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**TESTIMONY RE: TESTIMONY RE: Raised Bill No. 6722 AN ACT CONCERNING CONCUSSIONS IN  
YOUTH ATHELETES**

**Committee on Children**

**February 17, 2015**

Good Afternoon, Senator Bartolemeo, Representative Urban and esteemed members of the Committee on Children.

I want to thank-you for the opportunity to provide testimony on behalf of the Connecticut Nurses' Association (CNA), as a founding partner of the Coalition for a Safe and Healthy Connecticut. I am Mary Jane Williams Ph.D., RN current chairperson of Government Relations Committee for the Connecticut Nurses Association. I am also a founding member of the National Alliance of Nurses for Healthy Environments and currently serve on the Steering Committee. I speak in support of: Raised Bill No.6722 AN ACT CONCERNING CONCUSSIONS IN YOUTH ATHELETES.

A concussion is a type of Traumatic Brain Injury or TBI, caused by a bump, blow, or jolt to the head that can change the way your brain normally works. Concussions can also occur from a blow to the body that causes the head to move rapidly back and forth. Even a "ding," "getting your bell rung," or what seems to be mild bump or blow to the head can be serious.

Concussions can occur in any sport or recreation activity. So, all coaches, parents, and athletes need to learn concussion signs and symptoms and what to do if a concussion occurs. Head injuries among youngsters playing sports, particularly basketball, appear to be on the rise. This is especially disturbing since adolescents and teens, with their still-developing

brains, are at higher risk for long-term developmental and cognitive problems after such injuries.

A study conducted by Nationwide Hospital in Ohio found the number of traumatic brain injuries (TBIs) increased by 70 percent among young basketball players from 1997 to 2007. At the same time, there was a drop in the number of other injuries, such as sprains, strains and lacerations.

The retrospective study, published in the Sept. 13, 2010, issue of Pediatrics, looked at 4.1 million basketball-related injuries in children and adolescents from ages 5 to 19 who were treated in emergency departments. Over the 11-year study period, the number of TBIs doubled for boys and tripled for girls. The study authors speculated that bigger, stronger players may account for the dramatic increase of TBIs among girls.

Another study, conducted at Rhode Island Hospital/Hasbro Children's Hospital, examined emergency department visits for sports-related concussions in all sports among young athletes. Using the National Electronic Injury Surveillance System and All Injury Program, they looked at half a million emergency department visits for concussions in children ages 8 to 19 from 2001 to 2005. About half of these concussions were sports related, and most were sustained by 8- to 13-year-olds.

The top five concussion-generating team sports were football, basketball, baseball, ice hockey and soccer. Football and basketball accounted for the majority, but that could be related to the increased numbers of participants, the authors noted.

The number of TBIs in young athletes may actually be greater than research had shown, the authors of the Ohio study note. They found that more than one-third of the players didn't recognize concussion symptoms or report them to trainers. "To address the problem of TBIs and to manage them effectively, education of coaches and athletes is vital."

At a recent Mayo Clinic hockey summit, participants proposed a total ban on contact at the head at all levels of hockey; mandatory education of coaches, parents, referees and physicians about how to recognize, treat and prevent concussions; and prohibiting athletes from returning to play until they are cleared by a doctor. The recommendations in the current literature are to 1). **Educate Coaches, Parents, and Athletes:** Inform and educate coaches, athletes, and their parents and guardians about concussion through training and/or a concussion information sheet, 2). **Remove Athlete from Play:** An athlete who is believed to have a concussion is to be removed from play right away 3). **Obtain Permission to Return to Play:** An athlete can only return to play or practice after at least 24 hours *and* with permission from a health care professional. (These action steps are based on recommendations presented in the International Concussion Consensus Statement.<sup>7</sup> First created in 2002 and most recently updated in 2008, the Consensus Statement was developed by experts in the field and includes the latest science available on

Based on the aforementioned information and in order to protect the young athletes' in our State we strongly urge the members of the Committee on Children to support Raised Bill No. 6722.

Thank you

Mary Jane M. Williams PhD., RN

Chair, Government Relation, Connecticut Nurses Association

Professor Emeritus Central Connecticut State University

Sources:

Map of Concussion in Sports Legislation. National Conference of State

Legislatures. <http://www.ncsl.org/issues-research/health/traumatic-brain-injury-legislation.aspx>.

McCrory, Meeuwisse, Johnston, Dvorak, Aubry, Molloy, Cantu. Consensus statement on concussion in sport – The 3rd International Conference on concussion in sport, held in Zurich, November 2008, *Journal of Clinical Neuroscience* 16 (2009) 755–763.

# **Concussions-The Role of the School Nurse**

## **Position Statement**



### **SUMMARY**

It is the position of the National Association of School Nurses that the registered professional school nurse (hereinafter referred to as school nurse) is an essential member of the team addressing concussions. As the school-based clinical professional on the team, the school nurse has the knowledge and skills to provide concussion prevention education to parents, students and staff; identify suspected concussions; and help guide the student's post-concussion graduated academic and activity re-entry process. The school nurse collaborates with the team of stakeholders including health care providers, school staff, athletic trainers, and parents.

### **HISTORY**

The number of school-age children who have sustained concussions increased over the past few years (Bakhos, Lockhart, Myers & Linakis, 2010). Each year, U.S. emergency departments treat an estimated 135,000 sports- and recreation-related traumatic brain injuries (TBIs), including concussions, among children ages 5 to 18 (Centers for Disease Control [CDC], 2007). While falls are the most common cause of these concussions in children, sports-related concussions in school-age children are rising at an increasing rate (Faul, Xu, Wald, & Coronado, 2010; Lincoln, et.al. 2011). Almost half a million emergency department visits for traumatic brain injuries (TBI) are made annually by children aged 0 to 14 years (Faul et al., 2010). This increase in concussions may be due in part to a greater awareness of the condition and its symptoms or increased rates (Lincoln et al., 2011). The actual incidence of concussions may be higher than is currently reported due to lack of standardization in reporting and underreporting (Guskiewicz, Weaver, Padua, & Garrett, 2010; Halstead, Walter & The Council on Sports Medicine and Fitness, 2010). A variety of concussion management guidelines are emerging. For example, the CDC (2009) has developed the Heads Up campaign for concussion prevention and management.

### **DESCRIPTION OF ISSUE**

Concussions are considered to be a mild form of a traumatic brain injury and the potential for their occurrence in children is greatest during activities where collisions can occur, such as during physical education (PE) class, playground time, or school-based sports activities (CDC, 2009). Recognition of a concussion and immediate assessment is critical in preventing further injury and for post-concussion management. Any force or blow to the head and/or symptoms of a concussion in a student or athlete should be immediately evaluated by either the school nurse or designated, trained school personnel. A consensus statement approved by the 3rd International Conference on Concussion states that, although most people recover quickly and fully from a concussion, the time needed is often slower among young children and teens (McCrory et al., 2009). During this recovery phase, the student may have an array of physical, mental, and emotional symptoms, which can impact the student in the school setting. Children with diagnosed concussions require significant cognitive rest and a graduated re-entry plan to pre-concussion activities as determined by the licensed health care provider.

As the student returns to school after a concussion, the school nurse has a significant role in supporting the student. The school nurse collaborates with the parents, school staff, special service providers, the health care professionals, and the student in providing accommodations as the student transitions back to school. A collaborative team approach with all stakeholders involved provides for the best management of the student's post-concussion (CDC, 2010c). The school nurse can initiate an accommodation plan/health care plan based on input from the health care professionals and school staff to provide the cognitive rest and support needed during

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recovery. Accommodations during the recovery process may include modifying or limiting school activities (Halstead et al., 2010; Majerske et al., 2008; CDC, 2010c). The accommodations may include allowing rest during the school day, postponing testing until symptom-free, pacing homework or assignments, limited physical exertion, and physical accommodations, as needed. The school nurse can provide on-going monitoring of post-concussion symptoms and act as a liaison with stakeholders. For students who have persistent symptoms, the school nurse can work with the provider and family to facilitate a Section 504 Plan and/or a referral for special education evaluation as needed.

Students are at a risk for increased emotional symptoms post-concussion during the healing process (Halstead, et al., 2010). Furthermore, when cognitive deficits persist, there is an increased risk of psychological symptoms including depression (Ruttan, Martin, Liu, Colella, & Green, 2008). Recognizing the potential for these emotional symptoms in recovering students, the school nurse can provide encouragement and information for the student and school staff that brain healing is a paced process and cannot be speeded as the brain needs time to rest and repair itself.

#### **RATIONALE**

It is imperative that appropriate preventative guidelines and post-traumatic procedures are followed. Individualized, conservative management is recommended in treating children's and teens' post-concussion (Halstead et al., 2010; Majerske et al., 2008; CDC, 2010c). Proper management with a suspected concussion includes observation for symptoms, assessment for symptoms, notification to parents/guardians, referral to a health care professional if symptoms are noted, and if no symptoms are present - instructions to parents or school staff for continued observation (CDC, 2010a). As the school health professional, the school nurse provides advocacy for the prevention of concussions by advocating for safe environments; education of students, parents and staff on concussions; and tracking students with concussions (CDC, 2010b).

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