CARDIO PULMONARY RESUSCITATION
CPR IN CHILDREN

• Child CPR is administered to any victim from the age of 1 yr till puberty.

• Cardiac arrest due to - injury such as poisoning, smoke inhalation, or head trauma, which causes the breathing to stop first.

• Children tend to respond to CPR much better if administered as soon as possible
PEDiatric CHain OF Survival

Prevention – CPR – Call for help – Access to PALS – Post arrest care
CPR IN CHILDREN
Tap and shout

Yell for help. Send someone to phone 911 and get an AED

Look for no breathing or only gasping

Push hard and fast. Give 30 compressions

Open the airway and give 2 breaths

Repeat sets of 30 compressions and 2 breaths

If you are alone after 5 sets of 30 compressions and 2 breaths, phone 911, and then resume sets of 30:2

When the AED arrives, turn it ON and follow the prompts
SAFETY AND ASSESSMENT

• SAFETY –
  – Always make sure that the area is safe for you and the victim.

• ASSESSMENT –
  – Assume that cardiac arrest is present if:
    • the victim is unresponsive
    • not breathing
    • only gasping.
CHECK FOR RESPONSE

• Gently tap the victim

• Ask loudly, “Are you okay?”

• Call the child's name if you know it.

• If the child is responsive, he or she will answer, move, or moan.

• Quickly check to see if the child has any injuries
CHECK THE CIRCULATION

• If child is unresponsive/ not breathing

• Palpate for the central pulse – CAROTID/FEMORAL

• Take no more than 10 seconds to try to palpate the pulse.

• NO PULSE/NOT SURE of the pulse → START CPR
HOW TO CONDUCT CPR?

The recommended sequence of CPR

CAB sequence

Circulation

Airway

Breathing/ventilations
C-A-B

CPR is as easy as

C- A- B

Compressions
Push hard and fast on the center of the victim's chest

Airway
Tilt the victim's head back and lift the chin to open the airway

Breathing
Give mouth-to-mouth rescue breaths

American Heart Association
Learn and Live

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CHEST COMPRESSION

• Compress the lower half of the sternum

• At least one third of the AP dimension of the chest should be compressed

• Rate of 120 compressions/minute
CHEST COMPRESSION

• Use heel of 1 or 2 hands.

• Do not press on the xiphoid or the ribs.

• Complete release after each compression.
CHEST COMPRESSION

PUSH HARD -- PUSH FAST
CHEST COMPRESSION

• For the lone rescuer a compression-to-ventilation ratio of 30:2 is recommended.
• After the initial set of 30 compressions, open the airway and give 2 breaths.
CHEST COMPRESSION

• For two rescuer a compression-to-ventilation ratio of 15:2 is recommended.
AIRWAY

• A" is for AIRWAY.

• Normal infant - shallow and rapid breaths

• No signs of breathing → the tongue may be obstructing the infant's airway.
HOW TO OPEN THE AIRWAY?

• Tilt the head back into what is called the "sniffer's position" - far enough to make the child look as if he is sniffing.
• "B" is for BREATHING.

• Cover the infant's mouth and nose with your mouth creating a seal, and give a quick, gentle puff from your cheeks.
BREATHING

• Let the victim exhale on his own - watch his chest and listen and feel for breathing.

• If he does not breathe on his own, again place your mouth over his mouth and nose and give another small puff.

• If the infant remains unresponsive (no crying or moving), immediately check his circulation.
BAG AND MASK VENTILATION
E-C CLAMP TECHNIQUE
ACTIVATE EMERGENCY RESPONSE

• If there are 2 rescuers

• One should start CPR immediately

• Other should activate the emergency response system

• Obtain an AED
HAVE YOU SEEN THIS?
DEFIBRILLATOR

• Turn the AED on.

• Place the paddles/electrode pads

• Apply gel

• Select energy dose

• ANNOUNCE – “I am going to shock on three – All Clear!”

• Resume CPR
Automated external defibrillator (AED) checks heart rhythm and can send electric shock to restore normal rhythm. AED has written instructions and gives voice instructions.
RECOVERY POSITION

• Move the victim’s head, shoulders and torso simultaneously
• Turn the victim onto his / her side
• Limit pressure on bony prominences and peripheral nerves
• Monitor the victim’s respiratory effort and appearance
• You may bend the victim’s leg and move the knee forward to stabilize the victim
RECOVERY POSITION
INFANT CPR
INFANT CPR

• Infant CPR is administered to any victim under the age of 12 months.

• Check the infant for responsiveness by patting his feet and gently tapping his chest or shoulders.

• If he does not react (stirring, crying, etc.), immediately check his airway.
INFANT PULSE

• Brachial artery → inside of the upper arm, between the elbow and the shoulder.

• Palpate for 3 to 5 seconds.

• No pulse → START CPR
INFANT PULSE
INFANT CPR

• Place TWO fingers in the center of the infant's chest with the top finger on an imaginary line between the infant's nipples.

• Raise the top finger up and compress with the bottom two fingers.

• The compression should be approximately ½ inch deep
INFANT CPR
Thank You