



# Strengthening Michigan's Concussion Law

## AREAS FOR IMPROVEMENT

### Consequences for Violating Michigan Sport Concussion Law

Develop objective penalties for Michigan Sport Concussion Law violations for coaches, employees, volunteers, and other adults who supervise youth sports:

1st violation: Additional concussion recognition and management education

2nd violation: Suspension from all sports until appearance before the governing board

3rd violation: Suspension of all sport affiliations for a calendar year

### Increase Funding to Improve Healthcare Accessibility *(Michigan Department of Education, School Aid Budget)*

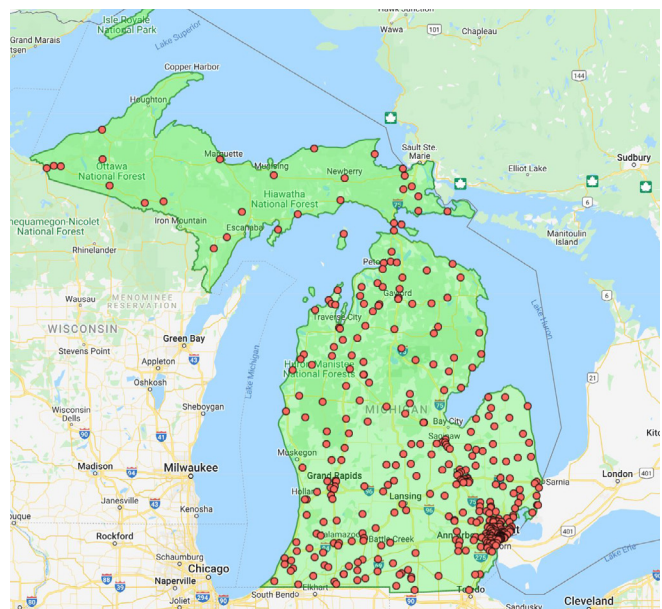
Athletic trainers play a critical role in concussion identification and management as the frontline healthcare providers for high school sporting events. Therefore, the University of Michigan Concussion Center recommends allocating state funding to improve the accessibility of athletic trainers at all Michigan high schools.

### Measuring Impact

Reporting increases through the Michigan High School Athletic Association (MHSAA) will demonstrate concussed athletes are being identified by stakeholders and/or medical providers.

## BACKGROUND

- The CDC describes concussions as a 'silent epidemic.'
- ~4 million Americans sustain a concussion annually during sport and recreation activities.
- Youth and high school athletes are at greatest risk.
- Cognitive impairments often negatively affect school and work performance.
- Half of Michigan high schools do not have onsite medical care to identify and remove concussed athletes from sport participation (Figure).
- ~50% of concussions go unreported<sup>1</sup> and receive no medical care.
- Lack of medical care increase recovery time<sup>2</sup> and risk for more serious brain injury (i.e., second impact syndrome).



Dots represent the half of Michigan high schools offering athletics without on-site medical care for sporting events. [Data courtesy of the Corey Stringer Institute at the University of Connecticut.]

Medically focused state legislation has passed in all 50 states, beginning with Washington state in 2009.

Michigan became the 39th state to enact legislation (2013), amended in 2017.

*Key Components of the Michigan Sport Concussion Law (333.9155 & 333.9156)*

- Parents/guardians and youth athletes must receive concussion educational materials and receipt.
- Coaches, employees, volunteers, and other adults must participate in the concussion awareness training program once every 3 years.
- Youth athletes must be removed from participation if a concussion is suspected.
- Youth athletes who are suspected to have sustained a concussion may not return to physical activity until they receive written clearance from an appropriate healthcare professional.

The Michigan Sport Concussion Law is an excellent first step in protecting the health and safety of our youth athletes, but consequences for violation are lacking and should be added immediately.

The inclusion of these violations will aid in: 1) identifying areas for improvement across all stakeholders (high school administrators, teachers, coaches, parents/guardians, and students), and 2) holding stakeholders accountable.

## BENCHMARKING

### Oklahoma

1st violation: Additional concussion recognition and management education.

2nd violation: Suspension from the sport until appearance before the governing board.

**Arkansas:** Undefined penalties for coaches who fail to meet training requirements.

## REFERENCES

1. McCrea M, Hammeke T, Olsen G, Leo P, Guskiewicz K. Unreported concussion in high school football players: implications for prevention. Clin J Sport Med 2004;14(1):13-7.
2. Asken BM, Bauer RM, Guskiewicz KM, et al. Immediate Removal From Activity After Sport-Related Concussion Is Associated With Shorter Clinical Recovery and Less Severe Symptoms in Collegiate Student-Athletes. The American journal of sports medicine 2018;46(6):1465-1474.

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*The University of Michigan Concussion Center maximizes societal and individual health through the relentless pursuit of concussion knowledge. The Concussion Center maximizes its impact by facilitating the development and sharing of groundbreaking ideas that translate laboratory, clinic, and community observations into interventions that reduce concussion risk and improve outcomes in those affected by the injury.*

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