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3 Title: Depression Screening in Adolescents after Sport-Related Concussion

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5 Introduced by: Mara Darian, for the Medical Student Section

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7 Original Author: Grace Peterson

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9 Referred To: Reference Committee D

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11 House Action: **APPROVED**

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14 Whereas, the estimated lifetime prevalence of concussion in middle school and high school  
15 students is 20 percent, and

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17 Whereas, the most common psychological sequelae diagnosed after concussion are  
18 depression and anxiety, and

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20 Whereas, the lifetime prevalence of depression in adolescents is estimated to be 11 percent,  
21 and

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23 Whereas, multiple studies have demonstrated that approximately 40 percent of children  
24 and adolescents with depressive disorders do not receive treatment, and

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26 Whereas, the sequelae of depression during childhood and adolescence include academic  
27 difficulties and school avoidance, social withdrawal, and dysfunction in interpersonal relationships,  
28 and

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30 Whereas, athletes who have had previous concussions are shown to have higher levels of  
31 depression than athletes who have not been concussed, and

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33 Whereas, there is evidence that former athletes have higher rates of depression and  
34 cognitive deficits when they have had multiple prior concussions, or with younger age of first  
35 participation in organized sports, and

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37 Whereas, the Michigan High School Athletic Association protocol for return to activity after  
38 concussion states that students may not return to activity the same day as the injury and must be  
39 examined and cleared by a physician, physician assistant, or nurse practitioner before they can  
40 return to activity, and

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42 Whereas, while individual schools, districts, and leagues may have more stringent inactivity  
43 and screening requirements before a student athlete can return to activity after a concussion, there  
44 are no reported recommendations for depression screening in athletes following concussion, and

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46 Whereas, the Patient Health Questionnaire Modified for Teens (PHQ-9) is a rating scale used  
47 for depression screening in adolescents age 12-18 and its use is supported by the American  
48 Academy of Child and Adolescent Psychiatry; therefore be it

50 RESOLVED: That MSMS supports the screening of student athletes participating in  
51 Michigan High School Athletic Association sports for depression after concussion by physicians,  
52 physician assistants, or nurse practitioners using a screening tool such as the Patient Health  
53 Questionnaire Modified for Teens; and be it further

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55 RESOLVED: That MSMS encourage the Michigan High School Athletic Association to  
56 include depression screening after concussion in the return to activity protocol.

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59 WAYS AND MEANS COMMITTEE FISCAL NOTE: Resolutions only requesting new or revised MSMS  
60 or AMA policy - \$500

**Relevant MSMS Policy:**

None

**Relevant AMA Policy:**

**Reduction of Sports-Related Injury and Concussion H-470.954**

1. Our AMA will: (a) work with appropriate agencies and organizations to promote awareness of programs to reduce concussion and other sports-related injuries across the lifespan; and (b) promote awareness that even mild cases of traumatic brain injury may have serious and prolonged consequences.
2. Our AMA supports the adoption of evidence-based, age-specific guidelines on the evaluation and management of concussion in all athletes for use by physicians, other health professionals, and athletic organizations.
3. Our AMA will work with appropriate state and specialty medical societies to enhance opportunities for continuing education regarding professional guidelines and other clinical resources to enhance the ability of physicians to prevent, diagnose, and manage concussions and other sports-related injuries.
4. Our AMA urges appropriate agencies and organizations to support research to: (a) assess the short- and long-term cognitive, emotional, behavioral, neurobiological, and neuropathological consequences of concussions and repetitive head impacts over the life span; (b) identify determinants of concussion and other sports-related injuries in pediatric and adult athletes, including how injury thresholds are modified by the number of and time interval between head impacts and concussions; (c) develop and evaluate effective risk reduction measures to prevent or reduce sports-related injuries and concussions and their sequelae across the lifespan; and (d) develop objective biomarkers to improve the identification, management, and prognosis of athletes suffering from concussion to reduce the dependence on self-reporting and inform evidence-based, age-specific guidelines for these patients.
5. Our AMA supports research into the detection, causes, and prevention of injuries along the continuum from subconcussive head impacts to conditions such as chronic traumatic encephalopathy (CTE).

**Reducing the Risk of Concussion and Other Injuries in Youth Sports H-470.959**

1. Our American Medical Association promotes the adoption of requirements that athletes participating in school or other organized youth sports and who are suspected by a coach, trainer, administrator, or other individual responsible for the health and well-being of athletes of having sustained a concussion be removed immediately from the activity in which they are engaged and not return to competitive play, practice, or other sports-related activity without the written approval of a physician (MD or DO) or a designated member of the physician-led care team who has been properly trained in the evaluation and management of concussion. When evaluating individuals for return-to-play, physicians (MD or DO) or the designated member of the physician-led care team should be mindful of the potential for other occult injuries.
2. Our AMA encourages physicians to: (a) assess the developmental readiness and medical suitability of children and adolescents to participate in organized sports and assist in matching a child's physical, social, and cognitive maturity with appropriate sports activities; (b) counsel young patients and their parents or caregivers about the risks and potential consequences of sports-related injuries, including concussion and

recurrent concussions; (c) assist in state and local efforts to evaluate, implement, and promote measures to prevent or reduce the consequences of concussions, repetitive head impacts, and other injuries in youth sports; and (d) support preseason testing to collect baseline data for each individual.

3. Our AMA will work with interested agencies and organizations to: (a) identify harmful practices in the sports training of children and adolescents; (b) support the establishment of appropriate health standards for sports training of children and adolescents; (c) promote evidenced-based educational efforts to improve knowledge and understanding of concussion and other sport injuries among youth athletes, their parents, coaches, sports officials, school personnel, health professionals, and athletic trainers; and (d) encourage further research to determine the most effective educational tools for the prevention and management of pediatric/adolescent concussions.

4. Our AMA supports (a) requiring states to develop and revise as necessary, evidenced-based concussion information sheets that include the following information: (1) current best practices in the prevention of concussions, (2) the signs and symptoms of concussions, (3) the short-and long-term impact of mild, moderate, and severe head injuries, and (4) the procedures for allowing a student athlete to return to athletic activity; and (b) requiring parents/guardians and students to sign concussion information sheets on an annual basis as a condition of their participation in sports.

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