Emergency Procedures & Fire Safety



February 2013 (Version 4)





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Emergency Procedures & Fire Safety



This course is endorsed by APEC No 061122359 as authorised by Australian College of Nursing (ACN) according to approved criteria.

Attendance attracts **1 ACN CNE point** as part of ACN's Life Long Learning Program (3LP).

(Equivalent to 1 hour CPD)



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Objective of Education Package

After identification of their own learning needs the employee will be able to show evidence of theoretical knowledge of Emergency Procedures and Fire Safety Training. This tutorial is designed to provide an overview to emergency codes and fire safety in Australia. After proceeding through this online tutorial the participant should have understanding of the basic concepts of fire prevention, the use of fire equipment and fire system awareness, fire emergency response procedures and evacuation, and the Emergency Procedure Guide.

This tutorial is designed as a generic learning tool in which all levels of nursing and health care workers can exit with the same learning experience. However, healthcare workers have the responsibility for making themselves aware of the specific policies and protocols where they work as equipment and conditions vary.

Remember: There are many textbooks and websites that you can access if at the end of this tutorial, you, as an individual working in the healthcare industry, recognise a need for more learning in this area and, as such, it is your obligation to do so.

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Chemistry of Fire: The Fire Triangle

Fire starts when **Fuel** – (a flammable and/or combustible material) has an adequate supply of **Oxygen** and is subjected to enough **Heat**.

A fire cannot exist without these three elements FUEL + OXYGEN + HEAT.

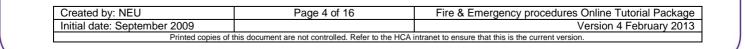
Therefore, fire can also be extinguished by removing any one of these three elements. For example:



- Removal of **HEAT** through the application of water via a hose;
- Removal of OXYGEN through application of carbon dioxide to starve the fire of O₂;
- Removal of **FUEL** through use of bins etc., to keep rubbish contained.

Health Facilities Fire Protection Systems

- 1. Each Health Facility, you are employed in will have Policies & Procedures at the local level. These Policies & Procedures have been developed to guide you in the event of a work place hazard occurring. It is up to the individual to have knowledge of these local Policies & Procedures;
- 2. All Health Facilities will have heat and smoke detectors;
- 3. All Health Facilities should have a 'Break Glass Alarm' within its environment and an internal alarm system;
- 4. Most Health Facilities have fire and/or smoke rated doors;
- 5. All Health Facilities will have a selection of fire fighting equipment e.g. canvas hose reels (for use of Fire Department); fire extinguishers; fire blankets, fire hose reels;
- 6. All Health Facilities will have a maintenance system of all its equipment on a annual basis;
- 7. All Health Facilities will have a training/education program for their staff.





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Identification & Operation of Fire Fighting Equipment

Fire Extinguishers

There are 4 basic steps to remember when using a fire extinguisher:

• *Pull the pin* at the top of the extinguisher

Aim the nozzle towards the base of the fire

- P-A-S-S
 - Squeeze the handles together
 - Sweep the nozzle from side to side, directing the contents at the base of the flames.

Classes of Fire

Differing Fire Extinguishers and Profiles

- Class A Paper, textiles, wood, most plastics & rubber
- Class B Flammable liquids
- Class C Combustible gases
- Class E Electrically energised equipment



Water Extinguisher

Wood, paper, plastic, textiles & rubber.

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Foam Extinguisher Wood, paper, plastic, rubber & flammable liquids.



Dry Chemical /Powder Extinguisher

Wood, paper, plastics, rubber, flammable liquids, combustible gases & electrical energised equipment.

Powder Fire Extinguisher ABE

(distinguished by a WHITE band around the top of the cylinder). The most widely used type of fire extinguisher suited for fires occurring in the house, boat, garage, car or caravans.



Carbon Dioxide

Electrical fires Flammable liquids

Note: the differing profile of nozzle in the cylinder.

