



Nov. 9, 2012

## ROUNDTABLE DISCUSSION

### **"PLAYING SAFETY: THE FUTURE OF YOUTH FOOTBALL?**

TOM FARREY: My name is Tom Farrey. I am the director of the Sports and Society program here and an ESPN reporter, and the title of today's roundtable is "Playing Safety: The Future of Youth Football?" I'd like to introduce Bill Mayer, who is two seats over from me. Bill is the chairman emeritus of the Aspen Institute and has been a great supporter of the Sports and Society Program, understands the DNA of this organization well as well as what it can bring to this type of conversation. So Bill -- and Bill is also an owner in the NFL. His Virginia Destroyers won the championship last year, so he has a feel for pro football, as well.

Take it away, Bill.

BILL MAYER: Thank you, Tom, and thank you all for coming to the Aspen Institute today, really looking forward to our conversation. I've been asked to just give a very short summary of what Aspen is and what we try to do and why it's involved in this program.

The Aspen Institute, which has been around for 60 years, means a lot of things to different people, but as a common denominator what we debate internally is the whole concept of thought versus action, so we all talk, and the whole key is what are you going to do with that conversation, and in fact will it ever lead to any action.

So what I think we're doing today is very much in the spirit of what we try to do here. Aspen is also described as an educational organization as well as a leadership organization, and I think both

of those tie into what we're trying to do today because ultimately if you're going to take thought and turn it into action, there has to be some leadership and some ownership.

So what we will hopefully come out of today and the ongoing discussions after today is try to take the conversation forward into action with leadership, and as some people call it, reach some kind of tipping point in the future to improve the participation of youth in sport and also the safety of those people involved.

Tom, back to you. Thank you.

TOM FARREY: Let me set up this meeting by reading to you two sets of facts: Fewer than 1 in every 4 adolescents gets enough exercise in this country. We have an epidemic of physical inactivity, costs the nation about \$90 billion a year right now in direct costs, projected to be \$190 billion by 2030.

We know that physical activity levels have dropped 32 percent in less than two generations, and that between the ages of 9 and 15, physical activity levels drop 75 percent. A lot of kids fall out of sports during the middle school years. And we know that there are many health benefits from playing sports, stronger bones, better heart health, lower levels of depression, and we know that one study in 2004 out of Penn State University said that adolescents who play sports are eight times more likely to be active in sports and physical activity at age 24 as adolescents who do not play sports.

So as a nation we have a real interest in getting and keeping as many kids active in sports into the teenage years as possible.

At the same time, we have another set of statistics that we have to contend with, particularly as it relates to the sport of football. I work for ESPN, and we recently conducted a survey of parents, and 58 percent of those with sons younger than age 15 say they were, quote, very concerned about youth football injuries. Nearly 1 in 5 discouraged their sons from playing the game. Football has the highest concussion rate in sports along with hockey, and so you have a lot of parents who are wondering, gee, is this a game that is safe for my kid, should I introduce them to it, what are the short-term consequences, what are the long-term health consequences.

So the central question that we are going to be looking at today is how can football, the institution of football, best serve the interests of children and communities and public health. How can football serve children, communities and public health?

Everybody at the table here has their own narrow interests. We work for this organization or that organization or we're trying to grow our membership or whatever else it may be. But this is a collective conversation about what are some great ideas that people have developed out there that could be scaled up, and is there common ground that people can find to move this conversation forward and address the needs of the nation and the concerns of parents.

People are worried; should we just hold off on football until high school, or, some would argue, not play at all? Or can it be made safer through reforms at the lower levels? And what's the role of the NFL and the Players' Association and pro football and the industry in general in creating an environment that's productive?

Aspen began to address these questions at the Aspen Ideas Festival in June, where we convened a panel called "Head Games: Can Football Be Saved From Itself?" and Jim Brown, the NFL legendary -- the legendary NFL running back was on the panel, as was Chris Nowinski, who's to my left here; Dan Garza, a professor at Stanford who's worked on mouth guard technology that could measure force impacts on the head; and Kevin Turner, who was the subject of a documentary which you will see a clip of. It was called "American Man," produced by a colleague of mine who works at HBO Real Sports.

This panel will be featured in a show on the World Channel on November 20th at 8:00 p.m. and online, as well. Public Television is working with the Aspen Institute to turn these conversations at the Aspen Ideas Festival into one-hour specials. There will be a whole one-hour special on the Sports Track which will include this conversation with football safety.

#### SESSION I; AT WHAT AGE SHOULD CHILDREN PLAY TACKLE FOOTBALL?

FARREY: What I'd like to do now is start off this conversation about the youth question, about the under-14 question, the pre-high school equation, and we'd like to do that with our special guest, Dr. Robert Cantu, who many of you, of course, are familiar with. He is chief of neurosurgery, chairman of the department of surgery and the director of the service of sports medicine at Emerson Hospital in Concord, Massachusetts, as well as a clinical professor of neurosurgery and the co-director of Boston University's Center For the Study of Traumatic Encephalopathy. He's a senior advisor to the NFL's head, neck and spine

committee and the co-founder of the Sports Legacy Institute, an organization dedicated to addressing the concussion crisis through research, treatment, education and prevention, and he is the author of a new book called "Concussions and Our Kids: America's Leading Expert on How to Protect Young Athletes and Keep Sports Safe" written with Mark Hyman who is with us here today, as well.

Dr. Cantu, what is the central thesis of your book here?

ROBERT CANTU: Well, first of all, I'd like to thank you and the Aspen Institute for convening this conference today and for inviting me to participate in it.

I think before I answer your question, I'd like to start by just simply saying, I am pro-sport. I want every sport that's being played today to be continued to be played and I want it to be played in greater numbers, and I believe all of the opinions that I hold are trying to have that happen, although right now maybe not everybody fully sees it.

Football's value is the aerobic and resistive exertional exercise obtained in playing it, and the last time I checked it was the minutes if not hours of physical activity playing the sport that count, not the milliseconds of bashing heads.

As the medical director of the National Center for Catastrophic Sports Injury Research, we track catastrophic sports injuries in this country, 97 percent of which come from the sport of football, or 96.9 to be precise. And that's even before you start to get into the concussion issue. We believe that all sports that are currently being played should continue to be played, but they should be made safer with regard to the head issue.

And in the sport of football, especially involving our very young youth, we believe that tackle football should not be played, rather flag football should be substituted, and in the substitution of flag football, it's perfectly okay if pads are worn and even helmets are worn. But the act of tackling, which is the activity where almost all of the serious injuries happen and the majority of the concussions, as well, is eliminated, and instead flags are pulled.

I personally view this as a tremendous opportunity for USA Football, because if they were to offer flag football as an option and promote it, all the aerobic benefits that are needed to be there; the head injury risk and other injuries would be largely decreased; and I think football would be gaining individuals coming from other sports at high risk of head injury, especially like soccer. Soccer has been a drain on football for two decades, and I think the drain would go the other

way if football were to offer the flag as an option to tackle.

Youngsters are not miniature adults. Brain injuries in youngsters are a bigger problem than they are in adults. Youngsters' brains are not fully myelinated. That's the coating of a telephone wire as an analogy; it helps in transmission but it gives extra structure and support to brain fibers connecting nerve cells. Youngsters' brains are more susceptible to the cytotoxic shock of concussions and as a group they tend to recover more slowly. Youngsters have big heads on weak necks, and that "bobble head doll" effect puts them at greater risk than it puts an adult. And youngsters as a group - I commend the NFL for trying to alleviate this problem - tend to have the oldest equipment, the least experienced coaches, almost never have medical personnel on the sideline, and youngsters do not have informed consent I would offer. Rarely do they really understand the risk they're taking, especially at the youth level.

So for these reasons as well as others, which I'm happy to get into, I think that we should seriously approach football from a different standpoint for our youngest individuals and take tackle out of football at the youth level.

TOM FARREY: Dr. Cantu, what is the research suggesting that's the wise thing to do?

ROBERT CANTU: Well, the research at certainly the lowest levels, the Pop Warner levels, unfortunately really isn't there because if you don't have medical personnel on the sideline, you're certainly not going to have very much recognition of concussion. We had an aberration in Massachusetts recently where there were five concussions at the Pop Warner level in one game, and I had somebody in my office earlier this week ironically that said there were three concussions in a particular game in which his son was injured. He happens to be a coach, and all of them came from one individual who was inflicting the trauma on others.

There's not solid signs to tell you exactly what the scope of this problem is because statistics have just not been accumulated. But what we do know from a wide variety of sources is that the brain of our youth are more susceptible to injury and the impacts that those brains are being asked to absorb sometimes reach the same level, 80G or higher, that we see in adults, and there is a lot of emerging evidence both on structural DTI, on metabolic studies, functional MRI, as well as neuropsychological testing to suggest that you don't even have to have concussions recognized

for a brain's structure and/or function to deteriorate over the course of a season of football.

Preseason testing versus postseason declines under all three of those disciplines. So there is plenty of evidence, I believe, to suggest that we need to look at this differently.

TOM FARREY: What is the -- I was speaking to someone yesterday who was telling me that her son is playing, he's a freshman in high school and it's his first year playing, and there were an awful lot of injuries this year, possibly because these kids haven't played football before and they're being introduced to tackle football. They didn't learn how to tackle at an earlier age. You've heard this thought, Kevin Guskiewicz at North Carolina believes you need to teach kids to tackle earlier to be able to protect themselves at 14, 15 and 16. What do you think of that?

ROBERT CANTU: I might have heard that once or twice (laughter.) Kevin is department chair where we're an adjunct professor, one of the other handles we wear, so I've heard that, and he's a very respected colleague and great friend. I have the highest regard for Kevin.

I think in this one area we seriously disagree. Maybe there's one or two others, but certainly here, and I cite the following: If you look at some of the great individuals that have played in the National Football League, Tom Brady is not a bad example, the guy that ran for 251 yards last week against Oakland is another, they didn't play a down of football until they got to high school.

Let's forget about them. Let's look at Tony Gonzales, the all-time leading tight end in the National Football League and still adding to his numbers. He played basketball at my alma mater, Cal, and up in New England our right guard for years was Steven Neal who didn't play a down of football in high school and college, came out of college with an outstanding elite wrestling career. There's not much future in Olympic style wrestling monetarily, there's another activity that doesn't quite go by the same name, but this big guy to my left can fill you in on it, where you can certainly make a buck, but certainly Olympic wrestling you can't, so he went into football. And there are many track stars that didn't play football in college like some that did that went to the NFL from track that didn't play a down of football in college.

If you've got the elite genes and the work ethic and the emotional makeup you can make it in whatever sport, and you don't have to pick it up at a very early age and you don't have to have the best coaching and all that kind of stuff. You're going to be better at age 5 or age 10 or age 12 if

you do, but when you're age 20 it's going to be what God gave you and what you're willing to do for yourself that determines where you're going to wind up.

So I don't believe for a second you need to teach these skills at a very early age to necessarily perform at a very high level when you're in your 20s or 30s, or even in high school.

And I don't think you necessarily need to stop them from learning those skills if you go to flag football, because flag football, yes, you're going to pull a flag instead of crack somebody to bring them down to the ground in tackling, but you can still teach all these skills, you can still teach tackling skills without having tackle be a part of game play. Instead of bashing heads you're hitting dummies, tackling dummies.

The winningest football coach in this country, Tom Gagliardi, now in his 80s, doesn't have any tackling once the season starts, and his teams have won and his teams have embraced it. The only tackling that goes on once the season starts is in game play. But they practice all week long the skills; they wrap people up, they just don't bring them to the ground.

TOM FARREY: We've talked about the importance of getting kids active. Isn't football one of the sports that is actually accessible to kids who are obese or overweight? There's no room for that kid on a soccer team or in any of the speed sports, but in football there's a place for him on the line. So if we move to flag, do you eliminate the opportunity to give those kids physical activity opportunities?

ROBERT CANTU: Well, last time I checked, flag did have tackles and guards and kids playing different positions, and I don't see flag eliminating those individuals from playing. Yes, they don't have as much of an advantage, but I think they can play flag football and get the aerobic benefits of flag football, and for our youth, playing as a youngster on a really big field, there's a lot of aerobic stuff that goes on. I want to see more of it, I don't want to see less of it.

TOM FARREY: One sport governing body that has moved in this direction is USA Hockey. They have banned body checking at the pee-wee level. They've also gotten rid of national championships at the pee-wee level, as well. There was a lot of angst when they were having this discussion about whether to push body checking off. What do you think of their reforms, how they've worked out? What have we learned?

ROBERT CANTU: Well, two years ago when we started writing, it was 11 years of age

full-body checking started as you just indicated, and then over the course of the last two years they've upped it to 13, so the 13, 14 year olds are the minimum age that they start with full-body checking. That came out and was facilitated by several reports out of Canada that showed the incidence of concussion was dramatically higher when there was full-body checking.

So that was really good stuff that showed and made it easier, and I commend them greatly.

I'm not hung up, by the way, on whether it's 14 or 15. If you're skeletally immature, if you haven't got axillary hair, move it up to 16 before you start collision activities if you want. The reason we arbitrarily picked 14 is simply that's high school; you want to learn at some point all of the skills and play the sport similar to how it's played in college. But we're going to have that debate a little later, and I look forward to it.

TOM FARREY: How do you feel about some of the reforms that Pop Warner and perhaps some other organizations have adopted such as limits on practice time during the course of the week, getting rid of certain head-on-head bull-in-the-ring type of drills?

