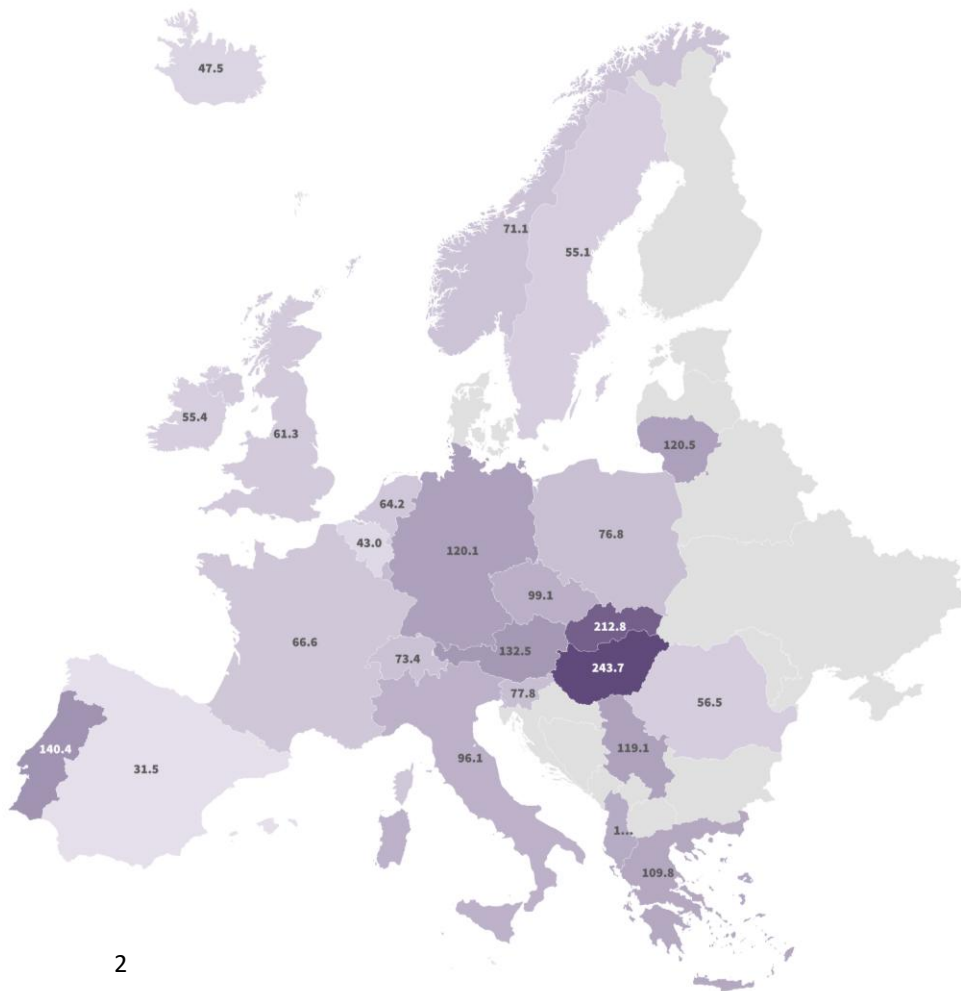


Reanimation 2025

**Das wichtigste zu den Guidelines 2025
und zum Status Quo in der Schweiz**

André Wilmes & Helge Regener



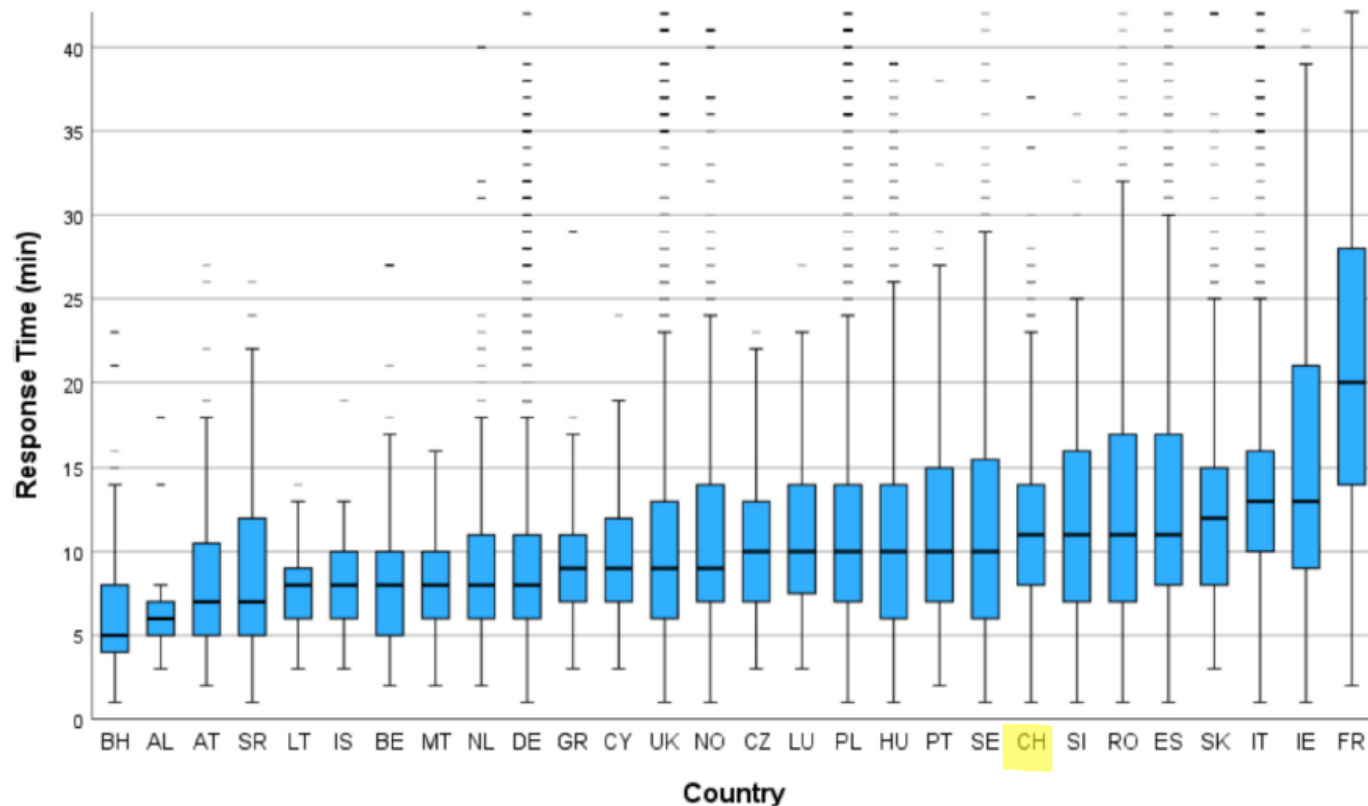


Fig. 2 – Box plot of EMS response times by country, sorted by increasing median in EMS treated OHCA. EMS witnessed cardiac arrests were excluded from calculation of the EMS response time. Abbreviations: Albania (AL), Austria (AT), Belgium (BE), Bosnia & Herz. (BH), Switzerland (CH), Cyprus (CY), Czech Rep. (CZ), Germany (DE), Spain (ES), France (FR), Greece (GR), Hungary (HU), Ireland (IE), Iceland (IS), Italy (IT), Lithuania (LT), Luxembourg (LU), Malta (MT), The Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Sweden (SE), Slovenia (SI), Slovakia (SK), Serbia (SR), United Kingdom (UK).

Positive Prädiktoren für das **Überleben**:

- Ein **schockbarer Anfangsrhythmus**.
- Der Kollaps wurde von einem Ersthelfer **beobachtet** ("witnessed by bystander").
- Die Durchführung von **Ersthelfer-CPR** mit Beatmung.
- Das Ereignis fand an einem **öffentlichen Ort** statt.
- **Nicht** medizinische oder traumatologische Ursache
- **Kurze RD-Hilfsfristen**.





