FLAIM

Extinguisher

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Scenario Descriptions and Learning Outcomes

Update: R1 2023

Safer | Smarter | Deeper Learning

FLAIM Extinguisher fully complies with and follows US Occupational Safety and Health Administration's (OSHA) portable fire extinguisher use standard protocol.

Under this protocol, if fire extinguishers are available for employee use, it is the employer's responsibility to educate employees on the principles and practices of using a fire extinguisher and the hazards associated with fighting small or developing fires.[1]

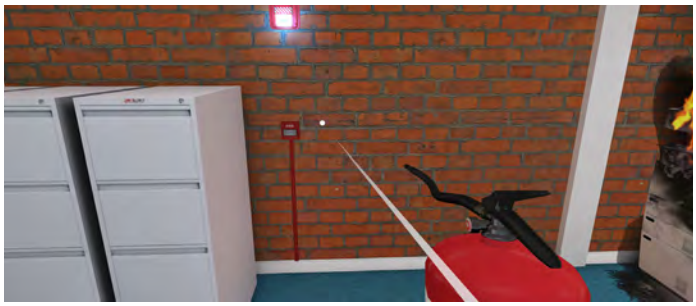
This education must be provided annually and when a new employee is first hired.[2]

Employees who have been designated to use fire extinguishers as part of the emergency action plan, must be trained on how to use the fire extinguishers appropriately in the workplace.[3]

This training is a specialized form of education that focuses on developing or improving skills and it must be provided annually and when employees are first assigned these duties.[4]

Using a Fire Extinguisher

The following steps should be followed when responding to incipient stage fire:

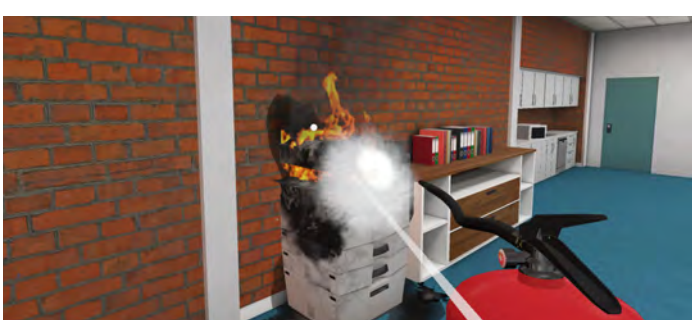


1. Sound the fire alarm and call the emergency services, if appropriate

2. Identify a safe evacuation path before approaching the fire. Do not allow the fire, heat, or smoke to come between you and your evacuation path

3. Select the appropriate type of fire extinguisher

4. Discharge the extinguisher within its effective range using the P.A.S.S. technique (pull, aim, squeeze, sweep). Back away from an extinguished fire in case it flames up again



5. Evacuate immediately if the extinguisher is empty and the fire is not out

6. Evacuate immediately if the fire progresses beyond the incipient stage

[1] US OSHA [29 CFR 1910.157(g)(1)]
[2] [29 CFR 1910.157(g)(2)]
[3] [29 CFR 1910.157(g)(3)]
[4] [29 CFR 1910.157(g)(4)]

FLAIM Extinguisher trains the P.A.S.S. technique:

PULL the pin

AIM low, pointing the extinguisher nozzle at the base of the fire

SQUEEZE the handle to release the extinguisher agent

SWEEP from side to side at the base of the fire and watch for re-ignition

WARNING: When using real CO_2 extinguishers, do not touch the plastic discharge funnel as it will be extremely cold and can damage skin

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Fire Warden Procedure

Scenario Description
There is a large kitchen fire that originated in the microwave due to an electrical fault. The trainee must make decisions regarding activating the alarm, notifying authorities, evacuating co-workers, and whether to fight the fire or not. The scenario ends when the trainee exits the office and interacts with the fire warden in the evacuation zone.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- An electrical fire is a Class C fire (USA), Class E fire (Aust), or Class K fire (Europe), and correct extinguisher types are CO2 (Class B and electrical fires) and Dry Chemical/ Powder (Class A, B and C fires)
- Identify that water is NOT a good extinguisher
- Describe risks posed by fire – identify safe exits, warning other people in the office and instruct them to call the fire department
- Describe if safe to approach and extinguish with an extinguisher

Forklift Fire

Scenario Description
An electric forklift has caught fire while in use in a warehouse. The battery has not been breached.

Note: the forklift can be powered down by interacting with the emergency stop button on the dashboard.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher.
- This is an electric forklift, so the correct extinguisher type is Dry Chemical (Class A, B and C fires).
- Describe if size of fire can be extinguished and what other options are available.
- Describe the issues that arise with electric vehicles.

