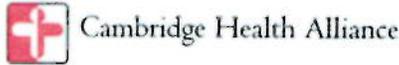


**CAMBRIDGE PUBLIC HEALTH DEPARTMENT**



**A REGULATION TO PREVENT AND MANAGE CONCUSSIONS IN YOUTH ACTIVITIES AT CITY OF CAMBRIDGE FACILITIES**

**WHEREAS**, Concussions are one of the most commonly reported injuries in children and adolescents participating in sports and recreational activities; and

**WHEREAS**, The Centers for Disease Control and Prevention estimates that as many as 3.9 million sports-related and recreation-related concussions occur in the United States each year; and

**WHEREAS**, In June 2011, the Massachusetts Department of Public Health promulgated regulations governing the training of school staff in the identification, disclosure, and medical clearance for the return to play of children to promote the health and safety of students engaged in extracurricular sports; and

**WHEREAS**, The risk of catastrophic injuries and death are significant when a concussion or a head injury is not properly evaluated and managed; and

**WHEREAS**, Research indicates that young, developing brains take longer to heal, requiring that treatment must be tailored for specific ages; and

**WHEREAS**, The Cambridge Public Health Department is committed to creating a safe environment for all youth participating in athletic activities and is committed to working with students, coaches, leagues, and families to develop a comprehensive approach to the prevention and management of sports-related head injuries within the City of Cambridge.

**NOW THEREFORE**, The Commissioner of Public Health for the City of Cambridge (“Commissioner”) enacts the following regulation to protect the health of Cambridge residents, workers, students, and visitors.

\* \* \* \* \*

**Section 1.00 Purpose**

The purpose of this regulation is to protect the health of youth by preventing and managing concussions that may occur in any Youth Athletic Activity that takes place at any facility owned by the City of Cambridge.

**Section 2.00 Authority**

This regulation is adopted under authority of M.G.L. c. 111, §31, Chapter 147 of the Acts of 1996 (also codified as M.G.L. c. 111 App. §3-8), Chapter 201 of the Acts of 1976, and pursuant to any other authority conferred by state or local laws on the Commissioner.



## **A REGULATION TO PREVENT AND MANAGE CONCUSSIONS IN YOUTH ACTIVITIES AT CITY OF CAMBRIDGE FACILITIES**

### **Section 3.00 Definitions**

Coach shall mean a coach, assistant coach, certified athletic trainer, trainer, team physician, nurse, or athletic director, whether in a volunteer or for pay capacity, of a Youth Athletic Program.

Concussion means a complex disturbance in brain function, due to direct or indirect trauma to the head, related to neurometabolic dysfunction, rather than structural injury.

Department shall mean the Massachusetts Department of Public Health.

Head Injury shall mean a direct blow to the head or indirect trauma to the head including a Concussion or a Traumatic Brain Injury. Scalp or facial laceration alone shall not be included in this definition.

Parent shall mean the parent or guardian or foster parent of a Youth Athlete.

Physician shall mean a duly licensed doctor of medicine or osteopathy.

Second Impact Syndrome shall mean a potentially lethal condition that can occur when a person sustains a Head Injury prior to complete healing of a Traumatic Brain Injury.

Traumatic Brain Injury ("TBI") shall mean a complex pathophysiological process affecting the brain, induced by traumatic biomechanical forces. TBI may be caused either by a direct blow to the head, face, neck or elsewhere on the body with an impulsive force transmitted to the head. TBI includes, but is not limited to, a Concussion.

Youth Athlete shall mean a minor (those being under the age of eighteen) who prepares for or participates in a Youth Athletic Activity.

Youth Athletic Activity shall mean those sports and athletic activities that are more fully set forth in the definition of Extracurricular Athletic Activities in 105 CMR 201.005 of the Department's Regulations as it may be amended, provided however, that the provisions of this regulation shall only be applicable to Youth Athletic Programs as defined in this Section.

Youth Athletic Program shall mean any youth sports program organized or operated for athletic activities, competition or instruction for participants under the age of eighteen.

### **Section 4.00 Concussion Prevention & Training**

1. All Youth Athletic Programs shall ensure that all of its Coaches annually complete a head injury training program approved by the Department as found on the Department's website. Youth Athletic Program Coaches must, in addition to online training programs approved by the Department, participate in any additional training required by the Commissioner for the administration of this regulation. In addition to the training required by this regulation and any guidelines issued by the Commissioner, Youth

## **A REGULATION TO PREVENT AND MANAGE CONCUSSIONS IN YOUTH ACTIVITIES AT CITY OF CAMBRIDGE FACILITIES**

Athletic Program Coaches may be required to participate in live training programs that provide training in the recognition, management, response, and prevention of Concussions and other sports-related Head Injuries.

2. Each Youth Athletic Program shall maintain a record of completion of annual training for all persons required to complete any and all training required by this regulation.

### **Section 5.00 Concussion Management**

1. A Youth Athlete who sustains a Concussion or Head Injury or suspected Concussion or Head Injury, or exhibits signs and/or symptoms of a Concussion or Head Injury, or loses consciousness even briefly, shall be immediately removed from participation in the Youth Athletic Activity by the Coach.
  - a. The Youth Athlete's Coach shall
    - 1) Immediately notify the Parent of the Youth Athlete that the Youth Athlete has been removed from participation in the Youth Athletic Activity for a known or suspected Concussion or Head Injury;
    - 2) Notify the Commissioner of the same no later than seventy-two (72) hours after any such incident; and
    - 3) Send written notice to the Parent in a form approved by the Commissioner advising the Parent to notify the Youth Athlete's school and any other Youth Athletic Program that the Youth Athlete participates in that a Youth Athlete has been removed from participation in a Youth Athletic Activity for a known or suspected Concussion or Head Injury.
2. A Youth Athlete who has been removed from participation in a Youth Athletic Activity for the reasons stated above may not return to participation in the Youth Athletic Activity until the Youth Athlete receives appropriate medical clearance as required by guidelines promulgated by the Commissioner.

### **Section 6.00 Permitting Requirements**

Before the first permitting or use of a facility owned by the City of Cambridge and annually thereafter, any Youth Athletic Program must certify on a form that the completed training provided to the coaches has been approved by the Commissioner.

### **Section 7.00 Administration**

The Commissioner or his or her designee shall be the chief enforcement officer of this regulation and shall have the authority to issue guidelines to administer and promote the purposes of this regulation which includes publicly disseminating information about the nature and risk of Concussions and other sports-related Head Injuries; regulating the prevention and management

## **A REGULATION TO PREVENT AND MANAGE CONCUSSIONS IN YOUTH ACTIVITIES AT CITY OF CAMBRIDGE FACILITIES**

of such injuries; regulating Head Injury training requirements and regulating the criteria for removal from and return to physical participation in a Youth Athletic Activity; or any other matter the Commissioner determines will promote the purposes of this regulation.

### **Section 8.00 Exemption**

The Commissioner, in his or her sole discretion, may exempt a Youth Athletic Program from the requirements of this regulation upon a finding by the Commissioner that the Youth Athletic Program is governed by a policy, program or law mandating substantially equivalent requirements as found in this regulation.

### **Section 9.00 Violations**

1. **Civil Penalty.**  
Any Coach who violates this regulation may be subject to a civil fine of up to \$300.00 pursuant to the City of Cambridge's Noncriminal Disposition of Violations Ordinance found at Section 1.24.030 of the Cambridge City Code. Each day's violation shall constitute a separate offense.
2. Should any Youth Athletic Program be found in noncompliance with any of the provisions of this regulation, such Youth Athletic Program may be suspended from using any facilities owned by the City of Cambridge for Youth Athletic Activities for a period of up to thirty (30) days or until such violation is cured, whichever is sooner.

### **Section 10.00 Enforcement**

1. Authority to enforce this regulation shall be held by the Commissioner, or his or her designees.
2. Any violation of this regulation may be enforced by the Commissioner, or his or her designees, in the manner provided in M.G.L. c. 111, §187.

### **Section 11.00 Severability**

If any provision, clause, sentence, paragraph or word of this regulation or the application thereof to any person, entity or circumstances shall be held invalid, such invalidity shall not affect the other provisions of this article which can be given effect without the invalid provisions or application and to this end the provisions of this regulation are declared severable.

### **Section 12.00 Effective Date**

This regulation shall take effect on September 1, 2015.