ROBERT CANTU: Well, I certainly commend all of those reforms. I think bull-in-the-ring is insane at any age, and it doesn't help you play the sport any better. But let's think about it a little bit. Reducing the hitting in Pop Warner by a third, and I support that, but that's up to 40 minutes a day theoretically every day they practice. The Ivy League a couple years ago went to hitting on only two days a week, and the National Football League and the Players' Association got together and the National Football League players now only hit once a week; that's 14 times in 18 weeks.

So these kids who have no medical personnel on the sideline, playing a sport that in the late 1900s was designed for adults, it came out of college and almost died in college in 1905 if it weren't for Teddy Roosevelt, but this sport that was made for adults is being played at a youth level without medical personnel in attendance, and they're practicing at a rate arguably 500 percent greater than the NFL uses.

TOM FARREY: I'd like to open up the conversation a little bit. If you want to make a comment, ask a question, go ahead and put your name tag up. Scott Hallenbeck, talk to us about what USA Football is doing in this area, and before that, address the general question, is football serving the best interests of children in communities, and how can it be improved?

SCOTT HALLENBECK, EXECUTIVE DIRECTOR, USA FOOTBALL: I believe it's certainly striving to provide a great experience for parents and kids. I think we all recognize there are challenges. We're at a point where we're learning.

But first I guess I should take a step back and thank Dr. Cantu for raising these important issues. We need to have a healthy debate around things such as this, among others, and I believe we're all in this together. We're all looking for ways to try to create a better and safer environment for parents and players.

I also hope that we're in this to provide accurate and whenever possible evidence-based data for parents. I think we have to be careful certainly not to scare parents. My interaction with parents across the country is that they're looking for frankly someone to say we care about your kids, we're taking action, we recognize there are challenges, we're doing something about it.

So largely there's two sides of this the best I can tell. There's the sport side and particularly the football side that we focus on, and of course there's the science side, and I'll let the medical experts talk about the science side, I mean, some that were over certainly in Zurich (at a recent international conference on concussion management standards) and others have been working closely with Dr. Cantu for some time.

But USA Football, there's 3 million kids that play organized tackle football, 6 to 14, roughly 2.8 that play flag. First of all, we believe strongly that flag is a great outlet, a great option to participating. In fact, we suggest that your first touch point, your first experience should be flag, no matter what age.

In addition to that, our focus, we don't run football leagues, so we work with the likes of Pop Warner and American Youth Football and organizations across the country to make them better and safer, so that includes things like the only nationally accredited coaching education program, people using practice plans. Most coaches don't use practice plans, so you talk about making sure you have an organized, structured practice and you're doing things the right way. We have to ensure these volunteers, and God bless all these folks out there that are volunteers, they're commissioners, coaches, what have you, they're out there putting their time into this, we need to educate them. And I think everybody, certainly everybody medical expert, every expert weighing in on this issue always comes back to education being most critical.

So USA Football's focus is largely about education. We provide the best resources we can to make sure that those folks are prepared.

I mean, literally down to drills that have 3D animations, a heads-up football app now that literally can be in the palm of the hand of a parent which has signs and symptoms, that has the proper tackling techniques, that has nutrition information, that has heat and hydration information, things like this, just resources that ultimately better prepare all these folks to ultimately deliver a safer experience.

With that said, we fully agree that we need to reduce how many contacts in practices. We literally have something called levels of contact, and it actually started with a conversation a couple years ago with Dr. Cantu and Chris when they came to our offices and talked about the hit concept. At that time we had come up with something called levels of contact.

The basic premise is there's a progression in practice. Take a two-hour practice. You start with air, just teach the technique. Then you transition to bags as he suggested. Then you transition to sort of 50 percent speed and 75 percent speed and maybe only the last 20 minutes of practice you actually have live contact.

So it's things like that. It's a new age-based teaching concept where we look at -- we brought the science, if you will, to football, and we said, think about this cognitively, emotionally, physically. Look at an eight year old, eight and under, a 10 and under, a 12 and under, a 14 and under, how do we develop these folks.

I'm a parent of a 17-year-old daughter and a 16-year-old son. My son plays football, and to see the development of an eight-year-old or ten-year-old is dramatic, again, emotionally, physically, cognitively. All these things weigh in on how we ultimately produce resources that make the game safer.

So those kinds of things seem to me a logical step. Maybe it's an interim step but certainly a logical step in lieu of evidence-based data right now that suggests we should effectively have upwards of 3 million kids stop playing organized tackle football.

TOM FARREY: Why not just adapt Dr. Cantu's suggestion of flag only before 14? What's the argument against that and why?

SCOTT HALLENBECK: First of all, we very much support flag. If I'm not mistaken, I think Pop Warner and a lot of other organizations do, as well, and that is growing like crazy.

TOM FARREY: But flag only is what he suggested.

SCOTT HALLENBECK: Yeah, I guess, again, from our standpoint interacting with parents, talking with coaches, these are folks that they love this game. You have a conversation, my kid loves this game. Just help us understand how to play it more safely.

So I guess in short, I just don't see that leap just yet, that that needs to be -- we need to actually take such a dramatic leap.

I think, again, there's room here to work together with the science experts and the medical experts to create programs and resources and probably stronger standards that ultimately can, again, make this a better, safer game.

TOM FARREY: Dr. Cantu?

ROBERT CANTU: Yeah, I would like to thank Scott very much, too, and it mostly is because of a very insightful meeting that he referenced when Chris and I spoke with him and other members of USA Football, and believe me, this isn't me against USA Football, at least it's not in my mind. I want USA Football to prosper, I want it to triple the number of people playing it. Yes, I want things played a little bit differently.

But where my eyes were opened was that when I talked with Scott two years ago, he said basically, Bob, I'm not opposed to flag football, but the parents won't sign the kids up for it. They want to see their kids emulating their Sunday heroes, and they want to see them do it as young as five years old.

And I may not be the quickest person in the world, but a light bulb did go off that said, wait a minute, I've been working in this field 35 years, I'm not getting a lot of traction in terms of changes. I go to medical meetings, yes, I talk here and there, but it really kind of dawned on me if anything is really going to happen, it's going to be educating the parents who are then going to demand there be changes and other options, and that was the genesis of the book.

And when we did the book, that's my 31st book - most of the others are medical - to try to keep people awake at night, we enlisted Mark Hyman to help me with it, and I'm really thrilled with the result.

TOM FARREY: A quick response to that, and then I'd like to go to Ray.

SCOTT HALLENBECK: Well, I didn't realize that I get to take credit for why he writes this book.

ROBERT CANTU: You do.

SCOTT HALLENBECK: That is somewhat news to me. I don't recall that conversation exactly that way, but in fairness, again, Heads Up Football, an example, the program we're trying where reform is probably a good one, where we've done the research, we looked at the concept of, again, a nationally accredited coaching education program that has 15 chapters and you have to pass -- and 15 quizzes, you have to pass at 80 percent. So you could argue there's 80 percent competency in a program like that.

Nearly 100,000 coaches have been trained by USA Football over the last five years. But I think, and this is important, we've sat back and said, wait a minute, how do we know that that coach is transferring that new knowledge to the field?

I'll try to be quick here with Heads Up Football. The concept is have a player safety coach that already is part of the league, someone that the coaches respect, has been a coach, has experience, and we will work to train that person up, again, with a baseline being this coaching education program, and they're on-site to assess and verify.

And then so they work with those coaches at the beginning of the season, throughout the season, monitor that they're doing the right things, having practice plans, teaching tackling the proper way, all these various things. They also have a moment at the beginning of the season where they work with the parents. And what we've learned from just three pilot locations -- and granted, that's not enough, we need to do a whole lot more - is parents are literally looking at us and saying thank you, you're making us feel more comfortable.

I guess a long way to get to -- again, I don't recall that conversation going exactly like that, but I hope I get some royalties from the book.

I think that the parents actually, again, are looking for ways that USA Football, that Pop Warner and other folks can work together to give them confidence that this can be a better, safer game. They're not looking to, again, immediately jump to flag or to other sports. They actually want to play the sport and they want to play it in a better, safer way.

TOM FARREY: Let me move it over to Ray. Why don't you give us your title and affiliation and the work you've done at Virginia Tech.

RAY DANIEL, LEAD RESEARCHER, VIRGINIA TECH STUDY: For those that may not know me, my name is Ray Daniel, and I'm currently a graduate research assistant with Dr. (Stefan) Duma. He sends his apologies for not

being able to attend this meeting. I just want to make a comment on Scott Hallenbeck and Dr. Cantu's really great work, and I really agree with them that education is really what we need to teach these players, kids, players, coaches and parents. And really at Virginia Tech, we're aiming at educating, getting the right information to these players, parents and coaches, and we have about 120 players instrumented with acceleration devices that measure linear and rotation acceleration.

TOM FARREY: Kids at what age?

RAY DANIEL: From 6 to 18 years old.

TOM FARREY: What have you found in terms of forces?

RAY DANIEL: Currently our pilot studies show that some of these kids have forces that exceed college level impacts, so although these kids are young in age, 7 years old was our pilot study, they are experiencing forces at magnitudes that may be injurious, and we're looking more into that and currently our study that we have ongoing this year, we have six youth football teams spread out between Virginia Tech and Wake Forest University, and we have about 32,000 data points or head impacts that we're studying, and we're currently working on publishing that information and making it available to some of the people here.

Also we're sending neurocognitive and imaging data, as well, to go along with the head impact exposure that we're studying with these kids to give the proper education to some of the physicians as far as the functioning of the brain and the difference with concussions that these children may see.

TOM FARREY: I'd like to go to Dr. Gioia. Tell me about your work in terms of pediatric cases and concussions and figuring out when kids should return to play.

GERARD GIOIA, DIVISION CHIEF, PEDIATRIC NEUROPSYCHOLOGY, CHILDREN'S NATIONAL MEDICAL CENTER: Again, thank you for holding this forum, and obviously to Bob, who has moved this science and this discussion forward dramatically, because I think one of the things we all know is that we can't not do nothing or anything -- let's see how many negatives I put in there to make a positive. We have to do something.

As both a clinician that sees kids and families in our clinics and seeing the major education deficit on the fields today and all sports frankly, but also seeing the outcomes of kids, we've got to change some things.

I think some of the things that Ray is talking about in terms of understanding these

forces is really important, and we've just completed some work in developing the measures that they're using so that we can understand neurocognitive and symptom kinds of effects of these blows to kids, and I think that's really a very, very important outcome to what we need to link up with the games.

You know, from the perspective of -- actually it was at the Aspen Institute this summer where you asked me Bob's question about should we be eliminating tackling in football before the age of 14, and at that point, I couldn't speak for Dr. Cantu directly, although we did speak that night and I had to check myself out with him, one of the things I think I said was that we've got to change things. In its current form, we've got a problem.

Although I think the age limit is something that has to be further studied, and I was going to actually finish my comments about research, but maybe it starts with research ultimately and trying to understand what evidence do we have.

I think one of the things that is hopeful that I'm seeing in sports like football but also in lacrosse and ice hockey and soccer and other sports is that we're looking at technique differently. This is a pretty young field right now, and taking the issue of injury, of concussion and linking it back with the sport is exactly what we need to be doing, and we have not really done that up until the last few years.

But the other thing is that we have so little data on kids right now in terms of concussions, we have to start collecting more data, and again, what Virginia Tech is doing is important, what we've been doing is important, as well. So we've got to look at what techniques are important, whether it's, again, the Heads Up tackling program. We've got to look at rules and rule enforcement and maybe even rule creation. From my perspective in football, a rule that would suggest that if you make no effort to wrap in a tackle then a flag gets thrown because otherwise you're just using your body as a torpedo, looking at that whole issue of recognition and response, again, educating our coaches and our parents.

We're doing a really good job with the 40 states that have passed laws. What we're doing is increasing awareness, but we've got to go to that knowledge transfer and action stage. I'm hearing a lot of parents and coaches saying I knew something was wrong but I didn't know what to do about it. So we've got to get to that point now of really making the next step in responding appropriately.

And then finally we've got to wrap that around with research. We've got to say, at what age is it safe, is it not safe. Two weeks ago in Boston Chris had asked me to make some comments on what age you think we want to limit contact, and I said, I don't know. I wouldn't know how to make that estimate right now. But we know that less is better. We do know that.

So I guess the other piece is reducing unnecessary or inappropriate contact. Is there a safe contact? We need to understand that. How the accelerometers tie with outcome is really important to know.

So Pop Warner has been trying this obviously, Ivy League, the NFL, what can we do at our youth levels. So those are five things I think we could start to do. But we've got to wrap that around with evidence to really now begin to in a more precise way say, you know what, six year olds shouldn't be doing this, nine year olds shouldn't be doing this but should do this, 12 year olds should or shouldn't be doing this. And from my perspective that's the direction we need to move in.

TOM FARREY: So the Virginia Tech study is showing that some hits are pretty big. The study showing that there are sub-concussive blows which are hard to measure and little kids who suffer, that's not enough. We need more research, more data to --

GERARD GIOIA: We need to tie that with the outcomes. We need to understand -- and also -- so one of the things I would imagine is that the Virginia Tech study is going to be a good base study of sort of generic coaching technique and not really taking a lot of other effects into account. My guess is there aren't reduced amounts of contact and that sort of thing, so it's probably a good status quo study upon which we now build some of these other measures and reducing contact and putting in new technique and hopefully building better recognition and response to that. So I think it'll be a good foundation upon which to build.

TOM FARREY: I want to go to Julian Bailes, who is the medical director for Pop Warner. Now, you disagree with Dr. Cantu. Am I right about that?

