Hur skapas riktlinjer i Första Hjälpen?

Stockholm, 8 Februari 2024

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Svenska HLR-rådet

HLR-rådet är en nationell kunskaps- och utbildningsorganisation med syfte att rädda liv vid plötsligt hjärtstopp inom sjukvården och i samhället.

MÅLEN ÄR ATT:

- sprida kunskaper i samhället och inom sjukvården om behandling av hjärtstopp och första hjälpen.
- skapa, utveckla och revidera riktlinjer och utbildningsprogram för behandling av hjärtstopp och första hjälpen.
- skapa, utveckla och revidera etiska riktlinjer för behandling av hjärtstopp.
- följa ovanstående i form av överlevnad och cerebral funktion.

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Utbildningsprogrammet består av tre utbildningsnivåer

- Grundutbildning, 4 timmar
- Instruktörsutbildning, 8 timmar inklusive lunch
- Huvudinstruktörsutbildning, 8 timmar inklusive lunch, utbildning sker centralt

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American Heart Association.

Inter American Heart Foundation

Resuscitation Council of Asia

Resuscitation Councils of Southern Africa

American Heart Association

Australian and New Zealand Committee on Resuscitation

European Resuscitation Council

Heart and Stroke Foundation of Canada

ILCOR

International Liaison Committee on Resuscitation

7 ILCOR Member Councils

International Liaison Committee on Resuscitation ILCOR

How Official Resuscitation Guidelines are Produced

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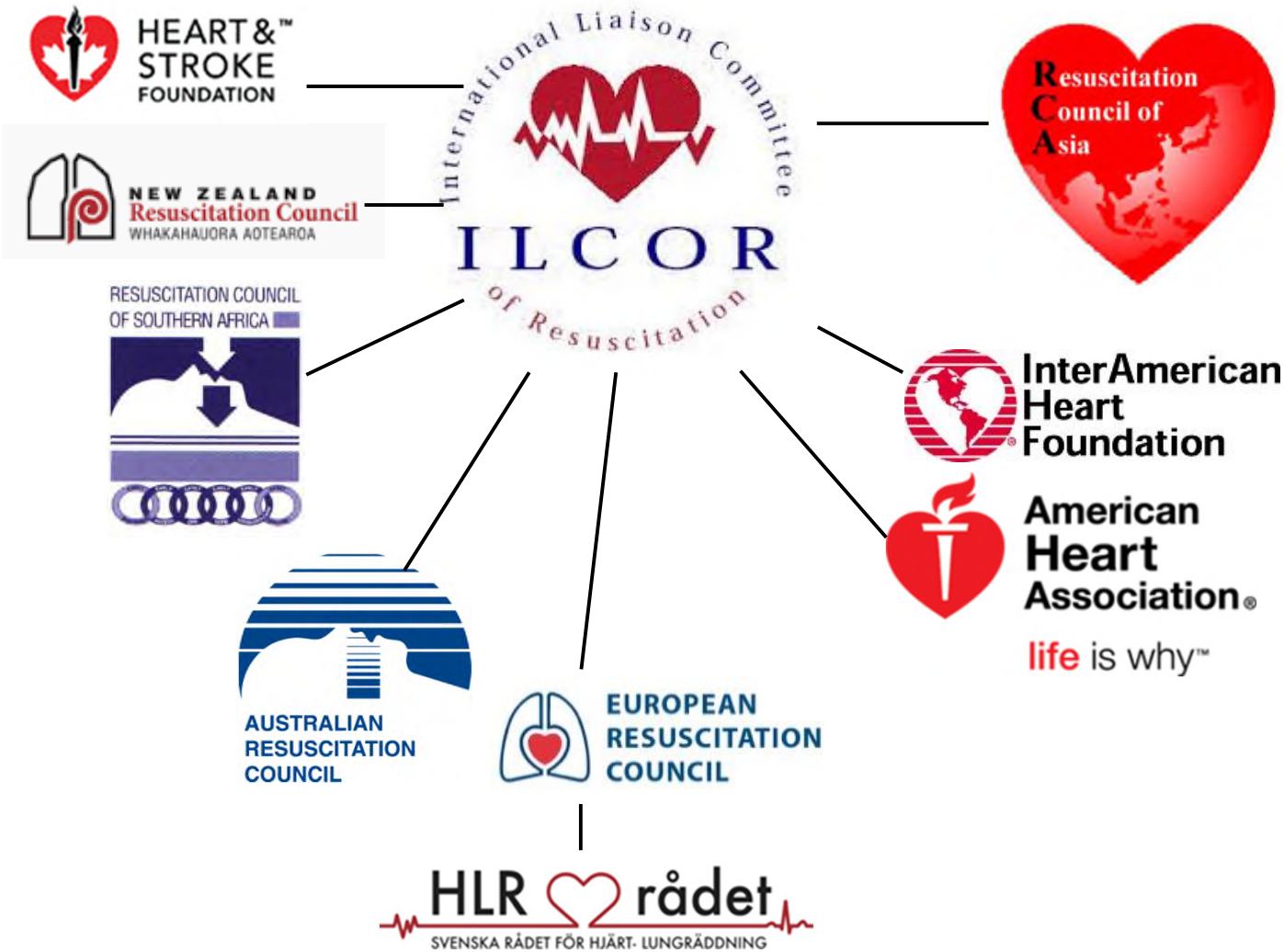
HEART & STROKE FOUNDATION
NEW ZEALAND Resuscitation Council
WHAKAHAUORA AOTEAROA
RESUSCITATION COUNCIL OF SOUTHERN AFRICA
International Liaison Committee of Resuscitation
ILCOR
Resuscitation Council of Asia
InterAmerican Heart Foundation
American Heart Association
life is why
AUSTRALIAN RESUSCITATION COUNCIL
EUROPEAN RESUSCITATION COUNCIL
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PICO Formula

PICO

The acronym used to help formulate a well-defined searchable question.

