

Wrestling away from a troubled past

arl Broghammer occasionally hears the stories from coaches and former wrestlers who spin wild yarns about their youth and the way wrestling used to be.

wax about losing a dozen or more pounds in the hours leading up to a match. The effort to qualify for their weight class could often be more challenging than the competition itself.

That era's sages taught that the its way back secret to success lay in dropping to after the lower weight classes. So wrestlers often spent more time worrying about unthinkable weight than wrestling. They avoided food and water in the hours leading became real up to a weigh-in and rode exercise bikes in heavy sweatsuits darkened by perspiration. If they really needed a push, they sitting against a wall in the Campbell wrestling sought a sauna to sweat away additional pounds or worked out in plastic suits that resembled body-length trash bags that trapped their heat, wringing out additional moisture.

The stories are often told to one-up the tales of other middle-aged men reminiscing about days passed. But the experiences don't impress Broghammer, a 197-pound junior at Upper Iowa who finished third in the Division II championships this spring.

"It sounds horrible," he said. They're just stories to Broghammer, though. Fifteen years ago this spring, the NCAA brought that era of collegiate wrestling to an abrupt halt, replacing stressful techniques passed down through generations with a complex system guided by body composition analysis, hydration measurements and strict weight-loss procedures.

Science now guides the sport: An online weightmanagement system establishes wrestlers' safe minimum weight, controls their descent to lower classes and offers nutritional guidance to maintain health. It steered the focus back to skill development and removed the consuming pressure of

By BRIAN HENDRICKSON

How one

sport found

making weight. Wrestling advocates say the reviving participation numbers and improving product on the mat owe some credit to those changes.

Head coach Heath Grimm nods in agreement The tales are common in wrestling circles. They as he sits across a table from Broghammer in the

> Upper Iowa wrestling offices. He's seen a safer sport emerge and skill levels explode. But Grimm grows somber once the discussion turns to the tipping point for those changes. In 15 years, he still hasn't found the right words to discuss it. What should he say? Should he say anything? His mind goes to Billy Jack Saylor's family in Florida and wonders what they would think.

The words come grievously as he describes the night he found Saylor room, his 19-year-old heart failing after cutting

weight for his first career match. His was the first of three deaths in five weeks that abruptly ended that era, halted a 10-year dispute between sport scientists and coaches, and helped reshape the role science and clinical medicine played in guiding all NCAA health decisions.

The inside story of how epic tragedy led to wrestling's revolution shares similarities with other struggles for necessary changes within the NCAA. There were feuding parties, territorial stands, practical complications, missteps on both sides and heartbreaking incidents that finally forced change. No one emerged as a hero. But the changes forced an evolution that today's coaches widely applaud – even if the old traditions are still being purged.

It's a tale with many teaching points about the importance of collaboration and respect for differing viewpoints. But the words that explain it still come uneasily.

A TRADITION AND A BURDEN

Weight cutting wove tightly with wrestling from the beginning, the fundamental burden of a sport based on weight classes becoming as much a rite of passage for its participants as it was a target for criticism.

As far back as the early 1930s, the American Wrestling Coaches Association sternly rebuked the practice as a blight to the sport.

"This must stop if the sport is to progress," the AWCA wrote in its 1934-35 rules guide. "Any coach who deliberately cuts down the weight of a boy to win a match is committing an unpardonable crime

and should be punished."

Coaches firmly believed their athletes would gain an advantage if they were willing to suffer more than their opponents by cutting to a lower weight class.

But over time the practice became one with the culture. The torturous process fit the combat mentality wrestling nurtured, and eventually the community embraced the belief that only its athletes were tough enough to endure it. Coaches developed and refined techniques for reducing weight quickly and passed them down to their wrestlers – some of which sounded preposterous. One example: A wrestler could stand on his head to redistribute the weight in his body and shave a few ounces at the scale.

But as wrestlers tasted success by sucking down to lower weight classes, then gaining it back in the hours before their match to seize a size advantage, they went on to become coaches who passed the knowledge to future generations. Paul Mance, who retired as head coach at Appalachian State in 2009 after 33 years, explained the coaches' emotional attachment to weight cutting in a letter written to the NCAA Commit-

tee on Competitive Safeguards and Medical Aspects of Sport in February 1996 when he pleaded for changes in the weight-management rules. He said coaches firmly believed their athletes would gain an advantage if they were willing to suffer more than their opponents by cutting to a lower weight class.

