

# Specific Weather Related Information

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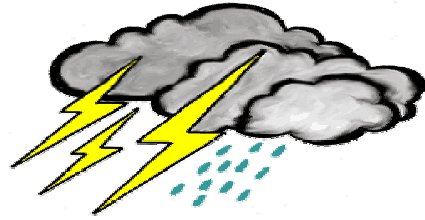
# Specific Weather Related Information

Weather is monitored closely by various government agencies. Severe weather should be taken seriously – it can be dangerous and harm both you and your property. Stay updated by watching TV or listening to the radio. The National Weather Service broadcasts forecasts, warnings and other information 24 hours a day. Special weather radios are available at local retail stores.

## Weather Service Glossary of Terms:

- **Winter Weather Advisory:** A minor accumulation of snow, sleet and freezing rain is expected.
- **Winter Storm Watch:** Significant accumulation of snow and/or ice is possible within 36 hours.
- **Winter Storm Warning:** A storm with six or more inches of snow/sleet/freezing rain within a 24-hour period is expected.
- **Freezing Rain Advisory:** Minor accumulation of ice due to freezing rain is expected.
- **Snow Advisory:** Accumulations of one to four inches expected within a 12-hour period.
- **Blizzard Warning:** Strong winds, blinding driven snow and dangerous wind chill are expected in the next several hours.
- **Severe Thunderstorm Watch:** There is potential for thunderstorms to form that can produce wind gusts greater than 58 mph and/or hail greater than ½ to 1 inch in diameter.
- **Severe Thunderstorm Warning:** A severe thunderstorm is occurring.
- **Tornado Watch:** A tornado could form in the next few hours.
- **Tornado Warning:** A tornado has been reported and/or the National Weather Service radar has detected a tornado or tornadic signature.
- **Flash Flood Watch:** Current or developing hydrologic conditions that are favorable for flash flooding in and close to the watch area, but the occurrence is neither certain or imminent.
- **Flash Flood Warning:** Flash flooding is in progress, imminent, or highly likely.
- For additional information visit the NWS website at
- [www.weather.gov](http://www.weather.gov)
- For additional weather glossary terms: <http://www.weca.org/nws-terms.html#winter>

# Thunderstorms, Flash Flooding & Tornadoes



## ***In A Thunderstorm:***

- Avoid handling metal pipes, working with electrical equipment, talking on the telephone, bathtubs, water faucets and sinks because lightning can follow the wires and pipes. Be especially careful with televisions.
- If there is a severe thunderstorm, take cover immediately in a stable facility.
- Lightening follows the path of least resistance. Avoid trees or other tall structures such as windmills, antenna towers or flag poles.
- Close all windows and doors.
- If in your car remain inside your vehicle.
- If you are hiking, avoid high points and evacuate off mountains.
- Severe weather and thunderstorms are associated with strong winds.
- Shutter or board windows if strong wind warning is issued.
- Secure outdoor objects such as lawn furniture or garbage cans that could blow away and cause damage or injury.
- Stay clear of downed power lines.
- In extreme conditions, consider shutting off power and appliance gas switches to prevent damage to your appliances.
- When venturing out of doors, dress appropriately.

## ***In A Flash Flood:***

- Seek high ground.
- Never attempt to drive your vehicle through standing or rushing water.
- If outside, avoid drainage ditches, gullies, creek beds and steep narrow canyons.
- If trapped, do not attempt to cross high water on your own. Seek a secure and stable place on high ground and shelter in place.
- Remain calm and be patient.

## ***In A Tornado:***

- Go to your basement or the lowest point of your residence.
- If you do not have a basement, retreat to the inner most portion of your home that offers the most protection. Cover yourself with a mattress to protect you from flying debris.
- If you are caught outside take cover in a ditch or other recessed area.
- If you are asked to evacuate, do so immediately.

- **To find out what to do before, during and after a tornado click on:**  
<http://www.redcross.org/services/disaster/keepsafe/tornado.html#before>  
Another resource is <http://www.spc.noaa.gov/faq/tornado/safety.html>



# Extreme Heat

During the summer months, California residents are especially vulnerable to the hazards created by hot weather. The asphalt, concrete and metal that make up our cities absorb heat and make it difficult to cool down at night. This is known as the “heat island effect”. In agricultural areas, workers are often exposed to long hours of direct sunlight

***People at risk for heat related illness include:***

- Those who work or exercise outdoors
- Athletes
- The elderly
- Young children
- Individuals with health problems
- Medical problems that lead to poor circulation
- Those who take diuretics

**Age plays a critical role in heat related illnesses:**

- Adults over age 60:
- Thirst trigger decreases
- Most seniors who drink only “when thirsty” are not getting enough fluids (90%).
- Under normal conditions, seniors need at least eight – 8 oz glasses of water daily.
- In warm weather, seniors may need to increase their water intake 3-4 times.
- Even mild excretion can cause dehydration just from breathing!