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Fire Blankets

- Fire Blankets are to only used on a *small* fire;
- Protect yourself from the flames by shielding your body with the blanket. Look over the blanket and approach the fire keeping it at arm's length;
- Place (do not throw) the blanket over the container to completely smother the fire. Make sure that the blanket has completed a seal around the rim of the container;
- Back away from the fire to a safe distance;
- Dispose of the blanket after use. **DO NOT RE-USE.**

Fire Hose Reel

- Open valve (ensure that hose reel is turned off at nozzle)
- Run out hose towards scene of fire
- Open nozzle and direct stream at base of fire



R.A.C.E

Usually connected to main water system but not the canvas reels that are used by the fire brigade.

Action in the Event of Fire or Smoke in a Hospital

- Remove people from the immediate area if safe to do so;
- Alert switch (dial emergency no.) or the Fire Brigade (break glass alarm);
- Contain if practicable, close the doors & windows;
- Extinguish use appropriate fire-fighting equipment but do not take risks. Evacuate to a safe area if and when directed to do so, ensuring that you can account for everybody under your care.

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Work Life Choice.

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Action in the Event of an Alarm

- Check your immediate area for any sign of <u>smoke</u>, <u>fire</u> or a <u>red light</u> showing on a detector;
- If safe to do so, proceed to the Nurses station and place patient records in a pillow case **but only** if safe to do so. Check for smoke or fire as you proceed and make sure that fire doors and windows are closed;
- Listen for any messages over the PA (Public Address) system;
- If directed to evacuate Evacuate to a safe area when directed to do so ensuring that you can account for everybody under your care and if possible take records with you;
- Remember the *R.A.C.E* format if you discover fire or smoke.

Emergency Procedure Guides

- The Emergency Procedure Guide is found in a flip chart booklet
- Guides outline the core actions required in the events of an incident
- They should be located in all areas of hospitals/health settings
- They should be located near the hospital/health setting emergency number

Emergency Codes

The Guides are **colour coded** as follows:

Medical Emergency	Code Blue
Bomb Threat	Code Purple
Internal Emergency	Code Yellow
Personal threat	Code Black
External Emergency	Code Brown
Evacuation	Code Orange
Fire/Smoke	Code Red

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Emergency Response

Fire & Smoke CODE RED

The presence of smoke or fire is a *CODE RED*. If you discover a *CODE RED* you should:

- Remain calm;
- Dial the hospital emergency number and state:
 - 'there is a CODE RED',
 - o The exact location
 - o Your name & title

In the event of a fire in a hospital you are to follow **<u>R.A.C.E</u>**

Medical Emergency CODE BLUE

Code Blue - Medical Emergency

All HCA employees need to access Basic Life Support – on line package, to fully familiarize yourself with your role during a CODE BLUE. This is a synopsis only:

Danger
ResponseEnsure your own, then others safety – remove danger.
Assess the person by touching gently, talking, or asking 'are
you OK?'

Send for help If in a patient's room, push the Emergency Call Button, or attract the attention of a second person if available. Dial emergency number & state:

- There is a cardiac arrest
- The exact location, e.g. ward, room number
- A Check airway
- B Check breathing
- **C** Commence Cardiac Compressions
- D Defibrillate patient via Automated External Defibrillator

Always stay with the person until help arrives if at all possible.

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In some of the larger hospital settings throughout Australia before a patient requires a Code Blue – Arrest call to be made, a Medical Emergency Team (MET) can be called if the patient's condition is deteriorating - but check with your health facility for further information.

Bomb Threat CODE PURPLE

Code Purple - Bomb Threat

If you receive a telephone threat you should:

- Remain calm & listen take notes if possible or use 'Bomb Threat Checklist' if this is readily available;
- Attract the attention of a second person if possible, or use another telephone yourself & dial the hospital emergency number and state:
 - There is a bomb threat
 - The exact location
 - o Your name & title

If you find a suspect package, you should:

- Leave the object alone do not touch it;
- Dial hospital emergency number & state:
 - There is a suspect package;
 - The exact location;
 - Follow the direction of senior staff.
- Do not use mobile phones or any radio frequency equipment as they may activate the bomb;
- Fill in the 'Bomb Threat Checklist' if this is readily available in that particular health facility setting.