"An athlete that has more muscle has an advantage over those that are not willing to cut the extra water weight," Mance explained. "Coaches that have been around a long time think this is important to the success of their team."

But the practice was never popular among the participants.

In fact, Mike Moyer, the National Wrestling Coaches Association director, believes the weight-cutting culture played a role in the loss of 130,000 annual high school participants in the 23 years leading up to the NCAA rules changes. The hours spent on exercise bikes, in saunas and plastic suits left world-class athletes too weak to walk. Extreme measures, including laxatives, diuretics, induced vomiting and repeated spitting to force trace liquids from the body, became as much a turn-off as it was tradition.

Wrestlers from that period recall debilitating cramps, insomnia and feelings of illness. Former Campbell wrestler Abner Suarez remembers his lips turning white; after a particularly intense workout, a friend watched Suarez chug a sports drink and swore he could see the liquid rippling down his throat into his stomach.

"It's not anything anyone enjoyed," Suarez said. "At least in my mind, I was just trying to survive the workout."

That was the goal: survive the workout. Weight classes were often determined by a wrestler's ability to drop pounds and still recover for his match. In theory, the more weight a wrestler cut through dehydration, the more he could regain after weighing in and hold a size advantage over his opponent. Coaches never considered the process a health risk, though it sometimes produced disturbing scenes.

During one tournament, retired Clarion head coach Bob Bubb, a former secretary-rules editor for the NCAA Wrestling Committee, shook his head in disbelief as he watched a wrestler, too weak to stand on his own, being carried to the scales with his coach screaming, "Get his feet on! Just get his feet on there!"

"It got to a point where it looked like it was crossing the line where something needed to be done," said Dan Gable, whose 15 national titles as head coach at Iowa remain the standard for excellence in the sport. "Absolutely, something needed to be done more than it was."

A COMMITTEE SEEKING INFLUENCE

Rumors of inappropriate weight-cutting procedures circulated for years. But the NCAA's medical community became fully aware of the practice only after drug testing at championship events started in 1986.

The program was implemented at the wrestling championships the following year and required athletes to provide urine samples after each match. That presented a problem for dehydrated wrestlers focused on making weight for the next round, according to Frank Uryasz, who was hired as NCAA director of sport sciences to start the testing program and later founded the National Center for Drug Free Sport. Uryasz said coaches grew contentious when drug testers attempted to make the athletes drink water so they could complete the test.

When the Wrestling Committee requested a testing accommodation from the Committee on Competitive Safeguards and Medical Aspects of Sports – which recommends health and safety legislation for the NCAA – it heightened attention on the weight-cutting practices. And as Uryasz, a liaison to the committee, relayed his experiences from the championships – stories of uncomfortably hot rooms, wrestlers exercising in plastic suits and dehydrated young men wandering in a daze – the committee grew outraged.

They were also somewhat powerless to stop it.

The competitive-safeguards committee is now one of the most influential groups within the NCAA, and its endorsement is critical for rules affecting health and safety. But the committee of the late 1980s and early 1990s faced different challenges. It issued guidelines, developed educational projects, researched important health trends and passed them along to appropriate committees. While the NCAA Executive Committee at that time routinely sought the group's counsel on health issues, the CSMAS had difficulty initiating change.



Even its most influential product – the Sports Medicine Handbook - held no teeth. And in 1996, the CSMAS complained to the NCAA Council, the organization's leadership committee at the time, that schools were not adhering to the book's guidelines.

"A lot of times back then there were rules being put in place that we never even knew about because they never



came to us," said Randy Dick, former assistant director of sport sciences and a liaison to the CSMAS.

Sport science was a maturing discipline at the time, though, having emerged in America during the 1960s. The discipline brought a new understanding of the human body by applying physiology, psychology, nutrition and biomechanics to sport activities. But its influence lagged behind the playing-level expertise of the coaches, whose decades-long experiences were relied upon to develop each sport's playing rules.