JULIAN BAILES: In what respect?

TOM FARREY: 14 and under, keeping it to flag.

JULIAN BAILES: Well, no, I agree with him that the brain certainly is vulnerable, and I agree that we need to do everything we can to make it safe, and if it's shown that that's what the public wants through this education he talked

about, maybe the sport will evolve to more flag play.

But I don't know, as I think he alluded to, we don't have exact science about is there truly more injury in youth level, and also, this whole concept gives us a conflict in a way, because we think that there are about maybe 100 head impacts in a youth player per season, and at the high school level there are 600 to 1,000, something like that, studies have shown. So is it then okay if we believe that the long-term risk is cumulative and risk-based? Is it okay then to have 1,000 hits a year, but it's not okay to have 100? So I think the nature of football and other sports bring in some natural difficult questions.

At Pop Warner we instituted this year for the first time, we're the first level of play at the time, we announced in June anyway, that we would have no head-to-head contact, and we would have contact drills of any type only a third of the practice time. So to be critical and say that we have 500 percent more than the NFL is a little bit, I think, not addressing the positive steps we tried to take in acknowledging them and comparing that to other levels of play.

So I think we really look forward to the results of this year. We're monitoring more than we've ever done, and we'll have a very good survey of our 18,000 coaches and the concussion incidence, and we hope to have a better idea after this season not only of concussion incidence about the acceptance of these rules changes and what effect they've had, how parents and players and coaches are reacting to them.

So we look forward to that and think that may be some good work to come out of it.

ROBERT CANTU: I hope people heard it the way I meant it to be, and that is I applaud all of these changes that Julian and Pop Warner have put forward, and I applaud the changes in education and coaching education, as well, in USA Football and all the materials. That's all great. That's super. And I certainly agree with everything Gerry said. We do need more research, especially at this youth level.

But let's look at what we've got so far. We've got at the high school and college level 97 percent of all catastrophic sports injuries coming from football. We've got 80 percent of those coming from the act of tackling or being tackled. It's kind of like connecting the dots about what's the risky activity in football, just like the risky activity in soccer is trying to head the ball.

And we have data from (hockey), not football, where they did do studies already that

show if you're full-body checking you up the incidence of concussion two to threefold, recognized concussion, don't really know about the unrecognized, and that's why they upped the age from 11 to 13.

So yes, we need more data, and yes, we should get it. But as a person that sits across the desk from families who have now through the years, hundreds that I can remember of the thousands of patients that we've seen, have had their lives altered by cognitive and emotional problems of post-concussion syndrome, not all of which recovered from it. And when we've got chronic traumatic encephalopathy by Ann McKee and her group that we work with at BU showing CTE in a 17 year old and an 18 year old, showing it in a 21-year-old college player and others that played only at the college level but never beyond, I think this is an issue that's serious enough that we need to talk about it now while we accumulate the data that Gerry suggests, and I'm 100 percent in favor of that.

TOM FARREY: We've got 15 minutes left on this particular topic, the under 14. I'd like to turn this part of the conversation to the participation question. You alluded to the fact that there is some concern that if you move to flag, then therefore parents are not going to sign their kid up for the sport. Let me bring in Tom Cove on this. Tell us your name, your affiliation and what you've learned about participation rates in football and some of the factors that may be driving those trends.

TOM COVE, CEO, SPORTS AND FITNESS INDUSTRY ASSOCIATION: Thanks, Tom. I'm Tom Cove, I'm the president and CEO of the Sports and Fitness Industry Association, basically the trade group of people that make sports products around the world.

We do, with a consortium of several other trade associations, a national survey every year on sports participation of all kinds, including fitness, outdoor, et cetera, 120 different activities. So we have a very strong basis to understand what's going on with sports participation at both the casual level and then we break it down gender and location and all those things.

What's happened is football for years and years was as steady as any team sport going. It has started to see some slight decrease, and at the younger levels probably a higher, faster rate of decrease, which is still fairly small but real over the last five to seven, ten years.

One of the concerns obviously is we look at this with football but with all other sports is, well,

is the concussion issue driving that reduction. Let me say first, at the high school level, that decrease in the rate of participation is not happening, so it's more at the younger levels. But frankly it's not clear why.

It's a reasonable kind of question certainly to say, well, with all the awareness about concussions and health and head injury, that may be a driving force because parents make those decisions for children at a young age for all sports.

But we'd also highlight that we have found, both from our own quantitative research, which is quite detailed, or qualitative focus groups, et cetera, but there are several other issues that are affecting football specifically and at a young age. For example, the specialization of sports in youth in America, clearly one of the most dangerous factors to sports participation because you used to play three, four sports a year; today people play one. Football suffers from that. Nobody plays football four seasons a year, but many people play lacrosse, soccer, swimming, et cetera.

So that's a fundamental issue is that specialization, which always probably happened and probably happened at the higher 15, 16, 17 is now moving down.

The second thing is football clearly would be affected more than many other sports by recession, so over the last three, four, five years, it's a costly sport, the numbers reflect all sports that cost a lot for certain segments of the lower income population suffered.

And then the third issue is the idea that middle school sports, because the school sports budget being cut, middle school sports are being cut.

So in that gateway to football, which traditionally has been increasing in high school while most other sports decrease, when football coaches and formal programs and that role of football in society is taken away at the middle school level, it starts to degrade people's interest potentially in getting their kids involved.

So finish with, it's obvious that the concussion issue is real and very apparent and on the front of mind for most parents, but there are many other issues that affect it, and as we see team sports in general struggling to keep its participation rates going forward, football is one of them. And that's where we stand.

TOM FARREY: Jon Butler from Pop Warner is with us here.

JON BUTLER, EXECUTIVE DIRECTOR, POP WARNER LITTLE SCHOLARS: Part of it ties

in with what Scott mentioned. We have nothing against flag football. We have offered flag football. I don't know when flag football started, probably the early 1980s at least, if not earlier. But to Scott's point, no matter how we promote it, we never get over 900, 950 teams versus 7,500 tackle football teams, and it's not a matter of us promoting one and not the other, that's just what people sign up for.

I can also tell you that our two fastest growing divisions are our two youngest divisions. We believe very strongly in education. Certainly as Julian Bailes mentioned we have put in, which we admit are arbitrary rules this year, we needed a starting point. We need to know going forward whether we need to adjust those rules further or create new rules as new research indicates appropriate.

I've been asked a number of times over the last couple of years why doesn't Pop Warner do away with tackle football and only offer flag football, and my response, and I've informally surveyed a number of people in Pop Warner, is that if we did, 90 to 95 percent of our members would drop out, and those kids would just be playing for a local, independent youth football program, because whether it be kids or parents, they want to play tackle football.

So that goes to a whole question of education. It's one of those things that we're trying to do certainly the best we can. We rely on an army of volunteers. We do require training and background checks. We do require at least minimal medical training be present at all practices and all games, and we will keep adjusting those rules.

One quick correction for Dr. Cantu. Tony Gonzales did play Pop Warner growing up, Dr. Cantu.

TOM FARREY: Eddie Mason is with us standing next to the pillar there. Eddie is a former NFL player, Washington Redskins, someone I interviewed for an "Outside the Lines" piece of mine a year and a half ago. Before Kurt Warner and a number of players were stepping forward saying I'm not going to let my kid play football, Eddie was one of those voices who got the conversation started back then. He lives around here.

Eddie, why don't you tell us about your perspective and the decision you made with your son.

EDDIE MASON, FOUNDER, MASE TRAINING LLC: Tom, thanks. Congratulations to the board, Dr. Cantu, thanks for all your great

work, all you guys, USA Football, Pop Warner. I obviously played this game 27 years of my life, been devoted to this game, eight years professionally. There's consequences to the game that comes along with it.

But I think at the end of the day, working now as the commissioner for i-9 Sports League, being involved with two, or actually three, four contact leagues in Loudoun County, Virginia, the thing that I've seen since I've been retired, and I've been training on a training facility that works with athletes, young athletes from the ages of six to pro, the issue is education. And the reality between the education and the reality is this: The coaches that coach this game, whether it's flag or tackle, for whatever reason don't embrace change very well. That's the issue. And the issue is that Pop Warner, USA Football can implement all the things that they want to. You can implement rules, you can implement changes, but until the football community embraces the reality of the sport, the reality of concussion, the reality of the damage that comes along with it if you start at an early age, that's the problem, and I've seen it because I work it. I live it every day.

The problem is when I was coming up, we didn't use our heads. We weren't taught to tackle with our heads. If you look at the elite level now, everybody leads with head contact. Where does it start? Youth football. Is that because these guys aren't implementing the right stuff? No, the coaches aren't embracing the change.

There's certifications that need to be implemented. There are rules that need to be changed of where we have to make decisions, real harsh decisions as -- as we always tell people, sometimes you have to take the decisions out of the hands of the parents and you have to just make the change. You say, well, we don't offer tackle at this age, we offer flag, and these are the reasons why. And then you develop and institute a set of rules and litigate that to a point to where people embrace that, not because we don't like tackle football, because tackle football changed my life and the course of my family's life. But what we are saying is that safety is number one, and number two is education, teaching, and number three is the transition of learning how to play the game the right way. I think that's what it comes down to at the end of the day.

Tom and I both agree, my son is eight years old, he's not playing tackle. I didn't play tackle until I got to high school, and I fared okay.

TOM FARREY: Do you feel like people need to learn how to tackle before high school?

EDDIE MASON: Yes, it is very important. I think flag teaches kids what we call entry point of contact. It teaches them how to drop their hips, how to keep their heads up; Heads Up Football, USA Football, thank you. It teaches them how to enter into the point of contact without making contact.

So when you're talking about attacking the hip, which we teach in football, it's that exact point. It's bent needs, heads up, eyes at the point of contact on the hips, obviously on the shoulders when you play tackle. But that's what we teach, and that's why I think flag is so important because of how it develops the mechanics of how to tackle.

And there's other things that need to be implemented. I think there's courses that need to be taught. I think that coaches need to understand at the youth level how do you teach kids how to play tackle, how do you teach them? Eighth grade, ninth grade, how do I teach a kid how to tackle?

That goes back to basic old-school mentality, some of the coaches that taught us how to tackle properly. And that will help improve some of the safety of the game and keep kids from using their heads as weapons.

TOM FARREY: Sean Pamphilon, documentary film maker, you're making a documentary now on football, and I don't know too much about it, but it has to do with the central question of should you let your kid play.

SEAN PAMPHILON, WRITER AND FILMMAKER, SP PHILMS: Well, I'm working on a film series for the past three years, I've shot about 1,000 hours of footage from pee-wee to the pros. I had the opportunity to work with Ray about a year ago at Virginia Tech. And to Eddie's point about the coaching, there was a pregame before -- there was not a single rep of offense or defense, it was all just lining these kids up and having them tag each other.

In my experience of watching and playing football when I was younger, someone is usually trying to elude somebody. It was just literally bam, bam, and when a kid didn't rise up to the level of machismo this coach wanted, he would tell him he's pitiful, this isn't dancing; the backs of their jerseys are reading Animal, Eliminator. And my question is who's watching these people.

My son is now 14, I interviewed Dr. Cantu a couple years ago to decide whether or not I wanted to let my son play, and I went to his junior high school, and they have no guidelines.

JOHN WALSH, EXECUTIVE EDITOR, ESPN: Where is this research and how thorough

is this research about the parents pulling kids out of programs?

TOM FARREY: Tom Cove would be best to answer that, not me.

TOM COVE: Actually I think Jon might have a better sense of it. With regard to parents taking kids out of programs, we don't have as much on that quite honestly. That is not as well developed an area of the motivation around leaving. What we do know about the motivation of leaving sports in general, we know a lot about that; it's because it's not fun, and the pressures and all the other things that we sort of in the youth sports community have talked about for years, that it gets past what the original goal was.

So with regard to some of the questions that have come up, if the child thinks it's not fun, whether you want to say flag is better or not, that's going to be a challenge. If the sensibility of the child is that they want to have fun playing the sport, we want to promote that. Obviously safety first even more than fun, but we do know that the No. 1 motivation for leaving youth sports is that it lacks a fun component.

TOM FARREY: Ashley?

ASHLEY FOX, NFL COLUMNIST, ESPN.COM: This is for Scott and Jon: What possible benefit there for a six year old to be playing tackle football?

JON BUTLER: I don't know about benefits. I can tell you that they have fun doing it. When we started our youngest division, which is right at that age, I thought it was kind of a random regional project. It has grown like crazy. You don't see a whole lot of tackling in the strictest sense, not that they're not being taught, it's just that kids at that age tend to either run into each other and fall down or do a lot of shirt tackling, grabbing a shirt.

Again, our primary goal is to keep it safe for them. Our second goal is to keep it fun. I can tell you that most of the kids that I've talked to who played flag, they say, okay, that was fun for a year or two years; when do I get the pads and helmet. And that's part of the education process. If we're going to change this, if research indicates that we need to make that change, we need a whole lot of education.

TOM FARREY: Ashley Fox, by the way, is an NFL reporter for ESPN, has written about how your -- I don't want to misquote you here - you don't want your son to play football.

ASHLEY FOX: Right, and he's three at this point (laughter).

TOM FARREY: Scott says there's a league out there for him.

ASHLEY FOX: There's plenty of things that kids want to do that are fun, but isn't there a point where as parents, as the adults, you have to protect them from themselves, and if you listen to Dr. Cantu and what he says, I mean, I think any parents would be nuts to allow their kid to play tackle football, period, but certainly before the age of 14.

