

CIVIL DEFENCE

EMERGENCY HANDBOOK

 9TH EDITION





SCDF
The Life Saving Force

... for a safer Singapore

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BE A COMMUNITY FIRST RESPONDER & MAKE A DIFFERENCE IN TIMES OF CRISIS.



Dear Reader,

SCDF's transformation vision 2025 for *A Nation of Lifesavers* was first mooted in 2015. In 2020, SCDF marked the halfway juncture of the journey towards realizing this grand vision. Among the developments that have been rolled out in the first half of the transformation journey include supporting programmes such as the Save-A-Life (SAL) Initiative which aims to make Automated External Defibrillators (AEDs) more accessible to the public. As of April 2021, more than 5,200 AEDs have been installed under this initiative, with AEDs deployed at one in every two HDB blocks islandwide. By 2025, SCDF's aim is to make one AED available for every 250m radius in urban areas.

Of course, this transformation vision remains aspirational until we see the community featuring more prominently as Community First Responders (CFRs). CFRs are invaluable partners to the SCDF who step up and provide vital assistance in times of emergency. They are the crucial bridge in the time elapsed between an incident occurring and the arrival of SCDF crew.

Despite the pandemic and its related challenges, SCDF is heartened that more members of the public have downloaded the myResponder app and registered as CFRs. Since the launch of the myResponder app as part of SAL initiative, 29 lives have been saved due to timely intervention from CFRs.

If you have not already downloaded the myResponder app, I would like to urge you to do so today. You may be able to make a difference and provide assistance to those in distress around you. Even if you are yet to be trained, you can follow the directions of the SCDF's 995 call specialists who will be on hand to guide you over the phone by providing Pre-Arrival Instructions. Your prompt intervention can prevent the situation from further escalating into a dire consequence and make that vital difference between life and death.

All of us have a part to play in emergency preparedness. This remains the basic tenet of the Civil Defence (CD) Emergency Handbook, in providing a handy reference for members of the public, whether trained or untrained, on essential lifesaving skills that may prove useful in their daily lives. In this latest 9th edition, you will find updates to existing topics as well as new topics such as SGSecure. You may download a digital version of the latest edition of the CD Emergency Handbook on SCDF's website and also through the myResponder app.

SCDF's pursuit of the transformation vision of *A Nation of Lifesavers*, especially with the unknown challenges that we may face in the future, may only be fully realised through partnership with willing everyday heroes within the community. Nobody can do everything but everyone can do something, so wait no longer to make a difference.

Eric Yap

Commissioner

Singapore Civil Defence Force

CHAPTER 1

FIRST AID

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Medical emergencies arising from illnesses and injuries can result in death or serious complications if not treated immediately. You can help save a casualty's life if you are able to render proper first aid on-site before medical help arrives. Remember, you should dial 995 only if it is an emergency. Otherwise, dial 1777 for non-emergency ambulance services.

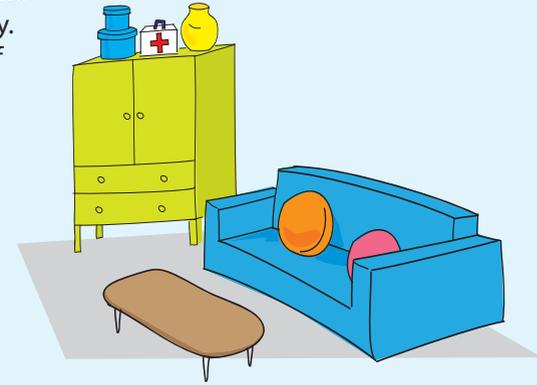


First Aid Kit

It is strongly recommended that each household be equipped with a first aid kit. You can purchase one at a pharmacy. Remember to monitor the expiry dates of the supplies in your first aid kit on a regular basis and replenish them when necessary. The first aid kit should be placed somewhere easily accessible to adults yet out of children's reach.

EXAMPLES OF ITEMS IN A FIRST AID KIT

ITEM	USAGE
Tweezers	Pull out small foreign objects embedded in the skin/wounds.
Scissors	Cut dressing and bandages.
Resuscitation face shield	Serve as a protective layer during CPR (Cardio-Pulmonary Resuscitation).
Thermometer	Measure human body temperature.
Disposable gloves	Protect the rescuer from infection transmitted via blood and bodily fluids.
Adhesive tape	Secure bandages.
Dressing	Protect the wound from exposure to dirt and other sources of infection; types include first aid dressing, sterile eye dressing, adhesive plasters and sterile gauze pads.
Bandages	Triangular bandages for slings and crepe bandages to wrap around wounds (e.g. a cut on the arm).



First aid kit on a cabinet in the living room



TO STOP THE BLEEDING:

1

Put on protective gloves or place a barrier between you and the casualty's blood.

2

Check if there are any foreign objects (e.g. glass fragments) in the wound.

3

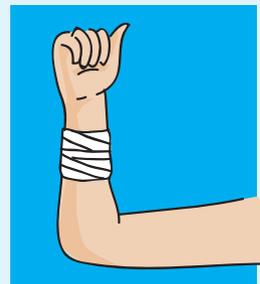
If there are no foreign objects in the wound:

- a. Elevate the injured arm or leg above the heart level.
- b. Place a sterile gauze pad over it.
- c. Apply firm direct pressure on the wound using your palm or fingers.
- d. Secure it with a bandage.

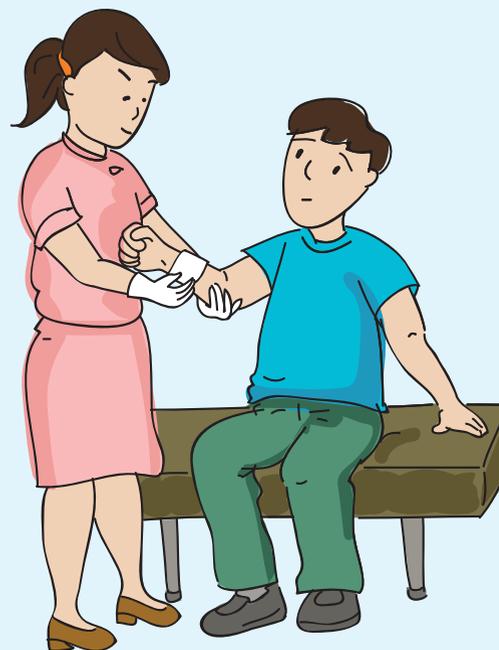
If there are any foreign objects (e.g. glass fragments) in the wound, do not press on the object. Avoid applying direct pressure on the object by building up padding around it before bandaging.

Large foreign objects, if noted, should not be removed as doing so may further injure the surrounding tissue. Seek medical attention immediately.

Small foreign objects such as splinters may be removed with the tweezers.



Injured arm to be raised above heart level



Fractures

A fracture is a crack in the bone and the skin over the fracture may be intact or torn.

SIGNS OF FRACTURES INCLUDE:

- Pain and tenderness.
- Unnatural shape or position of fractured part.
- Immobility of fractured limb.
- Swelling.
- Bruising.
- Open wound for open fractures, i.e. when the skin over the fracture is torn.



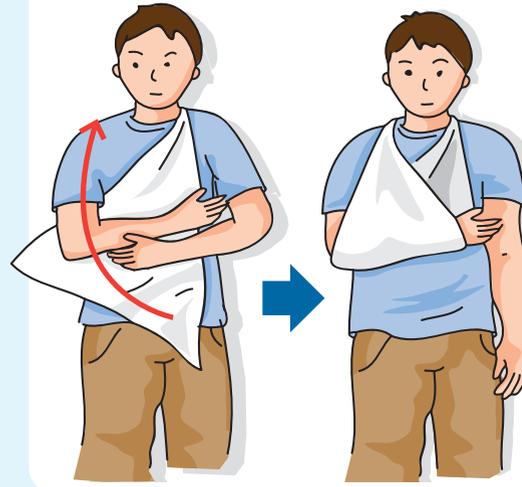
Closed fracture



Open fracture

TO TREAT FRACTURES:

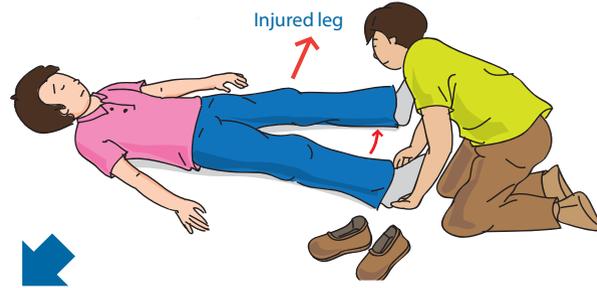
- 1 Calm the casualty down.
 - 2 Treat bleeding wounds, if any. For open fractures, stop the bleeding (pg 5) and cover the exposed bone.
 - 3 Rest, support and immobilise the injured part in a position most comfortable for the casualty.
- 3a If the casualty has a dislocated shoulder, fractured upper arm, forearm or wrist, apply the open arm sling as shown.



Two-step open arm sling

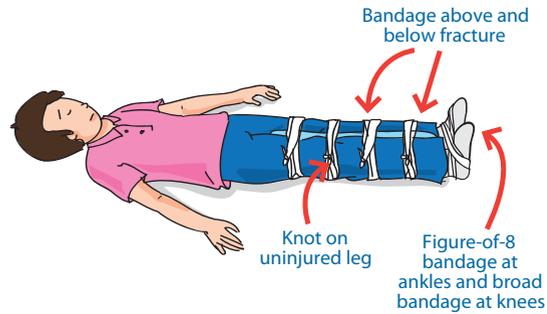
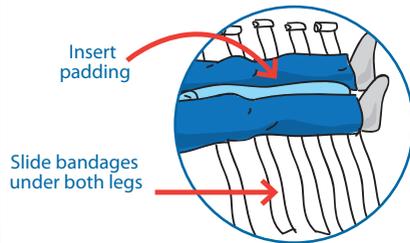
3b

If the casualty has a fracture in the leg, bring the uninjured leg (which acts as a splint) to the injured leg.



Slide the bandages under both legs as shown, and insert padding between the knees and ankles.

Bandage the legs together as shown and tie a knot on the side of the uninjured leg.



4

Seek medical attention or dial 995 for an ambulance.

Burns And Scalds

A BURN IS SEVERE IF IT AFFECTS:

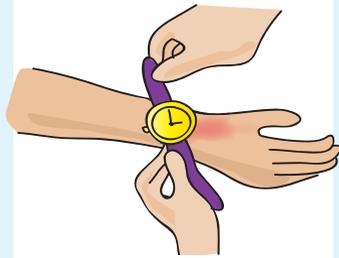
- More than 5% of the casualty's body surface, i.e. a surface area more than five times the size of his palm.
- The casualty's mouth, throat, eyes, ears and/or genitals.

TO TREAT A BURN OR SCALD, USE THE FOUR Cs

Cool the affected part under cold running water or immerse it in cold water for at least 10 minutes; for chemical burns, wash off the chemicals.



Constricting accessories such as bracelets, rings, watches or clothing are to be gently removed from the injured area before it starts to swell.



Cover the burned/scalded area with sterile dressing.



Consult a doctor if the burn/scald is not severe; otherwise, dial 995 for an ambulance.



THINGS TO NOTE WHEN TREATING BURNS AND SCALDS

- Do not apply toothpaste, lotion, ointment or fatty substance to the affected area.
- Do not cover the affected area with cotton wool.
- Do not break any blisters or remove anything that is sticking to a burn.

Fits are episodes of uncontrolled movements of the body.

SIGNS OF FITS

- Uncontrolled movements or body spasms.
- Casualty falling to the ground.
- Clenching of teeth.
- Rolling of eyes.
- Incontinence or the inability to restrain the discharge of urine or faeces.
- Casualty falling asleep once the fits have subsided.



WHEN SOMEONE IS EXPERIENCING AN EPISODE OF FITS

- Keep dangerous objects out of the way (e.g. scissors and other sharp items).
- Do not restrict the movements of the casualty.
- Do not place anything in the casualty's mouth.
- Treat any injuries once the fits are over.
- Dial 995 for the casualty to receive medical attention.



A stroke occurs when blood supply to the brain is disrupted and it may lead to long-term disability. It is therefore important to seek medical help as soon as possible when someone collapses from stroke.

SIGNS OF STROKE

Speech – Casualty is unable to speak clearly or understand the spoken words.



Arms – Casualty is unable to raise both arms upright.



Face – Casualty is unable to smile and his eye or mouth may be droopy.



DIAL 995 FOR AN AMBULANCE IMMEDIATELY IF YOU SUSPECT THAT SOMEONE IS SUFFERING FROM STROKE.

Sprains occur at joints and involve ligaments, the most common being sprained ankles. A strain, however, is an injury to the muscles and tendons especially when they are stretched.

TREAT SPRAINS (AND STRAINS) USING R.I.C.E.

Rest the sprained joint.



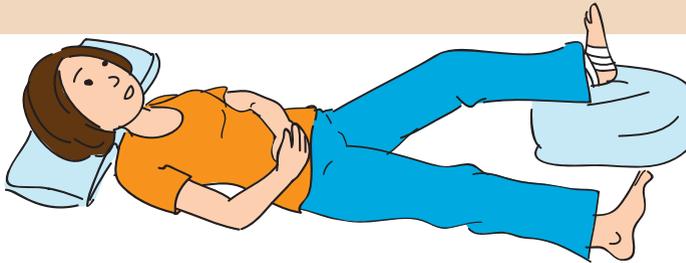
Ice or apply a cold compress to the sprain for 15-20 minutes.



Compress the sprained joint using a bandage or soft padding.



Elevate the sprained joint.



Choking

A fully obstructed airway can result in death within minutes if prompt treatment is not given. Someone who is choking will display the universal sign of distress and he will be unable to speak, breathe and cough.



Universal sign of distress when choking

IF THE CASUALTY IS CHOKING WHILE CONSCIOUS, PERFORM THE HEIMLICH MANOEUVRE

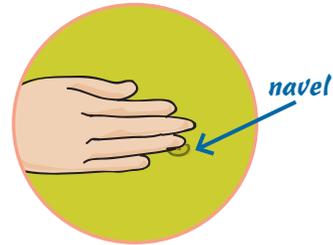
1

Stand behind the casualty and place one leg between the casualty's legs, making sure the casualty's legs are shoulder-width apart.



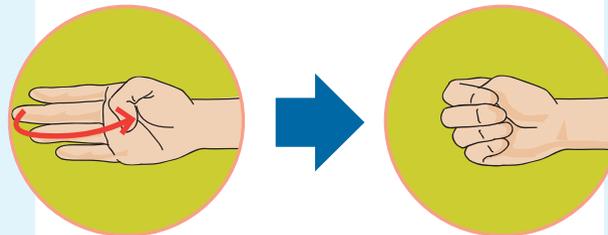
2

Using one hand, locate the casualty's navel using the ring finger and place two fingers above the navel as shown.



3

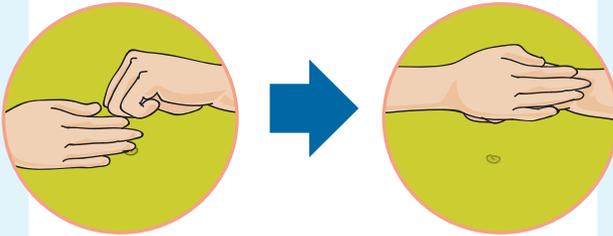
Using your other hand, tuck your thumb into your palm and curl your fingers into a fist.





4

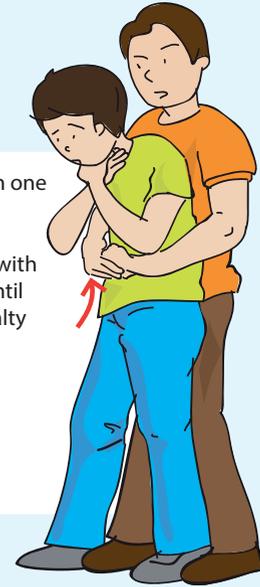
Place the fist 2 fingers above the navel button. While keeping the fist in position, use the other hand to bend the casualty forward and cover the fist to perform abdominal thrusts as shown in the diagram.



5

Give quick inward and upward thrusts in one motion into the casualty's abdomen.

Deliver each thrust firmly and distinctly with the intent of relieving the obstruction until the foreign body is expelled or the casualty becomes unconscious.

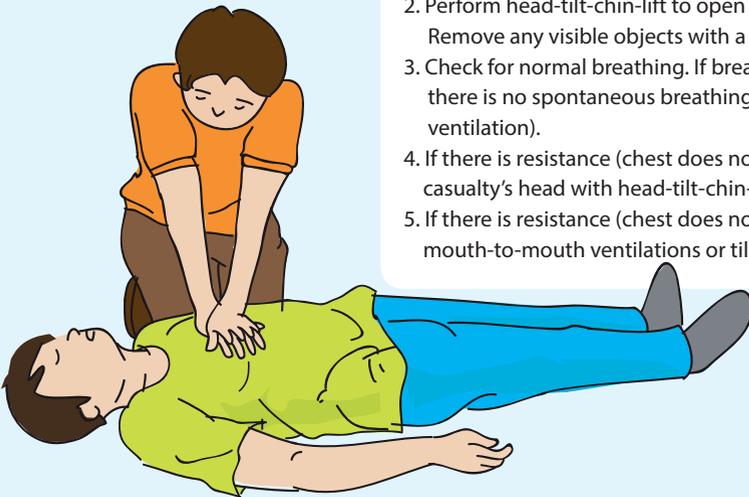


6

If the casualty falls unconscious, support and lay the casualty down. Position him on his back on a firm flat surface.

Shout for help, get someone to dial 995 for an ambulance and another person to get the Automated External Defibrillator (AED). Perform the following steps:

1. Start 30 chest compressions (pg 18, step 6).
2. Perform head-tilt-chin-lift to open airway. Pull down the chin to check for any foreign objects in the mouth. Remove any visible objects with a hooked index finger of your other hand.
3. Check for normal breathing. If breathing is present, monitor breathing constantly until ambulance arrives. If there is no spontaneous breathing, attempt one ventilation by performing mouth-to-mouth breathing (1st ventilation).
4. If there is resistance (chest does not rise), this indicates that the airway could be blocked. Reposition the casualty's head with head-tilt-chin-lift procedure. Re-attempt to ventilate (2nd ventilation).
5. If there is resistance (chest does not rise) again, repeat from Step 1 until you are able to give 2 successful mouth-to-mouth ventilations or till help arrives.

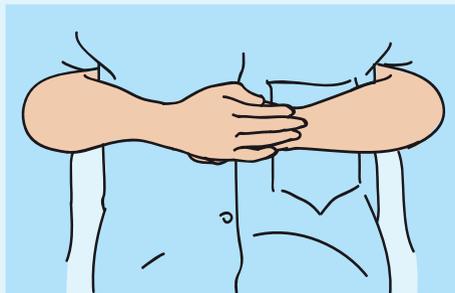
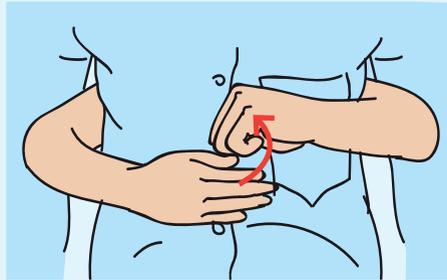


IF THE CHOKING CASUALTY IS OBESE OR PREGNANT, PERFORM CHEST THRUSTS

1 Stand behind the casualty and place one leg between the casualty's legs, making sure the casualty's legs are shoulder-width apart.

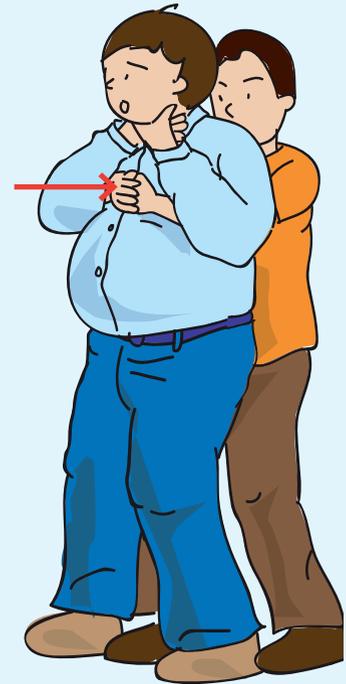


2 Slide both arms under the casualty's arms, make a fist with your thumb tucked in (pg 12, Step 3) and position it against the centre of his breastbone. Cover your fist with your other hand.



3 Give five thrusts in an inward motion and follow through steps 5 and 6 of the Heimlich Manoeuvre (pg 13).

Position fist and hand at the centre of breastbone

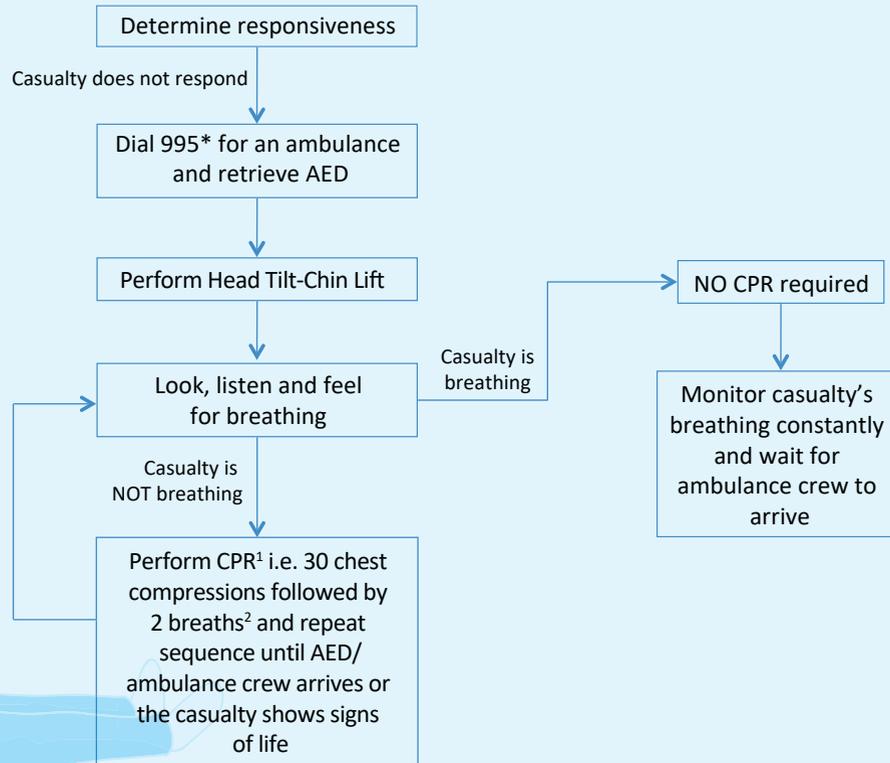




Cardio-Pulmonary Resuscitation (CPR)

CARDIO-PULMONARY RESUSCITATION (CPR) AT A GLANCE

CPR is a life-saving technique used to rescue casualties who have collapsed from cardiac arrest. When performed promptly and correctly, CPR may restore the heart function and increase the casualty's chances of survival. You are encouraged to attend our Responders Plus Programme (pg 100) to gain a better understanding of the CPR procedure.



*All SCDF 995 Operation Centre specialists are trained to provide telephone CPR Instructions. Follow the medical advice and instructions given by the 995 specialists to administer the CPR procedure.

¹To be complemented by the use of AED when its available.

² Members of the public can also perform "hands-only CPR" - continuous chest compressions without the need for mouth-to-mouth breathing. When performed early, "hands-only CPR" has been found to be as effective in increasing a victim's chance of survival as conventional CPR.

WHEN SOMEONE COLLAPSES FROM CARDIAC ARREST:

1 Tap the casualty on his shoulders and shout for his attention; if the casualty is not responsive, proceed to Step 2.

2 Ask someone nearby to dial 995 for an ambulance and another person to get the nearest available AED.



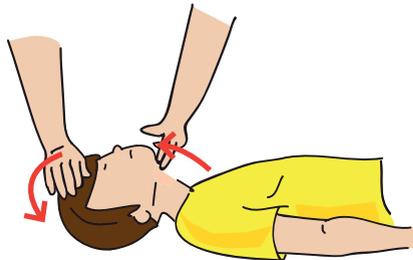
3

If the casualty is not lying flat on his back, reposition him while supporting and turning his head, neck and body at the same time.



4

Open the casualty's airway by performing the head-tilt-chin-lift manoeuvre as shown. This will lift the tongue off the back of the throat.



5

Maintain an open airway for the casualty and place your ear over his mouth and nose. To assess for breathing:

- **Look** for chest rise and fall
- **Listen** for air escaping when the casualty exhales
- **Feel** for the flow of air from the casualty's mouth and nose

If the casualty is **breathing**, monitor his breathing constantly and wait for the ambulance crew to arrive.

If the casualty is **not breathing**, proceed to Step 6 and commence chest compressions.



Cardio-Pulmonary Resuscitation (CPR)

6

Using your hand closer to the casualty's feet, locate the notch as shown by tracing the lower edge of the rib cage with your middle finger. Place your index finger next to your middle finger and position the heel of the other hand on the breastbone to meet the index finger as shown.



Trace the lower rib margin with your middle finger.

7

Release the two fingers and place this hand on top of the other, interlacing the fingers from both hands to secure the position. The fingers should be kept off the chest.



8

Straighten both elbows and position your shoulders directly above the casualty's chest.

Lean forward and use your body weight to perform the compressions.





Cardio-Pulmonary Resuscitation (CPR)

9

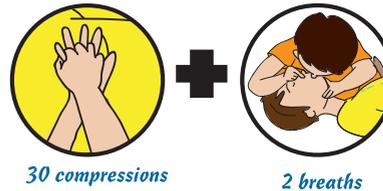
Perform **30 compressions**. The compressions should be done at a rate of at least 100 compressions per minute and each compression should be at a depth of about 5cm.
(Note : Sometimes you may hear a cracking sound. Do not be alarmed. The sound is caused by cartilage or ribs cracking. Even if this occurs the damage is not serious. The risk of delaying CPR or not doing CPR is far greater than the risk of a broken rib.)

Give **2 mouth-to-mouth ventilations**. Maintain a head-tilt-chin-lift position to open the airway. Pinch the casualty's nose with your thumb and index finger to prevent air from escaping. Seal your lips around the casualty's mouth. Give 2 short breaths quickly, one after the other. Observe the chest rise with each breath. Release the nostrils after each breath. The duration for each breath is 1 second.

Repeat this sequence of 30 compressions and 2 ventilations until the ambulance crew arrives or when an AED is available or when the casualty shows signs of life. After which, recheck the casualty's breathing, perform CPR and use AED, if necessary.

You may count the compressions in sets of 5:

- 1 and 2 and 3 and 4 and 5 and
- 1 and 2 and 3 and 4 and 10 and
- 1 and 2 and 3 and 4 and 15
- 1 and 2 and 3 and 4 and 20
- 1 and 2 and 3 and 4 and 25
- 1 and 2 and 3 and 4 and 30



Note: Members of the public can perform "hands-only CPR" without the need for mouth-to-mouth breathing. When performed early, "hands-only CPR" has been found to be as effective in increasing a victim's chance of survival as conventional CPR.

As a personal safety precaution, bystanders should wear a mask while rendering aid in an emergency. Refer to the Singapore Resuscitation and First Aid Council to know more about the precautionary measures you should adopt when helping others: <https://srfac.sg/news/>

Visit SCDF's 'myResponder' mobile app for a video demonstration on the CPR procedure and the application of AED (more information on pg 101).

Automated External Defibrillator (AED)

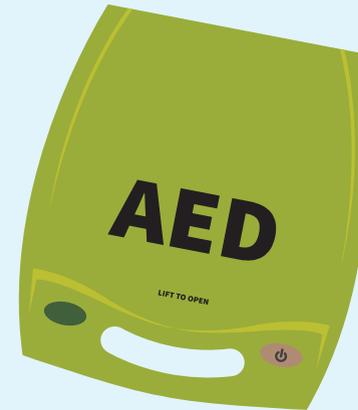
Defibrillation increases a casualty's chances of survival in the event of a cardiac arrest and it is the only treatment that can restart and restore a normal rhythm to a heart that has stopped beating.

Automated External Defibrillators (AEDs) have thus been installed in various public premises such as community clubs, shopping centres and sports council facilities to enhance the survival rates of cardiac arrest victims. SCDF's Save-A-Life Initiative (SAL), launched in August 2015, includes the installation of more than 5,200 AEDs - one for every two HDB blocks. SCDF targets to have at least one AED within every 250 metres in Singapore's urban areas by 2025.

The AED is a computerised medical device that is capable of analysing the casualty's heart rhythm and directs the user to deliver an electric shock to the casualty. Upon switching on the AED, the device will read out instructions on how to operate the AED, when to perform CPR and when to deliver a shock to the casualty.

An AED will not advise shock if a person is obviously dead, has a pulse and/or breathing.

For children aged between one to eight years or weigh less than 25 kg, paediatric defibrillation pads (which have reduced energy output) should be used. However, if there are no such pads, adult defibrillation pads can still be used on children.

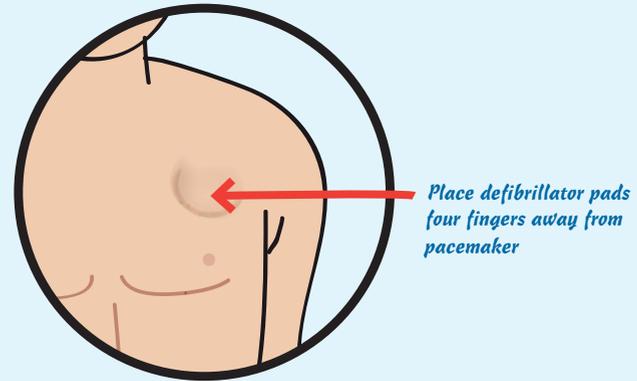




Automated External Defibrillator (AED)

TO PREPARE THE CASUALTY

- 1** Paste the defibrillation pads onto the casualty's bare chest; tear or cut off any obstructing fabric if necessary.
- 2** Remove/push aside any jewellery or accessories on the casualty's chest. Remove any patches (e.g. medicated patch) if they interfere with the placement of the defibrillation pads.
- 3** Shave excess hair on the casualty's chest to ensure that the defibrillation pads stick well to the skin (Note: There is a shaver in the AED kit).
- 4** Dry the casualty's chest area of any perspiration and moisture as these can reduce contact between the defibrillation pads and the skin.
- 5** If there is any pacemaker, place defibrillation pads four fingers away from the pacemaker. In the meantime, ensure that continuous CPR is performed on the casualty.

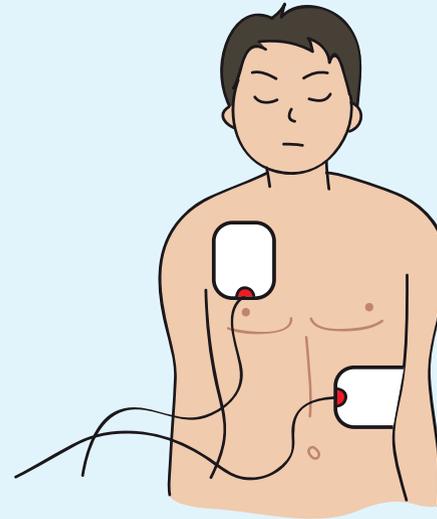


Automated External Defibrillator (AED)

APPLY THE DEFIBRILLATION PADS (WITH CPR IN PROGRESS):

- Follow the instructions on the packet and remove the pads.
- Peel off the backing and paste the pads as shown; ensure they are pasted down well with no air pockets.

You may now turn on the AED. Follow the AED's voice prompted instructions and perform CPR (pg 16) as required until the ambulance crew arrives or the casualty shows signs of life. Once the casualty shows signs of life, check for breathing. If the casualty is not breathing, continue with CPR and use the AED. If the casualty is breathing, monitor his breathing constantly until the ambulance crew arrives.



Paste the defibrillation pads onto the casualty as shown.

What happens when you hear 'Change Batteries' prompt when you are using the AED*:

DOs	DON'Ts
Stay Calm	Do not panic and attempt to change batteries
Continue to use the AED and wait for help to arrive	Do not remove existing pads from patient's body
	Do not stop administering CPR

*For ZOLL AEDs at HDB lift lobbies. Do note that other brands of AEDs may have different prompts.

CHAPTER 2

FIRE SAFETY

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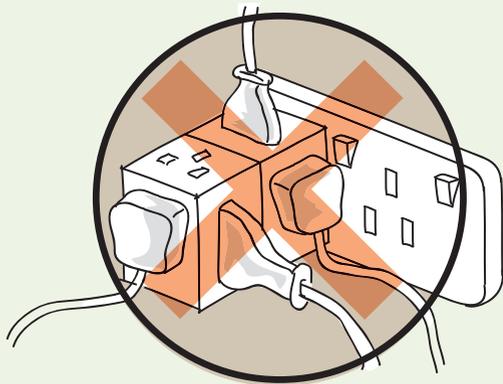
Fires can cause major loss of lives and property if preventive measures are not adopted. Learning to identify fire hazards and removing them can minimise the risk of fires occurring.



General Tips On Fire Safety

FIRE IS BEST PREVENTED BY ELIMINATING FIRE CAUSES

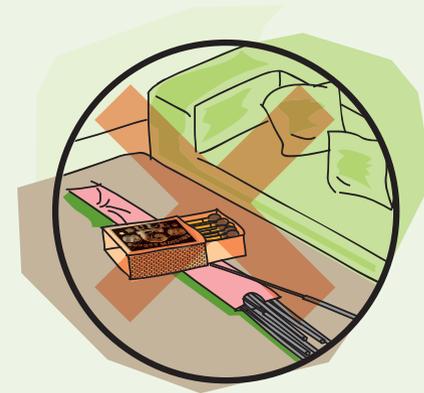
- Do not leave cooking unattended; turn off all the cooking appliances and unplug them when not in use.
- Keep stove-tops, cooker hoods and ovens clean and free of grease.
- Avoid wearing clothes with long loose sleeves when working near heat sources.
- Keep flammable products/perishables (e.g. cooking oil and wine) and combustible materials (e.g. paper and batteries) away from heat sources such as the stove.
- Do not throw burning embers (e.g. hot charcoal) and cigarette butts into rubbish chutes without fully extinguishing them first.
- Do not place window curtains or any combustible materials near praying altars, stoves or lighted materials.
- Keep lighted candles away from paper or cardboard decorations, curtains and furnishings; they should be placed in stable holders on heat-resistant surface so that they will not fall over.
- Do not overload electrical outlets and always switch off electrical appliances when they are not in use.
- Check for broken wires and exposed wiring; if any are found, have the wires replaced immediately.
- Keep lighters, matches and candles away from children.
- Children playing with sparklers must be closely supervised by adults; sparklers should be lit at arm's length and unused ones are to be sealed in boxes and kept away from heat sources.
- Do not leave batteries or devices to charge unattended for an extended period of time or overnight. Do not tamper with, modify, or attempt to repair the batteries or devices on your own. Always follow manufacturers' instructions for charging and storage. Stop using the battery if you notice any damage or deformities.





Household Fire Safety Checklist

HOUSEHOLD FIRE SAFETY CHECKLIST		Yes	No
Electrical wiring and components	Do all 3-pins plugs have the SAFETY MARK? 	<input type="checkbox"/>	<input type="checkbox"/>
	Are all electrical outlets safely loaded with only about one to two plugs per socket?	<input type="checkbox"/>	<input type="checkbox"/>
	Are all switches off when equipment and appliances are not in use?	<input type="checkbox"/>	<input type="checkbox"/>
	Are all wires in the house in good condition? (i.e. without broken insulation and exposed wiring)	<input type="checkbox"/>	<input type="checkbox"/>
	Are all wires laid in the open with none running under rugs, over hoods and through door openings?	<input type="checkbox"/>	<input type="checkbox"/>
	Are the television sets placed away from combustible materials?	<input type="checkbox"/>	<input type="checkbox"/>
Negligence and Malpractice	Are candles and oil lamps placed on a stable surface with measures taken to prevent them from being knocked over easily?	<input type="checkbox"/>	<input type="checkbox"/>
	Are matches, lighters and sparklers kept away from heat sources and children?	<input type="checkbox"/>	<input type="checkbox"/>
	Are flammable liquids (e.g. cooking oil and wine) and combustible materials kept far away from heat sources such as the stove, heat appliances, lit joss sticks and candles?	<input type="checkbox"/>	<input type="checkbox"/>
	Are cooking appliances (e.g. cooker hood) and the stove clean, free from grease and in good working condition?	<input type="checkbox"/>	<input type="checkbox"/>
	Are flammable liquids kept in approved containers, clearly labelled and stored in ways such that they cannot be knocked over easily?	<input type="checkbox"/>	<input type="checkbox"/>
	Is the LPG (Liquefied Petroleum Gas) cylinder kept in a well-ventilated area?	<input type="checkbox"/>	<input type="checkbox"/>
	Is the supply hose connecting the LPG cylinder to the stove/gas appliances in good condition, tightly fitted and without leakages?	<input type="checkbox"/>	<input type="checkbox"/>
Preparing your home against fire	Is the common corridor outside the house unobstructed by discarded items (e.g. mattresses, furniture etc)?	<input type="checkbox"/>	<input type="checkbox"/>
	Do you have at least one Dry Chemical Powder fire extinguisher at home?	<input type="checkbox"/>	<input type="checkbox"/>
	Do all of your family members and occupants of the house know what number to dial in case of fire or other emergencies?	<input type="checkbox"/>	<input type="checkbox"/>

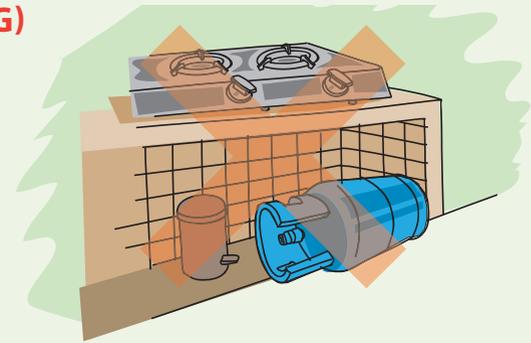


If you answered 'no' to any of the questions in the checklist, it is recommended that you rectify those areas as soon as possible to prevent fires from occurring in your house.

Liquefied Petroleum Gas (LPG)

FOR SAFE HANDLING OF LIQUEFIED PETROLEUM GAS (LPG)

- Purchase your LPG accessories with *SAFETY MARK* only from authorised dealers.
- Ensure that your LPG dealer conducts the 5-point safety check (includes the hose, regulator, hose clips, cylinder and joints/connections) on the LPG system at least once a year.
- Always keep gas cylinders upright; never store them horizontally.
- Keep the gas cylinder from open flames, heat sources and electrical outlets.
- Ensure that there are no naked flames nearby when changing the gas cylinder
- Store no more than one spare cylinder at any time, and the spare should be kept upright in a ventilated cabinet.
- Keep windows open and the kitchen well ventilated while cooking; never leave cooking unattended or place flammable items near the flame.
- Turn off the gas supply at the regulator before leaving for overseas trips.
- Replace the gas tubing/hose based on the expiry date marked on the tubing/hose.
- Replace the regulators every 10 years starting from the manufacturing date marked on the regulator.
- If you fail to ignite the stove after switching on the gas valve, it is advisable to turn off the gas valve and open all the doors and windows to ventilate the kitchen for a while before trying to ignite again. This will prevent ignition of any flammable LPG cloud that could be surrounding you.
- To report on suspected LPG leakages or LPG fires, call SCDF at 995.



5-Point Visual Safety Check

Ensure your LPG dealers conduct systematic and comprehensive visual inspection of your LPG system. The 5-Point Visual Safety Check should include:

REGULATOR

- Examine if worn out or expired.

RUBBER HOSE

- Examine if worn out and replace immediately if damaged.
- Replace with a new set based on the expiry date stated on the hose.

CYLINDER

- Always keep gas cylinders upright and never store them horizontally. Check each cylinder for wear and tear.

HOSE CLIPS

- Ensure that hose clips are neither loose nor too tightly fitted (which may cause an indent and cut on the rubber hose).

LEAK TEST / JOINT CONNECTIONS

- Examine all joint connections between stove and LPG cylinder for wear and tear.
- There is a leakage if bubbles appear when detergent or soap solution is applied on them.



Piped Town Gas

Piped town gas is piped gas supplied to domestic, commercial and industrial premises in Singapore.

FOR SAFE HANDLING OF PIPED TOWN GAS

- Always purchase a gas hob/cooker with SAFETY Mark label.
- Do not leave cooking unattended.
- Keep flammable liquids and combustible materials away from gas appliances.
- Install gas appliances in well-ventilated areas and maintain adequate ventilation.
- Ensure there is no smell of gas before lighting the oven.
- Leave the oven door slightly open before using the oven grill.
- You should only engage City Gas or a Licensed Gas Service Worker (LGSW) for any installation or alteration of gas pipes.
- Turn off your gas meter control valve when you are not using gas appliances for a long period of time e.g. when you are away for a long holiday. Please contact City Gas at 1800 752 1800 to turn on gas supply upon return.
- End users are advised to carry out proper maintenance of gas appliances

DISPOSAL OF USED LPG CYLINDERS & USING LPG CYLINDERS IN PUBLIC PLACES

For disposal of your used LPG cylinders or use of LPG for an outdoor event, please contact the following suppliers:

Esso LPG	6455 1169
SingGas	6863 4292
SunGas	6565 6565
Union Energy	6333 5555
LPG Association	6280 6612

IF YOU SMELL A GAS LEAK:

- Put out all flames and turn off the gas stove, gas valves and regulators. 
- Open all windows and doors to ventilate the area. 
- Keep a safe distance from the gas leak area. 
- Do not use a naked flame. 
- Do not turn on/off any switches or appliances. 
- Do not use a cell phone in the vicinity. 
- Call your authorised dealer from a safe distance to report the gas leak immediately. 
- If you are using piped gas, call 1800-752-1800 from a safe distance.

IF YOUR WOK OR OTHER COOKWARE CATCHES FIRE

- Cover it with a wet cloth and the fire will be extinguished; do not pour water into it as the fire will spread.
- Turn off the gas supply immediately.



Home Fire Alarm Device

A HFAD (Home Fire Alarm Device) is an automatic smoke or heat detector which provides early warning of a fire by sounding an alarm to alert the occupants. A smoke detector is more effective in providing early warning of fire compared to a heat detector. It is therefore recommended for the primary protection of homes.

A HFAD should be installed on the ceiling along an escape route within a home (e.g. living room, internal corridors or staircase entrances). Additional HFAD can be installed in bedrooms or other spaces for enhanced protection.

TIPS ON SMOKE DETECTORS

- Install smoke detectors on the ceiling near sleeping areas and other places where fire is likely to occur.
- Test your smoke detectors regularly based on the manufacturer's instructions.
- Follow the manufacturer's instructions on cleaning the smoke detectors regularly.
- Ensure that smoke detectors have their batteries changed yearly or when indicated by the device, whichever is earlier.



Home Type	Number and locations of detectors
Single-storey homes: - HDB flats - Apartments/Condominiums - Single storey landed dwellings	<ul style="list-style-type: none"> - Minimum 1 smoke detector - Installed along circulation area*/escape route - Optional: Additional detectors can be installed in other spaces for enhanced protection <p>*Circulation area refers to common areas such as living room, corridors, dining rooms or staircase landings. It excludes spaces such as bedrooms, storerooms or bathrooms.</p>
Multi-Storey Homes - Landed/non-landed dwellings - HDB flats - Apartments/Condominiums	<ul style="list-style-type: none"> - Minimum 1 smoke detector per storey - For storeys with circulation area >70m², at least 2 smoke detectors need to be installed on that storey - Installed along circulation area/escape route e.g. living room, corridor, and/or staircase landing - Optional: Additional detectors can be installed in other spaces for enhanced protection

Fire Hazards At Common Areas

You can make your environment a safer place to live and work in by looking out for fire hazards at common areas, examples of which include:

- Stacked boxes and goods along corridors, escape passageways and staircases.
- Discarded newspapers, furniture, cartons and other refuse at lift lobby.

These fire hazards can also seriously hamper fire-fighting efforts, fire evacuation and conveyance of patients during a medical emergency.

If you are an owner, operator or part of the management of shopping centres, public entertainment premises and supermarkets, avoid exceeding the permissible occupant load of your building as too large a crowd will adversely affect evacuation procedures during emergencies.

IF YOU DISCOVER A FIRE HAZARD

You may report it to the SCDF via the:

- Fire Hazard Reporting line at 1800 280 0000.
- Fire Hazard Report Form available at www.scdf.gov.sg on the footer of the homepage under 'Feedback'.
- Fire Safety Feedback module within **myResponder** mobile app (more information on page 101).





IF YOU DISCOVER A FIRE

- Do not panic.
- Alert others of the fire by shouting.
- Evacuate the room/area and try to get everyone out of the premises without endangering yourself.
- If possible, close the door of the affected room to contain the fire.
- Dial 995 for the SCDF.
- Turn off gas mains if you can reach them.
- Activate the fire alarm at the nearest manual call point (pg 34).
- Evacuate the building in an orderly manner via the stairs; do not use the lift.
- Do not return to the building until the authorities announce that it is safe to do so.



Fight the fire only if you are able to and without endangering yourself and others. Ways of extinguishing a fire include:

- Using water on burning papers, wood and fabrics but never on flammable liquids such as oil, as this will cause the fire to spread.
- Using a suitable fire extinguisher (pg 33).
- Using a hose reel (pg 34).

Note : As a rule of thumb, it is safe for occupants of residential buildings to stay in their respective residential units with the windows and doors closed unless they stay on the fire floor, or two floors immediately above the fire floor. SCDF will conduct evacuation for occupants from the fire floor and the two floors above the fire floor. Further evacuation may be required subsequently, so do follow the instructions of the authorities.



When A Fire Breaks Out

What if a Fire Breaks Out in a Super High-Rise Residential Building?

A super high-rise residential building refers to a building with more than 40 storeys.

If the fire is small, extinguish it. Otherwise,

- alert others,
- dial 995 to inform the SCDF and
- activate the nearest fire alarm

Always stay safe:

Do not use the lift but evacuate the area via the exit stairs immediately. If you're too far from the first floor, proceed to the nearest refuge floor.

What is a refuge floor?

A refuge floor is a special floor that serves as a safe holding area so that residents do not have to travel many floors down to leave the building in case of a fire.

The unique design of a refuge floor includes:

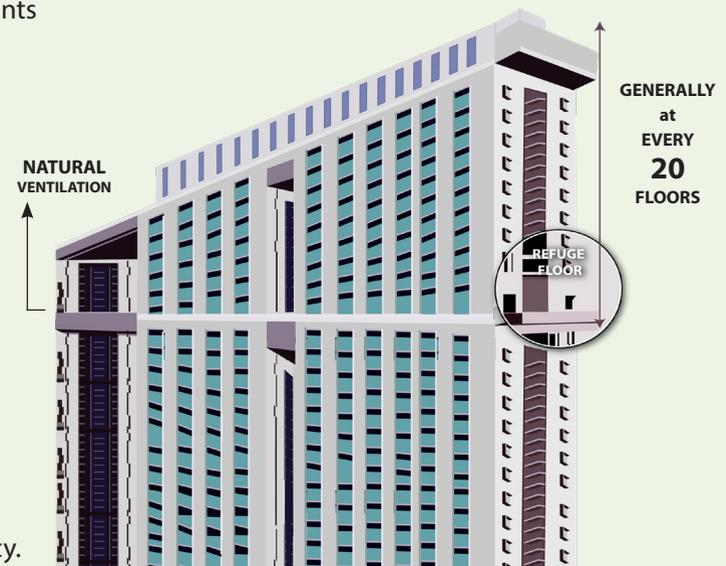
- natural ventilation
- made of fire-resistant materials
- generally one refuge floor is provided at an interval of not more than 20 storeys

You may identify a refuge floor by the sign "Evacuee Holding Area" displayed on the wall immediately outside the staircase at the refuge floor and inside the staircase.

What is a fire lift?

A fire lift is a special lift designed to support fire-fighting and firefighter-led evacuation operations during a fire. Equipped with emergency power supply, it could be manually operated by the SCDF firefighters during a fire emergency.

Super high-rise residential buildings should have at least two fire lifts. This requirement was incorporated in the Fire Code in 2013. In the event of a fire, do not use any lift unless you are guided by the firefighters or trained first responders. You should evacuate via the exit staircases.



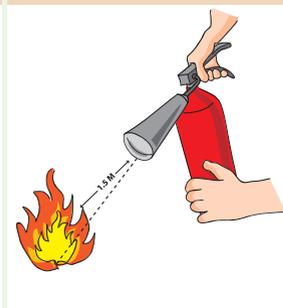


Fire Extinguishers

TYPES OF FIRE EXTINGUISHERS

Types of fire extinguishers	EFFECTIVE AGAINST FIRES INVOLVING		
	Ordinary combustible materials, e.g., paper, cloth, wood, plastics, rubber	Flammable liquids, e.g., oil, paint, thinner	Electrical or electronic equipment
Water	Yes	No. Not to be used against oil fires as this will cause the fire to spread	No
Carbon dioxide	No	Yes, but less effective in open areas.	Yes
Dry chemical powder	Yes	Yes	Yes

TO USE A FIRE EXTINGUISHER, USE THE P.A.S.S. METHOD

P ull out the safety pin as instructed on the label.	A im the nozzle at the base of the fire.	S queeze the lever.	S weep the fire using the extinguisher's discharge.
			

It is recommended that each household has at least one Dry Chemical Powder fire extinguisher that is certified by a Certification Body accredited by the Singapore Accreditation Council. Such a fire extinguisher can be used to extinguish many types of household incipient fires. The list of authorised fire extinguisher dealers and servicing workshops are listed on the SCDF website www.scdf.gov.sg.

Note: The SCDF is not linked to any fire extinguisher distributor that does any door-to-door sale of fire extinguishers.

DISPOSAL OF FIRE EXTINGUISHERS

For safety reasons, please do not dispose fire extinguishers in the rubbish chute/bin. You are advised to contact the manufacturer or supplier of the fire extinguishers to ascertain if they are able to dispose the items.

The contact details of the manufacturer or supplier can usually be found on the fire extinguishers. Alternatively, you may refer to the TÜV SÜD PSB Pte Ltd website at <https://www.tuvsud.com/en-sg/resource/certificate-finder/product-listing-scheme/fire-extinguishers> for a list of companies registered for the servicing, maintenance, and disposal of portable fire extinguishers.

Note: A nominal fee will be charged by the manufacturer or supplier for collecting the fire extinguishers for disposal.

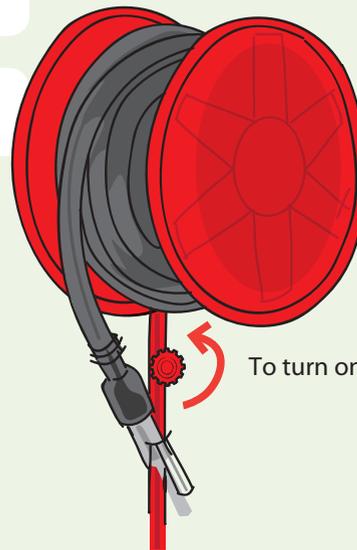
Manual Call Points And Hose Reels

In the event of a fire, use a sharp object (e.g. keys) to break the glass of the nearest manual call point to activate the fire alarm system. This will alert all occupants to the fire and prompt them to evacuate the premises.

To put out the fire, you may use a fire extinguisher (pg 33) or a hose reel.

TO OPERATE A HOSE REEL

- 1 Turn on the hose reel valve in an anti-clockwise direction.
- 2 Pull out the hose and test to see if there is water. Run it to the fire.
- 3 Turn on the water at the nozzle and direct it at the base of the fire.



To turn on the hose reel



When activated, the manual call point will sound the fire alarm.



Note: Timely evacuation in a fire situation is important. When the fire alarm is sounded, one should take it seriously and immediately evacuate the premises.



Escaping Through Smoke

In a fire incident, there are typically more casualties who suffer from smoke inhalation than burns.

IF YOU ARE IN A SMOKE-LOGGED ROOM

- Cover your nose and mouth with a wet cloth and avoid inhaling through the mouth.
- Get down, keep close to the ground and crawl towards the point of escape under the smoke.



When stretchers are not available or cannot be improvised, you may need to transport casualties by methods such as those listed below. You are recommended to undergo our Responders Plus Programme (pg 100) for a better understanding of these casualty evacuation methods. You may risk injuring yourself and your practice partner if you attempt some of these techniques on your own without proper training.

HUMAN CRUTCH

Used when the casualty is conscious and able to walk with some assistance. Hold him firmly around the waist and use your shoulders to support his arm while allowing his body weight to rest on you.



FIREMAN'S LIFT

Used for lightweight casualties. Stoop low, bend the casualty over your shoulders and lift him up. Secure the casualty's leg with your arm as shown for more stability.





PIGGYBACK

Used when the casualty is lightweight, conscious and able to hold on to you.



CRADLE

Used when the casualty is a child or a lightweight adult. Slip your arms beneath her shoulder blades and knees to ensure that casualty will be in the most comfortable position.



If You Are Trapped In A Fire

1

Enter a safe room, preferably one which has open windows, good ventilation and overlooks a road.

2

Shut the door behind you and seal the gap beneath the door with a blanket, rug or other fabric to prevent smoke from entering the room.

3

Go to the window, shout for help to alert others of the fire and dial 995 for the SCDF if you are able to.

4

Stay calm and do not attempt to jump out of the building.





If Your Clothes Catch Fire

STOP, DROP AND ROLL

1

Stop running and remain calm.



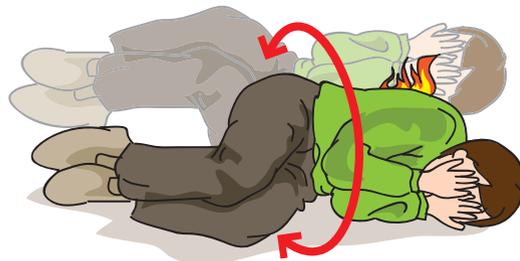
2

Drop to the floor immediately.



3

Roll over from side to side to smother the flames while covering your face with your hands.



Tips on Preventing Vehicle Fire

PRIMARY CAUSE OF VEHICLE FIRE

Primary cause of vehicle fires in Singapore is due to ignition sources such as:

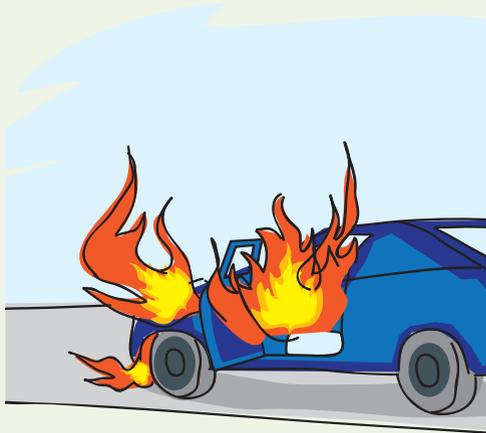
- Overheating.
- Electrical faults within the engine compartment.

EQUIP YOUR VEHICLE WITH A FIRE EXTINGUISHER

- Most vehicle fires start small but develop rapidly due to the presence of flammables such as petrol, diesel and lubricants.
- Equip your vehicle with a fire extinguisher so that you can extinguish an incipient fire before it spreads.
- For a step-by-step guide on how to operate a fire extinguisher, please see page 33 of this handbook, visit the SCDF website @ www.scdf.gov.sg or download the 'myResponder' mobile application.

PREVENTIVE TIPS

- Prevent your vehicle from catching fire by servicing it regularly at authorised vehicle workshops.
- During each servicing session, do ensure that the vehicle's electrical, engine and fuel systems are checked for any defect.
- Outside of the scheduled servicing period, you are encouraged to conduct visual checks for any sign of oil leakage.

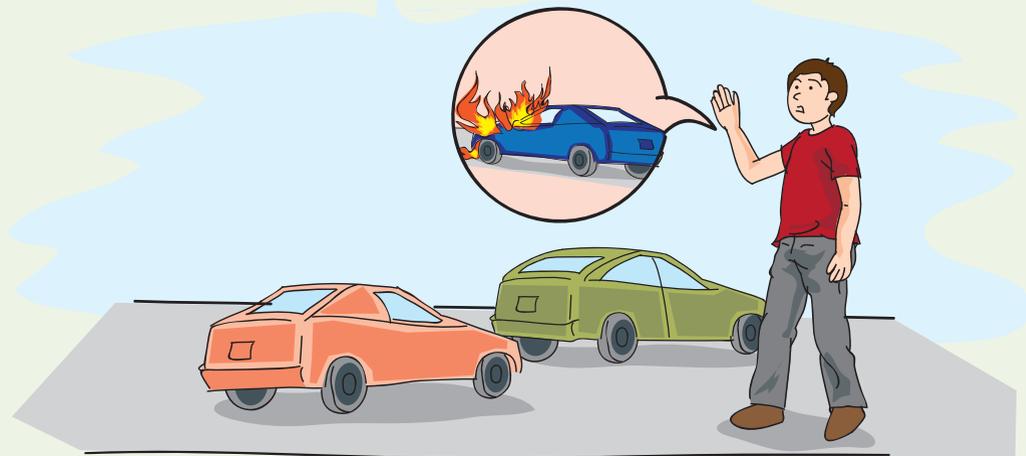




If Your Car Catches Fire

WHEN YOU OBSERVE SMOKE OR FLAMES COMING FROM YOUR VEHICLE

- 1 Slow down, signal and drive to the side of the road.
- 2 Turn off the engine and evacuate from the vehicle immediately.
- 3 Dial 995 for help.
- 4 If there is a fire extinguisher in the car, use it to put out the car fire while it is still small without putting yourself and others in danger.
- 5 If the fire grows big, move away from the vehicle to a safe area and wait for the arrival of the SCDF.
- 6 Warn oncoming traffic of the burning vehicle and keep onlookers and others away from the fire.



Electrical Vehicle (EV) Fire

As EVs (both pure EVs and hybrid EVs) run on electricity from High Voltage (HV) batteries, this poses a different kind of challenge as compared to fires involving Internal Combustion Engine (ICE) vehicles (e.g. risk of electrocution and extreme heat from the affected HV battery if it undergoes thermal runaway¹).

You should not attempt to extinguish a fire that has already fully engulfed the EV as thermal runaway may be in progress. Instead, you should retreat to a safe distance of at least 15 metres away from the vehicle and call 995 for assistance.

When calling 995, you should provide the license plate of the vehicle or the model of the EV and a brief description of the area on fire (e.g. front bonnet, middle section of EV, undercarriage of EV).

	Identifying pure EVs and Hybrid EVs	The EV High Voltage (HV) Battery is commonly located at:	
Hybrid EVs	 <p>Label insignia – “Hybrid”</p>	 <p>Trunk or Under/Behind Rear Seat</p>	
Pure EVs	 <p>Lack of exhaust pipe</p>	 <p>Undercarriage</p>	 <p>Transmission Hump</p>

¹ *Thermal runaway refers to a condition when an electrochemical cell increases its temperature through self-heating in an uncontrollable fashion and progresses when the cell's heat generation is at a higher rate than it can dissipate, potentially leading to off-gassing, fire, or explosion. Common causes of thermal runaway can be due to physical impact and over-charging of the battery.*



Solar Photo-Voltaic (PV) Panel Fire

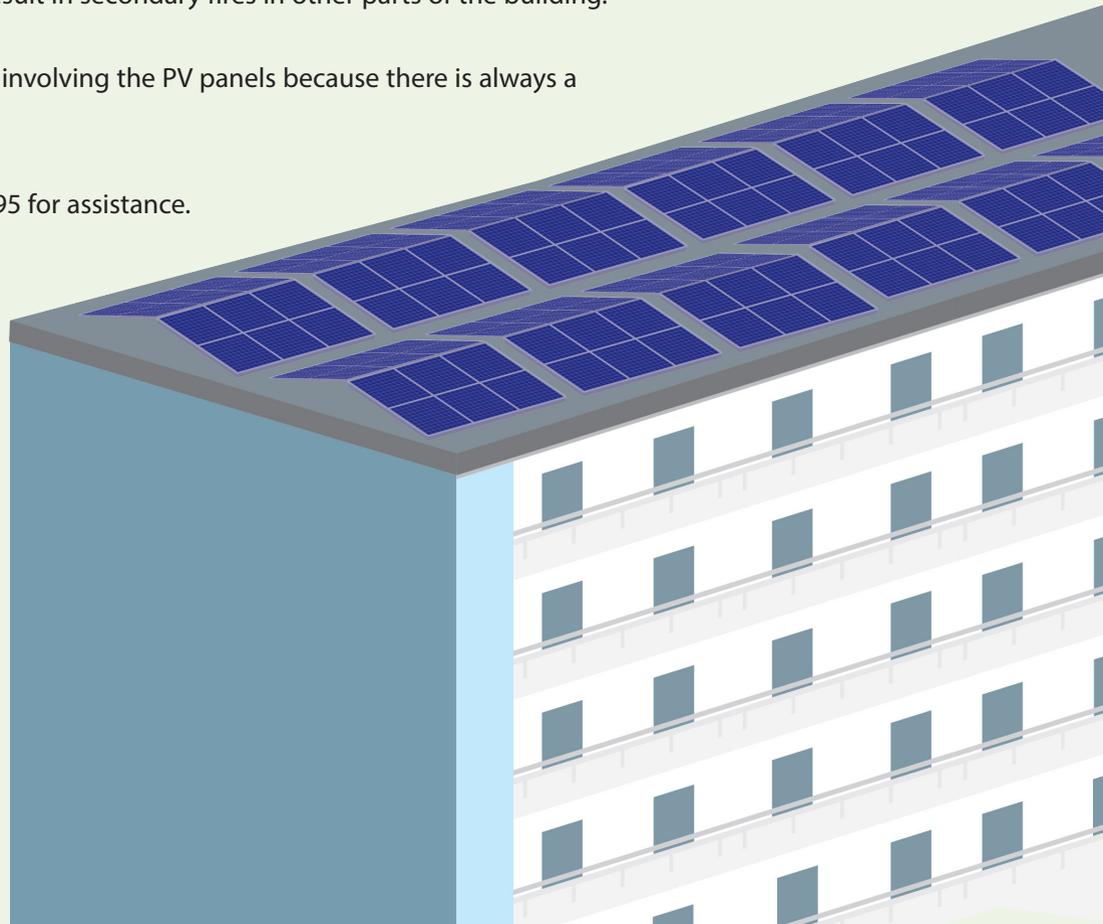
Solar photo-voltaic (PV) panels are typically installed in buildings and structures for energy harvesting. In Singapore, solar PV panels are commonly found on building rooftops.

While they are most efficient in harvesting sunlight for energy, the panels may continue to generate power even at night in the presence of a strong light source. Hence, it is always safer to assume that the solar PV panel is energised and to exercise caution around it.

In the event of a solar PV fire, it would help if you are aware of the location of the main isolation switch and are able to turn it off. This would help to safely isolate the building from any potential power surge due to the affected solar PV system that may result in secondary fires in other parts of the building.

However, do not attempt to extinguish the fire involving the PV panels because there is always a risk of electrocution.

You should retreat to a safe distance and call 995 for assistance.



CHAPTER 3

PEACETIME EMERGENCIES

- 45 Ready Bag
- 47 Stockpiling
- 48 Lightning
- 49 Floods
- 50 Tremors
- 52 Landslides
- 54 Power outage
- 55 Typhoons and tropical storms
- 57 Tsunamis
- 59 Earthquakes
- 61 If you are trapped under debris or rubble
- 62 If you encounter an unruly crowd



Though most natural disasters (e.g. floods, lightning storms and tsunamis) are beyond our control, we are still able to increase our chances of survival by acquiring the necessary knowledge and skills to ensure our safety in such emergencies.





The Ready Bag contains important items that will help you in an emergency and you should bring it along with you when you are required to evacuate your home. Every member of your family should know where the Ready Bag is kept and it is recommended to be stored in an easily accessible location even in the dark (e.g. during power outages).



THE READY BAG SHOULD CONTAIN THE FOLLOWING ITEMS:

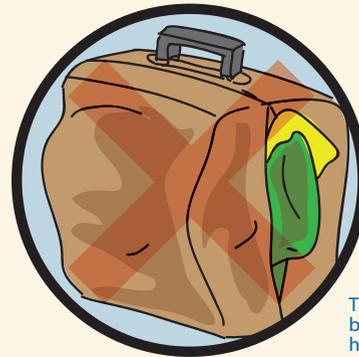
ESSENTIAL ITEMS	USAGE
Torchlight without batteries	In case of power outage and when evacuating in the dark.
Batteries	For powering the torchlight and radio; pack extra batteries and do not fit batteries into the devices until needed, as leaving them there may result in leakage or rust.
Essential personal medication and healthcare supplies	For any existing medical condition of yours and your family, e.g. asthma, heart problems etc. Spare face masks and hand sanitisers for protection against transmission of bacteria, viral infections and viruses.
Waterproof folder containing photocopies of important documents e.g. NRIC, insurance policies	For administrative purposes should the original documents be destroyed in the fire.
Whistle	To call for help or alert others; shouting may be tiring, ineffective and may even cause you to inhale dangerous amounts of smoke and dust in some cases.
First aid kit	To treat any minor injuries.
Childcare supplies and other special care items	To meet the needs of any special individuals in the family, e.g. infants.
N95 Mask	To protect you and your family from excessive exposure to pollutants and air-borne infections.

OPTIONAL ITEMS FOR THE READY BAG INCLUDE:

- A list of personal contact numbers, including telephone numbers of family members.
- Cash.
- Bottled water and dry foodstuff.
- A set of spare clothing, e.g. T-shirt and track pants.
- A list of emergency numbers, e.g. 995, 999, telephone numbers of the utility companies, insurance companies etc.

POINTS TO NOTE ON THE READY BAG:

- You may have more than one Ready Bag, e.g. one for each family member.
- Do not pack bulky items into the Ready Bag as it may hamper movement during an emergency.
- Check expiry dates of items in the bag and replace them when needed e.g. perishables, first aid supplies and masks.
- Periodically replace batteries with new ones and do not place them inside devices e.g. torchlight.



The Ready Bag should be portable and not too heavy or bulky.

Stocking up on essential items can help you and your loved ones survive an emergency. Routinely stock up on items according to your dietary requirements and replace those that have expired. A list of recommended items are shown below.

RECOMMENDED ITEMS FOR EACH HOUSEHOLD

Carbohydrates and Oil	<ul style="list-style-type: none">• Rice• Instant Noodles• Uncooked Pasta• Cooking Oil
Meat and Seafood	<ul style="list-style-type: none">• Frozen and Canned Meat• Frozen and Canned Seafood
Vegetables	<ul style="list-style-type: none">• Frozen and Canned Vegetables
Health Supplies	<ul style="list-style-type: none">• Masks (Surgical or Reusable)• Hand Sanitizer• Disinfectant• Oral Thermometers• Over-the-Counter Medication



When there is a thunderstorm, stay indoor by seeking shelter in your home, in a building or vehicle and stay away from metal objects and fixtures.

IF YOU ARE AT HOME

- Avoid taking a shower or bath; plumbing and bathroom fixtures can conduct electricity.
- Avoid using a corded telephone unless it is an emergency; cordless and mobile phones are safe to use.
- Unplug electrical appliances and other electronic items e.g. computers; power surges caused by lightning can damage these items.



IF YOU ARE IN THE OPEN

- Do not stay on high ground.
- Seek shelter in a building or vehicle; if that is not possible, seek shelter in a low-lying area such as a thick growth of small trees and crouch into a 'ball-like' position on the ground.
- Do not ride on a bicycle, motorcycle or golf cart; if you are travelling on them, get off them as soon as possible and seek shelter.
- Spread out if you are in a group.
- Avoid holding metal objects and standing under tall trees or near metal fences, pipes and rails.
- Avoid using handphone, electrical appliances and electronic equipment.
- Head for shore if you are in open water.



For more information on lightning, heavy rain, earthquake, air pollution, environmental data, please visit www.weather.gov.sg, www.nea.gov.sg and download the myEnv mobile application.

When there is a flood, move to higher ground.

IF YOU ARE AT HOME

- Stay put but grab your Ready Bag (pg 45) and be prepared to evacuate immediately when advised to do so by the authorities.
- If you think that it is dangerous to remain at home, dial 995 or 999 (giving your name and address) and evacuate immediately, moving to higher ground away from open areas, streams and storm drains.
- Tune in to the local radio stations for updates from the authorities.



IF YOU ARE IN A VEHICLE

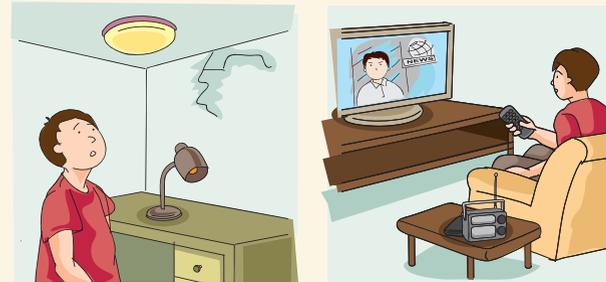
- Be alert to signs of flooding.
- Do not drive around barricades as they are put up for your safety.
- If the vehicle stalls in rapidly rising waters, abandon it immediately and try to get to higher ground.
- Do not walk through moving water as a mere 15cm high of moving water can make you fall; if you must, use a stick to check the firmness of the ground in front of you and try to walk in stagnant water.
- Dial 995 for the SCDF or 999 for the Police if help is needed.



To date, tremors felt in Singapore have all been due to earthquakes in the region and there are no records of serious impact affecting the island. The Meteorological Services Division, the SCDF and the Police will take immediate action should there be indications of such ground movements posing a threat to Singapore.

IF YOU ARE INDOORS

- 1 Keep calm and stay away from windows, display shelves, lighting fixtures or anything that may fall on you and cause injury.
- 2 Take cover under a sturdy table, preferably made of wood or other strong materials.
- 3 When the tremors stop, get out from under the table and switch off all gas and electrical appliances; do not touch any damaged electrical wiring.
- 4 Do not use matches or other naked flames as there might be a gas leakage caused by the tremors. Dial 1800 752 1800 to report a gas pipe leakage if you smell one.
- 5 Check your surroundings for any new cracks and other structural defects on building elements such as walls, columns and beams. Evacuation is only necessary when there are visible signs of structural defects on building elements (e.g. new cracks).



- 6 If there are new cracks:
 - a. Call the Building & Construction Authority (BCA) at 1800 342 5222 or the management office of the non-HDB building.
 - b. Call the Essential Maintenance Service Unit (EMSU) serving your area if you are in a HDB estate; the number can be found at the lift lobby.

- 7 Tune in to the local radio or television stations for updates on the tremor situation.

- 8 Avoid dialling 995 or 999 to prevent the jamming of emergency lines; call the SCDF or Police only if there is an emergency.





IF YOU ARE OUTDOORS

- 1 Stay away from buildings and overhead electrical cables.
- 2 Remain in the open until the tremors stop.
- 3 If you are driving, stop as soon as safety permits and remain in your vehicle. Avoid stopping near trees, buildings, bridges, overpasses or overhead electrical cables.

IF THERE IS A NEED TO EVACUATE

- 1 Switch off all lights and electrical appliances.
- 2 Turn off all gas appliances and taps.
- 3 Gather family members together.
- 4 Grab your Ready Bag(s).
- 5 Lock up your house.
- 6 Leave the building in an orderly manner via the staircases; do not use the lifts.

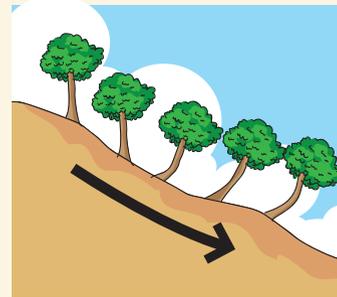


Landslides

Landslides are typically preceded by irregularities in slope profile. Should you notice any signs of slope failure listed below, it is recommended that you engage a professional engineer to inspect, assess and recommend solutions to rectify the problem.

SIGNS OF SLOPE FAILURE

- New cracks in and bulging or misalignment of the earth.
- Tilted trees, fences and utility poles along slopes.
- Accumulation of water behind retaining walls or new locations of water breaking through the ground surface.
- Erosion or washing away of vegetation and top soil on the slope.
- Upheaval of ground at or near the bottom of the slope.



WHEN A LANDSLIDE OCCURS AND DEBRIS FLOWS

- If it is safe to do so, turn off gas, electricity and water supplies as they may cause additional damage.
- Alert your neighbours.
- Grab your Ready Bag(s) and evacuate immediately if safety permits; move out of the path of the landslide.
- If you are driving, be especially alert and look out for collapsed pavement, mud, fallen rocks and other signs of a possible debris flow.
- If you or others are trapped, dial 995 or 999 and if possible tune in to the radio or television for updates on the landslide situation.
- Wait for rescue and stay calm and alert.



AFTER A LANDSLIDE

- Dial 995 or 999 to report any emergencies.
- Stay away from the affected area, building structures and electrical cables as there may be more landslides.
- Direct rescuers to the locations of injured and trapped persons near the affected area; do not enter the hazard area.
- Seek clearance and follow instructions from relevant authorities before returning to affected houses.
- Report structural defects to the:
 - Building & Construction Authority (BCA) at 1800 342 5222 or the management office of the non-HDB building.
 - Essential Maintenance Service Unit for HDB blocks; the telephone number can be found at the HDB block's lift lobby.
- Tune in to the radio or television for updates on the situation.



Power Outage

It is recommended that you pack a torchlight, radio and spare batteries in your Ready Bag (pg 45) in case of power outages. Matches and candles are not advisable as they may be difficult to handle without adequate lighting. The Ready Bag will therefore need to be stored somewhere easy to reach even in the dark.

WHEN A POWER OUTAGE OCCURS

- Retrieve your Ready Bag, turn on the torchlight and tune in to the battery operated radio for updates on the situation.
- If people are trapped in the lift during a power outage:
 - Do not dial 995 or 999 unless there is a life-threatening situation or a need for the emergency medical services.
 - For HDB estates, call the Essential Maintenance Service Unit for help (The telephone number can be found at the lift lobby)
 - For condominiums and non-HDB buildings, call the management office.
- If you are trapped in the lift, stay calm, press the alarm button and wait for help to arrive; do not attempt to force open the lift doors.
- If you are driving and the street lights go off, keep your headlights turned on at all times and drive slowly.



Avoid travelling overseas during the typhoon season of your destination country. It is recommended that you keep yourself updated on the country's weather watch to avoid being caught in a typhoon or tropical storm while outdoors. You may also wish to stock up on food and water in the event that you are trapped indoors due to a storm.

WHEN A TYPHOON OR TROPICAL STORM STRIKES IN YOUR AREA



- Evacuate if directed by local authorities; otherwise, seek shelter indoors immediately.
- Secure or move outdoor items such as toys, bicycles, potted plants and heavy objects into the apartment and away from the windows.
- Close all doors and windows; draw the curtains across windows to minimise glass fragments from flying in should the windows shatter.
- If a window breaks, place a mattress against the broken pane and push a piece of heavy furniture against it, if possible.

Typhoons And Tropical Storms

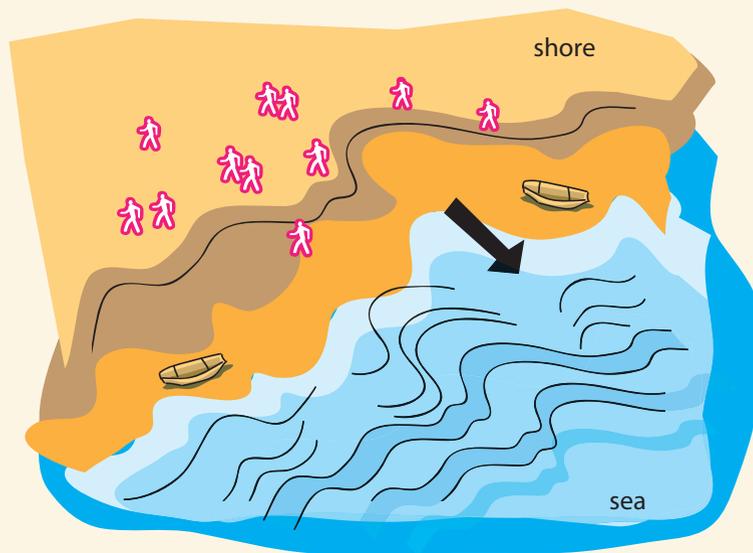
- Get hold of a torchlight and a first aid kit to prepare for any possible power outage and injuries caused by the storm.
- Set your freezer to its lowest temperature to minimise food spoilage in the event that the power supply is cut off.
- Tune in to a portable radio for updates on the situation.
- If possible, check for fire, electrical and gas hazards (pg 25) within the apartment during the storm.
- If the storm becomes severe, move to an area in the apartment which is least exposed to external glass windows and lie down or hide under a sturdy table.
- Do not step outdoors when the storm appears to have stopped; the winds may pick up again after a short period of calm.
- When the storm is declared to be over, check for broken glass, fallen trees, broken power cables and other hazards in your area.
- Dial for the area's emergency ambulance if there are cases of severe injury.



Most tsunamis are caused by earthquakes in the sea that induce movements in the sea floor. The risk of Singapore being affected directly by a tsunami is very low due to the protection provided by surrounding landmasses such as Peninsular Malaysia in the north and Borneo in the east. Nonetheless, Singapore has established a seismic monitoring system since the mid 1990s which is managed by the Meteorological Services Division, to alert its population to such an emergency situation.

WARNING SIGNS OF AN INCOMING TSUNAMI

- Tremors and ground movements at the beach or near the ocean.
- Sudden receding of the sea level or coastal waters from the shore, sometimes by a kilometre or more.



Tsunamis

IF YOU ENCOUNTER A TSUNAMI

- Once you experience either or both warning signs of an incoming tsunami, run to higher ground immediately; do not approach the beach to investigate or wait for the tsunami warning to be given.
- If you are advised to evacuate, do so immediately.
- Do not stay in low-rise buildings in the coastal area if a tsunami warning is activated.
- Move inland quickly to higher ground; if there is no time for that, seek refuge in the upper floors of high-rise, reinforced concrete buildings.
- If you are on a boat or similar vessel that is far from the shore, move it out to deeper waters; if you are near the pier, it may be safer to leave the vessel there and move to higher ground.
- Do not assume that it will be safe to go out into the open after the first wave as there may be subsequent waves.





During earthquakes, most injuries occur when people attempt to leave or move around buildings while the ground is still shaking. In fact, collapsing walls, flying glass and falling objects are the greatest causes of injury and death during earthquakes. While Singapore does not experience earthquakes, it is important that you follow the guidelines below to increase your chances of survival should you encounter an earthquake overseas.

IF YOU ARE INDOORS

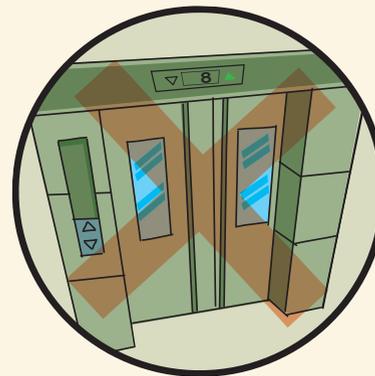
- When the shaking starts, drop to the ground and take cover under a sturdy table or furniture immediately; hold on until the shaking is over.
- If no furniture is available to serve as shelter, move to a safe place nearby (e.g. an inside corner of a building or an interior wall away from windows, mounted shelves or anything that can fall and hurt you) and crouch down while covering your face and head with your arms.
- Stay indoors until the shaking stops and you are sure that it is safe to exit; if you must leave the building after the shaking stops, do not use the lifts in case of aftershocks, power outage or other damages.

IF YOU ARE OUTDOORS

- Minimise your movement and stay away from buildings, street lights and utility wires.
- Stay put in the open until the shaking stops.
- If you are driving:
 - Stop as soon as safety permits and away from buildings, trees, overhead bridges and electrical cables.
 - Stay in the vehicle and tune in to the radio for situation updates.



Crouch down in a safe place while covering your face and head.



Do not use the lifts as they may malfunction due to aftershocks.

WHEN THE EARTHQUAKE HAS STOPPED

- Expect aftershocks any time from the next few hours to even months after the initial shockwave; each time you feel one, crouch down beside a safe interior wall or at an inside corner and cover your face and head with your arms.
- Do a quick check in your area for damage and get everyone to evacuate if there are visible structural defects.
- Help injured and trapped people, if any, and dial the local emergency services number to render assistance and direct rescuers to them.
- If possible, turn off the gas and electrical mains and be alert to smells of gas leakage, spilled chemicals and flammable liquids.
- Look out for signs of fire; put out small fires if possible.
- Beware of fallen power lines or broken gas pipes and stay out of damaged areas and buildings.
- Tune in to the radio for updates.



Do not move around while the earth is still shaking.



If You Are Trapped Under Debris Or Rubble

TO ENHANCE YOUR RATE OF SURVIVAL:

- Crawl under a sturdy piece of furniture (e.g. a desk or bed) which will provide you with breathing space and protection against falling objects. If that is not possible, brace yourself against an interior wall devoid of glass windows or mounted shelves and try to use blankets, boxes and other similar materials for protection against glass fragments and light debris.
- If possible, move away from unstable areas and objects, and put on a pair of sturdy shoes to protect your feet from broken glass.
- Stay put if you are in a safe area; do not attempt to use the stairs or elevators as you will be exposing yourself to dangers such as falling debris, damaged stairways and power outages in elevators.
- Do not turn on light switches or light up matches, fires and gas stoves unless you are sure that there are no gas leaks.
- Be calm, alert and responsive to calls from the rescuers.
- Do not shout unnecessarily as you may inhale dangerous amounts of dust while weakening yourself.
- If possible, use a whistle, torchlight or tap on a pipe or wall to attract the rescuers' attention.
- If you are pinned down by debris, periodically move your fingers and toes to promote blood circulation and prevent blood clots.
- Keep your spirits high by thinking of your loved ones.
- Consume food and water from the refrigerator if it is near you; look out for shattered glass and other debris if you need to eat and drink from an open source within the debris.





If You Encounter An Unruly Crowd

UNRULY CROWD

If you see a crowd gathering and turning unruly

- Stay calm and move away from the crowd.
- Do not approach or confront the crowd.
- Dial 999 immediately and report it to the Police, providing details such as:
 - a. Crowd size (how many people are gathering?);
 - b. Crowd activity (what is the crowd doing?);
 - c. Location of incident (where is the crowd gathering?); and
 - d. Further description of the crowd (e.g. What is the mood of the crowd? Are the people in the crowd carrying weapons?).
- If you are injured and require medical attention, dial 995 for the SCDF.



CHAPTER 4

WARTIME EMERGENCIES

- 64 Rationing and blood donation
- 66 Public Warning System (PWS)
- 67 Shelter protection
- 72 Defensive precautions



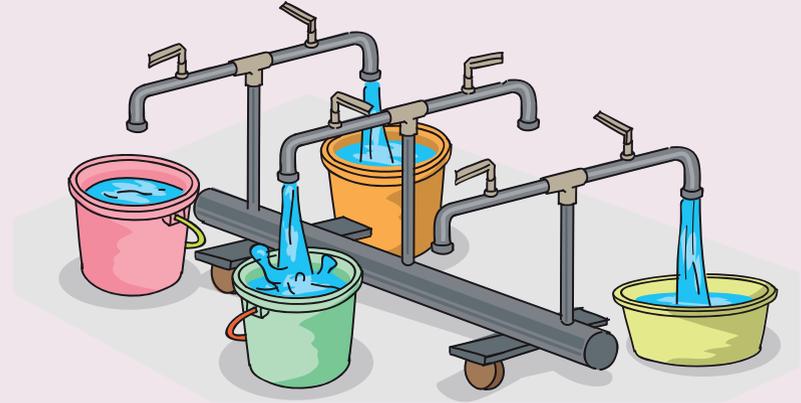
When disasters strike, our daily lives will be disrupted and essential goods and services may not be easily available. When that happens, emergency procedures will be put in place to help you obtain basic supplies so that life can carry on as normally as possible. Your chances of survival, however, may be greatly affected if you are unfamiliar with the emergency procedures. Take the opportunity to learn these procedures when the SCDF and other government agencies conduct an Emergency Exercise in your constituency.



Rationing And Blood Donation

WATER RATIONING

When water supply is disrupted, distribution points will be set up near your home. You will need to bring your own containers (e.g. pails and bottles) to the nearest distribution point and collect the water in an orderly manner.



FOOD AND FUEL RATIONING

To obtain and use your food and fuel ration coupons:

- 1** You will first receive a Registration Notice (for food coupons) and, if applicable, a Notification Card (for fuel coupons).
- 2** Bring the Registration Notice or Notification Card and your family's identification documents (e.g. NRIC or birth certificates) to your designated centre(s) to collect your coupons.
- 3** Use the coupons to purchase rationed food items or fuel from licensed retailers. Before using the food coupons, you will need to fill in the names and NRIC numbers of every member in your household on each coupon.





Rationing And Blood Donation

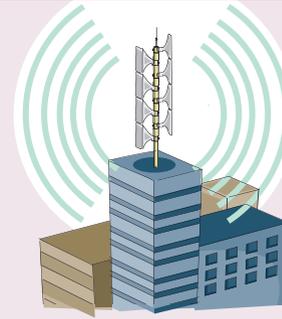
BLOOD DONATION

Blood is vital in treating various illnesses and injuries, and its demand is expected to rise sharply during wartime. As such, we encourage you to go forth and donate blood if you are able to. When you hear the appeal to give blood during wartime, bring along your NRIC to the nearest blood donation centre for registration and a medical professional will attend to you.



Public Warning System

The Public Warning System (PWS) is a network of sirens placed by the SCDF at strategic points across Singapore to warn the public of imminent threats that may endanger lives and property. The PWS will be used to warn the public of military attacks and disasters, both natural and man-made. During peacetime, the PWS may also be sounded during an imminent toxic industrial chemical threat that may affect some parts of the population.



The table below shows the different signals and what you should do when you hear them.

SIGNAL	HOW IT SOUNDS	SITUATION	WHAT YOU NEED TO DO
Alarm	Wailing blasts	An air raid or danger is approaching	Move to a Civil Defence shelter immediately
All Clear	Continuous blasts	The threat is over	Leave the shelter in an orderly manner
Important Message	Pulsating blasts	An "Important Message" broadcast will be aired via the local free-to-air radio and TV stations	Tune in to any local free-to-air FM radio stations and TV stations immediately

NOTE:

- We strongly encourage you to listen to an audio recording of the various PWS signals by logging on to www.scdf.gov.sg under Civil Defence Shelter > Public Warning System

The "Important Message" signal is typically sounded island-wide on 15th February (Total Defence Day) and on 15th September each year. When you hear the signal, please tune in to the local free-to-air FM radio station and TV stations for an important message broadcast from the SCDF.

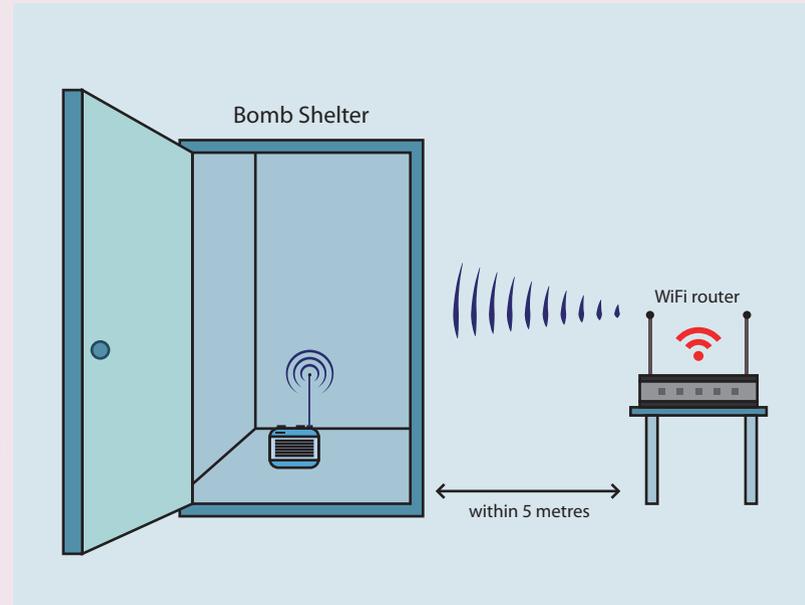


HOUSEHOLD AND STOREY SHELTERS

Household and storey shelters are the primary forms of sheltering the civilian population during a Wartime Emergency.

Household Shelters refer to those inside individual dwelling units, e.g. HDB flats, while Storey Shelters are larger versions of Household Shelters located in a common area on every storey. In some residential developments, the enclosed exit staircases are designed to double up as the Storey Shelter. During a wartime emergency, the SCDF will inform residents to prepare their Household and Storey Shelters for occupation by:

- 1 Removing all temporary fixtures and shelves inside the shelter
- 2 Closing and sealing the two ventilation openings (see next page)
- 3 Equipping the shelter with a radio
- 4 Relocating your WiFi router as close as possible within 5 metres (applicable only to Household Shelters)



Shelter Protection

VENTILATION OPENINGS

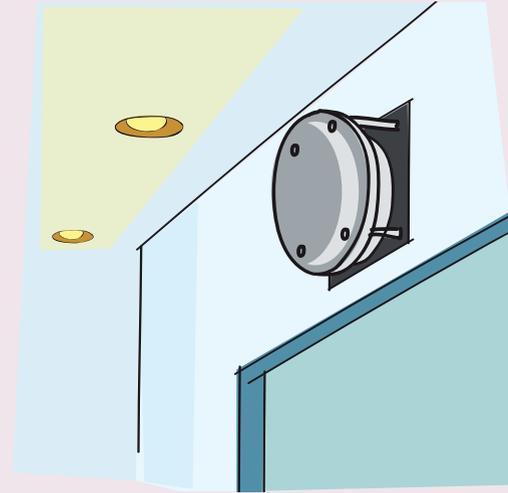
Aside from the lighting and power points provided in the Household and Storey Shelters, there are two ventilation openings in shelter wall(s).

DURING PEACETIME

- Leave at least 25% of the ventilation opening uncovered in case anyone gets trapped inside the shelter (not applicable to staircase storey shelter).

DURING A WARTIME EMERGENCY

- Using ordinary household tools, close both ventilation openings tightly with the steel plates provided to ensure that the shelter is airtight; this will protect you and your family from inhaling contaminants from the outside.
- With both ventilation openings closed tightly, you can stay inside the shelter for several hours; the actual duration of stay will depend on factors such as the number of people in the shelter as well as their age, gender and physical condition.
- Should there be a need for you to lengthen your stay or accommodate more people in the shelter, the SCDF will inform you to affix specified equipment to the opening to improve ventilation.





Shelter Protection

STEPS TO TAKE AT HOME WHEN YOU HEAR THE 'ALARM' SIGNAL

- 1** Turn off all gas and water supplies before heading to the shelter.
- 2** Bring in your radio, mobile phones/devices*, Ready Bag(s) and items such as water and food for your stay in the shelter. The Ready Bags should be pre-packed.
- 3** Move quickly and calmly into the shelter and close the door.

- 4** Sit away from the door and walls of the shelter and do not lean on them.
- 5** Tune in to the local free-to-air radio or TV channels using portable radio set or mobile phones/devices for important messages issued by the SCDF; you can leave the shelter once the "All Clear" PWS signal is sounded (pg 65).



*Applicable to mobile phones/devices with WiFi reception and/or mobile network.

PUBLIC SHELTERS

Public Shelters are built in places such as underground Mass Rapid Transit (MRT) stations, HDB void decks, schools, community centres and government buildings. To identify a public shelter, look out for the Civil Defence shelter sign. The locations of public shelters can be found at www.onemap.gov.sg under “Safety and Security” category (Civil Defence Public Shelters).



A Civil Defence Shelter sign

WHEN YOU ARE NOT AT HOME AND YOU HEAR THE “ALARM” SIGNAL

- 1** Move fast towards your nearest Public Shelter but do not push; if you are in a vehicle, park it at the side of the road, lock up and head for the nearest shelter.
- 2** Follow directions given by SCDF personnel.
- 3** If you are with your family, move as a unit to avoid anxiety and help the handicapped, children and the aged.
- 4** Do not bring bulky items and flammable substances into the shelter.
- 5** If you are unable to find a Public Shelter within a few minutes after the “Alarm” signal has sounded, seek shelter in a tunnel, underpass, underground basement, ditch, drain culvert or even an open drain.





ONCE INSIDE THE PUBLIC SHELTER

- 1 Move in towards the centre of the shelter and do not block the entrances and passageways.
- 2 Stay together as a group and do not wander around.
- 3 Do not start a fire to cook meals.
- 4 Be quiet and listen to announcements made by the SCDF.
- 5 Inform SCDF personnel if you encounter any problem.



LEAVING THE PUBLIC SHELTER

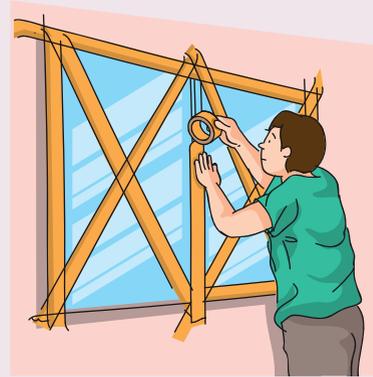
- 1 Leave the shelter only when directed by the authorities.
- 2 Move as a family unit.
- 3 Be patient; do not push and rush.

Defensive Precautions

PREVENTING DAMAGE

Although we cannot prevent the use of weapons (e.g. bombs and other projectiles) that cause damage during wartime, there are measures we can take to minimise damage to property, such as:

- Reinforcing all glass surfaces with tape to reduce shattering.
- Removing all objects hanging on the walls and sitting on balconies and windowsills.



BLACKOUT MEASURES

While a total blackout cannot prevent enemy air raids or shelling, it can reduce the enemy's ability to identify and pinpoint targets. Blackout measures include:

- Switching off all exterior lights.
- Covering all outlets of interior light such as windows and doors with curtains.
- Covering vehicle headlights with black tape while leaving only a small area exposed.



CHAPTER 5

TERRORISM

- 74 Chemical threats
- 77 Biological threats
- 80 Anthrax
- 81 Bomb threats
- 84 In the event of an explosion
- 85 Evacuating from an explosion site
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- 91 Public transport security
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The possibility of CBRE (Chemical, Biological, Radiological and Explosive) devices being used in terrorist attacks against innocent civilians is a growing concern. Understanding the threat and knowing what actions to take are therefore essential in our fight against terrorism.



Chemical Threats

A chemical agent attack is the deliberate release of hazardous chemical substances to kill, seriously injure or incapacitate people. Numerous chemical agents can be dispersed in an attack via improvised explosive devices, spray devices, military weapons and other means. Such agents include nerve, blister, blood and choking agents.

SIGNS OF A POSSIBLE CHEMICAL AGENT ATTACK

- Many people in the same area displaying symptoms such as:
 - Watery eyes or dim vision
 - Headaches or giddiness
 - Shortness of breath
 - Dryness of throat, coughing or extreme irritation to the respiratory tract
 - Nausea or vomiting
 - Salivation
 - Chest tightness
 - Redness of skin with severe pain and formation of blisters upon contact
 - Muscle twitching, seizures or convulsions
 - Incontinence (inability to control the discharge of faeces or urine)
 - Unconsciousness
- Three or more people collapsing for no apparent reason.
- Many sick or dead birds and small animals in the affected area.



IN THE EVENT OF A CHEMICAL AGENT ATTACK

- If possible, quickly determine the areas affected or where the chemical release is coming from.
- If the attack occurs indoors, cover your mouth and nose with a damp cloth (e.g. wet towel) and quickly evacuate the building without passing through the contaminated area(s).
- If the attack occurs outdoors and you are in the open, cover your mouth and nose with a cloth and move away from the affected area(s).
- Seek shelter as soon as possible and perform In-Place Protection (pg 88); do not walk into the wind as it may carry along the hazardous chemicals.
- If you are in your vehicle when the attack occurs, head to your home, office or public building immediately if they are very nearby; otherwise, perform In-Place Protection in your vehicle (pg 89).
- Do not leave the safety of the shelter to help others until the authorities say that it is safe to do so.



IF YOU HAVE BEEN EXPOSED TO A CHEMICAL AGENT

If you experience any abnormal symptoms such as those listed on pg 74, you may have been exposed to a chemical agent. You should wait to be decontaminated by the SCDF (pg 90). If that is not possible:

- 1 Look for the nearest water source.
- 2 Strip immediately and cut off the contaminated clothing. If possible, do not remove the contaminated clothing over the head to avoid contact with your eyes, nose and mouth. Tie up the contaminated clothes in a bag, if available, for proper disposal later on as instructed by the authorities.
- 3 Rinse yourself thoroughly; use soap if it is available.
- 4 Seek immediate medical assistance, if possible.
- 5 Dial 995 for the SCDF, informing them that you may have been exposed to a chemical agent and your location.
- 6 Stay calm and await assistance from the SCDF.

The decontamination procedures mentioned above also applies to exposure to Toxic Industrial Chemicals (TIC) in the case of accidental release.

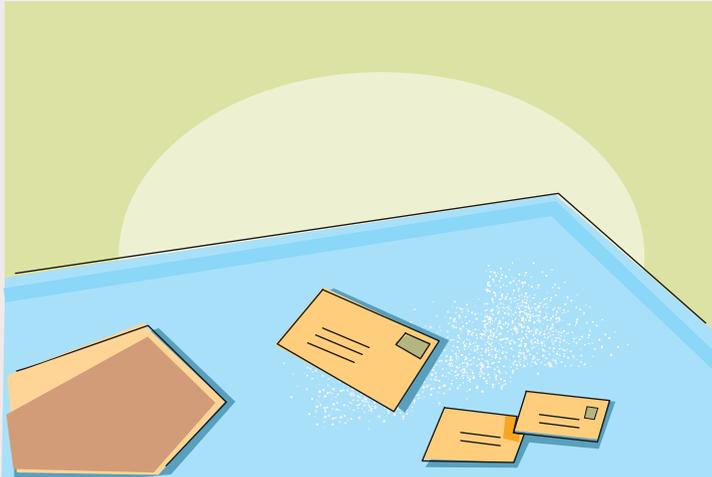
IF YOU SUSPECT THAT SOMEONE HAS BEEN EXPOSED TO A CHEMICAL AGENT

- Do not attempt to administer first aid on the affected person. You may be affected by the chemical and become a casualty too.
- Stay away from the affected area and dial 995 for the SCDF.





A biological agent attack is the deliberate release of biological agents in the form of living micro-organisms and biological toxins to kill or incapacitate people. Such agents can be released into the environment by aerosol sprays, food and water contamination and infected organisms like mosquitoes and rats. Some biological agents are contagious (e.g. smallpox).



SIGNS OF A POSSIBLE BIOLOGICAL AGENT ATTACK

A biological agent attack may not be immediately obvious as there is an incubation period during which the effects of the agent(s) are not observable. You will thus need to look out for:

- Unusual powdery or gel-like substances and suspicious articles.
- Reports on trends of unusual illnesses in the community.
- Unexplained waves of ill people seeking emergency medical attention.

IN THE EVENT OF A BIOLOGICAL AGENT ATTACK

Due to the latent effects of biological agents, it takes time to identify and confirm a biological agent attack. As a result, public health officials may not be able to provide information on immediate actions to take against a biological agent attack. It is recommended that you take the following precautions:

- Practise good hygiene and cleanliness to avoid the spreading of germs.
- Monitor the news closely for further information on the symptoms of the biological agent(s) and where to seek emergency medical care if you are affected.
- Do not assume that any illness or symptom is due to the declared biological emergency as many common illnesses have similar symptoms; you are advised to seek medical advice if you are unsure.





IF YOU SUSPECT YOU HAVE BEEN EXPOSED TO A BIOLOGICAL AGENT

- You may not suffer from any obvious symptoms, but you should quickly identify where the suspected biological release is, if possible, and move away immediately.
- Cover your nose and mouth with a damp cloth while moving away from the source area.
- If you are indoors, inform the building management and dial 999 or 995 to report that you have been exposed to a suspected biological agent; leave your contact information should there be an urgent need to reach you.
- At the earliest opportunity, shower thoroughly with water and soap and change into a clean set of clothing; tie up the contaminated clothes in a bag for proper disposal as instructed by the authorities.
- If you or a family member becomes ill, seek medical advice at the hospital(s) indicated by the authorities.



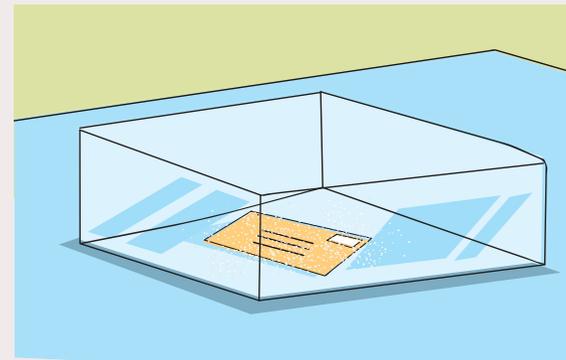
IF YOU THINK SOMEONE HAS BEEN EXPOSED TO A BIOLOGICAL AGENT

- You may help the casualty if you have adequate respiratory protection (e.g. an N-95 mask); otherwise, keep a distance from the person and avoid direct contact.
- Dial 995 for help from the SCDF or 999 for the Police.

Anthrax is a disease caused by bacteria and its powdery form, though not contagious, is a threat to public safety. In Singapore, several agencies such as the SCDF, Police, Ministry of Health and Singapore Post have taken precautionary measures to deal with this threat.

