



YOLO COUNTY

Adopt - A - Road Program

A Plan for
Community Road Care



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Chapter

1

Introduction

Adopt-A-Road Program

A Plan for Community Road Care

Program Description

The Adopt – A – Road Program encourages organizations, corporations, groups, and individuals to participate in keeping the county beautiful and safe by volunteering to maintain and enhance select Yolo County roadsides. When the public helps the county with pothole patching, tree trimming, roadside refuse removal and disposal, weed abatement, and ditch and culvert cleaning, the public directly contributes to creating a better community for the enjoyment of all residents. Adopt – A – Road participants will agree to maintain their commitments for 2 years, and they will have a lot to show for their efforts.

Program Goals

- Designed to promote civic responsibility, community spirit and pride, and to provide an opportunity to accomplish something beneficial to all.
- Designed to save taxpayer dollars and to operate with a minimum of red tape and with minimum supervision by the County Public Works Department.
- Designed to allow participants to work responsibly at their own convenience.
- Designed for volunteers 13 years of age and older, with appropriate supervision for those under age 18.
- Recognize participants with press releases and certificates of appreciation. For adopted sections of two miles or greater, the County Public Works Department will provide and install an appropriate sponsorship sign at each end of the adopted section. Participants may also provide a customized panel with logo and color (maximum size 15" tall x 30" wide) at their expense.



Pothole Patching

Patching potholes will make public roads safer and easier to drive for everyone in the community. Preserving the quality of our roadways will save the public money on tire and auto maintenance. Also, volunteer efforts to maintain public roadways will supplement County resources, save taxpayer dollars and allow County workers to deal with higher priority projects. The following are more details regarding the pothole patching program:

- Potholes must be cleared of loose material prior to placing a temporary patch. Pothole fill material can be used during wet conditions.
- Pothole patching will be allowed only on low traffic volume roads.
- Dura Patch can be used on potholes up to 2 feet in diameter or smaller. Potholes must be at least 2 inches deep for the material to be effective. Potholes must be filled to approximately 3/8 of an inch higher than the edge of the surrounding pothole, and then the fill material is compacted (wheel rolled with a vehicle).

Tree Trimming and Care

Attaining a safe amount of distance between traffic and the trees adjacent to roads and sidewalks will maintain safe roadways, increase visibility, increase vehicle clearance and access, and will prevent or eliminate some hazardous road situations. Also, keeping our trees healthy makes for cleaner air, cooler temperatures, less insect and pest problems, and overall a more beautiful county. The following are more details regarding the tree trimming program:

- Trim trees to maintain: a minimum fifteen foot (15') vertical clearance from the vehicle travel way; a minimum five foot (5') horizontal clearance from road shoulders; and a minimum eight foot (8') vertical clearance for all branches over sidewalks and bike paths.
- Remove all dead, diseased and crossing or crowded limbs to allow light penetration through the tree canopy.
- Remove all insect-infested limbs, including those with any structural defects to limit future safety hazards.

Roadside Refuse Removal and Disposal

Roadside refuse removal will beautify our roadways and make them safer for travel. Volunteer efforts on County roadsides and accompanying recognition signs increase public awareness and also appeal to community values and pride. Additionally, volunteer efforts supplement County resources, save taxpayer dollars and allow County workers to deal with higher priority maintenance of pavement, drainage, and safety facilities. The following are more details regarding the roadside refuse removal and disposal program:



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- Minimum length of adopted road section is 2 miles for refuse removal.
- Work must be performed according to the assigned frequency to be determined by the Public Works Department for the section of roadway adopted. The frequency may be one occurrence, bimonthly, monthly, or quarterly, depending on the section of roadway. Participants will be issued completion report forms to record cleanup efforts.
- The Yolo County Public Works Department will provide free trash bags and free refuse disposal.
- The Yolo County Public Works Department will review all adopted areas annually to ensure compliance with agreements.

Weed Abatement

The primary purpose of weed abatement is to provide clear site lines along the travel way for safety, and secondarily to reduce the risk of fire from the dry brush in the ditch and road shoulders.

If property owners would like to maintain the roadside ditches, then mowing is the preferred maintenance method; however, the use of chemical herbicides is also an acceptable method of weed control. The Yolo County Department of Agriculture has specific information on the protocol they currently follow to eradicate weeds on county roads.

Ditch and Culvert Cleaning

The primary purpose of ditch and culvert cleaning is to clear and dispose all debris, sediments, weeds and other obstructions, which will provide a clear path for storm water flows during the winter storms. Clear road ditches, culverts and culvert ends will prevent or reduce flooding to the traveled roadway and adjacent property.

Private driveway culverts in roadside ditches were installed for the sole benefit of a property owner. Consequently, the maintenance of the culvert, culvert entrances and adjacent ditch are the responsibility of the beneficiary (property owner).

Adoptable Roads

The Adopt – A – Road Program applies to all types of County roadways. Some sections of roadway may be unacceptable for adopting for the following reasons:

- Heavy traffic and high speed roadways
- Road segments with high incidents of accidents
- Dense vegetation
- Narrow road shoulders
- Restricted visibility



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- Poor road alignment
- Rugged terrain, steep slopes
- Section currently adopted

The Public Works Department will advise and exercise discretion whether a certain section of roadway is adoptable and suggest alternatives if a desired section is not adoptable for work by volunteers.

Chapter

2

Safety

The Adopt – A – Road Program is designed to have county road care completed as safely as possible. Adoptable sections of roadway are selected for safety and appropriateness of the work involved. Participants bear individual responsibility for personal safety and appropriate behavior within the County right of way.

Insurance is not required. However, participants agree to hold the County harmless for injuries arising out of their inappropriate action or nonconformance to safety requirements.

Participants work without direct Public Works Department supervision and without traffic control. **Groups are required to provide one adult supervisor for every five minors (children between the ages of 13 and 18) on the roadside.**

Group leaders are responsible for conducting safety briefings for all participants according to the attached safety requirements and to assure all participants follow the safety requirements. While working along the roadside, remember **SAFETY FIRST !!!**



Chapter

3

Adopt – A – Road Agreement Conditions

Agreement Conditions

Work shall be conducted during daylight hours. Work shall not be conducted on holiday weekends, or within twenty-four hours preceding a holiday weekend unless specifically authorized.

