Burden of disease
Affects individuals across age, gender, race, geography, and socioeconomic status

Out-of-hospital
Over 350,000 per year in the United States, with a survival rate of 10%

In-hospital
Over 290,000 per year in the United States, with a survival rate of 25%

CPR and Access
AHA 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.
- 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
Double sequential defibrillation is shock delivery by 2 defibrillators nearly simultaneously.

- Critical for cardiac arrest due to ventricular fibrillation and pulseless ventricular tachycardia
- 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 cesarean delivery if necessary.

- 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.