



California Cadet Corps Curriculum on Citizenship



“Disasters happen. Prepare Now, Learn How”

C5/A: California Disasters



CALIFORNIA DISASTERS

AGENDA

A1. Emergency Alerts

A2. Active Shooter

A3. Attacks in Public Places

A4. Cyber Attacks

A5. Drought

A6. Earthquakes

A7. Extreme Heat

A8. Floods

A9. HAZMAT Incidents

A10. Home Fires



CALIFORNIA DISASTERS AGENDA

A11. Household Chemical Emergencies

A12. Civil Unrest

A13. Landslides & Debris Flow

A14. Pandemic

A15. Power Outages

A16. Snowstorms & Extreme Cold

A17. Thunderstorms & Lightning

A18. Volcanoes

A19. Wildfires

A20. Recovering from Disaster



CALIFORNIA DISASTERS: UNIT OBJECTIVES

The desired outcome of this unit is for cadets to be familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

1. Describe the Emergency Alert System and options available for US residents.
2. Identify key elements of preparedness for active shooter incidents.
3. Identify key elements of preparedness for attacks in public places.
4. Identify key elements of preparedness for cybersecurity situations.
5. Identify key elements of preparedness for and response to drought.
6. Identify key elements of preparedness for earthquakes.
7. Identify key elements of preparedness for extreme heat.
8. Identify key elements of preparedness for floods.
9. Identify key elements of preparedness for HAZMAT incidents.
10. Identify key elements of preparedness for home fires.



CALIFORNIA DISASTERS: UNIT OBJECTIVES

11. Identify key elements of preparedness for household chemical emergencies.
12. Identify key elements of preparedness for staying safe during civil unrest.
13. Identify key elements of preparedness for landslides & debris flow.
14. Identify key elements of preparedness for pandemic.
15. Identify key elements of preparedness for power outages.
16. Identify key elements of preparedness for snowstorms & extreme cold.
17. Identify key elements of preparedness for thunderstorms & lightning.
18. Identify key elements of preparedness for volcanoes.
19. Identify key elements of preparedness for wildfires.
20. Identify key elements in recovering from disaster.



CALIFORNIA DISASTERS: EMERGENCY ALERTS

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A1. Describe the Emergency Alert System and options available for US residents.

Essential Question: How does the Emergency Alert System notify the public of emergencies, and how do people access the information?



IPAWS

- Integrated Public Alert & Warning System
- Run by Federal Emergency Management Agency (FEMA)
- Nation's alert & warning infrastructure
- Provides the public with life-saving information quickly
- Uses the EAS, WEA, NOAA Weather Radio, and other public alerting systems





EAS

Emergency Alert System

- **Wireless Emergency Alerts** – how public safety officials alert the public to serious emergencies, sent out by:
 - National Weather Service
 - National Center for Missing & Exploited Children
 - President of the United States
- Three Alert Categories:
 - Imminent threat
 - AMBER
 - Presidential
- Comes automatically to your mobile device
- Sent as a text message with a warning alert tone & vibration; may contain links to more information
- No need to subscribe; no charge for service



Emergency Alert System

- Allows the President to address the American people within 10 minutes during a national emergency
- Sent through broadcasters, satellite providers, cable TV systems, wireless cable systems
- May also be used by state & local authorities
 - Weather info, imminent threats, AMBER Alerts
 - May be opt-in at the local level
- May be used when all other means are unavailable
- Available in English and Spanish



Wireless Emergency Alerts

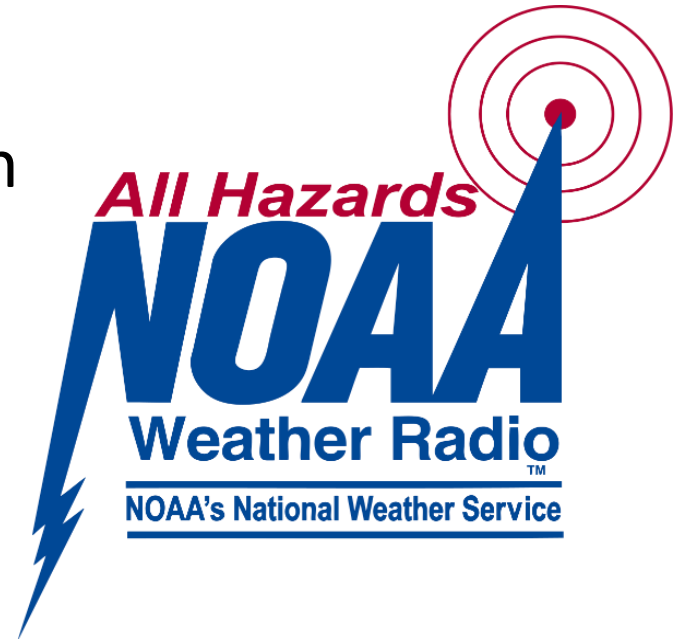
You may not receive a WEA if:

- Inadequate cell reception
 - Mobile device is turned off or on airplane mode
 - You have opted out (setting on device)
 - Very old phone (pre-2012)
-
- Notifications don't interrupt active calls or data sessions, but you should receive the WEA after completing your call/session



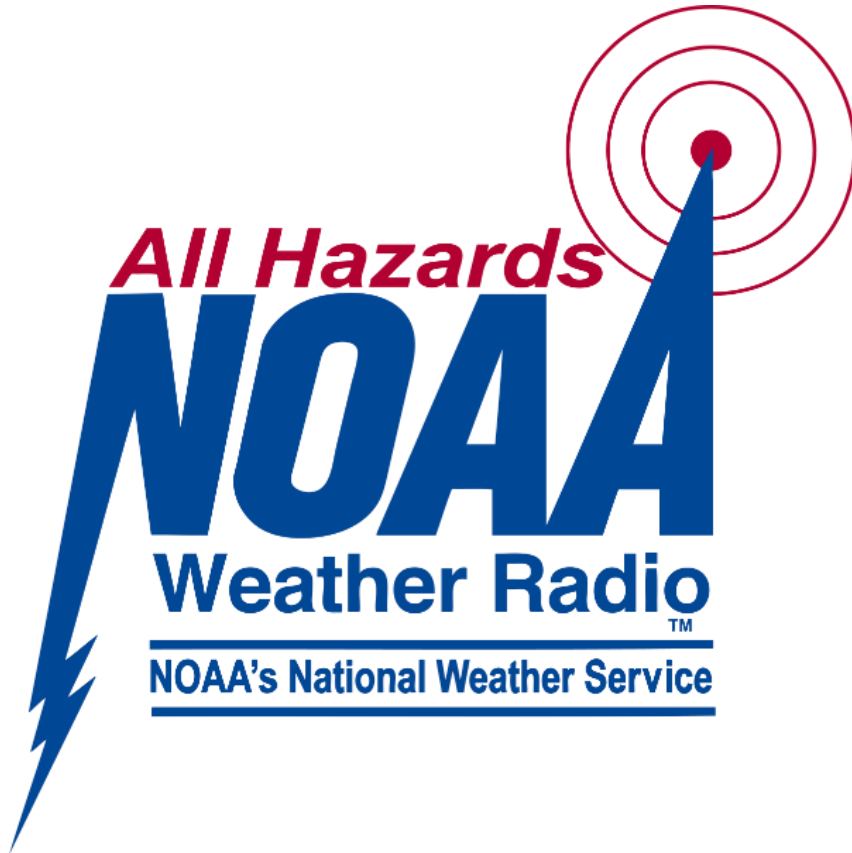
NOAA Weather Radio

- Nationwide network of radio stations that broadcast continuous weather information from the nearest National Weather Service office
- Broadcast official warnings, watches, forecasts and other hazard information 24-7
- Broadcast non-weather emergency messages from Emergency Alert System





NOAA Weather Radio



- Hurricane and Tsunami Warnings;
- Tornado and Flash Flood Warnings; and
- Typhoon, Dust Storm, Extreme Wind, Storm Surge, and Snow Squall Warnings.



CHECK ON LEARNING



1. What federal agency has primary responsibility for IPAWS and EAS?
2. Name two agencies that you might receive an EAS message from.
3. Do you have to opt in to receive messages?
4. When is the Emergency Alert System operational?



CALIFORNIA DISASTERS: ACTIVE SHOOTER

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A2. Identify key elements of preparedness for active shooter incidents.

Essential Question: What are the three options to consider during an active shooter incident?