If weather or other adverse circumstances cause a public hazard, work shall be immediately discontinued.

Volunteer work shall be subordinated to operations which the County or other designated entities may conduct, and shall not interfere with such efforts.

Volunteer(s) performing work under this Agreement shall wear personal protective equipment (safety vest, safety glasses, and gloves) as required by OSHA while on County right of way.

County furnished litter bags may be obtained from Public Works Department, 292 West Beamer Street; Woodland, CA 95695 (Monday – Thursday).

Volunteers shall designate a group leader and one alternate. One adult supervisor shall be assigned for each five minors participating in litter pickup. **No minor less than thirteen years of age shall be allowed to participate.**

Participants' personal vehicles shall be legally located off the traveled way so as to not interfere with the free flow of traffic, bicycles, or pedestrians.

Participants agree to notify the County prior to every activity on County right of way. A minimum of one week's notice will be necessary to verify the status of the area scheduled for activity.

Participants agree to provide a summary report of activities completed after each effort which includes location cleaned, total number of litter bags filled, and the location of where to pick up the filled litter bags. This information must be provided no later than one business day after the cleanup effort.

Lack of participation as scheduled, failure to notify Public Works Department to collect filled trash bags, or failure to complete activity summary report may result in the termination of Agreement.

No work shall be authorized in the travelled roadway or median areas without prior review and acceptance of the location by the Public Works Department.

This Agreement is valid for two calendar years from the date of issuance.



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Volunteers electing to furnish special identification placards conforming to County specifications for their Adopt – A – Road signs may do so. Volunteers shall furnish additional placards when required by Public Works Department for maintenance purposes.

It is understood and agreed by the Volunteer that the performance of any work under this Agreement shall constitute an acceptance of the provisions of the Agreement and all attachments.

The County reserves the right to terminate this Agreement at any time for any reason.



Adopt – A – Road Agreement

Encroachment Permit Number	
Adopted Road Section	
Supervisor District	
Issuance Date	
Expiration Date	
Assigned Frequency	
Volunteer (Group or Individual Name)	
# Of Participants	
Volunteer Representative	
Volunteer Representative Phone/Email	
Alternate/Phone/Email	
Attachments	Agreement Conditions

PERMISSION IS GRANTED TO THE NAMED VOLUNTEER, SUBJECT TO AGREEMENT CONDITIONS, TO ENTER ONTO COUNTY OF YOLO RIGHT OF WAY NAMED ABOVE FOR THE PURPOSE OF [POTHOLE PATCHING, TREE TRIMMING, REFUSE REMOVAL AND DISPOSAL, WEED ABATEMENT, AND DITCH AND CULVERT CLEANING (*remove any items that do not apply*)] AS ASSIGNED.

This Agreement or a copy thereof shall be kept at the work site and must be shown to any representative of the Public Works Department or any law enforcement officer upon demand.
WORK SHALL BE SUSPENDED IF AGREEMENT IS NOT AT JOB SITE AS PROVIDED.

Each individual shall attend a safety orientation conducted by the Volunteer Representative prior to entering the County right of way. The orientation shall include a discussion and explanation of the attached safety requirements. Individuals must participate in a safety orientation at least once during each calendar year when work is authorized.

No reimbursement will be made for expenses incurred by the Volunteer or participants. It is understood that a vehicle is not to be used when performing work associated with litter pick up from the roadside. The Volunteer and its officers, employees, agents, and subcontractors shall defend, indemnify, save, and hold harmless the County of Yolo and its officers and employees from all and any claims, costs, and liability for any damages, sickness, death, or injury to person(s) or property, arising directly or indirectly from or connected with the operations or services of the Volunteer or its officers, employees, agents, or subcontractors hereunder, save and except claims or litigation arising due to sole negligence or sole willful misconduct of the County of Yolo or its officers or employees. The Volunteer will reimburse the County of Yolo for any expenditure, including reasonable attorneys' fees, the County of Yolo may make by reason of the matters that are the subject of this indemnification and, if requested by the County of Yolo, will defend any claims or litigation to which this indemnification provision applies at the sole cost and expense of the Volunteer.



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The term of the Agreement is two (2) calendar years from the date of issuance. In the event Volunteer wishes to renew the Agreement, a notice of such intent shall be submitted to the Public Works Department at least thirty (30) days prior to expiration of this Agreement. This Agreement may be cancelled by the County for nonconformance with Agreement provisions or failure to adhere to direction given by the County's Representative.

PUBLIC WORKS DEPARTMENT (COUNTY)	VOLUNTEER REPRESENTATIVE
SIGNATURE:	SIGNATURE:
PRINT NAME:	PRINT NAME:



Volunteer Application and Registration Form

Name	Age	Social Security No.
Home Address		Home Phone
Business Address		Business Phone
Driver's License No., If Any		

Do you have a health problem we should be aware of in an emergency? Yes ___ No ___
(If Yes, describe: such as a history of back trouble, heart, epilepsy, diabetes, fainting, etc.) ___

Is there a medication you must take? Yes ___ No ___
Is there a medication to which you are allergic? Yes ___ No ___
If yes, medication is: _____

Medical or Hospital Insurance Plan: _____

Automobile Insurance Carrier: _____

Person to Call in Emergency	Phone No.	Address
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I have been informed against and accept responsibility for any breach on my part respecting confidential information. I have read the Policy adopted by the Yolo County Board of Supervisors on volunteer programs. In return for the benefits provided by Yolo County in case of my illness, injury, death, or third party liability while providing, or resulting from, acts or occurrences within the scope of my authorized volunteer services, and for my right to authorized expense reimbursement, I waive any claim on my behalf and on behalf of my heirs, representatives, and assigns against the County of Yolo, any other agency governed by the Board of Supervisors, and any agent, officer or employee thereof for illness, injury, debts or without limitation, other harm arising from my volunteer services, whether or not authorized.

