

Mental Health in the High School Athlete

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July 1st, 2016

Goals and Objectives

- Understand and recognize the prevalence of mental health issues in student athletes
- Be familiar with the risk and protective factors for suicide
- Identify possible triggering events
- Be familiar with depression and its links to overtraining and concussion
- Recognize various presentations of anxiety
- Become familiar with ADHD, eating disorders, and bullying
- Develop a care team and treatment plan for mental health disorders and emergencies
- Understand legal and educational components of mental health issues

Definitions and Statistics

- **DSM V** defines “mental disorder” as:
- “a clinically significant disturbance in cognition, emotional regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental process underlying mental functioning”
- Over 30% of adolescents meet criteria for anxiety disorder
- 20% have behavior disorders
- 14% experience mood disorders (twice as many girls as boys)
- 11% have substance-use disorders
- Prevalence increases with age; two fold increase in these disorders between age 13-14 and 17-18

Background Information

- Student athletes often define themselves by their identities as athletes.
- Factors such as injuries, conflicts with coaches and teammates, and changes in interest level in their sport can increase the risk of mental health issues or worsen an already present concern.
- Identification of these risk factors or triggers and implementation of a care plan is key to caring for a student athletes' mental health.

Triggering Events

- Certain events may trigger a new mental health concern or exacerbate an existing condition.
 - Family or relationship issues
 - Lack of playing time
 - Violence- assault, domestic violence
 - Death of friend or family
 - Maladaptation to school issues
 - Changes in interest in sport (burnout)
 - Lack of sleep
 - Substance abuse

Specific Risks and Types of Disorders

Suicide is the 3rd leading cause of death among 15-24 year olds.



Suicide

- 4700 young adults between the ages of 14-24 die by suicide annually in the US
- 1 in 6 high school students consider suicide
- 1 in 13 high school students attempt suicide one or more times
- Firearms are the most common method of death by suicide. Suffocation, and poisoning are next most common.
- For every woman who dies by suicide, 4 men die by suicide.
 - Women are 3 times more likely to attempt suicide

Risk and Protective Factors

Risk Factors

- Family history of suicide
- History of mental disorders (depression, substance abuse)
- Feeling hopeless
- Cultural or religious beliefs
- Barriers to accessing mental health
- Unwillingness to seek help (stigma attached to mental health)
- Physical illness
- Access to lethal methods

Protective Factors

- Effective clinical care for mental, physical, and substance abuse
- Family and community support
- Skills in problem solving, conflict resolution, and non-violent ways of handling disputes
- Cultural and religious beliefs

Suicide Warning Signs

Change in Mood

- Anxious or agitated
- Uncontrollable rage or anger - perhaps seeking revenge on others
- Depressed or sad
- Fearful responses such as not wanting to be alone
- Cries often
- Sudden mood swings

Change in Behavior

- Reckless or high-risk activities
- Too little or too much sleep
- Increase in substance or alcohol use

Change in Appearance

- Unkempt
- Poor hygiene
- Sudden weight loss or gain
- More tired than usual

Change in Performance

- Distracted or preoccupied thought processes
- Skipping more classes
- Drop in GPA

Change in Social Interactions

- Withdrawn from peers, family, and significant other
- Isolated; spends an increased amount of time alone

Change in Focus

- Preoccupied with death or violence
- Obsession with violent movies, music, art, or video games

Change in Outlook

- Hopeless
- May say things like "There is no use in trying," or "What's the point?"
- Helpless or feel trapped
- Lack of purpose

Student Athletes and Depression

- Participation in a team sport and athlete identity are associated with lower depression scores.
- Moderate exercise is associated with reduced depression

Participation in 3 or more team sports and/or investing 7 or more hours per week to sport did not have the same benefits as moderate exercise. Some increased scores for depression and anxiety

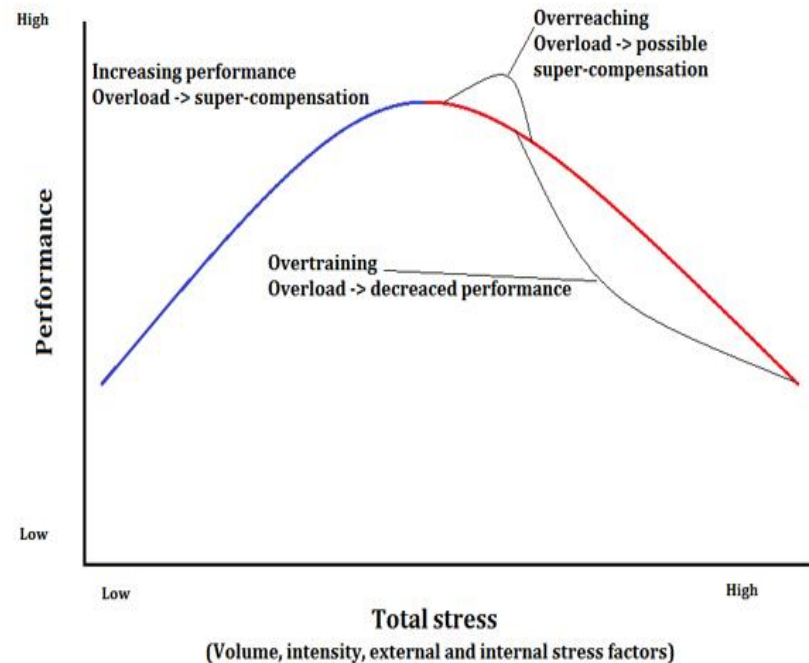


Signs and Symptoms of Depression

✓	SIGNS AND SYMPTOMS OF DEPRESSION
	Sadness or an "empty" mood
	Feeling guilty, worthless, or helpless
	Problems concentrating, remembering, or making decisions
	Change in eating habits and/or weight changes
	Feeling hopeless
	Lack of energy or feeling tired and "slowed down"
	Problems with sleep: Trouble getting to sleep, staying asleep, or sleeping too much
	Easily angered or irritable
	Wanting to be alone or spending much time alone
	Loss of interest or pleasure in hobbies and activities, including sex, that were once enjoyed

Overtraining and Depression

- Overtraining- cumulative training that results in **LONG TERM** decrease in sport specific performance with disturbances in mood.
- It may take weeks or months to recover.
- Exclude other possible causes of symptoms
 - Infection
 - Nutrition
 - Sleep

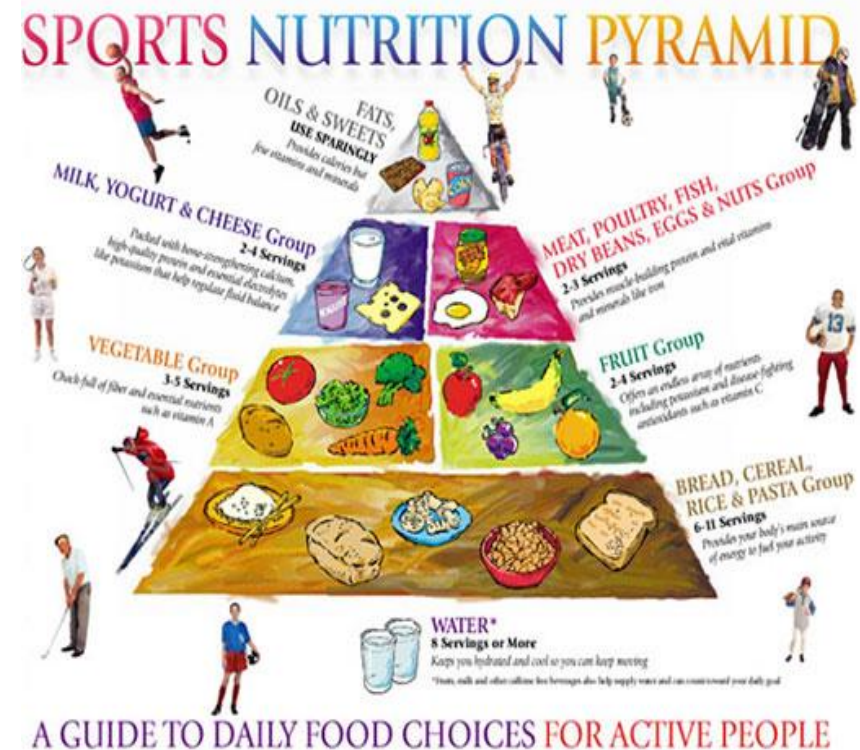


Overtraining and Depression

- Much more common in high school athletes due to sports specialization and year round training.
- Mood changes can occur in as few as two days with high intensity training.
- How do we identify those at risk????
 - *Sport specific questionnaires
 - *Mood assessment daily
 - *Psychomotor speed tests

Reduce the risk of Overtraining

- Adequate passive rest and **SLEEP!**
- Parent involvement
- Coach and medical staff education
 - At least one rest day a week
 - 7-9 hours of sleep nightly
- Good nutrition
 - Well-rounded meals/snacks
 - Plenty of protein
 - Healthy carbs



Student Athletes and Anxiety

- 85% of ATCs indicate that anxiety affects their student athletes.
- Anxiety may present as physical symptoms:
 - rapid heart rate, feeling weak or dizzy, feeling like “something is wrong”
- Pressure from coaches, teachers, parents and peers are the most common reasons teens list as causes of their anxiety.

Other Considerations that may Impact the Mental Health of the Student Athlete.....

Concussion

- Those student athletes that have an underlying mental health issue will likely have a longer post-concussive recovery.
- Acute post-concussive mood changes may also predict a longer recovery.
- Many athletes may not have a mental health diagnosis but will have positive screening questionnaires when they are completed pre and post concussion.

Mood Changes and Concussion

Thinking (Cognition)	Physical	Emotional/Mood	Sleep
Feeling slowed down or in a fog	Headache	More emotional	Drowsiness
Don't feel right	Pressure in head	Irritability	Trouble falling asleep
Difficulty concentrating	Neck pain	Sadness	Sleeping more than usual
Difficulty remembering	Nausea or vomiting	Nervous or anxious	
Confusion	Dizziness		
	Blurred vision		
	Balance problem		
	Sensitivity to light or noise		
	Fatigue/low energy		

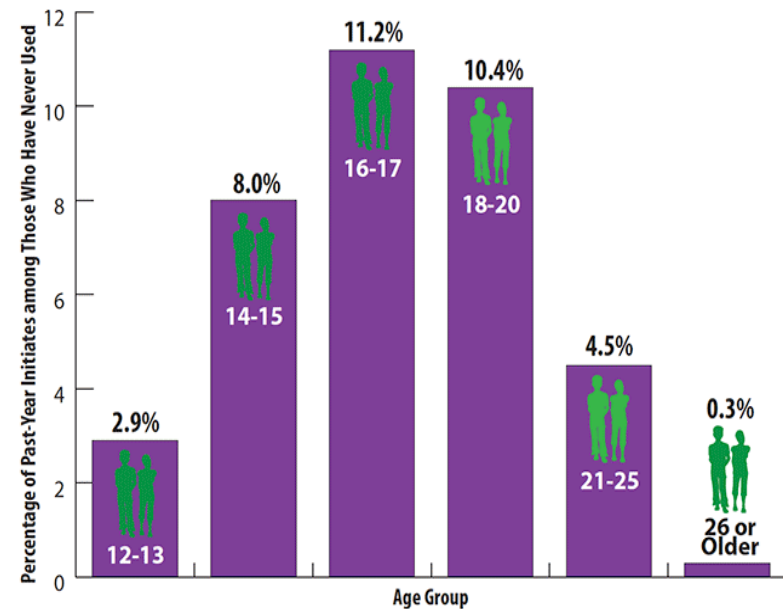
Post Concussion Syndrome

- ❑ Temper outbursts and changes in mood
- ❑ Learning and memory problems
- ❑ Impaired planning and problem solving
- ❑ Inflexibility, concrete thinking
- ❑ Lack of initiative
- ❑ Dissociation between thought and action
- ❑ Communication difficulties
- ❑ Socially inappropriate behaviors
- ❑ Self-centeredness and lack of insight
- ❑ Poor self-awareness

Substance and Alcohol Abuse

- 86% of high school students have seen a classmate drink, smoke, or use drugs during the school day.
- Having an untreated mental illness will increase the likelihood of substance or alcohol use
- Opioid abuse is an epidemic and is becoming rampant in many high schools.

The Drug Danger Zone: Most Illicit Drug Use Starts in the Teenage Years



Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2011 and 2012.

Attention-Deficit Hyperactivity Disorder

Symptoms of ADHD

Symptom	How a child with this symptom may behave
Inattention	Often has a hard time paying attention, daydreams
	Often does not seem to listen
	Is easily distracted from work or play
	Often does not seem to care about details, makes careless mistakes
	Frequently does not follow through on instructions or finish tasks
	Is disorganized
	Frequently loses a lot of important things
	Often forgets things
Hyperactivity	Frequently avoids doing things that require ongoing mental effort
	Is in constant motion, as if "driven by a motor"
	Cannot stay seated
	Frequently squirms and fidgets
	Talks too much
	Often runs, jumps, and climbs when this is not permitted
Impulsivity	Cannot play quietly
	Frequently acts and speaks without thinking
	May run into the street without looking for traffic first
	Frequently has trouble taking turns
	Cannot wait for things
	Often calls out answers before the question is complete
Frequently interrupts others	

Eating Disorders/Bullying

Eating disorders

- Focusing on weight management can become obsessive and result in an eating disorder
- Monitor for:
 - Intense fear of gaining weight
 - Compulsive exercising
 - Distorted body image
 - Chronic sore throat/swollen glands (purging)

Bullying or Hazing

- An observed or perceived power imbalance
- For athletes this may present as:
 - loss of focus, playing tentatively, anxiety, dropping out
- Hazing is just as prevalent in high school sports as in college sports. (22%).
 - Increased fighting, difficulty sleeping, eating, concentrating



Identification and Treatment of Mental Health Issues in Student Athletes

Team Approach

- Coaches, team physician, ATCs, school nurse, school counselor, community mental health providers, crisis counselors
- Monitor Behaviors:
 - Changes in eating and sleeping
 - Wt. loss or gain
 - Withdrawal
 - Decreased interest in activities
 - Difficulty concentrating
 - Mood swings
 - Excessive worry or agitation
 - Negative self talk
 - Increased physical complaints

The Plan

- Establish the need for a plan regarding mental health issues in the student athlete.
- Draft the plan
 - Intro, education on mental health, behaviors to monitor, needs of student athletes, school district policy on referral, identify resources, discuss confidentiality
- Share the plan with school nurse, counselor, administration
- Once approved, distribute the plan to all sports medicine staff, physicians, school nurses, counselors, coaches, administrators.
- Review and update the plan annually or as needed

Mental Health Emergency Action Plan

- Respond with empathy and support
- Enact the school crisis response plan
- Ensure the safety of the student in crisis and others
- Collaborate with the health care team
 - Connect immediately with the needed resources
- Mobilize the student's support system
- Follow-up with the referrals

Mental Health First Aid **ACTION PLAN**



Approach, assess and assist with any crisis

Listen non-judgmentally

Give support and information

Encourage appropriate professional help

Encourage other supports

Mental Health History and the PPE

- Complete a basic screening questionnaire on the history portion of the PPE
 - I often have trouble sleeping
 - I wish I had more energy most days of the week
 - I think about things over and over
 - I feel anxious and nervous most of the time
 - I often feel sad or depressed
 - I struggle with being confident
 - I don't feel hopeful about the future
 - I have a hard time managing my emotions
 - I have feelings of hurting myself or others

Questionnaires

MENTAL HEALTH QUESTIONNAIRE Maryland Healthy Kids Program

Child's Name: _____ Date of Birth: _____
 Managed Care Organization: _____ Child's Medicaid #: _____

Ages 13 – 20 years

Check all answers that may apply. This form may be filled out by the patient, parent/guardian or health care provider.

- Do you have trouble paying attention? Yes No
- Do you often:
- Feel distrustful of others Yes No
 - Have strange thoughts Yes No
 - Hear voices Yes No
 - Have to do things the same way or keep repeating them Yes No
- Do you have problems at school with:
- Behavior Yes No
 - Grades Yes No
 - Skipping classes Yes No
- Do you worry about your:
- Eating Yes No
 - Sleep Yes No
 - Weight Yes No
- Do you have trouble making or keeping friends? Yes No
- Do you often feel:
- Sad Yes No
 - Angry Yes No
 - Nervous or afraid Yes No
- Have you thought about or done any of the following:
- Destroy property Yes No
 - Hurt animals Yes No
 - Set fire Yes No
 - Listen to music with violent message Yes No
 - Use alcohol Yes No
 - Use drugs Yes No
 - Smoke cigarettes Yes No
 - Sex without protection Yes No
 - Suicide attempt Yes No

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MARYLAND HEALTHY KIDS PROGRAM
 Maryland Department of Health and Mental Hygiene
 HealthChoice and Acute Care Administration, Division of Healthy Kids

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IDAHO HIGH SCHOOL ACTIVITIES ASSOCIATION IDAHO HEALTH EXAMINATION AND CONSENT FORM

required that all students complete a History and Physical examination prior to his/her first 9th and 11th grade practice in the interscholastic (9-12) athletic program in the State of Idaho. The exam is at the expense of the student and may not be taken prior to May 1 of the 9th and 10th grade years. Examination is to be done by a licensed physician, physician's assistant or nurse practitioner under optimal conditions. Interim history forms are required during the 10th and 12th grade years and must be submitted to the principal prior to the first practice.

Name: _____ Home Address: _____ Phone: _____
 Sports: _____
 Date of Birth: _____ Sex: _____ School: _____ Physician's phone number: _____

HISTORY FORM

Provide details of "YES" answers in space below:

- | | YES | NO | | YES | NO |
|---|-------|-------|---|-------|-------|
| 1. Have you ever been hospitalized? | _____ | _____ | 5. Do you have any skin problems? (itching, rash, acne) | _____ | _____ |
| 2. Have you ever had surgery? | _____ | _____ | 6. A. Have you ever had a head injury? | _____ | _____ |
| 3. Are you presently taking any medication or pills? | _____ | _____ | B. Have you ever been knocked out or unconscious? | _____ | _____ |
| 4. Do you have any allergies (medicines, bees, other stinging insects)? | _____ | _____ | C. Have you ever had a seizure? | _____ | _____ |
| 5. Have you ever passed out during or after exercise? | _____ | _____ | D. Have you ever had a stinger, burner, or pinched nerve? | _____ | _____ |
| 6. Have you ever been dizzy during or after exercise? | _____ | _____ | 7. A. Have you ever had heat cramps? | _____ | _____ |
| 7. Have you ever had chest pain during or after exercise? | _____ | _____ | B. Have you ever been dizzy or passed out in the heat? | _____ | _____ |
| 8. Do you tire more quickly than your friends during exercise? | _____ | _____ | 8. Do you have trouble breathing or cough during or after exercise? | _____ | _____ |
| 9. Have you ever had high blood pressure? | _____ | _____ | 9. Do you use special equipment, pads, braces, mouth or eyeguards? | _____ | _____ |
| 10. Have you ever been told you have a heart murmur? | _____ | _____ | 10. A. Have you had problems with your eyes or vision? | _____ | _____ |
| 11. Have you ever had racing of your heart or skipped beats? | _____ | _____ | B. Do you wear glasses, contacts or protective eyewear? | _____ | _____ |
| 12. Has anyone in your family died of heart problems or a sudden death before age 50? | _____ | _____ | | | |

Have you ever sprained/strained, dislocated, fractured/broken, or had repeated swelling or other injuries of any of your bones or joints?
 _____ Head _____ Neck _____ Chest _____ Back _____ Hip
 _____ Shoulder _____ Elbow _____ Forearm _____ Wrist _____ Hand
 _____ Thigh _____ Knee _____ Shin/Calf _____ Ankle _____ Foot

Have you ever had any other medical problems such as:
 _____ Mononucleosis _____ Diabetes _____ Asthma _____ Hepatitis _____ Headaches (frequent)
 _____ Tuberculosis _____ Eye injuries _____ Stomach ulcer _____ Other _____

Have you had a medical problem or injury since last exam? _____
 When was your last tetanus shot? _____
 When was your last measles immunization? _____
 When was your first menstrual period? _____ When was your last menstrual period? _____
 What was the longest time between periods last year? _____

Print "YES" answers here:

CONSENT FORM

(Parent or Guardian and Student Permission and Approval)

I hereby consent to the above named student participating in the interscholastic athletic program at his/her school of attendance. This consent includes participation in and from athletic contests and practice sessions. I further consent to treatment deemed necessary by physicians designated by school officials for any illness or injury resulting from his/her athletic participation. In the absence of parents, I also consent to the release of any information contained in this form to carry out treatment and health care operations for the above named student.

PARENT OR GUARDIAN SIGNATURE _____ DATE: _____

Signature to compete in interscholastic athletics for the above school is entirely voluntary on my part and is made with the understanding that I have not violated any of the eligibility rules and regulations of the State Association.

SIGNATURE OF STUDENT _____ DATE: _____

Other Considerations

Legal Issues

- State laws may vary in regards to reporting threats or emergencies.
- Threat assessment
 - “a significant risk” constitutes a high probability of substantial harm, not just a slight increase, speculative, or remote risk to the health or safety of the student or others
- Policies in place in regards to release of confidential information

Education and Recognition

- Provide education on stress/ stress management and available services.
- Educational component on psychological health should be developed for presentation to student-athletes, coaches, and parents.
- Creating an environment in which student athletes feel “safe” discussing mental health.
- Formulate a plan to recognize and refer student athletes with psychological concerns.
 - Ideally the ATC would be the “point person” in developing a plan
 - Distribute the plan to school nurse, administrators, and community providers.
 - Have regular educational sessions for coaches, staff and students regarding mental health issues and update the plan as needed.

Future Research

- Identification of mental health issues in high school and collegic athletes is a top priority for the NCAA and NFHS.
- There are numerous research projects that are ongoing and are focusing on:
 - Specific risk factors
 - Screening questionnaires
 - Preventative resources
 - Treatment algorithms

Conclusions

- The most important factors in helping student athletes with a mental health concern are:
 - Education, early recognition, effective referral
- Understanding the stressors placed on student athletes as well as possible co-morbid illnesses will help identify mental health issues in this population.
- Developing a plan to address mental health issues and emergencies will make recognition and referral more effective and will minimize risk.

Resources

- “Interassociation Recommendations for Developing a Plan to Recognize and Refer Student-Athletes With Psychological Concerns at the Secondary School Level: A Consensus Statement” *Journal of Athletic Training* 2015;50(3) 231-249.
- “Interassociation Recommendations for Developing a Plan to Recognize and Refer Student-Athletes With Psychological Concerns at the Collegiate Level: An Executive Summary of a Consensus Statement. *Journal of Athletic Training* 2013;48(5):716-720
- “Lifetime Prevalence of Mental Disorders in US Adolescents: Results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *J A Acad Child Adolesc Psychiatry*. 2010 October;49(10) 980-989.
- “Mental Well-Being and Sport Related Identieis in College Students.” *Sociol Sport J*. 2009 Jule 1;26(2):335-356
- “Prevention, Diagnosis, and Treatment of the Overtraining Syndrome: Joint Consensus Statement of the European College of Sport Science and the American College of Sports Medicine.” 2012 ACSM.
- “Preinjury somatization symptoms contribute to clinical recovery after sport-related concussion.” *American Academy of Neurology*. 2012

Questions??????