P
- Patient, population or problem: What are the most important characteristics of the patient and their health status?

I
- Intervention/Exposure: What main intervention are you considering (medical, surgical, preventative)?

C
- Comparison: What are the alternative benchmark or gold standards being considered, if any?

O
- Outcome: What is the estimated likelihood of a clinical outcome attributable to a specific disease, condition or injury?

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Task Force	AHA ID	Domain	Active	Subcategory	Short Title	PICO	Category	Prioritization	Domain Leader	Comments
BLS	343	CPR	Yes	Compressions	Chest compression rate	Among adults and children who are in cardiac arrest in any setting (P), does any specific rate for external chest compressions (I), compared with a compression rate of about 100/min (C), change outcome including CPR	REPOSE			
BLS	344	Emergency Care	No	Head & Neck Injury	Face-down victim	Among adults and children with suspected neck injury who are in cardiac arrest in any setting (P), does any different strategy regarding positioning (eg. leaving them in the position they are found) (I), compared with standard care (ie. positioning the victim on his or her back) (C), change spinal cord injury, neurological injury, harm to patient, time to first shock (O)?	REPOSE			
BLS	345	CPR	Yes	Compressions	Rhythm check timing	Among adults and children who are in cardiac arrest in any setting (P), does checking the cardiac rhythm immediately after defibrillation (I), compared with immediate resumption of chest compressions with delayed check of the cardiac rhythm (C), change outcome including recurrence of VF (O)?	REPOSE			
BLS	346	CPR	Yes	Compressions	Timing of CPR cycles (2 min vs other)	Among adults who are in cardiac arrest in any setting (P), does pausing chest compressions at another interval (I), compared with pausing chest compressions every two minutes to assess the cardiac rhythm (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, ROSC, coronary	REPOSE			
BLS	347	Defibrillation & Electrical Therapy	Yes	-	Public access AED programs	Among adults and children who are in cardiac arrest outside of a hospital (P), does implementation of a public access AED program (I), compared with traditional EMS response (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, ROSC, time to first shock, bystander CPR rates	REPOSE			
BLS	348	CPR	Yes	Compressions	Check for circulation during BLS	Among adults and children receiving CPR (P), does continuous CPR without any check for return of spontaneous circulation at pre-defined time intervals (I), compared with interruption of CPR to check for return of spontaneous circulation at pre-defined time intervals (C), change outcome (O)?	REACTIVATE	B4	de Caen	
BLS	349	CPR	No	Compressions	Rescuer fatigue in CC Only CPR	Among rescuers who are performing chest compressions (P), does compression only CPR (I), compared with conventional CPR (C), change chest compression quality or outcome (O)?	REACTIVATE	B5	de Caen	
BLS	352	Airway & Ventilation	Yes	Basic Airway Management	Passive ventilation techniques	Among adults and children who are in cardiac arrest in any setting (P), does addition of any passive ventilation technique (eg positioning the body, opening the airway, passive oxygen administration) to chest compression-only CPR (I), compared with just chest compression-only CPR (C), change outcome including bystander initiated CPR, oxygenation (O)?	REPOSE			
BLS	353	CPR	Yes	Compressions	Harm from CPR to victims not in arrest	Among Adults and children who are NOT in cardiac arrest outside of a hospital (P), does provision of chest compressions from lay rescuers (I), cause unacceptable harm (O)?	REPOSE			
BLS	354	CPR	No	Miscellaneous	Harm to rescuers from CPR	Among rescuers who are caring for patients in cardiac arrest in any setting (P), does performing CPR (I), compared with not performing CPR (C), change harm to rescuer , bystander CPR performance, willingness to provide CPR, prevent further illness or injury (i.e., harm), the likelihood of harm (eg infection) (O)?	REPOSE			
BLS	357	CPR	Yes	Compressions	Hand position during compressions	Among adults and children who are receiving chest compressions in any setting (P), does delivery of chest compressions on the lower half of the sternum (I), compared with any other location for chest compressions (C), change outcome including cardiac output, harm (eg rib fracture), coronary perfusion pressure (O)?	REPOSE			
BLS	358	CPR	Yes	Compressions	Minimizing pauses in chest compressions	Among adults and children who are in cardiac arrest in any setting (P), does minimization of pauses in chest compressions for cardiac rhythm analysis or ventilations (I), compared with prolonged pauses in chest compressions for rhythm analysis or ventilations (C), change outcome including time to first shock, CPR	REPOSE			
BLS	359	CPR	Yes	Bystander CPR	Dispatcher instruction in CPR	Among adults and children who are in cardiac arrest outside of a hospital (P), does the ability of a dispatch system to provide CPR instructions (I), compared with a dispatch system where no CPR instruction are ever provided (C), change outcome including delivery of bystander CPR, time to first shock, time to commence	REACTIVATE	B1	Couper	
BLS	360	CPR	Yes	Compressions	EMS CC only vs standard CPR	Among adults who are in cardiac arrest outside of a hospital (P), does provision of chest compressions with delayed ventilation by EMS (I), compared with chest compressions with early ventilations by EMS (C), change outcome including time to first shock, time to first compressions, CPR quality (O)?	REPOSE			
BLS	361	CPR	Yes	Monitoring / Feedback	Feedback for CPR quality	Among adults and children who are in cardiac arrest in any setting (P), does real-time feedback and prompt device regarding the mechanics of CPR quality (e.g. rate and depth of compressions and/or ventilations) (I), compared with no feedback (C), change outcome including bystander CPR rates, time to first compressions	REPOSE			
BLS	362	CPR	Yes	Compressions	Compression ventilation ratio	Among adults and children who are in cardiac arrest in any setting (P), does delivery of CPR with another specific C:V ratio (I), compared with CPR using a 30:2 compression:ventilation ratio (C), change outcome	REPOSE			
BLS	363	CPR	Yes	Compressions	CPR prior to defibrillation	Among adults and children who are in ventricular fibrillation or pulseless ventricular tachycardia in any setting (P), does a prolonged period of chest compressions before defibrillation (I), compared with a short period of chest compressions before defibrillation (C), change outcome including rhythm control (O)?	REPOSE			
BLS	366	CPR	Yes	Compressions	Chest compression depth	Among adults who are in cardiac arrest in any setting (P), does a different chest compression depth during CPR (I), compared with chest compression depth to 5 cm (2 inches) (C), change outcome including CPR quality, coronary perfusion pressure, cardiac output, bystander CPR performance (O)?	REPOSE			
BLS	367	CPR	Yes	Compressions	Chest wall recoil	Among adults and children who are in cardiac arrest (P), does allowing complete chest wall recoil (I), compared with incomplete chest wall recoil (C), change outcome (O)?	REPOSE			
BLS	368	Emergency Care	No	Miscellaneous	Foreign body airway obstruction	Among adults and children who are choking from a foreign body in the airway in any setting (P), does provision of abdominal thrusts, and/or back slaps, and/or chest thrusts (I), compared with no action (C), change outcome including clearance of airway foreign body, risk of complications (eg aspiration), airway pressure	REACTIVATE	B8	Cheng	
BLS	370	CPR	Yes	Miscellaneous	Firm surface for CPR	Among adults and children who are in cardiac arrest in any setting (P), does performance of CPR on a hard surface like a backboard or deflatable mattress (I), compared with performance of CPR on a regular mattress (C), change outcome including chest compression depth (O)?	REACTIVATE	B6	Couper	
BLS	372	CPR	Yes	Compressions	Chest compression only CPR vs conventional CPR	Among adults who are in cardiac arrest outside of a hospital (P), does provision of chest compressions	REPOSE			

