VIDEO TRANSCRIPTS FOR MODULE 15 - CONCUSSION MANAGEMENT

The Module 15 Online Concussion Course is a series of informational slides in written form that are intertwined with short quizzes which allow you to advance through the course. There are 7 videos imbedded into this course presentation. Below are the transcripts of those videos with the slide numbers indicated. As you navigate through the course the videos will start automatically and you may pause them at anytime.

Slide 4 – Video Comments from Senator Martin Looney and Senator Tom Gaffey

Senator Gaffey > As important as this legislation is, what's even most important is the fact that new dedicated coaches is engaged in this training module so you have the knowledge to look for those signs, symptoms of behavior of a concussion and know when to pull the player out for the student athlete's safety. Marty.

Senator Looney > And we know that recent testimony at Congressional hearing in Washington pointed out that the concussions of course are not only a problem in terms of athletic performance, but also academic performance. There have been many students who have suffered serious effects in their classroom work as a result of concussions so we're not just concerned about students missing games and practices, but also being impaired in their academic performance and we know that all the coaches share that concern.

Senator Gaffey > It's very important; post concussion syndrome is a growing concern to physicians across this country. Student athletes can very often have ill effects well after the concussion. I remember suffering a bad concussion when I played at Maloney High School and the sort of surreal feeling that you had when you were trying to recover that day in the hospital and it's one of the most scariest injury I ever had because you just really don't know what's going on up in your brain. So, obviously it's a very serious injury, we believe that this legislation is in place to protect kids, former player of Maloney High School back in 1960's a gentleman named Terry Wanett actually died of head injuries 2 days after they played (Conard)High School so, this is serious business and you take your business very seriously. Thank you for coaching and thank you for looking out for the care of student athletes across Connecticut.

Senator Looney > Thanks, and we know that the coaches have been concerned about this because they have already adapted this into their rules of play under the CIAC, operating parallel to this legislation so I think it's important that we're all working on this together at the same time.

Slide 56 – Connecticut Concussion Task Force Video

Player 1 > I was doing a 1 on 1 drill and defenseman hit me to the boards and I hit my head against the metal siding.

Player 2 > Me and this girl both jumped up to do a header and when I was knocked down, I hit my head on the ground.

Player 3 > I was going for the ball and we met like helmet to helmet.

Player 4 > I was in a game and a girl came up there and hit me over the head with her stick.

Mike Golic > Are you aware that over 3 million concussions occur each year in the United States? Are you also aware that one of the biggest problems with the injuries of concussion is that many people have suffered a concussion but they do not even know that they've done so and therefore don't report it nor receive the appropriate treatment? How you doing everybody? My name is Mike Golic and you may know me from my radio show but I played football for Notterdame and also 9 years in the NFL, now throughout my career, myself, as well as many team mates and opponents, well, we've gotten our bell rung. Bell ringers are concussions, an injury to the brain. The video you're about to watch, was developed by the Connecticut Concussion Task Force and is designed to help you better understand concussions which are one of the most misunderstood injuries in sports. It can have lifelong effects if not treated appropriately. Please, pay close attention because concussions are more common than you think. At some point in your life, you or someone you know will be affected by this injury and you

should know what the symptoms are to help you recognize the injury so you can be treated appropriately. Let me introduce you to Dr. Carl Nissen, Director of the Connecticut Children's Medical Center's Elite Sport Medicine Program.

Dr. Carl Nissen > Thanks Mike. Concussions in the American teens today is perhaps the fastest growing problem that athletes face and that athletes suffer. Concussions occur at all different levels of participation. Young athletes, High School athletes, College professional athletes, all potentially can suffer concussion when they step onto the field. Today with this video, we're gonna try to help you understand a little bit better about what a concussion is, how to recognize it and how the first steps of treating it can really make a big difference in returning yourself back to play both safely and smoothly.

