

## Preliminary Results from a Survey of Athletic Directors

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### INTRODUCTION



In 2010, Massachusetts enacted legislation with regulations for the identification, treatment, and return-to-activity targeting public and private middle and high school student athletes with concussions (mTBI). School Nurses (SNs), Licensed Athletic Trainers (ATs) and Athletic Directors (ADs) play pivotal roles responding to students with head injury and managing their recovery.

To estimate compliance with the regulations, new questions were added to the Youth Health Survey about students' concussion symptoms and consequences (Figures 1 & 2).

### OBJECTIVE

To assess implementation of the law, the Massachusetts Department of Public Health (MDPH) has conducted focus groups and surveys with SNs, ATs, and ADs. The following presents the preliminary results of the survey conducted with ADs.

### METHODS

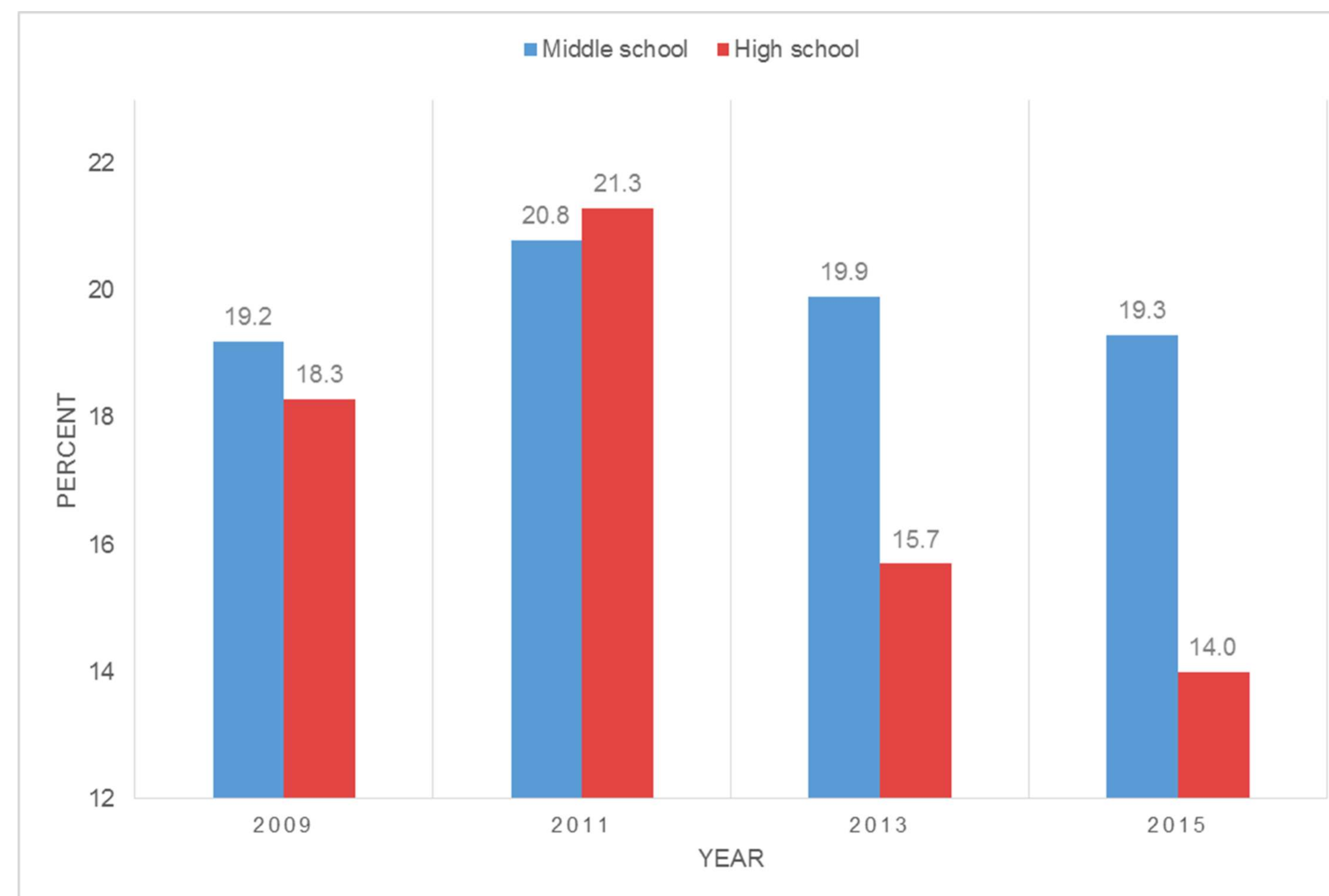
Focus groups with ADs were conducted in March of 2018. Based on the results of these groups, a survey instrument was developed with participation from investigators at the Boston Medical Center Injury Prevention Center, brain injury researchers at the Boston University School of Medicine, ADs, and injury prevention experts at the MA Department of Public Health.

In November 2018, the link to the electronic Qualtrics survey was sent to all AD members of the MA Interscholastic Athletic Association, the MA ADs professional organization (n = 377).