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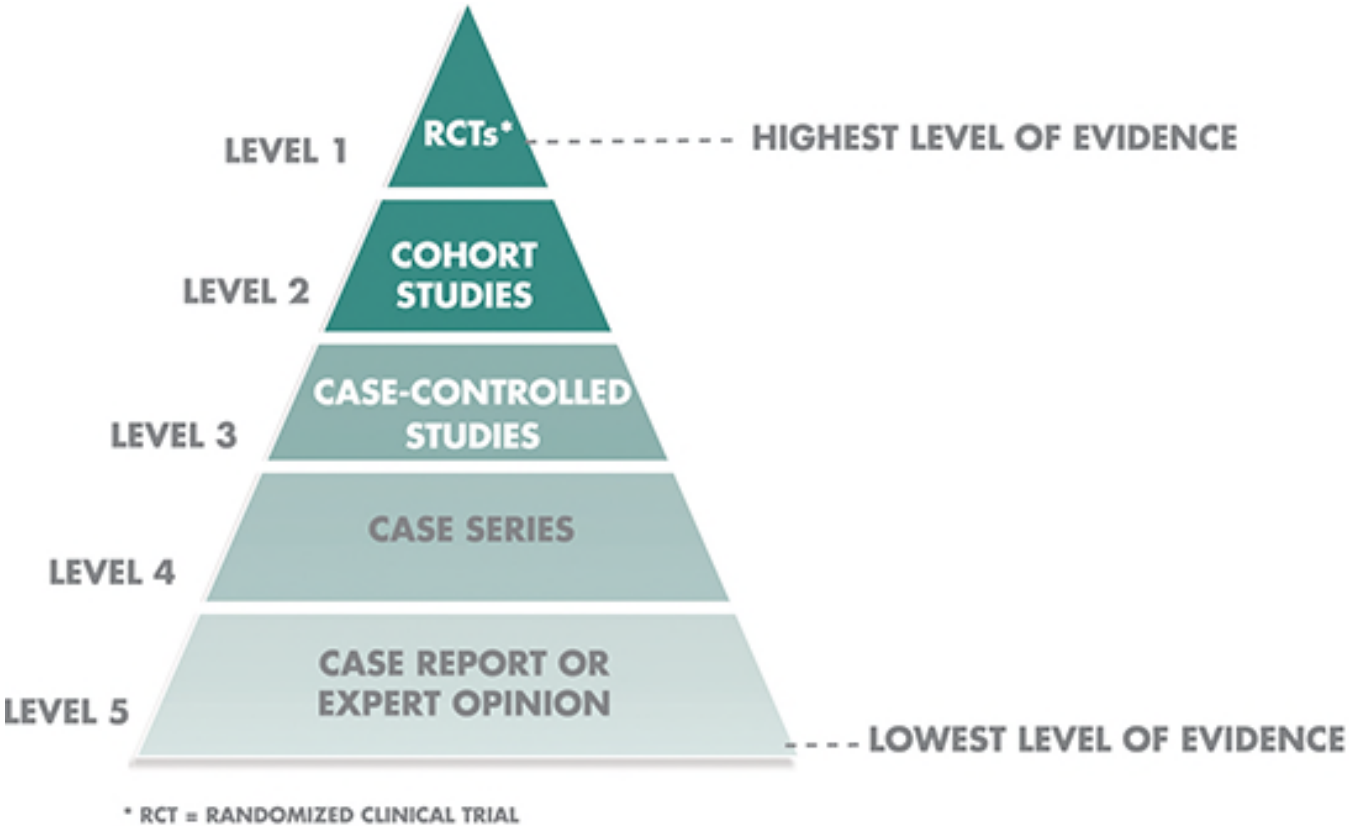
PICO
Among adults and children who are in cardiac arrest in any setting (P), does any specific rate for external chest compressions (I), compared with a compression rate of about 100/min (C), change outcome including CPR
Among adults and children with suspected neck injury who are in cardiac arrest in any setting (P), does any different strategy regarding positioning (eg. leaving them in the position they are found) (I), compared with standard care (ie. positioning the victim on his or her back) (C), change spinal cord injury, neurological injury, harm to patient, time to first shock (O)?
Among adults and children who are in cardiac arrest in any setting (P), does checking the cardiac rhythm immediately after defibrillation (I), compared with immediate resumption of chest compressions with delayed check of the cardiac rhythm (C), change outcome including recurrence of VF (O)?
Among adults who are in cardiac arrest in any setting (P), does pausing chest compressions at another interval (I), compared with pausing chest compressions every two minutes to assess the cardiac rhythm (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, ROSC, coronary
Among adults and children who are in cardiac arrest outside of a hospital (P), does implementation of a public access AED program (I), compared with traditional EMS response (C), change Survival with Favorable neurological/functional outcome at discharge, 30 days, 60 days, 180 days AND/OR 1 year, Survival only at discharge, 30 days, 60 days, 180 days AND/OR 1 year, ROSC, time to first shock, bystander CPR rates
Among adults and children receiving CPR (P), does continuous CPR without any check for return of spontaneous circulation at pre-defined time intervals (I), compared with interruption of CPR to check for return of spontaneous circulation at pre-defined time intervals (C), change outcome (O)?