*This regulation was promulgated by the Commissioner of Public Health for the City of Cambridge on April 9, 2015.*

ATTACHMENT B



**SLI**



TM

**SPORTS LEGACY INSTITUTE**

*Solving the concussion crisis*

# SLI Background

CONCUSSION  
EDUCATION



Educate tens of thousands of stakeholders about concussions and preventing brain trauma

SPORTS  
POLICY



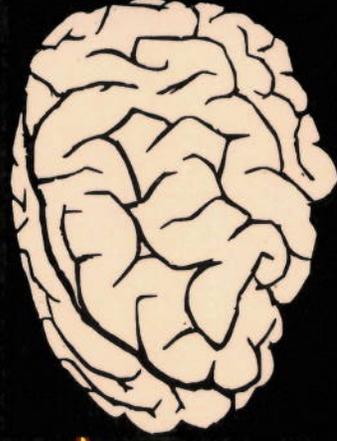
Champion policy initiatives geared at minimizing preventable brain trauma

CTE  
RESEARCH



Co-founded the world's first and largest CTE brain bank

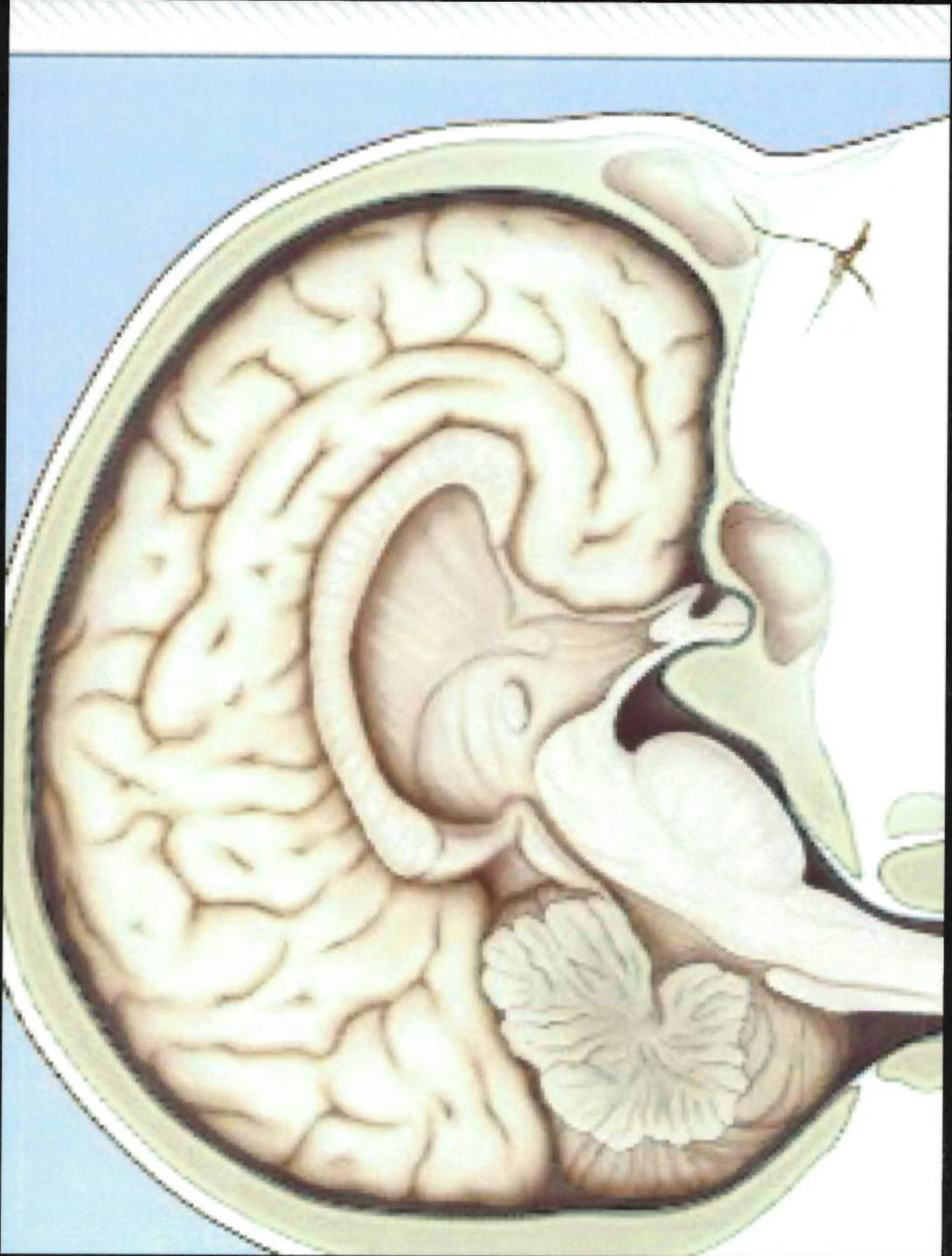
# What is a concussion?