**H**eat waves are particularly dangerous for children, the elderly and the infirm. Please make sure to check on your neighbors and offer them assistance. The terms listed below describe the illnesses that extreme heat can cause. Heat-related illnesses can become medical emergencies – call 9-1-1, especially in the case of heat stroke.

## **Heat Cramps:**

### **CAUSE**

Usually seen with athletes or high output activity. A combination of factors contributes including heat, dehydration from excessive sweating or inadequate fluid intake or poor physical conditioning. Another factor in heat cramps seems related to excessive loss of salt as a result of heavy sweating or salt depletion from excessive fluid intake.

### **SYMPTOMS**

Painful cramps of the major muscle groups (arms, legs, or stomach)

### **TREATMENT FOR HEAT CRAMPS:**

- You can make your own salt solution for drinking by mixing 1/4 to 1/2 teaspoon table salt dissolved in a quart of water.
- Commercially available electrolyte beverages like Gatorade or sports drinks will provide adequate dietary salt intake.
- Salt tablets by themselves *should not* be used. They can cause stomach upset and don't adequately replace fluid volume lost.

## **Heat Exhaustion:**

### **CAUSE:**

Heat exhaustion (also known as heat prostration) occurs when body fluids are lost through heavy sweating due to vigorous exercise such as working in a hot, humid place. It can also be the result of our body's failure to acclimate to a sudden seasonal increase in temperature, most commonly during those "first hot days" of summer.

### **SIGNS & SYMPTOMS**

Can include any of the following: Sweating, paleness, weakness, nausea, cool moist skin, fatigue, headache, dizziness, light headedness, rapid, weak pulse and shallow breathing.

### **TREATMENT**

Allow body temperature to go down. Provide non alcoholic, non caffeinated fluids. Find a cool, shady place to lie down. Elevate feet with pillows. A cool, wet compress to the forehead, neck and armpits may also help cool the body. The person may feel cool, moist and appear pale. The condition usually self corrects as the body temperature returns to normal. When in doubt, call 911.

## **Heat Stroke:**

*Also called "sunstroke"*

### **CAUSE:**

The victim's temperature control system, which produces sweat to cool the body, stops working.

### **SIGNS AND SYMPTOMS:**

Hot, red and dry skin associated with some or all of the following symptoms... Headache, dizziness, confusion, delirium, unconsciousness, stroke like symptoms, seizures. Clue: Everyone *except* the patient is sweating!

### **TREATMENT:**

True life threatening emergency!!! **CALL 9-1-1.** Must cool immediately. Get to a cool place! If the patient is conscious, a cool shower, pool or even garden hose will help lower the patient's body temperature until paramedics arrive.

For more information on heat related injuries click on this link:

<http://www.emedicinehealth.com/articles/6209-1.asp>

## ***Follow These Tips To Stay Cool:***

- Stay out of the sun. Venture out in the early mornings or after sunset.
- Wear light colored, light weight cotton
- When in the sun, wear sunscreen (at least SPF 15).
- Give your body a chance to adjust to extreme temperature changes.
- Drink plenty of non-alcoholic, non caffeinated fluids. Make it a habit to drink water even when you are not thirsty.
- Use Fans and consider, consider awnings to shade windows.
- Covering yourself with a wet towel or taking a cool bath or shower may help
- Don't use oven or stove when temperatures are high
- At night, open windows, use fans, close up house in AM
- Keep drapes drawn to keep cool
- Consider going to public pools and air-conditioned stores and malls.

# National Weather Service

## Heat Terms:



- **Heat Wave:** Prolonged period of excessive heat often combined with excessive humidity.
- **Excessive Heat Watch:** A long-term alert for excessive heat.
- **Heat Index:** Number of degrees Fahrenheit that indicates how it feels when relative humidity is factored into air temperatures.
- **Ozone Advisory:** Issued when ozone levels are expected to exceed 0.08 parts per million of ozone over an eight-hour period. People should limit their outdoor activity and those with respiratory problems (such as asthma) should be especially careful and avoid strenuous activity.
- **Heat Advisory:** When the heat index exceeds 100°F for less than three hours a day for two consecutive days.
- **Excessive Heat Warning:** When the heat index is expected to exceed 115°F or when it exceeds 100°F for three or more hours for two consecutive days.

**Additional weather related terms go to:**

<http://www.weather.gov/glossary/>



# Extreme Cold & Freezing Weather

Parts of California are prone to extremely cold and freezing weather. Extended periods of extreme low temperatures can have an adverse effect on the plumbing of many residential homes and commercial buildings. In newer homes, the plumbing runs through the structure's attic. Under extended freezing temperatures, plumbing can burst causing significant water damage to a structure and the owner's belongings. During periods of freezing nighttime temperatures, property owners should leave a faucet on allowing water to trickle overnight thereby making water move through the structures pipes. Also, allowing the heat of the home to warm the attic further helps to avoid unnecessary and expensive damage from burst pipes.

