# SPORTS MEDICINE

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## A New Meta: Esports Injuries and the Changing Health Standards in the Industry

By Zach Holdsman, of Montgomery McCracken

Professional esports is beginning to enjoy more legitimacy but with that legitimacy, comes liability. Esports players can make millions of dollars, but the player's long-term career outlooks are concerning. These players are sustaining detrimental injuries and retiring in their early-to-mid-twenties. Health risks and preventative measures are becoming more documented and as a result, more foreseeable. All of this culminates in a new pressure on esports organizations to take further action to support the health of their players.

The realm of esports has developed

rapidly from a fragmented landscape of locally coordinated competitions to professional leagues funded by the same key people supporting traditional sports organizations. Recent years have brought about enormous prize pools, advertisement revenue, and sponsorship deals for those lucky enough to get involved and be successful in esports leagues. For example, League of Legends brought in more viewers than the Super Bowl in 2019 according to a report by CNBC1.

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## **Steps To Making Boxing (And Combat Sports) Safer**

By Khari Griffin, J.D. Candidate at Emory Law School

mong the numerous viral sports clips, few are as disturbing as the footage of the South African Boxer, Simiso Buthelezi, who began throwing punches at an imaginary target after appearing to receive a normal punch on the chin from his opponent. 1 Due to Simiso's disoriented condition, the referee had

to promptly stop the fight.2 Buthelezi, who was only 24 years old at the time, was hospitalized, diagnosed with a brain bleed, and ultimately succumbed to his injuries and passed away two days later.

Unfortunately, this is not the first time a situation like this has occurred in professional boxing and will not likely be the last.3 In 2019, 27-year old American boxer, Patrick Day, died from brain

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<sup>1</sup> This esports giant draws in more viewers than the Super Bowl, and it's expected to get even bigger, Annie Pei, Apr. 14, 2019, https://www. cnbc.com/2019/04/14/league-of-legends-gets-

<sup>2</sup> *Id*.

<sup>3</sup> Dan Rafael, Patrick Day dies of brain injuries four days after knockout, ESPN, https:// www.espn.com/boxing/story//id/27861877/ patrick-day-dies-brain-injuries-four-daysknockout.

<sup>1</sup> Ben Church, Boxer Simiso Buthelezi dies after collapsing at end of fight in South Africa, ESPN, <a href="https://www.cnn.com/2022/06/09/sport/simiso-buthelezi-south-africa-boxer-death-spt-intl/index.html">https://www.cnn.com/2022/06/09/sport/simiso-buthelezi-south-africa-boxer-death-spt-intl/index.html</a>



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### Family of College Football Player Who **Collapsed and Died After Workout Files** \$10 Million Negligence Lawsuit Against School

he family of Quandarius Wilburn, an 18-year-old football player at Virginia Union University (VUU) who collapsed and died after a team workout last year, have sued the school for negligence.

The lawsuit, which was filed July 13 in Richmond Circuit Court, is seeking \$10 million.

Wilburn, who was 6-foot-2 and 230

pounds, was participating in conditioning drills on VUU when the incident occurred.

The Chief Medical Examiner's Office determined several months later that "the manner of death is natural, and the cause of death is acute sickle cell crisis in the setting of sickle cell trait [hemoglobin S gene heterozygosity], physical exertion, and

elevated environmental temperature."

An attorney for the plaintiffs, Victor C. Hawk, suggested to the media that once a school becomes aware that an "athlete has the sickle cell trait, it's commonly known in the industry that those athletes have to be trained differently than the other athletes. If you don't do it, they'll die."

Besides VUU, other defendants include Alvin Parker, VUU's head coach: Felicia Johnson, who was then the school's athletic director; Sean Ahonen, then the head athletic trainer for the football team; and Monterio Hand, then conditioning coach for the team.

The complaint alleges that "at all relevant times, including prior to August 8, 2021, all defendants knew Wilburn had a known sickle cell trait."

The lawsuit further alleges that on that fateful day Wilburn was participating in "80-yard sprints with little rest in between each sprint. When Wil-

> burn had trouble, he was pushed to the point of exhaustion and, inexcusably, beyond."

> After he collapsed, he was taken by ambulance to VCU Medical Center, where he was pronounced dead.

> The lawsuit contends that VUU failed to administer appropriate medical assistance in a timely manner, and also failed to call for

appropriate emergency assistance in a timely manner.

"Wilburn's death not only could have been prevented, it should have been prevented," according to the complaint.

The lynchpin of the case may be the plaintiffs' argument that Wilburn "underwent a physical examination at the East Georgia Health Center before reporting to VUU, and the examination confirmed he had sickle cell trait. information related to Parker before Wilburn and the team started VUU workouts."

The lawsuit contends that VUU failed to administer appropriate medical assistance in a timely manner, and also failed to call for appropriate emergency assistance in a timely manner.



## Court Grants Summary Judgment Ruling in Favor of High School for Athlete Injured During Cross-Country Race

By Bailey M. Lis, M.S. & Michael S. Carroll, PhD

In September 2016, Christopher Strickland was preparing to represent Northwest Rankin High School in a cross-country meet in Mississippi. Prior to the race, Christopher was stung on the top of his head by a wasp, resulting in a swelling sensation. After telling one of his coaches of the incident, two coaches and a registered nurse examined his head and determined that there was no swelling or any other sign of an adverse reaction to the sting. Christopher did not have any known allergy to insect stings on file with the school. Affidavits submitted by the Rankin County School District (RCSD) also showed that Christopher assured his coaches that he was fine and wanted to run the race anyway. However, Christopher recalled only one coach examining his head and claims that this coach encouraged him to run the race. More than one hour passed, and he ended up running the race.