Signature _____ Date _____

Received: _____
Signature _____ Date _____



Parental Consent Form

Name of Minor: _____

Address: _____

Birth Date: _____

Volunteer Activity: _____

The above person, a minor, desires to perform volunteer services for the County of Yolo in accordance with the attached application form.

As parent/guardian of this minor, permission is hereby granted for him/her to participate in the volunteer program. My child does not have any physical or medical problems which would prohibit or limit participation in the volunteer program, except:

In case of illness or emergency, please call:

Telephone Number: _____

I have reviewed the volunteer application and registration form and the policy adopted by the Yolo County Board of Supervisors on volunteer programs, and give my consent for _____

_____ to participate in the volunteer program subject to the terms and conditions expressed therein.

Signed by: _____
Parent/Guardian

Parent/Guardian Printed Name

Date: _____



Completion Form

This form is used by the Adopt – A - Road Coordinator to keep track of program participants and the frequency of cleaning of the adopted road. **Please remember to fill out and return a copy of this form after each cleanup by the next business day.**

Cleanup date(s): _____

Group leader: _____ Phone #: _____

Name of organization: _____

Road adopted: _____

Number of volunteers that participated: _____

Number of hours the cleanup lasted: _____

Number of trash bags filled: _____

Location of filled bags: _____

Were there any unusual incidents or injuries during the cleanup? _____

If so, please describe:

Note: Call the Adopt-A-Road Program Coordinator at 530-666-8811 the following business day after each cleanup to report completion.

Mail to: Attn: Adopt-A-Road Program Coordinator
 Yolo County Public Works Department
 292 West Beamer Street
 Woodland, CA 95695

Or Fax to: Adopt-A-Road Program Coordinator, 530-666-8156

Or E-Mail to: ppw@yolocounty.org



Appendix A

Safety Requirements

TO PROTECT YOURSELF AND OTHERS:

- Use caution when crossing roadways. Use crosswalks and signals where available.
- Face oncoming traffic as you work and keep an eye on traffic. Be prepared to move quickly if necessary.
- Work in small groups, three to five persons. DO NOT BUNCH UP. Large groups should be broken up and dropped off at different locations.
- When removing litter, do not work on the roadway or on bridges.
- Discontinue work before dusk. Do not attempt to work when fog or other conditions reduce visibility for drivers. Do not attempt to work when roadway is icy or wet.
- Do not touch or attempt to remove material which you suspect may be toxic or hazardous. Items to avoid include: powders, chemicals, smelly substances, suspicious packages, chemical drums or containers, weapons, syringes or hypodermic needles, dead animals, and broken glass. If you discover any of the above mentioned items, notify the Public Works Department at 530-666-8775 or 530-666-8811 (Mon – Thurs). The location of suspected toxic substances or any other hazardous materials should be identified to facilitate review by proper authorities. Report weapons immediately to the police by calling 911.
- Wear safety vests whenever you are on the roadside.
- Wear long pants and substantial leather shoes or boots with ankle support. Watch your footing and stay off steep slopes, drainage facilities, or places from which you might fall. Light colored clothing, long sleeve shirts, gloves, and sunscreen lotion is recommended.
- Do not run, throw objects, or engage in horseplay or any other activity which may distract drivers.
- Avoid overexertion. Drink plenty of water, especially on warm, humid days.
- Be alert for places where wildlife may be located. Also be alert for insects and poisonous plants such as ticks, bees, and poison oak.



Field Safety

Field Work means that you get to spend a good portion of your time working outdoors. But the longer you spend outdoors, the greater exposure you have to hazards such as temperature extremes (heat and cold), sun exposure, flora (poison ivy and oak), and fauna (bugs and critters). Be aware of the potential hazards involved with field work and take the steps to protect yourself.



SUN EXPOSURE

Sunlight contains ultraviolet (UV) radiation, which causes premature aging of the skin, wrinkles, cataracts, and skin cancer. *There are no safe UV rays or safe suntans.* Be especially careful in the sun if you burn easily, spend a lot of time outdoors, or have any of the following physical features: numerous, irregular or large moles; freckles; fair skin; or blond, red or light brown hair. Block harmful sun rays!

- **COVER UP.** Wear tightly woven clothing that you can't see through.
- **USE SUNSCREEN.** A sun protection factor (SPF) of at least 15 blocks 93% of UV rays. Follow application directions on the bottle. Sun block does not mean that you can stay in the sun indefinitely.
- **WEAR A HAT.** A wide brim hat, not a baseball cap, works best because it protects the neck, ears, eyes, forehead, nose and scalp.
- **WEAR UV-ABSORBANT SHADES.** Sunglasses don't have to be expensive, but they should block 99 to 100 percent of UVA and UVB radiation. Before you buy, read the product tag or label.
- **LIMIT EXPOSURE.** UV rays are most intense between 10am and 4pm.

Poison Ivy and Poison Oak

Poison Ivy and Poison Oak contain oily compounds that cause a bubbling skin rash in about two-thirds of the people that come into contact with it. A lucky third of people are immune to it.



Virginia Tech Weed I.D. Guide

The plants are hardy and can grow in damp wooded areas or very dry areas. They can take the form of a vine, trailing shrub, or upright woody plant and also change color with the seasons. The plant oils can stick to skin, clothing, and shoes and spread to other surfaces and people.



- Learn to identify these plants and avoid them.
- Wear long clothing, gloves and/or coveralls when working off of a road or trail in the underbrush.
- Barrier creams can be used to prevent contact with the plant oils. Doctors may prescribe injections or tablets that may provide protection from the oils.
- Scrub arms and legs (the most common points of contact) with soap and water.
- Strip off clothing after potential exposures to poison ivy and oak. Put the clothes directly in the washing machine. Take your shoes off outside and decontaminate them.
- When getting dressed, put your shoes on last so oils will not contaminate the inside of your pants legs.

SYMPTOMS and TREATMENT: Symptoms of poison ivy and oak exposure include itchiness, redness, and swelling followed by blisters on the skin. Wash the plant oils off as quickly as possible. Hydrocortisone cream will help the itching. See your pharmacist or doctor for additional treatments.