Laptop Fire

Scenario Description
A laptop computer has caught fire due to overheating or an electrical fault.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- An electrical fire is a Class C fire (USA), Class E fire (Aust), or Class K fire (Europe), and correct extinguisher types are CO2 (Class B and electrical fires) and Dry Chemical/ Powder (Class A, B and C fires)
- Identify that water is NOT a good extinguisher
- Describe location of exits
- Describe if the size of the fire can be extinguished with an extinguisher
- Describe what other actions should be taken, i.e. is the electricity is still connected? Do you need to warn other people in the office and ask them to call the fire department?

Microwave Fire

Scenario Description
A microwave has caught fire due to overheating or an electrical failure.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- An electrical fire is a Class C fire (USA), Class E fire (Aust), or Class K fire (Europe), and correct extinguisher types are CO2 (Class B and electrical fires) and Dry Chemical/ Powder (Class A, B and C fires)
- Identify that water is NOT a good extinguisher
- Describe location of exit
- Describe if the size of the fire can be extinguished with an extinguisher
- What other actions should be taken, i.e. is the electricity still connected? Do you need to warn other people in the office and ask them to call the fire department?

Paint Shop Fire

Scenario Description
A paper bin has caught fire at the paint shop service counter of a hardware store.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- Paper is a Class A material, the correct extinguisher types are: Water (Class A) or Dry Chemical/ Powder (Class A, B and C)
- Describe risks posed by fire
- Describe if safe to approach and extinguish with an extinguisher
- Plan of action if risk fire increases and conditions deteriorate
- Identify safe exits

Pallet Fire

Scenario Description
A stack of wooden pallets on fire in a warehouse.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- Wood is a Class A material, the correct extinguisher types are: Water (Class A) or Dry Chemical/ Powder (Class A, B and C)
- Describe risks posed by fire and if safe to approach and extinguish with an extinguisher
- Describe plan of action if risk of fire increasing and conditions deteriorate
- Identify safe exits

Paper Bin Fire

Scenario Description
A paper bin as caught fire in the office.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A paper bin is a Class A material, correct extinguisher types are: Water (Class A) or Dry Chemical/Powder (Class A, B and C)
- Describe location of exit
- Describe if the size of the fire can be extinguished with an extinguisher
- What other actions should be taken? Do you need to warn other people in the office and direct them to call the fire department?

PC Fire

Scenario Description
A computer has caught fire due to overheating or an electrical failure.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- An electrical fire is a Class C fire (USA), Class E fire (Aust), or Class K fire (Europe), and correct extinguisher types are CO2 (Class B and electrical fires) and Dry Chemical/ Powder (Class A, B and C fires)
- Identify that water is NOT a good extinguisher
- Describe risks posed by fire
- Describe if safe to approach and extinguish with an extinguisher
- Plan of action if risk fire increases and conditions deteriorate
- Identify safe exits

Power Board Fire

Scenario Description
An electrical board has caught fire due to overheating or an electrical failure.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- An electrical fire is a Class C fire (USA), Class E fire (Aust), or Class K fire (Europe), and correct extinguisher types are CO2 (Class B and electrical fires) and Dry Chemical/ Powder (Class A, B and C fires)
- Identify that water is NOT a good extinguisher
- Describe location of exit
- Describe if the size of the fire can be extinguished with an extinguisher
- What other actions should be taken, i.e. is the electricity still connected? Do you need to warn other people in the office and ask them to call the fire department?

Printer Fire

Scenario Description
The copying machine has caught fire due to overheating or an electrical fault.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- An electrical fire is a Class C fire (USA), Class E fire (Aust), or Class K fire (Europe), and correct extinguisher types are CO2 (Class B and electrical fires) and Dry Chemical/ Powder (Class A, B and C fires)
- Identify that water is NOT a good extinguisher
- Describe risks posed by fire – identify safe exits, warning other people in the office and instruct them to call the fire department
- Describe if safe to approach and extinguish with an extinguisher
- Describe other actions that should be taken to control fire, i.e. electricity connected.

Hot Brazing Tool Fire

Scenario Description
A hot brazing tool has been rested on a flammable surface, resulting in a fire.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is a wood/plastic fire, the correct extinguishers are Water (Class A) or Dry Chemical/ Powder (Class A, B and C fires)
- Describe actions that should be taken including turning off power
- Describe risk of working at heights, proximity of gas tanks, fire spreading to exposures

Welder Spark Fire

Scenario Description
A stray spark from a welder has triggered a fire in nearby tarpaulins.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is a plastic fire, the correct extinguishers are Water (Class A) or Dry Chemical/ Powder (Class A, B and C fires)
- Describe actions that should be taken including turning off power
- Describe risk of working at heights, fire spreading to exposures

