

Katie Johnson: Good morning and welcome to Apple a Day. Lake Region Healthcare's Health and Wellness segment, this is Katie Johnson, and joining me as my guest this morning is Brian Pickering. Brian is one of the athletic trainers on staff at Lake Region Healthcare and he's here to talk to us about Back to School Sport's Physicals. Good morning, Brian.

Brian Pickering: Good morning, Katie.

Katie Johnson: I hate to admit that it's time to talk about back to school stuff but we all know that Fall sports practice starts in August and that's just around the corner. I wanted to talk about the importance of the sports physical and what parents and athletes should be doing to prepare for a sports physical so let's just start at the beginning with maybe the sports physical 101. What are they and who needs them?

Brian Pickering: Yes, well a sports physical is sometimes called a pre-participation physical or as you said a sports physical or something along those lines. Depending on where you're at every kid participating in athletics at a Minnesota State High School League-sanctioned school in the state of Minnesota needs a physical every three years. There's no magic date, like it doesn't have to be done after May first or after June first, or whatever, it just needs to be completed sometime within the last three calendar years. If a kid chose not to play a Fall sport as a seventh grader and took a physical in let's say November they would be actually good through the Fall of their sophomore year but if you're in North Dakota you are required to take one every year.

Katie Johnson: Let's expand on that sports physical a little bit more, what it is meant to uncover, what can it prevent?

Brian Pickering: Yes, so really you shouldn't look at a sports physical as what can we find, it's hopefully what don't we find. You shouldn't you know whoever is doing it should never go into it looking to disqualify a kid or to put restrictions on a kid. Really, ultimately, you're looking to minimize any risks associated with sports or their participation. Minnesota State High School does a good job of breaking it down into nine boxes based upon strenuous activities and contact and, well I should put contact in a different category. Whether a sports considered a contact or non-contact and aerobic levels and actually allows a provider to determine exclusions based upon that. Saying that maybe somebody, and not every kid that falls into these categories is going to be excluded, but maybe a kid that had a congenital defect and maybe only has one kidney may be excluded from playing a contact sport such as football or hockey. It allows that provider that's doing the physical to determine what's safe for that kid long term, I mean that's really what you're looking for.

Katie Johnson: What are the components of a good sports physical?

Brian Pickering: Yeah, so to me, I guess a good sports physical comprises of six things. One, there

should be a medical history of the student-athlete and that should include things like allergies, asthma, vaccination history, vision problems, any prior significant illnesses such as pneumonia, mononucleosis, chickenpox should even be included in that. One side note, one thing that we started to see with these kids with chickenpox and kids that have gotten the chickenpox vaccination is shingles. Obviously, that is a concern as you get older, so you obviously want to be aware of that. Prior surgeries, any medications, and supplements they're taking, so those kind of things should be included in that.

You should also have some questions associated with cardiovascular screening, you know, some of that leads to your family history. History of heart disease, history of unexplained death prior to age fifty, high blood pressure, those kind of things should all be included in part two, which would be your family history because you want to look at that as well. Then you should do a general health screening which should include height, weight, blood pressure, pulse rates, vision check, a hearing check, and arm-span, we go back to Marfan syndrome, check that arm-span to make sure that's one of the identifying factors that you can use in order to determine that.

Then you should go into your physical exam which is going to check, obviously, joint stability, and strength and range of motion. You should do a neurocognitive and that should also be part I guess of your history. We want to talk about concussions, you know it's a big topic, there should be a neurocognitive exam as well as part of this. You know, obviously, checking eyes, ears, nose, throat, the skin for any potential skin infections. I find kids that come in with ringworm or something else and you don't want that to be spread and this is an opportunity to catch some of these and treat what's appropriate and obviously not disqualify but to get us headed in the right direction. Once that physical exam is done I always think that in the Minnesota State High School it's really good, they ask there's a group of questions on that form for the Doctor or whoever is doing it to go through there and kind of do a mental health screening.

Look at the stresses, kids that are playing sports are not immune to the stresses of society today. Talk about drug, alcohol, tobacco use, unsafe risk factors such as guns in the house, use a seat-belt, unprotected sex, all those sorts of things that you wouldn't think you want to address with a seventh grader but you may not see that kid again until the ten grader. Smoking in the home should be part of that assessment. Then, finally, I always view it as a good educational opportunity to look at that kid and talk to them about the importance of identifying and being able to report concussions to the right person.

Talking about hydration and heat illness protection, proper nutrition, potential side effects of any medications and supplements that kids are on, they need to know that with increased activity sometimes these medications may be a diuretic and may lead to cramping. That kid needs to know that so that we're not dealing with that issue, I hate to deal with those issues on the field because you have unexplained cramping and then you find out two days later that they're taking a

medication that may cause that. It's a good time to educate.