This was particularly true with the CSMAS and the Wrestling Committee. Each saw a different world through its own prism, one driven by scientific and clinical data, the other by firsthand experience. Even when the committees agreed to study the amount of weight wrestlers were regaining at the NCAA championships in 1991, the two sides couldn't agree on the findings.

The study was among the first to establish quantifiable numbers that could define the weight-cutting issue. When the results were published in 1994, it showed

that the 668 wrestlers studied gained an average of 7.3 pounds in the 20 hours between the weigh-in and the start of the matches (the largest of which was 16.8 pounds). The findings also did not statistically demonstrate that wrestlers gained a competitive advantage over their opponent because the practice was so common, undermining the inherent belief driving weight cutting.

Dick said the study justified the CSMAS members' concerns. If wrestlers gained more than 7 pounds before a match, then they must be losing at least that much before the weigh-in. And if some wrestlers were regaining enough to jump the equivalent of two weight classes, how could the system be considered effective for maintaining competitive equity?

The coaches essentially shrugged at the findings. From their experiences, 7.3 pounds wasn't an evebrow-raising number. No matter how the CSMAS framed the issue, the coaches brought the discussion to a standstill.

But as conversations continued into the mid-1990s, the coaches sensed that they couldn't remain entrenched.

SAUNAS HEAT UP DEBATE

Opportunity for change arrived in 1994 from the Special NCAA Committee to Review Student-Athlete Welfare, Access and Equity.

The special committee was appointed in 1992 by the NCAA Presidents Commission to study issues that affect the well-being of student-athletes. But when it issued its final report two years later, it identified several long-range matters it couldn't adequately examine. Among them were health and safety issues.

So the committee assigned that responsibility to the CSMAS, granting that group much-needed political clout. It became the

coat of arms the CSMAS carried into battle: Memos to the Wrestling Committee routinely included statements reminding the coaches about that charge, setting up a series of emotional clashes.

For years, the sport's community expected the wrestling championships' host campus to furnish sauna facilities. It was an accepted practice, even though it conflicted with the hypohydration statement in the Wrestling Rule Book's appendix. That guideline, implemented in 1985 as a result of the concerns of the CSMAS, stated that teams should not engage in practices that severely dehydrate athletes, and that steam rooms and plastic or rubber suits in particular "should be prohibited."

In 1996, the NCAA broke with its practice of holding the Division I championships on campuses and instead moved to the Target Center in Minneapolis, a facility with no sauna equipment on site. To address this standard need, the Wrestling Committee requested from the Division I Championships Committee the authority to rent the equipment. The Championships Committee

then forwarded the request on to the CSMAS.

The competitive-safeguards committee was outraged when it received the request, particularly since it came on the heels of incidents at that spring's Big Ten and NCAA championships in which two wrestlers were hospitalized for dehydration.

The coaches were already in a defensive stance. They felt "We were sort of mortified by the fact that we would they were fighting for their sport's existence, let alone the be asked to pay for stuff that was contrary to good health integrity they saw in its practices. During the 1981-82 seapractices," said G. Dennis Wilson, a retired professor of son, nearly half of all NCAA members included wrestling kinesiology at Auburn who chaired the CSMAS from 1994 in their programs (363 of 752). By 1995, participation was to 1997. in a freefall. Reorganizations prompted by Title IX played a The sauna issue provided the first battleground for role in the discontinuance of 106 programs, and little more than a quarter of NCAA members continued sponsoring the sport.

the CSMAS' Presidents Commission assignment. At its June 1995 meeting, the committee made three significant charges that struck at the weight-cutting culture. The committee asserted that weight classes and weighins were ineffective at ensuring competitive equity. It said wrestling needed to avoid the major shifts in weight before and after weigh-ins, which it deemed unhealthy. Finally, it condemned the acceptance of weight-loss behaviors at the NCAA championships, accusing the Wrestling Committee of facilitating those activities through the use of saunas.

To support its stance, the CSMAS included a recently updated position statement from the American College of Sports Medicine, first published in 1976, that discouraged the use of plastic suits, steam rooms and saunas for weight cutting and recommended weigh-ins be set immediately before competition. To the sport scientists, a statement from a national medical body – combined with its own weight-regain study in 1991 – reinforced their points. The coaches, however, didn't budge.

