

Fractures (Upper and Lower)

EVIDENCE REPOSITORIES

Evidence repositories are collections of best available resources and evidence (clinical guidelines, peer reviewed literature, systematic reviews, etc.), collated by our knowledge synthesis team and content advisors. 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. We search databases (Cochrane Library, PubMed, TRIP Database) and web search engines (Google, Google Scholar) to locate evidence. Additionally, hospital websites are browsed for guidance documents, such as clinical practice guidelines (CPG) for healthcare professionals.

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 at <https://pubmed.ncbi.nlm.nih.gov/28537762/>

CONTENT TEAM

Thank you to the following 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](#)

All Fractures

Clinical Guidelines

1. Victorian Paediatric Orthopaedic Network. [Paediatric fractures guidelines](#). The Royal Children's Hospital Melbourne. 2019.
2. Parikh SN, Wells L, Mehlman CT, et al. [Management of fractures in adolescents](#). J Bone Joint Surg Am. 2010;92(18):2947-58.
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Systematic Reviews

1. Boutis K. [Common pediatric fractures treated with minimal intervention](#). Pediatr Emerg Care. 2010;26(2):152-7; quiz 8-62.
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Key Studies

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4. Reynolds SL, Bryant KK, Studnek JR, et al. [Randomized controlled feasibility trial of intranasal ketamine compared to intranasal fentanyl for analgesia in children with suspected extremity fractures](#). Acad Emerg Med. 2017;24(12):1430-40.
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8. Naranje SM, Erali RA, Warner WC, Jr., et al. [Epidemiology of pediatric fractures presenting to emergency departments in the United States](#). J Pediatr Orthop. 2016;36(4):e45-8.
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- Clark E, Plint AC, Correll R, et al. [A randomized, controlled trial of acetaminophen, ibuprofen, and codeine for acute pain relief in children with musculoskeletal trauma](#). Pediatrics. 2007;119(3):460-7.

Other Resources

- Drendel A, Helman A. [Pediatric procedural sedation](#). Emergency Medicine Cases. 2016.
- Flynn J, Skaggs D, Waters P. [Rockwood and Wilkins' fractures in children](#). 2014.

Lower Extremity Fractures

Clinical Guidelines

- Roberts K, Miller B, Bone-Ellis H, et al. [Treatment of pediatric diaphyseal femur fractures: Evidence-based clinical practice guideline](#). American Academy of Orthopaedic Surgeons. 2020.
- Kocher M, Sink E, Blasier R, et al. [Treatment of pediatric diaphyseal femur fractures: Evidence-based clinical practice guideline](#). American Academy of Orthopaedic Surgeons. 2020.
- Victorian Paediatric Orthopaedic Network. [Distal tibia and-or fibula physeal fractures - emergency department](#). The Royal Children's Hospital Melbourne. 2019.
- Victorian Paediatric Orthopaedic Network. [Tibial shaft \(diaphyseal\) fracture - emergency department](#). The Royal Children's Hospital Melbourne. 2019.
- Victorian Paediatric Orthopaedic Network. [Femoral shaft fractures - emergency department](#). The Royal Children's Hospital Melbourne. 2019.
- Victorian Paediatric Orthopaedic Network. [Hip and proximal femur fractures](#). The Royal Children's Hospital Melbourne. 2019.

Systematic Reviews

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- Boutis K, von Keyserlingk C, Willan A, et al. [Cost consequence analysis of implementing the low risk ankle rule in emergency departments](#). Ann Emerg Med. 2015;66(5):455-63.e4.
- Madhuri V, Dutt V, Gahukamble AD, et al. [Interventions for treating femoral shaft fractures in children and adolescents](#). Cochrane Database Syst Rev. 2014;2014(7):Cd009076.
- Dowling S, Spooner CH, Liang Y, et al. [Accuracy of Ottawa ankle rules to exclude fractures of the ankle and midfoot in children: A meta-analysis](#). Acad Emerg Med. 2009;16(4):277-87.

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Key Studies

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Upper Extremity Fractures

Clinical Guidelines

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3. Victorian Paediatric Orthopaedic Network. [Elbow fractures](#). The Royal Children's Hospital Melbourne. 2017.
4. Victorian Paediatric Orthopaedic Network. [Clavicle fractures - emergency department](#). The Royal Children's Hospital Melbourne. 2017.
5. Victorian Paediatric Orthopaedic Network. [Forearm fractures](#). The Royal Children's Hospital Melbourne. 2017.
6. Victorian Paediatric Orthopaedic Network. [Wrist fractures](#). The Royal Children's Hospital Melbourne. 2017.
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Systematic Reviews

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9. Vavken P, Bae DS, Waters PM, et al. [Treating subscapularis and lesser tuberosity avulsion injuries in skeletally immature patients: A systematic review.](#) Arthroscopy. 2016;32(5):919-28.
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Key Studies

- Porter J, Porter R, Chan KJ. [Scaphoid fractures in children: Do we need to x-ray? A retrospective chart review of 144 wrists](#). Pediatr Emerg Care. 2020;36(3):130-3.
- Wang JH, Morris WZ, Bafus BT, et al. [Pediatric supracondylar humerus fractures: AAOS appropriate use criteria versus actual management at a pediatric level 1 trauma center](#). J Pediatr Orthop. 2019;39(8):e578-e85.
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Fractures (Upper and Lower)

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