One of Christopher's coaches checked on him a mile into the race, at which point Christopher assured her that he was doing fine. However, after he passed the one-mile marker, Christopher said that he began to feel dizzy. He then fell and hit his head. The same nurse that examined his head before the race went to help him along with her husband, a neurologist. They both determined that Christopher was able to recover, so he went back to his teammates. Christopher followed up with a doctor, who found that he had injuries to his brain and spine. Christopher's father, Christopher Strickland, Sr. (Strickland), sued RCSD on his son's behalf. In this lawsuit, Strickland alleged that RCSD employees breached

their duties in how they acted both after the wasp sting and the subsequent failure to follow the school's concussion protocol after Christopher's fall.

## **Discretionary-Function Immunity**

The defendant, RCSD, is a governmental entity. RCSD filed for summary judgment on the grounds that it qualified for discretionary-function immunity, meaning that the crosscountry coaches' actions, or lack of action, showed that they were exercising a discretionary function, which is required for immunity. Summary judgment motions are filed when the movant argues that no genuine issue of material fact exists in a case, so the movant is thus entitled to judgment as a matter of law and no trial is necessary. The trial court denied this first motion. RCSD amended its motion for summary judgment by declaring that the coaches' actions in the moment involved policy, and therefore constituted immune discretionary functions.

There is a two-part public-policy function test to determine whether an allegedly tortious activity involves a discretionary function. The two elements that must be present include (a) the action or activity contains an element of choice or judgment; and (b) that choice or judgment must have considerations based on social, economic, or political policy. Before the test is engaged, the court must first identify the allegedly tortious activity. In this case, the coaches' decision to let Christopher run in the race is the alleged tortious act. Although both parties agree that this decision was a judgment call, Strickland claims that this decision did not involve any policy, and therefore RCSD should not have immunity. This claim was not supported, however, because RCSD was able to argue that the decision did involve a policy consideration. Since the school allowed the coaches to set and conduct activities that are based on policy, the coaches have the ability to set guidelines and make decisions for their teams. RCSD also has a policy for the coaches to be certified in first-aid and to administer first-aid. This requires the coaches to make decisions regarding whether a student can and should continue to participate in their sport after injury. These decisions are anchored in social policy, meaning that discretionary immunity may be granted.

### **Summary Judgment**

When seeking summary judgment, the movant (RCSD) must demonstrate that there is no genuine issue of material fact. At the summary judgment hearing, Strickland's counsel rescinded their claims based on the RCSD employees' actions after Christopher's fall. They did not have enough medical evidence to show that RCSD's alleged failure to follow proper concussion protocols caused his injuries after the fall. Instead, they shifted their focus towards the coaches' decision to allow Christopher to run the race after being stung by a wasp on the top of his head. They insisted that it was ordinary negligence because they did not exercise the proper level of caution that was necessary.

In this case, RCSD was able to address both of Strickland's negligence claims regarding the coaches allowing Christopher to run in the race and their allegedly improper deviation from concussion protocol after his fall. RCSD argued that the school district was immune due to the coaches' actions involving policy and that there was no evidence of actionable negligence



against it. The trial court granted RCSD's motion for summary judgment based on the sense that the coaches did indeed act within their discretion. In doing so, the court determined that summary judgment was appropriate because the coaches' actions regarding the wasp sting, medical care, and decision to allow Christopher to run in the race exceeded the ordinary care standard.

### **Negligence Claim**

There are four elements required in order to prove negligence: (a) the defending party must owe the plaintiff a duty of care; (b) there must be a breach in that duty; (c) the plaintiff suffered an injury; and (d) causation must be established to show a causal connection between the breach and the injury. While RCSD did owe Christopher a duty of care and he did in fact suffer an injury, Strickland admitted that he could not prove he had suffered additional injury as a result of how the school's coaches handled Christopher's fall. The court determined that Strickland did not truly express any breach of duty by RCSD employees at any point in his complaint or in his responses to RCSD's motions for summary judgment and as such, Strickland was unable to prove negligence by RCSD.

### **Harmless Error Doctrine**

Strickland was only notified that he had to present evidence to prove actionable negligence in one of his two counts, but he was not given the opportunity to prove it. He admitted that he could not prove that that he suffered additional injury as a result of how the school handled his fall. It is necessary that the non-moving party in a case of summary judgment (Strickland) be notified and given ample opportunity to respond to the claim. This is essential to protect the plaintiff's constitutional right to a trial by jury. If the trial court grants sum-

mary judgment on grounds other than what was requested by the moving party (RCSD), then the non-moving party (Strickland) must be notified ahead of time in order to have the opportunity to respond to it. In this case, the court granted summary judgment based on the lack of a negligence claim, not based solely on discretionary-function immunity, as RCSD had asserted. Since the entry of summary judgment took Strickland by surprise, the harmless error doctrine applies. Generally, this means that although the trial court erred in what grounds they determined summary judgment on, the court did so without prejudice, and there was still a fair, although imperfect, trial.