In a stern rebuttal Nov. 21, 1995, the Wrestling Committee responded with a memo that brushed aside each charge. "Although the weight-loss subcommittee recognizes that there are incidents of wrestlers using improper weight-loss methods, the group raised the question as to why and how this necessarily constitutes a problem for the sport of collegiate wrestling," the memo said. The Wrestling Committee questioned the available

research and whether recent studies performed outside the collegiate realm could be applied to the sport. It contended that the dehydration incidents at the Big Ten and NCAA championships were isolated. It defended the use of saunas, arguing they provided therapeutic uses aside from weight loss, and even suggested that the 1991 weight-regain study in fact confirmed the competitive equity among weight classes.

"Obviously, the subcommittee doesn't share the same view as the competitive-safeguards committee on some of the issues surrounding weight loss in collegiate wrestling," the memo said.

But despite the stiff-arm response, the coaches weren't ignoring the issue in their own circles. In fact, during the Wrestling Rules Committee's April 1995 meeting, the coaches discussed adding a statement to the rule book holding coaches accountable for responsible weight-loss practices and the amount of weight their wrestlers dropped.

The contrasting discussions illustrate the distrust between groups. Committee members said the CSMAS felt the coaches were being uncooperative and naive to-

ward the health risks of their activities, while the coaches felt changes were being forced on them by a 19-person group composed of 10 members from the private sector or schools that didn't sponsor wrestling. How could they understand the sport?

Attacking weight cutting – being so intertwined with the sport's proud tradition - was like attacking wrestling itself.

"It was a mark of distinction, that this sport does something that nobody else really has to do," said Bates Athletics Director Kevin McHugh, the Wrestling Committee chair from 1994 to 1997. "You go at that aspect, you're looking to undermine the sport itself in some people's minds."

The coaches lost leverage as the fiery debates persisted. The committees continued their discussions, this time joined by the NCAA's legal counsel, during a teleconference Nov. 30, 1995, in which they discussed the charges from the CSMAS and the coaches' responses. Four days later, they issued a joint statement to the Executive Committee that indicated a radical shift in position by the entrenched coaches. The committees announced the ban of saunas at NCAA championships and acknowledged that wrestling needed to comply with the Wrestling Rule Book's hypohydration statement.

In 1991, a study revealed wrestlers gaining an average of 7.3 pounds (equivilent to almost 117 ounces of water) in the 20 hours between the weighin and the start of the matches.

"Excessive dehydration must not be a part of the NCAA wrestling championships," the statement read. "Such conduct could have created unreasonable health risks."

The coaches' about-face presented a major advance for the CSMAS, and both sides knew the negotiations were only beginning. Competitive-safeguards committee members asked Wilson to represent them at the NCAA championships and report back on the practices he saw.

Uryasz, on site for drug testing, met Wilson at the Target Center and led him into the exercise area where wrestlers were attempting to lose weight in advance of the weigh-in. There he saw what Uryasz first reported nearly a decade earlier: wrestlers wearing plastic sauna suits, exercising to a point of exhaustion, leaving pools of water in their wake.

"It just didn't pass the test of looking smart," Wilson said. "A lot of what went on was fine. But some of what went on, you would not want your mother, or girlfriend or anybody to see."

Wilson met with several coaches, and the concerns of both parties were aired. The exchange was healthy, except for one comment. Wilson can't recall exactly who said it, but the statement burned into his memory. It summed up what the CSMAS viewed as naiveté among the coaches toward the health risks of extreme weight loss. Wilson calls it "the most chilling remark in my whole time on the competitive-safeguards committee."

"He said, 'Well, but nobody's ever died from this.' "

A SURGE OF MOMENTUM

When the Wrestling Committee convened for its annual meeting in April 1996, five months after backing down on the sauna issue, it was becoming apparent change would be necessary.

"Intercollegiate wrestling must take steps to address these issues," the committee wrote in a questionnaire circulated to coaches at the 1996 championships. "Otherwise, the Committee on Competitive Safeguards will do so for us."

But what was the right approach?

