

# Concussion Management in the School Setting: An Integrative Literature Review

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## BACKGROUND AND SIGNIFICANCE

- ❖ According to the Centers for Disease Control and Prevention (CDC), concussions account for over 2.5 billion emergency department visits per year (CDC, 2011).
- ❖ Approximately 45 million youth participate in both school related and community related sports activities each year. As a result, many youth are at risk of suffering a concussion (Pfister et al., 2015).
- ❖ Concussion account for 8.9% of all high school sports injuries (McGuire & McCambridge, 2011).
- ❖ Illinois Public Act 099-0245 was enacted on August 3, 2015 to provide a policy and mandate education to manage students that suffer from concussion (Illinois General Assembly, 2015).



## METHOD

- ❖ Integrated literature review (Ganong model, 1987)
- ❖ Three research articles were identified that focused on the school nurses role in concussions.

## REFERENCES

- Centers for Disease Control and Prevention (2011). Injury Prevention & Control: Traumatic Brain Injury & Concussion. *Centers for Disease Control and Prevention*. Retrieved from <http://www.cdc.gov>
- Ganong, L. (1987). Integrative reviews of nursing research. *Research in Nursing & Health*, 10, 1-11.
- Illinois General Assembly (2015). Public Act 099-0245, Retrieved from <http://www.ilga.gov/legislation/publicact/fulltext.asp?Name=099-0245>
- Kasamatsu, T., Cleary, M., Bennett, J., Howard, K., & McLeod, T. V. (2016). Examining academic support after concussion for adolescent student-athletes: Perspectives of the athletic trainer. *Journal of Athletic Training*, 51(2), 153-161.
- McGuire, C. S. & McCambridge, T. M. (2011). Concussion in the young athlete diagnosis, management, and prevention. *Contemporary Pediatrics*, 30-46.
- Pfister, T., Pfister, K., Hagel, B., Ghali, W. A. & Ronsley, P.E. (2015). The incidence of concussion in youth sports: A systematic review and meta-analysis. *British Journal of Sports Medicine*, 0, 1-6.
- Weber, M. L., Welch, C. E., Parsons, J. T., & McLeod, T. C. V. (2015). School nurses familiarity and perceptions of academic accommodations for the student-athletes following sport-related concussion. *The Journal of School Nursing*, 31(2), 146-154.
- Wing, R., Amanullah, S., Jacobs, E., Clark, M. A. & Merritt, C. (2016). Heads up: communication is key in school nurses' preparedness for facilitating "return to learn" following concussion. *Clinical Pediatrics*, 55(3), 228-235.

## RESEARCH QUESTION

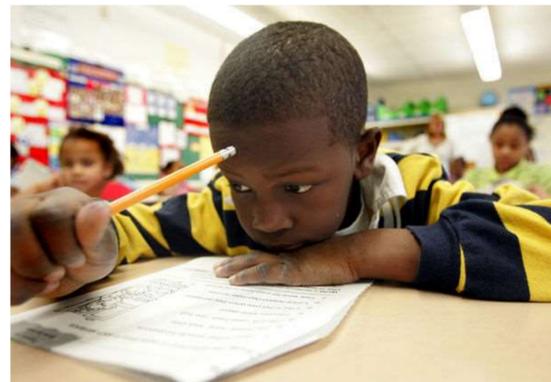
What is the role of the school nurse with concussion management in student athletes?

## Literature Reviewed

Author	Findings	Limitations
Katsamatsu, et al., (2005)	44% of athletic trainers report having a "Return to Learn" policy. Athletic trainers identify themselves as the point person for "Return to Learn" and "Return to Play" coordination.	Only athletic trainers were surveyed.
Weber, et al., (2015)	School nurses were familiar with academic accommodations. The extent of personal experience with concussions varied. Nurses working in schools that employed athletic trainers were more likely to be familiar with academic accommodations, to have used academic accommodations, and have an academic support team.	Only members of National Association of School Nursing were surveyed.
Wing, et al., (2016)	58% of school nurses reported having concussion training. The number one barrier identified was inadequate communication with providers. Only 40% surveyed reported to have a "Return to Play" policy while 30% reported having a "Return to Learn" policy.	Only nurses that attended the New England School Nurses conference participated.

## Results

- ❖ There is a gap in the literature regarding the role of the school nurse in concussion management.
- ❖ There are no definitive guidelines regarding interdisciplinary team roles in concussion management of student athletes.
- ❖ Both school nurses and athletic trainers believe they are best prepared to be the point person in managing student athlete concussions.



**School nurses need to be prepared to assume the responsibility for interdisciplinary team leadership and coordination of care for student athletes with concussions.**



## IMPLICATIONS

**POLICY:** Each school is responsible to follow the law and set their own guidelines for Return to Play and Return to Learn.

**RESEARCH:** Future research is needed to bridge the gap in the literature and promote development of definitive concussion guidelines as well as roles for school nurses and athletic trainers.

**EDUCATION:** School nurses need to educate the interdisciplinary team on care coordination of concussions and team role clarification.

**PRACTICE:** School nurses should be the leader of interdisciplinary team coordinating care for Return to Play and Return to Learn.