SCOTT HALLENBECK: I think you just touched on something very important. It's the decision of the parents, and one of the things I stressed early on was I think all of us have a responsibility to make sure we educate the parents, and there's a lot of information we don't have yet.

One of the things we're trying to do, we don't run leagues, so the first time we actually start teaching tackling is actually at seven years old. Not a big difference, but for what it's worth, again, but not based on some scientific evidence based profile or something -- I wish I had that, but it's not there. We do recommend the first experience be flag, and we don't run leagues, so we work with all these groups to make a better experience.

But the fact, as Jon said, is parents do make the decision, and what we feel strongly about is we need to do the best job we can, and I mean we collectively, we need the medical expertise to help provide accurate, and again, ideally speaking, evidence-based information to parents so they can make the decision, because they make these decisions all the time. Again, as a parent you make a decision all the time, when do I let my child ride a bike, when is he allowed to cross the road and walk to school. There's all kinds of safety-oriented decisions parents make all the time.

Again, I think we've got to be a little careful and at least acknowledge what you just said and you're doing on your own. You made a subjective decision, I'm not going to allow my child to play tackle football maybe ever, maybe allow him to play flag, who knows.

The other thing I think is really important that Eddie touched on is this idea of, again, proper tackling and teaching the ascending blow and teaching and holding these coaches accountable. They are not -- and I hate to say it, and this is our fundamental challenge, is getting with the leagues and working more closely together and creating standards to ensure that that coach cannot walk on that field until they're properly certified, period. That still doesn't guarantee that they're going to

teach it properly, which again goes back to why we think this Heads Up Football approach, having what we call a player safety coach right there monitoring, making sure, number one, before he steps on the field he actually does know how to fit equipment. It's frightening to realize that high school coaches and youth coaches do not know how to properly fit equipment. That's a huge step in the right direction if we can solve that.

Next, yes, tackling; how do you properly teach tackling? And going back frankly, for lack of a better word, the old school model, it's an ascending blow, it's not a launching blow, and we're learning all the time, just learned from you the idea that, you know what, we run one of the largest flag programs in the country.

But these are the kind of things we have to do together because the 40 states plus D.C. that now have a concussion law, we just had a conversation with the state senators in Indiana talking about how we push that down again to the middle school level and ultimately the youth level, and of course what they tell you is we have to have an organization that can govern and control the youth sports, and you can't because most of them are independent organizations or outside of their jurisdiction, if you will.

So what we're coming up with is maybe it's the fields; the fields are the place that they can control, and if we work together and say every coach has to be certified, you cannot walk on a public school field or a park and rec field without these kinds of certifications in place, again, it's a step. It's a positive step in the right direction trying to address this very complex problem.

TOM FARREY: I recently worked on a story involving a 13-year-old kid out of LA named Donovan Hill who was paralyzed because he stuck his head down. One coach was trained but he wasn't teaching the way that Pop Warner taught him to teach it. The assistant coach wasn't trained at all and believed that he was teaching the right technique.

SCOTT HALLENBECK: And he said in that spot, he said, I teach what I was taught, which goes back to Eddie's point. We've got to break the cycle.

TOM FARREY: I talked to the head coach afterward, he said, yeah, but you know what, even if we were teaching that technique, that type of play, they're coming at an angle to each other, he was trying to stop him at the goal line, it wouldn't have stopped -- it wouldn't have prevented the injury. His point was, look, can you really teach safe tackling? It's a little like trying to build a safe

cigarette; at the end of the day you can train up coaches but are you going to get to point where it actually is safe for kids.

SCOTT HALLENBECK: Again, our view is, and we've talked now to many, many coaches and experts across the country, NFL, college, high school, you name it, and the two critical pieces - and I'm interested to get Eddie's perspective on this - is the idea of, again, Heads Up, literally the concept of keeping your head up, which I know in that case there was debate even in that spot about was he taught to keep his head down, was he taught to effectively lunge and drive forward versus that ascending blow. And Coach will tell you, I've been teaching heads up tackling forever; I always preach heads up.

But then terminology, terminology is where this whole thing breaks down to me because the next statement is 'bite the ball, lead with the screws, put the screws on the numbers.' Well just the logic of that, if you have the ball right here and you're actually biting the ball, your head is down and you're leading with your head.

Two things we have to change, maybe three: Proper education, teaching proper legitimate heads up whenever possible. This game is the bang-bang, sort of it happens so quick, you're not going to be able to avoid a potential helmet-to-helmet contact entirely. There's just no way.

But I do believe we can make dramatic improvement if we teach proper heads up and then have terminology that completely reinforces it. No coach can say, and I think you said, 'lay a hat on him.' That terminology has to be wiped out of football, period. And we need everybody. We need to preach to parents. I have great confidence if I could talk to every single football parent across the country and explain the kinds of things we're trying to do with the Heads Up Football program and so forth, that at least if nothing else I'd give them greater confidence, they could make a better educated decision, and over time we're going to see an improvement in proper tackling.

## SESSION II: PUBLIC SPECTACLE, PUBLIC HEALTH: HIGH SCHOOL FOOTBALL AT A CROSSROADS?

TOM FARREY: I'd like to move to the high school equation at this point. High school football is deeply entrenched in our society. I can actually see us moving to a flag model at the very youngest ages, but when you're talking about high school football, this is community entertainment, Friday

night lights, people gather round, they have certain expectations, and yet we have high injury rates in high school. We have a lot of schools that don't even have athletic trainers on-site and we've got experts here to talk about that. Chris Nowinski, tell us your credentials and what your thought is on what we do with -- are there reforms that can be introduced at the high school level to make it safer so that we don't have as many kids being injured?

CHRIS NOWINSKI, EXECUTIVE DIRECTOR, SPORTS LEGACY INSTITUTE: Thank you, Tom. I'm Chris Nowinski, executive director of the Sports Legacy Institute where I work with Dr. Cantu and co-director of the Center for the Study of Traumatic Encephalopathy at Boston University, where I also work with Dr. Cantu.

High school is an interesting question. It's where I started playing football. You know, it's hard to kind of figure where on the spectrum it fits because we know youth is probably more dangerous than high school, and we know that high school is a big part of our culture.

I kind of want to go back, and I wrote a lot of notes here just to kind of separate youth from kind of professional and then kind of where we are in the middle, because I think this discussion is really what's unique about football versus other sports and why we're having this discussion, and I think a lot of it comes down to the adult game is not really separated from the youth game in any meaningful way, like soccer there's no heading before a certain age, ice hockey no checking, baseball no curve balls. But we don't do that with football.

And so it's a game where -- it's the only real game where head contact is not rare and accidental, and so I think we have to kind of identify that as a big issue. And I think we have to look to -- in terms of what we should be doing, we actually can look up to the NFL and the NFLPA and the steps that they've made in the last few years to make the game safer. You look at things like dramatically minimizing hitting in practice, which the one place that athletes had a voice to do that through the PA, they asked for that and they got it.

The medical infrastructure is incredible, the baseline testing, an athletic trainer in the skybox to watch the television feed because we know we've missed concussions on the field.

You look at that situation and you say if that is what grown men demand to play a game we know has immense risks, if you look at that as the way it should be done -- whether or not that's the way you believe, if that's the model, it's hard to

justify exposing kids of any age under 18 on a philosophical level to the same sport without any of those infrastructures and any of those resources. High school has no limits on any level of practice exposure, which is terrible, but there's also no leadership in the high school community to actually implement that in any simple way.

Medical infrastructure: 42 percent of high schools with athletic trainers. In a study just coming out two weeks ago saying in girls' soccer if you have an athletic trainer, you were eight times more likely to identify concussions.

So data like that tells us we can be absolutely certain we are not going to spot concussions at high school levels without -- even with medical people we know we don't get them all, but without medical folks and then the younger you go, it's the wild west. You're lucky if you catch one in a while because you think about even how we train athletes. We're begging the NFL players and the college players to report their concussion symptoms so we can treat them because we know as an observer you can't see them.

There's no real education program for children. No one really believes that we can train children to report their symptoms because they don't necessarily understand concussions.

So you kind of start separating these two things, and you realize that we are refusing to give children the things we think grown men deserve, and if you look at it from that perspective, the tackle football question, especially when you get to the youngest ages, does seem out of place that we allow that to happen.

This isn't really a referendum on USA Football or Pop Warner. The reality is they're leading on this in terms of reforms, and I think that's fabulous. But the reality we've all discussed is it's a big lack of control over can you force youth football programs to do these things we know are good ideas, and the answer as we've just said is no, we can't. With all these unknowns and issues, we have to take a real serious look.

TOM FARREY: I want to bring in Michael Hausfeld in a minute because he's a lawyer and he can talk about the liability questions here as we develop knowledge.

First I want to go to Gil Trenum. Gil is a school board member locally. He's also a father, was a father of a football player. Tell us about the implications on schools as we learn more about this problem.

GIL TRENUM, SCHOOL BOARD MEMBER, PRINCE WILLIAM COUNTY (VA.): Thank you, Tom. My name is Gil Trenum. I am a

school board member for Prince William County here in the Northern Virginia area. I am also a member of the Sports Legacy Institute's family advisory board, and I've sat on the opposite side of that table from Dr. Cantu, so that's the perspective I come to this discussion with.

At the high school level, and really it ties into the middle school, as Tom mentioned, middle school sports are on the decline just due to funding issues. We in Prince William County, we still have a middle school sports program. At the high school level there's several components to it. First is education.

The parents that are out there still don't know about this issue by and large. And it goes all the way down to the youth sports leagues. My kids have played football, lacrosse, basketball, baseball, soccer. They've played them all, so we've always been a big sports family with our boys. But for the education component, there is still a ton that needs to be done.

At the beginning of last year -- well, Virginia is one of those states that has a new law mandating concussion training for public schools. Great. That's great. But okay, it's a law. The fact that there's legislation is good but not necessarily effective.

When you execute it is where it really gets -- where you see the quality or not. In some places they do it, their education component, there's a few forms that you send out, you fill out, send it back in and you're done. There's some places it's all online and that can be good or not. You can click through it, do your clicks, get done, and go out and play and you gain no knowledge.

In Prince William County what we did first off, we made concussion education training mandatory for every player that plays any kind of athletic sports in the Prince William County schools because we recognize first off that it's not just a football issue. There's just so dang many of them, and we make that mandatory in person for both the student and at least one parent at both the middle school level before you can participate, and the high school level, at least once, so if you take it in middle school, you come back and you have to do it again in high school.

Every year you have to go through an online refresher type of training. So that's an important component. I've had -- this is anecdotal -- first off, I can give you one number. In one year we ran over 27,000 students and parents through that in-person training, so it can be done because I've had people tell me we can't do it. Well, yeah, you can, you can do it.

TOM FARREY: You still believe in football being valuable at the high school level, right? You've been through a personal experience.

GIL TRENUM: I've been through a personal experience, and I'll be honest, my boys don't play football anymore. But that's a different conversation we can have.

But actually it does tie to Dr. Cantu. I believe your five concussions in a game or three in a game is not an aberration. The last season my youngest played, the game he got his concussion there was one other teammate that got a concussion in the same game, and the next day in practice another teammate got a concussion. So that was three 11 year olds in a two-day period on a team with a roster of 14 kids. So the incidence was pretty high that week.

But for me, the education component, there's that. That's a big part of it, and it's not just for the parents, it's also for the coaches and the teachers, and it's across the board.

There's also cultural issues and rule change, things we need to implement that really go down to Scott's level. I got an email from a former professional player who's now a referee. He's saying what can I do about high school kids that lose their helmets in games. He said if it's the kid with the ball, the play is dead; that's fine. What about if it's a linebacker or somebody that's lost their helmet and they're still running down the field trying to chase the kid with the ball? I can't do anything about that.

Well, why can't we? In lacrosse you do. In lacrosse, you lose your stick, you have to take yourself out of the play until you get your equipment back or it's a penalty against your team. We can do those kinds of things in football, but that's a cultural thing that needs to start at the youth level.

TOM FARREY: Patrick Hruby, you've reported on Gil and his family, right?

PATRICK HRUBY: I have.

TOM FARREY: Tell us about your reporting and what do you think the takeaway is.

PATRICK HRUBY, COLUMNIST, SPORTS ON EARTH: Well, my reporting is Gil and his family have been through a lot. Their son Austin suffered a concussion in a game, and he committed suicide very shortly thereafter. It's very much linked to the brain trauma he received. This is obviously an area of science that is not totally well understood, and I talked to Dr. Gioia about it and others, but there's more and more evidence that suggests a pretty strong connection there.

But we already know that brain trauma is a big part of contact sports, in football in particular, and that's not really something that's being debated at this point.

The question I have is sort of we're all talking about limiting risk here. We're talking about making the thing safer, and even Scott acknowledged we can't make this sport safe. We can try to make it safer. But in most of these discussions I don't hear a lot of talk about, well, what's an acceptable level of risk in the first place, especially like with children. Obviously with children it's different than when you're talking about adults and our society, and this goes to socially, culturally, legally, we draw sort of different lines. So there's a moral question here, as well.

I would put this out to everybody. I'm struggling to understand this myself, I don't really understand -- the more I've thought about this, the more I've reported on it is how football is all that different from boxing or mixed martial arts, and I think if I was to say let's have six year olds have boxing leagues or let's have a high school mixed martial arts team that everybody comes to on Friday night that gets their community identity out of it, really enjoys the entertainment, and also sort of the character building things that we associate with sports, people would look at me like you're crazy, why would you suggest that.

