

Concussions: School Based Management

Position Statement

NASN POSITION

It is the position of the National Association of School Nurses (NASN) that the registered professional school nurse (hereinafter referred to as school nurse) provides leadership/care coordination in collaboration with the school-based team to manage student concussion. The school nurse has the healthcare knowledge and skills to provide concussion prevention education to parents/guardians, students, and school staff; identify suspected concussions; and help guide students as they return to academics/learning, physical activities, and sports.

BACKGROUND and RATIONALE

A concussion is a type of traumatic brain injury (TBI) caused by a bump, blow, or jolt to the head or by a hit to the body that causes the head and brain to move rapidly back and forth. This sudden movement can cause the brain to bounce around or twist in the skull, creating chemical changes in the brain and sometimes stretching and damaging brain cells (CDC, 2019a). The CDC has a checklist for initial assessment of possible concussion as well as danger signs for when the person should immediately be seen in an emergency department (CDC, 2019b). It should be noted that the initial assessment severity of TBI does not necessarily predict the extent of disability arising from TBI (NASEM, 2019). Approximately 2.5 million or 15.1% of United States high school students reported having at least one concussion on the 2017 Youth Risk Behavior Survey (DePadiia et al., 2017). All 50 states have enacted a sports concussion law, establishing protocols such as removal from play, return to play protocols, and concussion information for student athletes and their parents (Green, 2018). However, many states do not have return to school / return to learning laws or guidelines. The 5th International Consensus Statement on Concussion recommended that children with concussion should be managed conservatively, with the emphasis on return to learn before returning to sports. (McCrary, Meeuwisse & Dvorak et al., 2017). Concussion in children and adolescents can also occur outside of sports, such as motor vehicle accidents, a fall or collision from riding a bicycle (Haarbauer-Krupa et al., 2018). Regardless of where or how a concussion occurs, it is vital to properly recognize and respond to a suspected concussion to prevent further injury and to help with recovery (CDC, 2019a).

Schools must identify and support the educational and emotional needs of students by offering ascending levels of academic interventions (McAvoy et al., 2018). To assist students returning to school after a concussion, the school-based concussion management team led by the school nurse should consist of the school guidance counselor, school psychologist/counselor, athletic trainer, primary care physician, teachers, and parents. The team should counsel the student and family regarding the process of gradually increasing the duration and intensity of academic activities as tolerated, with the goal of increasing participation and learning without exacerbating symptoms (Lumba-Brown et al., 2018).

Recovery from concussion is different for each student. Most students only require short-term academic adjustments as they recover. The school nurse coordinates concussion care by taking the lead between the medical and educational teams. Based on the severity and symptoms the student is experiencing, the school nurse, in consultation with the concussion management team, creates “a plan of care written by the school nurse for students with or at risk for physical or mental health needs” called an Individualized Healthcare Plan (IHP) (ANA & NASN, 2017, p 90; McNeal & Selekman, 2017). When planning the student’s return to academics/learning the school team also considers the effect of comorbid conditions, such as Attention Deficit Hyperactivity Disorder, depression, migraine headaches, sleep disorders, or other learning disabilities (McNeal & Selekman, 2017). When a concussion is prolonged or severe, a more formal 504 plan of accommodations is the next ascending support to be used. (McAvoy, et al., 2018). If the student’s learning cannot be supported by an IHP or 504, an individualized education plan may be warranted for students with more chronic cognitive or emotional disabilities.

The school nurse, individually or as a member of a collaborative school committee, identifies students with possible concussion, makes appropriate referrals, and by way of care coordination leads students and families through the return to academics/learning and eventually a gradual return to physical activity including sports.

REFERENCES

- American Nurses Association and National Association of School Nurses. (2017). *School nursing: Scope and standards of practice* (3rd ed.). American Nurses Association
- Centers for Disease Control and Prevention. (2019a). *HEADS UP: Brain injury basics*. https://www.cdc.gov/headsup/basics/concussion_what.html
- Centers for Disease Control and Prevention. (2019b). *CONCUSSION SIGNS AND SYMPTOMS Checklist* https://www.cdc.gov/headsup/pdfs/schools/TBI_schools_checklist_508-a.pdf
- DePadilla, L., Miller, G. F., Jones, S. E., Peterson, A. B., & Breiding, M. J. (2018). Self-reported concussions from playing a sport or being physically active among high school students—United States, 2017. *Morbidity and Mortality Weekly Report*, 67(24), 682.
- National Academies of Sciences, Engineering, and Medicine. (2019). *Evaluation of the Disability Determination Process for Traumatic Brain Injury in Veterans*. National Academies Press.
- Green, J. (2018). State legislatures continue to update concussion laws. *National Federation of State High School Associations*. <https://www.nfhs.org/articles/state-legislatures-continue-to-update-concussion-laws>.
- Haarbauer-Krupa, J., Arbogast, K. B., Metzger, K. B., Greenspan, A. I., Kessler, R., Curry, A. E., ... & Master, C. L. (2018). Variations in mechanisms of injury for children with concussion. *The Journal of pediatrics*, 197, 241-248.
- Lumba-Brown, A. Yeates, K. O., Sarmiento, K., Breiding, M. J., Haegerich, T. M., Gioia, G. A., ... & Joseph, M. (2018). Centers for Disease Control and Prevention guideline on the diagnosis and management of mild traumatic brain injury among children. *JAMA pediatrics*, 172(11), e182853-e182853.
- McAvoy, K., Eagan-Johnson, B., & Halstead, M. (2018). Return to learn: Transitioning to school and through ascending levels of academic support for students following a concussion. *NeuroRehabilitation*, 42(3), 325-330.
- McCrory, P., Meeuwisse, W., Dvořák, J., Aubry, M., Bales, J., Broglio, S., Cantu, R. C., Cassidy, D., Echemendia, R. J., Castellani, R. J., Davis, G. A., Ellenbogen, R., Emery, C., Engebretsen, L., Feddermann-Demont, N., Giza, C. C., Guskiewicz, K. M., Herring, S., Iverson, G. L., Johnston, K. M., ... & Vos, P. E. (2017). Consensus statement on concussion in sport—the 5th international conference on concussion in sport held in Berlin, October 2016. *British journal of sports medicine*, 51(11), 838–847. <https://doi.org/10.1136/bjsports-2017-097699>
- McNeal, L., & Selekmán, J. (2017). Guidance for return to learn after a concussion. *NASN school nurse*, 32(5), 310-316.

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