Many residents have outside, stand alone water fixtures or faucets. To reduce the risk of pipe rupture, wrap exposed pipe and faucet with insulation. Home improvement stores have ready made insulation to wrap exposed pipes with. In a bind, any tightly wrapped material such as parts of an old blanket will work. Remember to leave the faucet on just a crack to keep water moving in the pipes.

## **Frostbite First Aid:**

- Shelter the victim from the cold and move the victim to a warmer place.
- Remove any constricting jewelry and wet clothing.
- Look for signs of hypothermia (lowered body temperature) and treat accordingly.  
**Signs and symptoms of hypothermia** can come on slowly and include:  
**Drowsiness, weakness and loss of coordination, pale and cold skin, confusion, uncontrollable shivering (although, at extremely low body temperatures, shivering may stop), slowed breathing or heart rate. If not treated promptly, lethargy, unconsciousness and death can occur.**
- DO NOT assume that someone found lying motionless in the cold is already dead.
- DO NOT use direct heat (such as hot water, a heating pad, or a heat lamp) to warm the person.
- Do NOT give the person alcohol!
- If frostbite is suspected, it is usually best to wrap the affected areas in sterile dressings (remember to separate affected fingers and toes) and transport the victim to an emergency department for further care.
- If immediate care is not available, re-warming first aid may be given. Immerse the affected areas in warm (never HOT) water—or repeatedly apply warm cloths to affected ears, nose, or cheeks—for 20 to 30 minutes. The recommended water temperature is 104 to 108 degrees Fahrenheit. Keep circulating the water to aid the warming process. Severe burning pain, swelling and color changes may occur during warming. Warming is complete when the skin is soft and sensation returns.
- Apply dry, sterile dressing to the frostbitten areas. Put dressings between frostbitten fingers or toes to keep them separated.
- Move thawed areas as little as possible. Re-freezing of thawed extremities can cause more severe damage. Prevent re-freezing by wrapping the thawed areas and keeping the victim warm. (<http://health.allrefer.com/health/frostbite-first-aid.html>)



# Floods

Floods are among the most frequent and costly natural disasters in terms of human hardship and economic loss. Knowing what to do before, during and after a flood is important to the safety of your family, home and economic security.

Historically, the valley regions of California have had to deal with floods and the threat of flooding since recorded time. Indian legends told of great floods in the Sacramento Valley that forced man and beast to coexist in the Sutter Buttes until floodwaters receded back within the riverbanks. Prior to the completion of Shasta and Oroville Dams, Northern California flooded regularly. In 1955 high water flooded Yuba City taking nearly two dozen lives. But Northern California has not been spared flooding since the completion of Shasta and Oroville Dams. Torrential rains on December 31, 1996 resulted in widespread flooding and the evacuations of thousand of residents of Butte, Colusa, Glenn, Siskiyou, Sutter, Tehama and Yuba Counties.

Floods are the most common and widespread of all natural hazards. Slow-rise floods develop over a period of days, but flash floods can result in raging waters in just a few minutes. Water runs off steeper ground very rapidly, causing natural drainage systems to overflow with rushing flood waters and a deadly cargo of rocks, mud, smashed trees and other debris. Remember – even very small streams, gullies, creeks, culverts, dry streambeds or low-lying ground that may appear harmless in dry weather can flood. Wherever you live, be aware of potential flooding hazards. If you live in a low-lying area, near water or downstream from a dam, you must be prepared for floods.

## **What to Do Before a Flood**

- Know the terms that warn of potential flooding conditions, which will be broadcast on radio and television.
- Flood forecasts mean rainfall is heavy enough to cause rivers to overflow their banks or melting snow is mixing with rainfall to produce similar effects.
- Flood warnings or forecasts of impending floods describe the affected river or lake, the severity of flooding (minor, moderate or major) and when and where the flooding will begin.
- Flash flood watches mean heavy rains are occurring or expected to occur that may cause sudden flash flooding in specified areas. Be alert to the possible emergency, which will require immediate action.