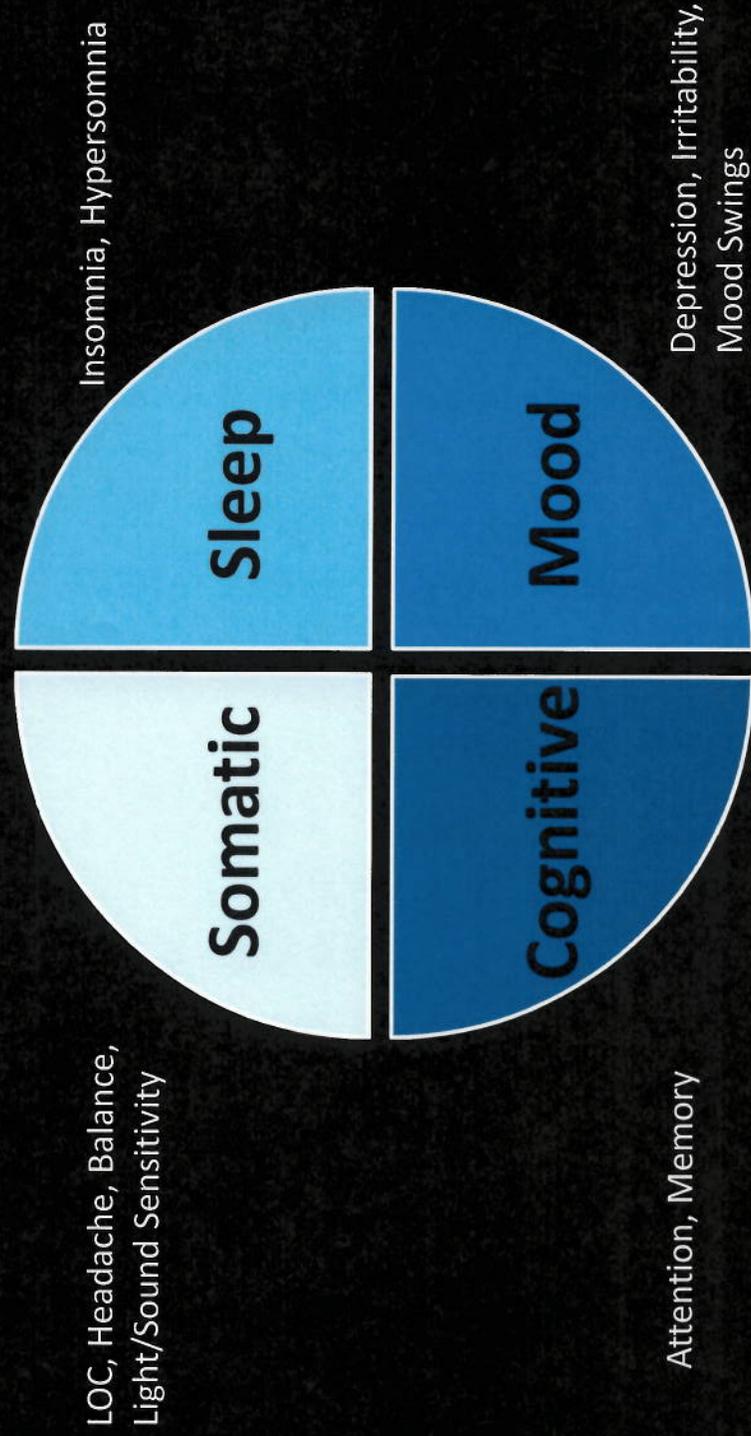
Applied to the brain



Resulting in symptoms



# Concussion Symptoms



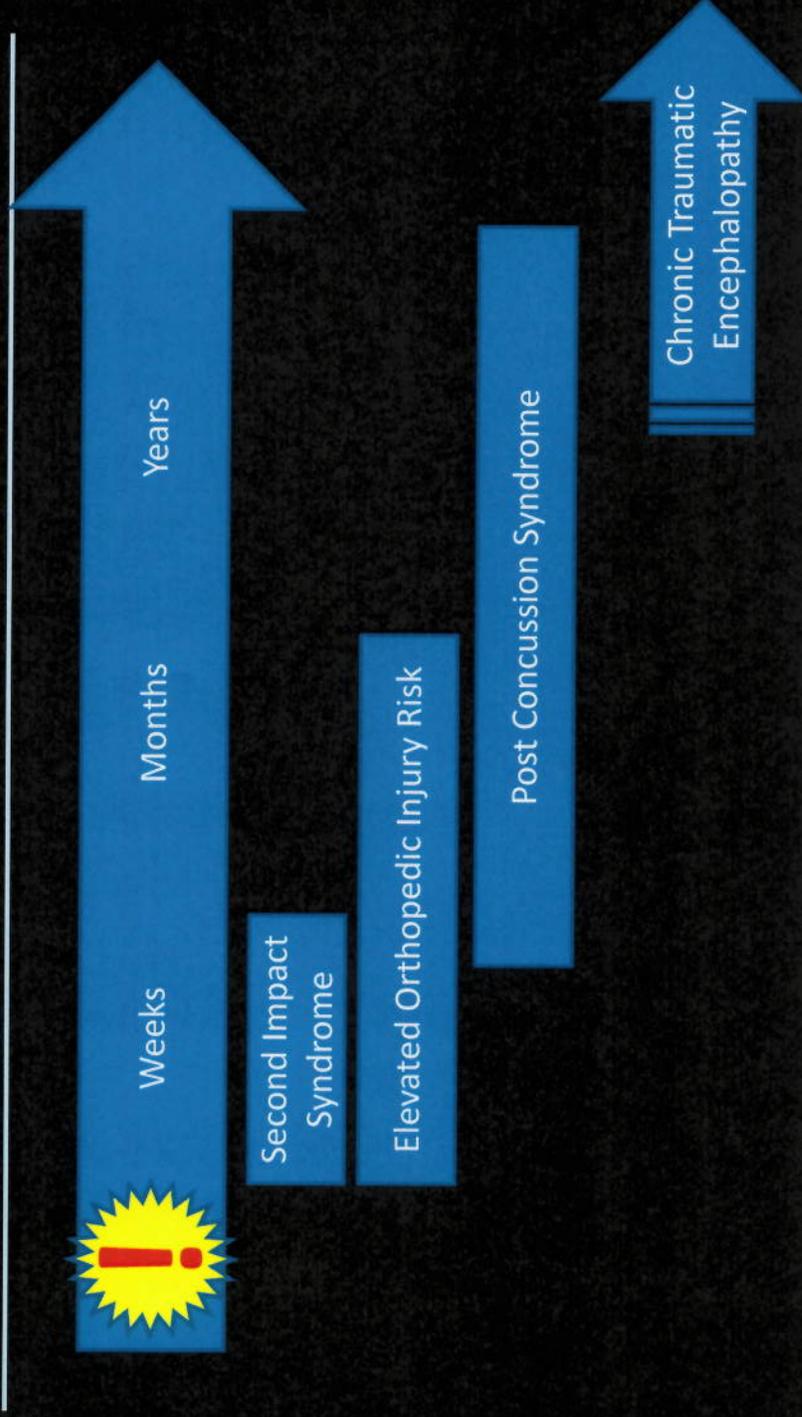
## Concussion Recognition

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- Study of 731 Division 1 FCS football players
- Questions:
  - How many concussions did you have last season?
  - How many additional concussions did you think you had but did not report?
  - How many dings or bell-ringers did you have?

1 6 21

# Concussion Response

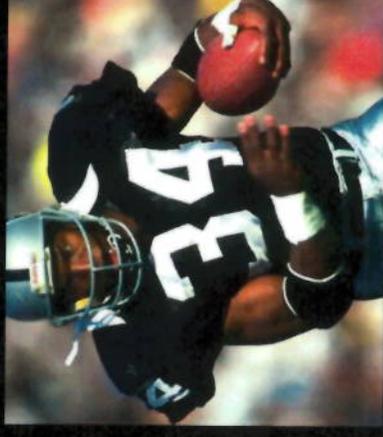


# Children vs. Adults

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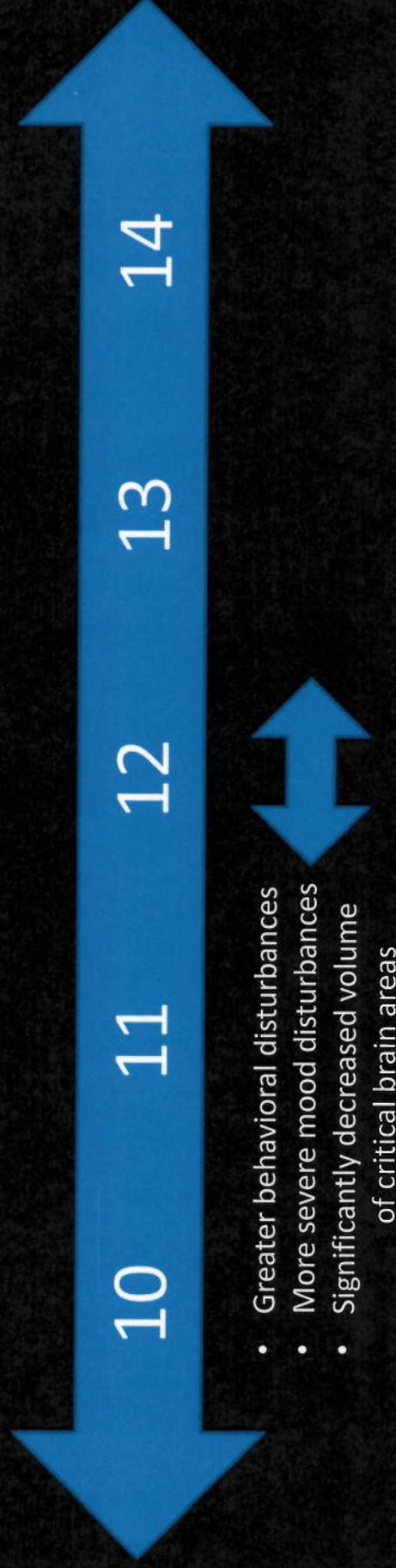
Younger athletes are biologically and social disadvantaged regarding concussion mechanics and recovery

1. Brains that are still developing – lack of myelination
2. Brains that are more sensitive to the excitotoxic shock of concussion



## Age of first exposure

- A study of former NFL players investigated the age at which players began playing contact football



Stamm et al, J Neurotrauma (2015)  
Stamm et al, Neurology (2015)  
Bourlas et al, submitted.

# Children vs. Adults

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Younger athletes are biologically and social disadvantaged regarding concussion mechanics and recovery

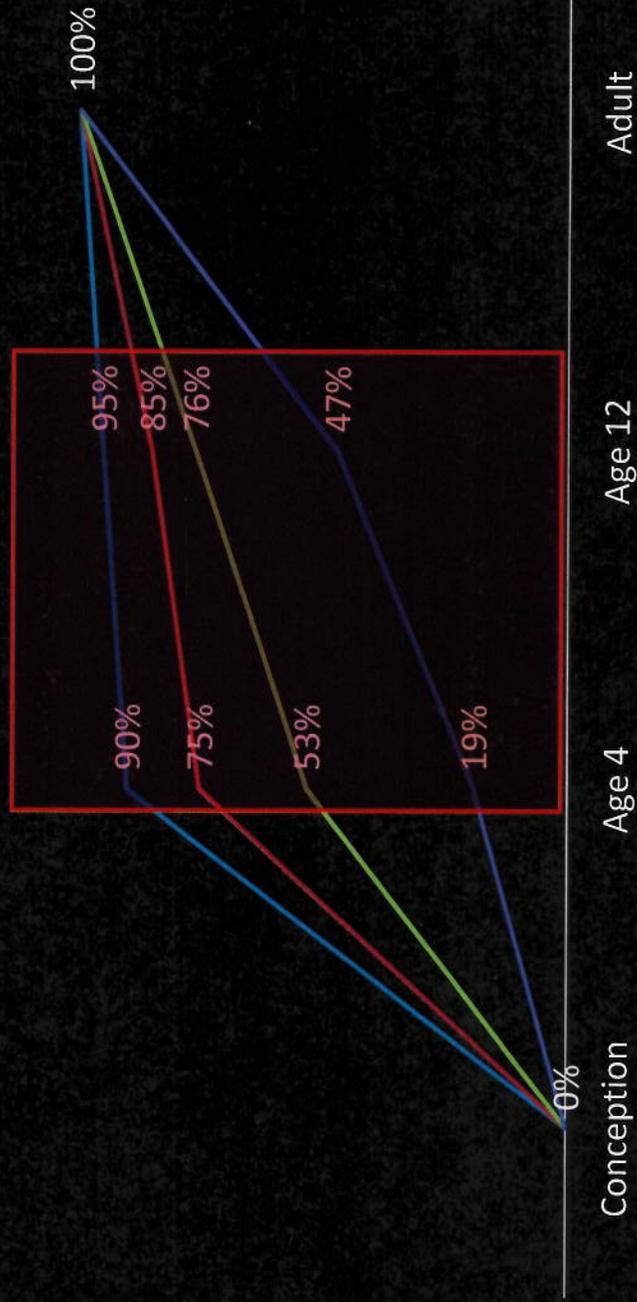
1. Brains that are still developing – lack of myelination
2. Brains that are more sensitive to the excitotoxic shock of concussion
3. Poor head/body ratio – human bobbleheads