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Resuscitation

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Practice Guideline

European Resuscitation Council Guidelines 2025
System Saving Lives

Federico Semeraro^{a,w,*}, Sebastian Schnaubelt^{b,c,d,w}, Theresa M. Olasveengen^{a,f}, Elena G. Bignami^g, Bernd W. Böttiger^h, Nino Fijačko^{i,j}, Lorenzo Gamberini^a, Carolina Malta Hansen^{k,l,m}, Andrew Lockey^{n,o}, Bibiana Metelmann^p, Camilla Metelmann^{q,r,s}, Giuseppe Ristagno^{r,s}, Hans van Schuppen^t, Kaushila Thilakasiri^u, Koenraad G. Monsieurs^v, for the ERC Systems Saving Lives Collaborator Group

Abstract

The European Resuscitation Council (ERC) developed the Systems Saving Lives Guidelines, based on the 2025 ILCOR Consensus on Science with Treatment Recommendations (CoSTR). These Guidelines addresses various topics including the Chain of Survival, advocacy, CPR awareness campaigns, Kids Save Lives, resuscitation in low-resource settings, social media, first responders, EMS organisation for cardiac arrest, in-hospital cardiac arrest management, cardiac arrest centres, system performance improvement, survivors and co-survivors, and new technologies and artificial intelligence.