- Flash flood warnings are announced when flash flooding is occurring or imminent along certain streams and designated areas. Immediate action to reach a place of safety must be taken by those threatened.
- Keep a stock of food that requires no cooking or refrigeration.
- Store drinking water in clean, closed containers, a minimum of 1 gallon per person/day.
- Remember, your electric power, gas and water services may be disrupted. Keep a portable, battery-operated radio, emergency cooking equipment and flashlights in working order; stock extra batteries.
- Have on hand first aid supplies and any medicines your family may need. Consult the “Get Ready” section for recommended Emergency Supply and Go Bag checklists.
- Find out if you live in a flood-prone area and what the average flood depths in your community are.
- You may need to store materials like sandbags, plywood, plastic sheeting and lumber to protect your house from floodwaters and to make quick repairs after a severe storm. Sand and sandbags may be available at designated city or county facilities during heavy storms and times of flood threats. Contact your local public works department for more information.
- Identify dams in your area. Be aware of what could happen if they fail.
- Contact your local Office of Emergency Services or public health department about local emergency action plans.
- Learn where to find alternate shelter in the event an evacuation is ordered. Be prepared for evacuation.
- Listen to your radio for emergency messages from the Emergency Alert System.
- Know the elevation of your property in relation to nearby streams, rivers and dams so that you will know if the flood elevations forecast will affect your home and property. If you have a GPS system or know someone who does, a GPS can be used to give you an approximate elevation.
- The flood warning stages are reported by elevation (feet) above sea level. For current river level and flood information go to:  
<http://cdec.water.ca.gov/river/rivcond.html> or [www.cnrfc.noaa.gov](http://www.cnrfc.noaa.gov)
- Contact your insurance agent or local government to discuss flood insurance coverage.
- Flood losses are not covered under normal homeowner’s insurance policies. Flood insurance is available through the National Flood Insurance Program. If you live in a flood prone area, get coverage early – there is usually a waiting period before it takes effect.

**If You Are Advised To Evacuate:**

## **Evacuation Orders**

You will often hear the terms Voluntary and Mandatory to describe evacuation orders, however, local jurisdictions may use other terminology such as Precautionary and Immediate Threat. These terms are used to alert you to the significance of the danger and

ALL evacuation instructions provided by officials should be followed immediately for your safety.

## The Law

Whenever a menace to the public health or safety is created by a calamity such as flood, storm, fire, earthquake, explosion, accident, or other disaster, officers of the law may close the area where the menace exists. [Penal Code 409.5 (a)]

Any unauthorized person who willfully and knowingly enters an area that has been closed and who willfully remains within the area after receiving notice to evacuate or leave shall be guilty of a misdemeanor. [Penal Code 409.5 (c)].

## What to do if a flood is imminent:

The amount of time you will have to evacuate your home or community depends on the disaster. If you receive an order for immediate evacuation do not delay. This means you must prepare yourself now, because once you need to evacuate, it may be too late to collect even the most basic necessities.

- Slow-rise floods may allow for a few hours to prepare to evacuate, while hazardous materials accidents or terrorist attacks may allow you only moments to leave.
- Secure your home before leaving. If you have the time, move essential items and furniture to the upper floors or above potential floodwaters.
- Lock doors and windows.
- Turn off utilities at the main switches or valves. Disconnect electrical appliances,

***DO NOT touch any electrical equipment  
if you are wet or standing in water.***

- Make sure you maintain the fuel in your escape vehicle at a minimum of half a tank, preferably full. During emergencies, filling stations may not be operating.
- Follow recommended evacuation routes. Do not try to find shortcuts on your own.
- Leave early enough to avoid being marooned by flooded roads. Be on the alert for washed out roadways and bridges. Many roads parallel streams and other drainage channels and may be swept away or covered by floodwaters.
- Avoid driving through flooded intersections. Overwhelmed storm drainage lines can cause manhole covers to be dislodged. If you drive into one of these open service access holes, your vehicle may incur severe body and suspension damage.
- Don't drive into flooded areas. It only takes a few inches of rapidly moving water to knock you off your feet or sweep your car off the roadway.

- Leave a note on your house to advise authorities that you have evacuated. Also click on *Tips for Pet Owners in the “Get Ready” and “Fire” Sections*.
- Monitor your local radio station for information on evacuation routes and emergency shelter location.
- For additional flood planning and preparedness information:  
<http://www.nws.noaa.gov/om/brochures/ffbro.htm>

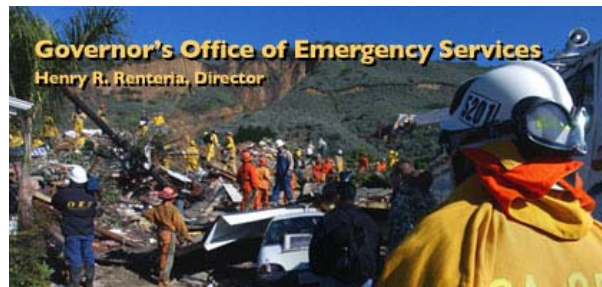
Evacuation periods can last for hours or several days. For part, or all, of this time, you may be responsible for your own food, clothing and other supplies until help arrives or utilities are repaired. Some mass shelters, such as those operated by the Red Cross, will be prepared to feed and house you and your family.

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