ACTIVE SHOOTER RESPONSE

LEARN HOW TO SURVIVE A SHOOTING EVENT



RUN



HIDE



FIGHT

CALL 911 ONLY WHEN IT'S SAFE TO DO SO



Be Informed & Prepared

- Participate in active shooter training
- If you see something, say something right away
- Receive emergency alerts
- Situational Awareness of your environment and any possible dangers
- Have a plan with your family & know what to do



Be Aware

For places you spend time at (school, the mall, popular venues):

- Know where the nearest exits are (ideally two)
- Have an escape path in mind
- Identify places you could hide if necessary



Run

RUN and escape if possible.

- Top priority is getting away from the shooter
- Leave your belongings behind
- Help others escape, if possible
- Warn and prevent individuals from entering the area
- Call 9-1-1 when you are safe





HIDE



HIDE if escape is not possible

- Get out of the shooter's view, behind protective cover
- Stay very quiet
- Silence electronic devices
- Lock & bolt doors, close blinds, & turn off lights
- Spread out; don't hide in groups
- Communicate with police by text or put a sign in a window
- Stay in place until law enforcement all clear



FIGHT

FIGHT as an absolute last resort

- Commit to your actions
- Act as aggressively as possible against the shooter
- Recruit others to help fight
- Use makeshift weapons like chairs, fire extinguishers, scissors, books, etc.
- Be prepared to cause severe or lethal injury to the shooter
- Throw items and improvise weapons to distract and disarm the shooter





After

- Keep hands visible and empty
- Obey police commands & follow instructions
- Take care of yourself, then you may be able to help the wounded before aid arrives
- Get injured to safety if they're in immediate danger
- Seek professional help to cope if needed





CHECK ON LEARNING



1. What are your three options, in order?
2. What's important to remember about your phone?
3. If you're in a classroom at school, what should you do?



CALIFORNIA DISASTERS: ATTACKS IN PUBLIC PLACES

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

.

Plan of Action:

A3. Identify key elements of preparedness for attacks in public places.

Essential Question: How do you protect yourself during a mass attack?



Mass Attacks

Rare, but unfortunately, mass attacks happen when assailants:

- Use weapons to attack crowds.
- Target less protected indoor or outdoor spaces.
- Intend to harm multiple victims.
- Use the attack(s) to intimidate.
- Are not uncommon in California
- Can use makeshift or modern weapons.

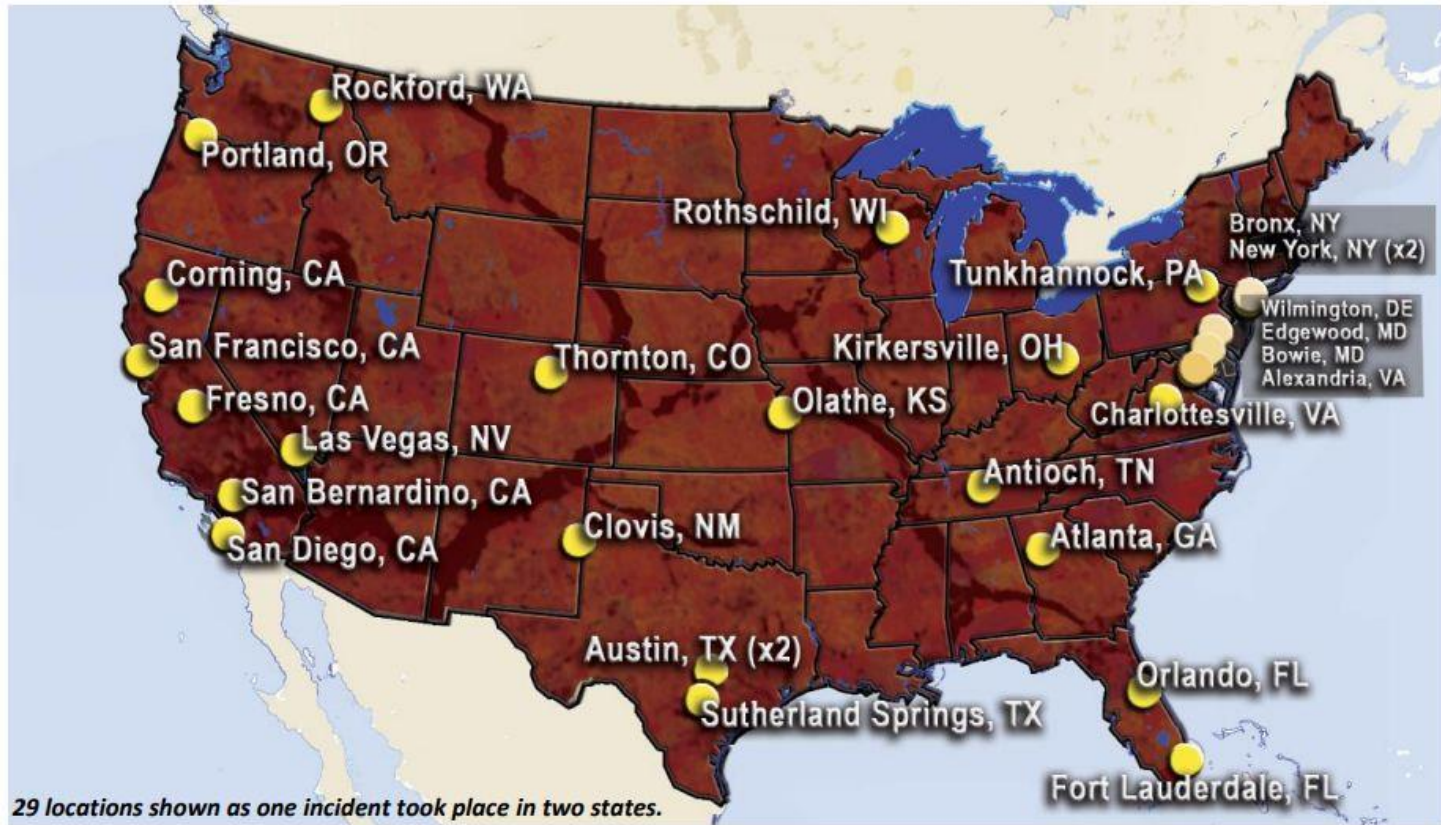


Examples

DATE	PLACE	DEAD	INJURED	TOTAL
• Dec 2019	Pensacola, FL	4	8	12
• Nov 2019	Fresno, CA	4	6	10
• Nov 2019	Santa Clarita, CA	3	6	9
• Oct 2019	Orinda, CA	5	4	9
• Aug 2019	Midland, TX	8	25	33
• Aug 2019	Dayton, OH	10	27	37
• Aug 2019	El Paso, TX	23	23	46
• Jul 2019	Gilroy, CA	4	15	19
• Oct 2017	Las Vegas, NV	59	422	481
• Dec 2016	San Bernardino, CA	16	22	38



Mass Attacks





Types of Attacks

- Active shooter: Individuals using firearms to cause mass casualties.
- Intentional Vehicular Assault (IVA): Individuals using a vehicle to cause mass casualties.
- Improvised Explosive Device (IED): Individuals using homemade bombs to cause mass casualties.
- Other methods of mass attacks may include knives, fires, drones or other weapons.





Protect Yourself

- Stay alert
- Seek safety
- Cover and hide
- Defend yourself
- Help the wounded
- If you see something, say something





Protect Yourself

- Observe warning signs
- Be alert to your surroundings
- Have an Exit Plan
- Plan to seek cover for protection
- Learn lifesaving skills
- Organize & participate in safety drills



CHECK ON LEARNING



1. T / F Mass attacks happen, but rarely in places we might go in California
2. Name two ways murderers try to kill large numbers of people (types of attack)
3. If you notice something that strikes you as odd, troubling, or out of place, what should you do?



CALIFORNIA DISASTERS: CYBER ATTACKS

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A4. Identify key elements of preparedness for cybersecurity situations.

Essential Question: What are the common types of cyber attack, and how do you prevent becoming the victim of one?



Cyber Attacks

Cyberattacks are malicious attempts to access or damage a computer system. Cyberattacks can lead to loss of money, theft of personal information and damage to your reputation and safety.





Cyber Attacks

- Can use computers, mobile phones, gaming systems and other devices.
- Can include identity theft.
- Can block your access or delete your personal documents and pictures.
- Can target children.
- Can cause problems with business services, transportation, and power.