Backhoe Engine Fire

Scenario Description
A fuel leak has triggered an engine fire in a backhoe.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is a combination fire, with flammable liquid and plastics, the correct extinguisher is: Dry Chemical/ Powder (Class A, B and C fires)
- Describe actions that should be taken including shutting down engine, chocking wheels (if possible) to prevent uncontrolled movement
- Describe risk of positioning responder near or under the plant because of sudden movement or equipment failure

Backhoe Hydraulic Fire

Scenario Description
An oil release in contact with electrical wires has triggered a fire in a backhoe's hydraulics.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is a combination fire, with flammable liquid and plastics, the correct extinguisher type is: Dry Chemical/ Powder (Class A, B and C fires)
- Describe actions, i.e., ensure any energized electrical equipment is turned off
- Describe need to turn off power source for the backhoe (tractor engine) to stop hydraulic pump (if safe to do so)

Cottage Fire

Scenario Description
A frying pan has caught fire while an inmate was cooking in a prison residential cottage. The trainee must both extinguish the fire and evacuate the inmates.

Learning Outcomes

- Demonstrate correct procedures for interacting with and evacuating inmates during an incident
- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and selection of the correct extinguisher.
- A kitchen fat fire is a Class B fire, the correct extinguisher type is Wet Chemical (Class A and F fires), but CO2 (Class B and E fires) and Dry Chemical/ Powder (Class A, B and C fires) can also be used.
- Demonstrate that water is NOT a good extinguisher for this fire
- Describe assessment of risks posed by fire
- Other actions that could be taken to control fire, e.g., put lid on fire or a fire blanket
- Shut off heat (gas/electricity)

Management Cell Fire

Scenario Description
An inmate has set fire to a mattress in a prison management cell. This is a procedural scenario that involves opening the cell door and interacting with the inmate in ways that do not endanger the trainee or the inmate. The trainee will use a hose reel to fight the fire. Cooling the gas layer is recommended in this scenario.

Learning Outcomes

- Demonstrate correct procedures for interacting with and evacuating inmates during an incident
- Demonstrate hose reel technique
- Discussion on type of fire and extinguishing medium
- Word-back and situation report training
- Correct water application and gas cooling technique
- Prioritisation of attack

School Bus Cabin Fire

Scenario Description
A child was literally playing with matches and has ignited a fire on a school bus. The user is the bus driver and must evacuate the children and extinguish the fire.

Note: the children can be evacuated by interacting with them as a group (point at them to highlight them).

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher.
- A school bus consists of many different materials, so the correct extinguisher type is Dry Chemical (Class A, B and C fires).
- Describe if size of fire can be extinguished and what other options are available.
- Describe additional actions that need to be taken, e.g., checking on children, correct emergency procedures.

School Bus Engine Fire

Scenario Description
A school bus engine has caught fire. The user is the responding bus driver and must evacuate the children and attend to the fire.

Note: the children can be evacuated by interacting with them as a group (point at them to highlight them). To access the engine users must first raise the hood by interacting with it.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher.
- A bus engine consists of many different materials, as well as oil and electrics, so the correct extinguisher type is Dry Chemical (Class A, B and C fires).
- Describe if size of fire can be extinguished and what other options are available.
- Describe additional actions that need to be taken, e.g., checking on children, correct emergency procedures.

Lab Fume Hood Fire

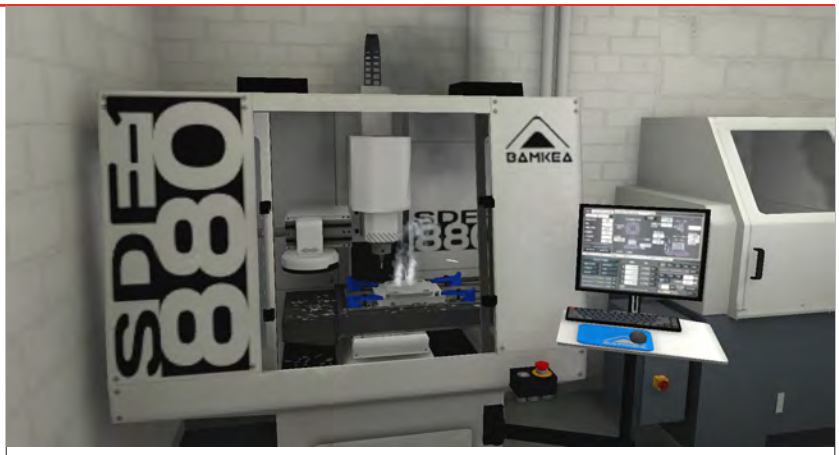
Scenario Description
A solvent fire has started inside a fume hood in a science laboratory.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is a combination solvent (Class B) and Class A fire, and the correct extinguisher types are: Water (Class A fires), CO2 (Class B and E fires), or Dry Chemical/Powder (Class A, B and C fires)
- Describe assessment of risks posed by fire
- Describe if safe to approach and extinguish with an extinguisher
- Describe additional actions that could be taken to control fire, i.e., close fume hood sash
- Shut off electricity

Magnesium Fire

Scenario Description
A magnesium fire has started inside a CNC milling machine in a science laboratory.



Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is a combustible metal fire, and the correct extinguisher type is Powder (Class D fires)
- Describe assessment of risks posed by fire
- Describe if safe to approach and extinguish with an extinguisher
- Describe additional actions that could be taken to control fire, i.e., close CNC milling machine hood sash
- Shut off electricity

Burst Pipe Fire

Scenario Description
A transport pipeline has ruptured resulting in an oil spill fire.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- An oil spill is a Class B fire, the correct extinguisher types are: Purple-K (Class B), Dry Chemical/ Powder (Class A, B and C fires) or Foam (Class B)
- Assess emergency situation and what actions can be taken to stop the source of the spill, i.e. close a valve/switch off a pump
- Describe if the size of the fire can be extinguished with an extinguisher
- Describe potential electrical risk and actions that can be taken to manage

Catalytic Converter Fire

Scenario Description
The fire is caused by a build-up of flammable material (coal dust/grass) adjacent to hot engine parts such as a catalytic converter or exhaust. May spread fire to surrounding area.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A grass fire is a Class A fire, the correct Extinguisher types are: Water (Class A) or Chemical/Dry Powder (Class A, B and C fires)
- Describe assessment of emergency situation: is there a casualty in or near the vehicle?
- Describe if the size of the fire can be extinguished with an extinguisher

Oil Spill Fire

Scenario Description
An oil spill has caught fire near a distribution station

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- An oil spill is a Class B fire., the correct extinguisher types are: Purple-K (Class B), Dry Chemical/ Powder (Class A, B and C fires) or Foam (Class B)
- Assess the emergency situation and what actions can be taken to stop the source of the spill, i.e. close a valve/switch off a pump
- Describe if the size of the fire can be extinguished with an extinguisher
- Describe potential electrical risk and actions that can be taken to manage

PVStop Solar Panel

Scenario Description
This scenario uses PVstop, a suppressant that switches off solar panels if applied correctly. This involves applying a continuous horizontal band of suppressant across each panel row.

Learning Outcomes

- Solar panel fires are live electrical fires and require specialised suppressants
- Demonstrate correct application technique for PVstop
- Discuss dangers associated with solar panel fires

Ute Engine Fire

Scenario Description
A utility vehicle's engine ignites in a mining environment.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A vehicle consists of many different materials, the correct extinguisher types are: Dry Chemical/ Powder (Class A, B and C fires), CO2 (Class B and electrical fires) or Foam (Class B)
- Demonstrate assessment of emergency situation: is there a casualty in or near the vehicle?
- Describe if the size of the fire can be extinguished with an extinguisher

Ute Engine Fire (Night)

Scenario Description
A utility vehicle's engine ignites in a mining environment at night.

Learning Outcomes

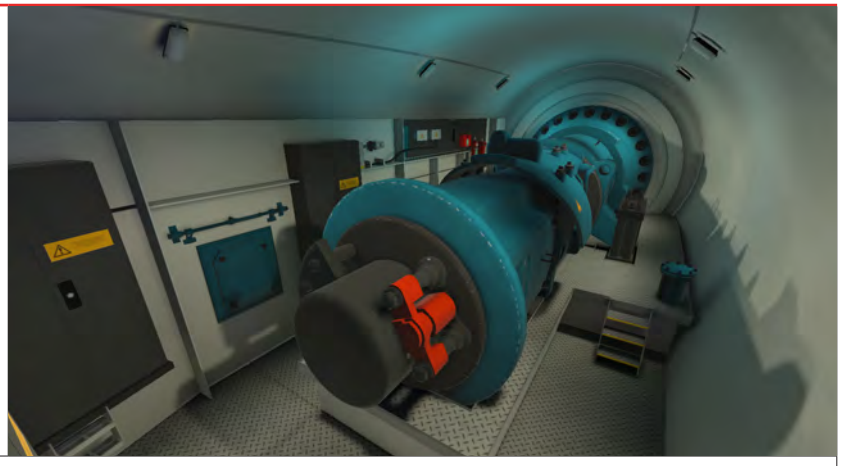
- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A vehicle consists of many different materials, the correct Extinguisher types are: Dry Chemical/ Powder (Class A, B and C fires), CO2 (Class B and electrical fires) or Foam (Class B)
- Demonstrate assessment of emergency situation: is there a casualty in or near the vehicle?
- Describe if the size of the fire can be extinguished with an extinguisher

Wind Turbine Electrical Fire

Scenario Description

An electrical cabinet has caught fire due to overheating or an electrical fault.

