

## **Inter-Association Recommendations in Developing a Plan for Recognition and Referral of Student-Athletes with Psychological Concerns at the Collegiate Level: A Consensus Statement**

This statement was written for the National Athletic Trainers' Association by:

Timothy L. Neal, MS, ATC\* (Chair); Alex B. Diamond, D.O., MPH~; Scott Goldman, Ph.D.+; David Klossner, PhD, LAT^; Eric D. Morse, M.D., DFAPA++; David E. Pajak, MBA, DRM, ARM^^; Margot Putukian, M.D., FACSM<; Eric F. Quandt, JD>; John P. Sullivan, Psy.D.#; Cory Wallack, Ph.D.{; VictorWelzant, Psy.D.}

\* Syracuse University, Syracuse, NY

~ Vanderbilt University, Nashville, TN

+ University of Arizona, Tucson, AZ

^ NCAA, Indianapolis, IN

++ Carolina Performance, Raleigh, NC

^^ Syracuse University, Syracuse, NY

< Princeton University, Princeton, NJ

> Scharf Banks Marmor, LLC

# Clinical & Sports Consulting Services, Providence, RI

{ Syracuse University, Syracuse, NY

} The International Critical Incident Stress Foundation, Inc., Ellicott City, MD

Timothy L. Neal, MS, ATC; Alex B. Diamond, D.O.; MPH, Scott Goldman, Ph.D.; David Klossner, Ph.D., LAT; Eric D. Morse, M.D., DFAPA; David Pajak, MBA, DRM, ARM; Margot Putukian, M.D., FACSM; Eric F. Quandt, JD; John P. Sullivan, Psy.D.; Cory Wallack, Ph.D., and Victor Welzant, Psy.D., contributed to the conception and design, acquisition and analysis, interpretation of the data, drafting, critical revision, and final approval of the manuscript.

## **Inter-Association Recommendations in Developing a Plan for Recognition and Referral of Student-Athletes with Psychological Concerns at the Collegiate Level: A Consensus Statement**

**Objective:** To present athletic trainers with recommendations on developing a plan for recognizing and referring student-athletes at the intercollegiate setting with psychological concerns for an evaluation and/or treatment by mental health care professionals, considerations in developing this plan in collaboration with athletic department and institutional administration, as well as campus and local mental health care professionals.

**Background:** There are growing concerns of the prevalence and understanding of mental illness in young adults in the United States. Participation in intercollegiate athletics doesn't offer the student-athlete immunity from this fact, and in some circumstances, participation in athletics may trigger or exacerbate a present psychological concern. With the continuing rise of mental illness in the demographics found in student-athletes, the lack of education and appreciation on this growing prevalence of psychological concerns in student-athletes by athletic trainers, university coaches and administrators, and the growing probability of mental health incidents that may violate an athletic department or university code of conduct policy, athletic trainers, collaborating with athletic department and university administration, should consider developing a plan to identify and address psychological concerns in student-athletes.

**Recommendations:** Recommendations are provided to assist the athletic trainer, in collaboration with athletic department and institutional administration, in developing a plan to address psychological concerns in intercollegiate student-athletes. The recommendations set out to educate athletic trainers, coaches, and administrators on the prevalence of mental illness in college-age adults, provide recommendations on recognizing potential psychological concerns in

student-athletes, offer recommendations in developing an effective mental health care referral system to send student-athletes for an evaluation and care by credentialed mental health care professionals, risk management and legal considerations in developing a plan, and considerations on how to initiate and develop a plan in collaboration with athletic and institutional administrations. The athletic trainer's role in this plan is not to provide psychological care directly to the student-athlete because this care is outside the scope of practice for the certified athletic trainer (unless the certified athletic trainer has a dual credential as a mental health care provider). This Consensus Statement provides a plan for the certified athletic trainer to utilize in collaboration with their respective athletic department and institution to facilitate psychological care for the student-athlete by recognizing potential psychological concerns, providing a plan of education, and developing a referral system to mental health care professionals. This Consensus Statement provides recommendations for consideration and is not intended to establish legal standards or rigid requirements that must be followed in all cases. There are significant differences in resources that may be available to the athletic trainer or athletic department at any particular institution, and those resources need to be considered when developing a recognition and referral plan for student-athletes with psychological concerns.

**Key Words:** mental health education, recognition of potential psychological concerns, referral system.

The full range of mental health concerns found in the general student population can also be found in student-athletes attending that university or college. