

BASIC CARDIAC LIFE SUPPORT

LIFE SAVER'S PRACTICE GUIDE



TM

SINGAPORE
FIRST AID TRAINING
CENTRE

1. INTRODUCTION

Heart Attack

blood clot in coronary artery



RISKS



smoking



poor diet



good diet



exercise



obesity



family history



regular check ups



PREVENTION

2. CARDIAC ARREST

Heart attack can lead to cardiac arrest.



INDICATIONS



no breathing



no heartbeat



electrocution



drowning

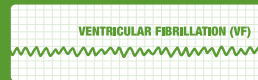


drug abuse

CAUSES INCLUDES

4-6min of cardiac arrest → brain death

Cardiac arrest victim may experience Ventricular Fibrillation (VF)



8 - 10 mins of Ventricular Fibrillation = Asystole

Survival rate drops by 7 - 10% for every min of delay



3. CHAIN OF SURVIVAL



1. Early Access

- Identify quickly • Call ambulance • Provide help

2. Early CPR

- CPR (Cardio Pulmonary Resuscitation) • Stabilize circulation • Delays brain death • Keeps organs alive

3. Early Defibrillation

- Identify VF (shockable rhythm) • Deliver shock • Restore normal heartbeat

4. Early Advanced Care

- Advanced airway devices • Resuscitation drugs



Every 1 min without help, chance of survival drops by 10%

4. CPR STEPS

Cardiopulmonary Resuscitation (CPR)

D

Check for **DANGER**

R

Check for **RESPONSE**: Tap shoulders and shout: "Hello! Hello! Are you ok?"

S

SHOUT: "HELP! Call ambulance 995 and get the AED!"

A

Open **AIRWAY**: Head-Tilt, Chin-Lift

B

Check for **BREATHING**: Look for rise and fall of the chest (up to 10 secs)
Check for **PULSE** (for Healthcare Providers only)

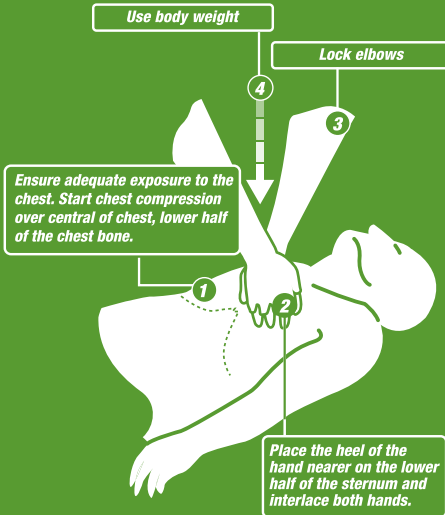
C

Start **CHEST COMPRESSIONS**

CPR - 30 COMPRESSIONS: 2 BREATHS

ABNORMAL GASPS ARE NOT BREATHS

5. COMPRESSIONS



WHEN DOING COMPRESSION...

- Push at least 4-6cm
- Rate of 100-120 compressions per min
- Ensure full chest rise

7. PULSE CHECK (Healthcare Provider only)

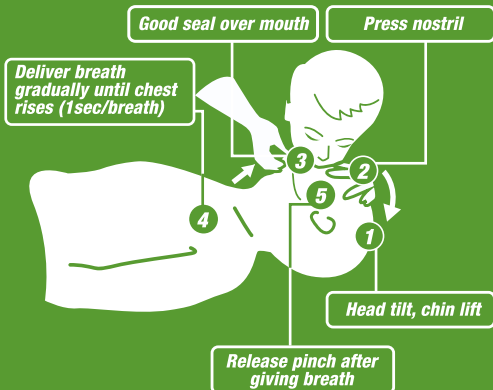
Check breathing and CAROTID pulse after every 5 cycles of CPR



NOTE:

If pulse is present but not breathing, begin Rescue Breathing.
Give 1 breath every 5 secs (12 cycles/min).
Reassess pulse and breathing after every minute.

6. GIVING BREATHS



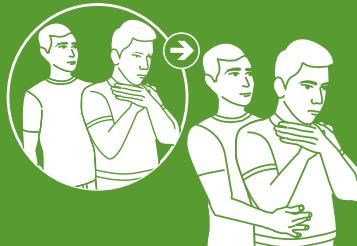
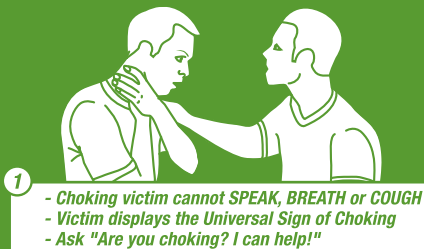
COMPRESSIONS ONLY CPR

If unwilling to give breaths, perform continuous chest compressions at a rate of 100-120 compressions per min.