Types of Cyber Attack

- Phishing
- Malware
- Man-in-the-Middle (MITM)
- Denial of Service (DoS)
- SQL Injected Attack
- CrossSite Scripting (XSS)
- Rogue Security Software
- Drive-By Downloads
- Password Attacks



Cyber Security



Cybersecurity involves preventing, detecting, and responding to cyberattacks that can have wide-ranging effects on individuals, organizations, the community and at the national level.



Protect Yourself

- Keep software and operating systems up to date
- Use strong passwords and two-factor authentication (two methods of verification).
- Watch for suspicious activity. When in doubt, don't click. Do not provide personal information.
- Use encrypted (secure) Internet communications.
- Create backup files.
- Protect your home and/or business WiFi network.





CHECK ON LEARNING



1. T / F Cyber attacks are an inconvenience, but can't really harm you
2. Name three types of cyber attack
3. Name three ways you can protect yourself from cyber attack



CALIFORNIA DISASTERS: DROUGHT

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A5. Identify key elements of preparedness for and response to drought.

Essential Question: What are proven ways to conserve water, and why is it important to do so?



Drought

- Nearly every part of the US experiences periods of reduced rainfall.
- California has experienced long periods of drought, interspersed with brief (one or two seasons) wet years
- Wet or normal years usually associated with El Niño



Draught in California

Drought Yrs in CA

1917-21

1922-26

1928-37

1943-51

1959-62

1976-77

1987-92

2006-10

2011-2019

55 of these 103 years were periods
of draught!





Drought in California

- Precipitation limited to winter months
- Cycles of very dry, then very wet years
- Few large-scale water projects since 1979
- Inefficient distribution systems
- Flood Control takes priority
 - Can't use reservoirs for long-term storage
 - Big storms bring vast amounts of water, absorbed in reservoirs, go to ocean through rivers



Conserve Water!

- Plant native or drought tolerant plants
- Don't buy water toys using constant water stream
- Use rainwater harvesting
- Don't water paved areas
- Check sprinkler timing
- Keep a higher cut of grass (3" on mower blade)
- Turn off sprinklers in rainy season
- Cover pools & spas to reduce evaporation



Conserve Water!

- Take short showers
- Wash dishes using two containers – 1 for soapy water, 1 w/rinse water + bleach
- Don't let tap run to wait for cold/hot water
- Don't rinse dishes before putting in dishwasher
- Operate clothes washers only when fully loaded; set the water level for the size of load
- Use a commercial car wash that recycles water



Conserve Water!

- Water in early morning or evening
- Water in shorter sessions; don't allow runoff
- Don't clean cement areas with hose – use a broom
- In extreme drought, allow lawns to die in favor of preserving trees & large shrubs



Conserve Water!

- Save unused water for plants or toilet
- Fix dripping faucets, leaks
- Install instant water heater for sink (Instahot)
- Insulate pipes
- Choose appliances that are water efficient
- Use a low-volume toilet; flush only when necessary (yellow-mellow; brown-down)
- Displace water in toilet tank
- Use ultra-low flow showerhead
- Throw food in garbage can, not garbage disposal



CHECK ON LEARNING



1. T / F California is in drought at least half the time
2. Why don't our reservoirs allow us to store water on a long-term basis?
3. Name five things you can do to conserve water.



CALIFORNIA DISASTERS EARTHQUAKES

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A6. Identify key elements of preparedness for earthquakes.

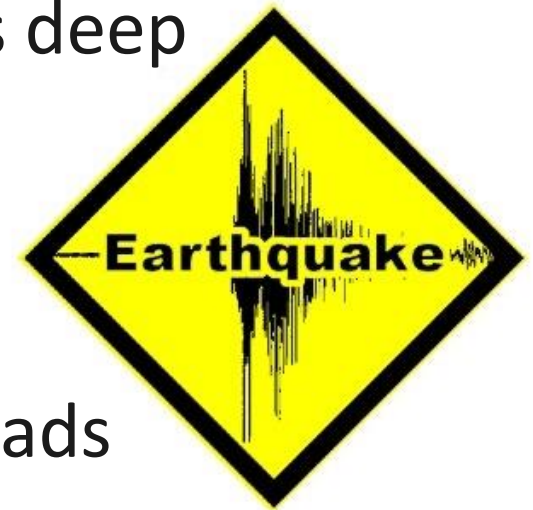
Essential Question: How do you prepare for earthquakes, and what do you do when an earthquake hits?



Earthquakes

An earthquake is a sudden, rapid shaking of the ground caused by the shifting of rocks deep underneath the earth's surface.

- No warning
- Can result in injuries
- Can cause damage to property & roads
- Can cause fires, tsunamis, landslides, or avalanches
- California is a state with a LOT of earthquakes





Protect Yourself During Earthquakes!

**IF
POSSIBLE**





Drop! Cover! Hold On!

- Wherever you are, drop down onto your hands & knees
- Cover your head & necks with your arms
- Crawl under a sturdy table or desk if possible
- If no shelter is nearby, crawl next to an interior wall, away from windows
- Hold on with one hand
- Be ready to move if the shelter moves





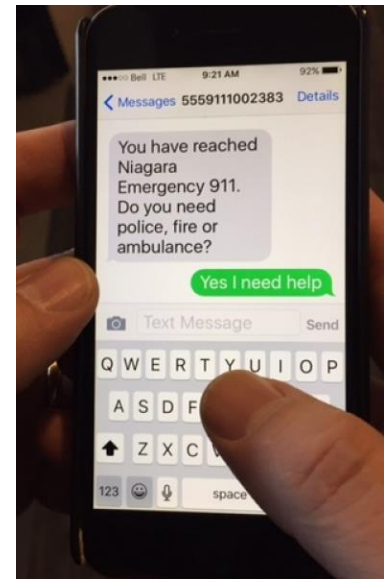
Prepare for Earthquakes

- Practice Drop, Cover, & Hold On
- Secure heavy items to walls (bookcases, refrigerators, TVs)
- Store heavy/breakable objects on low shelves
- Have a family emergency communications plan
- Keep food & water for 3 days sheltering at home
- If your building needs structural improvements, make them



If Affected

- Expect aftershocks
- Give yourself first aid if needed
- Move away from damaged buildings
- If trapped, protect your mouth, nose, & eyes from dust. Send a text, bang on a pipe or wall or blow a whistle
- Choose texts over phone calls
- Listen to emergency radio





CHECK ON LEARNING



1. You've dropped to your knees during a strong earthquake. What do you do next?
2. How do you prevent bookcases from falling over?
3. If there was a strong earthquake that caused damage to your house, what should you do?



CALIFORNIA DISASTERS

EXTREME HEAT

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A7. Identify key elements of preparedness for extreme heat.

Essential Question: How do you mitigate extreme heat, and what are the symptoms and treatment for the three types of heat injury?



Extreme Heat



- Extreme heat is a period of high heat and humidity with temperatures above 90 degrees for at least two to three days.
- Many of us live in extreme heat for a good portion of the year.
- In extreme heat your body works extra hard to maintain a normal temperature, which can lead to death. In fact, extreme heat is responsible for the highest number of annual deaths among all weather-related hazards.



In an Extreme Heat Warning:

- Find air conditioning
- Avoid strenuous activities
- Wear light clothing
- Check on family members and neighbors
- Drink plenty of fluids
- Watch for heat cramps, heat exhaustion and heat stroke
- Never leave people or pets in a closed car.





Avoid the Heat

- Find places in your community where you can go to get cool
- Keep your home cool:
 - Cover windows with drapes or shades.
 - Weather-strip doors and windows.
 - Use window reflectors, such as aluminum foil-covered cardboard, to reflect heat back outside.
 - Add insulation to keep the heat out.
 - Use attic fans to clear hot air.
 - Install window air conditioners and insulate around them.
- Learn to recognize the signs of heat-related illness.



Heat Cramps

- Symptoms: Muscle pains or spasms in the stomach, arms, or legs
- Treatment:
 - Go to a cooler location
 - Remove excess clothing
 - Take sips of cool sports drinks with salt & sugar
 - Get medical help if cramps last more than an hour





Heat Exhaustion



- Symptoms: Heavy sweating, paleness, muscle cramps, tiredness, weakness, dizziness, headache, fainting, nausea, vomiting
- Treatment:
 - Go to an air-conditioned place and lie down
 - Loosen or remove clothing
 - Take a cool bath
 - Take sips of cool sports drink with salt and sugar
 - Get medical help if symptoms get worse or last more than an hour



Heat Stroke

- Symptoms:
 - Extremely high body temperature ($>103^{\circ}$)
 - Red, hot and dry skin with no sweat
 - Rapid, strong pulse
 - Dizziness, confusion or unconsciousness
- Treatment: Call 911 or get the person to a hospital immediately. Cool down with whatever methods are available until medical help arrives.





