

INSTRUCTOR GUIDE

TOPIC: STOPPING UNSAFE PRACTICES

LEVEL OF INSTRUCTION:

TIME REQUIRED: THREE HOURS

MATERIALS: APPROPRIATE AUDIO-VISUAL MATERIALS

REFERENCES: ESSENTIALS OF FIRE FIGHTING, FOURTH EDITION, IFSTA;
CLOSE CALLS, FIREHOUSE MAGAZINE; FIREFIGHTER FATALITY STUDIES,
UNITED STATES FIRE ADMINISTRATION

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PREPARATION:

MOTIVATION: If we in the fire service are to reduce the number of deaths and injuries, we must all take a positive step to reduce or eliminate unsafe practices. Continued following of unsafe practices becomes the norm rather than the exception if action is not taken to correct them.

OBJECTIVE (SPO):

The firefighter will demonstrate a general knowledge of unsafe practices that could take place on the emergency scene and actions that could be taken to prevent future occurrences.

OVERVIEW:

STOPPING UNSAFE PRACTICES

- * Identifying Unsafe Actions
- * Specific Corrective Actions
- * General Corrective Actions

STOPPING UNSAFE PRACTICES

- SPO: The firefighter will demonstrate a general knowledge of unsafe practices that could take place on the emergency scene and actions that could be taken to prevent future occurrences.
- EO 1-1 Identify various unsafe practices that have taken place on the emergency scene.
- EO 1-2 Identify specific actions that could be taken to prevent future occurrences of unsafe practices that have taken place on the emergency scene.
- EO 1-3 Identify general actions that could be taken to make the emergency scene safer.

In order to make this drill more meaningful to everyone that participates, it should be conducted as an interactive discussion rather than a lecture. Local examples could be incorporated into the discussion along with additional items over and above those examples identified below. The overall intent is to make the emergency scene a safer place at which to work and to make sure that everyone goes home after the incident.

I. IDENTIFYING UNSAFE PRACTICES (EO 1-1)

- A. Personnel not being in good health and physical condition to handle the demands of the profession
- B. Firefighters not being seated with a seat belt fastened when the vehicle is in motion
- C. Failure to be observant when working around apparatus or on a roadway
- D. Attempting to operate with insufficient staffing for the activity or incident
- E. Failure to wear personal protective equipment appropriate for the incident
- F. Failure to manage the air supply so that there is sufficient to exit to a safe area before the air supply is exhausted
- G. Failure to coordinate ventilation with fire attack to prevent unexpected fire spread
- H. Failure to establish and maintain an adequate water supply
- I. Lack of awareness of other personnel in the area prior to initiating fire attack
- J. Using a nozzle incorrectly, e.g., incorrect pattern, incorrect type of nozzle, inadequate flow, or not opening the nozzle completely
- K. Failure to recognize fire conditions such as backdraft and flashover
- L. Failure to recognize dangerous building conditions such as those that contribute to the spread and intensity of the fire or those that make the building susceptible to collapse
- M. Failure to adequately light the scene and the specific work area
- N. Improper lifting, carrying, and raising of ground ladders including observation for overhead obstructions and placement on solid surfaces
- O. Failure to ventilate early in the incident
- P. Failure to be observant when working on the emergency scene

- Q. Failure to operate within the incident command system, e.g., accountability, freelancing
- R. Not observing safe practices unique to wildland fire incidents
- S. Being complacent on automatic alarm or gas leak incidents
- T. Failure to properly maintain apparatus and equipment

II. SPECIFIC CORRECTIVE ACTIONS (EO 1-2)

A. Personal Health and Wellness

1. Stay informed about job-related health issues
2. Follow recommendations for vaccinations
3. Use precautions to avoid exposure to the human immunodeficiency virus (HIV)
4. Learn proper lifting techniques to avoid muscle strains and other related injuries
5. Maintain a regular exercise program to sustain physical fitness
6. Maintain a diet that reduces cholesterol, fat, and sodium intake
7. Be aware of cardiovascular and cancer risks such as smoking, high blood pressure, and high cholesterol levels
8. Have regular physicals and medical check-ups
9. Participate in a physical fitness program that will keep personnel in good physical condition to handle the physical demands of the profession

B. Apparatus

1. Remain seated with a seat belt fastened until the vehicle comes to a complete stop
2. Observe traffic conditions when working around apparatus, on a roadway, or while the apparatus is in motion
3. Using vehicles, traffic marking devices (cones and flares), or traffic control personnel to create a safe working area around the emergency scene