Nobody knew the answer. The pressure of forced change fragmented the coaching base, and comments issued from the championships questionnaire and printed in the 1996 Wrestling Rules Committee minutes illustrate the emotions and concepts that complicated the discussions.

Some coaches favored bringing the weight-cutting era to an end: "You first must change the psychology of the wrestling coach," wrote one Division II coach, according to the minutes. "The NCAA will have to be willing to implement a plan of action that will make 'cutting weight' almost impossible to achieve."

But other coaches abhorred the idea of letting the CSMAS make the decision for them: "Do we, wrestling coaches, have to take whatever the safeguards committee rules without a fight?" wrote another Division II coach. "Every coach I know does not want to see his wrestlers damaged and does try to look out for their best (interests)."

Some coaches favored moving weigh-ins from five hours before dual meets to one hour. Others suggested holding them the night before a meet. But practical concerns added a layer of complexity. What worked for a well-resourced Division I school posed logistical trouble for a budget-thin Division III program. And nobody could determine who should bear responsibility for policing the new rules. The Wrestling Rule Book regulated competitions, not practices. Were coaches expected to turn themselves in for violations? Was it the responsibility of athletic trainers? Or referees?

"There seems to be as many methods ... as I have fingers and toes," Bob Bubb wrote in the minutes. "C.S. (Competitive Safeguards) may decide this for us."

But changes came nonetheless when the CSMAS and the Wrestling Committee met April 11, 1996. Two significant rules emerged to curb weight cutting.

The first, pressed by competitive safeguards and immensely unpopular among the coaches, became termed the "75 percent rule." It required wrestlers to compete in a single weight class for 75 percent of their matches in the second half of the season to qualify for the postseason. It sought to force wrestlers to consistently maintain and compete at a single weight class for an extended period rather than make a dramatic drop at the end of the year – a concept the CSMAS believed would discourage excessive weight loss.

Both groups agreed on the second rule: establishing a single weigh-in before the start of the NCAA regionals and championships, eliminating the need to continue cutting weight in subsequent rounds – the period when coaches saw the most problems occur.

The committees also agreed to continue holding those weigh-ins the night before regionals and championships started, though the decision made some CSMAS members uneasy. They firmly argued for holding weigh-ins immediately before matches so wrestlers wouldn't have time to recover from extreme cutting. But influential coaches, including Dan Gable, voiced opposition to what they feared would become a mat-side spectacle that could embarrass a wrestler who failed to make weight. They contended that athletes needed time afterward to take their focus off the weigh-in and mentally prepare themselves for the match. The CSMAS conceded the point but said it would monitor the policy.

Neither committee left satisfied – the rules presented a mixture of compromises. But each thought it offered a step toward a safer sport.

In hindsight, though, members of both committees realize how wrong they were.

Appalachian State coach Paul Mance was among the first to spot the danger. In September 1996, he wrote CSMAS for the second time in seven months to express concerns about weight cutting and predicted the new rules would only make the situation worse.

Mance predicted wrestlers would try to cut more weight earlier in the season than before and wrestle only part of their matches at their projected postseason weight specifically to meet the 75 percent quota. The one-time weigh-in at nationals, he predicted, would encourage athletes to drop significant amounts of weight because they could recover overnight before their first match and gain even more weight back by the later rounds.

"It is very important for your committee to remember that coaches and athletes want to win," Mance wrote to the CSMAS. "To be an All-American is all athletes' dream. Most coaches and athletes will do whatever it takes to realize this dream."

Research data and anecdotes from the following season support Mance's concerns.

For his master's thesis, Steve Westereng – a graduate assistant at Minnesota who is now director of sports medicine at North Dakota - repeated the 1991 weightregain study during the 1997 Big Ten Championships. The 41 wrestlers who participated gained approximately 11.8 pounds after their weigh-in -4.3 pounds more than the Division I average in 1991. Several coaches and administrators said it became uncomfortably common to see wrestlers, too exhausted or cramped to move on their own, being carried to the scales.

Members of both committees now look back and see that the new rules brought a much different effect than intended. They were a mix of compromises to address individual concerns. But put into practice by a competitive group, they became a toxic mixture.