Spiders

The Black Widow has a jet black color, rounded abdomen, and a red hourglass marking on its abdomen. The coarse, irregular webs are usually built in or beneath objects close to the ground (under porches, foundations of buildings, and in basements). The venom is highly neurotoxic and respiratory failure can occur if medical treatment is delayed.



- Take the precaution to shake out gloves and shoes before putting them on.
- Avoid sticking ungloved hands into woodpiles and under sinks and buildings.

SYMPTOMS and TREATMENT For ordinary spider bites, wash the area with soap and water, apply an ice pack, and take acetaminophen for the pain. Watch for signs of a secondary bacterial infection in the wound. If you are bitten by a black widow, you will feel a pinprick or sting. A black widow bite quickly causes intense pain and stiffness. Seek immediate medical attention.

Wasps, Bees and Hornets

- Avoid bright clothes and strong smelling soaps or colognes that may attract these insects.
- If an insect lands on you, don't panic or swat it. Brush it off gently and walk away.



SYMPTOMS and TREATMENT: Stings hurt because stinging insects inject venom into the victim. Check the sting site closely. If the stinger still remains, gently scrape it out with a credit card or butter knife. Apply a cold pack to reduce swelling and take ibuprofen or acetaminophen for the swelling and pain. AlkaSeltzer tablets can help: dip them in water and apply. Baking soda helps as well: apply it to the site and slowly drip vinegar on it to make it fizz.

Mosquitoes

Mosquitoes may be infected with West Nile Virus, a virus that is carried by birds and has spread throughout the United States in the last few years. West Nile virus can be a potentially serious disease, so it is important to avoid mosquito bites.



- Be aware that peak mosquito hours are between dusk and dawn. Wear long sleeves and pants.
- Reduce the density of mosquitoes in your yard by reducing sources of stagnant water. Mosquitoes can breed in as little as a teaspoon of water.
- Use insect repellent with DEET in it; apply it to the skin and clothing according to the package directions.

SYMPTOMS and TREATMENT Wash mosquito bites with soap and water; hot water run on the bites can reduce the itch. Apply calamine lotion or an itch reducing cream or spray. Mild symptoms of West Nile include fever, headache, body aches, and occasionally a skin rash on the trunk of the body and swollen lymph glands. Severe symptoms of West Nile include headache, high fever, neck stiffness, stupor, disorientation, coma, convulsions, and paralysis. Seek medical attention if these symptoms appear.

Ticks

Ticks may be infected with bacteria that can cause Lyme disease, a serious and chronic illness in humans. In Northern California, only the Western Black-Legged Tick carries Lyme disease. An infected tick does not transmit the Lyme bacterium until it has been attached for 24 hours.



H. Tondoro 2001
Los Angeles County Dept.
Vector Control Division



- Wear light colored clothing (for better visual spotting), long sleeves, and pants.
- Wear high boots and tuck your pants into them.
- Use tick repellants according to package directions.
- Once indoors, remove and launder clothing. Shower immediately and check your skin for ticks.

SYMPTOMS and TREATMENT: To remove a tick, gently grasp it near its head with tweezers and steadily pull it out. Do not torture the tick; this will cause it to disgorge its stomach contents immediately. A bulls-eye rash indicating Lyme disease may develop after being bitten by an infected tick. Other “flu-like” symptoms include fever, swollen lymph nodes, neck stiffness, fatigue and headaches. Seek medical treatment if symptoms appear. Persons with frequent exposure to ticks should consider vaccination.

If you have an imbedded tick, save it for identification of Lyme Disease! If you are a Yolo County resident you can bring or mail it to 137 North Cottonwood Street, Woodland, CA with a \$30 check for testing.

Poison Oak

Poison oak is one of the most common causes of allergic skin reactions in the United States.

Workers whose job tasks require them to be exposed to poison oak are susceptible to occupational contact dermatitis. Contact with poison oak can cause an irritating, itchy rash on your skin, also known as contact dermatitis. According to the U.S. Bureau of Labor Statistics, occupational skin diseases, mostly in the form of allergic and irritant (contact) dermatitis, are the second most common type of occupational disease.







What is Poison Oak?

Poison oak (*Toxicodendron diversilobum*) is a plant that has an oily, lacquer-like resin in its sap called *toxicodendrol*, which contains a potent chemical called **urushiol**, and commonly causes allergic skin reactions. Because toxicodendrol does not dissolve in water, it is difficult to wash off and its toxicity persists for a long time because it sticks to the skin. The urushiol binds so strongly to the skin that washing for more than 15 minutes after exposure does little to remove the chemical from the skin.



Poison oak is found primarily in the **West Coast of the United States**. It can usually be found in the form of a deciduous shrub, but in shady canyons and riparian habitats, it commonly grows as a climbing vine with aerial roots that adhere to the trunks of oaks and sycamore trees. Poison oak also forms dense thickets in chaparral and coastal sage shrub, particularly in central and northern California. It regenerates readily after disturbances such as fire and the clearing of land. **The leaves come in sets of three, are shiny, without prickles, the stems are erect, and the middle leaf has a distinct stalk that is longer than the other two.** In some regions, poison oak leaves remain green during the entire time they are on the stem, but in other areas the leaves change to various colors with the changing seasons. **During every season, contact with poison oak can lead to a skin reaction.**

Can you identify poison oak during each of the four seasons?

Seasonal Color Changes in Poison Oak Leaves			
Fall	Spring	Summer	Winter
<p>The leaves can turn colors such as yellow or red when other plants are still green. The berry-like fruit on the mature female plants also changes color in fall, from green to off-white. Remember: "Leaves of three, let it be... berries white, a poisonous sight."</p> 	<p>The leaves are light, bright green with whitish green flowers clustered on the stems.</p> 	<p>Some of the leaves can be either yellow-green, pink, or reddish, with small white or tan berries after the flowers of spring.</p> 	<p>The leaves and seeds fall, leaving stick or whip-like stems or climbing vines. Without leaves, poison oak may be identified by the long upright main branches with short, stubby side branches</p> 

How does poison oak affect the body and health?