# Pediatric Biomechanics

**Growth Chart**

— Head — Neck — Height — Weight



Source: Snell Foundation, UMTRI

# Children vs. Adults

Younger athletes are biologically and social disadvantaged regarding concussion mechanics and recovery

## Consider that children have:

1. Brains that are still developing – lack of myelination
2. Brains that are more sensitive to the excitotoxic shock of concussion
3. Poor head/body ratio – human bobbleheads
4. Poor equipment
5. Poor access to medical resources
6. Inability to understand concussion or explain injuries
7. Coaches with various levels of training



# Increased education = Increased identification

- Athletic trainers identify 8 times more concussions than no trained staff

LaBella et al, AAP (2012)

- Doctors on the sidelines identify 7 times more concussions than Athletic Trainers alone

Echlin et al, Neurology Focus (2012)

- Coach education is a cost effective way to increase medical infrastructure, and research continues to investigate the most effective methods

Rivara et al, Am J Sports Med (2014)

## Notification for parents

- Suggestion- this should include basic educational materials to inform them what to expect/look out for.
  - CDC Fact sheet
  - Customized one pager

## Summary

- Concussions pose serious risk to the athlete
- We must expect that we miss a significant portion of damage occurring
- Youth athletes are particularly disadvantaged from both a biological and social perspective
- Educating coaches and other caretakers is critical to proper injury prevention and management

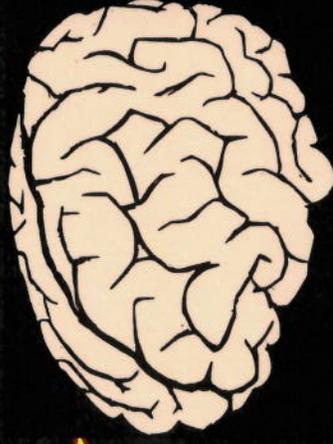
# Concussions in Soccer

- Concussion rate in soccer third highest, behind Football and Lacrosse  
Marshall et al, Injury Epidemiology (2015)
- Heading accounts for ~30% of concussions in soccer, making it the single riskiest behavior in the sport

Comstock et al, JAMA Pediatrics (2015)

O'Kane et al, JAMA Pediatrics (2014)

# What is a concussion?



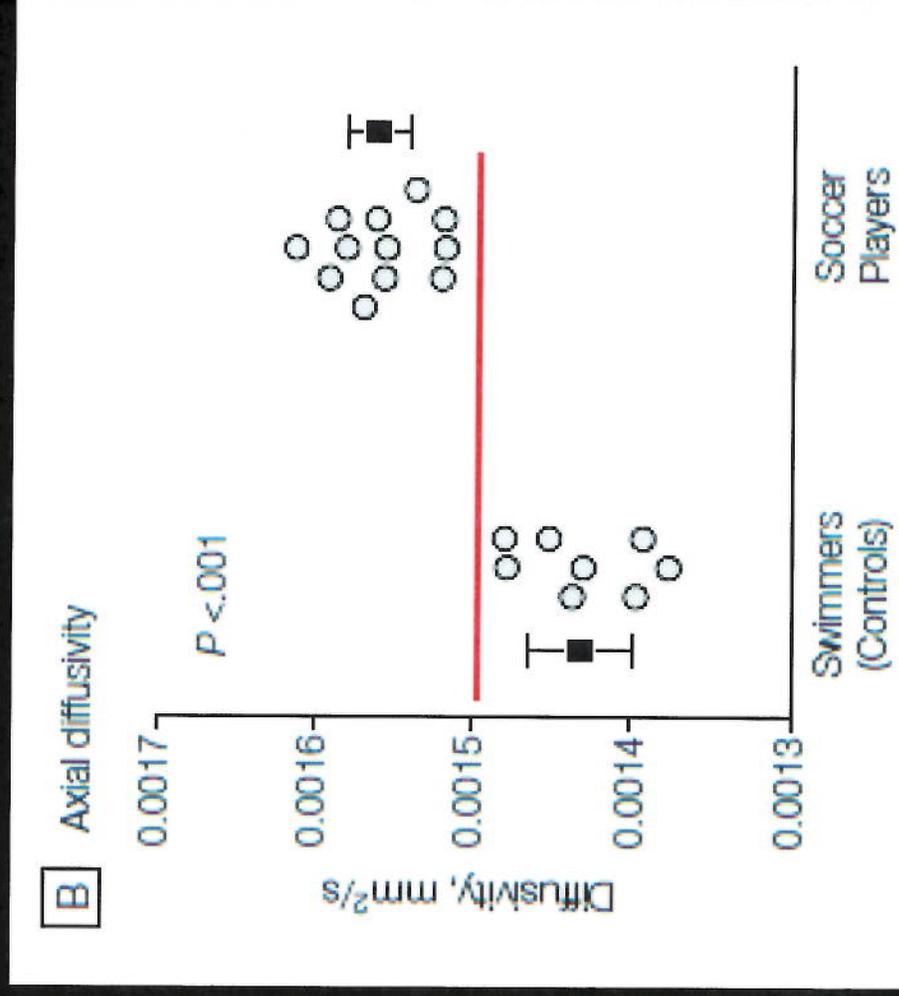
Applied to the brain



Resulting in symptoms

# Sub concussive damage

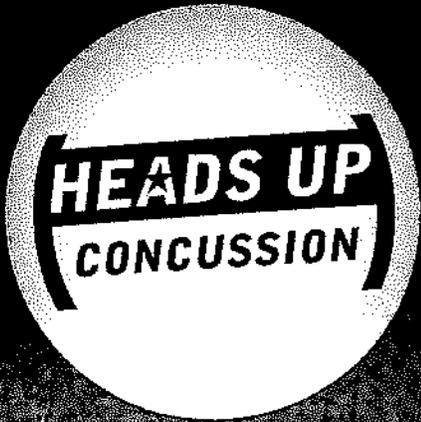
- Soccer players vs. swimmers
- Average age of 20
- No diagnosed concussions



## Sub concussive damage

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- DTI on 38 amateur soccer players (average age: 31 years) with 20 years of experience
- Over 885 headers/year showed DTI abnormalities
- Over 1800 headers/year showed memory impairment



# CONCUSSION AT PLAY

Opportunities to Reshape the  
Culture Around Concussion

[www.cdc.gov/HEADSUP](http://www.cdc.gov/HEADSUP)



Centers for Disease  
Control and Prevention  
National Center for Injury  
Prevention and Control

Across the country, growing attention on concussion has led to numerous efforts aimed at protecting young athletes. While progress has been made, research suggests that too many young athletes still do not report their concussion symptoms, are not removed from play and continue to play with symptoms, or return to play too soon.<sup>1-7</sup>

Building from the work of the Institute of Medicine report *Sports-Related Concussions in Youth: Improving the Science, Changing the Culture*, this document provides a snapshot of current research on concussion knowledge, awareness, attitudes, and behaviors among athletes, coaches, parents, health care providers, and school professionals. Based on these findings, potential strategies to help keep athletes safe are provided.<sup>8</sup>

## All Concussions Are Serious

Each day, hundreds of thousands of young athletes practice and compete in a wide variety of sports. Physical activity, sports participation, and play in general are great ways for children and teens to build and maintain healthy bones and muscles, lower their chances for depression and chronic diseases (such as diabetes), learn leadership and teamwork skills, and do well in school.<sup>9,10</sup> However, research shows that when it comes to concussion, young athletes are at risk.

A concussion is a type of traumatic brain injury—or TBI—caused by a bump, blow, or jolt to the head or body that causes the head and brain to move rapidly back and forth. This sudden movement can cause the brain to bounce around or twist in the skull, creating chemical changes in the brain and sometimes stretching and damaging the brain cells.