Mark McCarthy > Concussions can occur from a glancing blow, it does not have to be a blow to the person's head and they most definitely do not have to lose consciousness in order to initiate a concussion. When the brain is injured, there's a certain cascade of events that occur. We call them neuro-metabolic cascades and what happens is, one stacked cascade is started, it's like dominoes, once you hit one, the rest are gonna fall and that cascade of events, the final result is that the neurons don't function properly.

Player 1 > About half an hour after I got hit, I was driving home and I noticed I couldn't read the signs on the highway. I was getting dizzy, I started getting a headache and I just knew something was wrong.

Player 2 > After my injury, I felt dizzy, I had a headache, I couldn't think straight, I couldn't really remember anything and I just had this sick feeling in my stomach vomiting and...

Vicky Graham > Sometimes athletes don't realize that they really have a problem, but they have trouble concentrating or remembering their plays.

Dr. Tom Trojian > Initially, in the short term, you can get problems with school work, you can get problems with sleep, you can get problems with repeat concussions and worsened symptoms.

Mark McCarthy > It's not a high incident but loss of consciousness is something that you need to be aware of. Any loss of consciousness needs to be considered a concussion and needs to be treated appropriately.

Dr. Carl Nissen > The biggest problem with concussions today is recognition. Estimates of how many concussions occur on athletic fields and courts across the Unites States varies anywhere from 1.6 million to 3.8 million a year. At any time, you have a huge disparity and an idea of how many times an injury occurs and you know that the absolute number of concussions that occurs is not really known.

Mark McCarthy > Many times when an individual has had a concussion, they've really, basically they've had an injury to their brain, so they aren't able to think for themselves and may not even realize that there's a problem or understand that a problem occurs. So if someone recognizes or sees that a team mate or an opponent has received a concussion, it should be brought to somebody's attention.

Player 2 > Now that I've had a concussion, if I noticed that someone on my team is exhibiting the signs of a concussion, I will tell them what the signs were, if they were feeling them and then I tell them to go talk to our coach or their parents, tell them, you know, I just don't feel right, I really should go see a doctor about this. I really need to get help and I think I might have a concussion.

Kevin Fitzimmons > Coaches play one of the most important roles in recognizing and managing concussions. They are the first individuals there to recognize when an athlete is kind of out of it and they're the ones that need to pull the athlete from competitions and get them to see the athletic trainer or physician.

Player 4 > Taking the time to report it and say what happened and take that one day even just to take a break and make sure you're ok is so significant.

Mark McCarthy > And one thing the coaches should do is recognize that this is an injury and that they don't try to minimize the injury. Many times coaches will say oh I've had a concussion, I've had blows to the head before, I got my bell rung, it is not a big deal but what we do now know that it is a big deal so coaches really

need to take an active role in managing the concussion and mean, showing that someone who has had a concussion is not on the field and that's probably one of the most important roles that the coach can play, is that someone who has received a concussion is not playing in a game or a contest.

Slide 57 – Connecticut Concussion Task Force Video (cont)

Mark McCarthy > Good hydration is one thing, good food, good consumption, getting the appropriate amount of rest, being put into situations that aren't stressful, those are some of the things that can help moving to recover from that concussion so not only is it just taking them out of school but the athlete needs to be when they are at home, they need to be helping themselves by resting and taking care of themselves.

Player 2 > When I was in school, I couldn't focus; I couldn't see the board as well as I normally could. I couldn't, when I would look at the board, it would be blurred than it normally would, everything seemed father away, books seemed longer to read than they normally did.

Player 1 > Before, maybe I could do a couple of hours of school work at a time and after the concussion, I could probably only do a couple of minutes before I could take a break.

Player 4 > I've been so much slower when you're there, just taking in everything at once and handling all the different subjects that you take in 1 day, it's overwhelming.

Dr. Joel Becker > When somebody's been out if school for an extended period of time, we wanna put them in a slow graded process so they are not overwhelmed. They start with shortened days, they make modification to the curriculum and we certainly would allow rest periods and breaks during the day so that the individual does not reach the threshold of the activity of symptoms.

