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Silence on Concussions Raises Risks of Injury

By ALAN SCHWARZ

To Kelby Jasmon, there was only one answer. The question: If he received yet another concussion this football season, while playing offensive and defensive line for his high school in Springfield, Ill., would he tell a coach or trainer?

Jasmon, with his battering-ram, freshly buzz-cut head and eyes that danced with impending glory, immediately answered: "No chance. It's not dangerous to play with a concussion. You've got to sacrifice for the sake of the team. The only way I come out is on a stretcher."

Jasmon, a senior with three concussions on his résumé, looked at two teammates for support and unity. They said the same thing with the same certainty: They did not quite know what a concussion was, and would never tell their coaches if they believed they had sustained one.

Matt Selvaggio, who plays with Jasmon on both lines, said: "Our coaches would take us out in a second. So why would we tell them?"

Many of the 1.2 million teenagers who play high school football are chanting similar war whoops as they strap on their helmets. They either do not know what a concussion is or they simply do not care. Their code of silence, bred by football's gladiator culture, allows them to play on and sometimes be hurt much worse — sometimes fatally.

The National Football League has recently faced questions about its handling of concussions after four former players were found to have significant brain damage as early as their mid-30s. But teenagers are more susceptible to immediate harm from such injuries because, studies show, their brain tissue is less developed than adults' and more easily damaged. High school players also typically receive less capable medical care, or none at all.

At least 50 high school or younger football players in more than 20 states since 1997 have been killed or have sustained serious head injuries on the field, according to research by The New York Times.

Experts say many of these accidents could have been prevented by simple awareness of and respect for their gravity.

Poor management of high school players' concussions "isn't just a football issue," said Robert Sallis, president of the American College of Sports Medicine. "It's a matter of public health."

Interviews with players indicate that even those aware of the dangers of concussions ignore them. Coaches, trainers and parents can detect a gimpy knee or a separated shoulder, and act. But a concussion is often the player's secret. It is the one injury no one sees — until a case like Will Benson's, which no one forgets.

Benson carried himself with a verticality that captivated teachers, classmates and coaches. A handsome, straight-A student headed for the <u>Ivy League</u>, he was the star quarterback for St. Stephen's Episcopal School in Austin, Tex.

"He loved the idea of playing for his teammates and his brothers on that battlefield of the gridiron," recalled his good friend and classmate Kashif Sweet, now a senior at Columbia. "He was a naturally tough kid with a high threshold for pain. He liked to endure things, to conquer things, and have people follow him."

On a play during St. Stephen's first game of 2002, as a pile of bodies grew too dense to see through, a crack was heard throughout the stadium: the sound of helmet meeting helmet, two shells of polycarbonate alloy crashing together.

Watching from the stands, Judy Ryser, Benson's mother, heard the sound — everyone did — and turned to a friend next to her.

"Oh, my goodness," she said. "I hope that wasn't Will."

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In the stifling heat of July in Alabama, hundreds of high school players from across the United States gathered at Hoover High School outside Birmingham, preparing to compete in a preseason tournament. They ambled about the field in baggy polyester shorts, helmets dangling from their fingers. Give them each five years and 50 pounds, and it could be an N.F.L. rookie camp.

Some sat on the grandstand's metal benches, waiting for their games to begin. They were asked about concussions.

Garrick Jones, a senior quarterback at Whitehaven High School in Memphis, said he sustained one last year: He was briefly knocked unconscious when a linebacker picked him up and threw him to the ground on his head. No flag was thrown. He said he wobbled to the huddle, took the next snap and dropped back to pass before his vision blurred completely.

"I couldn't come out — my team needed me," Jones said. "You have to keep playing — until you can't."

Some players airily guessed at describing a concussion: "You feel dizzy and stuff"; "when you're cross-eyed"; "when you feel real sleepy"; "it's like when you turn into someone else." Only a few of more than 50 players interviewed at the tournament came close to defining the injury: a blow to the head that causes the brain to crash into the skull. Concussion — the word derives from the Latin concutere, meaning shake violently — is typically followed by dizziness, headache, nausea, lethargy, impaired vision or other disruptions in brain function.

Studies show that concussions are drastically underreported in high school football in part because many youngsters — even adults — still mistakenly think the injury requires the player to have been knocked unconscious. Athletic trainers report about 5 percent of high school players as having had a concussion each season, studies show, but formal widespread surveys of players strongly suggest the number is much higher.

