

Cracking down on Concussions

When people think of concussions in high school sports, football is the first sport that comes to mind. Although most concussions do take place in football, winter sports such as basketball and wrestling, also have very high concussion rates.

A concussion is described as a brain injury that is typically caused by a blow to the head or a violent shaking of the head and body. Higher contact sports have a greater risk of concussions.

Aproximately all sports-related concussions account for 3.8 million concussions per year and of that 2.4 million are from high school and teen sports. 63% of all concussions in the U.S. come from sport-related injuries. Of that 63%, 47% account for high school sports.

“I got my concussion in a basketball game last year,” junior Annika Yungner, a power forward on the girls varsity basketball team. “There was a cross-court pass and an elbow from an opponent that both hit my head at the same time.”

Girls basketball sees the third most concussions in all high school sports after football and girls soccer. According to the American Academy of Orthopaedic Surgeons, girls are at a significantly higher rate of getting concussions than boys.

“At first I didn’t know I had a concussion,” Yungner said. “It was ten minutes later when I felt very dizzy and had blurry vision.”

Concussions can put athletes out of sports for weeks. Recovery from a minor concussion can take up to 24 hours and as long as three weeks. Symptoms like dizziness and nausea can last multiple weeks after the injury. A major concussion, however, is very different. An athlete can be out for more than a month

and is significantly more likely to get another one down the road.

“We have a pretty comprehensive program that we have at AHS,” athletic trainer Ryan Hughes said. “Every student that plays a sport has a baseline computer test. This tells us how their brain is working before a concussion. If a student does get a concussion we notify the parents and the student checks in with us every day until the symptoms go away completely.”

Once the symptoms have gone away, a rigorous five step return to play protocol. It starts with light conditioning then moves to longer conditioning. This leads to agility exercises, conditioning with the team, and finally contact practice.

Cumulative sports concussions are shown to increase the likelihood of catastrophic head injury leading to permanent neurologic disability by 39%.

Many think that new safety measures should be taken in sports to prevent injuries.

Wrestling has banned some high-risk moves in past years for fear of concussions and other injuries. Although wrestling has lower rates of concussions since the safety measures were implemented wrestling has had a slight drop off in concussion rates.

“You can’t entirely prevent concussions if you play a contact sport,” Yungner said. “All you can do is be prepared for it if it ever happens.”

Concussions and injuries, in general, are hard to prevent, but there are a couple things you can do on and off the court to be prepared. Wearing the proper equipment and talking to your coach or trainer after a knock to the head are good ways to ensure that you don’t have a concussion. Knowing the symptoms and taking the proper concussion education courses are ways off the court or field to help.

In no way should this discourage students from playing a sport. Concussions and other sports injuries are always a possibility in any sport you play, but playing a sport has so many other benefits for high school students.

Player Profile: Patrick Lee

Q. Which sports do you play?

A. The sports I play are football, wrestling and lacrosse.

Q. In which sports did you have a concussion and how many times in each sport?

A. I got a concussion in football this year (sophomore year). This is my first concussion.

Q. How long have you been playing each sport?

A. This will be my ninth year playing football and wrestling and my eighth year playing lacrosse.

Q. What did having a concussion feel like?

A. It felt mostly like having a constant headache and it was hard to concentrate at times.

Q. What kind of steps did you have to go through in order to be cleared?

A. The first week I went home right after school and the second week I was doing exercises in the trainers which I am still doing.

Q. Was completing concussion education beforehand helpful?

A. Doing concussion education before getting a concussion was sort of helpful for me.

Q. How careful are coaches and trainers before letting you back to practice and games?

A. The coaches and trainers are extremely careful and I still have not returned to practice. I know they won't let me back until it is 100% better.

Q. What kind of effects did the concussion have on you physically and mentally?

A. It limited me to not being able to exercise and completing some class work.

Q. Did getting a concussion change your mind on wanting to play sports?

A. Getting a concussion has not changed my mind on wanting to play sports at all.

Q. What kind of steps do you take now in order to avoid any future concussions?

A. One step I plan on taking now is to use proper form when hitting or tackling in football.

6 ways to avoid concussions

Despite the difficulty of being able to effectively avoid concussions in contact sports, there are precautionary measures that can be taken in advance in order to limit the possibility of one occurring. As well as precautionary measures, there are safety steps to take afterwards in the case that a concussion occurs.