Most children and teens with a concussion feel better within a couple of weeks. However, for some, symptoms may last for months or longer and can lead to short- and long-term problems affecting how a young person thinks, acts, learns, and feels. Parents, coaches, health care providers, and school professionals all play an important role in supporting young athletes so that they can thrive on the playing field, at school, and in all parts of their lives.



Many groups help create a sports culture for athletes.



Research from separate studies shows that **too many athletes:**

**Do not report** their concussion symptoms.

**Are not removed** from play and continue to play with symptoms.

**Return to play** too soon.

# Concussion Knowledge and Awareness

## On the Rise

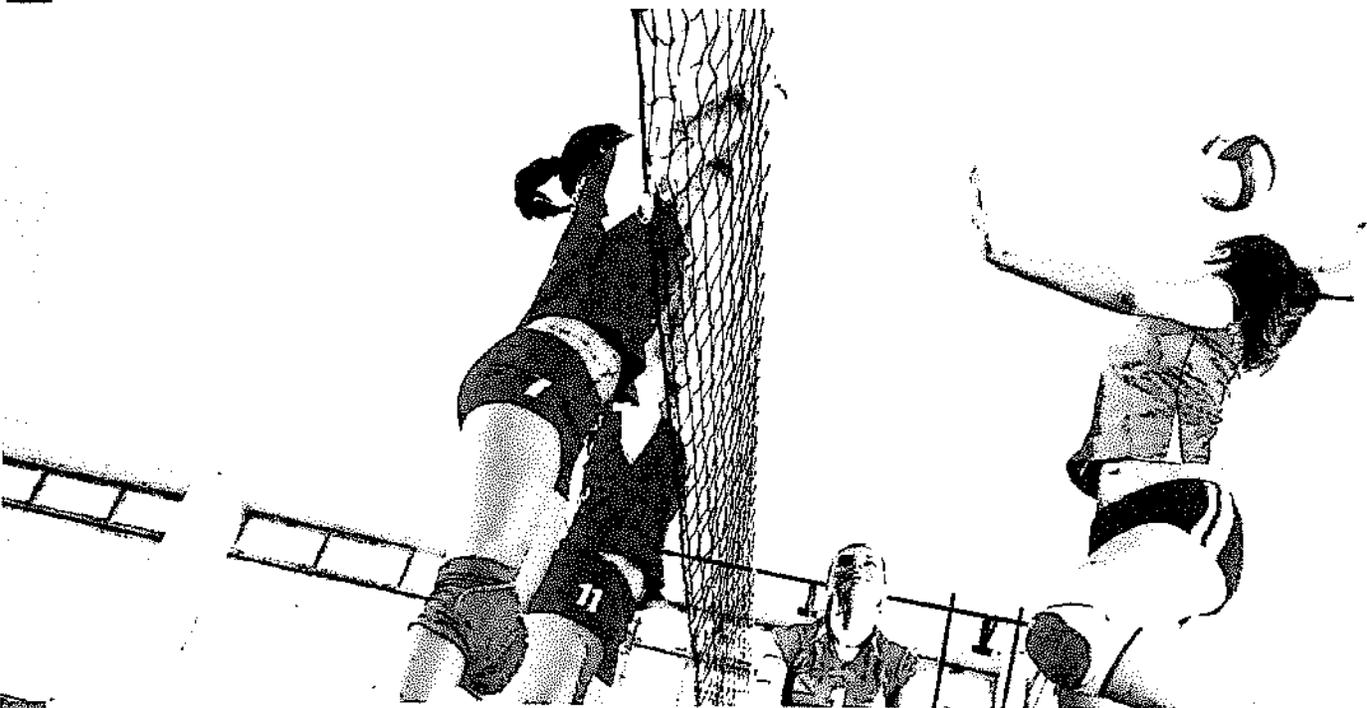
Along with the rise in the number of educational efforts on concussion, research over the last 5 years shows that the level of awareness and knowledge about concussion among these groups has grown. For example:

- The majority of youth (ages 13–18) have heard about concussion and understand the dangers of this injury.<sup>1,11</sup>
- Most parents view concussions as a serious injury and know that continuing to play with a concussion could cause further injury or even death.<sup>11,12</sup>
- Many coaches are aware of general concussion symptoms and understand that an athlete does not need to lose consciousness to have a concussion.<sup>1,13,14</sup>
- Health care providers in many areas are aware of and have access to referral networks for patients with concussion.<sup>15</sup>

## Gaps Still Remain

Even though knowledge and awareness of concussion is growing, research shows that there are still important gaps to be filled.

- Some parents are not familiar with state concussion laws or school or league protocols on children returning to learn and play.<sup>12,16</sup>
- Coaches may not be able to identify subtle concussion symptoms and may not be aware of the importance of managing cognitive activities following a concussion.<sup>1,14,17</sup>
- Some health care providers do not feel they have adequate training on concussion, and the use of evidence-based and standardized assessment tools and guidelines is limited.<sup>18–22</sup>
- While similar research about school professionals' knowledge and awareness of concussion is not currently available, the important role that school professionals play in concussion identification and management is clear.<sup>23,24</sup>



# Concussion Attitudes and Behaviors

## Too Many Young Athletes Do Not Report Concussion Symptoms

Reporting a possible concussion is the most important action young athletes can take to bring their injury to light. Reporting symptoms will facilitate an athlete being properly assessed, monitored, and treated and taking needed time to heal. Yet, research shows that too many young athletes do not take this critical first step.<sup>1,2</sup>

In one study, researchers interviewed a group of almost 800 high school athletes during the course of a season and found that:

- Sixty-nine percent of athletes with a possible concussion played with concussion symptoms.
- Forty percent of those athletes said that their coaches were not aware that they had a possible concussion.<sup>2</sup>

In a different study, 50 female and male high school athletes were asked what they would do if they thought they had a concussion:

- They most commonly answered, "I would keep playing and see how I felt" or "I would take a little break and return to play."
- None said that they would stop playing entirely if they experienced concussion symptoms.<sup>1</sup>

## After a Concussion, Young Athletes Are Returning to Play Too Soon

Young athletes should never return to play the same day of the injury. In addition, they should not return to play until an appropriate health care provider says it is okay. However, many young athletes are returning to play too soon following a concussion.<sup>6,7</sup>

In a study of 150 young patients seen in an emergency department for concussion, many did not take time to heal fully before returning to their usual activities:

- Thirty-nine percent reported returning to play on the same day of their concussion.<sup>6</sup>
- More than half (58 percent) returned to play without medical clearance.<sup>6</sup>

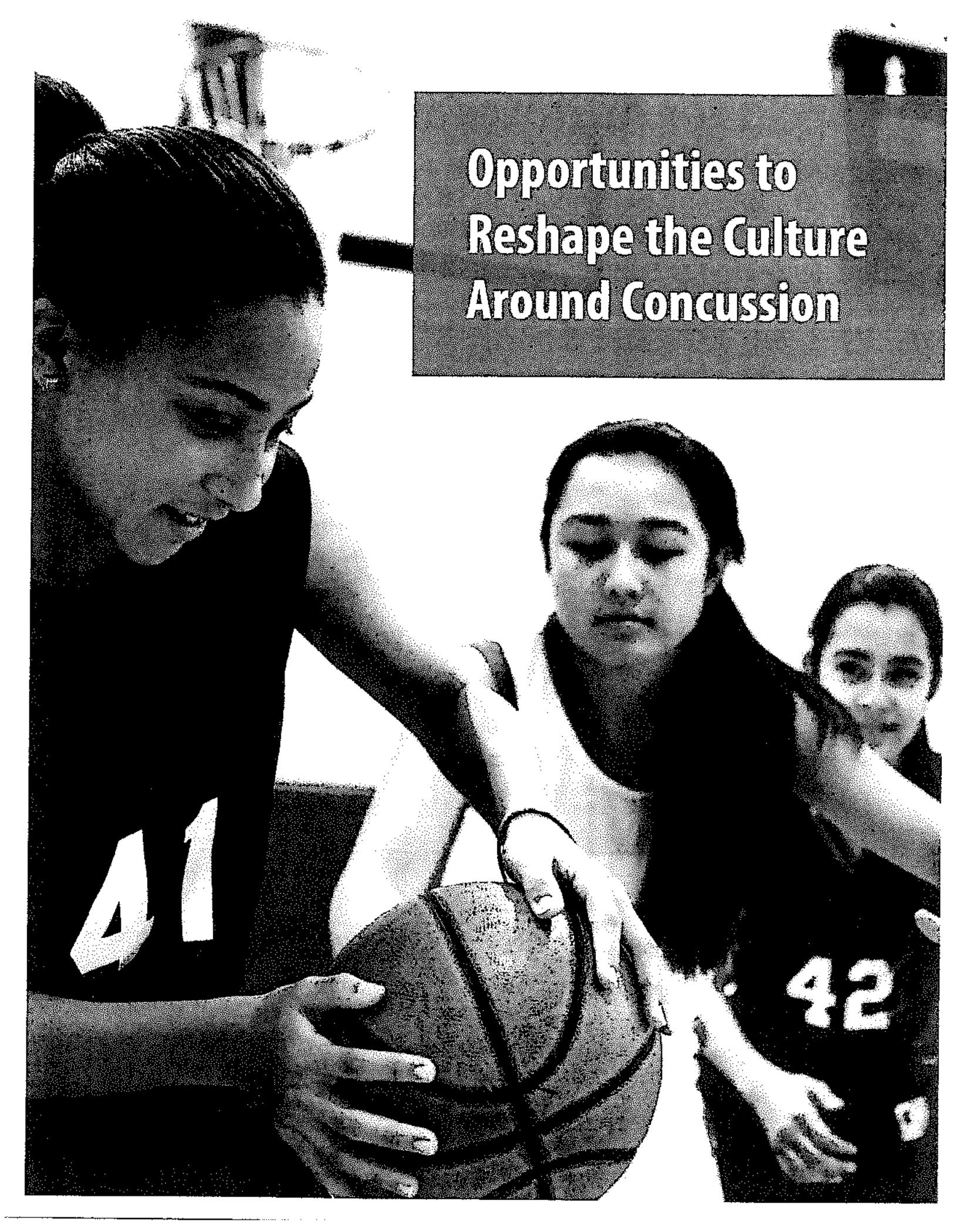
Out of nearly **800** high school athletes interviewed,



