

EPIDEMIOLOGY OF RESUSCITATION

KEY MESSAGES

Establish national registries

All European countries should have comprehensive national registries for Out-of-Hospital Cardiac Arrest (OHCA) and In-Hospital Cardiac Arrest (IHCA) according to the Utstein template

Use multidisciplinary teams for counseling

Autopsy and genetic results should be managed by multidisciplinary teams in specialized clinics to provide family counseling and eventual screening

Conduct comprehensive autopsies

All victims of unexpected sudden death under age 50 should receive a full autopsy

Measure long-term patient outcomes

Routine measurement of physical and non-physical outcomes for all cardiac arrest survivors is essential

Enhance post-resuscitation care

More research and expanded access to post-resuscitation rehabilitation services are needed

Expand IHCA research

There is a need for increased research efforts focused on in-hospital cardiac arrest in Europe

Use registry data for system planning

Data from OHCA and IHCA registries should be used to inform healthcare system planning and cardiac arrest responses

Support low-resource settings

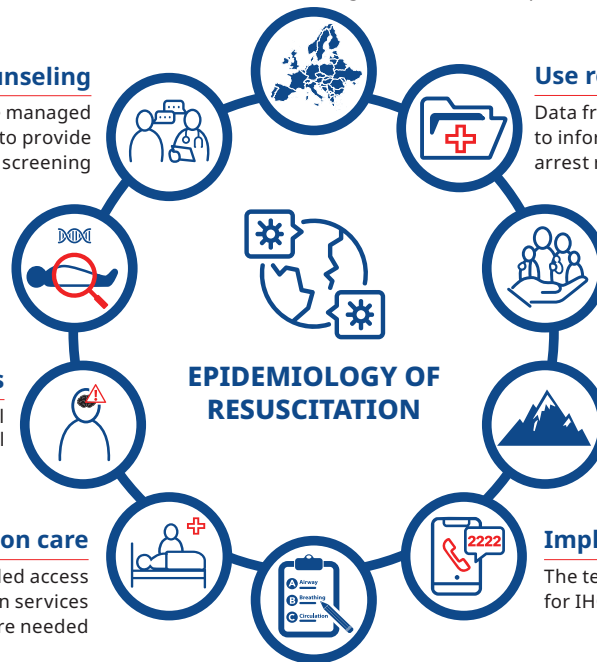
Epidemiological registries must be developed in low-resource settings to allow improvement of treatment and outcomes

Improve response systems in remote areas

Improved emergency response systems must be developed in remote areas to improve outcomes

Implement 2222 for IHCA

The telephone number 2222 should be standardized for IHCA response across Europe



SCAN FOR MORE
HELPFUL MATERIALS

DATA SNAPSHOT CARDIAC ARREST IN EUROPE



- Europe's annual incidence of EMS-treated out-of-hospital cardiac arrest is 55 per 100,000 inhabitants.
- The average age of victims is 67.2 years and men account for 65% of occurrences.
- 70% of cardiac arrest occur in private locations. Roughly 10% occur in public places or in nursing homes, fewer cases occurring in schools, sport facilities and workplaces.
- 20% of cardiac arrests that occur outside of a hospital have a "shockable rhythm" as first monitored rhythm, that is they are treatable with early use of an AED.
- Medical conditions caused more than 90% of out-of-hospital cardiac arrests, while trauma, asphyxia, drug overdose, drowning and electrocution made up the remaining cases.
- The bystander CPR rate in Europe is 58% with regional variations ranging between 13% and 82%.
- AED use by bystanders before EMS arrives on scene ranges widely from 2.6% to 59% across different European countries.
- The rate of bystander CPR and AED use is lower in settings with limited resources compared to high-resource locations.
- Nine European countries have an OHCA registry with full population coverage (lower resourced countries tend to not have them) and 17 countries have first responder systems, though some only at a local level (i.e. not coordinated nationally).
- Across Europe, survival rates following out-of-hospital cardiac arrests is 7.5%, though individual countries rates range from a low of 3.1% to an impressive 35%.
- Only one in three out-of-hospital cardiac arrest survivors is given access to rehabilitation programmes and just 10% receive brain injury rehabilitation.
- Most cardiac arrest survivors report the need for substantive support after discharge from hospital, including follow-up with access to a multi-disciplinary team.
- Researchers found genetic contributing causes to sudden cardiac arrest in up to 25% of cases in people under 50. Autopsy and genetic analysis should be routinely performed in young victims of cardiac arrest.

AED - automatic external defibrillator; CPR - cardiopulmonary resuscitation; EMS - emergency medical services;

IHCA - in-hospital cardiac arrest; OHCA - out-of-hospital cardiac arrest