8. CHOKING

For normal size victim



continue on next page



- 3**
- Place clenched fist, thumb side inwards above fingers
 - Lean the victim forward
 - Wrap the other hand around your fist



- 4**
- Give 5 successive inwards and upward thrusts, followed by a quick check
 - Continue until the object is dislodged or casualty turns unconscious

For obese or pregnant victim



- 1**
- On the breastbone along armpit line
 - Place clenched fist thumb side inwards
 - Wrap the other hand around your fist



- 2**
- 5 successive backwards thrusts, followed by a check
 - Continue until the object is dislodged or casualty turns unconscious

9. UNCONSCIOUS CHOKING



SUPPORT

Check for danger and lie victim on a firm surface



SHOUT

"Help! Call for ambulance 995 and get the AED!"



COMPRESSION

Perform 30 chest compressions



AIRWAY

Head-Tilt, Chin-Lift & Open Mouth
Check for Foreign Body,
Perform Finger Sweep.



BREATHING

Check for breathing.
If absent, give 1st breath.

SUCCESSFUL

Give another breath

RESISTANCE

Reposition head
Give another breath

CIRCULATION

Check breathing, if no breathing, start CPR

STILL RESISTANCE CONFIRM CHOKING

30 Chest Compressions

10. INFANT CPR



1 DANGER

- Make sure the scene is safe.
- Remove all dangers with caution and ensure that it is safe to approach the victim.



2 RESPONSE

- Tap the infant's shoulder and foot and call out: "Baby, baby, are you ok?"



3 SHOUT

- If no response, shout: "Help! Call for ambulance 995!"
- Get AED



4 AIRWAY

- Perform a Head-Tilt-Chin-Lift.

Do not tilt the infant's head too far back as this may cause the airway to kink or collapse.



5 BREATHING

- Check for normal breathing and pulse for up to 10 secs.

6 CIRCULATION



STEP 1:

Place 3 fingers on the infant's chest with index finger on the nipple line.

STEP 2:

Slide middle and ring fingers on infant's sternum. Lift index finger off infant's chest, leaving only middle and ring fingers in contact.

Thumb Encircling Method:

Wrap hands around the infant's chest and place both thumbs on the sternum, just below the nipple line.

HEALTHCARE PROVIDERS ONLY

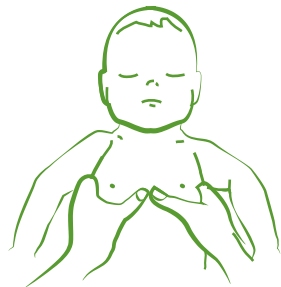


Brachial Pulse

An infant's pulse is checked at the BRACHIAL artery, which is located inside of the upper arm, between the elbow and the shoulder.

Place two fingers on the brachial artery applying slight pressure up to 10 seconds.

ALTERNATIVE METHOD FOR 2 OR MORE RESCUERS



COMPRESSIONS



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.

STEP 3:

Using the pulp of the fingers, compress 3-4cm at a compression rate of at least 100-120 per min while counting.

After 30 compressions, deliver 2 breaths.



To deliver breaths, seal lips around infant's nose and mouth and deliver 2 breaths over 1 sec each (30cc).

Deliver 30 compressions followed by 2 breaths until breathing returns, trained medical help takes over or the AED is in use.

11. INFANT CHOKING

A choking infant will not be able to make any sounds, breath or cough.



1 APPROACH

- Sandwich the infant with your forearms in between the infant's legs and with your hands supporting the infant's head.



2 POSITION

- Stand with your feet apart
- Rest infant's face down onto your forearm and thigh on the same side.



3 MANOEUVRE

- Give 5 back blows in between the infant's shoulder blades.
- Turn the infant over.
- Rest on the other leg.



- Place 2 fingers on the infant's breastbone, just below the nipple line.
- Deliver 5 chest thrusts vertically downwards.



- Check for any foreign body in the mouth. If foreign body is visible, perform a finger sweep with your last finger to remove it.

Repeat manoeuvre until:

1) infant is no longer choking
or
2) infant turns unconscious

Proceed with steps for Unconscious Choking

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