"It backfired," Wilson said. "Sometimes, in retrospect, the rules you create cause more problems than you fixed."

A TRAGIC NIGHT

Abner Suarez could tell freshman teammate Billy Jack Saylor needed to lose more weight than he was letting on.

It was Nov. 6, 1997, a Thursday afternoon, and Campbell's wrestlers were preparing for their first meet of the year at West Point. The team gathered for a final practice before their weigh-in at 6:30 the next morning. Like all teams, the Camels assessed their weight.

But Saylor wouldn't tell his teammates what he weighed.

The 19-year-old arrived at Campbell after a stellar high school career. He was a three-time state champion at Suwannee High School in Live Oak, Fla., a program Suarez and assistant coach Heath Grimm knew held a reputation for demanding workouts. Saylor found failing to make weight unacceptable, Suarez said. But wrestlers

bear a sixth sense about

their bodies, and Suarez

could see that Saylor

needed to work.



"Most of us thought it was going to be tough on him," Suarez said. So he told Saylor he would stay late and help his teammate through the workout.

What Saylor didn't tell Suarez was that he'd arrived at Campbell in August weighing 233 pounds, according to a report conducted by the Centers for Disease Control and Prevention. He was supposed to wrestle at 190.

Saylor spent the next 10 weeks shedding 23 pounds, but he still had another 15 to lose a day before the weighin – a challenging but achievable goal in the minds of that era's wrestlers.

That evening, Saylor, Grimm and Suarez ran around the campus together. The trio talked excitedly about the next day's meet. It was to be Saylor and Grimm's first Division I match.

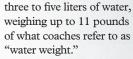
Grimm arrived at Campbell the previous summer, the first time the two-time All-American at Luther College chose to live outside his home state of Iowa. The Campbell job presented an opportunity to dedicate himself to a coaching career. So he sold his Camaro, cashed in a CD, rented an unheated room at the back of a home adjacent to campus and embraced the lean living of a coach with a graduate assistant's stipend.

Grimm asked Saylor how he felt during the run. The freshman started his last-minute push to shed the weight that day at 3 p.m., but he offered no clues of anxiety and never suggested he might struggle to make weight. "All positive signs at that point," Grimm said. "Just part of the process in a way."

When the trio returned to campus, Grimm departed

and left Suarez and Saylor alone. Saylor dropped another 9 pounds by 11:30 p.m., according to the CDC, leaving only 6 to go. He rested for two hours and returned to shed the final pounds at 1:45 a.m., riding an exercise bike in a heavy sweatsuit for the next hour.

But the final pounds are the most arduous to shed. According to Craig Horswill, a clinical associate professor of kinesiology and nutrition at Illinois-Chicago and a member of the 1991 weight-regain research team, the initial pounds come off quickly as sweat glands pull water from the bloodstream to cool the body. A person's blood can contain



The loss of fluid from the bloodstream weakens cardiovascular functions and reduces endurance. If the water isn't restored, blood flow to the skin and muscles will start to shut down to preserve the remaining fluid. Without the ability to sweat, the body begins to overheat. With no oxygen, the muscles start to die. It can trigger the potentially life-threatening condition rhabdomyolysis, in which the starved muscle fibers

Saylor stepped off his exercise bike around 2:45 a.m., walked to a wall without saying a word and sat down.

break down and flood the bloodstream with proteins, clogging the kidneys and stressing the electrical processes that support the heart.

At some point in that process, Saylor stepped off his exercise bike around 2:45 a.m., walked to a wall without saying a word and sat down. Suarez thought his teammate was angry.

"Hey, Billy," Suarez called out. Saylor didn't respond. Grimm returned to the wrestling room about that time to check on any wrestlers still working late and found Saylor against the wall - an image that has stayed with him to this day. The wrestler's body language concerned Grimm. He was still moving, but he stayed slumped against the wall. Grimm and Suarez helped Saylor out of his sweats, and Grimm told Saylor to drink some water.

Grimm knew Saylor needed help. But the circumstances offered few options.

The wrestling room lacked a phone. The building stood removed from the rest of campus in rural Buies Creek, N.C. But the tenant in the front unit of the house Grimm rented, just a couple blocks away, was an emergency medical technician and former Campbell wrestler. It seemed like the closest source for help.

