2020 American Heart Association Guidelines for CPR and ECC:

Adult Basic and Advanced Life Support

Cardiac Arrest

Burden of disease

Affects individuals across age, gender, race, geography, and socioeconomic status

Out-of-hospital

An estimated 400,000 per year in the United States and Canada combined, with a survival rate of 10%

In-hospital

Without a national registry in Canada, the combined numbers are unknown. However, over 290,000 per year in the United States, with a survival rate of 25%

CPR and Access

2020 Guidelines reaffirm the need for early initiation of **High-quality CPR**

Real-time audiovisual feedback is suggested as a means to maintain CPR quality.

Depth of at least 5 cm (2 inches) for chest compressions

100 to 120/min

Administer Epinephrine

Administer as soon as feasible for nonshockable rhythms and after defibrillation has failed in shockable rhythms.

Attempt IV Before IO

Emphasis is on intravenous as first access attempt; if that fails or is not feasible, intraosseous may be used.

Defibrillation

Critical

for cardiac arrest due to ventricular fibrillation and pulseless ventricular tachycardia

Double sequential defibrillation is shock delivery by 2 defibrillators nearly simultaneously.

The usefulness of double sequential defibrillation has not been established for refractory shockable rhythms.

Routine use of double sequential defibrillation is not recommended at this time.

Special Considerations

Cardiac arrest due to an opioid overdose must be considered and requires individualized treatment.

Administer naloxone for respiratory arrest or if unsure if patient is in cardiac arrest. The most common routes of administration are intravenous, intramuscular, or intranasal.

New in 2020: Algorithms for healthcare providers and lay rescuers for treating overdoses are provided.

Cardiac arrest in pregnancy requires individualized management of resuscitation.

EMS should notify healthcare facilities in advance to ensure all resources are available for both infant and mother.

Focus on maternal resuscitation, with preparation for perimortem caesarean delivery if necessary.

Perform left uterine displacement during CPR to improve perfusion.

New in 2020

Point-of-care ultrasound: If an experienced sonographer is present and the use of ultrasound does not interfere with standard cardiac arrest protocol, then it may be considered as an adjunct, although its usefulness has not been well established.

Neuroprognostication: Multiple modalities should be used to improve decision-making accuracy.

Post–cardiac arrest care: Emphasis is on interventions during the initial stabilization phase as well as on continued management and additional emergent activities.

Chain of Survival: A new link—recovery—has been added. Full recovery can take a year or more. Because recovery continues long beyond initial hospitalization, provide assessment and support for physical, cognitive, and psychosocial needs.

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Guidelines provided by

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