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Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomised controlled trials

Gordon C S Smith, Jill P Pell

HULTON/GETTY

Parachutes reduce the risk of injury after gravitational challenge, but their effectiveness has not been proved with randomised controlled trials

not been proved with randomised controlled trials

Abstract

Objectives To determine whether parachutes are effective in preventing major trauma related to gravitational challenge.

Design Systematic review of randomised controlled trials.

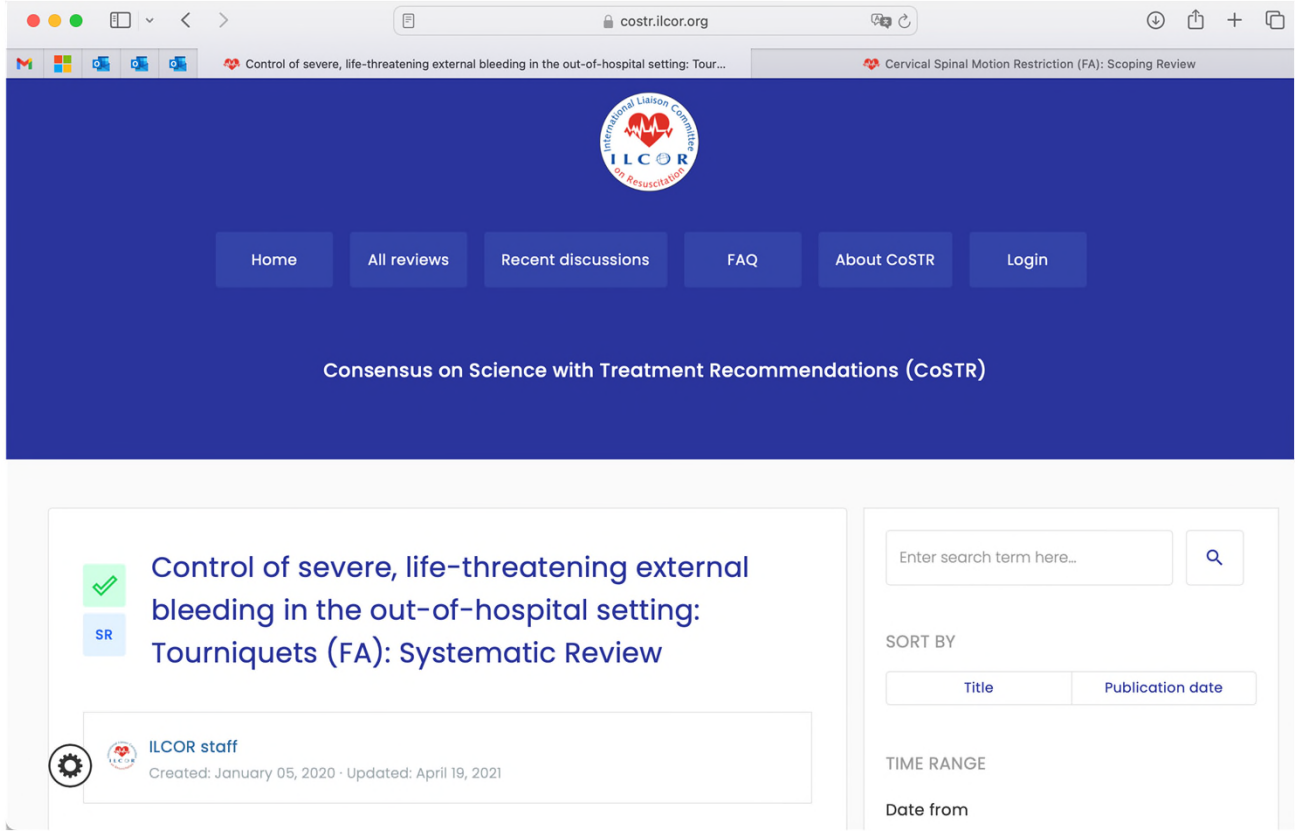
Data sources: Medline, Web of Science, Embase, and the Cochrane Library databases; appropriate internet sites and citation lists.