Contact with the urushiol oil of a poison oak plant, which is found in all plant parts of poison oak – roots, stems, leaves, flowers (except in pollen and honey), and the fruit (berries), can cause a form of **contact dermatitis**. There are two forms of contact dermatitis: allergic contact dermatitis and irritant contact dermatitis. Contact dermatitis is a localized inflammation of the skin. It is caused by direct contact with a toxic or contaminated substance. Dermatitis includes some or all of the following symptoms: itching, pain, redness, swelling, and the formation of small blisters or wheals (itchy, red circles with a white center) on the skin.





Warning: Do not burn poison oak! Burning poison oak will release a mixture of toxicodendrol and urushiol in the form of smoke that can cause severe symptoms of airborne contact, such as irritation and swelling of the throat and lungs, which makes it difficult to breathe and is life-threatening. Airborne contact with these particles can also deform the face by causing wrinkles and folds.

Post-Contact with Poison Oak

If you have come into contact with poison oak and have developed fluid-filled blisters, know that the fluid does not contain urushiol. If the blisters break, the fluid will not cause the dermatitis to spread.

Contact with Urushiol Can Occur in Three Ways:

Contact Type	Description
Direct Contact	Touching plant sap.
Indirect Contact	Touching an object exposed to urushiol – examples: contaminated tools, clothes, pets, etc. Keep in mind that the oil may remain on contaminated items and surfaces for long periods. These contaminated items can cause future rashes long after the initial exposure.
Airborne Contact	Burning plants with urushiol releases oleoresin particles into the air that can cause severe symptoms to the eyes, nose throat and lungs.

Urushiol **can get embedded and remain under your nails** for several days unless carefully removed by thorough cleaning. Scratching other parts of the body with contaminated fingernails can spread poison oak and cause dermatitis. If you have come into contact with poison oak, your clothes, tools, equipment, and/or gear also may have been contaminated with urushiol. These items can spread poison oak and cause dermatitis to anyone who comes into contact with them. Note that thick fur protects most animals that run through poison oak from developing symptoms, but people who touch contaminated animals can come directly in contact with urushiol and can develop contact dermatitis.

Prevention and Treatment of Poison Oak

Know what poison oak looks like. Avoid contact with poison oak and anything, whether animal, clothing or tools, that may have been contaminated by it. Stay away from any vegetation that you suspect may be poison oak. Do not eat any part of a plant that looks like poison oak. If you are required to enter or work in areas where there is poison oak, take the following necessary precautions:

- Wear protective clothing** such as long-sleeved shirts, long pants tied around the ankles, leather gloves with gauntlets, and neckerchiefs.
- Use protective creams** that form barriers to protect against the toxic urushiol oil found in all parts of the plant. There are also injections or tablets that provide protection for some people. Consult a pharmacist for advice.
- Put your shoes on last** when dressing, so that any contamination on your shoes does not contaminate the inside of your trousers.
- Remove all contaminated clothing** and wash it separately. When removing clothing, take shoes off first and leave them outside for decontamination by washing.
- Avoid touching anything after exposure.** Any object you touch after having been exposed to poison oak can act as a carrier to contaminate others. Remember that the plant's nearly invisible oil, urushiol, sticks to almost all surfaces, and does not dry.



- Wash immediately and thoroughly after poison oak contact** by showering, using cold water and a strong soap or detergent. Do not take a bath to wash yourself! Thoroughly wash beneath the fingernails. Use rubbing alcohol (isopropyl alcohol) on affected skin areas and rinse with cool water to prevent further skin irritation.
- Stay cool and apply cool compresses to your skin** because body heat and sweat aggravate itching. Use calamine, hydrocortisone cream, and oatmeal baths to soothe the itching.
- Consult a physician or seek treatment from a medical facility** for severe inflammation and itching, swelling, or breathing difficulty, or if your rash shows signs of infection.

Ticks

What Is A Tick?

A tick is not an insect. It is an arachnid with eight legs and is actually related to the spider. Like spiders, ticks cannot fly. Ticks like to live in shady, wooded areas. They can be found in tall grass, moss, bushes, low tree branches, and even lawns and gardens.

The tick life cycle starts from an egg, grows to a larva, nymph, then matures to an adult. Tick size ranges from very small (size of a sesame seed) to large (size of a watermelon seed), depending on the species and the life stage. Some ticks have soft bodies while others, like dog ticks and deer ticks, have a very hard shell.

Larvae and Nymphs are often found in the spring and summer. Adult ticks are found in the fall and winter. Both tick stages feed on humans. Tick species in Yolo County include the Pacific Coast tick, American Dog tick, and the Western Black Legged tick. In California, the Western Black Legged tick is the only carrier of Lyme disease.



Pacific Coast tick



American Dog tick



Western Black-Legged tick

Tick Bites

Ticks survive by finding and biting a host, burying their mouth parts into the skin, and drinking blood (also known as taking a “blood meal”). They often climb to an elevated location such as a blade of grass, tree, or even the walls of an office or home and hold out their front legs to “quest” for a host. Ticks can sense butyric acid, a compound emitted by all mammals, and they latch on to a suitable host when it passes by. You may not know that you have been bitten by a tick because you can barely feel a tick bite. Once a tick has bitten you, it can stay attached to your skin for several weeks if you don’t remove it. Ticks that have taken a large blood meal become engorged and about the size of a large pea. They usually drop off their host and then complete their next life cycle or lay eggs. Most tick bites are followed by a reaction



within hours creating redness at the site of the bite that does not grow larger. This reaction disappears within a few days.



Tick in “quest position”



Engorged tick

Lyme Disease

According to the Centers for Disease Control and Prevention, between 1992 and 1998, there were 88,967 reported cases of Lyme disease in the U.S. In California, only the Western Black Legged Tick carries the bacteria that results in Lyme disease. In other states, Lyme disease carriers include the Deer Tick.

Ticks that feed on the blood of infected animals transmit the Lyme disease bacteria to animals and humans when they feed again. An infected tick transmits the bacteria for Lyme disease after taking a “blood meal” for 24 – 48 hours. It is important that you check for ticks and remove them immediately!

Early symptoms of Lyme disease include “flu-like” symptoms including fever, fatigue, swollen lymph nodes and aches. Sometimes a bulls-eye shaped rash develops between 3-30 days after the bite of an infected tick. The bacteria that cause Lyme disease can stay in the body for several years if not treated with antibiotics. Seek medical treatment if symptoms appear.

How to Prevent Tick Bites

The best way to prevent Lyme disease is to avoid tick bites! Here are some tips:

- Wear long sleeves and pants to cover as much skin as possible.
- Wear light colored clothing so that ticks can be seen and removed before attaching.
- Wear high boots. Tuck pants into socks and boots. Tuck shirts into pants.
- Wear a hat and tie back long hair
- Use tick repellents or insect repellants containing DEET or pyrethrin on clothes and/or skin. Follow all label directions when using repellents.
- Choose wide trails and stay in the center. Avoid off-trail hikes with lots of brush and grass.
- Frequently check for ticks on yourself, your children, and pets. Make a “tick check” part of hiking and camping outings. Use approved tick repellents to kill ticks found.
- Once you return home, remove and launder clothing. Shower immediately and check all parts of your body for ticks.
- After removing clothing worn in tick infested areas, put clothing into the dryer for at least 30 minutes to kill any remaining ticks.

How and Where To Look for Ticks

Look for ticks in pressure points or places that bend. Good places to look for ticks are the back of the knee, fingers, toes, underarms, thighs, belly button, and groin. Other areas to look include under belts, elastic, and behind the ears, back of your neck, scalp, and hairline. It helps to have someone else check areas that you cannot see like your back, neck, and scalp. Remove all unattached ticks immediately. Use

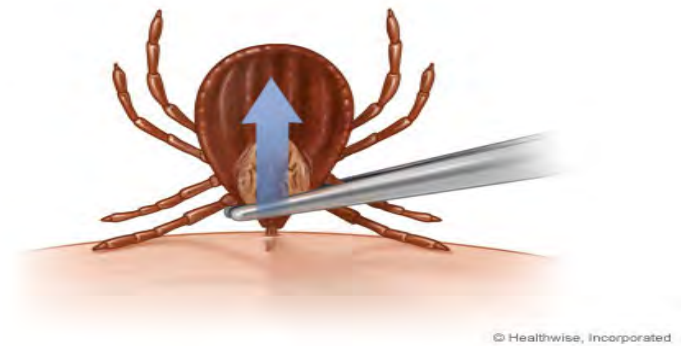


gloves, tissue, or cellophane tape to remove a tick. Do not use your bare hands! If you find a tick, check again for more. Removed ticks should be put into a sealable plastic bag and thrown away.

How to Remove an Attached Tick

If you are bitten by a tick, it is important to remove the tick as soon as possible:

1. Use blunt tweezers or gloved fingers.
2. Grasp the tick by the head, near the mouth, and as close to the skin as possible.
3. Apply firm and steady pressure until the tick releases, and gently pull the tick straight away from the skin.
4. If the tick's head breaks off in the skin, use tweezers to remove it as you would a splinter.
5. Wash your hands, and clean the wound and the tweezers in an antiseptic or soap and water.
6. If you want to have the tick checked, save the tick in a clean vial or Ziplock bag with a blade of grass and a moist cotton ball. Bring the tick to your local vector control district or your doctor to check the tick species and if it carries infection.
7. Call your doctor if you have any questions or concerns.



When Removing Ticks, DO NOT:

- Do not use bare hands.
- Do not use sharp tweezers.
- Do not crush, puncture, or squeeze the tick's body.
- Do not use a twisting or jerking motion to remove the tick.
- Do not use hot match, nail, or cigarette to remove the tick.
- Do not smother the tick with petroleum jelly, or other substance.

Call the Yolo County Environmental Health Department for assistance: (530) 666-8646; or call the Napa-Solano County Public Health Laboratory for more information on tick testing: (707) 784-4410.

Mail or drop off removed ticks, in a container with a moist cotton ball or moist piece of gauze, at 137 North Cottonwood Street in Woodland with a \$30 check before 3PM; or you can drop off or mail the tick and \$30 check directly to the lab at 2201 Courage Drive Room 2218, Fairfield, CA 94533. "Torturing" a tick can cause it to salivate and/or regurgitate into you and "inject" bacteria it may contain.

Information sources:

* Contra Costa Mosquito & Vector Control District; * OSHA; * CDC; * OFF products



Spider Safety

When you work in the field, you get to call the outdoors your office. But when you enter this outdoor office, you are entering insect habitat. Knowledge of the different insects you might find in the county can help you prepare for your work environment in the great outdoors.

Black Widow Spiders

The female Black Widow has a jet black colored, rounded abdomen, with a red hourglass marking. The female has a body that is .5 inches long, but she can be up to 1.5 inches long with her legs outstretched. Only the female black widow has a venomous bite. Adult males are harmless to humans, about half the female's size (smaller bodies and longer legs). Males and immature black widows have yellow and red bands and spots over the back.



Female black widow



Male black widow

Black Widows spin sticky, coarse, irregular webs. They are usually built on or beneath objects close to the ground. You will find them on the underside of ledges, rocks, plants and debris, and under porches, building foundations, and in basements. Cold weather and drought may drive black widows into buildings.

The venom of the black widow spider is 15 times as toxic as the venom of the prairie rattlesnake. It is highly neurotoxic and respiratory failure can occur if medical treatment is delayed. Black Widow spiders are not usually deadly, especially to adults, because they inject only a small amount of venom.

SYMPTOMS and TREATMENT: Black widow bites may quickly cause intense pain and stiffness, but some are not painful and may go unnoticed. The poison injected can cause abdominal pain similar to appendicitis as well as pain to muscles or the soles of the feet. Other symptoms include alternating salivation and dry-mouth, paralysis of the diaphragm, profuse sweating and swollen eyelids.

FIRST AID MEASURES: Apply an ice pack over the bite location and keep the affected limb elevated to about heart level. Try to collect the spider specimen in a small jar or plastic bag for examination by a spider expert, even if you have crushed it. Seek medical attention.