Katie Johnson: It's pretty thorough when you cover all of those things, so the question that comes to my mind is - is it okay for this to take the place of their annual exam, you know their well-child exam?

Brian Pickering: It should never replace it, it can be a component of it, I know in my household that's what, that's part of it. When our kids go in for their well-check, and we only have one at that age, but part of her well-check and she's convenient because she's a September birthday but we always do her sports physical as part of her annual well-check. The sports physical should never replace the well-check, unfortunately, from study to study they say that anywhere between thirty-five and eighty percent of kids are not getting an annual well-check and they're using the sports physical as that. Sometimes things get lost, which is why I personally believe things like vaccination checks should be, you know, you should be getting your sports physical done by someone that can assess your vaccination schedule and catch those things because unfortunately sometimes that's the only time kids come in and we need to make sure we are catching those things.

Katie Johnson: Right, right, I think there's, it's maybe common for kids to worry about passing the physical. Is it common for someone to not pass or for more tests to be needed once they are done with the sports physical?

Brian Pickering: Yeah, so kind of two different questions. Is it common to not pass? I can't think of fifteen, sixteen years of doing this, I can't think of ever having one kid that I knew failed it. I should say, you know, it's not pass-fail.

Katie Johnson: Right.

Brian Pickering: Any one kid that was ever completely disqualified from activities. I've had kids that have been told that they can't participate in a certain level of activity, whether it's you can't play soccer but you can golf. Somewhere, you know, statistics show between half a percent, maybe two percent of kids get excluded, I'd say closer to the half really when you look at it. Now, is it common to do additional tests? I'd say, I'd have to define common, but it's not unusual to maybe be listening to the heart and hear something and then request an EKG to be taken, or to look at a kid that might be overweight for their age and request at least a baseline of lipids and some baseline blood tests that would assess kind of what's going on there. If the kid maybe has a thyroid issue or something like that, again, this is where it doesn't replace an annual exam, it can be part of that but it should never really replace that.

Katie Johnson: I think that's part of the education process too if you're really being upfront with your child about what the purpose of the sports physical is and taking them for their well-child exams. They'll be well aware of their personal health, hopefully being really proactive about their personal health and knowing that the physical for sports isn't about passing or failing it's about making sure they can be the strongest

athlete they can be.

Brian Pickering: Right, and you know if you really want to build on that people ask me all the time, "Well, can I just go wherever to get my physical done?" I said, "Absolutely, you can go wherever to get your physical done." To me, part of a good sports physical as well is getting it from someone that you have a long-standing or at least some sort of standing relationship with so that they know your medical history. I mean we talk about wanting to get your prior medical history and wanting to get your family history but sometimes if you walk in, obviously, kids that are around now Dr. Magnuson's been here since the time they were born and maybe since, you know, wherever.

Dr. Magnuson knows that kid as well as anybody because he's seen them for thirteen, fifteen, sixteen years and knows that history. That relationship is already there and established as opposed to somebody that you're just going to because you need to get this piece of paper done. It's much more than a signature. That's one of my biggest maybe frustrations about public image of a sports physical is that I think when we talk about kids that maybe happen to, there's a kid that passes away playing football or whatever the case is, those kids I think if you were to go back and look at it there's something that was there that just got missed because somebody overlooked it because it was just a sports physical and not really looking at what are my concerns? Take the name off, take who I'm looking at off and here's the data I have in front of me and what's my concerns?

Katie Johnson: Excellent advice, anything that we've missed that you want to make sure that we add?

Brian Pickering: No, I guess the last thing that I would say is that don't think it's too early to get this done and it's not too late to have it done either. If somebody would ask me when should I have it done? I always tell them about four to six weeks ahead because that gives you that month, month and a half, that if you need to do an EKG, or if you need to get a lipid panel, or you need to, let's say there's a concern of sickle cell trait or something like that. You have time to do those additional testing and get those answers as opposed to sitting there for two, three weeks waiting for those answers.

You never want to be doing that at the beginning of the sports season, I mean, any coach would tell you that's the most important time of the year. Contest that maybe but that's the time when kids become part of that team you'd hate for them to miss out on those situations. Don't feel like you're missed out on it and don't feel like you're doing it way too early like you're planning ahead of time because you might be actually a little bit behind the game a little bit.

Katie Johnson: Yeah, exactly, as you say it's definitely time to make your appointment if you haven't done so already. Great advice, Brian Pickering, athletic trainer on staff at Lake Region Healthcare talking Fall Sports Physicals with us this morning on Apple a Day and both Brian and I remind you there is so much to do here, stay healthy for

it. Thanks for listening and have a great day.