Carrie Kramer > It might be that someone had a concussion; they were unaware that they had a concussion. They've returned to sports, they've returned to

school activities and they start to decompensate, they start developing all kinds of problems. They're exhausted all the time, they're not concentrating in school, they become a little bit irritable, they're having some other physical symptoms, and this is all due to the concussion and sometimes, some kind of post concussion syndrome that's developed but it's unbeknown to the parent and to the student and so really concussion management is so important at the very beginning of the experience because we can prevent some of these things happening to the kids in the first place.

Mark McCarthy > If someone were to get a concussion, still have symptoms and returned to play, the outcomes could be disastrous coz some of the figures show that 50% of individuals who get second impact syndrome, may die from that injury so second impact syndrome is very serious, although all be very rare, but it is very serious and therefore it needs to be considered when treating and managing a concussion.

Player 1 > After the first concussion I had, it probably took about 6 weeks before I started feeling well again.

Player 2 > Two or three weeks, I started feeling a lot better and I could do almost everything I could before the hit.

Dr. Carl Nissen > One of the first questions that almost everybody that suffers a concussions says I know that I have this, when can I play? When can I go back to school? When will I feel normal again? The problem is, is no two individuals are alike. Once you have a concussion, your concussion is gonna last as long as your brain needs to fully recover.

Mark McCarthy > Someone can go back to play after a concussion has occurred when, I call them three plus things that are, one is they have to be asymptomatic at rest, so they're sitting around telling us, you know, I have no more symptoms, my headaches are gone and I can go to my normal everyday activities and I'm not having any symptoms. And the second thing, be asymptomatic to no symptoms with exertion. So now they started getting their full activities, their full school, their full testing, they will be able to run around a little bit with no increase of

symptoms. So, they're not having any symptoms with activities. Third thing is we need to have a neurocognitive return and that using neurocognitive testing, we help determine if the brain has come back to normal and the plus is, we would put them through a return to play program which takes a few days to slowly increase and return the back to normal activity.

Dr. Tom Trojian > It's important that we don't allow people to return to play just because they feel like they have to be there to help their team. We all know that athletes wanna play and we want athletes back out on the field but we don't want them to hurt themselves and to have long term problems that we can't recover from.

Player 2 > Before, I would just be like oh, play through it, I'm fine, I can do this, I can keep playing and also I did the first time and it took me a lot longer to come back from the concussion than I normally would have and it's just not a good idea to do that.

Player 4 > When you know you're not normal, going back isn't the smartest thing to do at all. So, if the length of time, that is how long it took me to finally feel normal, it's the time I need to be out.

Dr. Joel Becker > If somebody's had multiple injuries, that can potentially have accumulative effect and what we do see in some athletes is that even at a smaller and a lower level hit occurring after multiple hits, it was a more severe reaction.

Carrie Kramer > When someone hears the word concussion, they may not think of a serious medical issue but if a concussion remains untreated, there can be very serious medical consequences and so it's so important to treat the concussion.

Player 1 > I was a little scared and tempted after that first hit, I didn't want it to happen again but potentially it wears off and you come back to regular play and back to normal.

Player 2 > I still feel that I play the same, I just know what to watch out for and not to do crazy things and how to stay out of a situation where you might get a concussion.

Mike Golic > The Center for Disease Control has deemed concussions among young athletes participating in sport and academic. If you or someone you know suffers a concussion, there are four things you should remember: Number on, learn how to recognize the signs and symptoms of a concussion. Number two, remove yourself from the practiced game or contest if you have received a concussion. If you suspect a team mate has received a concussion, report it to your coach or athletic trainer. Number three, seek treatment from a qualified medical provider and last, only return to play when you are fully recovered. For more information about concussions, please log on to <u>www.connecticutconussiontaskforce.org</u>. Remember this, please smart, play hard, play safe, and most importantly, have fun while you're playing. Sports can give you a life time of enjoyment and fulfillment.

Slide 71 – Second Impact Syndrome (Brandon Shultz)

John Gunn > Friday night fever in (Anacortes) Washington. A showdown between the (Anacortes) High and the Linden Lions bring fans to their feet. Among them, Brandon Shultz, an honor student during his days in (Anacortes) High who spent many of his nights out on this field.

Brandon Shultz > I love football. To this day I still love it. I still have dreams that I'm playing.

John Gunn > Brandon made varsity at sophomore year playing right guard in left end but now he's not just a normal star recalling past glory, in fact, he has no memory of the event seven years ago that ended his football career and changed his life. It all started just after his 16th Birthday. Following a hard tackle, Brandon suffered a mild concussion forcing him to sit for the rest of the game. **Brandon's Mother** > He really wasn't down on the ground or anything, he was just shook up. Got his bell rung as we say.

John Gunn > Brandon wrote a letter to his father that week complaining of headaches and he skipped several practices but no one told his parents to get him medically evaluated. It just didn't seem that serious.

Brandon's Mother > He got up Monday morning, went to school and said you know, I feel fine, I'm gonna play.

John Gunn > His family videotaped the action that night from the stands. After a tackle at the end of the half, number 61 seemed fine but during the next few minutes, something happened.

Brandon's Mother > I looked up and there was Brandon just laying on the field flat and it was kind of surreal as I looked back, I didn't really panic, I just said oh, I guess I better get down there.

Andrew Holtz > Lane Phelan approached her son who turns out was unconscious. The coaches called for an ambulance. Brandon was in a coma for five days and endured four operations on his brain and skull and yet the faithful hit at the time seemed like so many others. So why did seemingly a routine tackle have such devastating results? Well doctors concluded Brandon had second impact syndrome and what that means is that Brandon's brain had been injured and left critically vulnerable by the hard hit a week earlier. It hadn't had time to recover so even a slight blow could trigger swelling and bleeding, squeezing Brandon's brain within his skull causing permanent damage.

Dr. Steve Wright > It was as if his brain was exploding.

Andrew Holtz > Dr. Steven Wright, an expert on sports related head injuries says a second hit, even a mild one like Brandon's can set off a dangerous chain reaction in the brain.

Dr. Steve Wright > When his brain swelled, it was as if he had a sponge that absorbed large amounts of fluid and made its size much much larger than it

normally would and of course being confined in the hard skull, it had no place to go but to put pressure on the walls of the skull and on itself.

John Gunn > Brandon is now partially blind. His right arm and leg don't always do what he wants. It's unlikely he'll ever be able to hold down a job or to live alone. So many things that once came easily, are hard.

Brandon Shultz > It is very frustrating, you know, especially when something that I know I could do before, just fine.

Brandon's Mother > I think there's very few similarities, it's hard to come up with any similarities, he's, he really is a totally different person.

John Gunn > A legal settlement will be (Anacortes) School District funds Brandon's ongoing care and the district now takes a hard line on sports injuries.

Gill James, AD> Our standard is that if we have any reason to think there's a head injury, we immediately pull those kids out and we're gonna send them to be evaluated.

John Gunn > The American Academy of Neurology issues this palm card for coaches listing possible warning signs for concussions like delayed response, confusion and slurred speech. It also tells how long a player should wait before returning to action, in most cases, at least a week but a recent survey published in the American Journal of Sports Medicine found that almost a third of High School and College player who's suffered a concussion still went back onto the field the same day.

Dr. Steve Wright > It's very important that we follow them to make sure that they truly are better before they engage in additional activity. They'll never be playing or participating if they're symptomatic, period.

John Gunn > The toughest audience to educate about concussions and second impact syndrome may be the athletes themselves.

Brandon Shultz > Players should realize when something is wrong with them that's, you know, serious, and they should, you know, in their own minds, you

know, draw the line saying, no, you're not going back out and I know that, I know that that is extremely hard to do.