So like I said, the more I learn about sort of the brain trauma and the damage that's going on, the more I'm trying to wrap my head around the idea of is football all that different from all those other activities and what's the larger cultural and moral question here, and how are we going to answer it. I would just open that to everybody.

TOM FARREY: Michael Hausfeld, I'd like to turn to you. Michael is a top class-action antitrust lawyer who's involved in a number of very interesting cases right now, including the Ed O'Bannon case, suing the NCAA on behalf of players for likeness issues. More relevant to this conversation, you're involved with the NFL concussion lawsuits, right? As you hear this conversation, what runs through your mind as a plaintiff's lawyer? Are there liability issues here in terms of the lack of trained coaches, irresponsible behavior by some? Where is all this headed? Could we see the same type of litigation at the youth and high school level that we've seen at the NFL level, and if so, what impact might that have on forcing coaches to get trained or people adhering to responsible behavior at the lowest levels?

MICHAEL HAUSFELD: Can I start this with a yes?

TOM FARREY: It was a seven-barrel question, and I apologize.

MICHAEL HAUSFELD: The law offers an interesting perspective, and the conflict in the discussion that's gone on today between Dr. Cantu, who is advocating that until science proves otherwise it's safest at least to preclude tackling and stay with flag football despite the fact that there are efforts progressively to make the game safer, because what the law looks at is the perspective of safety as a whole in terms of its social aspects and the duty owed by those who run the game to those who play the game.

And there's a continuum or a scale of risk, as Patrick just said, and it's not just the risk of getting injured, you're never going to have any sport that's risk-free, that's totally safe. There's going to be some injury, a broken bone or whatever. But you clearly here have enough science to understand that there's a risk of concussions and a consequence to those concussions to which we are not appropriately addressing. And is it a matter of education, or does the law step in and say, education is too slow, it's nice, we're moving towards a safer game, but since we've identified this particular issue having this effect on a more vulnerable or mostly vulnerable population, what, if anything, is the special duty owed by the league and those who run the clubs to those who play the game?

And in that continuum and in that balance of education versus duty, where do we draw the line or where will the law draw the line with respect to youth football and then as well this afternoon when DeMaurice is here we talk about professional players?

TOM FARREY: John Gerdy? Give your affiliation.

JOHN GERDY, AUTHOR, SPORTS IN AMERICA: THE ALL-AMERICAN ADDICTION: I'm the former associate commissioner of the Southeastern Conference and author of several books on the role of sports in a school's culture.

This is a bit of a bittersweet discussion for me as the son of a high school football coach. I grew up in a football locker room, I had brothers that played college football. So I've seen all the wonderful things that football can do. It changes lives.

But my hope -- and I've enjoyed listening and learning more about the specific concussion issue. But my hope about this is that it really sparks a much broader debate, specifically what

should be the role or what role or is there a role for football in our junior highs and high schools. We've got to have a serious, honest, open, data-driven discussion that centers around the issues of return on educational dollars invested, okay.

The football community has got to realize that you don't operate in a vacuum. You're part of a larger community, okay. You're a host institution within the educational institution, so we've got to be realistic about the challenges that that educational institution faces, specifically standards are being raised, expectations are skyrocketing regarding our schools and what they need to do to instill in our young people an education that's worthy of the 21st century, right.

We live in a global community, interrelated cultural community, economy, which is a challenge, but they're being asked to do that with declining resources, against a backdrop of declining resources.

You know, I think we've got to become smarter, more efficient with all the resources, whether money, energy, time, emotion associated with every single component of our educational institution. Given this reality, every single component of our educational institution has to be evaluated based on what's the return on investment of educational dollars, including football.

So how do you do that? Well, I think the way you do that, you've got to go to the justifications that we have been using for a century for football's place within our educational institution. We've got to be honest. You know what the primary justification was? Part of it was to socialize an immigrant work force. But the other part of it is the great industrialists at the turn of the century were really interested in football as a way to train a workforce for the industrial economy. They wanted folks who were physically fit, took directions, were obedient. There wasn't much room for lofty thinking on the assembly line.

So we have to ask the question, is this the primary justification we're incorporating into our schools, to train a workforce for an industrial economy, we no longer live in an industrial economy, a totally different skill set that enables our kids to succeed in the future, okay.

The other justification that we've used for years, and I do believe this justification, is that football is a way -- it's an educational tool. It builds character, discipline, team work, time management, personal responsibility, all those things, but you know what, you can make a case,

you can make an honest case that football's ability or potential to continue to teach those wonderful lessons, okay, those wonderful lessons, has actually been diminishing over the past 30, 40 years, and the reason why it's diminishing is because of the culture of elite sports in our country.

It's become more about the end result, winning, than it has about the process, which is education. So you can make your argument that it's become less effective at teaching these wonderful things, okay, and think it's also naïve to think -- people say the only way you learn this team work and discipline and all these kind of things is through organized sports or football. Well, you know what, I've played college and professional basketball, I've been on teams where you have five guys working together for a common goal to win, disciplined communication skills, teamwork, all those kind of things, and I've been in a five-piece band, and you know what, same exact characteristics are learned. So football is not the only sport or only educational activity that does these things.

Finally, the other big one is health. From a public health standpoint and an individual health standpoint, we've got to have an honest -- again, honest and open data-driven debate about what's the proper role of elite athletics in our school systems. Is it a system where the vast majority of resources are heaped upon an elite few at the top, meanwhile pushing everybody else to the sidelines to watch and cheer in this one of the most obese nations on the planet, or should the role of sport in our educational systems and our schools be to provide broad-based opportunities in activities that can be practiced for a lifetime for reasons of public health? That's an honest debate we have to have.

My point is this, and not even getting to the concussion thing. The point is I'm not saying eliminate football, but maybe we need to consider with our educational institutions of privatizing it, of outsourcing it. We're the only country on the planet with a responsibility for developing elite athletes and teams rest with educational institutions. Everywhere else it's done through the clubs, really good kids.

My hope is we've got to have -- we've had a serious discussion, data-driven discussion, and if we truly believe what football is supposed to do and the wonderful things, we should welcome that. But the question is if you have that return on investment evaluation and we find out that's more valuable than what we thought, then we need to invest more money in it. But educational return on dollars? What do we do as responsible citizens?

What do we do as responsible parents? What do we do as responsible educational leaders?

So my hope is it draws a larger, wider debate.

TOM FARREY: We need to break here. When we come back, I'd like to hear from Warren Lockette (Deputy Assistant Secretary, US Dept. of Defense). We're no longer part of an industrial economy but we still need soldiers, and a lot of recruits are failing tests because they're just too obese and I want to bring that perspective into it, as well.

### SESSION III: HOW CAN THE NFL AND ITS PLAYERS ASSOCIATION BEST SERVE THE NEXT GENERATION?

TOM FARREY: This next session, our final topic is how can the NFL and its players best serve the next generation? Our featured guest is DeMaurice Smith, the executive director of the NFL Players' Association. We appreciate him coming. He's also a trained lawyer, as opposed to an untrained lawyer.

DeMAURICE SMITH, EXECUTIVE DIRECTOR, NFL PLAYERS ASSOCIATION: Well, recovering lawyer, let's go that far.

TOM FARREY: Just very broadly, what do you see the NFL and the NFLPA's role in this being? How much leadership should it show on pushing good practice and policy down to the grass-roots, the youth and high school level?

DeMAURICE SMITH: Yeah, the way we look at it, it's not really a question of how much leadership we should show. We embrace the fact that whatever we do results in being leaders in the sport.

So when you look at, for example, this new CBA, the fact that there are no more two-a-day practices, the fact that after week 11 there can only be one padded practice -- four more padded practices than throughout the year, there can be only one padded practice a week.

The greatest thrill that our player leadership has is when you take a stand like that, when you see it start to be replicated in college sports and youth sports. We didn't go into it with the idea that we were going to make these changes because we thought that we could be leaders in college and youth sports. We made the decision because we felt, A, that the medical science supported it, that it was a smart thing to do in order to make the game and the business of football safer, but most importantly, we do know

that by having the opportunity to make good decisions, we know that those things are going to make a difference, and we know that when we make decisions like that, it's going to be reported. You'll have wonderful seminars like this where obviously you couldn't find anybody else other than me to sit in this chair, but it's an opportunity to be here. We know that those kind of things are going to be things that are going to be reported and talked about.

The way that our leadership and the way that I challenge our leadership is not so much to sit around and try to think of individual items that we can change. What we have tried to do over the last four years is think the right thoughts, ask the right questions, raise fundamental questions of accountability and responsibility, and then to take the best course of action that we can.

TOM FARREY: What about role modeling? How important is it for NFL players to show proper tackling technique, because you've got all these kids out there watching, you've got youth coaches watching, and if they see NFL players leading with their head, maybe even complaining about being punished when they lead with their head, what kind of signal does that send?

DeMAURICE SMITH: Well, look, when I go into a locker room, and for the next few minutes you're going to be treated to the way in which I talk to our players in the locker room. We expect them, I expect them to be good men, good family men, good husbands, good brothers, good men in their community, and that's something that we've decided, again, as a group of leadership that that's what we're going to demand among all of our leadership.

So when it comes to your question of what players can do, we look at it far more broadly than just proper tackling technique. We now know that there are things that we can do to make the practice and playing of the game safer, and while there are a number of players that weren't happy with the changes, we made a decision as a group of leaders that that was the direction that we were going to go.

For example, changing the off-season for our players where we call it the flat ball rule, where during phase 1 of the off-season training, we are in a world where there can be no running, no drills with a ball. Why? Because we wanted to make sure that during phase 1 that there was absolutely no contact. And while we talked about a number of different ways about making sure that coaches wouldn't have contact, we all know that coaches in

the National Football League are coaches in the National Football League, and if we didn't have a hard and fast rule that prohibited or made contact completely illegal that the creep would happen, that certain teams would start changing and start doing certain rules, and then you literally get into a, quote-unquote, arms race.

Ideas about having the flat ball during phase 1, let me tell you, not every player was happy with that. A lot of quarterbacks, a lot of our skill position players called, they were certainly upset with me, how come I can't do this, how come I can't do that. The reality was while it might be good for those individual players, it was not good for the 2,000 people who played football.

We're happy making decisions that sometimes make a smaller group of people unhappy, if we do believe that at the end of the day we, again, are in a world where we lead by example, where we hopefully achieve a world where our players can play longer, and most importantly where they can play safer.

TOM FARREY: We've heard a lot of talk today about Heads Up Football, proper tackling technique and so forth. What's your sense? Do players support those kinds of initiatives but maybe only at the youth level? Do they draw a distinction at all and say, okay, that's good for the kids, but this is a man's game up here?

DeMAURICE SMITH: No, our players play the way they were coached. You will not find a player in the National Football League who believes that, okay, I was taught to do this in youth football, now I'm going to do something completely different in the pros. I mean, look, the reality of it is while things like commissioner discipline or while issues of illegal hits are the things that tend to make it on to ESPN every day, we can talk about that later, the reality of it is for every snap that we have, for the 22 people who are playing, more often than not ESPN and the NFL Network are not talking about illegal things that happen on the field. Those things don't make the news.

So no, our players don't believe that there's something that's good that they can do on the youth level and things that are certainly okay on the pro level. What we do have an issue with, and I think, again, the CBA and the last couple of years have tried to combat it, we know as a group of players how they are being coached to play. So the question sometimes that I think we have to ask ourselves, and it's one that certainly I've posed at times, when a player gets fined for the way in which he tackles, the one question I always have of our players is which way were you being taught

or coached by your professional team. And once again, maybe sometime down the road, ESPN and the players can get together and talk about those kind of things.

TOM FARREY: You're a very effective advocate for professional football players, right.

DeMAURICE SMITH: Is that a question?

TOM FARREY: It's a setup.

DeMAURICE SMITH: At least you know.

TOM FARREY: A good kind of setup.

The point I'm making is who's advocating for kids, and how do we build champions for kids and their interests? Is it parents? Is it a matter of arming parents with education? Is it, I don't know, building the voice of kids into this conversation? How do we build champions for kids?

DeMAURICE SMITH: You know, I think all of us have an obligation. Myself, while I don't coach football, I've coached my kids in sports from the time they were seven years old, heading into the last year of coaching my girls' basketball team, and if there's one group of people that I'll crawl through glass for, it'll be my girls' basketball team. But that responsibility is one that comes from being a parent. It certainly comes from a person who believes in the lessons, the life lessons that youth sports teach.

But look, I don't think that it's really a question of whether kids have an advocacy group for them. I think the benefit that kids all over this country have is that hopefully the people sitting around this table, the people who are watching at home, fellow coaches like myself, parents who believe in youth sports, all of those people are people who believe in the beauty and the benefits of sports.

I mean, when you think of the things that we have accomplished in sports over the last, take 50, 60 years, those things weren't really accomplished because a particular group had a particular lobbyist working on their behalf. It would be great if youth sports had folks like Jeff Miller working on their behalf, another great advocate, but really when you look at all of the issues that have made sports great in this country for kids, you're talking about people who just took it upon themselves that this was better for society.

When you think of Title IX, when you think of ways in which even in the last two years practices have become safer for kids, that didn't happen because they happened to retain a great law firm or a great advocate group to represent them. I think society, parents and everybody got together and said, what's best for the people who

are playing this game, and shouldn't we be doing better.

And when we do that, I do believe that we're actually capable of adhering to our better angels and actually accomplishing things that are great in our community and in our society.

TOM FARREY: How much do you -- NFL players, how much do they support reform at the lowest levels?

DeMAURICE SMITH: Youth levels and college?

