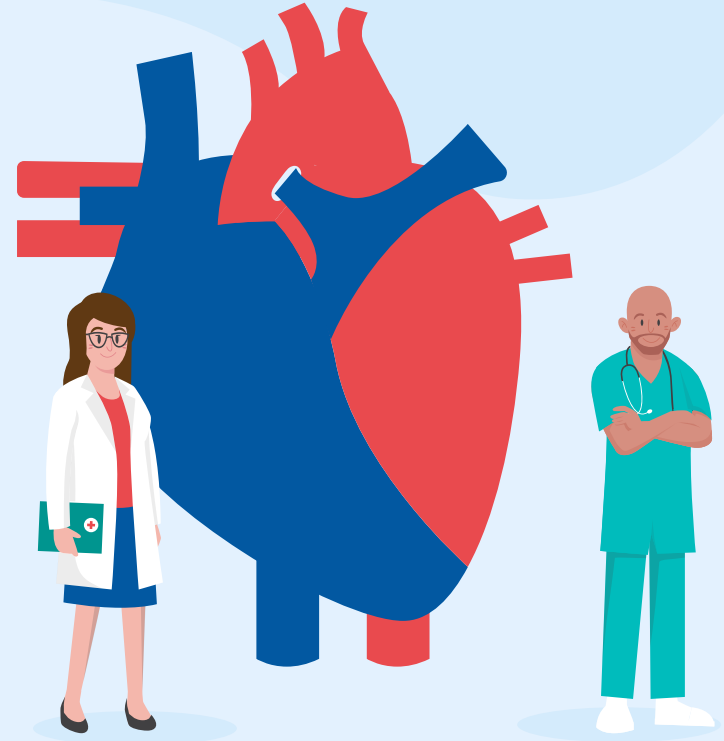


CPR for Infant and Pediatric AHA Guideline 2020

Indah D. Pratiwi



Topik

Epidemiologi



Algoritma

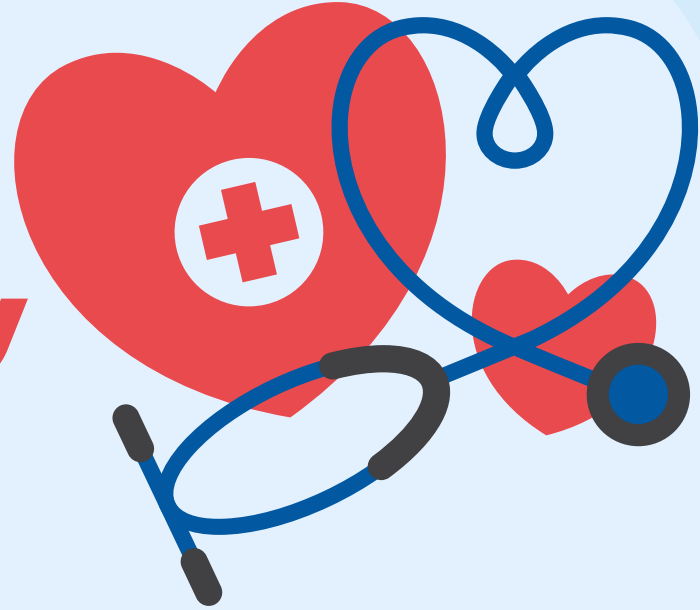
Chain of Survival



Updating Guideline

1

Epidemiology





20.000

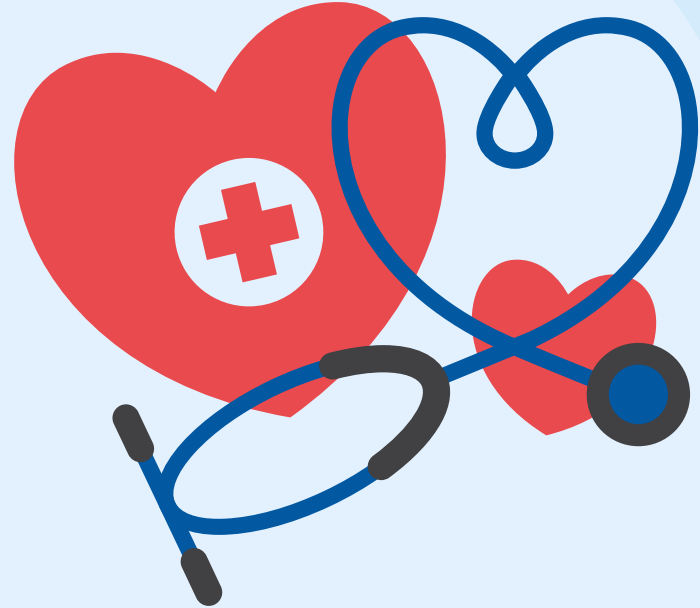
Anak dan bayi mengalami henti jantung



2

Chain for Survival

IHCA & OHCA



IHCA

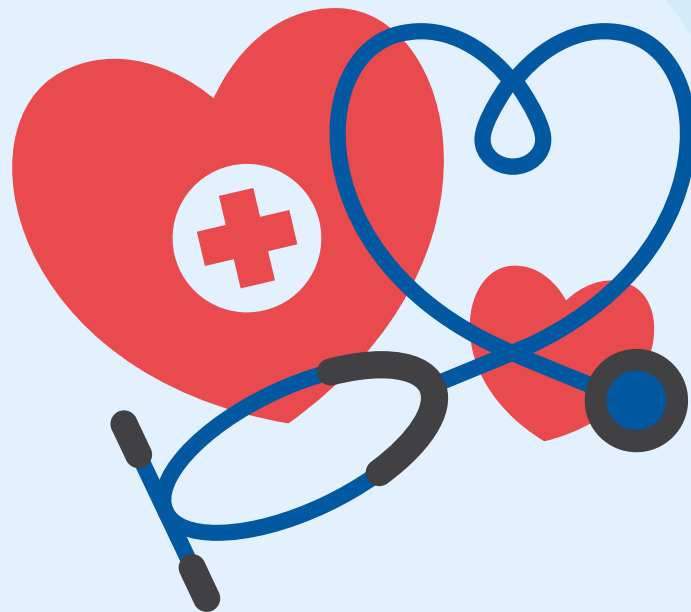


OHCA

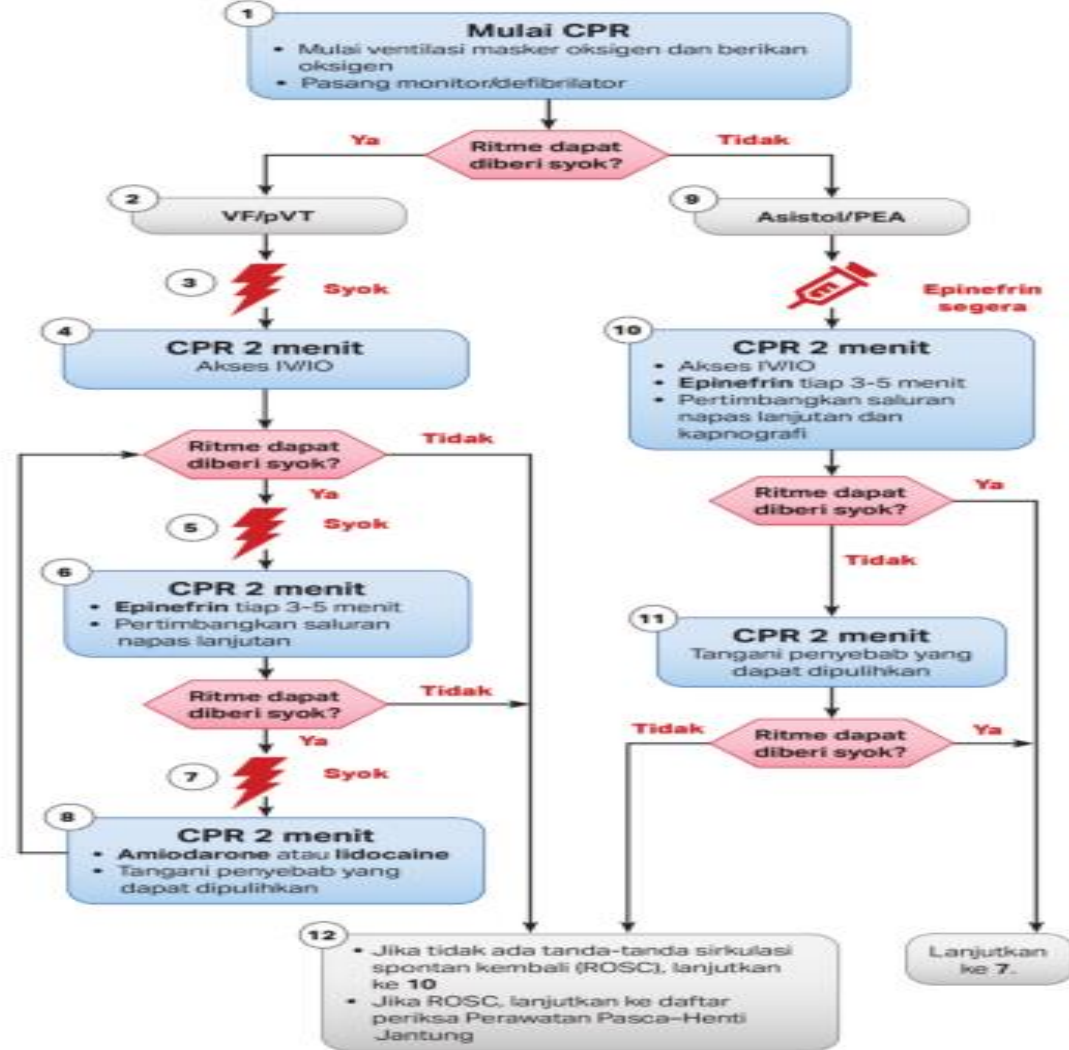


3

Algoritma

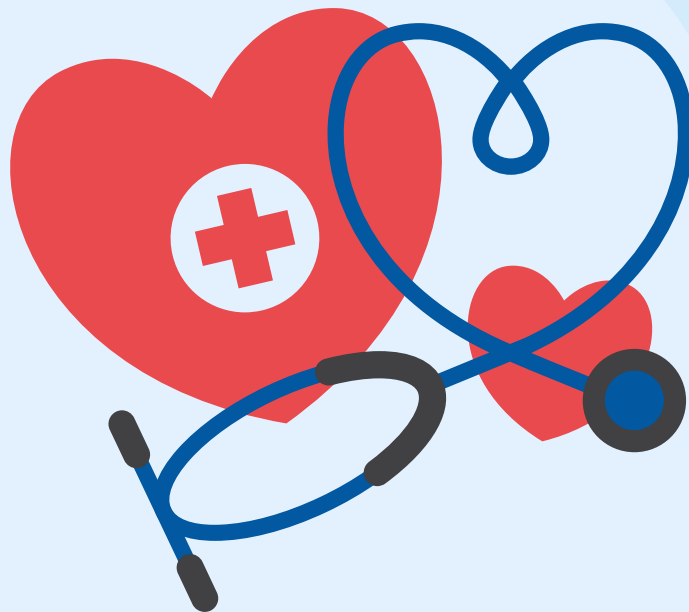


ALGORITMA HENTI JANTUNG PADA ANAK- ANAK



4

Updated



Changes to the Assisted Ventilation Rate: Rescue Breathing

2020 (Terbaru): Untuk bayi dan anak-anak dengan denyut nadi, namun upaya bernapas tidak ditemukan atau tidak memadai, pemberian **1 napas setiap 2 sampai 3 detik (20-30 napas/menit)** dapat dilakukan.

2010 (Lama): Jika ada denyut nadi yang teraba 60/menit atau lebih, tetapi tanpa pernapasan yang memadai, berikan napas penyelamatan dengan laju sekitar 12 hingga 20/menit (1 napas setiap 3-5 detik) sampai pernapasan spontan dilanjutkan.



Cricoid Pressure During Intubation

2020 (Terbaru): Penggunaan rutin tekanan krikoid tidak dianjurkan selama intubasi endotrakeal pada pasien anak.

2010 (Lama): Tidak ada cukup bukti untuk merekomendasikan aplikasi rutin tekanan krikoid guna mencegah aspirasi selama intubasi endotrakeal pada anak-anak.





Infant compressions