**69%** of athletes with a possible concussion **played with concussion symptoms.**<sup>2</sup>



Out of those athletes, **40%** said their **coaches were unaware** that they had a possible concussion.<sup>2</sup>



**Opportunities to  
Reshape the Culture  
Around Concussion**

## The Way Coaches Talk About Concussion Influences Young Athletes' Decisions to Report Concussion Symptoms

Young athletes depend on their coaches for guidance and need to feel comfortable in order to report their symptoms to their coaches, athletic trainers, teammates, and parents.<sup>1,25</sup> In fact, young athletes' beliefs about their coaches' expectations on reporting may trump their own knowledge or intention to report a possible concussion.<sup>1,26</sup>

The way coaches talk about concussion affects young athletes' behaviors around reporting symptoms:

- Young athletes who receive negative messages from their coaches, or who are insulted by their coaches for reporting an injury, may feel pressured to keep playing with concussion symptoms.<sup>1</sup>
- On the other hand, young athletes who receive positive messages from their coach and are praised for symptom reporting are more likely to report their concussion symptoms.<sup>1</sup>

## Young Athletes May Feel Pressure to Hide Their Concussion Symptoms

Research shows that despite the importance of reporting their concussion symptoms, many young athletes are unaware that they have a concussion or may not report a possible concussion because they:<sup>3</sup>

- Do not think a concussion is serious.<sup>1,3</sup>
- Are worried about losing their position on the team or do not want to stop playing.<sup>1,3</sup>
- Do not want to let their coach or teammates down.<sup>3,26</sup>
- Are concerned about jeopardizing their future sports career or about what their coach or teammates might think of them.<sup>26</sup>

• • •  **ACTION STEP:** Coaches should foster an environment where young athletes feel comfortable reporting a concussion. Before and during the season, coaches should talk about concussion and ask young athletes to share and discuss their concerns about reporting a concussion.

**WHY THIS IS IMPORTANT:** Young athletes are more likely to report concussion symptoms accurately when they receive positive messages about reporting from their coach.<sup>1</sup>

• • •  **ACTION STEP:** Coaches should keep a list of concussion signs and symptoms and a concussion action plan on hand and visibly posted where young athletes play games and practice. Coaches should review this list frequently with their athletes.

**WHY THIS IS IMPORTANT:** Most young athletes understand the potentially dangerous consequences of a concussion, such as long-term disability and death.<sup>1</sup> Yet young athletes may be unable to identify some symptoms, like a ringing in the ears or fatigue caused by a concussion.<sup>1,3</sup>

Coaches also may have difficulty identifying some subtle concussion signs and symptoms, such as vision problems, sensitivity to light and noise, and problems with sleep.<sup>4,14,28</sup>



**ACTION STEP:** Parents and coaches need to communicate to athletes that a concussion should be reported no matter how important the game or event seems. Athletes should know that health and safety always come first.

**WHY THIS IS IMPORTANT:** Parents and coaches greatly influence how athletes think about sports, such as their motivation to play, enjoyment of the sport, goals, and decision-making.<sup>29,30,31</sup> Young athletes may not report their symptoms because they feel pressure from or worry about letting down their coach, parent(s), or teammates.<sup>3</sup>

## Young Athletes Are More Likely to Play With a Concussion During a Big Game

Young athletes may be more reluctant to tell a coach or athletic trainer about a possible concussion in a championship game compared to a regular game.<sup>27</sup> Researchers presented the following situation to 58 young athletes: "During a championship game, you develop an injury that does not significantly hinder your ability to play, but could result in severe or permanent injury if you continue to play. Do you tell your coach or athletic trainer, or do you say nothing and continue to play?"

- Fifty-two percent of young athletes said they would always report an injury during a championship game or event.<sup>27</sup>
- Thirty-six percent of young athletes said that they would sometimes tell their coach or athletic trainer, while 7 percent said they would never tell their coach or athletic trainer about the injury.<sup>27</sup>

Similarly, the same researchers asked a group of 314 coaches if they would remove a young athlete from play with concussion symptoms in different scenarios:

- Ninety-two percent of coaches reported they would remove the young athlete from play when the importance of the game or event was not included in the scenario.<sup>29</sup>
- When the scenario included a championship game, 17–20 percent of coaches indicated that they would allow a concussed athlete to keep playing.<sup>28</sup>

## Health Care Providers and School Professionals Can Help Young Athletes Successfully Return to Learn and Play

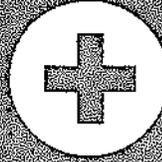
As many as a third of young athletes do not receive clear discharge instructions after going to an emergency department with concussion symptoms.<sup>32,33</sup> When discharge instructions are provided, health care providers often give instructions on return to play but not on return to learn.<sup>32,34</sup>

There is limited research about school professionals' knowledge of concussion, yet the most important action that school professionals can take is to support young athletes during their recovery process as they return to learn. A student's quality of care is improved when school professionals across the school setting work in collaboration to achieve positive school outcomes.<sup>35</sup> Health care providers and school professionals can guide young athletes and their parents as they return to activity in the classroom and on the playing field.

**ACTION STEP:** Parents should receive written instructions from health care providers on return to learn and return to play strategies. This information needs to be given to an athlete's coach and school.

**WHY THIS IS IMPORTANT:** Youth athletes and their parents need guidance to support them as they return to learn and play. Coaches and school professionals will benefit from these written instructions as well. Young athletes also need to take time to heal before returning to school since thinking and learning can be difficult when the brain is still healing. In one study, 30 percent of students reported a decline in school performance or attendance after a concussion.<sup>34</sup>

### Creating a Safe Sport Culture. Athletes thrive when they:

 <p>Have fun playing their sport.</p>	 <p>Receive positive messages and praise from their coaches for concussion symptom reporting.</p>	 <p>Have parents who talk with them about concussion and model and expect safe play.</p>
 <p>Feel comfortable reporting symptoms of a possible concussion to coaches.</p>	 <p>Support their teammates sitting out of play if they have concussion.</p>	 <p>Get written instructions from a health care provider on when to return to school and play.</p>



**ACTION STEP:** Educate young athletes and coaches on the importance of concussion throughout the season using materials that have been evaluated and shown to be effective. Education efforts should be coupled with programmatic and league policy activities.

**WHY THIS IS IMPORTANT:** Educational efforts should be tailored to meet the needs of and address the main concerns reported by athletes.<sup>38</sup> Improving coaches' and young athletes' knowledge alone may not always result in increased concussion reporting by athletes.<sup>1,2</sup> A pilot study implemented in 40 high schools that included standardized protocols for schools and medical providers, education and training, and coordination among the key stakeholders led to an increase in the number of concussions identified, reported, and treated.<sup>39</sup>

## Education Efforts Help Play a Role in Concussion Safety

Participation in concussion education may support increased symptom reporting by athletes.<sup>26,27</sup> A survey of almost 170 high school athletes in six sports found that young athletes who were more knowledgeable about concussion were more likely to report a concussion during practice.<sup>3</sup>

Another study of high school athletes who received concussion education from any source were more likely to report concussion symptoms to a coach or athletic trainer compared to athletes with no education. Specifically:

- Seventy-two percent of athletes who had received concussion education indicated that they would always notify their coach of concussion symptoms.<sup>27</sup>
- Only 12 percent of athletes who had no history of concussion education stated they would always report their concussion symptoms to their coach.<sup>27</sup>

Similarly, coaches who receive coaching education are more likely to correctly recognize concussion signs and symptoms and feel comfortable deciding whether an athlete needs to be evaluated for a possible concussion.<sup>4,36,37</sup>

## Young Athletes Look to Parents and Coaches to Understand the Culture of Safety

A young athlete's views and actions on the sports field are influenced by those of their parents, coaches, teammates, and even spectators.<sup>29,30,40,41</sup> Together, these groups shape a "sports culture."

### Action Steps: Expect Safe Play. Model Safe Play. Reinforce Safe Play.



#### Expect Safe Play.

**Why this is important:** While not risk-free, sports are a great way for children and teens to stay healthy and can help them do well in school.<sup>9,10</sup> Young athletes look to their coaches and parents to learn which actions are okay in the "team's culture" and how to follow safe play and the rules of the sport.<sup>29,42</sup>



#### Model Safe Play.

**Why this is important:** Children and teens learn from what they see their parents doing. In a study of parents and their children who ski and snowboard:

- Ninety-six percent of children who wore a helmet said that their parents also wore a ski or snowboard helmet.
- Among parents who did not wear a helmet, only 17 percent of their children wore one.<sup>43</sup>



#### Reinforce Safe Play.

**Why this is important:** As many as 25 percent of the concussions reported among high school athletes result from aggressive or illegal play activity.<sup>44</sup> A culture that supports aggressive or unsportsmanlike behavior among young athletes can increase their chances of getting a concussion or other serious injury. Such an atmosphere also encourages athletes to hide concussion symptoms and keep playing when they are hurt.



**Working Together to Create a  
Culture of Safety for Young Athletes**

We need to build a culture in sports where athletes take steps to lower their chances of getting a concussion and recognize and report concussion symptoms so that they can seek care and take time to recover.<sup>8</sup> This involves moving beyond general knowledge of concussion and changing the way we talk about and respond to concussion so that athletes know they cannot play with a concussion or hide their symptoms. While research is ongoing to help identify the best approach to changing the culture of concussion in sports, there are action steps that coaches, parents, health care providers, and school professionals can take now to help keep young athletes safe and supported as they pursue the sports they love to play.

### Athletes:

- Learn concussion signs and symptoms and why it is important to take care of your brain.
- Always report symptoms of a possible concussion to your coach right away. Do not forget, all concussions are serious. It is better to miss one game than the whole season.
- Help your teammates by looking out for signs and symptoms among friends who may have had a possible concussion.

### Coaches:

- Educate your athletes about concussion throughout the season and teach ways to lower an athlete's chances of getting a concussion.
- Tell your athletes that you want them to always report concussion symptoms, no matter how important the game or event seems.
- Keep a list of concussion signs and symptoms and a concussion action plan with you at practices and games. It is helpful to have the information handy when you need it.

### Parents:

- Talk with your children about why it is important to report a possible concussion and that you expect them to report their concussion symptoms to you and their coach right away. Let them know that their safety comes first by modeling and reinforcing safe play and good sportsmanship.
- Ask your child's health care provider for written instructions related to returning to learn and returning to play. Give this information to the coach and your child's school.

- Talk with a health care provider if your child's concussion symptoms do not go away or if they get worse after your child returns to regular activities. Make sure that you know how to support your child through this phase of recovery.

### Health Care Providers:

- Incorporate evidence-based tools and guidelines in your practice or health care system and coordinate with schools and sports organizations.
- Educate young athletes about the risks of hiding symptoms and returning to play too soon. Reassure them that taking the time to heal is the best way to get back in the game, and you are here to help them with this healing process.
- Give young athletes and their parents written instructions to share with their school and coach to help them know how to return to learn and play.

### School Professionals:

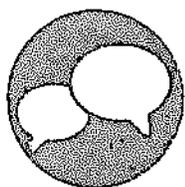
- Develop school policies and standard practices for preventing, identifying, and managing concussion at school events and in practice.
- Coordinate a school-based team to support athletes as they return to learn that is built in collaboration with local health care providers or systems.
- Teach other school professionals about the important role they play in helping students slowly return to learn at a pace that works for them. Be sure to offer your students breaks and support as needed.



## A strong focus on health and safety in sports can help keep young athletes safe.

Athletes, coaches, parents, health care providers, and school professionals are well positioned to improve the culture of concussion. Each of these groups plays a critical role in empowering young athletes to report their symptoms and take the steps necessary to give their brain time to heal after a concussion. Our young athletes deserve to play sports in a culture that celebrates their hard work, dedication, and teamwork, and in programs that seek to create a safe environment—especially when it comes to concussion.

Together, athletes, coaches, parents, health care providers, and school professionals should:



**Talk** about concussion.



**Learn** how to spot a concussion and what to do if a concussion is suspected.



**Model**, expect, and reinforce safe play.



**Support** the return to learn and play processes.



Download CDC's **HEADS UP** materials and learn more about how you can help keep young athletes safe from concussion at [www.cdc.gov/HEADSUP](http://www.cdc.gov/HEADSUP).

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[www.cdc.gov/HEADSUP](http://www.cdc.gov/HEADSUP)



Centers for Disease  
Control and Prevention  
National Center for Injury  
Prevention and Control



## Welcome to School Health

School health services are provided by the Cambridge Public Health Department through an agreement with the Cambridge Public Schools. The School Health Program is dedicated to helping students in grades K-12 stay healthy and in school so they can reach their academic potential.

Our staff includes registered nurses, nutritionists, vision and hearing professionals, and health assistants.

We also partner with other programs of the Cambridge Public Health Department, including the Childhood Asthma Program, Lead-Safe Kids Program, Healthy Smiles Program, and the Agenda for Children Literacy Initiative.

## Our Services

- Emergency care, triage, and First Aid
- Medication administration
- Health counseling
- Mandated screenings
- Immunization reviews
- Care planning for children with chronic illnesses
- Linking families to primary care providers
- Collaboration with other school staff
- Hearing and vision screenings
- Medical referrals and other resources
- And more!

## Your questions, answered!

**Which immunizations (shots) does my child need to start school?**

To start school, your child will need:

- DTP/Dtap (5 shots)
  - Polio (4 shots)
  - Hepatitis B (3 shots)
  - MMR (2 shots)
  - Varicella, or documentation of having had the chickenpox (2 shots)
  - Tdap Booster (for grades 7 and up)
  - A physical exam within the past year (and every 4 years afterward)
  - Lead and PPD status for entering Kindergarten students
- For more information, visit [cpsd.us](http://cpsd.us) or [mass.gov](http://mass.gov) for state immunization requirements.

**What if my child needs to take medicine at school?**

Your school nurse will need a Medication Order Form, filled out by your child's doctor and signed by you. You can find this form at [cpsd.us](http://cpsd.us) (go to Safety, Health, and Wellness > School Nurse) or get it directly from the school nurse. The nurse will also need your child's medicine in its original bottle. The information on the bottle needs to match the information on the Medication Order Form. All medications are locked up in the nurse's office. *Note: children are not allowed to keep medicine with them unless authorized to do so.*

**What if my child needs to take medicine like Tylenol?**

Your child should see the school nurse for medication like Tylenol and Advil. A parent will also need to sign a permission form before any medication is given. This form can be found at [cpsd.us](http://cpsd.us) (go to Safety, Health, and Wellness > School Nurse). Only the school nurse has permission to give over-the-counter medications.

**What if my child has a chronic illness or allergies?**

Life-threatening allergies, like peanut allergies, are serious. You should give your school nurse information about your child's medical history and emergency contact information. Please see your school nurse if your child has any chronic illness, such as diabetes, seizures, asthma, etc. Your nurse will work with you to develop the best plan of care for your child.

**What if I don't have insurance?**

You can apply for insurance at The Cambridge Hospital. Apply in person at 1493 Cambridge St., Cambridge, or call 617-665-1000 (Pediatrics: 617-665-1264).

**When should I keep my child home from school?**

Keep your child home from school if she/he has any health issue that keeps your child from taking part in learning and school activities. When in doubt, don't hesitate to call your school nurse.