"Hey, get some water," Grimm said, and he left to wake his neighbor.

It took only minutes for Grimm to return. But when he looked at Saylor, the EMT determined that he was dehydrated. Just give him some water, he suggested, and



Upper Iowa coach Heath Grimm (right) guided the Peacocks into wrestling's new era by developing the program into a top-five regular in the Division II championships, in a rural town where his athletes are recognized celebrities.

Grimm left to take his neighbor home.

The situation degraded badly by the time Grimm returned. Saylor turned blue as his body entered cardiorespiratory failure. Grimm didn't know CPR. There was no phone to call for help.

So Grimm rushed out a second time to seek his neighbor's help and to call 911. The scene felt surreal to Suarez as he watched his teammate receiving CPR. It wasn't until that moment that Saylor's life seemed in danger.

"It looked like a dream," Suarez said. "You just think at the most he's going to need an IV or something." The ambulance drove slowly away from the wrestling

room. Nobody said a word. Suarez felt numb.

A REBIRTH

That night, Saylor became the first known fatality in collegiate wrestling, but tears for the Campbell freshman barely dried before that list expanded and developed into one of the worst NCAA crises ever.

Two weeks after Saylor died, a senior at Wisconsin-La Crosse named Joe LaRosa collapsed and died of hyperthermia while attempting to lose 4 pounds in four hours, according to the CDC report. His core body temperature, after working out in a sauna suit, measured 108 degrees at his autopsy.

Then on Dec. 9, Michigan junior Jeff Reese died of kidney failure brought on by rhabdomyolysis after losing 15.3 pounds in four days, according to the CDC. He, too, was exercising in a sauna suit. All three wrestlers had attempted to lose an average of 30 pounds since the preseason, or 15 percent of their total body weight - more BRIAN HENDRICKSON / NCAA PHOTO

than double the average wrestler's weight loss.

"Under such conditions, particularly when dehydration is involved," the CDC reported, "there are no established limits for safe weight loss."

It tested the leadership of new Wrestling Committee chair Mike Moyer with a crisis rarely seen since the safety concerns in football gave birth to the NCAA in 1906. The George Mason associate athletics director, and former wrestling coach, assumed McHugh's seat barely two months before Saylor's death. The third fatality, at a highly visible Big Ten program, summoned national media scrutiny, with The New York Times, Sports Illustrated and ABC's "Primetime" lining up to question wrestling's weight-loss tradition.

The news media vilified the practice. Former wrestlers testified against the horrors of cutting weight. Coaches, fearful that the sport may not survive, recalled the discontinuance of NCAA boxing after Wisconsin's Charlie Mohr collapsed and later died following a 1960 championship bout.

Emergency teleconferences and meetings followed. USA Wrestling assembled the sport's top governing bodies to discuss the issue. Michigan put its season on hold, started an investigation and debated the program's future.

The crisis defused opposition from the coaches. Some questioned whether responsibility lay with popular supplements like creatine or ephedrine (the Food and Drug Administration found no connections). But preserving a future for the sport became paramount for many. And in the midst of chaos and criticism, those involved on both sides of the issue said Mover offered a voice of reason in the coaches' discussions with the CSMAS. He defended

the sport while showing an eye for the need to change. By early January, after a month of collaboration, the first of a series of sweeping - and complex - new rules started dramatically reshaping collegiate wrestling and invited sport science to play a leading role.

The changes banned plastic sauna suits, and saunas themselves soon followed. Weight classes increased, and weigh-in times significantly tightened: to one hour before the start of dual meets, up from five; and two hours for tournaments, NCAA regionals and championships, rather than the day before. It eliminated the time necessary to recover from excessive weight cutting.

In the years ahead, preseason certification established each wrestler's minimum weight class, and a rigid descent plan prevented them from losing more than 1.5 percent of their body weight each week, thwarting the types of crashes that ultimately cost Saylor, LaRosa and Reese their lives. Body-fat percentage and hydration checks also helped ensure wrestlers weren't starving or dehydrating themselves to make weight.

The system revolutionized weight management.

It was also logistically challenging to police.