Keywords: Cardiac arrest, Systems saving lives, Emergency medical service, First responders, Awareness campaign, Advocacy, Survivors, Co-survivors, Kids save lives, World restart a heart, Low resource settings, In-hospital cardiac arrest, Cardiac arrest centres, Social media, Artificial intelligence

Introduction

These ERC Guidelines 2025 on Systems Saving Lives explain how various factors can work together to improve the care of cardiac arrest patients, not through isolated actions, but via a comprehensive, system-level strategy. This chapter aims to present the best practice based on the highest quality evidence available, regarding interventions that healthcare systems can implement to improve outcomes from cardiac arrests occurring both outside and inside hospital settings (Fig. 1).

The intended audience includes governments, stakeholders in health and education systems, healthcare professionals, educators, students, laypeople, and communities affected by cardiac arrest.

The importance of the Systems Saving Lives approach to cardiac arrest is highlighted within the chain of survival. Key components

include cardiac arrest centres, rapid response teams to prevent in-hospital cardiac arrest (IHCA), and the collaboration among community, Emergency Medical Services (EMS), and hospital healthcare professionals. This system involves everyone, from schoolchildren learning CPR to citizens, ready to initiate resuscitation after receiving alerts on their mobile phones. The latest ERC guidelines extend their relevance to low-resource settings, recognising the need for adaptable solutions beyond high-resource healthcare environments (Table 1).

These Guidelines are derived from the previous Consensus on Science with Treatment Recommendations (CoSTR) provided by the International Liaison Committee on Resuscitation (ILCOR).¹ The ERC Systems Saving Lives writing group has used published systematic reviews and scoping reviews, alongside the CoSTR document. This process includes thorough consideration of evidence-to-decision tables, narrative reviews, task force discussions, and

Highlights of the 2025 American
Heart Association Guidelines for
Cardiopulmonary Resuscitation and
Emergency Cardiovascular Care

The American Heart Association (AHA) thanks the following people for their contributions to the development of this publication:

Ian R. Drennan, ACP, PhD; Stephen M. Schexnayder, MD; Jason Bartos, MD, PhD; Marina Del Rio, MD; Melissa Mahgoub, PhD; Ashish R. Panchal, MD, PhD; Amber J. Rodriguez, PhD; Julie Sell, MSN, RN; Camilla Sasson, MD, PhD; Jaylen Wright, PhD; and the AHA Guidelines Highlights Project Team.

INTRODUCTION

These Highlights summarize the key issues and changes in the 2025 AHA Guidelines for Cardiopulmonary Resuscitation (CPR) and Emergency Cardiovascular Care (ECC).¹ The 2025 Guidelines are a comprehensive revision of the AHA's guidelines for adult, pediatric, and neonatal life support; resuscitation education science; systems of care; and resuscitation ethics topics. They have been developed for resuscitation professionals and AHA instructors to focus on the resuscitation science and guidelines recommendations that are most significant or controversial or those that will result in changes in resuscitation training and practice. The rationale to support each of these recommendations is provided.

Because this publication is a summary, it does not reference the supporting published studies and does not list Classes of Recommendation or Levels of Evidence. For more detailed information and references, please read the 2025 Guidelines, including the Executive Summary, published in *Circulation* in October 2025, and the detailed summary of resuscitation science developed by the International Liaison Committee on Resuscitation (ILCOR) in the 2025 *ILCOR Consensus on Science With Treatment Recommendations*,² published simultaneously in *Circulation* and *Resuscitation* in October 2025. The methods used by ILCOR to perform evidence evaluation and by the AHA to translate these evidence evaluations, as well as to evaluate topics not considered by ILCOR, into resuscitation guidelines have been published in detail.

The 2025 Guidelines use the most recent version of the AHA definitions for each Class of Recommendation and Level of Evidence (Figure 1). Overall, 780 specific recommendations are made for adult, pediatric, and neonatal life support; resuscitation education science; and systems of care. Of these recommendations, 233 are Class 1 recommendations and 451 are Class 2 recommendations (Figure 2). Additionally, 76 recommendations are Class 3, including 55 for evidence of no benefit and 21 for evidence of harm.

1. Del Rio M, Bartos JA, Panchal AR, et al. Part 1: executive summary: 2025 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Circulation*. 2025;152(suppl 2):in press.
2. International Liaison Committee on Resuscitation. 2025 ILCOR Consensus on Science With Treatment Recommendations. *Circulation*. 2025;152(suppl 1):in press.

* Corresponding author.

E-mail address: federico.semeraro@austl.bologna.it (F. Semeraro).