CHECK ON LEARNING



1. Extreme heat is when temperatures are above _____ degrees for at least 2-3 days.
2. Name five things you should do in extreme heat.
3. Which heat injury is characterized by little or no sweating?



CALIFORNIA DISASTERS FLOODS

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A8. Identify key elements of preparedness for floods.

Essential Question: What measures do you take to prepare for and survive a flood?



Flooding

- Flooding is a temporary overflow of water onto land that is normally dry.
- Floods are the most common natural disaster in the United States.
- Failing to evacuate flooded areas or entering flood waters can lead to injury or death.





Floods

- Result from rain, snow, coastal storms, storm surges and overflows of dams and other water systems.
- Develop slowly or quickly. Flash floods can come with no warning.
- Cause outages, disrupt transportation, damage buildings and create landslides.





Floods

FLOOD SAFETY

- ***Don't walk or drive through flood waters***
- ***Get to higher ground***
- ***Stay away from power lines and wires***
- ***Don't park your vehicle near streams or creeks***

AVE 3 NEWS STORM TRACKING TEAM

- If you are under a flood warning, find safe shelter right away!
- Do not walk, swim, or drive through flood waters. Turn Around, Don't Drown!
- Stay off of bridges over fast-moving water
- Depending on the type of flooding:
 - Evacuate if told to do so
 - Move to higher ground or a higher floor
 - Stay where you are



Prepare

- Know the flood risk in your area
- If flash flooding is a risk, monitor potential signs, such as heavy rain
- Learn and practice evacuation routes, shelter plans, and flash flood response
- Keep important documents in a waterproof container
- Protect your property. Move valuables to higher levels
- Declutter drains and gutters



Survive

- Go to the safe location in your plan
- Evacuate immediately if told to
- Listen to EAS, NOAA Weather Radio
- Don't go through flood waters
- Stay off bridges over fast-moving water
- If your car is trapped in rapidly moving water, stay inside. If water is rising inside the car get on the roof.
- If trapped in a building, go to the highest level
- Don't climb into a closed attic



Survive

- Only go to the roof if necessary
- Return home only when authorities say it is safe
- Avoid driving except in emergencies
- Wear heavy gloves and boots during clean-up (snakes, etc.)
- Be aware of electrocution risk. Don't touch electrical equipment if it's wet or you're standing in water
- Avoid wading in floodwater





CHECK ON LEARNING



1. Do floods develop slowly or quickly?
2. Do not walk, swim, or drive through flood waters. Turn _____, Don't _____!
3. What should you wear during clean-up to protect yourself?



CALIFORNIA DISASTERS HAZMAT INCIDENTS

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A9. Identify key elements of preparedness for HAZMAT incidents.

Essential Question: How do you prepare for and avoid HAZMAT incidents, and what do you do if nearby when one takes place?



HAZMAT Incidents

- Hazardous materials can include explosives, flammable and combustible substances, poisons and radioactive materials.
- Emergencies can happen during production, storage, transportation, use or disposal.
- You are at risk when chemicals are used unsafely or released in harmful amounts where you live, work or play.





Prepare

- Know about local sites with HAZMAT potential
- Be prepared to evacuate
 - Make a Family Emergency Plan
 - Have an Emergency Supply Kit
- Know how to operate your home's ventilation system
- Read about sheltering in place:
<https://www.ready.gov/shelter>



If Asked to Evacuate

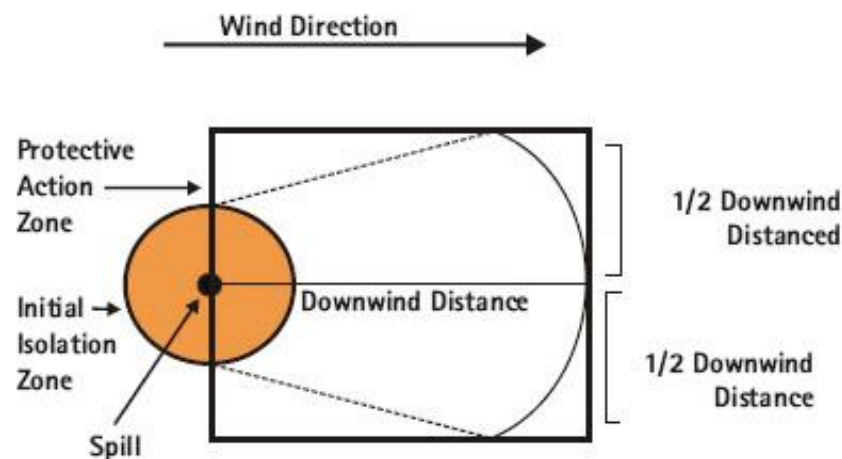
- Do so immediately
- Listen to radio or TV for info on routes, shelters, and procedures
- Time permitting, minimize contamination by closing all windows, vents, and attic fans
- Take pre-assembled disaster supplies
- Help your neighbors





If Caught Outside

- Stay upstream, uphill, and upwind
- Try to go at least a half mile from the danger
- Don't touch spilled liquids, airborne mists or condensed solid chemical deposits.
- Try not to inhale gasses, fumes, or smoke
- Cover mouth with a cloth or mask
- Stay away from accident victims until the hazardous material has been identified





If In a Car

- Stop and seek shelter in a permanent building
- If you must remain in your car, keep car windows and vents closed and shut off the air conditioner and heater





If Asked to Stay Indoors

- Bring pets inside
- Close & lock all exterior doors & windows
- Close vents, fireplace dampers, interior doors
- Turn off air conditioners & ventilation systems
- If gas gets inside, take shallow breaths through a cloth or towel
- Avoid food or drink that may be contaminated
- Go to your pre-selected shelter room
- Seal gaps under & around doors, vents, windows



After a HAZMAT Incident

- Listen to local radio or TV for information
- Go to public shelter if told to evacuate
- Follow decontamination instructions
- Seek medical treatment for unusual symptoms
- Put exposed clothing in sealed containers
- Return home only when authorities say it's safe
- Report any lingering vapors/hazards to local EMS



CHECK ON LEARNING



1. When protecting your house from contamination, what do you seal off?
2. T / F If caught out in a car during an incident, and you can't get away from the area, you should seek shelter in a permanent building.
3. If you think there may be gas in the air, breath shallowly through _____.



