

EVIDENCE REPOSITORIES

This evidence repository is a collection of best available resources and evidence collated by a knowledge synthesis team at Alberta Research for Health Evidence ([ARCHE](#)) and the clinical content team.

The knowledge synthesis team utilizes a pyramid-shaped framework, built upon the [“4S” hierarchy of evidence model](#), to provide detailed evidence appropriate to meet stakeholders’ needs. They search a combination of databases (Cochrane Library, PubMed, TRIP Database) and web-based search engines (Google, Google Scholar) to locate evidence for the knowledge pyramids. Publication types sought in the initial topic searches are organized into five levels that determine the order in which resources are presented:

- (1) Bottom Line Recommendations
- (2) Clinical Practice Guidelines and Pathways
- (3) Overviews and Summaries of Systematic Reviews
- (4) Systematic Reviews
- (5) Key Studies

Where applicable resources for families and parents are also listed.

The knowledge synthesis team collaborates with the clinical content team to select the most relevant guidelines, reviews, and key studies, which can be found below. This evidence repository is not intended to be an exhaustive list of resources for a topic, but rather a curated list of current, evidence-based resources, based on expert consensus of relevance and usability for a general emergency department setting. Every effort is made to identify resources that are open access (i.e. publicly available, free of charge, not requiring a subscription).

More information about the creation of our evidence repositories can be found [here](#).

CONTENT TEAM

Thank you to the following clinical content experts and Knowledge Synthesis team who led the development of this evidence repository.

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TREKK developed resources for healthcare providers and parents & families can be found [here](#).

Clinical Practice Guidelines and Pathways

1. Government of South Australia. [Paediatric burns service guidelines](#). Women's & Children's Hospital. 2023.
2. The Royal Children's Hospital Melbourne. [Burns - acute management](#). 2020.
3. Legrand M, Barraud D, Constant I, et al. [Management of severe thermal burns in the acute phase in adults and children](#). Anaesth Crit Care Pain Med. 2020;39(2):253-67.
4. Western Region Burn Disaster Consortium. [Burn injury: Guidelines for care](#). 2020.
5. ISBI Practice Guidelines Committee; Steering Subcommittee; Advisory Subcommittee. [ISBI practice guidelines for burn care](#). Burns. 2016;42(5):953-1021.

Overviews and Summaries of Systematic Reviews

1. CritiCall Ontario. [Burns centre consultation guidelines](#). Critical Care Services Ontario. 2019.
2. UBC Division of Plastic Surgery. [Pediatric burn referrals](#). 2017.

Systematic Reviews

1. Griffin B, Cabilan CJ, Ayoub B, et al. [The effect of 20 minutes of cool running water first aid within three hours of thermal burn injury on patient outcomes: A systematic review and meta-analysis](#). Australas Emerg Care. 2022;25(4):367-76.
2. Djärv T, Douma M, Palmieri T, et al. [Duration of cooling with water for thermal burns as a first aid intervention: A systematic review](#). Burns. 2022;48(2):251-62.
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4. Suman A, Owen J. [Update on the management of burns in paediatrics](#). BJA Educ. 2020;20(3):103-10.
5. Jeschke MG, van Baar ME, Choudhry MA, et al. [Burn injury](#). Nat Rev Dis Primers. 2020;6(1):11.
6. Nímia HH, Carvalho VF, Isaac C, et al. [Comparative study of silver sulfadiazine with other materials for healing and infection prevention in burns: A systematic review and meta-analysis](#). Burns. 2019;45(2):282-92.
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10. Stiles K. [Emergency management of burns: Part 2](#). Emerg Nurse. 2018;26(2):36-41.
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12. Sheridan RL. [Burn care for children](#). *Pediatr Rev*. 2018;39(6):273-86.
13. Shah AR, Liao LF. [Pediatric burn care: Unique considerations in management](#). *Clin Plast Surg*. 2017;44(3):603-10.
14. Romanowski KS, Palmieri TL. [Pediatric burn resuscitation: Past, present, and future](#). *Burns Trauma*. 2017;5:26.
15. Norman G, Christie J, Liu Z, et al. [Antiseptics for burns](#). *Cochrane Database of Systematic Reviews*. 2017(7).
16. Nherera LM, Trueman P, Roberts CD, Berg L. [A systematic review and meta-analysis of clinical outcomes associated with nanocrystalline silver use compared to alternative silver delivery systems in the management of superficial and deep partial thickness burns](#). *Burns*. 2017;43(5):939-48.
17. Nherera L, Trueman P, Roberts C, Berg L. [Silver delivery approaches in the management of partial thickness burns: A systematic review and indirect treatment comparison](#). *Wound Repair Regen*. 2017;25(4):707-21.
18. Palmieri TL. [Pediatric burn resuscitation](#). *Crit Care Clin*. 2016;32(4):547-59.
19. Haines E, Fairbrother H. [Optimizing emergency management to reduce morbidity and mortality in pediatric burn patients](#). *Pediatr Emerg Med Pract*. 2015;12(5):1-23; quiz 4-5.
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21. Wasiak J, Cleland H, Campbell F, Spinks A. [Dressings for superficial and partial thickness burns](#). *Cochrane Database of Systematic Reviews*. 2013(3).
22. Barajas-Nava LA, López-Alcalde J, Roqué i Figuls M, et al. [Antibiotic prophylaxis for preventing burn wound infection](#). *Cochrane Database of Systematic Reviews*. 2013(6).
23. Khundkar R, Malic C, Burge T. [Use of acticoat dressings in burns: What is the evidence?](#) *Burns*. 2010;36(6):751-8.
24. Latenser BA. [Critical care of the burn patient: The first 48 hours](#). *Crit Care Med*. 2009;37(10):2819-26.

Key Studies

1. Delgado-Miguel C, Miguel-Ferrero M, Ezquerro A, et al. [Sedoanalgesia in the debridement of pediatric burns in the emergency department: Is it effective and safe?](#) *Children (Basel)*. 2023;10(7).
2. Suman A, Owen J. [Update on the management of burns in paediatrics](#). *BJA Educ*. 2020 Mar;20(3):103-110.
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4. Griffin BR, Frear CC, Babl F, et al. [Cool running water first aid decreases skin grafting requirements in pediatric burns: A cohort study of two thousand four hundred ninety-five children](#). *Ann Emerg Med*. 2020;75(1):75-85.
5. Auh E, Kistamgari S, Yang J, Smith GA. [Children with facial burns treated in united states emergency departments, 2000 to 2018](#). *Acad Pediatr*. 2020;20(4):540-8.



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Resources for Families

1. Helman A, Fish J, Ivankovic M, Kovacs G. [Emergency medicine cases podcast: Burn and inhalation injuries: Ed wound care, resuscitation and airway management](#). Emergency Medicine Cases. 2019.
2. Victoria Adult Burns Service at the Alfred. [Paediatric burn assessment](#). The Royal Children's Hospital Melbourne. 2012.