A single rescuer may now use 2 thumbs or the heel of 1 hand

2020 (New): A single rescuer should compress the sternum with 2 fingers, or 2 thumbs paced just below the nipple line (intermammary line)

2020 (New): If the rescuer is unable to achieve guidelines-recommended depths, it may be reasonable to use the heel of 1 hand.



CPR Technique		Infant (< 1 Year Old)	Child (Age 1 Year to Onset of Puberty)
<p>Compression-to-ventilation ratio:</p> <ul style="list-style-type: none"> • Single provider 30:2 • Multiple providers 15:2 	 <p>Compressions</p>	<ul style="list-style-type: none"> • Hand position: Two thumbs placed in the center of the chest just below the nipple line (encircling thumbs technique). Alternatively two fingers may be used (i.e., two-finger technique). The one-hand technique may be considered if depth cannot be achieved with either the encircling thumbs technique or the or two-finger technique. • Depth: About 1½ inches (3.8 cm) • Rate: 100 to 120 per min • Full chest recoil: Compression and recoil times should be approximately equal 	<ul style="list-style-type: none"> • Hand position: One or two hands centered on the lower half of the sternum • Depth: About 2 inches (5 cm) • Rate: 100 to 120 per min • Full chest recoil: Compression and recoil times should be approximately equal