Study selection: Studies showing the effects of using a parachute during free fall.

Main outcome measure Death or major trauma, defined as an injury severity score >15.

Results We were unable to identify any randomised controlled trials of parachute intervention.

Conclusions As with many interventions intended to prevent ill health, the effectiveness of parachutes has not been subjected to rigorous evaluation by using randomised controlled trials. Advocates of evidence based medicine have criticised the adoption of interventions evaluated by using only observational data. We think that everyone might benefit if the most radical protagonists of evidence based medicine organised and participated in a double blind, randomised, placebo controlled, crossover trial of the parachute.


costr.ilcor.org
Control of severe, life-threatening external bleeding in the out-of-hospital setting: Tour...
Cervical Spinal Motion Restriction (FA): Scoping Review
International Liaison Committee on Resuscitation
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Consensus on Science with Treatment Recommendations (CoSTR)
SR
Control of severe, life-threatening external bleeding in the out-of-hospital setting: Tourniquets (FA): Systematic Review
ILCOR staff
Created: January 05, 2020 · Updated: April 19, 2021
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Title
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Date from

SR

Control of severe, life-threatening external bleeding in the out-of-hospital setting: Tourniquets (FA): Systematic Review

ILCOR staff

Created: January 05, 2020 · Updated: April 19, 2021

Nathan P. Charlton, Janel M. Swain, Jan L. Brozek, Maja Ludwikowska, Eunice Singletary, David Zideman, Jonathan Epstein, Andrea Darzi, Anna Bak, Samer Karam, Zbigniew Les, Jestin N Carlson, Eddy Lang, Robby Nieuwlaat & On behalf of the International Liaison Committee on Resuscitation (ILCOR) First Aid Task Force (2020)

Control of severe, life-threatening external bleeding in the out-of-hospital setting: a systematic review, Prehospital Emergency Care, DOI: 10.1080/10903127.2020.1743801

Länk:

https://costr.ilcor.org/document/control-of-severe-life-threatening-external-bleeding-in-the-out-of-hospital-setting-tourniquets-ksu-tf-systematic-review

The PICOST (Population, Intervention, Comparator, Outcome, Study Designs and Timeframe)

Population: Adults and children with severe, life-threatening external bleeding in out-of-hospital settings. Bleeding from both compressible and non-compressible external sites were included.

Intervention: All bleeding control methods applicable for use by trained or untrained first aid providers including manufactured or improvised tourniquets, hemostatic dressings or agents, cryotherapy, direct (manual) pressure, pressure points, pressure dressings or bandages or elevation of the injured area. Manufactured tourniquets included windlass-style or elastic, with single or double application.

Comparators: Studies with comparators of bleeding control methods are included, as well as observational cohorts with a single bleeding control technique which in an observational meta-analysis may allow comparison of one technique against another.

Outcomes:
1. Mortality due to bleeding (Critical)
2. Cessation of bleeding / achieving hemostasis (Critical)
3. Time to achieving hemostasis (Critical)
4. Mortality from any cause (Important)
5. Decrease in bleeding (Important)
6. Complications/adverse effects (e.g. wound infection, limb loss, re-bleeding, pain related to an intervention) (Important)

Study Designs: Randomized controlled trials (RCTs) and non-randomized studies (non-randomized controlled trials, interrupted time series, controlled before-and-after studies, cohort studies) were eligible for inclusion.

Timeframe: All years and all languages were included as long as there was an English abstract; unpublished studies (e.g., conference abstracts, trial protocols) were excluded. Literature search updated to November 22, 2019.
PROSPERO Registration: CRD42018091326

Consensus on science- Tourniquets compared with direct pressure

For the critical outcome of mortality due to bleeding

We identified very low certainty evidence (downgraded for serious risk of bias, inconsistency and imprecision) from four cohort studies{King 2015 594; Ode 2015 586; Passos 2014 573; Scerbo 2017 1165} in the *prehospital civilian setting* with a total of 527 participants. These studies report variable results but suggest a reduction in mortality due to bleeding with the use of tourniquets compared with the use of direct pressure alone.

The mortality rate with tourniquet use for the individual studies ranged from 0 to 4%, whereas mortality with direct pressure alone ranged from 0 to 14%, however no meta-analysis could be performed due to the heterogeneity of the studies.

Consensus on science- Tourniquets compared with direct pressure

For the critical outcome of cessation of bleeding

We identified very low certainty evidence (downgraded for serious risk of bias and imprecision) from two cohort studies{Beekley 2008 S28; Mucciarone 2006 687} in the *prehospital military setting* with a total of 76 participants. Due to heterogeneity, these results were not combined for meta-analysis but results from the largest cohort study{Beekley 2008 S28} with a total of 70 participants showed..

… a higher rate of bleeding cessation on arrival to the hospital among those with a tourniquet placed compared with those without a tourniquet; (35/42 [83.3%] compared with 17/28 [60.7%]; p = 0.033). A small cohort study{Mucciarone 2006 687} showed bleeding cessation in 2/2 participants with tourniquet and 4/4 participants with injuries that were amenable to a tourniquet but did not receive one.

