# **RESEARCH MATTERS**

## **CONCUSSION SYMPTOMS AND ACCOMMODATIONS**

#### **ABOUT THIS ARTICLE**

Each year, an estimated 1.1 million to 1.9 million children in the U.S. sustain sports or recreation-related concussions (Bryan, Rowhani-Rahbar, Comstock, & Rivara, 2016). While most students recover within 28 days, prolonged symptoms are common, and inconsistent return-to-learn (RTL) practices often hinder academic success. Concussion symptoms, including physical, cognitive, and emotional challenges, affect participation and performance, with a history of concussions linked to lower academic outcomes. Formal RTL programs, which provide structured accommodations and symptom-based support, are associated with better recovery outcomes.. A study of evidence-based RTL programs demonstrated high feasibility and acceptability, encouraging further research to confirm its effectiveness in supporting students with concussion symptoms through tailored accommodations.

#### **METHODS**

This study evaluated the implementation and outcomes of a CDC-funded, Return to Learn (RTL) program for students with concussions across 13 Washington state high schools during the 2021–2022 academic year. RTL champions conducted weekly check-ins used symptom checklists to assess severity across physical, cognitive, sleep, and emotional domains and recommended tailored academic accommodations.

#### **KEY FINDINGS**

Sixty-two students reported an average of 11.2 symptoms in the first week, with physical symptoms being the most common. Most students required accommodation for 1–2 weeks, while a smaller group with more severe symptoms needed support for up to 4 weeks. Those needing support for 3–4 weeks had higher initial symptom severity. The most common accommodations included screen time limits, rest breaks, and removal from physical education, with symptoms in the physical and sleep domains receiving the most frequent support.





Findings highlight the importance of individualized accommodations and consistent monitoring to facilitate effective recovery and academic reintegration for students with concussions.

#### **STUDY IMPLICATIONS**

This study highlights the diverse symptoms experienced by students with concussions and emphasizes the importance of providing tailored academic accommodations through a structured Return to Learn (RTL) program. Implementing RTL programs in high schools can improve the delivery of individualized support and help identify students who may require longer-term care. The findings suggest that standardized RTL programs could address disparities in concussion care by ensuring consistent guidelines and practices across schools. The findings suggest that an evidence-based RTL program effectively addresses students' academic needs after a concussion and helps identify those requiring longer-term support.

### **SOURCE ARTICLE**

Philipson, E. B., Avery, A., Takagi-Stewart, J., Qiu, Q., Jinguji, T., Coppel, D. B., & Vavilala, M. S. (2024). Student concussion symptoms and tailored accommodations during use of a return to learn program in 13 public high schools. *PM&R*. https://doi.org/10.1002/pmrj.13282

#### REFERENCE

Bryan, M. A., Rowhani-Rahbar, A., Comstock, R. D., & Rivara, F. (2016). Sports-and recreation-related concussions in US youth. Pediatrics, 138(1), e20154635. <a href="https://doi.org/10.1542/peds.2015-4635">https://doi.org/10.1542/peds.2015-4635</a>