4. Wear reflective vests when operating apparatus on a roadway
5. Being careful that apparatus lighting does not blind on-coming traffic
6. Being aware that motorists are probably not paying attention to traffic at the emergency scene

C. Staffing

1. Delay certain activities until sufficient staffing is available so as not to create an potential safety problem for on scene personnel
2. Request additional personnel to supplement those on the scene
3. If there is not a known rescue and there are insufficient personnel to staff a rescue team, limit operations to the exterior
4. Request additional personnel so that personnel on the scene can be rotated to rehab especially during extreme weather conditions or extended operations

D. Personal Protective Equipment

1. Correctly wear personal protective equipment appropriate for the incident
2. Use respiratory protection appropriate for the hazard and keep it in place until it has been determined that the atmosphere is safe to remove it
3. Manage the air supply so that there is sufficient to exit to a safe area before the air supply is exhausted (Remember that a firefighter generally will get about 20 minutes of air from a 30-minute cylinder and will use about 15 minutes of it getting to the fire area with only about 5 minutes left to exit when the alarm activates)
4. Keep personal protective clothing in place until it has been determined that it is no longer needed

E. Fire Attack

1. Coordinate ventilation with fire attack to reduce the heat level, provide a means for steam to escape, and prevent uncontrolled fire spread
2. Establish and maintain a water supply that is adequate for the fire flow requirements or reduce the level of fire attack so that it is within the supply capability

3. Use proper attack methods for the size of the fire, e.g, direct attack for small fires with little heat and an indirect or combination attack for larger fires and high heat levels
4. Use correct nozzle patterns and the appropriate type of nozzle for the specific fire to minimize steam production in occupied areas and to make sure that the stream is reaching where it is needed and providing protection for the firefighters
5. Open the nozzle completely to achieve maximum flow capability based on the nozzle pressure being provided
6. Account for all personnel on the attack line or in the area and make sure that they are in a safe location prior to initiating attack
7. Use an adequate sized attack line and nozzle for the volume of fire and the needed fire flow
8. Make sure that personnel are not attacking the fire from opposite directions
9. Evaluate friction loss calculations and nozzle flows to make sure that nozzles are delivering the expected fire flows (this should be done prior to an incident)

F. Emergency Scene

1. Recognize fire conditions such as backdraft and flashover and take precautions to protect firefighters from them
2. Recognize dangerous building conditions that contribute to the spread and intensity of the fire or those that make the building susceptible to collapse
 - a. Open walls, ceilings, floors, shafts, or pipe chases
 - b. Void spaces
 - c. Areas not protected by fire sprinklers
 - d. False walls or ceilings
 - e. Interior finishes that may be combustible
 - f. Ducts, pipes or other surfaces that can transmit heat
 - g. Weakened floors, walls, or roofs
 - h. Steel structural supports that have been subjected to high levels of heat

- i. Damaged mortar joints
- j. Veneer that has been separated from the frame
- 3. Provide adequate lighting for the scene and the specific work area by using light towers for overall scene lighting and portable lights for specific work areas
- 4. Properly lift, carry, and raise ground ladders
 - a. Use legs for lifting rather than the back
 - b. Properly foot the heel of the ladder when raising or lowering
 - c. Make sure hands and feet are clear when moving ladder sections
 - d. Maintain stability of the ladder when it is in an upright position
 - e. Place the ladder at the proper angle for climbing
 - f. Watch for overhead obstructions when raising the ladder
 - g. Heel the ladder when someone is on it
 - h. Use a leg lock or ladder belt when working off a ladder
 - i. Climb the ladder smoothly and without excessive bouncing
 - j. Have at least one hand in contact with the ladder when climbing
 - k. Climb with the back straight while using the legs to climb
 - l. Set the heel when the ladder is placed on soft surfaces
 - m. Use extreme caution when the ladder heel must be placed on an uneven surface
- 5. Use of tools and equipment properly
 - a. Wear eye protection (safety glasses or goggles)
 - b. Check the surrounding area before starting to minimize someone being hit with debris
 - c. Chop so that the blade is going away from body parts when using an axe

- d. Use tools for the purposes for which they were designed
 - e. Be careful when pulling ceiling to avoid being under it
 - f. Do not reach to cut with a power saw
 - g. Shut power saws off before carrying them to where they will be used
6. Observe safe practices during overhaul
- a. Use SCBA and PPC until it has been determined that it is safe to remove them
 - b. Have adequate lighting in the work area to prevent injury
 - c. Have a charged hoselines in place in case fire is located
 - d. If there is a concern about structural stability, delay overhaul until daylight or reduce the level of overhaul
7. Use the buddy system at all times on the emergency scene so that there are two sets of eyes and ears to be alert for danger
8. Operate within the incident command system
- a. Maintain adequate supervision over operations and crews
 - b. Maintain a reporting chain of command
 - c. Prevent freelancing
 - d. Maintain personnel accountability
 - e. Maximize available resources
9. Have a safety officer in place at any working incident