Consensus on Consensus on science- Tourniquets compared with direct pressure

For the important outcome of complications/adverse effects

We identified very low certainty evidence (downgraded for serious risk of bias and imprecision) from three cohort studies{Passos 2014 573; Smith 2019 43; Teixeira 2018 769} with a total of 1,420 participants in the *prehospital civilian setting* evaluating complications with use of a tourniquet compared with the use of direct pressure.

Complications included compartment syndrome, nerve palsy, need for fasciotomy, or thromboembolic episodes. Due to heterogeneity these studies were unable to be combined for meta-analysis. These studies demonstrated mixed results when comparing a tourniquet compared with the use of direct pressure, with no clear increase in adverse events on one modality compared with the other.

We identified very low certainty evidence (downgraded for serious risk of bias) from five cohort studies{Passos 2014 573; Romanoff 1977 485; Scerbo 2017 1165; Smith 2019 43; Teixeira 2018 769} in the *prehospital civilian setting*with a total of 1686 participants reporting the complication of amputation.

Due to heterogeneity, these studies could not be combined for meta-analysis, but all reported similar amputation rates with the use of tourniquets compared with the use of direct pressure.

We identified very low certainty evidence (downgraded for risk of bias and imprecision) from one cohort study{Beekley 2008 S28} in the *prehospital military setting* with 165 participants.

This study showed no difference in the amputation rates for those who had tourniquets applied (4/67 (6.0%) compared with use of direct pressure ((9/98 (9.2%); RR, 0.65; 95% CI, 0.21-2.20

Manufactured tourniquets compared with Improvised tourniquets?

We did not identify any human studies comparing manufactured tourniquets with improvised tourniquets for the management of severe, life-threatening external bleeding, however, four simulation studies were reviewed to help formulate treatment recommendations.

Windlass style manufactured tourniquets compared with other types of manufactured tourniquets?

We did not identify any human studies comparing windlass style manufactured tourniquets with other types of manufactured tourniquets for the management of severe, life-threatening external bleeding, however, six simulation studies were reviewed to help formulate treatment recommendations.

Treatment recommendations

1. We suggest that first aid providers use a tourniquet in comparison with direct manual pressure alone for severe, life-threatening external bleeding that is amenable to the application of a tourniquet (weak recommendation, very low certainty of evidence).

2. We suggest that first aid providers use a tourniquet rather than a hemostatic dressing for severe, life-threatening external bleeding that is amenable to the use of a tourniquet (weak recommendation, very low certainty of evidence).

3. We suggest that first aid providers use a manufactured tourniquet rather than an improvised tourniquet for severe, life threatening external bleeding (weak recommendation, very low certainty of evidence).

4. For the treatment of severe, life-threatening external bleeding by first aid providers, we are unable to recommend any one particular design of tourniquet compared with another.

Knowledge gaps

Current knowledge gaps include but are not limited to:

1. Sufficiently powered experimental or observational studies comparing tourniquet with hemostatic dressing in individuals with severe, life-threatening bleeding in the out-of-hospital setting

2. Experimental or observational studies comparing manufactured tourniquet with improvised tourniquet with hemostatic dressing in individuals with severe, life-threatening bleeding in the out-of-hospital setting

3. Experimental or observational studies comparing windlass tourniquet with other types of tourniquet in individuals with severe, life-threatening bleeding in the out-of-hospital setting

4. There is an urgent need for comparative studies specific to the pediatric population

5. Can first aid providers recognize injuries that are amenable to tourniquet placement?

6. How much education is needed to appropriately deploy tourniquets on a mass scale (e.g. just-in-time training)?

EUROPEAN RESUSCITATION COUNCIL

Europeiska HLR rådet (ERC)

- Publicering av nya riktlinjer:

- **18 Oktober 2010**
- **15 Oktober 2015**
- **25 Mars 2021**

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ERC publicerar riktlinjer den 25 Mars 2021 via: cprguidelines.eu

Available online at www.sciencedirect.com

Resuscitation

journal homepage: www.elsevier.com/locate/resuscitation

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EUROPEAN RESUSCITATION COUNCIL

European Resuscitation Council Guidelines 2021: First aid

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Abstract

The European Resuscitation Council has produced these first aid guidelines, which are based on the 2020 International Consensus on Cardiopulmonary Resuscitation Science with Treatment Recommendations. The topics include the first aid management of emergency medicine and trauma. For medical emergencies the following content is covered: recovery position, optimal positioning for shock, bronchodilator administration for asthma, recognition of stroke, early aspirin for chest pain, second dose of adrenaline for anaphylaxis, management of hypoglycaemia, oral rehydration solutions for treating exertion-related dehydration, management of heat stroke by cooling, supplemental oxygen in acute stroke, and presyncope. For trauma related emergencies the following topics are covered: control of life-threatening bleeding, management of open chest wounds, cervical spine motion restriction and stabilisation, recognition of concussion, cooling of thermal burns, dental avulsion, compression wrap for closed extremity joint injuries, straightening an angulated fracture, and eye injury from chemical exposure.