John Gunn > But Brandon also knows how hard it is to live with a serious brain injury and how the hopes and dreams of a young man with so much promise can be crushed in an instant.

Brandon Shultz > I think about living my life more for the moment than for the future because I realize now that the future may never come.

Slide 170 - Final Video (Preston Plevretes)

Commentator > Life was good for Preston Plevretes as a senior at Marlboro High School, New Jersey. He was charismatic, handsome, captain and MVP of the football team.

Preston's Brother > Everyone looked up to him kind of funny, that's kind of how he was around our school, like everyone knew him, everyone was trying to say hi to him.

Preston's Mom > He just was happy all the time, always happy. He just had that aura.

Commentator > What were his dreams in football?

Preston's Dad > He was gonna get himself good enough and strong enough and fast enough to play somewhere. If it wasn't at the NFL, it would be in Europe.

Commentator > In college, those dreams would come to an end.

Commentator > October 4th, 2005. La Salle University in Philadelphia, Plevretes is a 6 foot 2, 230 pound freshman line backer. At practice, he gets injured in a helmet to helmet collision.

Preston's Brother > I remember him coming home that night, a little bit concussed, you are kinda wearied, I don't really know what's going on.

Commentator > In a game 4 days later, Plevretes tells the La Salle trainer his head hurts. The trainer sends him to the student health clinic where he is diagnosed with a concussion but 2 days later, a nurse tells Plevretes he can return to play after sitting out 1 game.

Commentator > Was he symptom free at that time?

Preston's Brother > No, he was never symptom free, not at all.

Commentator > Why do you say that?

Preston's Brother > He always played with a headache.

Commentator > And how did he deal with it?

Preston's Brother > He took lots of headache pills at the time.

Commentator > Plevretes plays in 2 games without incidents, then on November 5^{th} , 2005, with 2:42 left in the game against Ducane University in Pittsburgh, he tried to make a tackle on a punt return.

Football Coach > He went down like a ton of bricks, I mean, he hit the ground and he was out.

Commentator > Doctors, trainers and coaches rushed onto the field where Plevretes lay convulsing.

Preston's Brother > He was just shaking and then he kinda rolled over onto his back and he just went completely limp.

Football Coach > I was worried then. I can't describe the look on his eyes.

Commentator > The head coach and team trainer run to Mercy Hospital, just a few blocks away. Assistant coach, Phil Petit is in the ambulance.

Football Coach > He started to foam a bit at the mouth, at that point, he was starting to fade.

Commentator >For two and a half hours, surgeons work furiously to save Plevretes' life. A massive blood clot is putting massive pressure on his brain. To relieve the pressure, the right side of his skull is removed.

Preston's Dad > His top was all pushed in cuz they had taken his skull off so the brain was exposed. He was on life support.

Preston's Mom > He was laying there, tubes out of his head, he had tubes going down both nostrils, my beautiful boy was laying there.

Commentator > Today, 24 year old boy Preston Plevretes is the face of concussion and consequence. He struggles to eat, walk and talk, four and a half years after his injury.

Commentator > Do you remember the hit that you took on the field?

Preston > I don't know but when I see the tape it brings back memories.

Commentator > What do you remember about the Ducane game?

Preston > That I almost died.

Commentator > At least 55 High School and College football players have died of brain injuries sustained on the field since 1995 according to the National Center for Catastrophic Sport Injury Research. Preston suffered second impact syndrome which occurs only in athletes under age 23 whose brains are still forming. It is a rare, often fatal injury that happens when a brain that hasn't yield from a prior concussion is jolted again.

Dr. Nicky Collins > The word concussion in Latin means to shake violently, think about the yolk inside an egg shell.

Commentator > Nicky Collins who has reviewed Plevretes' medical records is one of the world's leading authorities on sports related concussions.

Dr. Nicky Collins > If you have a blow to the head that's sufficient enough to cause the brain to move inside the skull, a certain neuro-chemical called Potassium is released outside of the neuron. At the same time, a second neuro-chemical,

calcium which is supposed to be outside the cell, it leaks into the neuron and for some reason, a second blow during this period of metabolic crisis, will set off a cascade of events that you can't turn back from and then you see the massive brain swelling. I don't believe the second event would have ended up resulting in a catastrophic outcome if it weren't for the first head injury.

Slide 171 - Final Video pt. 2 (Preston Plevretes)(cont.)

Commentator > Preston lived without a portion of his skull for 5 months. He will spend his 20th Birthday in the hospital trying to regain the use of his arms and legs. After 9 months, he began moving around with a walker. In 2007, 2 years after the hit, he was exercising daily and starting to regain his speech, but Preston began having painful seizures as many as 10 a day. So in July 2009, doctors disconnected the frontal lobe from the rear of his brain. The surgery left him barely able to move or talk again.

Preston's Dad > He was devastated, I remember him crying after his operation saying nothing works, he didn't expect it to be that bad.

Preston >Is this how I'm going to be for the rest of my life?

Preston's Mom > Preston said to me he doesn't blame the game. The only thing Preston blames is the lack of knowledge.

Commentator > In 2007, the Plevretes sued La Salle University and team trainer Bill Gerzabek for negligence. E60 obtained this deposition of Gerzabek who was questioned about his evaluation 5 days after the initial concussion.

Attorney > No orientation or memory questions?

Trainer > No.

Attorney > No recall questions?

Trainer > No.

Attorney > Nothing to evaluate his mental status?

Trainer > No.

Commentator > The University has admitted no wrong doing and still employs Gerzabek but last November, La Salle, which no longer has a football program, agreed to paid Plevretes \$7.5 million. In December, the NCAA began revising its concussion guidelines. On April 29th, 2010, it urged schools to have a concussion management plan on file, requiring clearance by a team doctor before an athlete returns to play.

Attorney > This case is significant because it's a wakeup call that you have to have a serious program with regard to head injuries.

Commentator > At home, aids and Preston's parents care for him around the clock.

Preston via an interpreter > My name is Preston Plevretes.

Commentator > 5 days a week, he sees therapists who help him work toward 1 of his goals, to speak publicly about the dangers of playing with a concussion.

Commentator > How important is it to you to have people understand your story and learn from your experience?

Preston via an interpreter > Very.

Preston via an interpreter > Very important. Yeah.

Preston via an interpreter > Because I don't want people to end up like me.

Commentator > This is a young man that's been through heck of a lot.

Commentator > It's now February 2010 and all eyes or on Preston Plevretes.

Preston > My name is Preston Plevretes.

Commentator > A concussion awareness event at a New Jersey hospital.

Preston > Thank you for coming tonight.

Commentator > In the audience, High School trainers, coaches, his therapists and family listened to his story.

Preston > I could have sat out for one more game.

Commentator > What was the message in speech?

Preston > I could have sat out for a season. But now, I will sit out for the rest of my life.

Preston's Mom > My son survived, but look at his life right now. My son is the face of consequence of not understanding the symptoms of a concussion.

Commentator > What has been the hardest part of all this for you?

Preston > Just waking up every day and knowing I can't do all the things that I want to do.

Slide 172 - Final Video pt. 3 (Medical Team Analysis of Preston's Injury)

Dr. 1> To educate us on what could happen to a football player when he takes a hit like this, we asked the sports science guys to analyze the head and what did you guys come up with?

Dr. 2 > So we set up an experiment that replicated as many factors as possible in the Preston hit and what we found out, it was sort of the perfect storm for this injury to happen.

Dr. 3 > Our stand-ins were a live player and an instrumented crash test dummy. We found that the peak linear acceleration of Plevretes' head was about 55 G's upon impact and 58 G's when he hit the ground.