

## 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.

**Roger Zemek, MD;** *Scientist, Children's Hospital of Eastern Ontario (CHEO) Research Institute; Director of Research, Division of Pediatric Emergency Medicine, CHEO; Physician, Division of Pediatric Emergency Medicine, CHEO; Associate Professor, Departments of Pediatrics and Emergency Medicine, Faculty of Medicine, University of Ottawa*

**Jennifer Dawson, PhD;** *Research Associate, CHEO Research Institute*

**Liza Bialy, BSc, MPH,** *Knowledge Synthesis Project Coordinator, Alberta Research Centre for Health Evidence, Department of Pediatrics, University of Alberta*

**Sarah Elliott, PhD,** *Assistant Director, Alberta Research Centre for Health Evidence, Department of Pediatrics, University of Alberta*



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

## Clinical Practice Guidelines and Pathways

1. Zemek R\*, Reed, N, Dawson, J, et al. [Living guideline for pediatric concussion care](#). 2023.
2. Silverberg ND, Iverson GL, Cogan A, et al. [The American congress of rehabilitation medicine diagnostic criteria for mild traumatic brain injury](#). Arch Phys Med Rehabil. 2023;104(8):1343-55.
3. Patricios JS, Schneider KJ, Dvorak J, et al. [Consensus statement on concussion in sport: The 6th international conference on concussion in sport-Amsterdam, October 2022](#). Br J Sports Med. 2023;57(11):695-711.
4. Goulet K, Beno S. [Sport-related concussion and bodychecking in children and youth: Evaluation, management, and policy implications](#). Paediatr Child Health. 2023;28(4):252-66.
5. Dawson J, Johnston S, McFarland S, et al. [Returning to school following concussion: Pointers for family physicians from the living guideline for pediatric concussion care](#). Can Fam Physician. 2023;69(6):382-6.
6. Velikonja D, Baldisera T, Bauman S, et al. [Standards for post-concussion care: From diagnosis to the interdisciplinary concussion clinic](#). Ontario Neurotrauma Foundation. 2017.

## Systematic Reviews

1. Fan F, Anderson V, Morawakage T, et al. [Post-traumatic headache pathophysiology in paediatric concussion: A systematic review](#). Neurosci Biobehav Rev. 2024;156:105498.
2. Davis GA, Schneider KJ, Anderson V, et al. [Pediatric sport-related concussion: Recommendations from the Amsterdam consensus statement 2023](#). Pediatrics. 2024;153(1).
3. Yeates KO, Räisänen AM, Premji Z, et al. [What tests and measures accurately diagnose persisting post-concussive symptoms in children, adolescents and adults following sport-related concussion? A systematic review](#). Br J Sports Med. 2023;57(12):780-8.
4. Putukian M, Purcell L, Schneider KJ, et al. [Clinical recovery from concussion-return to school and sport: A systematic review and meta-analysis](#). Br J Sports Med. 2023;57(12):798-809.
5. Patricios JS, Schneider GM, van Ierssel J, et al. [Beyond acute concussion assessment to office management: A systematic review informing the development of a sport concussion office assessment tool \(scoat6\) for adults and children](#). Br J Sports Med. 2023;57(11):737-48.
6. Leddy JJ, Burma JS, Toomey CM, et al. [Rest and exercise early after sport-related concussion: A systematic review and meta-analysis](#). Br J Sports Med. 2023;57(12):762-70.
7. Echemendia RJ, Burma JS, Bruce JM, et al. [Acute evaluation of sport-related concussion and implications for the sport concussion assessment tool \(scat6\) for adults, adolescents and children: A systematic review](#). Br J Sports Med. 2023;57(11):722-35.
8. Chauhan R, Cheng A, Tsow R, et al. [Activity and recovery among youth with concussion: A meta-analysis](#). Pediatrics. 2023;151(5).
9. Yumul JN, Crowe L, Catroppa C, et al. [Post-concussive signs and symptoms in preschool children: A systematic review](#). Neuropsychol Rev. 2022;32(3):631-50.
10. van Ierssel J, Pennock KF, Sampson M, et al. [Which psychosocial factors are associated with return to sport following concussion? A systematic review](#). J Sport Health Sci. 2022;11(4):438-49.

Visit [TREKK.ca](https://www.trekk.ca) for more resources related to pediatric emergency care



11. Djukic S, Phillips NL, Lah S. [Sleep outcomes in pediatric mild traumatic brain injury: A systematic review and meta-analysis of prevalence and contributing factors](#). Brain Inj. 2022;36(12-14):1289-322.
12. Cook NE, Gaudet CE, Van Patten R, et al. [Clinical outcome following sport-related concussion among children and adolescents with a history of prior concussion: A systematic review](#). J Neurotrauma. 2022;39(17-18):1146-58.
13. Goh MSL, Looi DSH, Goh JL, et al. [The impact of traumatic brain injury on neurocognitive outcomes in children: A systematic review and meta-analysis](#). J Neurol Neurosurg Psychiatry. 2021.
14. Bellesi G, Barker ED, Brown L, Valmaggia L. [Pediatric traumatic brain injury and antisocial behavior: Are they linked? A systematic review](#). Brain Inj. 2019;33(10):1272-92.

### Key Studies

\*To access and download a comprehensive list of key studies please see the Living Guideline for Pediatric Concussion Care Living Evidence Map, powered by EPPreviewer and EPPMapper.

[pedsconcussion.com](https://pedsconcussion.com)