Note: There is also an advanced version of this scenario that features a harder and more persistent fire.



Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and selection of the correct extinguisher
- An electrical fire is a Class C fire (USA), Class E fire (Aust), or Class K fire (Europe), and correct extinguisher types are CO2 (Class B and electrical fires) and Dry Chemical/ Powder (Class A, B and C fires)
- Identify that water is NOT a good extinguisher
- Describe location of exit
- Describe if the size of the fire can be extinguished with an extinguisher
- What other actions should be taken, i.e. is the electricity still connected?

Wind Turbine Grease Fire

Scenario Description

A gear drip box has caught fire due to overheating.

Note: There is also an advanced version of this scenario that features a harder and more persistent fire.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A grease/oil fire is a Class B fire, the correct extinguisher types are: Purple-K (Class B), Dry Chemical / Powder (Class A, B and C fires) or Foam (Class B)
- Assess the emergency situation and what actions can be taken to extinguish or evacuate safely
- Describe if the size of the fire can be extinguished with an extinguisher
- Describe potential electrical/environmental risk and actions that can be taken to manage

Extraction Fan Fire

Scenario Description
An extraction fan is on fire in a commercial kitchen.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and selection of the correct extinguisher.
- A kitchen fat fire is a Class B fire, the correct extinguisher type is Wet Chemical (Class A and F fires), but CO2 (Class B and E fires) and Dry Chemical/ Powder (Class A, B and C fires) can also be used.
- Describe assessment of risks posed by fire
- If safe to approach and extinguish with an extinguisher
- Shut off heat (gas/electricity)
- The cooker hood (overhead exhaust fan) should be shut off (if possible)

Fat Fryer Fire

Scenario Description
A fryer is on fire in a commercial kitchen. This scenario also features fire blanket and manual suppression options.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and selection of the correct extinguisher.
- A kitchen fat fire is a Class B fire, the correct extinguisher type is Wet Chemical (Class A and F fires), but CO2 (Class B and E fires) and Dry Chemical/ Powder (Class A, B and C fires) can also be used.
- Demonstrate that water is NOT a good extinguisher for this fire
- Describe assessment of risks posed by fire
- If safe to approach and extinguish with an extinguisher
- Other actions that could be taken to control fire, e.g., put lid on fire or a fire blanket (not the best option for this fire).
- Shut off heat (gas/electricity)
- The cooker hood (overhead exhaust fan) should be shut off (if possible)
- Discuss use and merits of manual suppression system

Food Truck Fat Fire

Scenario Description
A fryer is on fire in a food truck. This scenario also features fire blanket and manual suppression options.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and selection of the correct extinguisher.
- A kitchen fat fire is a Class B fire, the correct extinguisher type is Wet Chemical (Class A and F fires), but CO2 (Class B and E fires) and Dry Chemical / Powder (Class A, B and C fires) can also be used
- Demonstrate that water is NOT a good extinguisher for this fire
- Describe assessment of risks posed by fire
- Describe if safe to approach and extinguish with an extinguisher
- Describe other actions that could be taken to control fire, i.e. put lid on fire or a fire blanket (not the best option for this fire)
- Shut off heat (gas/electricity)
- The cooker hood (overhead exhaust fan) should be shut off (if possible)
- Discuss inbuilt suppression system activation

Food Truck Mixed Fire

Scenario Description
A frying pan has caught fire in a food truck and the fire has spread to the nearby counter. This scenario also features fire blanket and manual suppression options.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and selection of the correct extinguisher
- A kitchen fat fire is a Class B fire, the correct extinguisher type is Wet Chemical (Class A and F fires), but CO2 (Class B and E fires) and Dry Chemical / Powder (Class A, B and C fires) can also be used
- Demonstrate that water is NOT a good extinguisher for this fire
- Describe assessment of risks posed by fire
- Describe if safe to approach and extinguish with an extinguisher
- Describe other actions that could be taken to control fire, i.e. put lid on fire or a fire blanket (not the best option for this fire)
- Shut off heat (gas/electricity)
- The cooker hood (overhead exhaust fan) should be shut off (if possible)
- Discuss and demonstrate suppression system activation

Garbage Bin Fire

Scenario Description
A garbage bin in a food service area has caught fire.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher.
- This is mainly a paper packaging fire, so the correct extinguisher type is Water (Class A fires).
- Describe if size of fire can be extinguished and what other options are available.
- Describe any other actions that may be taken.