**To learn more, visit [cambridgepublichealth.org](http://cambridgepublichealth.org) or [cpsd.us](http://cpsd.us).**

## Your questions, continued!

### When should I contact the school nurse?

Contact the school nurse with questions, concerns, or updated information, including:

- A new medical diagnosis or change in your child's physical, behavioral, or emotional health
- Recent changes in your family that may affect your child, such as a birth, recent death, serious illness, military deployment, unemployment, homelessness, marital separation or divorce, and financial changes
- An injury needing stitches, casting, splints, or use of crutches or a wheelchair
- Contagious conditions (can be passed to other people) like chicken pox, flu, strep throat, whooping cough, or pneumonia

*Note: all information will be kept confidential.*

## School Nutrition



Cambridge Public Health Department nutrition staff work to create a healthy nutritional environment in the public schools and after-school programs. In collaboration with school department partners, nutrition staff help increase the number of healthy and appealing food choices available to students, promote tap water as a healthy beverage, facilitate School Wellness Council meetings, and produce annual health and fitness progress reports.

Nutritionists work with a professional chef to develop new recipes, and then organize "taste tests" for students and train kitchen staff how to prepare the dishes. Haitian vegetable soup, green leaf salad, and healthy wraps are some of the popular items introduced to school menus since 2004. The Growing Healthy "farm-to-school" initiative has extended this work by helping schools buy locally grown produce.



## School Nurse

### Contact Information

#### Amigos

617-349-6567 x105

#### Tabin

617-349-6600 x295

#### Baldwin

617-349-6746

#### Vassal Lane Upper

Campus  
349-6600 x295

#### Cambridgeport

617-349-6065 x203

#### Haggerty

617-349-6557 x201

#### Graham and Parks

617-349-6577 x114

#### CRS

617-665-3314

#### Kennedy/Longfellow

617-349-6036

#### CRS Public Health 3-5

617-665-3310

#### Putnam St. Upper

Campus  
617-349-6036

#### School Nutrition

617-665-3765

#### King

617-349-6562 x120

#### Vision & Hearing

Coordinator  
617-665-3794

#### King Open

617-349-6540 x136

#### Immunization

Coordinator  
June Murray  
617-665-3776

#### Cambridge St. Upper

Campus  
617-349-6540 x136

#### School Health Clinical

Manager  
Barbara Meade, RN  
617-665-3807

#### Fletcher/Maynard

617-349-6588 x 203

#### Morse

617-349-4003

#### Medical Director for

School Health

#### Peabody

617-665-3313

#### Lisa Dobbertein, MD

617-575-5570

#### Rindge Ave. Upper

Campus  
617-349-4049

#### Senior Director of Public

Health Nursing Services  
Susan Breen, RN  
617-665-3860



## Cambridge Public Health Department Health Services for Cambridge Public Schools

A guide for parents and families

Health and Environment Committee  
Cambridge City Council  
August 11, 2015

**Cambridge Public Health Department Report – Concussion Regulations**

- Introduction:
  - Chief Public Health Officer - 8<sup>th</sup> year with the Cambridge Health Alliance and also a member of the board of the National Association of County and City Health Officials
- Our department is charged with protecting the health of Cambridge, preventing the occurrence of disease and illness, and promoting healthy behaviors.
- Cambridge recognizes the value of a strong public health system, and the City has made substantial investments in public health and health care in the time I've been here and long before that.
- Much of our day-to-day work flies under the radar.
- For example, we have public health nurses and epidemiologists who routinely investigate disease outbreaks in worksites and schools.
- In addition, we have an environmental health team that works with businesses, residents, and landlords to prevent unsafe –and sometimes toxic—exposures.
- The school nurses in the public schools are part of our staff—and they do an excellent job keeping kids healthy and in school.
- If you throw in flu shots and West Nile virus education and awareness, what I've just described pretty much captures the traditional work of public health departments in Massachusetts.
  
- As many of you know, the Cambridge Public Health Department has set an ambitious agenda for this coming fiscal year: we plan to become one of the first nationally accredited health departments in the Commonwealth.
- As part of this effort, we conducted a comprehensive community health assessment last year earlier this year we released a 5-year community health improvement plan for the city, based on findings from the health assessment and input from community partners and stakeholders. This citywide efforts aligns well with our day-to-day work as we strive to establish a more robust culture of health here in the city. This afternoon's discussion is a good illustration of the city's commitment to ensuring that we have a culture of safety especially for our younger athletes.

On April 9, 2015, the Cambridge Public Health Commission promulgated a regulation to protect youth athletes under 18 from head injury in organized sports and other athletic activities. The regulation takes effect on September 1, 2015.

The Cambridge regulation does not supersede the 2010 Massachusetts law, “**An Act Relative to Safety Regulations for School Athletic Programs**,” or the subsequent Massachusetts Department of Public Health regulation (105 CMR 201), “**Head Injuries and Concussions in Extracurricular Athletic Activities**.”

The state law applies to all public middle and high schools, however configured, serving grades 6–12, and other schools subject to the official rules of the Massachusetts Interscholastic Athletic Association. The Massachusetts law **does not** apply to (1) younger children (in grade 5 or lower) who participate in school-sponsored athletic activities or (2) children of any age who participate in non-school-sponsored athletic activities.

### **Scope of the Cambridge Regulation**

The Cambridge regulation is intended to protect a broader population of young athletes than is currently covered under the Massachusetts head injury law.

The Cambridge regulation applies to:

- Youth and children’s athletic programs that apply for permits to use facilities owned by the City of Cambridge.

The Cambridge regulation does not apply to:

- Any youth or children’s athletic program that does not use city-owned facilities.

### **Key Provisions of the Cambridge Regulation**

- All youth athletic programs governed by the Cambridge regulation must ensure that program coaches complete approved annual trainings on the prevention and management of head injury and concussion.
- In the event of a known or suspected head injury or concussion, the child will be removed from the activity. The athlete’s coach will:
  - Immediately notify the parent/guardian that the child has been removed from the activity for a known or suspected concussion or head injury.
  - Within 72 hours, notify the Cambridge Public Health Department of the incident.
  - Send written notice to the parent/guardian advising the family to notify the child’s school and any other athletic program in which the child participates.
  - Receive appropriate medical clearance from the child’s health care provider prior to allowing the child to return to physical participation in the athletic activity.

### **Implementation & Enforcement**

- There was a question raised early on about the liability for volunteer coaches as a result of having these requirements enforced here in the city. To clarify, this regulation does not address this issue because Massachusetts General Laws Chapter 231, Section 85V grants immunity to volunteer coaches and their assistants from lawsuits “for acts or failures to act in rendering such services.” The City Solicitor and

her staff are available to comment further in case you have a particular question about this provision.

- With regards to the implementation of this regulation, the Recreation Division of the city's Department of Human Service Programs will be responsible for **approving permit applications** from youth athletic programs seeking to use city-owned facilities. To meet the requirements of the regulation, the **athletic program must certify on a form** that the coaches have completed an approved head injury training program.
- The Cambridge Public Health Department's responsibilities include, but are not limited to **determining** head injury training requirements; **sharing** information about sports-related head injury with families and youth athletic programs; **collecting** head injury data from youth athletic programs and families; and the **enforcement** of the regulation.

### **Rationale for a Local Public Health Regulation**

State governments and by delegation, local health departments and boards of health, possess the authority to enact and enforce public health laws under what is known as their "police power," a broad concept that encompasses the functions historically undertaken by governments in regulating society.<sup>1</sup> **Local and state public health regulations have the effect of law.**

Public health laws and regulations are generally upheld in courts if it can be shown that the laws are reasonable attempts to protect and promote the public's health, safety, and general welfare and that the laws are not arbitrary or capricious attempts to accomplish such an end.<sup>2</sup>

A local public health regulation also allows for increased flexibility and efficiency on the part of a local health agency to adopt changes, if needed.

The Cambridge Public Health Department has promulgated and successfully enforced regulations pertaining to biosafety, trans fat, and body art to name a few examples.

We look forward to the next phase of implementing these regulations to include brochures, materials and posting on website in the coming weeks. Our process will include the staff of the city's recreation division to modify the current application forms used for issuing the permits. In addition, we will be working with coaches, providers, parents and athlete to ensure that they are made aware of the new regulations. The timeline has been set for the September 1 effective date which will affect the permitting process for activities taking place in the coming seasons.

**We will submit a formal report to the city manager as a part of our annual report in January 2016.**

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<sup>1</sup> Neuberger, B. and Christoffel, T. The Legal Basis of Public Health (Module 1). Public Health Training Network. Available at: <https://www.uic.edu/sph/prepare/courses/ph430/resources/lbphmod01.pdf>

<sup>2</sup> Ibid.