

Emergency Action Plan Training



Presented by: William Buckman



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Purpose

- The purpose of the Emergency Action Plan (EAP) is to establish a plan that ensures a reduced risk of hazards in an emergency situation.
- This Emergency Action Plan applies to all employees, guests, customers, consultants, contractors, vendors, and any other visitors to your facility.

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A Few Disasters to Think About

- 856 AD, Iran: Earthquake killed 200,000.
- 1228, Holland: 100,000 people drowned by sea flood.
- 1556, China: Most deadly earthquake; 830,000 killed.
- 1642, China: Rebels destroyed seawall; 300,000 drowned.
- 1918, World wide: H1N1 Pandemic Flu (Spanish Flu) killed 50 to 100 million world wide.
- 1931, China: Yangtze River flood; 3.7 million dead.
- 1942, Boston: Coconut Grove Nightclub fire kills 492.
- 1987, Philippines: Ferry collides with tanker, 4,340 killed.
- 2001, USA: Terrorist attacks kill almost 3,000.
- 2004, Sumatra: 283,106 killed by Tsunami.
- 2005, Pakistan: 80,400 killed by earthquake.

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Overview

- Emergency Procedures.
- Medical Emergency.
- Chemical Spill Response.
- Fire or Explosion.
- Natural Disaster.
- Bomb Threat.
- Evacuation.



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Emergency Procedures

- Written Emergency Response Plan.
- Emergency Response Coordinator.
- Call 9-1-1.
 - (9) 9-1-1 if you need to dial 9 to get an outside line.
- Notification Methods.
 - Fire Alarm, Public Address System, etc.

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Emergency Procedures

- Emergency Coordinator report the following:
 - Type of emergency;
 - Location of incident and probable size of area;
 - Physical and environmental conditions of area;
 - Personnel involved;
 - Number and extent of injuries.
- Contact your supervisor.

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Medical Emergency

- Medical Injury (i.e., head trauma, heart attack, severe laceration, etc.)
- Call 9-1-1.
- Assess area prior to approaching injured person.
- Certified persons may initiate First Aid and/or CPR and if you've been trained AED.
- Contact your Supervisor.

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Medical Emergency

- If immediate medical assistance is required but not available due to certain circumstances, the patient may be transported if:
 - Life-threatening emergency.
 - Always call 9-1-1.

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Medical Emergency

Chemical/Toxin Exposure Response		
Exposure	Symptoms	General Response
Dermal	Redness, dryness, rash, irritation	Flush with water for 15 minutes, use emergency shower, MSDS
Eye	Burning, watering, blurred vision	Flush with water for 15 minutes, use eye wash station
Inhalation	Headaches, dizziness, nausea, respiratory distress	Fresh air, call 9-1-1
Injection	Headaches, dizziness, nausea	Call 9-1-1, MSDS
Ingestion	Nausea, abdominal distension, death	Call 9-1-1, MSDS

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Medical Response

- Immediately report incidents, accidents, or injuries to your Supervisor.
- Always rinse for 15 minutes minimum.



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Spill Response

- Toxic Chemical Spill.
- Acid/Caustic Spill.
- Organic Liquid.



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Spill Response

- Acid/Caustic:
 - Location of Spill Kits.
 - Type of Spill Kits.
- Other Chemicals:
 - Check Material Safety Data Sheets (MSDS).



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Fire and Explosion

- Call 9-1-1.
- Have an escape route.
- R.A.C.E.
 - Rescue.
 - Alert.
 - Contain.
 - Extinguish.



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Fire and Explosion

- Type and location.
- Type of extinguisher.
- P.A.S.S.:
 - Pull;
 - Aim;
 - Squeeze;
 - Sweep.



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Bomb Threat

- Remain calm.
- Stay on the phone.
- Write note to co-worker – “Bomb Threat.”
- Ask questions.
- Note other voices, background noises.



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- Know your work area.
- Duck, Cover & Hold.
- Evacuate.



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Facility Evacuation

- Who has the authority to evacuation?
- Notification.
- Decontamination.
- Evacuation Assembly Point.
- Congregation Area Supervisor.



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Summary

- Preparedness.
- Respond Safety.
- Any Questions?



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Portable Fire Extinguishers



CCR Title 8 Section 1922 Portable Fire Fighting Equipment
29 CFR 1910.157 Fire Extinguishers

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Session Objectives

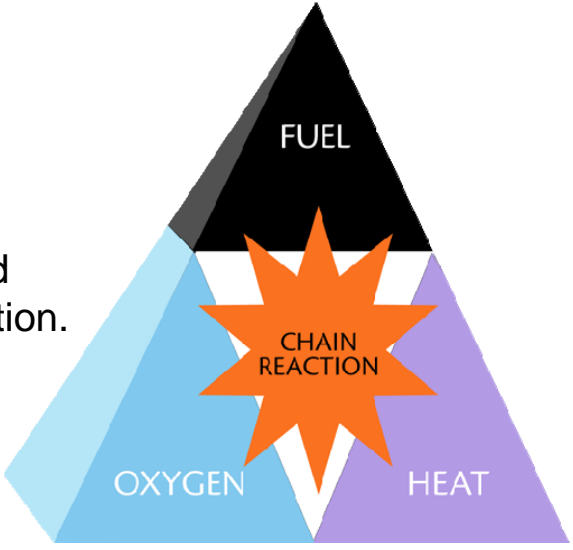
- You will be able to:
 - Identify different classes of fire.
 - Choose the appropriate type of fire extinguisher.
 - Use a fire extinguisher.
 - Inspect and maintain extinguishers.