Anonymous questionnaires that ask specifically about concussions have reported rates among high school football players at about 15 percent each season; when the word concussion is omitted and a description of symptoms is provided instead, close to 50 percent of players say they had one, with 35 percent reporting two or more. Although concussions remain one of the more imprecise diagnoses in sports medicine — magnetic resonance imaging exams and CAT scans cannot detect them — the players' testimony has been taken by experts to indicate that a vast majority of concussions are not treated.

Asked to define a concussion, Josh Bailey, a senior safety at Patterson High in Louisiana, could not. After being told, he said he definitely had one last year, when his head slammed against another player's knee. He said no one noticed, and he never considered leaving the game.

"Football, it's all about contact — you kind of have to suck it up," Bailey said. "Because you're going to feel pain. That's what the game is about. If you don't put yourself through that, you don't really love the game."

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The crack on the St. Stephen's field five years ago was indeed the sound of Will Benson's helmet slamming into another. He played the rest of the game, which his team lost. Admitting to headaches several days later, Benson sat out the next game — and St. Stephen's lost again.

"He felt a lot of responsibility," recalled Jay Lamy, a volunteer coach that season. "He didn't want to let his teammates down. He knew the impact that he had."

That influence was felt the next Friday night. Filling his No. 7 uniform as only a star quarterback can, Benson ran for a touchdown in the first quarter.

But later in the half, with seemingly no provocation, he took off his helmet and walked off the field. Benson told his coach he felt weird and had "big blobs" in his vision. He sat on the bench and put a towel over his head. Then a golf cart took him to the trainer's room.

A few minutes later, Benson was screaming in a way that no one present will ever forget.

"Mom!" he shrieked before he lost consciousness.

"Mom!"

"Mom!"

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Doctors call it second-impact syndrome. Almost solely among teenagers, sustaining another blow to the head — even a seemingly benign one — before a first has healed can set off a devastating chain of metabolic events: Cerebral blood flow increases, arteries swell past capacity, and pressure builds inside the brain, often leading to <u>coma</u> and death. Helmets can do only so much to keep youngsters' brains from sloshing inside their skulls, like the yolk inside an egg.

A recent study in The American Journal of Sports Medicine led by Barry P. Boden of the Orthopaedic Center in Rockville, Md., found that catastrophic football head injuries were three times as prevalent among high

school players as college players — and that "an unacceptably high percentage of high school players were playing with residual symptoms from a prior head injury."

For many victims, staying alive is only the first challenge. Kort Breckenridge of Tetonia, Idaho, has trouble holding down a job because of short-term memory problems stemming from a football brain injury two years ago. Brady Beran of Lincoln, Neb., emerged from a coma reading at a kindergarten level; he remains in physical therapy with hopes of running again.

Second-impact syndrome is relatively rare, however. Experts said that for every such case there can be hundreds of victims of postconcussion syndrome, leaving youngsters depressed, irritable and unable to concentrate, and they sometimes miss school for weeks or perform poorly on tests. Ben Mangan of Lewisburg, Ohio, still has mood swings and cognitive problems deriving from at least one major concussion in 2002.

"It definitely has held me back in progressing through school," said Mangan, now 20 and attending a small Ohio college. "I was a B student in math before, but now I sit there and I'm like, Why can't I get this? I'll do the same problem five times and keep getting different answers. It's really frustrating."

With no limp or wince to advertise most concussions, coaches and sideline medical staff must be keenly aware of their signs; waiting for gross disorientation or nausea invites disaster.

Diagnostic methods vary in science and scope, but most involve asking questions to gauge a player's awareness, testing short-term memory by repeating strings of words and numbers backward and forward, and administering short pencil-and-paper tests. Players are encouraged to be re-examined after physical exertion to see if headache or cognitive problems return.

Many school districts require an ambulance and paramedics to be on-site in case of emergencies, but a sideline physician is often a luxury. Only 42 percent of high schools in the United States have access to a certified athletic trainer, according to the National Athletic Trainers' Association.

"Budgets are tight," said Bob Colgate, the assistant director of the National Federation of State High School Associations. "You hate to say that, but it's a reality."

Howells High School is among the 77 percent of Nebraska schools without an athletic trainer. The football coach, Mike Spiers, said that he cannot monitor the health of every player, many of whom he speaks with only a few times a game.

"I have a tremendous fear of all injuries that could permanently damage a kid," Spiers said. "It's something that may convince me not to do this anymore."

At midweek practices, which often feature even more banging and tackling than games, volunteer coaches with little training typically evaluate injuries while the head coach calls plays.