#### Conclusion

In conclusion, the court ruled that RCSD exceeded the ordinary care standard and therefore was not negligent in their decision to allow Christopher to participate in the cross-country race. RCSD's actions also qualified for discretionary-function immunity. Upon appeal, after examining the evidence in the light most favorable to Strickland, the court found that the trial court did not err in granting summary judgment to RCSD, and the decision was affirmed.

#### \*\*Case Update

Right before the publication of this article, Strickland petitioned the Supreme Court of Mississippi for a writ of certiorari, which was granted. The Supreme Court found that, while the Appellate Court focused on the debate regarding applicability of the two-part public policy function test as it applied to discretionary-function immunity, it was somewhat a moot point, as a first step in such a case required Strickland to allege a valid tort claim and provide evidence in support of that claim. The court found that Strickland failed to successfully articulate any breach of duty by RCSD employees with respect to the wasp sting and his continuance in the race that proximately caused Christopher's injuries. Moreover, the Supreme Court found that whatever happened to him during the race was not the result of any tortious activity on the part of RCSD employees. Lacking this crucial element, there is nothing on which to apply the two-part public policy function test with respect to RCSD's immunity from such liability. As such, the Supreme Court affirmed the grant of summary judgment in RCSD's favor.

#### References

Strickland ex rel. Strickland v. Rankin County School District, No. 2019-CT-01669-SCT (Miss. 2021). Retrieved from https://law.justia.com/ cases/mississippi/supreme-court/2022/2019-ct-01669-sct.html

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## Attorneys Seeking Responses from Concussed Female Lacrosse Players in Class Action Investigation Against NCAA

By Gina McKlveen

Indoubtably, female lacrosse players ought to be just as protected as the men. But right now, a group of attorneys conducting an investigation into the NCAA are alleging that such equal protection is questionable.

Current NCAA guidelines prohibit the use of protective helmets in women's lacrosse because the sport is defined as a "noncontact" for the women. Meanwhile, the NCAA requires the use of a full protective helmet in men's lacrosse because it is considered a "full-contact" sport for the men.

Given this discrepancy, attorneys from Milberg Coleman Bryson Phillips Grossman, LLP, a leading class action law firm, are launching an investigation into whether the NCAA put female lacrosse players at risk for concussions. The firm is working alongside Public Justice, a national nonprofit organization that confronts discriminatory systems to ensure equal access to justice for all. Last month, ClassAction.org, an online forum connecting a network of professionals to facilitate class action and mass tort lawsuits, announced that the attorneys are seeking input from women lacrosse players who played for NCAA-governed schools and suffered concussions while playing the sport. Such players are encouraged to fill out the form on ClassAction.org's website to get in touch with an attorney.

The attorneys conducting the investigation believe that the NCAA's rules differentiating women's lacrosse as "non-contact" and men's lacrosse as "full-contact" are discriminatory and outdated. Some spectators view men's lacrosse as more closely related to ice hockey, whereas women's lacrosse resembles field hockey. Essentially, the distinction between the similar sport played by the two sexes is that in men's lacrosse "body-checking," or player-on-player contact, is permitted; however, in women's

lacrosse this type of body-checking is strictly prohibited. In fact, according to previous report by <u>USA Lacrosse</u>, a foul will be called in women's lacrosse if a seven-inch imaginary sphere around the female player's head is breached. This rule and other penalties attempt to deter the type of hits that lead to major head injuries and brain traumas.

Nevertheless, statistics show that despite technically playing a non-contact sport, female lacrosse players suffer higher rates of head injuries than their male counterparts. A Future Medicine's Concussion medical journal article from 2017 revealed that women players had a higher rate of head, face, and eye injuries than men with 40% of these injuries being classified as concussions. The article further elaborated that while most of concussions in men's lacrosse were caused from player-to-player contact, the primary mechanism of head injuries in women's lacrosse were from stick or ball contact. Stick checking, knocking the ball out of an opposing player's possession, while limited, is still allowed in women's lacrosse. So, even though referee rules have been modified to penalize body-checking in women's lacrosse, these type of rules do not prevent the occasional, and often inevitable albeit accidental, hit to the head by a flying ball or stray stick to the face.

Moreover, the article compares having the proper protective helmets in women's lacrosse to equipping baseball players with batting helmets or construction workers with hardhats—both of which are designed to prevent head injury caused by objects impacting the head. The same type of lacrosse ball is used in both men's and women's lacrosse. This ball is hard, inflexible, and fast moving, designed to be flung from a lacrosse stick at speeds reaching over 100 miles per hour, which has the potential to cause significant injury to any part of the body not properly protected upon impact. Yet, despite the same ball usage and risk

of significant head injury, the equipment requirements vary drastically between men's and women's lacrosse—a mandatory helmet for the men, but merely protective eyewear and mouthguard for the women.

According to Journal of Cartilage & Joint Preservation journal article published in December 2022, "[a] nother notable difference between men's and women's lacrosse is that the head of a women's lacrosse stick is flat and without a deep pocket...[causing] female players [to] carry the head of the stick close to their heads to increase ball control and prevent defenders from knocking the ball loose...[but] this method of ball handling by female players puts them at a greater risk of sustaining injuries to the head and face."

Still, some critics of a protective helmet requirement in women's lacrosse argue that it will have a "gladiator effect" amongst female players, convincing them that a helmet will make them invincible, amplifying aggression over skill in the sport. These same helmet nay-sayers are instead proponents of consistent enforcement of previously established rules by referees and proper education among officials, coaches, and players.

The protective helmet wearing debate takes on additional relevance given that lacrosse is one of the fasting growing sports in the United States. To date, a total of approximately 826,000 individuals participate in the sport from youth to collegiate levels. In women's lacrosse specifically, there are currently more than 500 active women's collegiate lacrosse programs across all the NCAA divisions, which has also expanded opportunities for young girls on youth and high school teams. At this growing rate of participation, so too has the rate of injury increased amongst participants, which makes the on-going investigation into protective helmets for female players on NCAA women's lacrosse teams all the more urgent for future generations.



### After Career Ending Injuries, Former UCLA Bruins Football Player **Settles with NCAA**

By Gina McKlveen

ast month the attorney for a former UCLA offensive lineman, who was suing the University, ex-head coach Jim Mora, and the NCAA for injuries he suffered following multiple concussions, filed a "conditional" settlement with the Santa Monica Superior Court.

The former Bruins player, Poasi Moala, was recruited by Mora, UCLA's then-head coach, in 2013. Afterwards, Moala suffered multiple head injuries that resulted in concussions as well as serious hip injuries that eventually required numerous operations. Moala alleged that by the end of the 2013 season his injuries became so severe that the 265-lbs athlete could barely squat, let alone play through an entire football game. Despite making his injuries known to Mora and the Bruins team over the course of three years, Moala claimed that his coaches continued to dismiss the player's injuries and downplay his issues, often disregarding or ridiculing him altogether.

Once the team allowed Moala to become X-rayed and receive an MRI, the results showed several severely torn tissues along the player's right hip. The medical examination also revealed lesions, damaged tissue, around both of Moala's hips—a type of injury that Moala asserted could have been prevented, or at least minimized, had the team taken his medical concerns seriously much sooner.

Instead, Moala's complaint alleged that whenever the former Bruins player complained about the pain he was experiencing, his UCLA coaches and trainers told him that his hips were just tight and that if he stretched them out the cause of his pain would be resolved. Likewise, with respect to Moala's head injuries, the complaint stated his concerns were not taken seriously by the UCLA team.

Prior to joining the team Moala had no prior history of head injuries, but by August

2013 he was regularly subjected to repeated hitting during repetitive head-to-head contact drills during practices that resulted in two documented concussions throughout his UCLA football career.

Such conduct is a similar subject of another lawsuit filed by Moala's teammate, John Lopez, another former UCLA offensive lineman. Lopez, like Moala, was recruited by UCLA's former head coach, Mora, in 2013. He attested that he suffered his first-ever concussion shortly thereafter during the team's annual summer training

Lopez later suffered two more concussions—a second one at the Bruins summer training camp in 2014, and a third and final one in 2015 that was so severe that he was forced to medically retire by his junior year. His symptoms and brain injuries from these concussions resulted in drastic changes in his demeanor, including short term memory loss, depression, and anxiety. By 2016, Lopez was unable to attend classes to complete his college degree and attempted to commit suicide by overdosing on a combination of over-the-counter and prescription medications. The player's complaint claimed that both the UCLA, its coaches, and the NCAA failed to protect him from these injuries.

Again, similar to Moala, while Lopez was still playing on the team, he reported his injuries to the coaches and trainers, but rather than being taken seriously, he was ridiculed by them for his injuries instead of being appropriately treated. Lopez's lawsuit alleged that the team's culture of "no excuses" cultivated by Mora subjected him to drills described as "unnecessarily brutal" which required players to practice at full speed with no safeguards against helmet-to-helmet contact. This culture of "no excuses" also contributed the lack of complete implementation of post-concussion symptom protocol, which Moala's complaint alleged

was put in place "just for show" and was not actually followed in "any meaningful way."

Both Moala and Lopez, therefore, accused UCLA of failing to follow proper concussion protocol. A third former UCLA offensive lineman, Zach Bateman is also suing based on his UCLA football related injuries. Like his two former teammates, Bateman expressed symptoms of injuries in both his feet, but claimed he was discouraged from seeking medical attention for his injuries. Instead, he was compelled to return to the field to play before receiving any medical treatment and before allowing his injuries to heal. Dissatisfied with UCLA's response, Bateman sought off-campus medical treatment, immediately receiving an MRI that revealed two fractures to his right foot.

Bateman was the only UCLA player of the three former offensive linemen, not to name the NCAA as a defendant in his lawsuit. When all three of these players' lawsuits were filed in 2019, each plaintiff sought over \$15 million dollars. In the past three years, NCAA attorneys have stated that the organization has no legal duty to either Moala or Lopez for their injuries. The NCAA also previously claimed that it had no direct oversight or control over the student-athletes at UCLA.

Currently, Moala's recent settlement with the NCAA offers no further details as to the contents of the agreement between the parties. In the past, the attorney for all three players, Pamela Tahim Thakur, has stated that her clients' health and safety was clearly disregarded by the UCLA coaching staff. Whether the University and the NCAA maintains its position that student-athlete health and safety is a top-priority remains to be realized so long as protocols meant to protect players, like Moala, are continuously disregarded by those put in charge.



## N.C. State Responds to Aug. 30 Lawsuit from Student Athlete Alleging Abuse at Hands of Athletic Trainer

C. State University has responded to a lawsuit brought by a former student athlete alleging abuse at the hands of an athletic trainer employed by the school. For more on the lawsuit, visit https://www.newsobserver.com/sports/college/article265056039.html

Here is the statement:

"On Jan. 19, 2022, a former student athlete reported to NC State University Police allegations of sexual misconduct by an athletic trainer between 2015 and 2017. This was the first the university was informed of the accusations; neither this former student athlete nor other student athletes had previously reported these types of allegations to the university. Police immediately began investigating the allegations, the uni-

versity started a related discrimination and harassment investigation, and the employee was placed on administrative leave.

Sexual misconduct of any kind is completely unacceptable and contrary to the culture and standards of the athletic department and the university.

Police concluded their investigation and no criminal charges have been filed.

The trainer was involuntarily separated from employment with the university while the university's investigation was ongoing. Although the trainer was no longer a university employee, the university's investigation continued in order to ensure a complete and thorough process. The findings of the investigation are considered subject to

the State Personnel Records Act and to personnel files as well as subject to the federal Family Educational Rights and Privacy Act (FERPA) and cannot be released by the university.

The health and safety of students and student athletes is paramount to NC State Athletics and the university. NC State Athletics strives to follow best practices and is committed to continually reviewing and improving its processes to ensure student health, safety, and privacy.

NC State is reviewing the lawsuit and determining appropriate next steps. As this is a pending legal matter, the university cannot provide additional comments at this time."

## High School Athletes in Contact Sports More Likely To Misuse Prescription Stimulants Throughout Their 20s

igh school seniors who play contact sports are roughly 50% more likely to misuse prescription stimulants in the next decade after graduation, compared to those who do not participate in these types of sports, a new University of Michigan study found.

Overall, 12th graders who take part in sports—both contact or noncontact—are more likely than nonathletes to misuse prescription stimulants in young adulthood, said lead author Philip Veliz, associate research professor at the U-M School of Nursing.

By contrast, seniors who participate in noncontact sports are less likely to misuse prescription opioids over the next decade, although more likely to misuse stimulants than nonathletes.

This is the first known national study

to assess how high school sports participation is associated with prescription drug misuse from ages 17-18 to ages 27-28. Data were collected from 4,772 U.S. 12th graders between 2006-2017 from the Monitoring the Future study and followed for a decade.

Veliz and colleagues looked at high-contact (football, ice hockey, lacrosse, wrestling), semi-contact (baseball, basketball, field hockey, soccer) and noncontact sports (cross country, gymnastics, swimming, tennis, track, volleyball, weightlifting).

Other key findings:

About 31% of high school seniors overall indicated misusing prescription drugs at least once at ages 17-18.

With respect to contact sport participation, the percentage of 12th graders

who indicated past-year prescription stimulant misuse was 11%, which increased to about 18% by ages 21-22.

"Misuse of prescription opioids was higher for respondents who participated in contact sports during the 12th grade. However, participation in this type of sport was not associated with initiating this type of drug use in young adulthood," Veliz said.

While surprising, he said, it should be noted that prescription drug misuse of opioids declined among adolescents and young adults during the study period because opioids were becoming less available and there was greater awareness of risks of opioid misuse during this period.

Prescription drug misuse of both opioids and stimulants has declined



substantially among adolescents since 2010, Veliz said.

"However, this study found that some types of former high school athletes are at greater risk of misusing these drugs and initiating them during early adulthood (between ages 19 and 21)," he said.

Veliz was surprised that adolescents in noncontact sports had greater odds of initiating stimulant misuse during young adulthood than those who did not play a noncontact sport. Noncontact sports may yield a culture of self-control or an aversion toward physical harm, but this does not mean participants don't value competitiveness, he said.

Studies suggest that participants in noncontact sports have better academic outcomes and may view sports as a resume builder in the admissions process. Moreover, young adults commonly misuse stimulants because they believe, erroneously, that this boosts academic performance, so stimulants may appeal to this subgroup, Veliz said.

"The findings reinforce screening during adolescence as nearly one-inthree high school seniors engage in prescription drug misuse," said Sean Esteban McCabe, senior author and director of DASH, the Center for the Study of Drug, Alcohol, Smoking, and Health in the U-M School of Nursing. "Increased prescription stimulant misuse following high school warrants ongoing monitoring during young adulthood, especially among athletes."

Veliz said his next set of studies will focus on the relationship between sports participation and stimulant misuse among adolescents who are being treated for ADHD.

## New York State Athletic Trainers' Association Names SUNY Athletic Trainer as President

The New York State Athletic Trainers' Association has named Lauren Stephenson, athletic trainer at SUNY Oneonta Athletics, as the new president of the organization. NYSATA stands to advance the profession of athletic training for the purpose of enhancing the quality of healthcare for the physically active in New York State.

As president of the organization, Stephenson plans to draw on her business consulting and administration experience to elevate the profession and awareness of athletic trainers with the goal of improving the general public's understanding of what athletic trainers do and the importance of their role in protecting the health and well-being of the physically active. She also aims to

bolster diversity and inclusion initiatives while working to get legislative goals passed in New York State. This includes an ongoing effort to pass a bill that would require licensure for athletic trainers, rather than just a certification.

"I am excited to step into the role as president of the New York State Athletic Trainers' Association and work toward elevating the profession both internally and externally," said Stephenson. "I'm looking forward to using my past experience to create a solid organizational structure, strengthen engagement among members and increase public awareness."

An athlete her whole life, Stephenson decided to go into athletic training as it combined her love of medicine, specifi-

cally emergency medicine, with sports and being a part of a team. She enjoys making a difference in her patients' lives and is deeply invested in how her athlete-patients are doing on and off the field and court. Her involvement in NYSATA began because of her interest in public perception and recognition of athletic trainers. She joined the organization in 2011 and has been involved in various public relations projects, lobby days and letter writing campaigns on behalf of the governmental affairs committee.

Stephenson's term as president will run for two years and she will step down in June 2024.

### **SML Digest**

### Tennessee Promotes McVeigh to Senior Associate AD for Sports Medicine & Sports Performance

Tennessee Vice Chancellor/Director of Athletics Danny White has announced Longtime sports medicine lead

Jason McVeigh's promotion to Senior Associate Athletics Director for Sports Medicine & Sports Performance.

"Jason's impact on Tennessee Athletics is longstanding and continues to grow," White said. "His oversight has expanded beyond sports medicine to

elite-performance training, sports nutrition and our sports science initiatives. He brings a modern approach and continues to position Tennessee as a national leader in each of those areas."



### Regular Cannabis Use Impairs Performance in Female Athletes

Vounger women who use cannabis regularly, even when healthy and physically active, aren't able to produce as much anaerobic power as nonusers, and they show signs of greater risk of cardiovascular disease, according to a study in The Journal of Strength and Conditioning Research, a publication of The National Strength and Conditioning Association (NSCA). The journal is published in the Lippincott portfolio by Wolters Kluwer.

Laura K. Stewart, PhD, FACSM, a professor in the School of Sport and Exercise Science at the University of Northern Colorado, and colleagues compared 12 healthy female cannabis users with 12 female nonusers. Both groups were 19 to 34 years old and regularly engaging in resistance and aerobic training.

Nonusers had not consumed any cannabis products for at least 12 months. At their first study visit, all users said they had smoked cannabis or eaten an edible product in the past 2 weeks. The average duration of cannabis use was 6 years, and average frequency of use was 15 days a month. No cannabis user also smoked tobacco.

## Differences between cannabis users and non-users

The researchers found that cannabis users

differed substantially from nonusers in two important ways:

Anaerobic performance—Anaerobic exercise is short bursts of intense effort where the body can't process oxygen fast enough to use it as fuel. That type of exercise increases muscle mass, strength, and cardiovascular fitness. In this study, anaerobic performance was measured on a stationary bike where the women pedaled as fast as they could against resistance for 30 seconds.

Compared with nonusers, cannabis users showed 18% less power output during the first 5 seconds of pedaling and 20% less during the second 5-second period. These differences were statistically significant. The authors note this difference in power production "is important for both coaches and athletes to consider whether the athlete's performance relies heavily on short-term power production."

Risk of cardiovascular disease—Controlling inflammation in the body is essential for maintaining optimal health and athletic performance. Once age was accounted for, cannabis users showed significantly higher concentrations of C-reactive protein (CRP), an indicator of inflammation, compared with nonusers. Moreover, the younger the age at the time

of initiating cannabis use, the higher the CRP concentration.

## Moderate increased risk of cardiovascular disease

All told, based on CRP concentrations, cannabis users were at moderate risk of cardiovascular disease and nonusers were at low risk.

The two groups were similar in aerobic performance, lung function, cardiorespiratory fitness, and muscle strength. "This may be related to the overall good health and regular physical activity status of many of the study subjects," the authors point out. "It is possible that it may take longer for the effects of regularly using cannabis to appear."

The primary active components of cannabis, called cannabinoids, are THC (delta-9-tetrahydrocannabinol) and CBD (cannabidiol). The authors emphasize that the use of cannabis products containing THC or any other cannabinoid is explicitly prohibited by the World Anti-Doping Agency (WADA). "The only exception to this is that WADA does permit athletes to use products containing pure CBD," they explain. "The use of any other cannabinoid by an athlete could result in serious consequences including suspension."

### **Esports**

Continued from page 1

An article in Forbes2 reported that the value of esports was more than \$1 billion in May 2022 and expected that

more-viewers-than-super-bowlwhats-coming-next.html

2 From Reality To Virtual: Why Traditional Sports Are Getting Into Esports, Swish Goswami, May 17, 2022, https://www.forbes. com/sites/forbestechcouncil/2022/05/17/ from-reality-to-virtual-why-traditional-sportsare-getting-into-esports/?sh=1bc32dd74736 value to reach over \$7.1 billion by 2028. Prize pools alone can allow individual players in games like DOTA 2 to make over \$7 million3.

While in the past teams may have simply been a name for a group of players, many of the teams independently, and even the leagues that host them, have become much more. Consider the

3 See https://www.esportsearnings.com/players

Overwatch League, which touted4 a minimum \$50,000 a year salary, health benefits, retirement savings plan, and housing and training facilities during

<sup>4</sup> Six-figure salaries, million-dollar prizes, health benefits and housing included – inside the Overwatch League, Noah Higgins-Dunn, Sept. 29, 2019, <a href="https://www.cnbc.com/2019/09/29/what-its-like-to-be-a-professional-gamer-in-the-overwatch-league.">https://www.cnbc.com/2019/09/29/what-its-like-to-be-a-professional-gamer-in-the-overwatch-league.</a>



the season. Many of these teams also have minor league organizations for finding fresh talent as well as college leagues.

However, just because the players are competing in a virtual world, does not mean they are not at risk of injury. Indeed, esports players appear to be very prone to chronic injuries from overuse resulting in retirement in their twenties. 1HP5, which describes itself as a team of medical professionals and gamers that specialize in helping gamers avoid injuries, reported6 that in 2021 they had 95 cases of tendinopathy across various tendons in the wrist and hands. They also reported 15 cases of thoracic outlet syndrome. 1HP also addresses issues related to the mental health of players.

The knowledge of treatment, preventative care, and risks of injury to esports players is developing and being documented and distributed just like other fields of sports medicine. 1HP published the Handbook of Esports Medicine: Clinical Aspects of Competitive Video Gaming and two research publications in 2021:

McGee, Caitlin, et al. "More Than a Game: Musculoskeletal Injuries and a Key Role for the Physical Therapist in Esports." Journal of Orthopaedic & Sports Physical Therapy 51.9 (2021): 415-417.

McGee, Caitlin, and Kevin Ho. "Tendinopathies in video gaming and esports." Frontiers in Sports and Active Living (2021): 144.

Most esports are played on a keyboard and mouse-not a traditional video game controller. As a result, the players are restricted to what is ergonomically feasible with a keyboard and mouse to avoid injury while practicing and competing. To make matters worse,

the esports environment appears to allow for limitless practice time. It is well understood in traditional sports that players only have so many hours of practice before their bodies simply won't perform the physical actions anymore, or at least to the degree where practice is more beneficial than harmful. Esports appear not as limited because the physical requirements are not as obviously taxing on the body. Injuries may not become apparent until long after the players have passed their bodies' limits. Or worse, players may continue practicing despite injuries because they do not perceive their injuries as serious.

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This results in prominent players like Thomas "ZooMaa" Paparatto retiring at 25. The Washington Post reported7

"For a while, I had no range of motion in my thumb," Paparatto recalled in a recent interview with The Washington Post. A ganglion cyst, likely caused by gaming, had developed on one of his thumb tendons in 2016 and required surgery. "It was something I struggled with the entire second half of my career,"

he said. "I always felt the wear and tear after long gaming sessions, and it was difficult to live the professional grind."

That same Washington Post article discussed how some teams have been hiring in-house health professionals to support their teams. For example, Dr. Lindsey Migliore was hired as director of player performance for the esports organization: Evil Geniuses. Dr. Migliore was quoted by the Washington Post as saying, "We're losing these players in their early 20s due to preventable injuries that could've been, and still can be, treated." She then went on to detail some of the aspects of treatment plans that may be effective.

Based on a review of current litigation, there do not appear to be any claims by players against organizations for injuries suffered due to over-practice or competing in esports leagues and competitions. This is likely due to several factors: (1) player contracts have well-written assumption of risk clauses; (2) players are provided insurance, which may be deemed to be an adequate standard of care for the profession; (3) teams and organizations are engaging in practices similar to what is described above, where they retain health professionals to increase the health outcomes of their players; and (4) injuries occur slowly over time due to overuse and cannot be directed to specific incidents where there is a discernible and responsible party other than the player. It is unclear at this time how these factors may play a role in the lower leagues such as recruitment leagues and college-level leagues.

Those in the industry should be taking note of the developments in the field and ensuring their players are treated in accordance with the latest and best health practices if they want to keep their players in the game longer, help their players perform better, and reduce risk of liability.

See https://1-hp.org/

<sup>1</sup>HP 2021 Year in Review: Esports Medicine & Performance Team, Dec. 27, 2021, https://1hp.org/blog/hpforgamers/1hp-2021-year-inreview-esports-medicine-performance-team/

<sup>7</sup> Aching wrists, early retirement and the surprising physical toll of esports, Gregory Leporati, Mar. 14, 2022, https://www.washingtonpost.com/video-games/esports/2022/03/14/ professional-esports-athlete-injuries/



### Safer

#### Continued from page 1

injuries just four days after he suffered a 10th round knockout loss. 4 Studies have shown that traumatic brain injuries are common among boxers at the professional and amateur level. 5 Such could explain why critics of boxing, including the World Medical Association, have called for an end to the sport altogether and plead to make the sport safer. 6

Yet, to date, professional boxing has failed to adopt universal safety measures. 7 Unlike private organizations such as the NFL or the UFC, Professional Boxing is governed and regulated by each individual State Boxing Commission or State Athletic Commission, headed by the state's boxing commissioner. In some states, this role is politically appointed, and may not require knowledge of the sport. Nevertheless, the welfare of boxers fall in the hands of their decisions, as they establish the state's rules and appoint referees, who are in charge of stopping a fight if it becomes clear a fighter can no longer protect themselves. For the commissioner, this arrangement can potentially lead to a conflict of interest between boxer safety and monetary gain. For example, the promoter's role is to put together the most exciting fights, which tend to be those that end in knockouts.8 This may lead promoters to forum shop and avoid hosting fights in states with more stringent safety requirements.

## The Professional Boxing Safety Act

In light of widespread corruption in the

- 4 *Id*
- 5 Julian Savulescu & Ingmar Persson, Should boxing be banned?, TLS, https://www.the-tls. co.uk/articles/should-boxing-be-banned/
- $6 \overline{Id}$
- 7 Melissa Neiman, Protecting Professional Boxers: Federal Regulations with More Punch, 15 SPLAWJ 59, 91 (2008)

8 *Id*. at 79.

- industry, Congress passed the Professional Boxing Safety Act in 1996 to address unethical business practices in boxing as well as boxer safety. The following safety requirements were established by the Act:
- (1) A physical examination of each boxer by a physician certifying whether or not the boxer is physically fit to safely compete, copies of which must be provided to the boxing commission.
- (2) Except as otherwise expressly provided under regulation of a boxing commission promulgated subsequent to October 9, 1996, an ambulance or medical personnel with appropriate resuscitation equipment continuously present on site.
- (3) A physician continuously present at ringside.
- (4) Health insurance for each boxer to provide medical coverage for any injuries sustained in the match.

If a commission is found to have violated one of these safety requirements, the Attorney General may pursue civil damages, as well as criminal prosecution. See 15 U.S.C. § 6309. Similarly, boxers may pursue damages against the state commission for lack of care.9 In 2005, former heavyweight champion Greg Page filed suit against members of the old Kentucky Athletic Commission, claiming negligence on his fight night when he collapsed in the 10th round. Despite the second listed PBSA requirement, neither an ambulance or adequate medical personnel was there on-site to assist him. After collapsing, Page underwent cardiac arrest, as it took over 2 hours for him to reach an operating room. Today, Page remains severely hemiparetic and is unable to walk on his own.

#### 9 *Id*. At 82.

### **Takeaways**

### Qualified, On-Site Medical Personnel

Hall of fame boxer, Sugar Ray Leonard once said, "you don't play boxing." This phrase is uttered often in the boxing community to reinforce the inherent danger of the sport. Thus, as a preliminary matter, state boxing commissions should ensure proper emergency personnel is onsite before the first bell is rang. Moreover, ringside physicians should also be thoroughly pre-screened. 10 In Page's instance, the ringside physician was not licensed to practice medicine in Kentucky, had never worked as a ringside physician before, and had just had his medical license suspended in Ohio. Perhaps a qualified and experienced ringside physician would have called the bout to be ended much earlier.

#### Universal Medical Documentation

Moreover, state boxing commissions should establish a universal system for collecting fighters' histories and flagging those with extreme risks. For older boxers tasked with bolstering the records of top prospect fighters, known as "journeymen" or "professional losers", this system would mitigate the problem of boxers suffering life-ending and life-debilitating brain injuries due to repeated head trauma over the years. Boxing purists will often utter the phrase, "the name of the game is to hit and not get hit." For brawler-style fighters and boxers who have received several knockouts or losses in their career, it is possible they could already be suffering from a TBI.11 Take Bradley Rone for example, who collapsed and died after the first round of a 2003 bout.12 At thirty-four years of age, Rone had

<sup>10</sup> Melissa Neiman, Protecting Professional Boxers: Federal Regulations with More Punch, 15 SPLAWJ 59, 82 (2008)

<sup>11</sup> Id. At 83.

<sup>12</sup> *Id*.



lost twenty-five consecutive fights over the past three years leading up to the fight.13 Nevertheless, the Utah Athletic Commission granted Rone a license to fight, which ultimately led to his death.

### Hydration Monitoring and Less Stringent Weigh-Ins

Dehydration can have serious consequences for boxers, both in terms of physical performance and long-term health. In the short-term, dehydration can lead to fatigue, muscle cramps, and impaired decision-making, all of which can impact a boxer's ability to compete effectively in the ring. In the long-term, dehydration has been linked to an increased risk of brain injury in boxers, as well as other negative health outcomes.

Boxers typically lose a significant amount of water through sweat during training and competition, and it is important for them to replace this fluid in order to maintain their physical and mental

performance. However, some boxers may intentionally dehydrate themselves in order to meet weight requirements or to gain an advantage over their opponents. This practice, known as "weight cutting," can be dangerous and can increase the risk of dehydration-related health problems.

One of the most significant risks of dehydration in boxers is the potential for brain injury. Studies have shown that dehydration can lead to a decrease in blood volume and blood pressure, which can in turn reduce the flow of oxygen and nutrients to the brain. This can impair brain function and increase the risk of brain injuries such as concussions.

To protect the long-term health and well-being of boxers, it is important for the sport to prioritize hydration and to discourage the practice of weight cutting. Boxers should be provided with the necessary dietary resources and support to ensure that they are adequately fueled and hydrated before and during competition. Many of the elite professional boxers hire nutritionists to ensure they can "make weight" in a safe and proper manner. In addition to promoting proper nutrition and hydration, penalties should be put in place for those who engage in unsafe weight cutting practices. This will encourage fighters to take a more proactive and calculated approach to meeting weight requirements and discourage fighters from fighting in weight classes that are way below their natural weight. By taking these steps, the sport of boxing can work to reduce the risk of dehydration-related health problems, including brain injury.

Unfortunately, as a sport premised on heart and toughness, fighters often need protection from themselves. Beyond the fighters' corner, whose job is to throw in the towel if their fighter is in danger, state boxing commissions must be compliant and proactive in protecting the men and women who keep the sport of boxing alive.