Powerboard Fire

Scenario Description
An electrical board has caught fire due to overheating or an electrical failure.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and selection of the correct extinguisher.
- An electrical fire is a Class C fire (USA), Class E fire (Aust), or Class K fire (Europe), and correct extinguisher types are CO2 (Class B and electrical fires) and Dry Chemical/ Powder (Class A, B and C fires)
- Identify that water is NOT a good extinguisher
- Describe location of exit
- Describe if the size of the fire can be extinguished with an extinguisher
- What other actions should be taken, i.e. is the electricity still connected?

Wok Fire

Scenario Description
A wok is on fire in a commercial kitchen. This scenario also features fire blanket and manual suppression options.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and selection of the correct extinguisher.
- A kitchen fat fire is a Class B fire, the correct extinguisher type is Wet Chemical (Class A and F fires), but CO2 (Class B and E fires) and Dry Chemical/ Powder (Class A, B and C fires) can also be used.
- Demonstrate that water is NOT a good extinguisher for this fire
- Describe assessment of risks posed by fire
- If safe to approach and extinguish with an extinguisher
- Other actions that could be taken to control fire, e.g., put lid on fire or a fire blanket
- Shut off heat (gas/electricity)
- The cooker hood (overhead exhaust fan) should be shut off (if possible)
- Discuss use and merits of manual suppression system

Air Ambulance In-Air Fire

Scenario Description

A centre console fire has started mid-flight with a patient on board.

* Note: There are both EC135 and EC145 versions of this scenario, with the fires in different cockpit positions

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Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A helicopter console is primarily Class A material, which can be extinguished by a Halon extinguisher (Class B and C fires, less effective with Class A fires) with a little effort
- Describe if size of fire can be extinguished and what other options are available
- Describe additional actions that need to be taken, e.g, protecting the patient?

Air Ambulance Land Fire

Scenario Description

An exhaust fire on an air ambulance sitting on the tarmac.

* Note: There are both EC135 and EC145 versions of this scenario, with the fire in different exhausts.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- An aircraft consists of many different materials, the correct extinguisher types are: Water (Class A), Dry Chemical/ Powder (Class A, B and C fires), CO2 (Class B and electrical fires) or Foam (Class B)
- Demonstrate assessment of emergency: is there a casualty in or near the aircraft?
- Describe if the size of the fire can be extinguished with an extinguisher

Air Ambulance Medical Bay Fire

Scenario Description
A medical bag has caught fire in the air ambulance medical bay. This fire is very close to the patient and the trainee must both protect the patient and ensure they don't inadvertently hit them with Halon suppressant.

* Note: There are both EC135 and EC145 versions of this scenario, with the fire in either a medical bag or medical equipment.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A medical bag is primarily Class A material, which can be extinguished by a Halon extinguisher (Class B and C fires, less effective with Class A fires) with a little effort
- Describe if size of fire can be extinguished and what other options are available
- Describe additional actions that need to be taken, e.g, protecting the patient?

Ambulance Fire

Scenario Description
A faulty oxygen tank regulator ignites a fire in an ambulance carrying a patient to hospital.

The user is the responding paramedic and must extinguish the fire while their colleague attends to the patient.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher.
- An ambulance consists of many different materials, so the correct extinguisher type is Dry Chemical (Class A, B and C fires).
- Describe if size of fire can be extinguished and what other options are available.
- Describe additional actions that need to be taken, e.g., protecting the patient, correct emergency procedures.

Bed Motor Fire

Scenario Description
A bed in a modern hospital is on fire, caused by the ignition of the bed's electric motors that enable it to be moved to a number of different positions.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- If power is still connected and live the correct extinguisher is Chemical/Dry Powder or CO2. If power is isolated a water extinguisher should be used.
- Describe actions that should be taken including: checking where the patient is – call on others for help if needed; checking if the electrical components of the bed are connected to power sources – if safe to do so disconnect from power; checking If there is live electrical equipment in close proximity to the bed – remove if safe to do so.
- Describe if further assistance is needed, i.e. instructing someone to call the Fire Department
- Describe the need to follow organisation's fire plan instructions

Cigarette Fire

Scenario Description
A bed is on fire in a standard hospital room, ignited by a cigarette a patient was smoking in the bed.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- If power is still connected and live the correct extinguisher is Chemical/Dry Powder or CO2. If power is isolated a water extinguisher should be used.
- Describe actions that should be taken including: checking where the patient is – call on others from help if needed; checking if the electrical components of the bed are connected to power sources – if safe to do so disconnect from power; checking if there is live electrical equipment in close proximity to the bed.
- If further assistance is needed, i.e. instructing someone to call the Fire Department
- Describe the need to follow organisation's fire plan instructions