G. Wildland

- 1. Understand that the fire behavior on wildland fires is different than that of structural fires and that wildland fires are not restricted by any boundaries
- 2. Understand that wildland fires have an unlimited oxygen supply

3. Unlike structural fires, the direction of travel of wildland fires can change at any time
4. Follow the wildland fire orders
 - a. Fight fire aggressively but provide for safety first
 - b. Initiate all action based on current and expected fire behavior
 - c. Recognize current weather conditions and obtain forecasts
 - d. Ensure instructions are given and understood
 - e. Obtain current information on fire status
 - f. Remain in communication with crew members, your supervisor, and adjoining forces
 - g. Determine safety zones and escape routes
 - h. Establish lookouts in potentially hazardous situations
 - i. Retain control at all times
 - j. Stay alert, keep calm, think clearly, act decisively
 - k. Avoid being complacent on automatic alarm or gas leak incidents

H. General

1. Be aware of the common causes of firefighter injuries – overexertion and strain; slips, trips, and a falls; exposure to chemicals or radiation; exposure to fire products; being caught or trapped; extreme weather; being struck by objects; stepping on or contact with objects
2. Properly maintain apparatus and equipment so that it will work when needed and it is safe to use
3. Call for help when first needed rather than waiting until it is too late for help to arrive and assist
 - a. Do not panic because it causes rapid breathing that uses more valuable air (control breathing while crawling and communicate with other team members)
 - b. Stop and think about how you got to where you are

- c. Listen for noise from other team members, for hose and equipment operation, or for sounds that indicate the location of fire
- d. Use the portable radio to announce your last known location
- e. Activate your PASS device
- f. Place a flashlight on the floor with the light shining toward the ceiling
- g. Remember the different methods to find a way out (follow the hoseline out if possible; crawl in a straight line; crawl in one direction, call out;, or make noise for other firefighters to assist you; or break a window or breach a wall if possible)
- h. Lie flat on the floor close to a wall so that you will be easier to find if you are exhausted or feel you may lose consciousness

III. GENERAL ACTIONS (EO 1-3)

A. Empower all firefighters to stop unsafe practices

B. Follow standard operating procedures (SOP's)

- 1. Apparatus placement at the scene
- 2. Safe approach of apparatus at the scene
- 3. Task assignments by riding position
- 4. Operating within the buddy system
- 5. Carrying tools and equipment for the task
- 6. Laying a supply line and establishing water supply
- 7. Staying with your crew and officer to maintain accountability

C. Attitude

- 1. Safety consciousness
- 2. Regard for safety of others
- 3. Work aggressively but being observant at all times

4. Wearing proper protective equipment
5. Pacing to minimize exhaustion
6. Rehabbing after each cylinder of air
7. Being realistic rather than feeling “indestructible”
8. Remembering that Superman is a comic book character and that we are mortals

D. Near misses

1. Reading reports
2. Making a positive effort to avoid repeating events
3. Learning from others

E. Preventable accidents

1. Keep in mind that most accidents are predictable and preventable
2. Taking an extra measure to prevent an accident rather than accepting it as an occupational hazard
3. Recognize that the emergency scene does not have to be an unsafe work environment

F. Accident chain

1. Environment – Included here are physical surroundings such as weather, surface conditions, access, lighting, and physical barriers
2. Human factors – This includes human and social behaviors, training (or lack of training), fatigue, fitness, and attitudes
3. Equipment – Included here are apparatus, personal protective equipment, maintenance and serviceability, proper application, and equipment limitations.
4. Event – The event is the intersection of the foregoing components.
5. Injury - This last part of the chain deals with the actual injury (or property damage) associated with the accident.

G. Steps to creating a positive safety attitude – practice good habits, learn from others, and be vigilant

REVIEW:

STOPPING UNSAFE PRACTICES

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- * General Corrective Actions

REMOTIVATION: It is everyone's duty and responsibility to be on the lookout for and call to the attention of supervisors any potential or real unsafe practices. Failure to take corrective actions in a timely manner may result in injury or death. If unsafe practices are not corrected, they may become accepted practice.

ASSIGNMENT:

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EVALUATION: