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# Encouraging Healthy Adolescent Development

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The main threats to the health of adolescents today are preventable risk behaviors. Screening for risks during adolescent clinical encounters is widely accepted. However, health as defined by the World Health Organizations is a state of complete physical, mental, and social well-being. Health is not merely the absence of disease. Positive youth development or a strength-based approach embraces this definition of health.

Positive youth development orients youth toward actively seeking out and acquiring building blocks for future success. The goals of a strengthbased approach are to 1) raise adolescents' awareness of their developing strengths and the role they can play in their own health and well-being and 2) motivate and assist adolescents in taking on this responsibility.



Incorporating strengths into the adolescent clinical encounter is not an add-on, but rather a way to reorganize and prioritize the content of your interactions and anticipatory guidance. Adopting a strengthbased approach in the clinical setting means modeling respect and exhibiting empathy toward adolescents. It means conveying the belief that adolescents have the ability to continue their positive health behaviors or to make a behavior change when needed. The clinical encounter is not just an opportunity to assess the adolescent's strengths, but an opportunity to directly promote strengths in the adolescent.

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The Vermont Child Health Improvement Project (VCHIP) has integrated a strengthbased approach into primary care practices across the state. Their strength-based approach is based on Brendtro's Circle of Courage model, which integrates resilience research, traditional Native American philosophies of child-rearing, and the wisdom of early pioneers in education and youth work. The Circle of Courage portrays four universal growth needs: belonging, mastery, independence, and generosity.





The strength of **belonging** is a measure of the adolescent's connection with their family and community. The adolescent can say, "I am loved." One of the key insights from resilience research is that a caring relationship with at least one responsible adult is a positive, protective factor. Possible questions to assess the strength of belonging include:



- How do you get along with the people living in your home?
- What do you like to do together as a family?
- Do you have at least one friend or a group of friends with whom you are comfortable?
- How do you feel you "fit in" at school?
- Do you have at least one adult in your life who cares about you and to whom you can go if you need help?
- When you're stressed, who do you go to?

If the strength is present the provider may state, "You have many strong relationships in your life. I know this group of friends and adults must be a lot of help when times get tough." If absent, the provider could state, "It's important to develop relationships to help you. Can you think of some people you might be able to rely on when you need it?

The second strength in the Circle of Courage is **mastery** or competence. The adolescent can say, "I can succeed." Questions to assess the strength of mastery include:

- What are you good at? What do others tell you that you are good at?
- How are you doing in school?
- What do you like to do in your free time?
- What do you do to stay healthy?
- What are your responsibilities at school? At home?

If the adolescent is struggling in school, finding other areas

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of mastery can be extremely important. If the strength is present a provider can praise the adolescent's mastery of various skills. If the strength of mastery is absent, the provider could say, "Becoming good at something (developing mastery) will help you feel good about yourself. What do you like to do?"



The third strength is **independence** or confidence. The adolescent can say, "I have the power to make decisions." Questions to assess the strength of independence include:

- Do you feel you have a say in your family rules and decisions?
- Do you take responsibility for your actions even when things don't work out or as you planned?
- Have you figured a way to control your actions when you're angry or upset?

- Everyone has stress in their lives. Have you figured out how to handle stress?
- How confident are you that you can make a needed change in your life?

One affirmation of the strength of independence is, "I'm impressed with your decision to stop hanging out with the group of friends who were making unhealthy decisions. I know it was difficult, but it showed independence on your part." If the strength is lacking, the provider may provide feedback such as "I wonder if there is something we can do to help you start finding your own way and developing your independence?"

The fourth strength in the Circle of Courage model is **generosity** or contribution/ character. The adolescent can say, "I have a purpose in my life." Questions to assess the strength of generosity include:

- What do you do to help others?
- How do you support your friends when they are try-ing to do the right thing?
- What makes your parents proud of you?
- What do your friends like about you the most?
- What do you like about yourself?

If this strength is present the provider could state, "Your willingness to help out with your brother's football team is great!" If absent the provider could say, "I'd like you to think about sharing your athletic skill with others, maybe some younger kids." Having a bulletin board in your office promoting volunteer opportunities or providing a list of volunteer opportunities in the community can help promote this strength.

In summary, positive youth development or a strength-based approach is a key strategy for promoting healthy development and reducing risky behaviors in adolescents. Used in conjunction with motivational interviewing, this approach can assist health care providers in promoting positive behavioral change in adolescents.

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# **Sport-Related Concussion**

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This high school football season has been the first under lowa's new youth sports concussion safety law. While athletes seem to be better protected under the new rules and awareness of concussion in sports has increased, there remains some confusion about the health care provider's role in evaluating and managing sport-related concussion. This review is meant to serve as a primer for health care providers who may care for concussed athletes.

A concussion is a disturbance in the function of the brain caused by an injury to the brain itself. Most concussed athletes will not have loss of consciousness, seizures, or other dramatic symptoms. Commonly, athletes will complain of symptoms such as headache, feeling in a fog, and difficulty concentrating. On physical examination, difficulties with memory and concentration are common. Occasionally, coaches or teammates will recognize poor play as the presenting sign of a concussion. For a complete review of the common signs and symptoms of concussion and the current (but lengthy) definition of concussion, please refer to the Consensus Statement from



the 3rd International Conference on Concussion in Sport (commonly called the Zurich Statement).

On April 7, 2011, the lowa youth sports concussion law was signed into effect. This law covers student athletes in private and public schools in grades 7 through 12. All schools must educate student athletes, coaches, parents, and guardians of the risk of sport-related concussion and the danger of continuing to play after sustaining a concussion. In addition, athletes are required to report any signs or symptoms of concussion.

If an lowa student athlete is observed by coaches or offi-

cials to have signs or symptoms consistent with a concussion, the athlete must be removed from practice or competition. They may not return to practice or competition until they have received written clearance from a licensed health care provider with training in the evaluation and management of concussion. The health care provider may be a physician, physician assistant, chiropractor, nurse practitioner, nurse, physical therapist, or licensed athletic trainer. However, they must have adequate training to competently evaluate and manage sport-related concussion.

Initial evaluation of concussion is focused on recognition. When an athlete sustains a concussive injury, exhibits signs of concussion, or complains of symptoms of a concussion, an initial evaluation of the athletes' symptoms, cognition, and neurological status should be performed. Typically, this is done using the standardized Sideline Concussion Assessment Tool (SCAT2), which is widely available and free of charge.

If an athlete demonstrates signs or symptoms of concussion on their SCAT2 evaluation,

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## Heads Up: Concussion in High School Sports

## A Fact Sheet for Parents and Students

The lowa Legislature passed a new law, effective July 1, 2011, regarding students in grades 7 – 12 who participate in extracurricular interscholastic activities. Please note this important information from lowa Code Section 280.13C, Brain Injury Policies:

- (1) A child must be immediately removed from participation (practice or competition) if his/her coach or a contest official observes signs, symptoms, or behaviors consistent with a concussion or brain injury in an extracurricular interscholastic activity.
- (2) A child may not participate again until a licensed health care provider trained in the evaluation and management of concussions and other brain injuries has evaluated him/her and the student has received written clearance from that person to return to participation.
- (3) Key definitions: "Licensed health care provider" means a physician, physician assistant, chiropractor, advanced registered nurse practitioner, nurse, physical therapist, or athletic trainer licensed by a board. "Extracurricular interscholastic activity" means any extracurricular interscholastic activity, contest, or practice, including sports, dance, or cheerleading.

#### What is a concussion?

A concussion is a brain injury. Concussions are caused by a bump, blow, or jolt to the head or body. Even "getting your bell rung" or what seems to be a mild bump or blow to the head can be serious.

## What are the signs and symptoms of a concussion?

You cannot see a concussion. Signs and symptoms of concussion can show up right after the injury or may not appear or be noticed until days after the injury. If your teen reports one or more symptoms of concussion listed on the next page, or if you notice the symptoms yourself, keep your teen out of play and seek medical attention right away.

#### What parents/guardians should do if they think their child has a concussion:

- 1. OBEY THE NEW LAW.
  - a. Keep your child out of participation until s/he is cleared to return by a licensed healthcare provider.
  - b. Seek medical attention right away.
- 2. Teach your child that it's not smart to play with a concussion.
- Tell all of your child's coaches and the student's school nurse about ANY concussion.