CONTROL: To control the black widow, remove all materials where they might hide. Clean them out of an area by knocking down the webs, spiders, and round, tan egg sacs with a stick and crushing them underfoot. Removal or destruction of the egg sacs may help control the population. This spider is resistant to many insecticides.



Common House Spiders

Common house spiders can be found in building and home interiors. Some build wide webs in upper corners, near windows, while others build small “sack” webs in lower corners and behind furniture and fixtures. Common house spider bites usually occur when the spider feels threatened, most often if it becomes trapped against a person's skin in clothing or bedding or if it is cornered. House spiders are responsible for more bites on people than any other spider.



Common house spider



Red Knee Tarantula

SYMPTOMS and TREATMENT: Typical symptoms of a bite include initial pain, redness, and sometimes swelling. A small blister may form, often breaking, leaving a sore that heals over a period of several weeks. Soreness near the bite may last for a few days to several weeks or may not occur at all, depending on the individual.

FIRST AID MEASURES: Wash spider bite areas with soap and water, apply an ice pack, and take acetaminophen for the pain. Watch for signs of a secondary bacterial infection in the wound. If the bite of any spider causes an unusual or severe reaction, contact a physician.

TARANTULAS

Fall is tarantula time in Yolo County. It is this time of year when hordes of male spiders swarm on roads and through hillsides in order to find a mate. Tarantulas are usually nocturnal and live in the ground.

SYMPTOMS and TREATMENT: While they inspire terror, tarantulas are not considered a threat to humans. No person has ever been killed by a tarantula. Tarantulas have very small venom glands and the bite of the local tarantula is no more painful than a bee sting. However, some individuals may have allergic reactions to this bite and there is a risk of secondary infection with any bite.

Tarantulas are reluctant to attack unless they are hunting prey. If provoked, tarantulas may signal their intention to attack and bite by raising their front legs and rearing up into a "threat posture." The tarantula's main defensive weapon is to scrape a cloud of barbed, porcupine-like hairs from its abdomen into its tormentor. These hairs can cause irritation to eyes, nose, and skin, and the lungs and airways if inhaled.

FIRST AID MEASURES: Encourage bleeding to wash out the puncture wounds from within. Clean the bite site with soap and water and protect it against infection. Monitor the wound for heat, redness, or



other signs of infection. Skin exposures to the hairs can be treated by applying and then pulling off some sticky tape such as duct tape, which carries the hairs off with it. If any breathing difficulty or chest pain occurs, seek medical attention immediately as this may indicate an anaphylactic reaction.

PERSONAL PROTECTIVE EQUIPMENT AND SAFE WORK PRACTICES

- Wear coveralls if you must access an area likely to contain spiders and insects.
- Wear work gloves to protect your hands. Watch where you put your hands.
- Shake out gloves and shoes before putting them on.
- Do not store your protective clothing, tools and equipment outdoors.
- Avoid sticking ungloved hands into woodpiles and under sinks and buildings alcoves. Inspect and clear these areas out before you begin work.

MANAGEMENT

Spiders are primarily beneficial in the garden. However, in home and building interiors and near outdoor work areas, they may not be welcome. The best approach to controlling spiders is to remove hiding spots and regularly clean webs and spiders out of building interiors and off of exteriors.

- Seal cracks and openings in the foundation around buildings and structures. Seal window and door gaps.
- Good window and door screens keep out spiders and insects that they must have for food.
- Regularly vacuum or sweep windows, corners of rooms, storage areas, basements, and other seldom used areas to help remove spiders and their webs. Vacuuming up spiders can kill and remove them.
- In indoor storage areas, place boxes off the floor and away from walls. Seal the boxes with tape to prevent spiders from taking up residence within. Clean up clutter.
- Outdoors, eliminate places for spiders to hide and build their webs by keeping the area next to the foundation free of trash, leaf litter, heavy vegetation, and other accumulations of materials. Trim plant growth away from the house and other structures. Outdoor lighting attracts insects, which in turn attracts spiders. If possible, keep lighting fixtures off structures and away from windows and doorways. Sweep, mop, hose, or vacuum webs and spiders off buildings regularly.

Typically pesticide control of spiders is difficult unless you actually see the spider and are able to spray it. If you spray a spider, it will be killed only if the spray lands directly on it; the spray residual does not have a long-lasting effect and will not prevent future spiders. Control by spraying is only temporary unless accompanied by housekeeping. If necessary, sweep away and crush a spider with a tool, rolled up newspaper, your shoe or vacuum it up.





Snake Bites

California is the home to approximately 80 species of snakes, 10 of which are rattlesnakes. In Northern California, the Northern Pacific Rattlesnake (*Crotalus oreganus oreganus*) is the only native venomous species. Its range is defined from San Luis Obispo north to the Oregon border and from the coast to the sierra ridge. Rattlesnake bites can damage tissue at the bite site and cause other harmful physiological symptoms such as swelling, allergic reaction, and blood clotting problems.

