vomiting, staggering walk, convulsions, difficulty in breathing; collapse.

Rhododendrons and azaleas are commonly cultivated shrubs. Children may be poisoned by sucking the flowers to obtain nectar ("honey") or by making a play "tea" from the leaves. All species are poisonous.
POISONOUS PARTS — All parts contain a sap containing a chemical which may cause allergic dermatitis; the irritant also is carried by smoke.

SYMPTOMS — Itching, redness of the skin, small blisters. In severe cases the blisters may become quite large and local swelling of the flesh may occur.

If the sap is removed immediately from the skin by washing with strong soap, the dermatitis may be prevented or at least reduced.

Poison Ivy is a woody shrub or vine with changeable appearance; it is harmful at all seasons, and should never be placed in the mouth.

Poison Sumac (Rhus vernix) grows in wet areas and bears greenish flowers and white fruit. It should not be confused with other plants called Sumac which have red fruit and are harmless.

Poisonous species of Rhus also are known as Toxicodendron.
**Ricinus communis — Castor Bean**

POISONOUS PARTS — Although all parts are poisonous, the seeds are the most toxic.

SYMPTOMS — Burning sensation in the mouth and throat, vomiting, stomach pains, prostration, convulsions and death.

Ricin, the poisonous principle, is one of the most toxic of plant poisons. One to three seeds are sufficient to kill a child, four to eight will kill an adult.

Castor Bean is an annual plant cultivated for its large leaves and spiny, often colorful seed pods. It may be grown safely if the flower clusters are removed. Do not allow children access to packets containing the seeds.
POISONOUS PARTS — Young leaves, seeds and the inner bark.

SYMPTOMS — Flushed face, vomiting, diarrhea, reduced heart action, coldness of legs and arms, stupor.

Black Locust is a large tree, sometimes cultivated, and sometimes found growing wild in dry wooded areas and along road-sides. It bears pendulant clusters of white flowers. Children may be poisoned by sucking the flowers or by chewing twigs.
POISONOUS PARTS — All parts are poisonous.

SYMPTOMS — Burning sensation, vomiting, thirst, dizziness, prostration.

Bloodroot is frequently cultivated for its white flowers which precede the leaves in early spring; in the wild it appears in rich woodlands. The blood red sap is a conspicuous feature of its leaves, stems, and roots when broken.
Solanum tuberosum — Potato

POISONOUS PARTS — Unripe tubers which have turned green from exposure to light; "sprouts" from the tubers.

SYMPTOMS — Headache, colic, vomiting, diarrhea; pupils of the eyes may or may not be dilated; mental confusion, stupefication, coma.

Except for known edible fruits or tubers, all parts of all members of the Potato family should be regarded with suspicion.
Solanum pseudocapsicum — Jerusalem Cherry

Solanum nigrum — Black Nightshade
Solanum dulcamara — Deadly Nightshade

POISONOUS PARTS — All parts are potentially dangerous but the unripe fruits are most toxic.

SYMPTOMS — Headache, colic, vomiting, diarrhea; pupils of the eyes may or may not be dilated; mental confusion; stupification; coma.

The Jerusalem Cherry is a favorite holiday plant with fruits resembling cherry tomatoes.

Black Nightshade is a weedy annual with small white flowers and shiny black berries.

Deadly Nightshade is a sprawling shrub or herbaceous vine simultaneously bearing small purplish flowers and red berries. These, like all other members of the Potato family, should be regarded with suspicion unless known to be edible.
**POISONOUS PARTS** — All parts except the fleshy red covering around the seed.

**SYMPTOMS** — Vomiting and diarrhea, trembling, difficult breathing, weakness, convulsion, coma, death.

Yew is a commonly cultivated evergreen used for hedges and plantings. The foliage is poisonous; therefore hedge clippings should be gathered and disposed of. Because of the potential toxicity of the seed, children should not be encouraged to eat the red, fleshy covering.

All species are poisonous.
Urtica dioica — Nettle

POISONOUS PARTS — Stinging hairs on leaves and stems.

SYMPTOMS — Rash on the skin.

Nettle is a weedy herbaceous perennial found in rich soil, along roadsides, and in waste places.
POISONOUS PARTS — All parts are poisonous.

SYMPTOMS — Burning sensation in the mouth and throat; salivation; prostration; shortness of breath; slowed heart-beat and lowered blood pressure.

A coarse herb, 3–8 feet tall, commonly found in wet areas. The large basal leaves may resemble those of Skunk Cabbage.
Wisteria spp.

POISONOUS PARTS — Seed pods and seeds.

SYMPTOMS — Stomach pain, vomiting and diarrhea.

Wisteria is a woody vine commonly grown for its pendulant clusters of flowers in the spring.

This, like all other members of the Pea family, should be regarded with suspicion. While garden beans and peas are wholesome and nutritious, the seeds and/or foliage of many others such as Precatory Bean, Lupine, and Loco Weeds are definitely injurious or fatal.
Bibliography

This selected list of references includes those most readily available which are concerned with humans. Many others not listed deal almost exclusively with animals from the veterinarian's point of view. Those starred (*) probably are the best investments.

Enari, Dr. Leonid. Poisonous Plants of Southern California. Arcadia, California: County of Los Angeles, Department of Arboreta and Botanic Gardens. 1972. 35 pages, illustrated.


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Poison Control Centers

The following cities in Massachusetts maintain an answering service which provides poison information without charge. Emergency service at these centers is available to everyone 24 hours a day, 7 days a week.

BOSTON
Poison Information Center
Dr. Joel P. Alpert, Exec. Sec.
Children's Medical Center
30 Longwood Avenue  (Zip) 02115

FALL RIVER
Poison Control Center
Union Hospital
300 Hanover Street  (Zip) 02720

NEW BEDFORD
Poison Control Center
St. Luke's Hospital
101 Page Street  (Zip) 02740  Ex 311

SPRINGFIELD
Poison Control Center
Mercy Hospital
233 Carew Street  (Zip) 01104  Ex 229

Poison Control Center
Springfield Hospital
759 Chestnut Street  (Zip) 01107  Ex 704 or 705

Poison Control Center
Wesson Memorial Hospital
140 High Street  (Zip) 01105

WORCESTER
Poison Control Center
Worcester City Hospital
71 Jacques Street  (Zip) 01603

Your Physician: Dr. ____________________________
Phone: ________________________________
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