TOM FARREY: Youth and high school. Do they look and say, something is broken, or do they look and say, that's just football, that's how I came up, get over it?

DeMAURICE SMITH: No, I don't know of a parent that would look at it that way. Can you imagine a world where I might do something between 9:00 and 5:00 during the day and let's just say that I'm a day laborer or a work as a boiler for a manufacturing company where I would say, well, what I do at work is fine, but if things are less safe for my kids, well, hope it all works out for them. Nobody thinks that way.

Our players don't think that way. Every guy that you will ask in our locker room will tell you that they love the game of football, and it's not so much that I think that they would look at it like we look at the NFL, that things are fundamentally broken, but conversations that we have in our locker rooms and in our team meetings are not whether things are a mess or not. The fundamental questions that we discuss are what can we do to make things better.

And to me, I think it's a mistake to think that you will ever get to a point where you are comfortable or satisfied with the current state of safety or even the current state of almost anything. I mean, isn't our goal to be constantly jealous and constantly upset and eager to find out more information to develop new practices to make things safer? That's where we want to be.

The conversations we have in our locker room are from a group of guys that certainly care about our sport, but I've got to tell you they care a heck of a lot more about their kids and their neighbors and their friends and trying to do anything they can to make this game safer.

TOM FARREY: What are specific measures that are being discussed? The NFL just donated \$30 million to the NIH to fund research in the area of youth football and youth sports in general, USA Football has ramped up their efforts. I know you're supportive of USA Football's efforts.

DeMAURICE SMITH: Absolutely, and Pop Warner.

TOM FARREY: What could the PA do now that it's not doing right now that maybe hasn't been discussed?

DeMAURICE SMITH: Well, there's three or four things, and let me start off with where I believe we all have to be. It is thinking about new ideas and coming up with what I believe is the right way of thinking about the role and the world of where an athlete fits in.

One of the most fundamental changes that I think that you've seen over the last few years in professional -- in the NFL is our refusal to believe that we start looking at our athletes as football players first and people second. When we sit around this table, all of us obviously have been to some doctor at some point in our lives, we believe -- all of us hopefully believe in things like informed consent because we believe that those are things that every patient is entitled to, regardless of whether they're an athlete or not.

So when we move in that direction and the National Football League, I'm happy to have those conversations with folks in Pop Warner, as well, because we believe that just like they do, we should look at these young kids as who they were before they became athletes. When it comes to issues like ensuring that coaches are certified, that's an effort that we've been involved in really for the last 20 years, because again, I played football in high school with what some people would call an old-school coach; any man in this room or woman who played football that doesn't cringe when they hear bull-in-the-ring is a person who is a lucky, lucky individual. But the reality was that's the type of football that I grew up with.

When we are talking about efforts about educating coaches about what's safe and what's not safe, that's something that we do on every level. We probably have over 200 players who run some sort of off-season football or speed camp. I can tell you that none of those players run or have camps that have practices that wouldn't fly in the National Football League.

So again, as we go forward, I do believe that it might be this issue of culture change. I know that's a little bit of a buzz word, and I do my best to stay away from buzz words, but things like culture change, things like pushing an understanding of where an athlete fits into this paradigm.

But the last thing, to be blunt, is also this issue of accountability. One of the things that we have strived for in the last four years is this issue of increased accountability, and if there is any one

aspect of what we do on the pro level that I hope gets replicated on a college and youth level, it is this issue of accountability.

For example, this CBA is the first one in history that obligates team medical professionals to adhere to every federal, state, local, professional and ethical standard.

Now, the good news is that that's now in the CBA. The bad news is it took until this CBA to actually have that done, which is a little staggering, but I guess you have to start somewhere.

But with respect to our ability to file grievances against team doctors where we believe that their care has fallen below a certain standard, again, issues of informed consent are big ones for us, and are those -- are there a couple of issues that we're still fighting with between ourselves and the League on that issue? Yes.

For example, I don't believe it is morally acceptable that you force a player to sign a waiver of all liability before some sort of medical attention is given to a player. I believe that's morally indefensible.

So on those instances where we're dealing with teams that have forced our players to sign waivers of liability, those will be steps where our union will seek to hold those medical professionals and the league that pays them responsible for those things.

But again, those are big-time issues that where you might not be able to find one particular program or one particular act like no two-a-days, but that is a fundamental sea change in the culture or philosophy of football that is really a product of the last three or four years.

TOM FARREY: What we've seen is essentially an evolution of what the standard of care is, right, for the health and safety of NFL players?

DeMAURICE SMITH: And the expectation of that care.

TOM FARREY: And the expectation of that care.

DeMAURICE SMITH: Those two things go hand in hand, because it is one thing to say that if someone messes up the standard of care, you will hold them accountable. It is quite another to have as a parent where you now have an expectation of accountability, you have an expectation that the coach will be certified, you have an expectation that a neutral physician will be making a call about whether a player can continue to play. And that expectation to me is in some respects even more important than the level of accountability.

TOM FARREY: Right. There are all these -- there is that standard of care at the NFL level that you've ramped up, but a lot of youth leagues can't afford doctors and trainers and neurologists sitting in the press box. So how should we think about that? Now that we know what we believe is appropriate for adults, how much of that do you think should be pushed down the pipeline to kids versus, hey, they just simply can't afford it so let's not even engage in that conversation?

DeMAURICE SMITH: Yeah, and I talked a little bit about the economics, and that's certainly a big issue. I mean, look, I grew up in D.C., grew up in Prince George's County; the little league, Pop Warner or Boys & Girls Club team I paid for did not have a trainer. If they did, we called him Coach, and if it couldn't be solved by rubbing dirt on it, it was not fixed.

But I do think that going back to this expectation issue, I know that what we've done and what people like Chris and Robert and others have done to try to talk about youth sports is making a difference on the youth level when you can talk to parents as I have now who are concerned when they believe their kids might even have a sub-concussive event, where they instead of just shaking it off in the old days, whether it was my parents or somebody else saying, well, what you have is a stinger or what you have is just a little bit of a nick, you're going to be fine, just sit down and sit this play out, those were the old days.

When you have parents and coaches now who know that it's not good enough to just say that a kid is going to be okay, we don't even have to take a look at him, I know we've made a change.

So yes, I do believe that where we can ensure that players are getting the right medical attention, that's key. But I also believe that this education piece where we ensure that parents have a greater expectation of how their kids are going to be taken care of, that's critical.

TOM FARREY: I'd like to bring others into the conversation, but one question before we go. Dr. Cantu as you know supports no tackle football before the age of 14. Your thought?

DeMAURICE SMITH: Well, you know, I've read the piece that was -- again, I'm going to make some paper unhappy that I didn't remember the name of the paper, but I'm sure it was one of yours, and I read some of the backup literature. You know, I think it's worth looking at and studying, because again, I tend to read everything, and I tend to certainly want to know what the scientific

underpinnings of it is, and I think it's worth further study.

I mean, to me the questions are always going to be evidence-based. And if that's where -- anywhere where the evidence leads you, I think that's where you'd make your best decisions. I think it's something that's worth looking at and worth studying.

At the same time, however, I'm always worried that if a particular individual reaches some point about, okay, this is where the bright line is, it doesn't mean that we should stop thinking about all of the things that we can do to make sure that our current efforts are as safe as possible. And that -- to me that is really the one -- probably the only danger that comes from scientific knowledge is if it leads people to believe that they have permission to stop thinking about something else.

I mean, for example, my son is a lacrosse player, my daughter is a soccer player. Even if that is true, I don't want us to think that we should stop thinking about ways to make lacrosse safer, soccer safer, and again, if -- because we know that kids will still want to play tackle football from ages below 14, does that mean we should stop thinking about how do we keep those kids as safe as possible. My hope would be everybody would say no.

TOM FARREY: Mark Hyman, give us your credentials.

MARK HYMAN, PROFESSOR, GEORGE WASHINGTON UNIVERSITY: I'm a friend of Dr. Cantu's.

TOM FARREY: He's also the author of a couple books on youth sports.

MARK HYMAN: We've all read comments from NFL players, past and present, indicating that they would not allow their children to play tackle football, and I wonder if you can give us a sense of your conversations. Are those unusual cases where players hold those views, or is that a more typical view among players?

DeMAURICE SMITH: Which conversation are you talking about?

MARK HYMAN: Players who will say to you, I don't really feel comfortable with my child, my child less than 14 years old playing tackle football.

DeMAURICE SMITH: I've had conversations with lots of players who have their kids play and certainly conversations with some parents who say they wouldn't. Instead of drawing any wider lessons from any small group that I would ever talk to, I'm sure that's not what you would teach, I think that the real issue is the

candor and the fact that parents should be empowered to make the best decisions for their kids as possible.

So I don't really look or really place much significance on a broader level about the safety of football, given what an individual player might say to me. We've got 2,000 players in the National Football League. There's probably 10,000 former players.

So to me the real thing that I look for and the way in which our players relate to their sport and their family is I love the fact that these parents, who might be players or former players, are thinking about what's best for their kids, and that's where it begins and ends.

I can tell you that the great part about my job is while most people in America see our players between 1:00 and 4:00 or 4:00 and 6:00 or on Thursday night or on Monday night, really the pleasure that I have is I get to deal with them once the TV is off, and on a Monday they probably have a tough time coming down the steps to shake hands with me. But when the TV is off, they're parents. So at the end of the day, the lessons that I draw from having those conversations are lessons that, while they might be supermen on the field, they're the same guys who hug their kids like I do every night.

TOM FARREY: I'd like to bring Dave Zirin into the conversation.

DAVE ZIRIN, SPORTS EDITOR, THE NATION: First, I feel like I should say to Christine, Mike and the other working sportswriters in the room today that Mike Brown just got fired, in case you have to run.

I'm the sportswriter at The Nation magazine, I host a show called Edge of Sports Radio. My question for you is given everything we've seen over the last several months in the NFL season, when I say that I mean given the continued push by the NFL for an 18-game season, given the regimentation of Thursday night games, which a lot of players don't like because they feel like there's not enough rest and recuperation playing every Thursday night, and given the replacement referees, which as you commented created a very unsafe working environment for NFL players, do you feel like you have a working partner in Roger Goodell in the National Football League in creating a safer game?

DeMAURICE SMITH: I do, and obviously everybody around the room knows that when it's time for a, quote-unquote, dust-up to happen between the commissioner or Roger and myself, it

typically happens. It also means that we have separate constituencies that we represent and sometimes we see the world through two different lenses.

Our job, as I said earlier, is to push this issue of safety and accountability. I will tell you sitting here right now as the executive director of this organization that there will never come a day when I will be pleased or simply resigned to where we are on the issue of safety. I think both of our jobs is to continuously look to strive to push to make the game safer.

Are there issues that we disagree with? Absolutely. We believe that there should be, for example, sideline concussion experts in the National Football League. Why? We believe that there should be people who are trained in diagnosing and healing concussions who are going to be at the sideline of every game who only have one job, and that's to look for the possibility of a concussed or a sub-concussed player.

If you remember what happened to Matt Schaub, for example, that issue was one where we, even immediately after the game, there was a question about whether or not he had suffered a concussion because the doctors who were there to treat him missed the play.

So by having a person who has as their only job somebody on that sideline to make sure that happens, that's something that we the players union believe should exist. The League disagrees. Does that mean that it won't be resolved? No, but sometimes it takes us a little bit of time to get to that middle point where we're -- I wouldn't say both happy, sometimes we're just mutually unhappy.

TOM FARREY: I'd like to bring Jeff Miller into the conversation. Jeff Miller is a vice president at the NFL, represents the League here. Jeff, how critical is this issue, football participation at the youth and high school level, to the NFL's long-term growth?

JEFF MILLER, SENIOR VICE PRESIDENT, NFL: Let me start by making a little bit of news, and that's to say that I agree with quite a bit of what De said.

DeMAURICE SMITH: That you need to go run and get the papers.

JEFF MILLER: I didn't say all. Quite a bit of what he said.

His dedication to player health is commendable. Like the Players' Association, we sit on the board of USA Football. De is a board member himself and the contribution the Players' Association he makes along with the League to

USA Football and a lot of what they do is going to address the question that you just posed.

Activity in the youth sports, whether they be playing football or other sports, is essential as a public health issue. We all appreciate that. It was a conversation that we had this morning.

We want kids to play football, of course, tackle football, flag football, we want them to play. We want them to play lots of sports. I think this sociology around playing one sport seems counterintuitive for what's good for our kids. As the parent of two young children, that just doesn't make any sense to me.

Getting back to the League and a question you posed to De at the top, what responsibility do we have as the Players' Association and the League, and the answer is of course we have an obligation. We embrace that obligation, we take that obligation seriously in everything we do. We realize that what we do will be mirrored in other levels of sport.

It didn't take very long after we decided to kickoff line five yards for other sports to follow. That's a small example, small maybe in the sense that it was only five yards and maybe is just a minor rule change, but it decreased the incidence of concussion on that play by 40 percent in one year.

So while we look at rules changes about hits to the head, why we penalize players, why we fine players, why we try to change the culture, that trite phrase that De referenced, all of those things are followed in all levels of sport, and that's important. That's relevant. We have a platform when 100 million people watch our games every weekend and see what the players do on the field and how the NFL reacts to it.

I think that you're kidding yourself if you don't think that you have an obligation, and that's one that you have to take seriously. So when we hear questions raised by Dr. Cantu or others about the future of sport and youth sport, those are places where we want to engage. That's the reason that the NFL recently gave \$30 million to the National Institutes of Health, much of it for neurological research. That's the reason that the NFL set aside \$100 million over the course of this CBA for health research. That's the reason that we cut down on the practices.

These are things that the players advocated for and the NFL was receptive to, and that will change how football is played at all levels.

Now, it goes beyond that. It can't just be settling the model. You can't just say we do this and now everybody will follow. You actually have

your put your actions where your words are, and there was an issue this morning, a theme that came up a lot about education and a lot about infrastructure I think was the term that was used that would help parents, teachers, coaches, those at the youth sports level.

Well, because they don't have the athletic trainer in the sky and they don't have the neurologist independent for players to see, those resources don't exist to the same degree, and so what can you do. It's an issue that we have faced. We're proud at the League that we have invested with the CDC, as has the Players' Association, a great degree into a terrific set of campaign materials called Heads Up, which are easily available and need to be pushed out further. We're pleased that even though it caused me to spend time in Pierre, South Dakota, in January, that we've been able to get 40 states to pass youth concussion laws. Now, not us alone, our friends over here with the American College of Sports Medicine have been terrific advocates, as well.

But when parents receive that information sheet and coaches learn that they have to be educated in concussion, and when the law states that children have to be removed from play when they've been concussed and have to see a qualified licensed health care provider before they return to play, these things make a difference. And so the obligation that the League has as a platform is relevant to this conversation. It's important, but it's not all that you can do. You also have to your put your money, your time, your advocacy and pursue the education to make sure that these things change.

I think while not any individual part of that is a panacea, all of it put together if people are on the side of sports, whether it be at the professional level or the youth level, is going to help change the culture over time, and so that as a parent of young kids, I will see it before my very eyes.

And so the conversation as we have it here and as it will continue does not need to be dire. What USA Football does, what the Players' Association does, what Dr. Cantu does, what Pop Warner does, these are all important, relevant parts of a conversation, but one that I'm optimistic about, and as a League representative, it's one that we can continue to push.

TOM FARREY: One of the things we've heard about a lot today is coach education and coach training. The NFL and the PA, they had a great tool to address that question called the NFL Youth Football Fund. I wrote about it a couple months ago (ESPN.com article from Aug. 28 here:

[http://espn.go.com/espn/otl/story/\\_id/8294350/nfl-youth-football-fund-once-flush-millions-faces-safety-crisis-depleted-funds-options](http://espn.go.com/espn/otl/story/_id/8294350/nfl-youth-football-fund-once-flush-millions-faces-safety-crisis-depleted-funds-options) ); it was getting funded at \$25 million a year through 2006, when funding got cut off. Ever since then the funds have been drained. If it had been continued, if it had been funded at that level up until now, you might have a kitty of \$150 million you could throw at getting every coach in the country trained, perhaps mandating it, paying for online courses, maybe in-person courses. I know you guys have been thinking about, okay, how do we bring more resources to this question.

I guess, what's happening with the youth fund? Is that going to get re-funded, and if not, are there going to be dollars thrown at the issue of helping the Pop Warners of the world get coaches' education mandated?

JEFF MILLER: Your premise is misstated to start. With the Players' Association in a previous CBA we allocated a great deal of money to the Youth Football Fund, one of the NFL's two charitable institutions for the purpose of promoting youth football. That money was set aside at an early date with the purpose of spending the money down over time, so it wasn't that we cut off the money, it was that we planned ahead. So that's very different than what you said.

Now, the second piece, to answer your question is, in the most recent CBA we chose a different tack with the players in terms of charitable contributions. They have their own set of what they're going to choose to do. I leave it to De to talk about that to the extent that he wants.

We set aside as part of the negotiation \$276 million over 10 years for philanthropic institutions. We recently have given a great deal of thought as to how we're going to use that money. We've chosen two primary initiatives, health and safety of the game and youth football. I'm not trying to break news here, but our commitment to youth football, whether it be with the players and setting up USA Football and whether it be through the youth football fund or through the negotiated element that I just discussed has been unwavering.

Is it important more so now than ever given public perception? I'll let somebody else have that argument, but nothing is going to change in that regard. Scott can talk to that in terms of the contributions that he's received from us and the players have been, and I'm sure that De could talk about it, as well. But there's money set aside. It's important; we believe in youth football and will continue to support it.

TOM FARREY: One of his (Hallenbeck) most compelling ideas I think people would agree is get the coaches trained at a regional site, then they go back into their community league and they teach everyone else and they serve as a check and balance and they're not a coach. And it can be compelling, but that costs money, right, so someone has to underwrite that. Do you have any thought on how that's going to happen?

SCOTT HALLENBECK: Actually both parties are talking about helping to underwrite that. In fact we are looking at every conceivable model including potentially covering the costs of all coaches to be trained. I mean, we're looking at that. Right now it's \$5 a coach. Again, I think that's an important statement, \$5 a coach, and it's nationally accredited, it dovetails -- it includes practice plans and membership actions, not just a coaching education course.

So we strive and we can only do this -- this is an advertisement. We can only do this because of the contributions of the NFL and the Players' Association to allow us to put systems like that in place and ultimately spread them out across the country. I mean, a million dollars' worth of equipment grants, thanks to the NFL and the Players Association; half a million dollars into subsidy for background checks thanks to them. The only reason we can offer it for \$5 is because it's a loss leader, and it's because of the support that we get from them.

Candidly I think one of the questions that should be raised is everyone seems to always ask me what's the motives of the NFL and the Players' Association to do this? I guess they could speak to that better than I can, but where is the rest? Where all the other organizations out there, stakeholders of football? Why aren't we all unifying and working together to address this issue financially, because in the end, you're saying the right thing; we need to find a way to help coaches be trained, need to find a way to get people on the ground that can be there to supervise, assess, verify, et cetera, and I think we do have systems and plans to do that, but it does take funding.

TOM FARREY: Shannon Shy is with the American Youth Football, which is one of the largest youth football organizations out there. A lot of independent leagues are affiliated with your group. Tell me what you're doing about this issue. I know you guys, for instance, you have not supported Pop Warner's idea of limiting practice time. You have your own ideas on how to reform youth football.

SHANNON SHY: This is a really important, critical meeting, and the conversation needs to continue. I will tell the NFL, what you do does have a big impact all the way down. I've been in youth football since 1999 as a coach, as an administrator, and now I'm on the national staff.

The concussions right now is on the tip of everybody's tongue, and that's really important. A couple of things: I heard sort of a theme in the first hour or two about maybe football -- it's not so much about teamwork anymore; it's losing its zeal. I think that's absolutely false.

We take kids from underprivileged neighbors in the inner city, very privileged kids, all of them learn the same lessons that help them in life. So we should never minimize the importance of that.

For concussions, I will tell you we applaud what Pop Warner is trying. For us, we're trying to take a look at this, limiting -- practice is already limited during the year after school starts. Our fear for saying you can only hit for 40 minutes a practice is that the coaches are now going to say, okay, we've got 40 minutes, let's go hit, and it'll drive them to that. What we tell them, don't spend your time hitting, spend your time teaching technique and everything. We're not saying that that's wrong, we're just trying a different approach.

We're all after the same goal. The other thing is I can't ever imagine, although the research is critical, I can't ever imagine a time when we turn around and the Federal Government or state governments will outlaw football for 14 years and younger. We should really spend our time finding out what the research said, like De said, and then trying to figure out how to make it as safe as possible.

Working with USA Football and Pop Warner, the result is going to be extremely, extremely important for the future of the game. But the other thing is, on the education piece, what we found is teaching the parents, teaching the parents is critical.

When I started, we had all kinds of parents saying, I know my kid, he can go back in the game, and you'd say, ma'am, your child cannot go back in the game. Parents are now aware, and they're not making those kind of decisions.

The other piece of it is on coaches' training. We need to really get the coaches out there to teach other coaches. We can handle everybody in our organizations, but we really have to do a better job as a whole nation about going to the places where there isn't a national structure.

TOM FARREY: I want to bring Brooke de Lench into this. Brooke, tell me about your website. Are you working with the NFL, is that right, on an initiative?

BROOKE de LENCH, EXECUTIVE DIRECTOR, MOMSTEAM.COM: Yes, we are actually helping with NFL Evolution, so each day you see some of the tips from Mom's Team, which I am the publisher of, in that site. I am also the author of "Home Team Advantage, the Critical Role of Mothers in Youth Sports," and I have a great new hat. It is as a producer of a documentary around football.

I keep hearing these great pieces by De and others about parents. So yes, Mom's Team is the website that I run, and for the past 12 years we have been leading the way, I believe, in concussion education at the youth sports and high school level.

TOM FARREY: Moms are concerned, aren't they?

BROOKE de LENCH: Moms are very concerned. As a matter of fact, about a year ago, nine months ago, I received a letter from a mom in Oklahoma, and she wanted Mom's Team to parachute in with our team of experts to set up a concussion risk management program. And that is a very common question that we have received over 12 years is can you help us. We've been helping right along, but this time we wanted to document every step of the way.

One of my triplet sons actually was taken out of football because of concussions years ago, and now knowing what I know, the game can be made safer. The game is being made safer. So very quickly, what we did was we parachuted into Oklahoma, we've been following a team for the entire season. We started in February, and each month we visit them for a week. We've been filming them.

Their concussion rate has plummeted. We've put together our risk management program, 15 different steps. We have the accelerometers, the hit sensors are in their helmets at the high school level. So we are tracking hits, we are tracking everything that these boys want. We have been able to give them new helmets, not just the correct fit but how to measure it.

Most important message I have is that the kids want the accelerometers, either in their helmet or as an earbud or a mouthpiece. They want that responsibility taken away from themselves. So right now they're underreporting, and this is really helping.

TOM FARREY: Let me bring Bill Mayer into this conversation. Bill as I mentioned is an owner in the NFL, and you have a unique perspective on the downstream consequences of concussions and other injuries. They're sort of placed at your doorstep, aren't they?

BILL MAYER, OWNER, NFL'S VIRGINIA DESTROYERS: Well, I think I'm like a lot of people. You end up learning about something sort of from the back going forward, and in this case it's the cost of worker's compensation in football, and it is a real problem. Part of it is the state of California and how it's structured to take claims, but the insurance companies, you're in effect self-insured. The point is the cost of worker's compensation for our little league is -- we had to go through the states, and it was about one and a half times the entire compensation of the players, okay, and we had a conversation recently with the National Football League, and I think if you ask them, they would tell you it's a similar problem.

Well, why is that a problem? Well, people think of, of course, concussion and inheriting where a player played last the whole thing, and nobody, nobody objects, of course, because there are players that have been hurt. But if you go back and you say, all right, if you want to change this, guess where you end up, you end up where Dr. Cantu is talking about.

And then I say, well, wow, we basically have an entire generation we're going to have to deal with because who knows, somebody playing in the Southeast Conference has perhaps already incurred damage that isn't going to manifest itself for 15 or 20 years.

TOM FARREY: The point is that you -- I think you were telling me that the last team that employs the player is the one that picks up all the worker's camp cost, right?

BILL MAYER: Yeah, and that's not right or wrong, that happens to be the law.

DeMAURICE SMITH: I'm interested in your conversations as I always am with the National Football League about how they could be in the same situation.

BILL MAYER: I'm not speaking for the National Football League.

DeMAURICE SMITH: One thing that's different in our CBA, the great thing under our CBA is the cost of their worker's compensation insurance is actually borne by the players. So we actually live in a world under the CBA where the insurance cost is basically estimated every year, and that is a benefit that goes to the team. So the good news at least for our football teams, and it's

always rare that I'll say something good about NFL owners, but this is one of them, is that when it comes to their cost of their insurance, it's something that's reimbursed.

Now, the world that we live in that makes it somewhat ironic is that even though those costs are reimbursed, the teams nonetheless fight us on worker's comp, which is interesting. I could probably choose another word other than interesting, but it's a family show.

So I'm always interested in this issue of worker's compensation, but I do think that going back to these big ideas, recognizing that when our players get hurt, our leadership refuses to call it an accident. If you are a running back and you're squaring up and Ray Lewis is coming at you or if you're a cornerback and Steven Jackson is heading towards you, what happens after you tackle one of those individuals is not an accident; that is a necessary and foreseeable consequence of something that we call playing football.

And the day that we actually turn the corner on making this game better for youth is the same day that we recognize that players, when they are engaged and they get hurt at work, at work, not playing a game, hurt at work, when we accept that responsibility and choose that we are going to compensate and take care of those medical injuries for those players who get hurt at work, that's a day that's going to be much better for youth football because we will have moved beyond that sort of, quote-unquote, gladiator phase of football where we all used to say, well, you know, if a guy got a broken leg, well, it just happened and that was tough for him and we should move on. Those days need to end.

BILL MAYER: Let me finish. That's why they call it worker's compensation, because it is work. My point was not necessarily worker's compensation per se, but as a symbol for the cumulative impact of trauma from the youth. And so we talk about 100 million people watching football and watching your players that you represent on the field working, all right, and they are the role model for youth sports. And so part of what you do is going to obviously influence youth sports. So you've got to work at it from both ends.

DeMAURICE SMITH: Absolutely.

BILL MAYER: And my last point is something I said at the beginning of my comments. I'm a big fan of looking at trends as opposed to snapshots, and so you weren't able to join us that early, but it's clear that the discussion is different than it was three years ago about this whole issue of youth sports and the risk up until call it 14 years

old when the brain and the shell is actually formed or may be actually formed, and yes, you need a lot more research. But I can tell you from the standpoint of logic, it's very clear to me that this has to be viewed as a threat or an opportunity, and clearly most people would say in any situation where things seem to be changing or we're learning more information, you would want to be in control of the situation and drive the decision as opposed to being outside of it.

So there are big differences of opinion here amongst everybody that's doing this research for the 7 to 14 year olds, but I would sure hope you're working together, because the outcome is going to be what it is, and sooner or later there will be a point that is commonly called, Malcolm Gladwell calls it the tipping point, and tipping points are usually reached not necessarily by individual votes but because there is some person that has an abnormal amount of influence on the opinion of others. Who it is, that person is probably in this room.

TOM FARREY: I'd like to bring two NFL players into this conversation. I want to go to a former NFL kicker, Stefan Fatsis, who wrote a book about kicking in the NFL. Stefan, give me your thought on what you've heard.

STEFAN FATSIS, SPORTSWRITER, COMMENTATOR FOR NPR, SLATE: Well, I did. I spent a summer with the Denver Broncos as a kicker on the team, in the locker room, on the practice field. I was never hit because if anyone had ever hit me, I would not be sitting here today.

I did have a tight end coach insist that I approach a tackling dummy one day, and I got hurt. I didn't tell anybody that I got hurt, like most NFL players; they don't tell anyone that they got hurt.

I think there are two points I wanted to make, and one is that the reality both at the professional level and the youth level is far different from, I think, some of the scenarios that we are laying out here. Players are not, for all of the excellent and progressive changes that De has managed to get in conjunction with the NFL, players are still at the mercy of their coaches, they are still unwilling to tell doctors when they are hurt. They are still unwilling to demand their medical records when they have right to them. They are still unaware of the long-term consequences of many of the injuries that they are asked to play through.

That's a long-term proposition to change the culture of the League, and I know that there are efforts being made to do that. But players

aren't willing to just make those changes overnight because their livelihoods depend on getting back out on the field.

At the youth level, kids don't have those folks, and parents are terrible. They're, I think, the worst judges of what their children need or are capable of. Coaches in most sports are uneducated, and for all of the educational opportunities and efforts you make, there's still going to be the majority of coaches are not going to try to implement these things.

We're talking about a sport that -- you're talking about putting accelerometers in equipment, where we want equipment specialists to outfit our children, where we're talking about having independent observers of coaches on the sidelines at practices and games to monitor what's going on. I'm going to throw out a general question, which is at what point are we kidding ourselves about youth football, that this is not a sensible proposition when you need this superstructure of equipment and medical testing and trained medical observers for every youth football game in the country?

At what point, and maybe the lawyers decide it, maybe the school boards decide it, maybe the journalists decide it, but how do we know we're at that point?

TOM FARREY: I'd like to hear from Eddie Mason. Do you want to respond?

EDDIE MASON: First, thank you (Smith) for the work that you've done for the players. I wish you would have done it 10 years ago. I would have still been playing.

But limited practices, all that type of stuff, League, everybody, all the officials here, as I stated earlier, the main thing about youth sports is safety. I think we all agree that we need to make the game safer on every level, from youth, high school, college, to pro, and I think there has been many measures doing it. There's been a lot of research, a lot of discussion here, appreciate the research you guys are doing at Virginia Tech. But the reality is here. We live in a football community, and it's everybody's responsibility in this room, that's why we're here. Tom, thank you for bringing us all together, to come together to embrace the research, embrace the wisdom, embrace the knowledge, have people that will fight for change and represent.

Perfect example, as I stated to you earlier, I worked with the commissioner over a flag football league, and I'm also working with three tackle leagues in the Loudoun, Virginia, area. The reality is this: In the football culture we're always taught to fight through it, to go that extra mile, to keep

working, to keep pushing. And then there's that breaking point as you talked about earlier, that tipping point of where you have to come to the realization of, okay, who do we leave this responsibility, the hands of this responsibility into, and at some point we have to take that responsibility away from the coaches and even the leagues because many of the leagues, the leagues that I work with are parent run or owned. They're not governed by USA Football or Pop Warner. These guys can't come down, Scott can't come down there and tell every coach in the United States of America that this is the way you need to do it.

So what we try to do with the league, and I just want to share this as an example of this is what you're fighting against at the grass-roots level, is number one, Coach Carey Cameron, who played nine years in the League, I played eight, we went to the League, we approached the League and we said this: You know what we want to do? We've played at the highest level, so there's a model standard that's already out there. The NFL and the NFLPA have already set a standard for youth coaches in America. The problem is that they don't embrace the changes because it's all about winning. It's the win-at-all-costs mentality.

Now, winning is good, but guess what, nobody remembers Ws and Ls years from now. What matters is the effects of the game. So what we tried to do with the League was, okay, if you guys want to improve safety and you want to improve making sure that these coaches are responsible, being accountable and credible, then implement a league czar, just like the NFLPA. They protect, what? The players. They work alongside the NFL to come inside and say, okay, these are the things we want to give, these are the things that are most important, these are the issues, and that's what needs to happen.

It may have to be legislative. I don't know, but if we're serious about making changes to the game and serious about making safety paramount at the youth level, then we need to get serious about, okay, if these issues exist and these league presidents don't want to make changes, then your league can't exist. Your league cannot exist. You are irresponsible and you're being irresponsible to these families and to these kids if you are unwilling to adhere to the standards.

Because at the end of the day, that's what it's all about, it's about a standard and it's about raising that standard and the expectation and then implementing it, and if we don't do that, then it's going to continue to be the same. Yes, you're

right, 15 years from now, little Jimmy, little Johnny, yeah, might be having some problems if we don't all come together as a football community. That's what this is all about.

TOM FARREY: Mike Wise, how hopeful -- we've heard a lot here today and you're a good listener because you're a journalist. You're also a skeptic because you're a journalist. How optimistic are you that the culture of football can change, that we can get coaches trained, that quality decisions can be made at the youth level, that high schools can use football in a way that promotes public health?

MIKE WISE, WASHINGTON POST COLUMNIST: It's a tough one, because while I think this is a start and a huge start, and Dr. Cantu's work is seminal and a lot of the things said today here are very important, I'm a little disappointed that Eddie is one of the only players here -- I would love to see more active players be a part of this, and I think if there is anything -- you said it best: I don't think culture change is a bad watch word at all. I wonder from Jeff's perspective and De's, is it possible for the league to get into the thick heads of guys whose job is to hit people, people like Ray Lewis, like James Harrison, who have used some of this new culture of not killing the quarterback and calling it the sissification of the League, and people who say snitches get stitches during Bounty Gate, is it possible to come down on these people? Is it possible to get it through their heads that it's not okay to hurt your fellow competitor?

It's one thing to lay a guy out. I'm like anybody else; I have a reptilian brain, I jump out on my couch when a guy makes a big hit. But when that player stays down, it's as sick as anything I can remember. I was at the AFC Championship game a few years ago in Pittsburgh, and when Willis McGahee went down, Ryan Clark laid him out, nobody thought Willis McGahee was getting up.

So I don't know if there's a PSA thing where like Grant Hill came out and said, using gay slurs are bad, if something can happen like that in the NFL where Ray Lewis and some of the most violent hitters in this game can come out and say, point blank, kids, this ain't right; it's one thing to knock a guy down, it's another thing to want to willfully hurt him. I think the culture change needs to start at that level, and I don't know if Colt McCoy is allowed back on the field what it all means.

DeMAURICE SMITH: And I hear you and I think that's a great point. But again, going back to responsibility and accountability, and you and I

had a good chance to chat a little bit outside and you know my feelings about the importance and the obligation of smart journalists and good journalism in America, and that's a debate thankfully that people are having again, but my question is always while you identified two individuals who said things that I would rather they not say, I'll be dead honest with you, I have to hunt for a story about a guy like Mike Vrabel, who was as vicious a linebacker as possible but coaches youth football in the way that everybody in this room would want him to coach.

So to me, again, going back to the fact that there are 2,000 football players in the National Football League, if we wanted to come up with the worst examples of things that happened that we would wish not happen, my guess is we would be numbering in the 10s and the 20s, not the thousands.

So as I look at guys like Steven Jackson and even guys like Ryan Clark, those are guys who I think do do it the right way when it comes to teaching their youth football people.

While I agree with you 100 percent on the idea of PSAs for those things, you know what, I'd love to have a little bit of good news coming out about some of the players who you never hear about because they don't drive their car at 1,000 miles an hour, they don't get in fights at clubs, they don't throw people out of windows. Unfortunately those are the stories that we never hear, and the good thing about Jeff and I's job is, again, once the TV is off, those are the guys that we meet.

And to me the greatest PSAs that we could possibly do, and maybe I'm putting a little bit of this responsibility on us, as well, and more importantly the head of our communications department George in the back of the room, is for us to tell those stories, because we have thousands of great ones, and for the guys that you played with, Eddie, for those guys that were on your teams, more often than not, those are the very same guys that you would entrust to teach your kids how to play football, and that's the stories that we need to hear.

JEFF MILLER: If I can jump in real quick on what De said, I'll be brief. De makes a good point. The stories that you get, the Colt McCoys and other things that lead to further evolution and how we address these issues are essential that they be told, and they're essential because they lead to changes. And the game has to continue to evolve. Would we have athletic trainers in the skyboxes and video boards on the sidelines but for that? I don't know whether we would. But it helped.

But what's interesting is that last year in the championship games, the NFC and AFC championship games, two hard-hitting games, the Ravens played the Patriots, the Giants beat the Niners, and then in the Super Bowl, go back and watch those games. Was there an illegal hit? Was there a penalty for unsportsmanlike conduct? Were all the hits hard, solid, making your reptilian brain jump off the couch? There weren't. Go back and watch.

I present to you, and I don't know whether De would agree, but I present to you that it is changing. James Harrison said publicly that he was going to avoid hitting the quarterback in the head because he didn't want to draw a fine from the League. So anecdotal, and I'll probably get in trouble back at the League when I mention some of these things. But anecdotal isn't proof, but then again, those stories also exist, and the great part about football, those hard hits that you're excited about, they can be done, and they can continue to encourage the following of the fans and that part of us who enjoys hard hits. But they don't have to be to anybody's head, either, and that does exist.

TOM FARREY: We need to wrap up here, and I'd love to get to everyone who's at the table, but I'd like to -- two quick closing comments from Scott and let's go to Bob at the end.

SCOTT HALLENBECK: I just wanted to comment on the idea that getting players engaged is very important, and actually part of -- this is not an advertisement, I've got to be careful, but the three pilot programs that we have with Heads Up Football, one of the aspects that was really beneficial was former NFL alumni players came out, and they were genuinely presenting their feelings about the game. They were talking openly to the parents. LaVar Arrington in particular game out here in Northern Virginia, and it made a real difference.

And so I think one of the points that you made is how do we all sort of come together and get the message out and talk about what we know, and as we learn more from the science and the medical industry and so forth, we obviously have to embrace that and act accordingly. But I am pleased with the Players' Association and the NFL in that they're encouraging their players to come out and engage parents and talk about the realities of what's going on, and parents are asking some real hard questions.

But in the end, they want to be informed. And so I think there is a movement. The point of this statement is there is some proactive steps being taken to try to address this very complex

issue, and obviously the conversation needs to continue. But at the former player level, they are definitely engaging.

TOM FARREY: Bob, you got this conversation started with the whole idea of 14 and under in flag football, so I'm going to give you the final comment.

ROBERT CANTU: Thanks very much. Let me just wrap it quickly by saying what I started with. Thank you, Tom, for having us, the Aspen Institute. I think it's important all of us in this room understand that no brain trauma is good brain trauma. We're not paranoid about it, but when you can reduce it or every chance you get to eliminate it short of stopping something completely, it's a good thing.

I'm very encouraged with what I've heard today because I think the bus that's been driving has been at the wrong end. I'm proud as heck of what the National Football League has done, what Commissioner Goodell has done, working with DeMaurice Smith and the Players' Association collectively, what they did in their collective bargaining agreement, reducing the hitting to less than once a week, but that's not been picked up significantly at lower levels so far, and I'm speaking now -- forget me getting on my 14-and-under bandwagon, let's just say college and high school.

We've just come back from Zurich where we've been on the organizing committing representing the United States since '01, and the big thing four years ago was for youth football 18 and under, no going back into the contest the same day. That was the mandate coming out of the conference. Nothing happened. Nothing.

2009, nothing.

2010, the National Football League implemented that, and within months the NCAA lock-stepped and the National Federation of High School Football Associations lock-stepped.

The National Football League has been driving this safety business, and it seems to me that we need to have a little -- yes, it's great they're doing that, but the youth leagues need to step in a bigger way than they have in the past. I'm delighted to see what they've done recently, and I applaud it.

TOM FARREY: A couple things before we go. Like I said, a transcript of today's proceedings will be available later in the day. They'll be sent to me, I'll take a look at them and then I'll send them out to folks if you're interested.

I'm sorry we weren't able to figure out the video clip earlier but we're going to show it now

and you're welcome to stick around. If you want to head out, that's fine, as well.

I'd like to thank everyone who helped bring this meeting together ... and all of you who engaged in this conversation. As an investigative journalist, people like Donovan Hill or Preston Plevretes, who suffered from Second Impact Syndrome, they talk to me because they want something good to come of their story. They want people to learn from what happened to them so it doesn't happen to someone else. The kind of journalism that fleshes out those stories is essential. But there's another component. There's something that happens afterward. And it's conversations like these where important people come together, share perspectives, try and find common ground, identify breakthrough ideas and advance the conversation moving forward. So for me personally, I feel like I'm doing right by the Donovan Hills of the world by helping convene this. So thank you for coming. (clapping)

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