<p>Switch CPR compressors</p> <ul style="list-style-type: none"> • Every 2 min • During rhythm check • If provider is fatigued 	 <p>Ventilations</p>	<ul style="list-style-type: none"> • Open airway to neutral position (avoid hyperextension). Use modified jaw-thrust maneuver instead if you suspect head, neck or spinal injury. • Each ventilation should last about 1 sec and make the chest begin to rise; allow the air to exit before delivering next ventilation. • If an advanced airway is in place, one provider delivers 1 ventilation every 2 to 3 secs, while the other provider delivers continuous chest compressions without pausing for ventilations. 	<ul style="list-style-type: none"> • Open airway to slightly past-neutral position (avoid hyperextension). Use modified jaw-thrust maneuver instead if you suspect head, neck or spinal injury. • Each ventilation should last about 1 sec and make the chest begin to rise; allow air to exit before delivering the next ventilation.



#fact:
every minute
without CPR
survival rate
decreases
by 10%



by 10%



References

- Highlights of the 2020 American Heart Association Guidelines for CPR and ECC.
- Panchal, et al. (2019). 2019 American Heart Association Focused Update on Advanced Cardiovascular Life Support: Use of Advanced Airways, Vasopressors, and Extracorporeal Cardiopulmonary Resuscitation During Cardiac Arrest. *Circulation*.140:e881–e894. DOI: 10.1161/CIR.0000000000000732.



Thanks!

Does anyone have any questions?

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