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Fire Tetrahedron

- Oxygen;
- Fuel;
- Heat;
- Uninhibited chain reaction.




The diagram illustrates the Fire Tetrahedron, a four-sided pyramid representing the four elements of fire. The top vertex is a black triangle labeled 'FUEL'. The bottom-left vertex is a light blue triangle labeled 'OXYGEN'. The bottom-right vertex is a purple triangle labeled 'HEAT'. In the center of the pyramid is an orange starburst shape labeled 'CHAIN REACTION'.

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Class A – Ordinary Combustibles

- Wood;
- Paper;
- Plastic;
- Garbage.



A photograph showing a pile of Class A combustibles, including cardboard boxes, plastic bags, and other debris, likely in a dumpster or storage area.

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Class B – Flammable Liquids

- Grease;
- Gasoline;
- Oil;
- Solvents.



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Class C – Energized Electrical

- Appliances;
- Switches;
- Panel boxes;
- Power tools.



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Class D – Combustible Metals

- Magnesium;
- Titanium;
- Potassium and sodium;
- Pyrophoric materials.

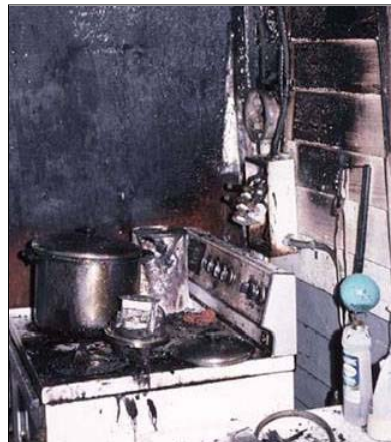


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Class K – Kitchen Fires

- Added in 1998.
- Grandfathered if installed before 1998.



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Extinguishing the Fire

- Remove heat.
- Remove oxygen.
- Remove the fuel.



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Water Extinguishers

- Rated *only* for Class A fires.
- Spread a grease fire.
- Cause an electrical shock on a Class C fire.
- Increase a metal fire.



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Dry Chemical Extinguishers

- Best all-around choice.
- Help prevent re-ignition.
- Make a mess.
- Class BC contains sodium bicarbonate.
- Class ABC contains ammonium phosphate.



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Carbon Dioxide (CO₂) Extinguishers

- Class BC-rated.
- Not effective on Class A fires.
- Should not be used on Class D—metal fires.
- Do not leave a residue.
- Are a good choice for computers or electronics.
- Must be used 3 to 8 feet from the fire.



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Metal/Sand Extinguishers

- Class D-rated.
- Powdered copper.
- Sodium chloride.
- Form an airtight crust over the fire.



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Halon Extinguishers

- Halon production is now banned.
- Gas interrupts fire's chemical reaction.
- Are Class BC-rated.
- Protect valuable electrical equipment.
- Have a range of only 4 to 6 feet.



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Halotron I Extinguishers

- Replace Halon 1211.
- Discharge as a liquid.
- Leave no residue.
- Non-conducting.
- Ideal for computers and electronics.
- Class BC-rated.



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Water Mist Extinguishers

- Class AC-rated.
- Safety from electrical shock.
- Less scattering of burning materials.
- Hospital environments and clean rooms.



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Fight-or-Flight Decision

- Alarm has been pulled.
- Fire department has been called.
- Fire is small and contained.
- You can avoid the smoke.
- Exit is clear.
- Extinguisher is nearby.
- You have been trained to use the extinguisher.



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P.A.S.S.

- **P**ull the pin.
- **A**im nozzle at base of the fire.
- **S**queeze the handle.
- **S**weep the nozzle from side to side forming a blanket over the burning fuel.

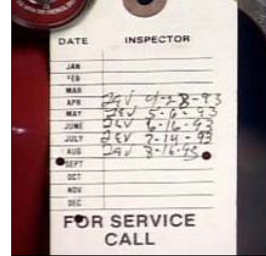


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Inspect Extinguishers

- Annual Service.
- Monthly inspection.
- Extinguisher not blocked.
- Pressure is acceptable.
- Pin and seal are intact.
- No dents or damage.



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Care and Maintenance

- Keep extinguisher clean.
- Replace if damaged.
- Recharge immediately after use.
- Have hydrostatic testing done.
- Remove non-rechargeable fire extinguishers after 12 years.

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Locations and Signs

- Readily accessible:
 - 75 feet—Class A;
 - 50 feet—Class B;
 - 50–75 feet—Class C;
 - 75 feet—Class D.
- Highly visible sign.



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Key Points to Remember

- Fire tetrahedron.
- Fire hazard class.
- Know your extinguishers.
- Fight or flight.
- P. A. S. S.

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Questions

- Class: Emergency Action Plan and Fire Extinguisher
- Instructor: Bill Buckman
- Contact: (510) 651-8289; du-all.com
- Fax Sign in Sheets to (510) 651-8937 or safety@du-all.com



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