**STUDENTS**: If you think you have a concussion:

**Tell your coaches & parents**— Never ignore a bump or blow to the head, even if you feel fine. Also, tell your coach if you think one of your teammates might have a concussion.

#### Get a medical check-up—

A physician or other licensed health care provider can tell you if you have a concussion, and when it is OK to return to play.

#### Give yourself time to heal—

If you have a concussion, your brain needs time to heal. While your brain is healing, you are much more likely to have another concussion. It is important to rest and not return to play until you get the OK from your health care professional.

### IT'S BETTER TO MISS ONE CONTEST THAN THE WHOLE SEASON.

## Signs and Prevention of Concussion

## Signs of Concussion

#### **Reported by Students:**

- Headache or "pressure" in head
- Nausea or vomiting
- Balance problems or dizziness
- Double or blurry vision
- Sensitivity to light or noise
- Feeling sluggish, hazy, foggy, or groggy
- Concentration or memory problems
- Confusion
- Just "not feeling right" or "feeling down"

#### **Observed by Parents** or Guardians:

- Appears dazed or stunned
- Is confused about assignment or position
- Forgets an instruction
- Is unsure of game, score, or opponent
- Moves clumsily
- Answers questions slowly
- Loses consciousness (even briefly)
- Shows mood, behavior, or personality changes
- Can't recall events prior to hit or fall
- Can't recall events after hit or fall



## **PARENTS:** How can you help your child prevent a concussion?

Every sport is different, but there are steps your children can take to protect themselves from concussion and other injuries.

- Make sure they wear the right protective equipment for their activity. It should fit properly, be well maintained, and be worn consistently and correctly.
- Ensure that they follow their coaches' rules for safety and the rules of the sport.
- Encourage them to practice good sportsmanship at all times.

Adapted from the Iowa High School Athletic Assn. (www.iahsaa.org). Information on concussions provided by the Centers for Disease Control and Prevention (www.cdc.gov/Concussion). they should be excluded from practice and competition for that day. Neuroimaging studies (CT, MRI, etc) are needed only if an athlete demonstrates progressive neurologic decline or has focal neurologic deficits.

In the days following a concussion, the athlete should be encouraged to engage in as much physical and cognitive rest as possible and the athlete's symptom score (a portion of the SCAT2) should be monitored frequently. Once the symptom score returns to normal, a graduated, return-toplay protocol can be employed to help the student athlete return to play safely:

- Easy cardiovascular exercise (such as easy jogging)
- 2. Harder cardiovascular exercise (such as sprints or line drills)
- 3. Easy strength exercise (such as push-ups or light weight lifting)
- 4. Harder strength exercise (such as pull-ups or heavy weight lifting)
- 5. Non-contact sport specific drills
- 6. Contact sport—specific drills
- 7. Full practice and competition

Typically, each phase is completed over the span of one calendar day. If an athlete redevelops signs or symptoms of concussion during the return-



to-play protocol, progression should be stopped and the athlete should be rested for one to two days before restarting the protocol at the previous best symptom-free level. Rarely, an athlete may progress through the protocol at a faster rate, but this should only be attempted under the supervision of an expert in concussion management.

Computer-based neurocognitive testing (CNT) is an additional tool to help providers decide when a student may return safely to sport. Ideally, an athlete will have a baseline test score from before their injury. Following resolution of concussion symptoms, CNT can be used to ensure that the athlete has recovered fully from their injury. Modern CNT is very sensitive for persistent neurocognitive dysfunction due to concussion. Once an athlete's CNT has returned to baseline, a provider can be reassured that the athlete's brain has recovered enough to allow safe return to play. CNT should only be administered and interpreted by providers who are well trained in CNT evaluation.

Rarely, an athlete has persistent signs or symptoms of concussion. These athletes may benefit from medications or a concussion rehabilitation program. These treatments should only be undertaken by providers who are experts in concussion management.

By monitoring our student athletes for signs and symptoms of concussion, monitoring for complete resolution, and using a graduated return-toplay protocol, we can minimize the dangers of sport-related concussion.

#### References

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