Introduction and scope

In 2015 the European Resuscitation Council published its initial First Aid guidelines[1] based on the International Liaison Committee on Resuscitation (ILCOR) Consensus on First Aid Science with Treatment Recommendations published in the same year.[2,3] In 2015 ILCOR modified its consensus on science review process from a five-year cycle to a continuous evidence evaluation process. This is reflected in the 2020 ILCOR Consensus on Science with Treatment Recommendations (CoSTRs).[4,5]

In 2016 the ILCOR First Aid Task Force assessed all the topics reviewed by the American Heart Association and American Red Cross in the 2010 evidence review[6] and the 13 medical Population, Intervention, Comparison, Outcome (PICO) questions, ten trauma PICO questions and one education PICO examined in the ILCOR

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https://doi.org/10.1016/j.resuscitation.2021.02.013
Available o

-20 PICOST: (11 medicin och 9 trauma)
- 248 referenser

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Resuscitation

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European Resuscitation Council Guidelines 2021: Basic Life Support

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European Resuscitation Council Guidelines 2021: Education for resuscitation

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EUROPEAN RESUSCITATION COUNCIL

European Resuscitation Council Guidelines 2021: Ethics of resuscitation and end of life decisions

Spyros D. Mentzelopoulos[a,], Keith Couper[b,c], Patrick Van de Voorde[d,e], Patrick Druwé[f], Marieke Blom[g], Gavin D. Perkins[h], Ileana Lulic[h], Jana Djakow[i,j], Violetta Raffay[k,l], Gisela Lilja[m], Leo Bossaert[n]*

HLR rådet
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Medical emergencies

Recovery position
Optimal positioning for shock victims
Bronchodilator administration for asthma
Recognition of stroke
Early aspirin for chest pain
Anaphylaxis:
- Second dose of adrenaline (epinephrine) in anaphylaxis
- Recognition of anaphylaxis by first aid providers

Management of hypoglycaemia
Oral rehydration solutions for treating exertion-related dehydration
Management of heat stroke by cooling
Supplemental oxygen in acute stroke
Management of presyncope

Trauma emergencies

Control of life-threatening bleeding
Management of open chest wounds
Cervical spine motion restriction and stabilisation
Recognition of concussion
Thermal burns:
- Cooling of thermal burns
- Thermal burn dressings

Dental avulsion
Compression wrap for closed extremity joint injuries
Straightening an angulated fracture
Eye injury from chemical exposure

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Resuscitation 84 (2013) 1487–1493

Contents lists available at ScienceDirect

Resuscitation

journal homepage: www.elsevier.com/locate/resuscitation

Commentary and concepts

The formula for survival in resuscitation☆

Eldar Søreide[a,b,*,1], Laurie Morrison[c,d,1], Ken Hillman[e,f,1], Koen Monsieurs[g,h,1], Kjetil Sunde[i,1], David Zideman[j,k,1], Mickey Eisenberg[l,1], Fritz Sterz[m,1], Vinay M. Nadkarni[n,1], Jasmeet Soar[o,1], Jerry P. Nolan[p,1], Utstein Formula for Survival Collaborators

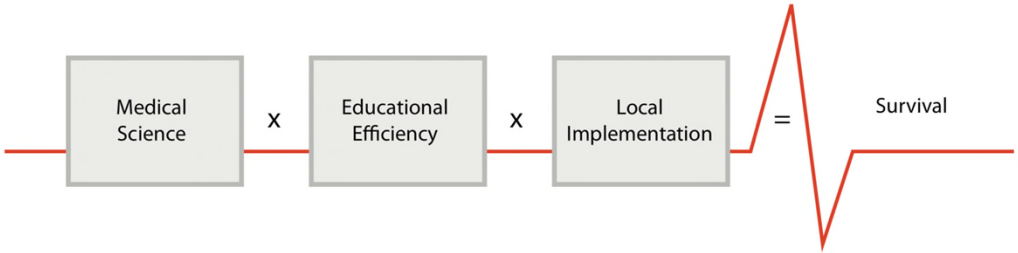

Fig. 1. The Utstein formula for survival.

Guidelines:

ILCOR / AHA/ ERC

Utbildningsmaterial:

Svenska HLR-rådet

Implementation:

Instruktörer, du och jag

HLR rådet
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Utveckling av evidensbaserade kursmaterial tar tid

1.	Forskningsidé, planering, genomförande, publicering av enskilda forskningsartiklar.	Forskare
2.	Systematiskt litteratursök, analys, gradering och sammanställning av all forskning i en PICOST	ILCOR
3.	Publicering av guidelines för samtliga PICOST ca 200 st	AHA, ERC
4.	Inläsning, översättning, nivåanpassning, integrera pedagogik, utformning utbildningsprogram, testutbildning, revidering, lansering	HLR-rådet
5.	Utbildning av instruktörer, utbildning av användare	HLR-rådet
6.	Första hjälpen insatser	Samhälle

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The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Defibrillation Strategies for Refractory Ventricular Fibrillation

Sheldon Cheskes, M.D., P. Richard Verbeek, M.D., Ian R. Drennan, A.C.P., Ph.D., Shelley L. McLeod, Ph.D., Linda Turner, Ph.D., Ruxandra Pinto, Ph.D., Michael Feldman, M.D., Ph.D., Matthew Davis, M.D., Christian Vaillancourt, M.D., Laurie J. Morrison, M.D., Paul Dorian, M.D., and Damon C. Scales, M.D., Ph.D.

Table 3. Primary and Secondary Outcomes.