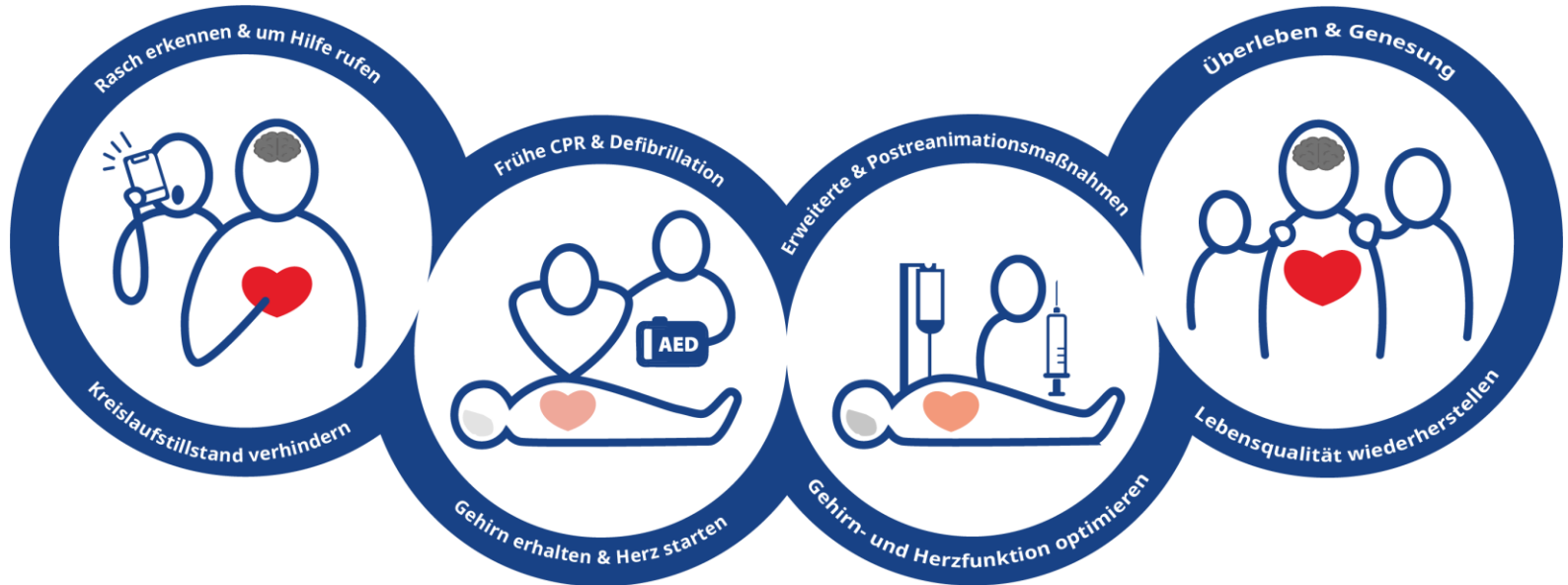
^w These authors contributed equally as first authors.

ERC-Taskforces

- Epidemiology in resuscitation
- Systems saving lives
- Adult basic life support
- Adult advanced life support
- Adult special circumstances in resuscitation
- Adult post resuscitation care
- Newborn resuscitation and support of transition of infants at birth
- Paediatric life support
- Education of resuscitation
- Ethics in resuscitation
- First Aid



«Oxygenierung / Perfusion & Defibrillation»



Systems saving lives



Positive Prädiktoren für das **Überleben** :

- Ein **schockbarer Anfangsrhythmus**

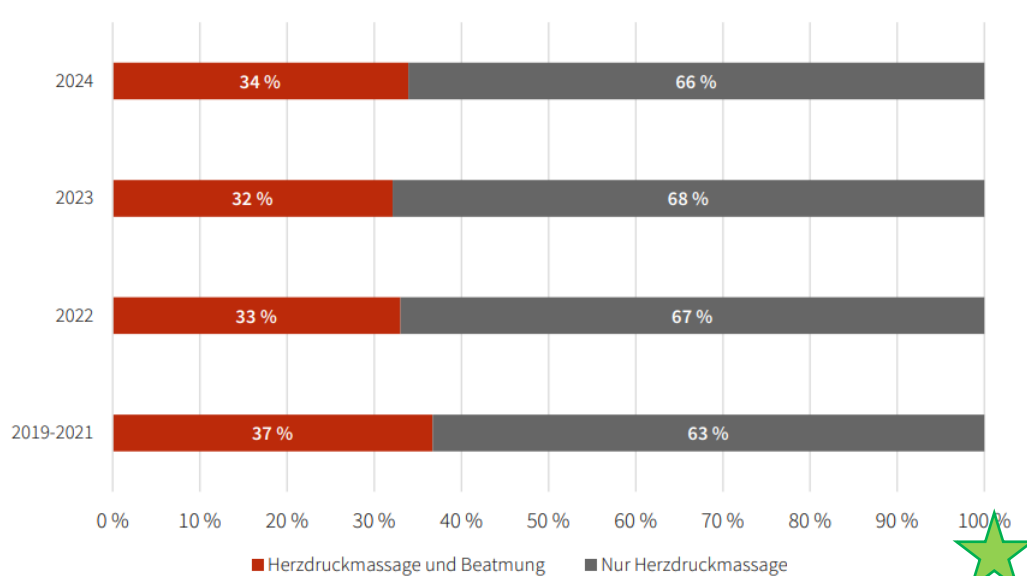
2025: Ca. **7'600** Einträge in SWISSRECA