Medical Oxygen Fire

Scenario Description

In medical situation a patient may be receiving medical oxygen. In a major hospital this may be plumbed into the room or may consist of the small portable tank. The presence of the oxygen will dramatically increase the intensity of the fire. If the tank is in close proximity to the fire it may fail. Common ignition cause is a patient smoking in bed.. This scenario also features a hose reel option.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is an A class fire, so the correct extinguisher type is Water (Class A fires)
- Describe actions that should be taken including: checking to ensure the patient is removed, checking if oxygen is plumbed (turn off at source if safe to do so or remove portable tank if safe to do so)
- Describe the need to follow organisation's fire plan instructions

All Terrain Vehicle (ATV) Fire

Scenario Description
An all-terrain vehicle can catch fire in a number of scenarios including refuelling, broken fuel lines, build-up of flammable material adjacent to hot engine parts and mechanical failure.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- Identify this as a combination fire, with flammable liquid and plastics, the correct extinguisher is: Dry chemical/Powder (Class A, B and C fires)
- Demonstrate that this fire should be extinguished from all sides - over and under the body of the unit
- Describe actions, i.e. evacuation to a safe distance, removal of passengers

Backhoe Engine Fire

Scenario Description
Fire can start in the engines of mechanical plants such as backhoes or tractors. The causes range from fuel leaks, mechanical failure or build-up of carbonaceous material around hot engine parts and mechanical failure.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is a combination fire, with flammable liquid and plastics, the correct extinguisher is: Dry Chemical/ Powder (Class A, B and C fires)
- Describe actions that should be taken including shutting down engine, chocking wheels (if possible) to prevent uncontrolled movement
- Describe risk of positioning responder near or under the plant because of sudden movement or equipment failure

Backhoe Hydraulic Fire

Scenario Description
In some circumstance there can be a release of hydraulic oil, which may ignite. The ignition source may be contact with a high temperature source or contact with energized electrical wires/ equipment.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is a combination fire, with flammable liquid and plastics, the correct extinguisher type is: Dry Chemical/ Powder (Class A, B and C fires)
- Describe actions, i.e. ensure any energized electrical equipment is turned off
- Describe need to turn off power source for the backhoe (tractor engine) to stop hydraulic pump (if safe to do so)

Boat Console Fire

Scenario Description
Electrical problems can start fires on boats in this location. It can also be a source of ignition for flammable vapours.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique including selecting the correct extinguisher
- This is a combination fire, with flammable liquid and plastics, the correct extinguisher is: Dry Chemical/ Powder (Class A, B and C fires)
- Describe actions that should be taken including disconnecting and removing portable fuel tanks from boat if safe to do so
- Describe importance of ensuring the boat is secured so it does not threaten other facilities, i.e. refuelling pontoons or other boats.

Boat Engine Fire

Scenario Description
Fires can start in and around boat engines because of refuelling, trying to start flooded engines, mechanical failure and overheating.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is a combination fire, with flammable liquid and plastics; the correct extinguisher is: Dry Chemical/ Powder (Class A, B and C fires)
- Describe the requirement to disconnect and remove portable fuel tanks from boat if safe to do so.
- Describe importance of ensuring the boat is secured so it does not threaten other facilities, i.e. refuelling pontoons or other boats.

Generator Fire

Scenario Description
A generator is fuelled by flammable liquid. If unit is re-fuelled whilst hot ignition can occur. If the unit is flooded with fuel and attempts made to start unit it may ignite. A further cause of fire may be mechanical failure.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- This is a combination fire, with electricity, flammable liquid and plastics; the correct extinguisher is: Dry Chemical/ Powder (Class A, B and C fires)
- Describe actions, i.e. move fuel containers from the area, turn off any equipment connected to the generator

Propane Fire

Scenario Description

Fires can occur when there is a release of gas or oil/fat used for cooking ignites. A barbeque is a common example of this fire type that people experience.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- The correct extinguisher type for a propane fire is: Dry Chemical/ Powder (Class A, B and C fires)
- Describe actions, i.e. evacuation to a safe distance
- Need to check if gas is extinguished and why it should be turned off gas to prevent an uncontrolled gas release (if safe to do so)

Fat Fire

Scenario Description
A frying pan is on fire on the stove. This scenario also features a fire blanket option.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A kitchen fat fire is a Class B fire, the correct extinguisher types are: CO2 (Class B and E fires), or Dry Chemical/Powder (Class A, B and C fires)
- Demonstrate that water is NOT a good extinguisher for this fire
- Describe assessment of risks posed by fire
- Describe if safe to approach and extinguish with an extinguisher
- Describe additional actions that could be taken to control fire, i.e. put lid on fire or a fire blanket.
- Shut off of heat (gas/electricity)
- Shut off the cooker hood (overhead exhaust fan) if possible

Kitchen Smoke Alarm Fire

Scenario Description
A frying pan caught fire on the stove.