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Internal Emergency CODE YELLOW

Code Yellow - Internal Emergency

Internal Emergencies may include:

- A failure of essential services e.g. <u>electricity</u>, water, gas outage;
- Hazardous substances incidents e.g. leaking or spillage of substances such as flammable liquids. A Material Safety Data Sheet (M.S.D.S.) should be very near the hazard chemical as well as in a central location. Do not attempt to handle the leaking/spillage without reference to the M.S.D.S.;
- Structural damage;
- Flooding in both patient or non-patient areas.

If you discover an internal emergency, you should:

- Remain calm
- Dial the hospital emergency number & state:
 - There is an internal emergency Code Yellow;
 - The exact location;
 - Your name & title.
- •
- Move patient; visitors; etc., in immediate danger BUT ONLY IF SAFE TO DO SO.

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Personal Threat CODE BLACK

Code Black – Personal Threat

Personal threat situations include armed or unarmed persons, threatening injury to others or themselves. Personal Threats also include incidents of violence or assault; armed hold-ups; robbery and the presence of intruder.

If you are involved in a situation of personal threat or armed hold up, you should:

- Obey the offenders instructions if they are reasonable;
- Remain calm talk quietly to aggressor & assist them as able;
- Retreat when safe to do so;
- Dial the hospital emergency number if able to and state:
 - There is a personal threat situation Code Black;
 - The exact location;
 - Your name & title;
 - Use duress alarm if available, and/or safely reached.
- Do NOT withhold drugs or money if they are demanded and it is safe to comply;
- Record observations of the perpetrator after the threat has passed;
- Do not pursue if the aggressor leaves the Health Facility.

In some large hospitals throughout Australia, there is an Emergency Code called – <u>CODE GREY</u>. Sometimes located only in Emergency Departments, sometimes it is throughout the hospital and there is a hospital wide response. <u>Code Grey</u> usually has the following features:

Threat to Employee or Patient by an internal Patient or Visitor:

A response team trained & available to meet that threat, it is your responsibility as a HCA employee, to ascertain which Emergency Codes are profiled in the health setting you are employed in and to know what responses are required from casual employees.

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External Emergency CODE BROWN

Code Brown – External Emergency

External emergencies (major disaster) that may have occurred within region and may include any of the following:

- Transport accidents;
- Industrial accidents;
- Chemical, biological, radiation release;
- Natural disasters.

Depending upon the nature of the emergency & the availability of other emergency resources, any healthcare facility may become involved in an emergency response. Activation of various phrases of the overall plan will only occur on the authority of the Hospital Executive Team.

Evacuation CODE ORANGE

Code Orange - Evacuation

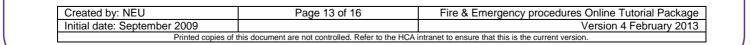
Evacuation refers to the movement of people from immediate danger in as quick and safe manner as possible. The case of a fire is used as a example throughout this section.

Stage 1:

Remove people from the **immediate danger**, outside the room, or into an adjoining room and for example in the case of a fire, isolating the fire by closing the door.

Stage 2:

Remove people from outside the involved room into another safe adjoining fire compartment, either **horizontally** away from the fire through the smoke/fire doors, or **vertically** to another level/floor below the fire.





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Stage 3:

Remove people from the building to a pre-determined safe assembly area dependent on the size of the facility.

Priority of Evacuation

- 1. First Ambulant Patients and Visitors: Who can evacuate themselves and can be directed to a safe area. Can also assist semi- ambulant patients;
- 2. **Second semi ambulant patients:** who may be suffering ailments, which cause them to be slow movers; they must be assisted out of danger;
- 3. Third non ambulant patients who are totally reliant upon rescuers' to remove them from danger;
- 4. Fourth violent aggressive or resistive patients. These are the type who may put the rescuer at risk.

A lift should **not** be used for evacuation under any circumstances as power failure or fire in lift shaft may occur.

Remember to <u>always</u> make yourself aware of the policies, protocols and location of safety equipment/exits in place wherever you work, and your role in the event of an emergency as these may differ from where you last worked.

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CONGRATULATIONS!



You have completed the reading for this part of the course and should now complete the multi-choice assessment quiz to successfully complete the course.

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