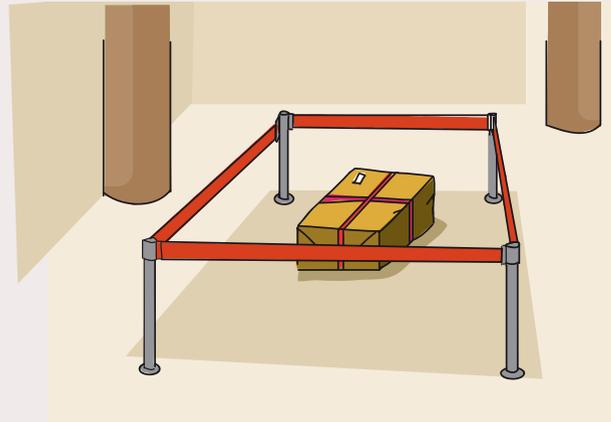
IF YOU SUSPECT THAT AN ARTICLE CONTAINS ANTHRAX

- Dial 995 or 999 for help from the SCDF or the Police respectively; inform the security personnel and/or management if you are in a building.
- Do not handle the article directly and do not sniff the article or its exposed contents, or attempt to clean up the spilled contents, if any.
- If the article is already opened, cover the exposed and spilled contents immediately with a plastic cover, cloth, paper or even a trash can; do not remove the cover until the authorities arrive.
- Turn off all local fans or ventilation units in the affected area.
- Leave the room and close the door or block off the area to prevent others from entering.
- Head to the nearest toilet or washing point and wash your hands and any exposed skin with soap and water.
- Prepare a list of names and contact numbers of persons whom you know were in the vicinity of the suspicious article and hand the list over to the Police for follow-up investigations.
- At the earliest opportunity, remove all clothing (see pg 76, Step 2), shower thoroughly with soap and water and change into a new set of clothing; do not use bleach or other strong disinfectants on your skin.
- Clothing that may have been exposed to anthrax should be sealed in a plastic bag and disposed of properly according to guidelines given by the authorities.



IF YOU SEE A SUSPICIOUS ARTICLE OR AN UNEXPLODED BOMB

- 1** Dial 999 immediately and report it to the Police; provide details such as the shape, size, colour and location of the suspected bomb.
- 2** Do not touch or move the suspected bomb.
- 3** Move away from it and warn people in the area to stay away from the suspected bomb.
- 4** For evacuation procedures, refer to pg 85.



Bomb Threats

IF YOU RECEIVE A BOMB THREAT OVER THE TELEPHONE

1

Stay calm and if possible, signal for someone nearby to dial 999 to make a Police report and another person to inform the building management staff immediately.

2

Keep the caller talking for as long as possible to buy time and try to jot down the exact words used by the caller in the threat.

3

Try finding out from the caller:

- When the bomb will explode
- Where the bomb is placed
- What type of bomb it is and how it looks like
- What will trigger the bomb to explode
- If he/she planted the bomb himself/herself and why
- What message the caller is trying to convey and to whom
- His/her name and current location

4

Take note of how the caller sounds, e.g.:

- Caller's vocal characteristics, e.g. voice of a man, woman or child, possible age etc.
- Language used and accent
- Articulation, e.g. caller speaks fluently or stutters
- Tone of voice, e.g. emotional, angry or calm
- Background noises, e.g. sounds of traffic, music, announcements

5

Do not antagonise or taunt the caller in any way.

6

Do not spread rumours.





IF YOU RECEIVE A SUSPICIOUS LETTER OR PARCEL

1

Treat the indicators below with care and treat the parcel with caution and suspicion if:

- Excessive postage despite its weight.
- Been overly secured with string or adhesive tape.
- An odd shape, size or rigid feel.
- Oily stains or discolouration on the wrapping material.
- An unusual odour that smells like almonds.
- Metal contents whereby gently shaking the article produces metallic sounds.
- Wires or aluminum foil sticking out from the article.
- Unfamiliar handwriting.
- Only the recipient's name on it or restrictive markings such as "Personal", "Confidential" and "To be opened by addressee only".

2

Do not try to open the letter or parcel if you suspect it to contain explosives; most bombs are designed to detonate when the outer wrapping is torn or cut open.

3

If you are unsure of its origin and you have reason to suspect it to be a bomb, report it to the Police immediately by dialling 999.

4

Place the suspicious letter or parcel bomb in a corner of a room away from the windows.

5

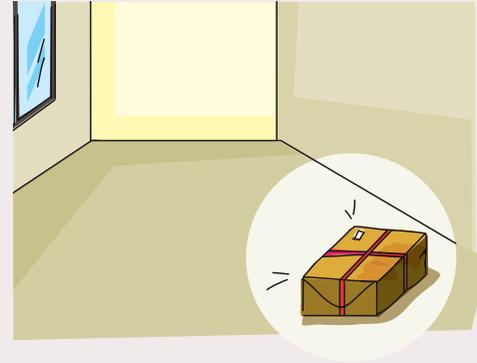
Evacuate the room and the building if necessary, while leaving all doors and windows open to mitigate the effects of shattering glass should the bomb explode.

6

Inform the building management and security personnel, providing clear details on the location of the letter or parcel bomb.

7

Await further instructions from the authorities.



In The Event Of An Explosion

IF YOU ARE HURT:

- 1 Do not use your mobile phone to call for help as it may trigger secondary explosions.
- 2 If you are able to evacuate, move away from the affected area. If you are trapped, refer to pg 61.
- 3 Do not move unnecessarily as you may worsen your injuries.



Do not use your mobile phone near a bomb threat or explosion site.

- If you are not in the affected area, stay away from the explosion site and do not dial 995 or 999 unless you encounter an emergency; tune in to the radio or television for updates.
- After an explosion, beware of post-blast hazards such as:
 - Damaged structures, walls, beams, columns and overhanging slabs.
 - Craters in the ground.
 - Sharp debris and broken glass.
 - Smoke, fires and toxic fumes.
 - Water and gas leakages due to damaged utility pipes and exposed live electrical cables.
 - Potential secondary bomb devices
- Ensure your own safety before helping others.
- If safety permits and you are a trained first-aider, treat casualties until the arrival of emergency responders.
- If you are not trained in first aid, move away from the hazard area; note the locations of severely injured casualties and inform rescuers to attend to them.



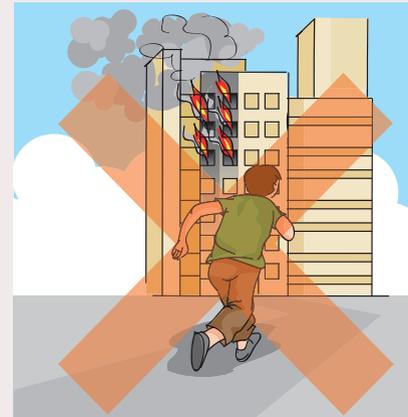
In The Event Of An Explosion

EVACUATING FROM AN EXPLOSION SITE

- Stay calm and do not panic.
- Bring along only what is necessary and evacuate in an orderly manner.
- Do not use the elevators as they may malfunction; use the stairs but do not keep the doors propped open as that will allow more smoke to enter the stairway.
- Do not run; walk briskly and help the disabled, children and the elderly along the way.
- Keep roads and walkways clear for emergency vehicles and rescuers while looking out for them.
- Do not use mobile phones, radios or any electronic equipment at a bomb site as they may trigger secondary explosions.
- At the earliest opportunity, let your loved ones know that you are safe.
- Do not spread rumours about the situation.
- Do not enter a building whose structure has been damaged by the explosion.
- Leave the area and disperse as quickly as possible in case of secondary attacks; if the attack occurred at your workplace, you may explore alternative means of accounting for your staff, colleagues, tenants and clients.



Do not obstruct roads and walkways while evacuating. Make way for emergency vehicles and rescuers.



Do not enter a building that has been damaged by an explosion.

Dirty Bomb Threats

Dirty bombs use conventional explosives spiked with radioactive materials. Once detonated, harmful radioactive materials are dispersed into the air, resulting in radiological contamination over a wide area.

EFFECTS OF RADIATION

Depending on the extent of exposure to radiation, effects can range from none to radiation sickness such as nausea, vomiting, inflammation of exposed areas and skin burns. In some cases, persons exposed to radiation may develop cancerous cell growth that may not be apparent until many years later.

POSSIBLE SIGNS OF A DIRTY BOMB ATTACK

- A dirty bomb explosion sounds and looks like a conventional explosion, and casualties of such explosions are likely to suffer from blast injuries which include burns and shrapnel wounds.
- Specialised equipment are required to detect the presence of radioactive material in a dirty bomb attack; otherwise, it is almost impossible to differentiate it from conventional bomb blasts.



IN THE EVENT OF A DIRTY BOMB ATTACK

- If you are outside and the explosion/radiation occurs nearby:
 - Cover your nose and mouth with a damp cloth and move away from the hazard area.
 - Seek shelter as soon as possible and do not walk into the wind as it may carry radioactive particles.
- If you are indoors and the explosion/radiation occurs near the building:
 - Check if any walls and building elements have been damaged.
 - If your area did not sustain any damages, stay put, close all windows and doors and turn off air-conditioners and other ventilation systems.
 - If uncertain, evacuate from the damaged building in the same manner as you would outdoors (see above).
- If there is an explosion/radiation in your building:
 - Cover your nose and mouth with a damp cloth and leave the building immediately.
 - If you have been exposed, wait to be decontaminated by the SCDF personnel; otherwise, move away from the hazard area and avoid walking into the wind.
- Tune in to the local free-to-air radio or television channels for advisories from the authorities on where to report for radiation monitoring and other tests to determine if you have been exposed to radiation; you will also be given advice on steps to protect your health.



After an explosion nearby, check for any damage to the walls and building elements.

In-Place Protection Procedure

You may be required to observe In-place Protection (IPP) procedure when hazardous substances are released into the environment intentionally or otherwise. IPP serves to minimise the infiltration of hazardous materials into premises such as homes, schools and workplaces. If you are outdoors when hazardous substance is released, seek shelter and perform IPP immediately.

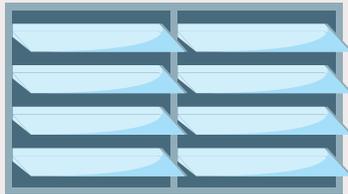
IPP PROCEDURE AT HOME

When instructions are given by the authorities to carry out the In-Place Protection procedure via the sounding of the Public Warning System's 'Important Message' signal and the 'Important Message' broadcast over the free-to-air Mediacorp TV and radio stations, adopt the following procedures:

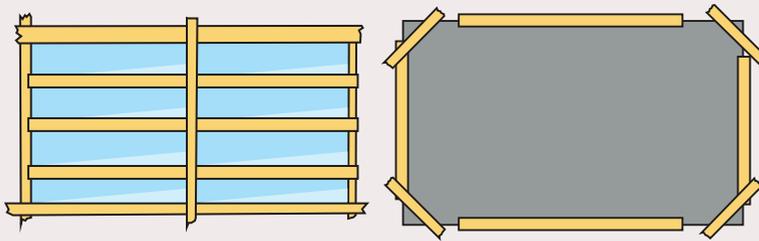
1

GO IN

- Go indoors immediately;
- Close all doors and windows, including blinds and curtains; and
- Switch off all ventilation and air-conditioning units.



Louvre Windows



Examples of how the louvre windows can be sealed.
The sealing process can be carried out using common household items such as clothes/towels or tapes.

2

STAY IN

- Grab your handphone, some cloths/ big towels and tapes;
- Choose a room with minimal windows/ exterior openings;
- Use cloths/towels to seal off gaps between the door and floor;
- Close all windows in the room; and
- If there are louvre windows (or openings of similar design), seal the gaps with common household items such as cloths/ towels or tapes.

3

TUNE IN

- Tune in to the free-to-air MediaCorp TV and radio stations or SCDF's social media platforms for updates on the latest situation and/or instructions from the authorities; and
- Leave the room only when instructed by the authorities.

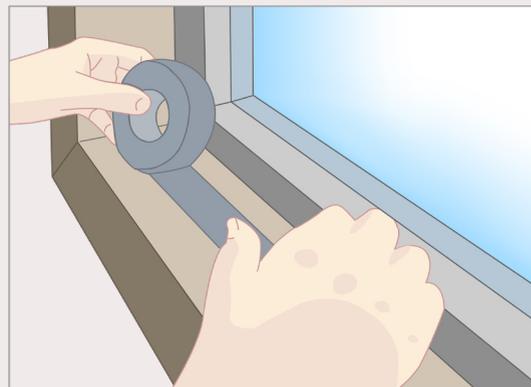
Note: As a rule of thumb, the IPP procedure is expected to be observed for up to half a day. However, this duration may vary depending on the nature of the incident.



IPP PROCEDURE AT SCHOOL AND IN THE WORKPLACE

If your children are in school, they will be sheltered. Schools that are within the affected area will be notified to carry out the IPP procedure. Unless instructed by the authorities, do not go to the school and bring your children home. Transporting them from the school will put all of you at risk.

For workplaces, pre-planning by the building management is essential in ensuring good coordination and quick execution of the IPP procedure. A guide for preparing IPP for non-residential buildings is available at www.scdf.gov.sg under Fire Safety->Downloads->Acts, Codes & Regulations->Others



Rolls of tape can be used to seal any obvious gaps around window and doors and to use secure the plastic sheets over windows/vents

IPP PROCEDURE IN YOUR VEHICLE

If a vehicle is caught in a hazardous chemical release plume:

- Close all windows and switch off the air-conditioning unit/ventilation system. Ensure that the air re-circulation vent is closed;
- Drive away from the affected area; and
- Tune in to free-to-air MediaCorp radio stations for updates on the latest situation and/or instructions from the authorities.
- Once out of the affected area, switch on the air-conditioning unit/ventilation system fan speed to high and open the air-circulation vent.

If you are unable to drive out of the affected area, close all windows, switch off the engine and remain in the vehicle or move into the nearest indoor premises and carry out the IPP procedure.

END OF IPP PROCEDURE

Once the chemical plume has passed or the outdoor toxic chemical concentration has dropped to a safe level, you will be alerted.

The alert will be made by SCDF through the sounding of the Public Warning System's 'Important Message' signal and the 'Important Message' broadcast over the free-to-air Mediacorp TV and radio stations.

It will inform you that the threat is over and it is safe to leave the premises. You would also be advised to ventilate the premises by opening doors and windows and switching on fans, air conditioning units and ventilation systems.

Decontamination Procedures

In the event of a hazardous material incident involving a chemical, biological or radiological substance, the SCDF will set up decontamination facilities on-site to decontaminate the affected persons. This critical process saves lives and prevent cross contamination. A full decontamination process entails the following steps:

1

PREPARATION

- Collect a clothing pack provided by the SCDF. The clothing pack would contain the following items:
 - Valuables Bag
 - Trash Bag
 - Towel
 - Shirt
 - Pants
 - Slippers
- Place essential valuables in the valuables bag and maintain possession of it throughout the decontamination process

2

UNDRESSING

- Remove all clothing down to undergarments and footwear; doing so will remove bulk of the contaminant(s).
- Dispose them into the trash bag.



3

DECONTAMINATION

Depending on the situation, you may be instructed to undergo dry or/and wet decontamination.

DRY DECONTAMINATION

- Use the dry absorbent materials provided to wipe off the contaminants from the hair and skin areas.
- Clean the top and sides of the head first, followed by the hands and then any other skin areas.
- Discard the used absorbent materials into the trash bag.

WET DECONTAMINATION

- Wet and scrub your body thoroughly, especially the armpit and groin areas.
- Dry yourself with the towel from the clothing pack and discard it into the trash bag.

4

MONITORING

- Raise your arms to the side to form a T-shape with your body; this will allow SCDF personnel to scan your body for traces of the contaminant(s)
- If residual contaminant(s) are detected, you will be instructed to repeat step 3.

5

GETTING DRESSED

- Put on the clothing provided in the clothing pack once SCDF personnel declare that you are free of contaminant(s).
- Seal the trash bag and hand it over to the SCDF personnel prior to movement to the temporary holding area. Await instructions from the authorities.



Public transport systems are easy targets for terrorists and vigilance is the key to safety in this area. If you see anything or anyone suspicious, inform the bus captain, train operator or transit security personnel immediately. Should there be a threat to life or cases of injury, dial 999 for the Police or 995 for the SCDF.

WHEN EVACUATING THE TRAIN OR BUS

- If a problem occurs while the train or bus is on the move, do not panic.
- Listen carefully to the announcements made by the transport staff and follow the instructions closely.
- Take care of the disabled, children and the elderly.
- For trains:
 - Do not force open the doors and attempt to jump off the train.
 - Head towards either end of the train and evacuate in an orderly manner via the emergency exits.
 - During evacuation, no electrical power will be running through the train tracks so you may safely walk on them; emergency lighting and ventilation will be provided in the trains and tunnels during evacuation.



SGSecure is Singapore's community response to the terrorism threat

It is a national movement to sensitise, train, and mobilise everyone in Singapore to play a part to prevent and deal with a terrorist attack.

This is a call to action to everyone in our multi-racial, multi-religious society to come together to safeguard Singapore and our way of life.

SGSecure focuses on three core actions that every one of us can do in our fight against terrorism.