1 Wear proper equipment

Wear the proper protective gear for your sport. Make sure your equipment fits properly and is worn correctly. The equipment should also be well maintained and up to date with any and all sports regulations.

2 Know the sport you are playing Learn and use proper playing technique for your sports. Play safely and practice with caution at all times. Many concussions occur not only during games but during practice and drills as well. Some organizations have also limited the number of contact practices permitted per season.

3 Check playing environment

Make sure to analyze playing environment before participating in practice or a game to ensure safety. Make sure that there are no uneven surface areas or deep holes on playing fields. In addition to this, make sure that end posts are padded.

4 Complete concussion education

In addition to completing a yearly physical to participate in sports, it is imperative to complete concussion education online. Doing so will allow student-athletes and parents to know which steps and protocol to take if a concussion does occur at practice or during a game.

5 Know the symptoms of a concussion

It is essential to be educated about and understand the symptoms of having what could potentially be a concussion. Symptoms can include but are not limited to; persistent or severe headache, blackout, poor balance, nausea, mental confusion and memory loss. If a student-athlete has any of these symptoms they should speak with an athletic trainer, doctor or coach as soon as possible in the case that they do have a concussion.

6 Recover Properly to Avoid Future Implications

It is also imperative to recover properly. Always follow protocol and steps to recovery as instructed by athletics trainers. Doing this will reduce the risk of long term damage and lessen the extent of lingering side effects.

Combating Concussions

As two players speed down field towards each other, an audible crack can be heard throughout the crowd as their helmets collide.

The ensuing view is a sight of players being helped off the field by teammates and staff and heading back to the locker room.

Often times in situations like this, a possible result of a collision of this nature is a concussion.

Concussions most typically occur as a result of a blow to the head area, sometimes head to head contact. This could result in a loss of consciousness depending on the severity of the impact.

More often than not, concussions take place in contact sports such as football, lacrosse and wrestling, rather than non-contact sports.

“Higher contact sports have a greater risk of concussions,” Athletics Trainer Kathleen Ayers said. “But then again, that’s not always the case.”

When concussions occur in school sports to student athletes, they must go through the protocol and multiple steps in order to be cleared.

“Steps we take to make sure a concussion is properly treated is to have early recognition and utilize a variety of tools to evaluate and make sure there’s a full recovery,” Ayers said.

In some situations, coaches are the first to recognize the possibility that a student-athlete has suffered a concussion.

“We have been pretty fortunate because we haven’t had very

many concussions in the past few years,” Head Football Coach Michael Scott said. “But it is always a concern, anytime that we think it’s a possibility we get the player to the trainers.”

With a sport like football being a high contact sport concussions have to be kept track of more frequently.

“We try to monitor as best we can and that’s one of the reasons why in football we always have a trainer present at practice,” Scott said.

Higher contact sports are much more likely to have a greater amount of injuries occur, including concussions.

Researchers at Yale University discovered if contact sports could be made non contact, there would be just over 600,000 less injuries per year among male high school students.

A common point of scrutiny used in arguments to prevent concussions among high school student athletes is improvements to protection such as helmets.

However, the main cause of concussions and head injuries is contact and the high impact of collisions.

“We always send our helmets out every year to be reconditioned,” Scott said. “We also always try to buy the highest graded out kind of helmets.”

Protection, such as helmets, can be useful in mitigating impact and limiting the possibility of a concussion, but do not prevent head injuries 100% of the time.

“It doesn’t matter what you have on your head, it’s still a very real possibility that people are going to get concussed,” Scott said. “We are using the same helmets as guys in the NFL who get concussions and are making millions of dollars, so it happens unfortunately.”

At the end of the day, despite protection and helmets in all sports, concussions and other injuries are always in the realm of possibility.