Learning Outcomes

- This scenario does not involve extinguishing the fire but is instead a visual demonstration of when photoelectric and ionization smoke alarms activate in relation to fire and smoke progress.

Rubbish Fire

Scenario Description
A backyard rubbish pile fire has gotten out of hand.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and selection of the correct extinguisher. A backyard rubbish pile fire consists of wood and garden waste (Class A material). The correct extinguisher types are: Water (Class A) and Dry Chemical/Powder (Class A, B and C).
- Describe risks posed by fire and if safe to approach and extinguish with an extinguisher
- Describe plan of action if risk of fire increasing and conditions deteriorating
- Identify safe exits

Sofa Fire

Scenario Description
The sofa in the living room caught fire, potentially as result of a candle or a cigarette.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A sofa is a Class A material and the correct extinguisher types are: Water (Class A) or Dry Chemical/ Powder (Class A, B and C)
- Describe risks posed by fire
- Describe if safe to approach and extinguish with an extinguisher
- Describe additional actions that should be taken, i.e. warn other people in the house, ask them to call the fire department
- Describe potential exits for use if conditions deteriorate

Aircraft Laptop Fire

Scenario Description
A laptop fire on a passenger aircraft involving a lithium-ion battery.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- An electrical fire is a Class C fire (USA), Class E fire (Aust), or Class K fire (Europe), and correct extinguisher types are CO2 (Class B and electrical fires) and Dry Chemical/ Powder (Class A, B and C fires)
- Describe additional actions, i.e. evacuation to a safe distance

Army Bulk Fuel Tanker Fire

Scenario Description
A fire has broken out in the manifold area of an army bulk fuel tanker while it was loading fuel. The trainee must activate the E-Stop button and extinguish the fire, paying close attention to the wind direction.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A fuel spill is a Class B fire, the correct extinguisher types are Purple-K (Class B), Dry Chemical/ Powder (Class A, B and C fires) or Foam (Class B)
- Assess emergency and what actions can be taken to stop the source of the spill, i.e., close a valve/ switch off a pump
- Demonstrate observance of wind, correct approach vector to fire, and communications
- Describe if the size of the fire can be extinguished with an extinguisher

Army Truck Fire

Scenario Description
An army truck caught fire due to overheating brakes or possibly an electrical failure.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A vehicle consists of many different materials, the correct extinguisher types are: Dry Chemical/ Powder (Class A, B and C fires) or CO2 (Class B and electrical fires)
- Describe if the size of the fire can be extinguished with an extinguisher
- Describe the risk of materials or ammunition the truck is transporting
- Describe further actions, i.e. evacuation to a safe distance

Car Engine Fire

Scenario Description
A car caught fire inside a gas station.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A Car consists of many different materials, correct extinguisher types are: Dry Chemical/Powder (Class A, B and C fires), Foam (Class B), or CO2 (Class B and E)
- Describe assessment of risks posed by fire
- Describe If safe to approach and extinguish with an extinguisher
- Describe actions to control extra dangers, ie. activate emergency stop button to isolate power from pumps
- Assessment of emergency situation, i.e. Is someone in the car? Describe additional actions, ie. call paramedic

Car Fire

Scenario Description
A car catches fire after collision with a pole.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A Car consists of many different materials, correct extinguisher types are: Dry Chemical/Powder (Class A, B and C fires), Foam (Class B) or CO2 (Class B and E)
- Demonstrate assessment of risks posed by fire
- Describe if safe to approach and extinguish with an extinguisher
- Describe actions to control extra dangers, ie. activate emergency stop button to isolate power from pumps
- Assessment of emergency situation, i.e. Is someone in the car?
- Describe additional actions, ie. call paramedic

Train Seat Fire

Scenario Description
One of the seats on the train has caught fire, potentially as result of vandalism or an overheating smartphone.

Learning Outcomes

- Demonstrate PASS (Pull, Aim, Squeeze and Sweep) technique and select correct extinguisher
- A train seat is a Class A material and the correct extinguisher types are: Water (Class A) or Dry Chemical/ Powder (Class A, B and C)
- Describe if the size of the fire can be extinguished with an extinguisher
- Describe additional actions that need to be taken, i.e. do you need to warn other people on the train and ask someone to warn the train driver using the emergency call button?

FLAIM

FLAIM's Intellectual Property

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ISO 9001 BUREAU VERITAS Certification

Designed, developed and supplied under a Quality Management System certified by Bureau Veritas against the requirements of ISO 9001:2015.

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