CALIFORNIA DISASTERS HOME FIRES

OBJECTIVES

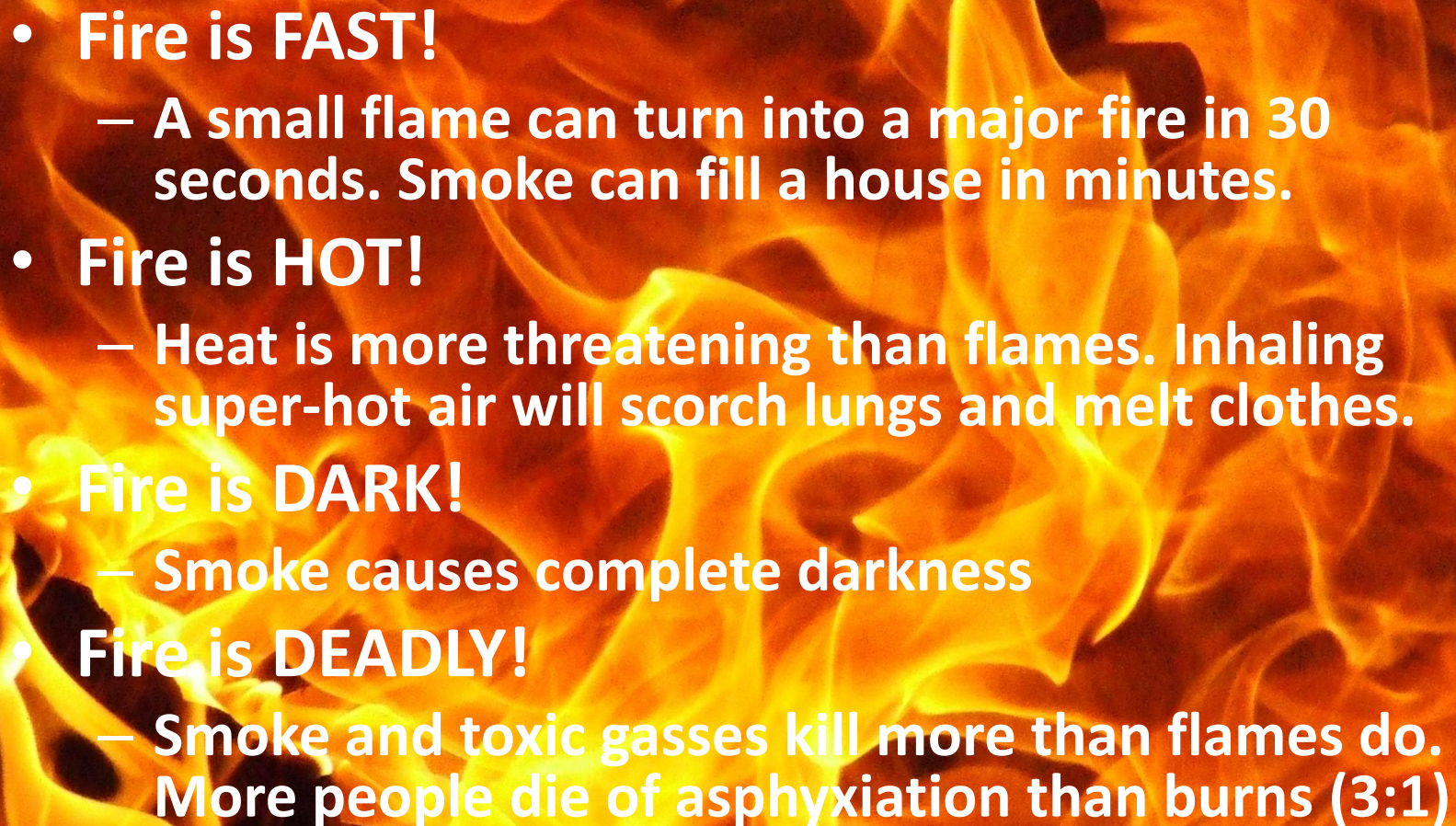
DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A10. Identify key elements of preparedness for home fires.

Essential Question: How do you prevent fires in the home, and how do you safely escape if fire strikes?

- 
- **Fire is FAST!**
 - A small flame can turn into a major fire in 30 seconds. Smoke can fill a house in minutes.
 - **Fire is HOT!**
 - Heat is more threatening than flames. Inhaling super-hot air will scorch lungs and melt clothes.
 - **Fire is DARK!**
 - Smoke causes complete darkness
 - **Fire is DEADLY!**
 - Smoke and toxic gasses kill more than flames do. More people die of asphyxiation than burns (3:1)



Be Prepared

- Find two ways to exit each room
- Consider windows & collapsible ladders
- Make sure windows aren't stuck shut, screens remove easily, and security bars can be opened
- Practice feeling your way out of the house with your eyes closed
- Teach children not to hide from firefighters





Smoke Alarm Safety



- Use both ionization AND photoelectric smoke alarms
- Test batteries monthly
- Replace batteries in battery-powered and hard-wired smoke alarms at least once a year (except lithium batteries)
- Install smoke alarms on every level of your home, including the basement, both inside and outside of sleeping areas.
- Replace the entire smoke alarm unit every 8-10 years or according to manufacturer's instructions
- Never disable a smoke alarm while cooking – it can be a deadly mistake.



During a Fire



- Crawl low under any smoke to your exit
- Before opening a door, feel the doorknob. If it's hot or there's smoke, use alternate exit
- Open doors slowly, ready to shut quickly
- Tell firefighters about people & pets inside
- If you can't get out, close the door, cover vents & cracks around doors, call 911, & signal for help at the window



Stop, Drop, & Roll

- If your clothes catch fire, stop, drop, and roll:
 - Stop immediately
 - Drop to the ground and cover your face with your hands
 - Roll over and over or back and forth until the fire is out.
- If you or someone else cannot stop, drop, and roll, smother the flames with a blanket or towel.
- Use cool water to treat the burn immediately for three to five minutes
- Cover with a clean, dry cloth
- Get medical help right away by calling 9-1-1 or the fire department.





Fire Safety Hints

Cooking



- Stay in the kitchen when you are frying, grilling or broiling food. If you leave the kitchen for even a short period of time turn off the stove.
- Wear short, close-fitting or tightly rolled sleeves when cooking.
- Keep children away from cooking areas by enforcing a "kid-free zone" of three feet around the stove.
- Position barbecue grills at least 10 feet away from siding and deck railings, and out from under eaves and overhanging branches.



Fire Safety Hints Smoking

- Smoke outside and completely stub-out butts in an ashtray or a can filled with sand.
- Soak cigarette butts and ashes in water before throwing them away. Never toss hot cigarette butts or ashes in the trash can.
- Never smoke in a home where oxygen is used, even if it is turned off. Oxygen can be explosive and makes fire burn hotter and faster.
- Be alert – don't smoke in bed! If you are sleepy, have been drinking or have taken medicine that makes you drowsy, put your cigarette out first.





Fire Safety Hints

Electrical & Appliances



- Frayed wires can cause fires. Replace all worn, old or damaged appliance cords immediately and do not run cords under rugs or furniture.
- If an appliance has a three-prong plug, use it only in a three-slot outlet. Never force it to fit into a two-slot outlet or extension cord.
- Immediately shut off, then professionally replace, light switches that are hot to the touch and lights that flicker.



Fire Safety Hints

Portable Space Heaters

- Keep combustible objects at least three feet away from portable heating devices.
- Buy only heaters evaluated by a nationally recognized laboratory, such as Underwriters Laboratories (UL).
- Check to make the portable heater has a thermostat control mechanism and will switch off automatically if the heater falls over.
- Only use crystal clear K-1 kerosene in kerosene heaters. Never overfill it. Use the heater in a well-ventilated room.





Fire Safety Hints

Fireplaces & Woodstoves



- Inspect and clean woodstove pipes and chimneys annually and check monthly for damage or obstructions.
- Use a fireplace screen heavy enough to stop rolling logs and big enough to cover the entire opening of the fireplace to catch flying sparks.
- Make sure the fire is completely out before leaving the house or going to bed.



Fire Safety Hints Children

- Take the mystery out of fire play by teaching children that fire is a tool, not a toy.
- Store matches and lighters out of children's reach and sight, preferably in a locked cabinet.
- Never leave children unattended near operating stoves or burning candles, even for a short time.





CHECK ON LEARNING



1. What kills more people in fires, smoke & toxic gasses or burns?
2. What should you do if your clothes catch fire?
3. What's the rule about 3-prong plugs?



CALIFORNIA DISASTERS

HOUSEHOLD CHEMICAL EMERGENCIES

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A11. Identify key elements of preparedness for household chemical emergencies.

Essential Question: What are common guidelines for using and storing household chemicals, and who do you contact if someone is exposed to potentially dangerous chemicals?



Hazardous Household Chemicals

- Aerosol cans (including hair spray and deodorant)
- Nail polish and nail polish remover
- Cleaning products and furniture polishes
- Pesticides
- Automotive products (like antifreeze or motor oil)
- Miscellaneous items (like batteries, mercury thermometers and florescent light bulbs)
- Flammable products (like kerosene, home heating oil, propane tanks and lighter fluid)
- Workshop or painting supplies (such as paint thinners and turpentine)
- Lawn and garden products (like herbicides and insecticides)





General Rules

- Keep in original containers and never remove the labels
- Never store hazardous products in food containers.
- Never mix household hazardous chemicals or waste with other products. Some chemicals, such as chlorine bleach and ammonia may react, ignite or explode.



General Rules

- Never use hair spray, cleaning solutions, paint products or pesticides near an open flame
- Clean up any chemical spills immediately. Allow the fumes in the rags to evaporate outdoors, then dispose of the rags by wrapping them in a newspaper and placing them in a sealed plastic bag in your trash can.
- Dispose of hazardous materials correctly.
- Save the national poison control number in your cell phone and post it next to landlines in your home 800-222-1222.



During a Household Chemical Emergency

If there is danger of fire or explosion get out immediately.

- Stay upwind and away from the residence to avoid breathing toxic fumes.
- Recognize and respond to symptoms of toxic poisoning including:
 - Difficulty breathing
 - Irritation of the eyes, skin, throat or respiratory tract
 - Changes in skin color
 - Headache or blurred vision
 - Dizziness, clumsiness or lack of coordination
 - Cramps or diarrhea
- If someone is experiencing toxic poisoning symptoms or has been exposed to a household chemical, call the **national poison control center at 800-222-1222**.
- Follow the emergency operator or dispatcher's first aid instructions carefully. The first aid advice found on containers may be out of date or inappropriate. Do not give anything by mouth unless advised to do so by a medical professional





CHECK ON LEARNING



1. Name three types of household chemical products.
2. Why should you never store hazardous products in food containers?
3. Name three symptoms of toxic poisoning.



CALIFORNIA DISASTERS CIVIL UNREST

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A12. Identify key elements of preparedness for staying safe during civil unrest.

Essential Question: What are the signs a peaceful protest may turn violent, and how can you safely exit without getting hurt?



Civil Unrest

- Activity arising from a mass act of civil disobedience (such as a demonstration, riot, or strike) in which the participants become hostile toward authority, and authorities incur difficulties in maintaining public safety and order over the disorderly crowd
- Doesn't include peaceful demonstrations
 - But those may turn violent
- You have the right to protest and be heard, but don't get involved in violence



Best Practice

- Don't get involved in a situation that may become violent
- Protest with a group committed to nonviolence
- Stay aware of what's happening around you
- If the mood of the crowd or the reaction by police seems to be turning, leave immediately





Be Prepared

- Make a plan with your family and make sure everyone knows what to do if drawn into a violent demonstration
- Be prepared to get out quick
- Work your way to the outer edges of the mob and make your escape
- Keep situationally aware



If Situation Turns Violent



- Getting away from instigators of the violence is your top priority
- Leave your belongings behind and get away
- Help others, but get away if they won't
- Take cover or get indoors if you can't get out
- Don't get caught against a wall or fence
- Don't go to a protest with weapons
- Carry a scarf to cover your face
- Wear sensible shoes



If Confronted

- Remain calm
- Be courteous and confident
- Allow the opportunity for the person to express their feelings and concerns
- Listen respectfully and objectively
- Don't attempt to touch the individual
- Don't blame anyone
- Don't "blow off" the hostile individual





CHECK ON LEARNING



1. Define “situational awareness” in the context of a protest or riot.
2. What is your top priority if a situation turns violent?
3. If directly confronted, what should you do?



CALIFORNIA DISASTERS LANDSLIDES & DEBRIS FLOW

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A13. Identify key elements of preparedness for landslides & debris flow.

Essential Question: What are the warning signs for landslides that will give you time to get out of danger?



Landslides

- Landslides occur in all US states
- Can be caused by many factors
 - Earthquakes
 - Storms
 - Volcanic eruptions
 - Fire
 - Human modification of land
- Most deadly slides occur quickly with no notice



pixtastock.com - 5172539



Landslides

- Masses of rock, earth, or debris move down a slope
- Debris & mud flows are rivers of rock, earth and other debris saturated with water
- They develop during intense rainfall, runoff, or rapid snowmelt
- They flow rapidly, striking at avalanche speeds (faster than a person can run)
- They can travel far, picking up trees, boulders, cars, and other materials
- They don't always stay in stream channels



Be Prepared



- General emergency preparedness:
 - Build an emergency kit
 - Make a family communications plan
- Heed evacuation warnings
- Don't build near steep slopes
- Be aware of danger areas near you



Warning Signs

- Wildfire burn areas
- Rushing water, mud, unusual sounds
 - Trees cracking, boulders knocking together
 - Faint rumbling sound that increases in volume
- Fences, retaining walls, utility poles, k-rails, boulders, or trees move
- Huge boulders in the landscape can be signs of past debris flows





Slow-Moving Landslides

Slow-moving landslides pose a threat to property:

- Changes in landscape (esp water runoff)
- Doors or windows stick or jam for the first time
- Outside walls/walks/stairs pull away from the building
- Underground utility lines break
- Water breaks through the ground in new places
- Fences, retaining walls, poles, trees tilt or move



What to Do

In a catastrophic slide:

- Heed all warnings and evacuation notices
- Be aware during storms. Landslide deaths often occur while people are sleeping
- By the time you're sure a debris flow is coming, it's too late to get away safely
- Never cross a road with water or mud flowing
- Never cross a bridge if a flow is approaching
- Move uphill as quickly as possible
- Avoid river valleys and low-lying areas



CHECK ON LEARNING



1. Name three natural events that cause landslides.
2. What are two warning signs of possible landslides?
3. If caught in a pending major slide, which direction should you go?



CALIFORNIA DISASTERS PANDEMIC

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A14. Identify key elements of preparedness for pandemic.

Essential Question: What actions should you take to protect yourself during any large health emergency or pandemic?



Be Prepared

- Pandemics (a disease prevalent over a whole country or the world) have different characteristics, depending on the virulence of the disease, the reaction of the government and population, and the effect on the economy and daily lives
- Nobody expected a major early effect of a pandemic to be a lack of toilet paper or other common products in stores, prior to 2020



Be Prepared



- Store additional supplies of food and water
- Keep a good supply of prescription drugs
- Have nonprescription drugs on hand
- Discuss with family members about how they would be cared for if they get sick
- Determine and gather what you would need to quarantine at home



Best Practices

- Follow guidelines from CDC, experts
- Avoid close contact with people who are sick
- If you are sick, stay away from others
- Cover your mouth and nose when sneezing and coughing
- Wash your hands
- Avoid touching your eyes, nose, or mouth
- Practice social distancing for airborne diseases
- Practice good health habits: sleep, physical activity, lower your stress, drink fluids, eat healthy





CHECK ON LEARNING



1. T / F Having a good supply of food and water at home is recommended at the start of pandemic type emergencies.
2. What's the connection between washing your hands and touching your face?
3. T / F Avoiding contact with sick people can reduce the chance of catching a disease.



CALIFORNIA DISASTERS POWER OUTAGES

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

.

Plan of Action:

A15. Identify key elements of preparedness for power outages.

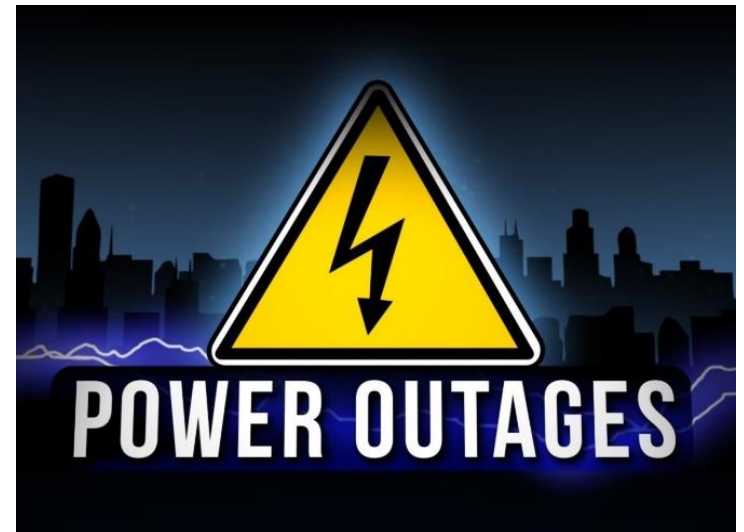
Essential Question: What measures can you take to successfully come through a power outage?



Power Outages

Extended power outages may impact the whole community and the economy. A power outage is when the electrical power goes out. A power outage may:

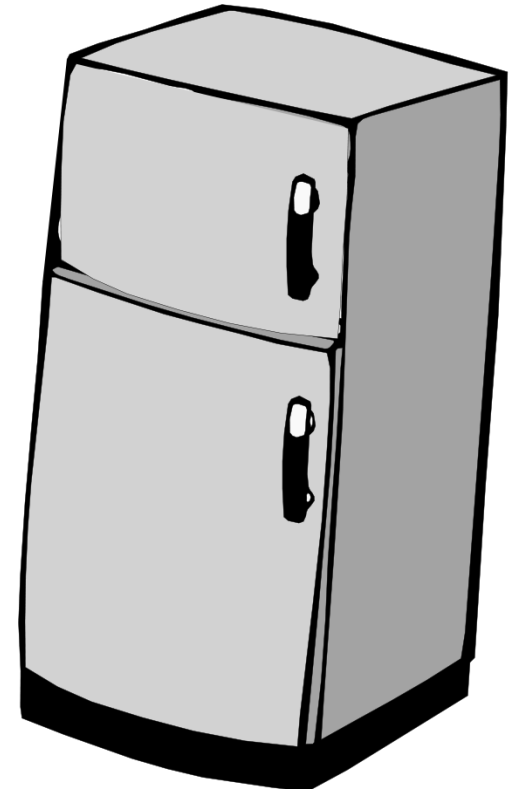
- Disrupt communications, water, and transportation.
- Close retail businesses, grocery stores, gas stations, ATMs, banks, and other services.
- Cause food spoilage and water contamination.
- Prevent use of medical devices.





Protect Yourself

- Keep freezers and refrigerators closed.
- Only use generators outdoors and away from windows.
- Do not use a gas stove to heat your home.
- Disconnect appliances and electronics to avoid damage from electrical surges.
- Have alternate plans for refrigerating medicines or using power-dependent medical devices.
- If safe, go to an alternate location for heat or cooling.
- Check on neighbors.





Prepare

- Sometimes we know the power may be out for an extended time, like when the power company shuts it off to prevent wildfires. You can prepare for this and have fewer problems if you think ahead.
- Inventory items you need that rely on electricity
- Find out how long medication can be stored at higher temperatures; get specific guidance for any meds that are critical to life





Prepare

- Develop an alternate plan to power critical medical devices
- Sign up for local alerts and warnings
- Stock up on non-perishable food and water, extra batteries and flashlights
- Get a thermometer for your refrigerator and freezer. Throw out food if the temp is 40° or higher
- Keep mobile phones charged and gas tanks full





Survive

- Keep freezers and refrigerator doors closed.
 - Refrigerators will keep food cold about 4 hours
 - Freezers will keep the temp about 48 hours
 - When in doubt, throw it out!
- Maintain non-perishable food supplies
- Don't run generators in the house!
- Don't use a gas stovetop or oven to heat your home!
- Check on neighbors
- Go to a shelter if heat or cold are extreme
- Turn off appliances. Power may return with a momentary surge that can cause damage





CHECK ON LEARNING



1. Will the temperature in your refrigerator stay low if you avoid opening the door, or will it last a set amount of time?
2. About how long will a freezer keep food cold?
3. What happens if there's a power surge when the power comes back on?



CALIFORNIA DISASTERS

SNOWSTORMS & EXTREME COLD

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A16. Identify key elements of preparedness for snowstorms & extreme cold.

Essential Question: How do you prepare for extreme cold weather, avoid dangerous situations, and identify and treat cold injuries?



Winter Storms

Winter storms create a higher risk of car accidents, hypothermia, frostbite, carbon monoxide poisoning, and heart attacks from overexertion. Winter storms and blizzards can bring extreme cold, freezing rain, snow, ice, and high winds. A winter storm can:

- Last a few hours or several days;
- Knock out heat, power, and communication services; and
- Place older adults, young children, and sick individuals at greater risk.





Winter Storm Warning

- Stay off roads
- Stay indoors and dress warmly
- Prepare for power outages
- Use generators outside only and away from windows
- Listen for emergency information and alerts
- Look for signs of hypothermia and frostbite
- Check on neighbors





Frostbite

- Frostbite causes loss of feeling and color around the face, fingers, and toes.
- Signs: Numbness, white or grayish-yellow skin, firm or waxy skin
- Actions: Go to a warm room. Soak in warm water. Use body heat to warm. Do not massage or use a heating pad.
- Seek medical advice





FROSTBITE

Signs & symptoms

- redness or pain
- ● a white or grayish-yellow skin
- ● ● unusually firm or waxy
- ● ● ● numbness

High risk



people, who work outdoors for long time



older adults



people, who drink alcohol in excess or use illicit drugs



Treat



seek medical attention



warm room or shelter



remove any wet clothing



dry blankets and clothing

Frostbite caution

Since skin may be numb, victims of frostbite can harm themselves further. Use caution when treating frostbite.



do not walk on feet or toes with frostbite



do not use a fireplace, heat lamp, radiator or stove for warming



do not use a heating pad or electric blanket for warming



do not rub or massage areas with frostbite



do not use alcohol for warming



Hypothermia

- Hypothermia is an unusually low body temperature. A temperature below 95° is a medical emergency
- Signs: Shivering, exhaustion, confusion, fumbling hands, memory loss, slurred speech, or drowsiness
- Actions: Go to a warm room. Warm the center of the body first—chest, neck, head, and groin. Keep dry and wrapped up in warm blankets, including the head and neck.



Hypothermia

It is a condition which occurs when the body starts losing heat more quickly than it can produce it resulting in the body temperature going down rapidly.

Symptoms of Hypothermia

- Shivering
- Dizziness
- Feeling hungry
- Nausea
- Rapid breathing
- Problems speaking
- Confusion
- Coordination difficulties
- Fatigue
- Rapid heart rate
- Shivering, as the condition worsens
- Drowsiness
- Weak pulse
- Shallow breathing.



CHECK ON LEARNING



1. Who's at a greater risk during winter storms?
2. Name three symptoms of hypothermia.
3. How do you treat frostbite?



CALIFORNIA DISASTERS

THUNDERSTORMS & LIGHTNING

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

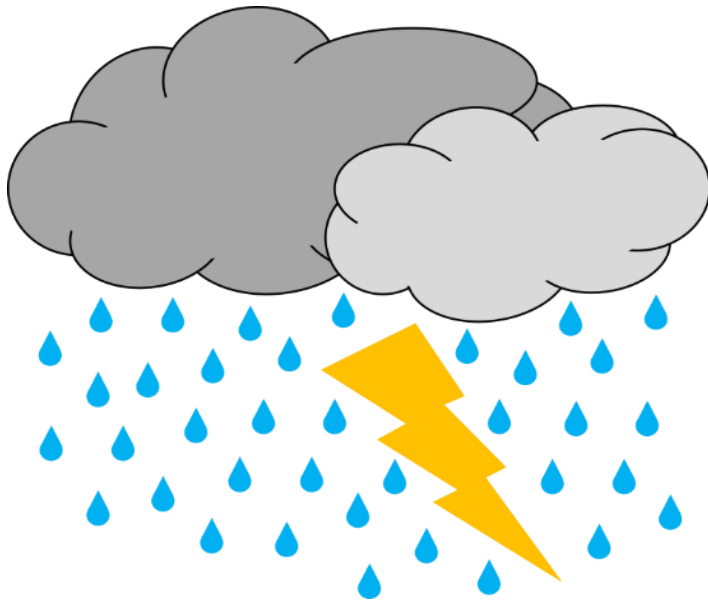
Plan of Action:

A17. Identify key elements of preparedness for thunderstorms & lightning.

Essential Question: How do you stay safe and avoid danger during a severe thunderstorm?



Lightning



Lightning is a leading cause of injury and death from weather-related hazards. Although most lightning victims survive, people struck by lightning often report a variety of long-term, debilitating symptoms. Thunderstorms are dangerous storms that include lightning and can:

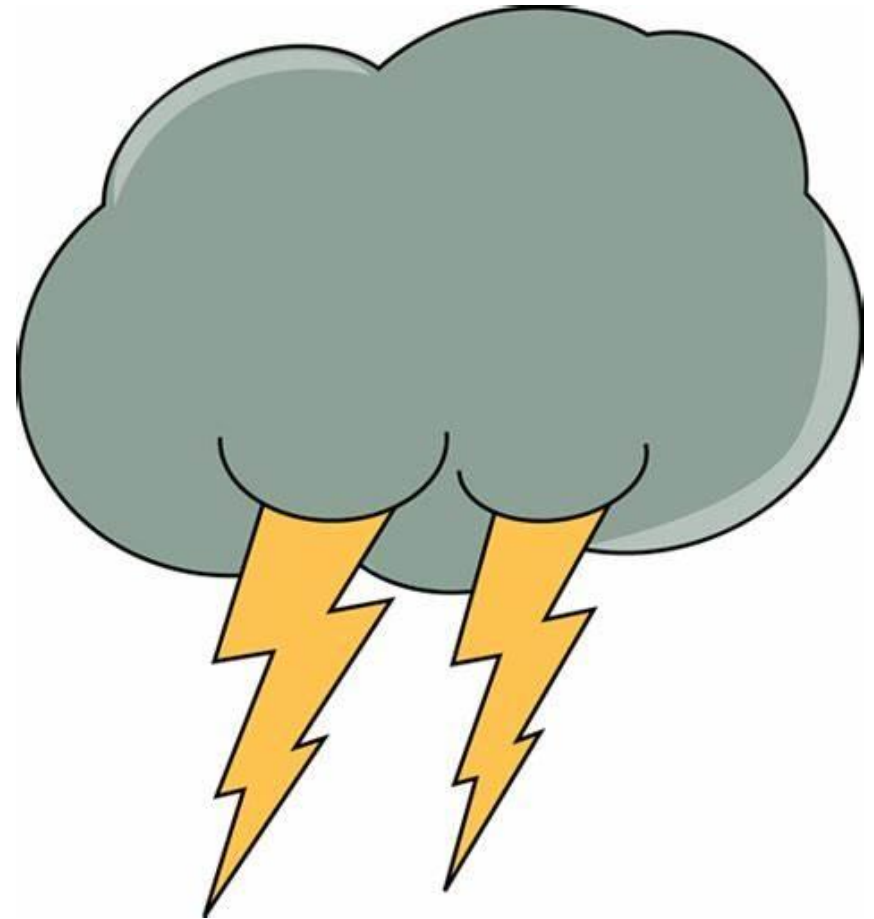
- Include powerful winds over 50 MPH;
- Create hail; and
- Cause flash flooding and tornadoes.



Seek Shelter & Safety

*IF YOU ARE UNDER A
THUNDERSTORM WARNING,
FIND SAFE SHELTER RIGHT
AWAY*

- When thunder roars, go indoors!
- Move from outdoors into a building or car
- Pay attention to alerts and warnings
- Unplug appliances
- Do not use landline phones





Prepare



- Know your area's risk for thunderstorms
- Sign up for your community's warning system
- ID nearby, sturdy buildings you can shelter in close to home, work, study, and play
- Cut down or trim trees that may fall on your home
- Use surge protectors, lightning rods or a lightning protection system to protect your home, appliances, and electronic devices



CALIFORNIA
CADET CORPS

React Immediately!

WHEN THUNDER ROARS GO INDOORS



Lightning Fatalities
For Outdoor Sports



40%

SOCCER



27%

GOLF



17%

RUNNING



10%

BASEBALL



3%

FOOTBALL



3%

OTHER



weather.gov

step 1

Leave the field
immediately



step 2

Seek shelter in an
enclosed building or car

Wait **30 minutes** after hearing
thunder to return outside



Seek Shelter Immediately!





If Outside

If you're not able to take cover, the CDC says to crouch low but try to limit how much of your body is touching the ground. Electrical currents can run through the top of the ground. If you're outside when there's lightning:

- Keep away from metal conductors
- Stay away from open areas – you don't want to be the tallest object
- Avoid isolated tall trees, poles or towers
- Stay away from water – if you're in a pool or body water, get out immediately
- Don't lie flat on the ground





CHECK ON LEARNING



1. When thunder roars, _____
_____.
2. Where is the best place to seek shelter from lightning?
3. If you're caught outside during a lightning storm with no shelter, what should you do?



CALIFORNIA DISASTERS VOLCANOES

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A18. Identify key elements of preparedness for volcanic eruptions.

Essential Question: What do you need to know about volcanic eruptions to understand the threat and avoid becoming a victim?



Volcanic Eruption

A volcano is an opening in the Earth's crust that allows molten rock, gases, and debris to escape to the surface. Alaska, Hawaii, California, and Oregon have the most active volcanoes, but other states and territories have active volcanoes, too. A volcanic eruption may involve lava and other debris that can flow up to 100 mph, destroying everything in their path. Volcanic ash can travel hundreds of miles and cause severe health problems. A volcanic eruption



Volcano Warning

IF YOU ARE UNDER A VOLCANO WARNING:

- Listen for emergency information and alerts
- Follow evacuation or shelter orders. If advised to evacuate, then do so early
- Avoid areas downstream of the eruption
- Protect yourself from falling ash
- Do not drive in heavy ash fall





CHECK ON LEARNING



1. What part of the US has the most active volcanoes?
2. Name three dangers from a volcanic eruption.
3. Should you go upstream or downstream from a volcanic eruption? Why?



CALIFORNIA DISASTERS WILDFIRES

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A19. Identify key elements of preparedness for wildfires.

Essential Question: How do you stay safe when a wildfire threatens, survive and stay safe afterward?



Wildfire!





Wildfires

- Wildfires can ruin homes and cause injuries or death to people and animals. A wildfire is an unplanned fire that burns in a natural area such as a forest, grassland, or prairie. Wildfires can:
- Often be caused by humans or lightning
- Cause flooding or disrupt transportation, gas, power, and communications
- Happen anywhere, anytime. Risk increases with in periods of little rain and high winds
- Cost the Federal Government billions of dollars each year

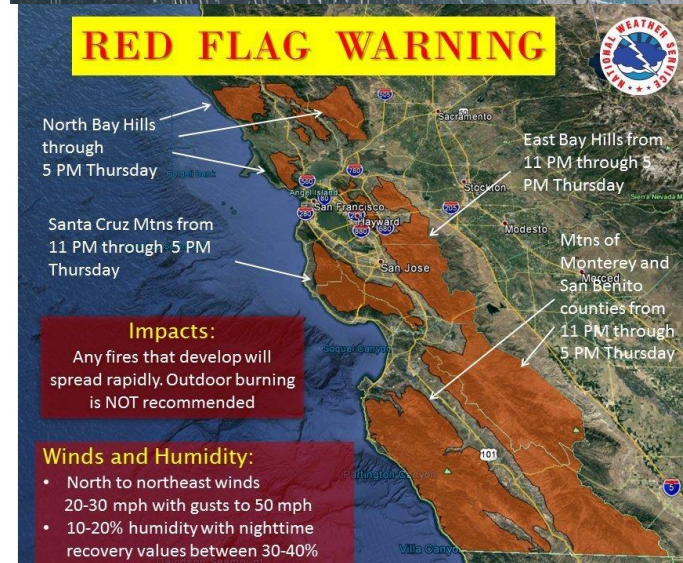




Wildfire Warning

IF YOU ARE UNDER A
WILDFIRE WARNING, GET
TO SAFETY RIGHT AWAY

- Leave if told to do so
- If trapped, call 9-1-1
- Listen for emergency information and alerts
- Use N95 masks to keep particles out of the air you breathe





Prepare

- Sign up for your community's warning system.
- Know your community's evacuation plans and find several ways to leave the area.
- Gather emergency supplies, including N95 respirator masks. Don't forget the needs of pets.
- Designate a room that can be closed off from outside air. Close all doors and windows. Set up a portable air cleaner to keep indoor pollution levels low when smoky conditions exist.
- Keep important documents in a fireproof, safe place. Keep digital copies
- Use fire-resistant materials to build, renovate, or make repairs.
- Find an outdoor water source with a hose that can reach any area of your property.
- Create a fire-resistant zone that is free of leaves, debris, or flammable materials for at least 30 feet from your home.
- Pay attention to air quality alerts.



Survive



- Evacuate immediately if authorities tell you to do so.
- If trapped, then call 911 and give your location. Turn on lights to help rescuers find you.
- Listen to EAS, NOAA Weather Radio, or local systems.
- Use an N95 mask.
- If you are not ordered to evacuate but smoky conditions exist, stay inside in a safe location or go to a community building where smoke levels are lower.



CHECK ON LEARNING



1. What is a Red Flag Warning?
2. What kind of face mask should you use to filter out smoke?
3. How do you make your home less vulnerable to burning down during a wildfire?



CALIFORNIA DISASTERS

RECOVERING FROM DISASTER

OBJECTIVES

DESIRED OUTCOME (Self-Mastery)

Cadets are familiar with the disaster emergencies that commonly occur in California and how to prepare, respond, and recover from them.

Plan of Action:

A20. Identify key elements in recovering from disaster.

Essential Question: What are the primary concerns when starting the process of recovery from a disaster?

After the Disaster



- Be cautious when entering your home after a disaster. Don't enter if:
 - You smell gas
 - Floodwaters remain around the building
 - Your home was damaged by fire and authorities have not yet declared it safe
- Be wary of wildlife as you return home after a disaster
- Help others by donating cash, volunteering, or donating goods



Recover

- Recovery can be a long process. Go into it with a positive attitude and realistic expectations
- Research available programs to help victims of disaster. FEMA puts out a lot of information.
- Join victim groups to advocate together
- Learn to navigate the governmental processes
- Have patience
- Turn to family and friends for help and support
- Be flexible





CHECK ON LEARNING



1. If your home was damaged in a fire, what should you wait for before you go inside to check out the damage?
2. Who can help you find out about available resources to assist after a disaster?
3. T / F Volunteering to help others is a positive way to move forward.