- In 75 % der Fälle waren Ersthelfer vor Ort und in 11 % davon wurde ein AED angeschlossen
- In 80 % waren FR* vor Ort und in 40 % davon wurde ein AED angeschlossen

*Sofern die SNZ 144 den Stillstand erkannt hat und FR anbieten konnte

Positive Prädiktoren für das **Überleben** :

- Die Durchführung von **Ersthelfer-CPR** mit Beatmung



Beatmung

- Thoraxkompression UND Beatmung generiert die höheren Überlebenschancen
- Nach 30 Kompressionen je 2 Beatmungen
- So, dass Brustkorbhebungen erkennbar sind

Treatment Recommendations (2025, Unchanged From 2017)

We recommend that chest compressions be performed for all adults in cardiac arrest (good practice statement). We suggest that bystanders who are trained, able, and willing, give chest compressions with rescue breaths for adults in cardiac arrest (weak recommendation, very low–certainty evidence).



Thoraxkompression & Ersthelfer-Beatmung

- Druckpunkt
- Frequenz
- Kompressionstiefe
- Kompression : Beatmung
- Verhältnis Druck : Entlastung
- Immer völlig entlasten
- Möglichst keine Unterbrechungen

untere Sternumhälfte (= Mitte Thorax)

100 bis 120/min

5 bis 6 cm

30:2

1:1



Thoraxkompression

- Am effektivsten auf fester Unterlage
- Patient jedoch **nicht** von einer „weichen“ Unterlage, z. B. einem Bett, auf den Boden legen
- Zum Ausgleich tiefer drücken
- **Keine** Anpassung der Massnahmen bei Übergewichtigen
- **Keine** CPR mit erhobenem Kopf

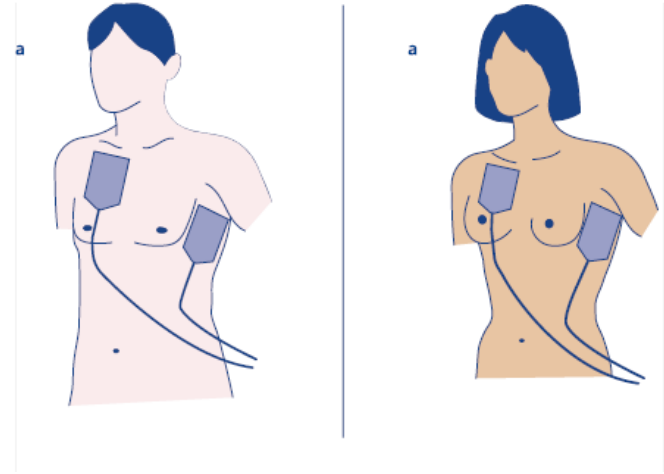
Defibrillation

- Nach Schock: 2 min CPR (ohne Pulskontrolle)
- Nach zwei Minuten: EKG-Rhythmus überprüfen.

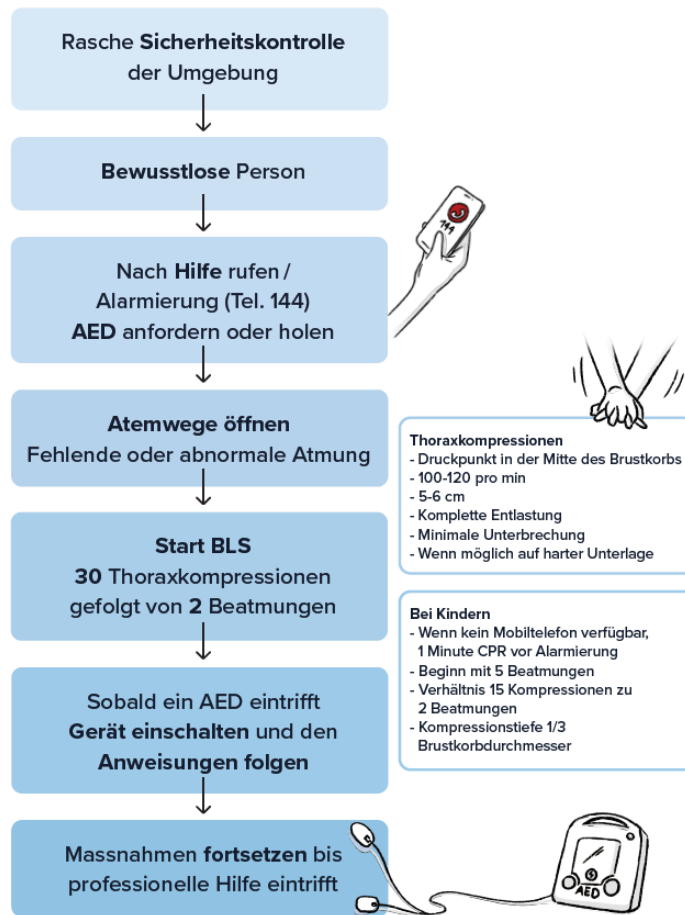
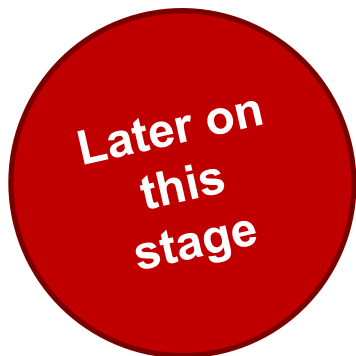