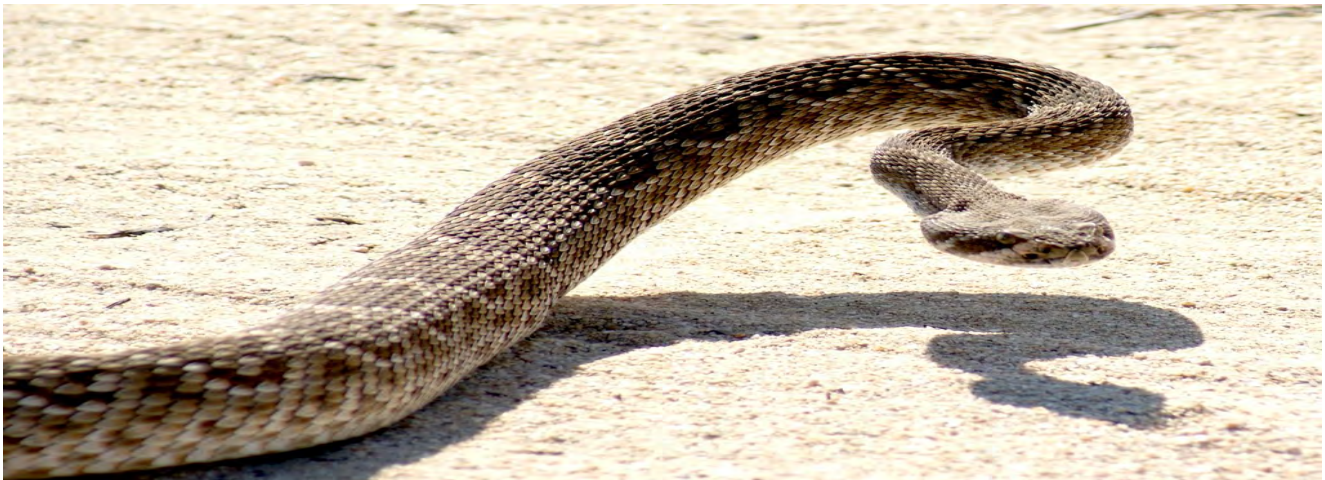
Snakebite Safety Concerns

Each year, 7,000 snakebites are reported in the United States, 15 of which are fatal. There are 800 rattlesnake bites reported per year and only 1-2 fatalities. Generally not aggressive, rattlesnakes strike when threatened or deliberately provoked; given room they will retreat. Most snake bites occur when a rattlesnake is handled or accidentally touched by someone walking or climbing. Never try to pick up a rattlesnake.

Be safe, be smart: Leave snakes alone and avoid a bite.

How Can Rattlesnakes Be Identified?

Looking at a snake's color or pattern is NOT a reliable method of identification. Looking for the characteristic rattle on the tail is a good method, but sometimes these rattles are lost. Rattlesnakes have a powerful body, thin neck and a well defined triangular or arrow shaped head. Their eyes are hooded and the pupils of the eyes are oval (like a cat) rather than round. **BE SAFE: DO NOT** get close enough to a rattlesnake to see what shape pupils it has unless it is safely captured.



California Rattlesnake

How Do You Identify Non-Poisonous Snakes?

Non-poisonous snakes have round pupils in their eyes. A nonpoisonous snake tends to look more like a snake a child rolls out of clay: the head, neck and body have more-or-less the same diameter. They do not share the distinct skinny neck and larger head of the rattlesnake. ***Note: This is true only of snakes native to California; it does not apply to exotic snakes or imported snakes.

What Do I Do For Initial First Aid?

Do not chase after the snake to identify it – that will only increase the blood flow and circulate the venom faster if it is a rattlesnake bite. Look at the wound instead. Rows of small tooth marks or lacerations normally show in the bite of a non-venomous snake, and a good antiseptic may be adequate treatment. If



the snake is venomous, there will usually be one or two fang punctures with possible smaller teeth marks.

Develop an Emergency Plan

Because most Californians live in rattlesnake country, a snakebite emergency plan should be developed before it is needed. If you are less than one hour from the nearest emergency room, initial treatment is relatively simple:

- STAY CALM** or calm the victim.
- Gently wash the area with soap and water.
- Apply a cold, wet cloth over the bite.
- Transport to the nearest emergency facility for further treatment.

If you will be **more than one hour** from an emergency facility, follow these guidelines:

- Know how long it will take 911 emergency responders to arrive on the scene.
- Always hike, camp, or work with a buddy who will be able to go for help.
- Take along a portable phone.
- Notify people where you will be and check in with them.

What Should NOT Be Done After A Rattlesnake Bite?

- DON'T apply a tourniquet.
- DON'T pack the bite area in ice.
- DON'T cut the wound with a knife or razor.
- DON'T use your mouth to suck out the venom.
- DON'T let the victim drink alcohol.
- DON'T apply electric shock.

These treatments will NOT help the victim and are dangerous. Applying ice or a tourniquet can block circulation, which can result in gangrene and eventual loss of the limb due to amputation. Cutting the wound can cause excessive bleeding. Because human mouths are full of bacteria, sucking the venom from the wound can cause infection, making treatment more difficult.

What About Snake Bite Kits?

Snakebite kits contain a syringe-like device that acts like a vacuum to extract venom from the wound. Snakebite kits remove less than half the venom injected into the wound; they are NOT a substitute for treatment in an emergency room.





What Symptoms Develop After A Rattlesnake Bite?

Fifty percent of the time, a rattlesnake may strike without injecting venom, inflicting what is called a "dry bite." Even though the victim is not poisoned, the painful bite can still become infected. All rattlesnake bites require medical attention in an emergency room. If a rattlesnake injects venom into the wound, watch for: swelling, pain, bleeding at the site, nausea, vomiting, sweating, chills, dizziness, weakness, numbness or tingling of the mouth or tongue, and changes in the heart rate and blood pressure. Other symptoms can include excessive salivation, thirst, swollen eyelids, blurred vision, muscle spasms, unconsciousness and difficulty with blood clotting.

What Is The Treatment For A Rattlesnake Bite?

Rattlesnake bites are a medical emergency and require immediate medical attention. Severe symptoms can be life-threatening and must be treated with antivenin, a prescription medication given intravenously with fluids. Other therapy may include antibiotics and a tetanus update.

What Can Be Done To Prevent A Bite?

Hands, feet, and ankles are the most common sites for rattlesnake bites.

- Wear hiking boots when walking in the rough. Avoid sandals or going barefoot.
- Stay on paths. Avoid tall grass, weeds and heavy underbrush where you can't see the ground.
- Use a walking stick — if you scare a snake, it can strike the stick instead of you.
- Look for concealed snakes before picking up rocks, sticks, or firewood.
- Check carefully around stumps or logs before sitting or stepping over them.
- When climbing, always look before putting your hands in a new location.
- Baby rattlesnakes are poisonous! They can and do bite. Leave them alone.
- Don't handle fresh killed snakes. You may still be bitten.
- Never tease a snake to see how far it can strike. You can be several feet from the snake and still be within striking distance.
- Always give snakes the right of way!