Outcome	Standard Defibrillation (N=136)	VC Defibrillation (N=144)	DSED (N=125)	Adjusted Relative Risk (95% CI)*	
				DSED vs. Standard	VC vs. Standard
	number of patients/total number (percent)				
Survival to hospital discharge†	18/135 (13.3)	31/143 (21.7)	38/125 (30.4)	2.21 (1.33–3.67)	1.71 (1.01–2.88)
Termination of ventricular fibrillation	92/136 (67.6)	115/144 (79.9)	105/125 (84.0)	1.25 (1.09–1.44)	1.18 (1.03–1.36)
ROSC	36/136 (26.5)	51/144 (35.4)	58/125 (46.4)	1.72 (1.22–2.42)	1.39 (0.97–1.99)
Modified Rankin scale score ≤2†‡	15/134 (11.2)	23/142 (16.2)	34/124 (27.4)	2.21 (1.26–3.88)	1.48 (0.81–2.71)

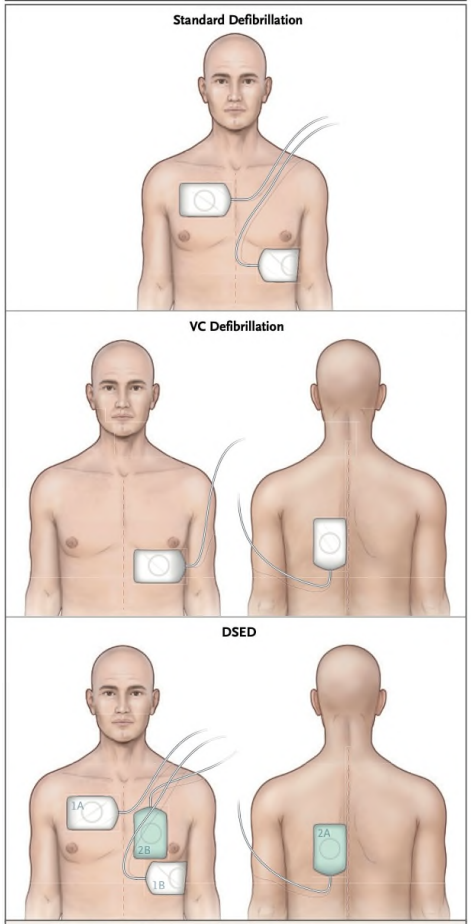

Figure 1. Pad Placement in the Three Defibrillation Strategies.
Pad placement for standard defibrillation, vector-change (VC) defibrillation, and double sequential external defibrillation (DSED) is shown. In the bottom panel, defibrillation pads 2A and 2B are those of the second defibrillator, with the pads placed in the posterior and anterior positions. For all strategies, the first three shocks occurred with pads placed in the configuration used for standard defibrillation.

ILCORs rekommendation

Rekommendation 230504:

- Dubbel defibrillering kan övervägas för vuxna med hjärtstopp där ventrikelflimmer kvarstår efter 3 på varandra följande defibrilleringar **(svag rekommendation, låg säkerhet kring vetenskapen)**

Kunskapslucka:

- Kan resultatet från denna studie upprepas?

Referens: https://costr.ilcor.org/document/double-sequential-defibrillation-strategy-for-cardiac-arrest-with-refractory-shockable-rhythm-als-tf-sr

Svenska HLR-rådets rekommendation

DUBBEL-DEFIBRILLERING VID REFRAKTÄRT VENTRIKELFLIMMER
17 oktober, 2023

HLR-rådet föreslår baserat på ILCORS rekommendation att ”dubbel-defibrillering” (svag rekommendation, låg säkerhet kring vetenskapen) eller ett byte av vektor (anterio-posterior placering) (svag rekommendation, väldigt låg säkerhet kring vetenskapen) kan övervägas för vuxna med hjärtstopp där ventrikelflimmer kvarstår efter 3 på varandra följande defibrilleringar.

Om ”dubbel-defibrillering” används föreslår vi att samma teknik som i studien används, dvs att en person avsätts för att enbart göra detta (good practice statement).

Referens: https://www.hlr.nu/dubbel-defibrillering-vid-refraktart-ventrikelflimmer/

LÄRANDEMÅL

När du genomfört instruktörsutbildning i Första hjälpen ska du kunna:

- planera och genomföra grundutbildning och repetitionsutbildning i Första hjälpen enligt kursplanen
- skapa förutsättningar för att deltagarna når lärandemålen
- bedöma att deltagarna kan utföra första hjälpen åtgärder samt HLR med god kvalitet
- hur nya riktlinjer inom HLR och Första hjälpen skapas och implementeras.

LÄRANDEMÅL

När du genomfört huvudinstruktörsutbildning i Vuxen-HLR, Barn-HLR, Första hjälpen, eller HLR för insatspersonal ska du kunna:

- planera och genomföra instruktörs- och huvudinstruktörsutbildning enligt kursplanen
- skapa förutsättningar för att deltagarna når lärandemålen
- bedöma att deltagarna utför HLR med god kvalitet
- hur nya riktlinjer inom HLR och Första hjälpen skapas och implementeras.

Du som är huvudinstruktör och har erfarenhet av minst fyra instruktörsutbildningar är behörig att utbilda nya huvudinstruktörer. Det gäller utbildningsprogrammen Barn-HLR, Vuxen-HLR och HLR för insatspersonal. Huvudinstruktörsutbildning i Första hjälpen ges endast centralt på uppdrag av HLR-rådet.

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HLR KONGRESS 2021
GÖTEBORG 23-24 NOVEMBER


HR2021

Länkar

- European Resuscitation Council: erc.edu
- European resuscitation guidelines: https://cprguidelines.eu/
- HLR-rådet: hlr.nu
- ILCOR: costr.ilcor.org

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Resuscitation

European Resuscitation Council Guidelines 2021: First aid

Tack!

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FH-kursbok 2021

INNEHÅLLSFÖRTECKNING

* = Obligatorisk del i genomgång vid kurstillfälle

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LANS
ANDREAS
AMBULANSSIJUKSKOT.