Defibrillation

- Sobald ein Gerät verfügbar ist
- Elektrodenanlage unter Kompression
- Linksantere Elektrode medioaxillar unter der Achsel
- Elektrodenanlage bei BH ggf. adaptieren (mögl. nicht auf Brustgewebe)
- Kein Patientenkontakt während Schockabgabe
- Schockpausen kurz halten (5 s)

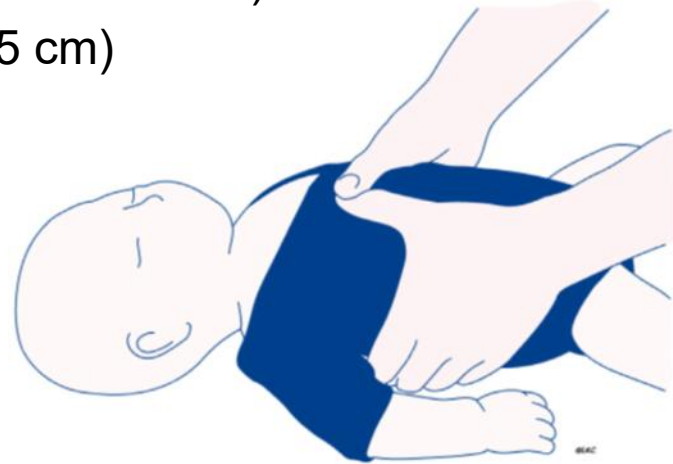


Algorithmus BLS-AED-SRC 2025



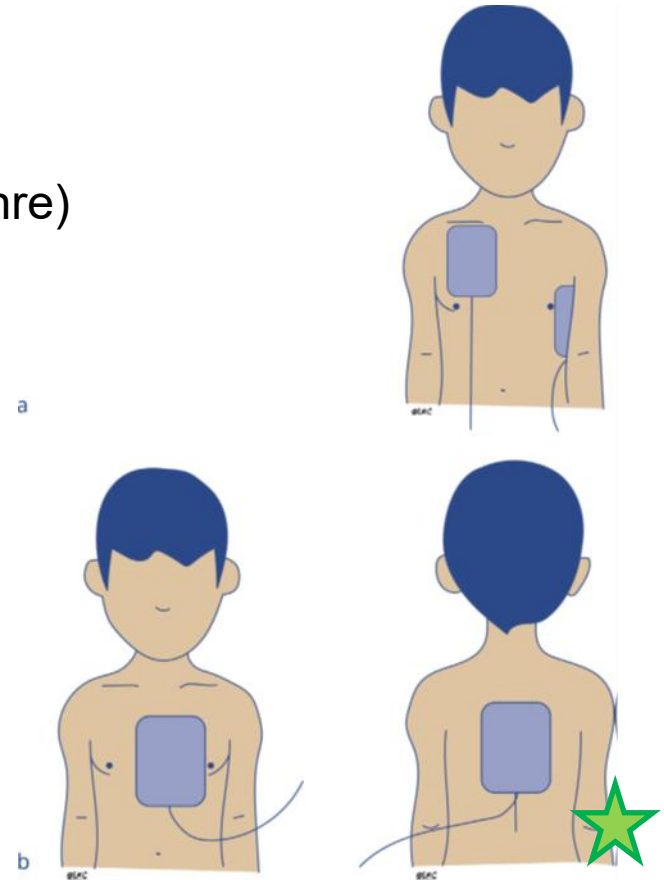
Kompression & Beatmung bei Kindern

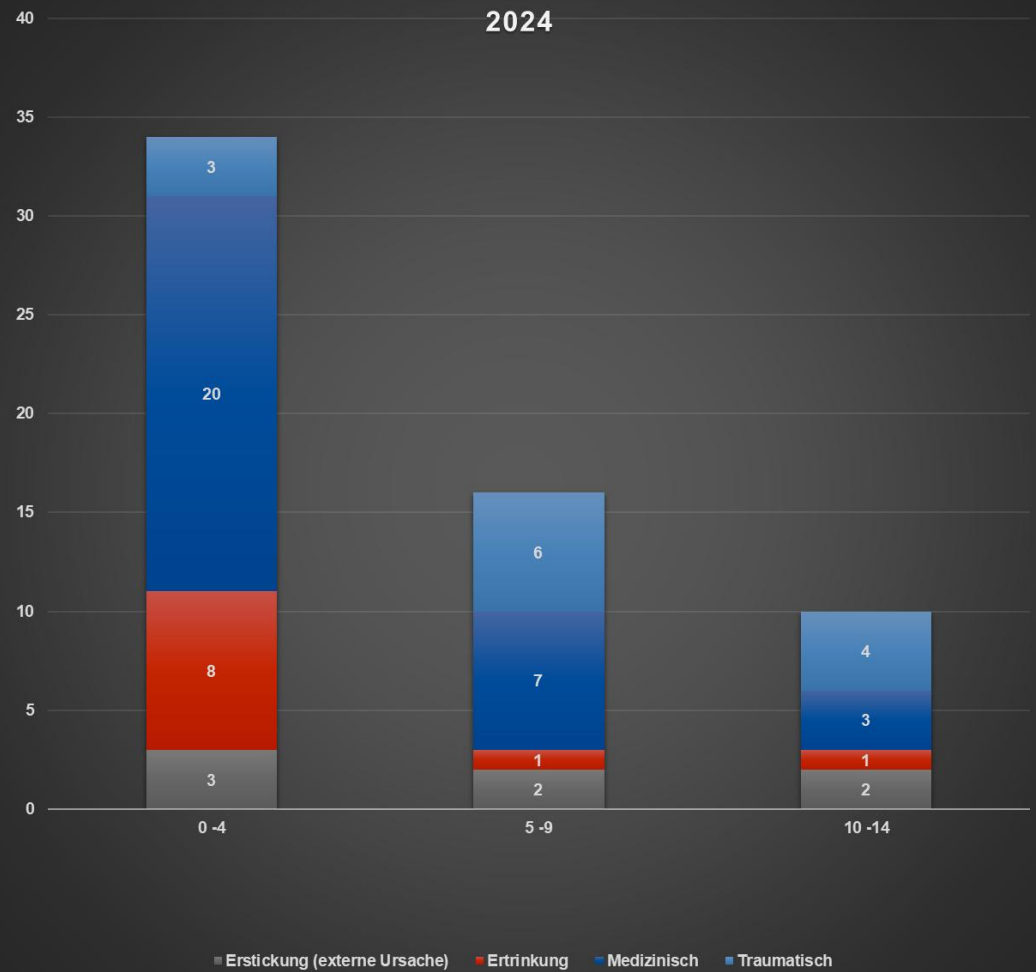
- ERC: 15:2 (wer in PBLS nicht trainiert ist, verfährt, wie beim Erwachsenen 30:2)
- Start mit 5 Beatmungen
- Frequenz 100 bis 120 / Minute
- Druckpunkt Kind wie beim Erwachsenen (untere Sternumhälfte)
- Drucktiefe: mind. 1/3 Brustkorbdurchmesser (4 bis 5 cm)
- Bis 1 Jahr, umgreifende zwei Daumenmethode
- **Keine** zwei Finger Methode mehr



Defibrillation bei Kindern

- Padposition: Anterior posterior bis 25 kg (ca. 8 Jahre)
- Bei AED wenn möglich im Kindermodus







Die 5 wichtigsten Tipps

- Kinder im Auge behalten – die kleinen in Griffnähe
- Auch mit Schwimmhilfen wie «Flügeli» die Kinder stets beaufsichtigen
- Den Kindern beim Bootfahren eine passende Rettungsweste anziehen
- Kinder den Wasser-Sicherheits-Check WSC absolvieren lassen
- Zugänge zu Teichen, Pools und Kinderplanschbecken sichern



Einsatzverfahren

- individualisierte Versorgung



Pharmakotherapie

Zugänge

- i.v. VOR i.o.

Vasopressoren

- 1 mg Adrenalin alle 3 – 5 min
 - Bei nicht defibrillierbaren Rhythmen so früh wie möglich
 - Bei defibrillierbaren Rhythmen
 - AHA: nach dem 2. Schock
 - ERC: nach dem 3. Schock
 - ILCOR: Datenlage ungenügend
(wenn initiale Defibrillationen erfolglos bleiben).

Potentiell reversible Ursachen

H's

- Hypoxie
- Hypovolämie
- Hypo- oder Hyperthermie
- Hypo- oder Hyperkaliämie/-kalzämie/ -magnesiämie und Hypoglykämie

HITS

- Herzbeuteltamponade
- Intoxikation
- Thromboembolie (Herz, Lunge)
- Spannungspneumothorax



Unterstützung der Thoraxkompression

- **Keine** Empfehlung zum routinemässigen Einsatz
- Einsatz dann, wenn qualitativ hochwertige manuelle Thoraxkompression nicht möglich oder gefährlich ist (HKL, Ambulanzfahrt etc.)
- Kompressionsunterbruch reduzieren.



Ja oder nein?

Regel

- Im Zweifel reanimieren
- Menschen unmittelbarer Lebensgefahr muss geholfen werden (Art. 128 StGB)

Ausnahme

- Nein ist nein
- Menschen, die Hilfe klar abgelehnt haben, darf nicht geholfen werden

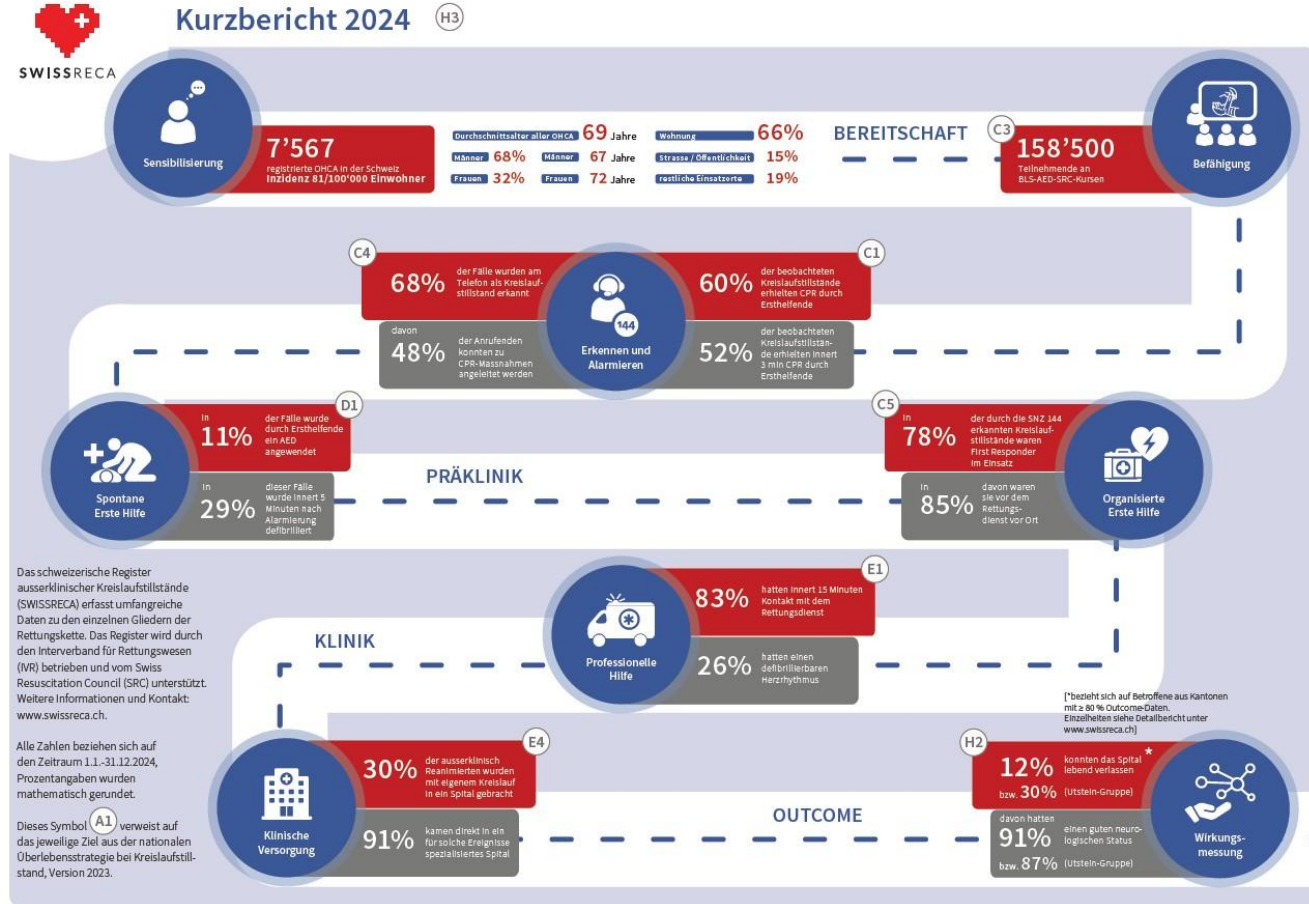
Haftung

- Schädigungen durch Reanimation sind i.d.R. gerechtfertigt
- Nur bei klarer Ablehnung der Reanimation kann eine Haftung entstehen



What's next?

- Überlebensstrategie (SSL)
- BLS in die Schulen
- Lücken schliessen mit FR
- AED 24/7 Zugänglichkeit
- Fazit: 50 % muss möglich sein! Dafür brauchen wir eine Kultur des Helfens!





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