### RESULTS

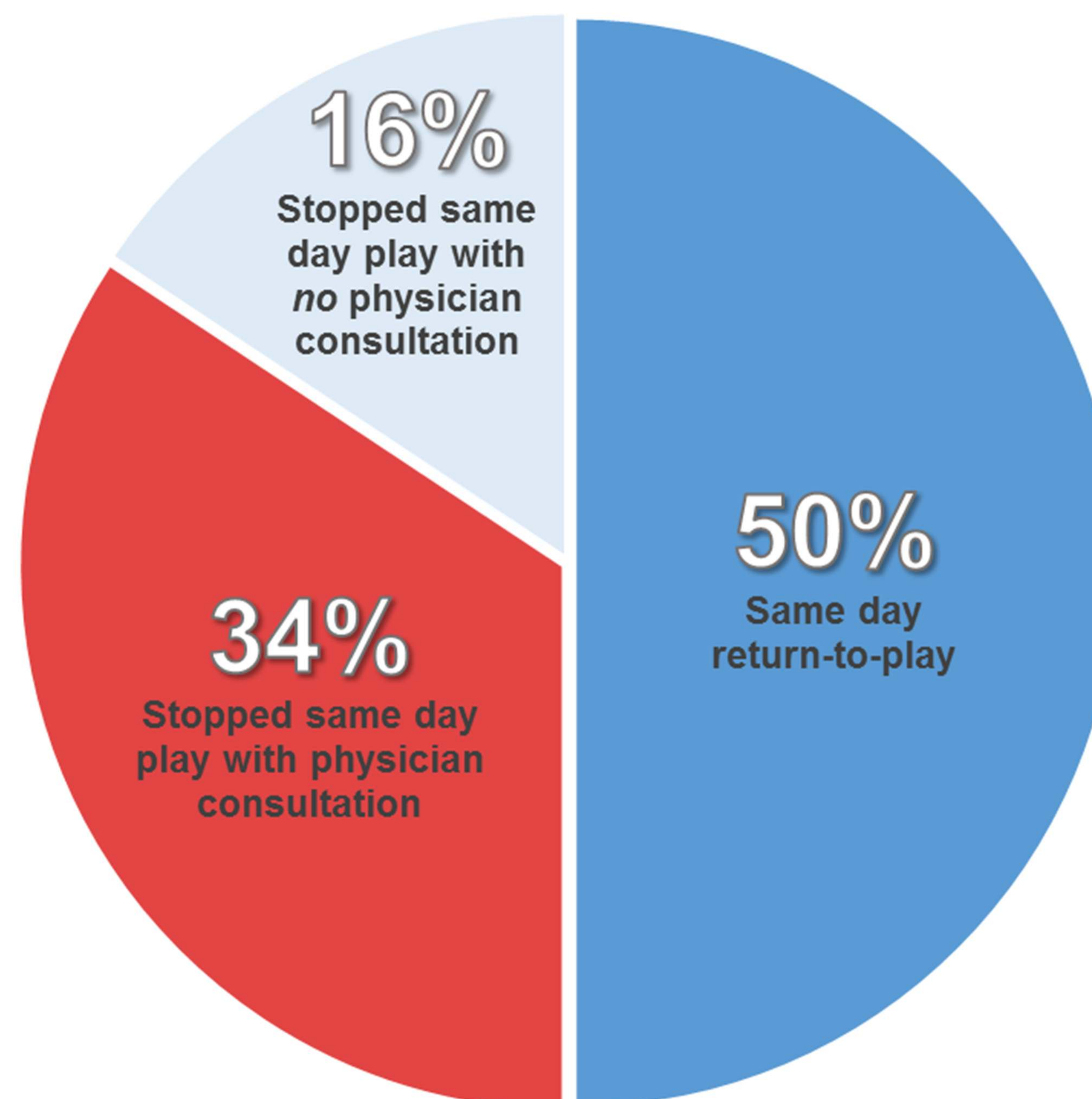
- 125/377 (33%) responses have been received to date
- Preliminary analyses indicate that: the mean rating on a 0-10 scale on importance of the law for student safety was 9.15 (with 10 being "very important")

Figure 1: Students who experienced concussion symptoms over twelve-month periods



Source: Massachusetts Youth Health Survey 2009-2015

Figure 2: Same day disposition of students who reported experiencing concussion symptoms in 2015, 19.3% middle school, 14.0% high school (e.g. nausea, vomiting, headaches, memory problems, being "knocked out", blurred vision)



Source: Massachusetts Youth Health Survey 2009-2015

### RESULTS CONT'D

- The mean rating on a 0-10 scale of the law's impact on workload was 1.4 (with 0 being "not at all")
- 86% of respondents reported that their school had a concussion management team consisting of the ADs, ATs, SNs, and guidance counselors (GCs)
- 75% of ADs reported that they were informed "always" (26%) or "often" (49%) when a student athlete experienced a mTBI in a venue other than extracurricular sports
- 97% endorsed that "all" or "most" of SNs were "very knowledgeable" about the law and regulations
- 33% endorsed that "all" or "most" of teachers were "very knowledgeable" about the law and regulations
- 60% endorsed that "all" or "most" of GCs were "very knowledgeable" about the law and regulations
- 80% endorsed that "all" or "most" of the students' physicians were "very knowledgeable" about the law and regulations
- 62% endorsed that "all" or "most" of students' parents were "very knowledgeable" about the law and regulations
- 67% endorsed that student athletes with concussion "often" (6%) or "sometimes" (61%) misrepresent their mTBI symptoms to accelerate return-to-play
- 69% perceived that student athletes with concussion "often" (13%) or "sometimes" (56%) misrepresent their mTBI symptoms to avoid academics

### LIMITATIONS

- Participants may not have been representative of all Massachusetts ADs.
- Response data is in preliminary phase, currently at a 33% response rate

### CONCLUSIONS

ADs perceive the sports concussion legislation as very important to student safety and positively assess implementation of the law and associated regulations. More effort is needed to increase understanding of the law among some stakeholders, including teachers, parents, and physicians.