Sallis, of the American College of Sports Medicine, joined many experts in saying he was not trying to discourage the playing of football, only the widespread acceptance of playing it unsafely.

"It's crazy," he said. "High schools hire a zillion coaches before they wonder about hiring a trainer. If you

hire a head football coach, that next hire should be an athletic trainer."

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As Will Benson wailed, vomited, had a seizure and lost consciousness, the ambulance dispatched for him could not find the entrance to the St. Stephen's campus. According to records released by the local emergency medical services unit, it spent 13 minutes trying to find the trainer's room.

A helicopter whisked Benson to a hospital as the game continued. Coaches were confused: He had not been involved in any notable hits or tackles in the game.

Bleeding in his brain, Benson slipped into a coma that night and never regained consciousness. A neurosurgeon operated to relieve pressure inside the skull but could not revive him. Five days later, Benson was declared brain dead. He was kept alive overnight so his organs could be harvested for donation.

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There is no shortage of unenlightened coaches. Scott Robertson, a volunteer team physician for Nipomo High in Southern California, said he had seen coaches at other schools "berate and ostracize" players who complained of concussion symptoms. Jerry Bornstein, another team physician for several Los Angeles-area schools, said a coach once yelled at him for refusing to let a concussed player return to a game. His response: "I'll be happy to, Coach, as long as you accept the responsibility for this kid waking up dead tomorrow morning."

Ellen Marmer, the team physician for Rockville High School in Vernon, Conn., said that after she determined an offensive player from the opposing team was unfit to play after a concussion, his coach had him switch uniforms to try to play defense.

Parents lose perspective as well. Garrick Jones, a quarterback from Memphis, said that the week after his concussion, his father pleaded with the coach to let him play. (The coach won.) Vito Perriello, the team doctor for St. Anne's-Belfield School in Charlottesville, Va., said, "I have had parents tear up the form that I've filled out strongly recommending their child not play, and shop a doc to get their kid O.K.'d."

Yet many experts say that as poorly as adults can behave, it is the football bravado they instill in children, the thirst for competition and the blind eye to pain, that keeps players in the game. More than a dozen high school players at the Alabama tournament said they had hidden concussions from their coaches and medical personnel to stay on the field.

"If the coach knew about it, he'd take us out," said Matt Arent, a quarterback in Nashville. "They treat us like we're their own kids. It comes down to the player not telling the coach that something's wrong."

Players will hide from trainers and try to sneak back into huddles. They will rehearse answers to impress the trainer, so they won't forget to use magic phrases like "I don't have any headache at all" when asked.

One maneuver involves the preseason memory and cognitive tests many schools administer as a baseline for comparison should a player sustain a concussion. Several doctors and trainers said they have heard players boast of purposely doing poorly on the preseason tests so they will be more readily found fit to play.

A paradox has developed in high school football: The more strict the rules, the more likely they are to be evaded by the players they aim to protect. Many doctors support a rule whereby any player sustaining a concussion cannot return to play that day. But Sallis supported a more realistic approach, in which a player may return to the game if doctors are convinced the symptoms have cleared.

If not, Sallis said: "Players are all going to stop telling the team physician that they have any symptoms — they're going to hide them. Which we know they already do, but I think it's going to get even worse. It's putting them at more risk."

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Dick Benson spent five years trying to wring something positive out of his son Will's death. In June, Will's Bill, legislation he crusaded for, was signed into law.

It requires every Texas high school coach and official involved in every sport to be trained in basic safety and emergency procedures. Beyond neck injuries and heart attacks, special attention will be afforded to the symptoms of concussion and roots of second-impact syndrome. Benson said: "We're not teaching people the principles of neurology. This is fundamental, basic stuff."

The law does not apply to Will's old high school, however. It originally covered parochial and private schools, but the primary sponsor of the bill, State Senator Leticia Van de Putte, said it became entangled in "a raging school-voucher argument." The legislation had to be scaled back "over politics," she said.

Benson said that he hoped that the steps taken in his son's name would reach other states, but added that the process would be slow at best.

"It usually takes something like Will to get people to take this kind of thing seriously," he said. "People like learning things the hard way."

Particularly adolescents. Playing linebacker two years ago, Riley Haynes of Ponte Vedra Beach, Fla., tackled a running back with such force that he found himself on the ground, all but unconscious, not remembering his name. His head throbbed, and he had no idea where he was.

A teammate reminded him. He jumped on top of Haynes and screamed through his face mask: "That's football, baby! That's football, baby!"

Haynes gathered himself, stumbled back to his position and took his stance for the next snap.

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