Calculations could be misfigured - or easily manipulated. Paper forms overloaded boxes at the NCAA, which had no infrastructure to monitor such a volume. The sweeping system changes were a mere paper tiger. But Mover saw potential.

Hired in 1999 as executive director of the National Wrestling Coaches Association, Moyer pulled the responsibility for operating the weight-management program under the NWCA's roof and collaborated with researchers and wrestling advocates to explore technological options to ease the logistical congestion.

"We were doing calculations on our fingers and toes," Mover said. "I just recognized there was a huge need to help governing bodies and coaches of athletes administrate this."

The result was the Optimal Performance Calculator, a web-based system that distilled many of the complex NCAA rules into a manageable and enforceable procedure. While weigh-in times and other competition safeguards halted the last-minute weight crashes, the OPC - a complementary tool – solved the practice oversight question and ensured the overall suite of rules was effective.

The system empowers athletic trainers to track wrestlers' weight and body fat percentage throughout the year. It also simplifies the complicated calculations for certifying weight and determining wrestlers' optimal weight class. As athletes update their weight weekly, the system flags those who lose too much too quickly and helps guide a safe descent by providing a nutritional plan. Moyer said every NCAA program and middle school and high school wrestlers in 39 states - more than 230,000 athletes - now use the OPC. And after more than a decade of development, the coaches association is expanding the program so other sports with weight-control challenges such as swimming and cross country - can benefit.

Moyer's hope is that, out of tragedy, wrestling can become a model for change.

"Now we are in a unique position to promote wrestling as the gold standard in promoting fitness and nutrition," Moyer said. "What we are trying to do is to position wrestlers to be role models in schools across

America to combat the No. 1 threat to our nation's children, which is childhood obesity."

It's a noble goal, but not a finished journey.

Each year the system is tweaked to prevent manipulation, an ongoing challenge the wrestling community freely acknowledges. But those closely involved with the sport say the impact is evident. The rules changes and the OPC's oversight now make dropping weight difficult. They say there is more incentive to remain at a manageable weight. Weigh-ins no longer breed anxiety, and coaches say it's common to see wrestlers joking and smiling.

Wrestlers are more commonly spotted lifting weights to build muscle – anathema to the old philosophies – and even former national champions move up weight classes and maintain their competitive position. The wrestling community holds that as evidence that the weight-cutting culture's grip has relaxed.

Nobody calls the system perfect. Parts of the wrestling community still question whether to allow saunas for therapeutic purposes, move dual weigh-ins to two hours before matches and relax thresholds for urine specific gravity, which indicates hydration levels. Medical personnel still cringe when some changes are suggested. But both sides agree: Science and clinical medicine not only saved the sport at the NCAA level; they also guided it to become a better product. And the momentum carried over to CSMAS collaborations with other sports, leading to protective preseason practice regulations in football, concussion management guidelines, eye protection in lacrosse and padded pole vault collars in track.

"Unfortunately, we lost wrestlers who brought all that information to the forefront," said Dave Martin, Oklahoma State's senior associate athletics director and the current chair of the Wrestling Committee. "But it's been change that has dramatically helped the sport."

Those tragic events still cast a fog over wrestling. It's when you step into venues like Upper Iowa's Dorman Gymnasium in peaceful Fayette, Iowa, on a winter afternoon that you see the sport's health on display. Sure, you could pick the Division I championships and its recordsetting crowd of 109,450 fans in 2012. Or look at the healing participation numbers at the high school level, up 40,000 in the last 15 years. But rural Upper Iowa provides a grass-roots view.

This is where Grimm settled less than three years after the tragic deaths called the sport's future into question. He never felt a need to leave the town of 1,300. His team's schedule posters hang inside Main Street's restaurants, and his wrestlers get recognized at the local pizzeria. The nationally ranked program competes to capacity crowds, in front of spectators calling down an impassioned din on the mat below.

The town sees past the old problems and criticisms. It finds virtues in the proud sport to support and cheer. Young boys run onto the mat after matches and look admiringly to their heroes.

And it's in those moments that wrestling coaches see the future, when the next generation looks to the current, sees a healthier athlete setting a different example than their fathers and grandfathers learned from, and aspires to be just like them.