**Stay Alert**

to prevent a terrorist attack and to keep yourself safe in the event of an attack

Pay attention to your surroundings and keep a lookout for anything Abnormal, Irregular, Strange or Unusual.

E.g.

- Unattended items in public areas, especially if they are partially hidden
- Someone loitering suspiciously
- Vehicle heading towards a crowd and not slowing down

If you see anything suspicious, call the Police immediately. You may also use the SGSecure app to provide information, photos and videos to the Police.

**Stay United**

to help one another, especially after a terror attack

Let's do our part to protect our social fabric by:

- Learning more about different cultures, races and religious practices
- Staying in touch with neighbours and helping one another
- Being understanding, considerate and respectful of one another

After an attack has taken place:

- Keep calm and find out the latest information from official sources such as the Police website
- Do not spread rumours
- Do not post or share videos or photos that lead to panic and fear

**Stay Strong**

to safeguard our social fabric and bounce back as one people

Know how to protect ourselves and our loved ones in an attack. If you are caught in an attack, remember "Run, Hide, Tell".

Familiarise yourself with Improvised First Aid Skills Plus (IFAS Plus) pg 94 and emergency preparedness skills such as basic first-aid, CPR-AED so that you may help others who are injured during an attack or in any emergency.

After an attack, encourage your family and friends to return to their daily activities as soon as possible.

IN EVENT OF AN ATTACK



RUN

- Move quickly and quietly away from danger using the safest route.
- Do not surrender or attempt to negotiate with the attackers.



HIDE

- Stay out of sight, be quiet and switch your phone to silent mode.
- Lock yourself in and stay away from the doors.



TELL

- Provide information to the Police by calling 999/SMS 71999 or using the SGSecure App
- Provide details about the attackers and their location.

WHEN HIDING FROM DANGER



PRESS

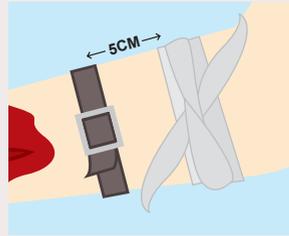
Directly on the wound to stop the bleeding using items such as a handkerchief or cloth.



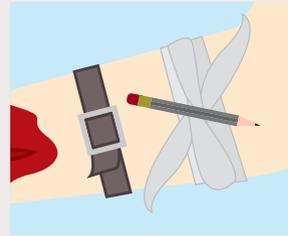
TIE

At least 5 cm above the wound using items such as a neck tie, belt or sling of a bag to stop any excessive bleeding. If the bleeding does not stop, apply the windlass technique.

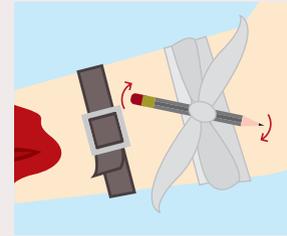
Steps to windlass technique:



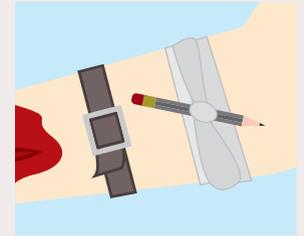
A. Tie at least 5cm above the first tie.



B. Place a rod (pen or wooden stick) on the second tie and secure the rod.



C. Turn the rod in one direction until the bleeding stops.



D. Secure the rod by tying a knot.



TELL

The SCDF Emergency Responders about the injury and the time when you tied the wound.

AFTER AN ATTACK HAS TAKEN PLACE



Keep calm

Get the latest information and advisories from official sources



Do not speculate or spread rumours

Do not post or share videos or posts that can lead to panic or cause disharmony



Care for others

Encourage your family and friends to bounce back and return to their daily activities as soon as possible.



Download the SGSecure App

The SGSecure app allows you to:

- Report suspicious sightings to the Police – point, shoot and send.
- Receive timely updates from the authorities in the event of major emergencies.
- Receive alerts to Cardiac Arrest or Minor Fire cases happening near you

For more information on SGSecure, please visit www.sgsecure.gov.sg



Scan the QR code to download the app

SGSecure Mobile Application

Question

If I am already signed up as a responder for the SGSecure mobile app or myResponder mobile app, do I need to sign up for the other?

Answer

It is not necessary for you to sign up as a responder in both apps they both enable you to receive similar alerts on cardiac arrest and minor fire cases.

Either of the apps can be used to respond to any case of cardiac arrest/minor fires, and in the course of responding to a case, any action that you take (e.g. report “arrived”) will be updated on both apps.

Is there a need for me to download both SGSecure and myResponder mobile apps?

While both apps allow you to receive alerts and respond to similar cardiac and minor fire cases , each app has its own unique features which you may find useful.

You are therefore encouraged to download both apps.

- The SGSecure app could be also used to:
- Receive important broadcast messages from the authorities during major emergencies;
 - Send videos, photos, messages to the authorities to provide information on security-related threats you have witnessed;
 - Seek assistance from the authorities during an emergency; and
 - Receive updates on security-related MFA Travel Advisories.

- The myResponder app enables users to access:
- Geolocation enabled dialling of 995;
 - SCDF’s step-by-step guides on dealing with emergency cases such as cardiac arrest or firefighting; and
 - SCDF’s e-services such as fire safety feedback.

Be A Community First Responder & Make A Difference In

97

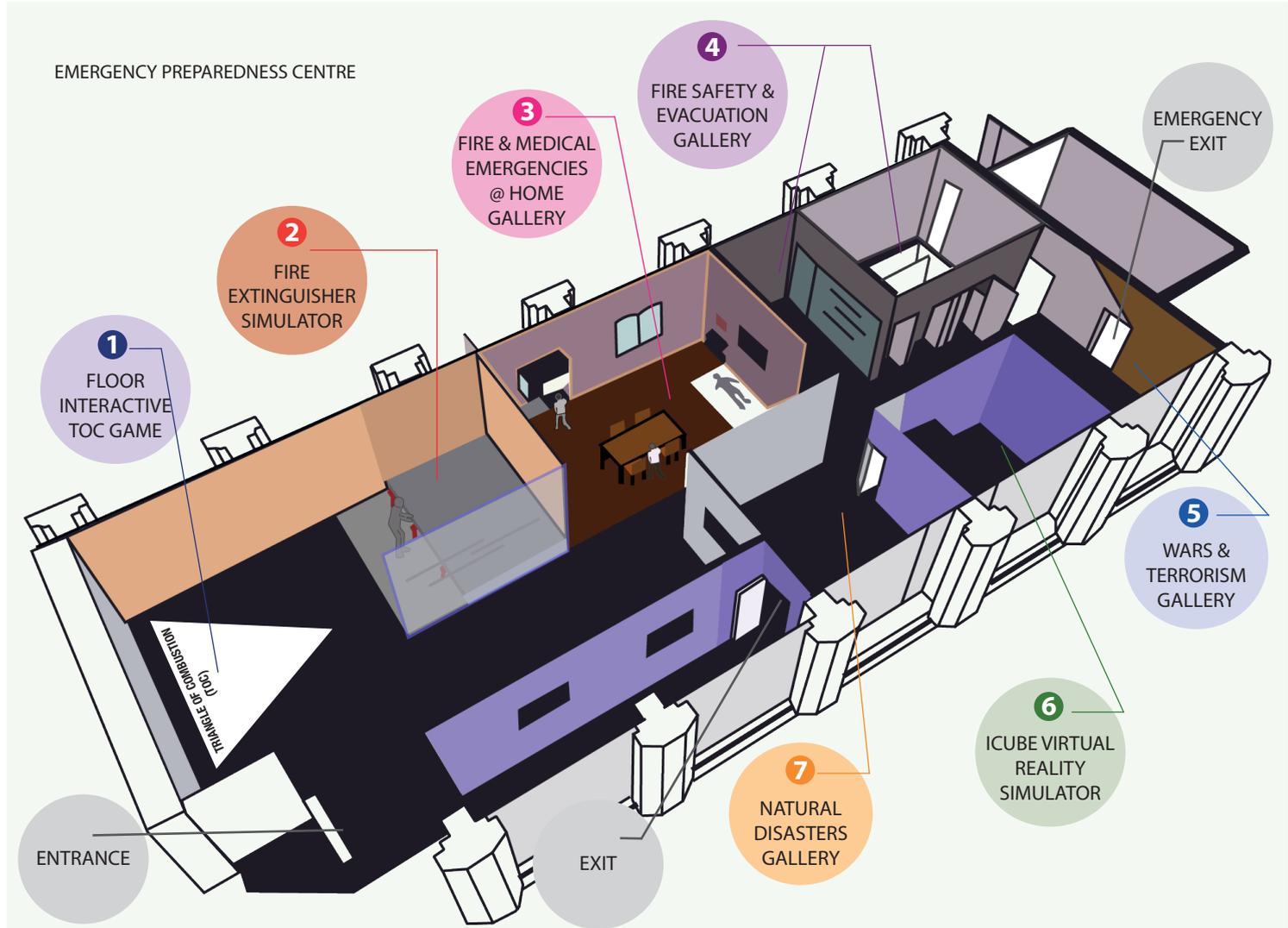
During emergencies, you can make a difference by being a Community First Responder to render assistance to those in distress prior to the arrival of the SCDF emergency responders. The following are some ways in which you can acquire emergency preparedness and life saving skills to help your loved ones, neighbours and community during emergencies. Together, let us make Singapore a nation of lifesavers.



Be Ready As A Community First Responder

EMERGENCY PREPAREDNESS CENTRE (EPC)

The EPC provides visitors with fire safety tips, emergency preparedness knowledge and life-saving skills through highly visual and interactive exhibits. Some of these exhibits include the fire extinguisher simulator which discharges water onto a video wall depicting a few incipient fire scenarios as well as mannequins for visitors to try out the Heimlich Manoeuvre and CPR procedure. Its signature exhibit is the Icube which uses the latest state-of-the-art virtual reality 3-D immersive technology to give visitors a near realistic experience of natural disasters such as typhoon and tsunami. The EPC has seven different learning zones:



Be Ready As A Community First Responder

EMERGENCY PREPAREDNESS CENTRE (EPC)

EPC Opening Hours

Tuesday to Sunday (including Public Holidays), from 10am to 5pm.

Address

SCDF Heritage Gallery at 62 Hill Street, Singapore 179367, Level 2 (Next to Central Fire Station)

Minimum Age Requirement

The EPC is recommended for persons aged 10 and above.

Pre-registration

Prior booking is required for visits to the EPC. All visits are based on guided tours and each one hour tour can accommodate a maximum group size of 20 persons (adults and children included).

To visit the EPC, please make a **booking** online through the EPC Visit online form at our SCDF website (www.scdf.gov.sg) under 'Community & Volunteers' Tab > Visit SCDF Establishments.

For enquiries

For enquiries, please call 6332 2996 during the EPC opening hours.



EPC is where adults and kids learn and have fun!

Be Ready As A Community First Responder

RESPONDERS PLUS PROGRAMME (RPP)

The Responders Plus Programme (RPP) is SCDF's emergency preparedness training programme, which equips learners with core lifesaving skills, namely First Aid, CPR-AED, and Fire Fighting.

The RPP has two components:

RPP (Online): 45 mins

URL: [https://www.scdf.gov.sg/community-volunteers/responders-plus-programme-\(rpp\)/course.html](https://www.scdf.gov.sg/community-volunteers/responders-plus-programme-(rpp)/course.html)

Core lifesaving skills are covered by a self-directed e-learning course, focusing on the following topics:

- 1) What is a Community First Responder
- 2) Basic First Aid Skills
- 3) CPR/AED
- 4) Fire Fighting
- 5) SGSecure

RPP(In-Person): 4 hours

URL: [https://www.scdf.gov.sg/home/community-volunteers/responders-plus-programme-\(rpp\)](https://www.scdf.gov.sg/home/community-volunteers/responders-plus-programme-(rpp))

Through hands-on practical sessions, you will further hone your lifesaving skills. RPP (In Person) is conducted at the four SCDF Division Headquarters and will focus more heavily on the hands-on application of the following skill sets:

- 1) Essential Emergency Preparedness Knowledge
- 2) First Aid
- 3) CPR/AED
- 4) Fire Safety and Evacuation Procedure
- 5) SGSecure

To register for RPP (In-Person), you can contact one of the four SCDF Division HQs nearest to your office/home.

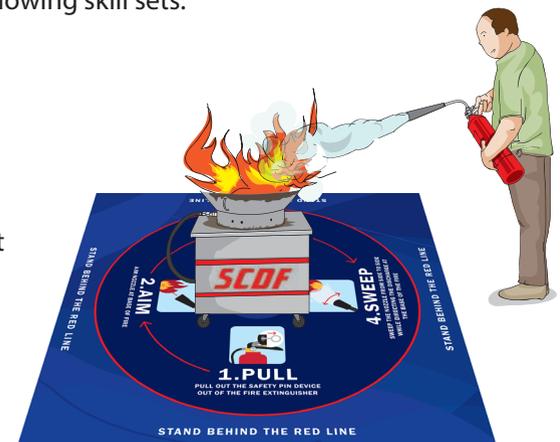
You are strongly encouraged to attend both components of the RPP for a richer learning experience.



Scan here to access the e-learning course



Scan here to access the contact numbers of the four SCDF Division HQs:



Be Ready As A Community First Responder



myResponder MOBILE APPLICATION

The myResponder app alerts users to cardiac arrest cases and minor fire cases in their immediate vicinity. Members of the public can also access the National AED registry, which is a database of AED locations in public places, via the myResponder app.

Responders who are able to respond can choose to accept the notification and provide early intervention to the casualty, such as performing CPR and/or using the nearest available AED. SCDF's 995 Ops Centre may also ask responders to guide the ambulance crew by escorting them to the incident site.

In addition, the 'Dial 995' feature on the myResponder app (which can also be pinned as a widget on the phone) can be used to send one's geolocation to the 995 Ops Centre. This is extremely useful for the SCDF to send help to anyone who may be in distress at park connectors, nature trails, or any place in Singapore where the location may be unclear.

Note: You may register with your Singpass or via SMS OTP. If you are under 18 years old, please seek parental consent for your participation.

Scan the QR code to download myResponder app:



myResponder app (Medical Module)

Every second matters!
Chances of survival drop by 7% to 10% every minute without CPR intervention.

Bystander CPR doubles the survival rates.
We can improve the survival rate of cardiac arrest victims via:

- **EARLY NOTIFICATION** to SCDF 995 call centre through mobile phone geolocation;
- **EARLY CPR** by trained Community First Responders; and
- **EARLY DEFIBRILLATION** with publicly accessible AEDs.

myResponder app (Fire Module)

Each year, SCDF responds to more than 1,000 rubbish fires. These fires are small with **no risk of spreading** and can be **easily put out** by members of the public.

We can help to put out such fires by using extinguishing mediums such as containers of water or a fire extinguisher. By putting out a minor fire, we can help prevent further damage and keep our neighbourhood fire safe.

This will also free up SCDF's resources to attend to life-threatening cases.

Features of myResponder mobile app



Dial '995' through the app and your geolocation will be sent to SCDF automatically



Notification of cardiac arrest victims or minor fire cases near you



Enable users to provide photos/videos for major incidents using the camera function in the app



Locate the nearest publicly accessible AED

How to download?

Step 1:
Go to Google Play/App store



Step 2:
Search for 'myResponder'



Step 3:
Download myResponder mobile app on your phone



Step 4:

Launch the myResponder mobile app and click 'sign up'
* If you wish to volunteer, you can sign up via Singpass or SMS OTP.
* Your handphone number will be required for SCDF to get in touch with you during an emergency.





Useful Numbers

FIRE AND EMERGENCY AMBULANCE SERVICES	995
NON-EMERGENCY AMBULANCE SERVICE	1777
SCDF EMERGENCY SMS [specially catered for people who are deaf, hard-of-hearing and/or have speech impairment (DHS)*]	70995
FIRE HAZARD REPORTING LINE	1800 280 0000
SCDF GENERAL ENQUIRIES	1800 286 5555
POLICE	999
POLICE HOTLINE [for general enquiries]	1800 255 0000
PUB, THE NATIONAL WATER AGENCY [for water supply matters]	1800 2255 782
SP POWERGRID [to report on electricity supply interruption]	1800 778 8888
CITY GAS [to report on Piped Town Gas matters]	1800 752 1800
BUILDING & CONSTRUCTION AUTHORITY [to report structural defects in non-HDB buildings]	1800 342 5222
HDB'S ESSENTIAL MAINTENANCE SERVICE UNIT (EMSU) [to report power failure and structural defects in HDB buildings; the service number for your building can be found outside the lift]	1800 275 5555 1800 325 8888

**This number is only for members of the DHS community to send an SMS to request for SCDF assistance during emergencies such as fire or medical condition.*

BE A COMMUNITY FIRST RESPONDER AND MAKE A DIFFERENCE IN TIMES OF CRISIS



To learn lifesaving skills and emergency procedures, visit www.scdf.gov.sg



To be a Community First Responder, register via the myResponder App.

TOGETHER A NATION OF LIFESAVERS



A COMMUNITY EDUCATION PROJECT BY:



SCDF
The Life Saving Force

... for a safer Singapore



IN COLLABORATION WITH:



National Fire And Emergency
Preparedness Council

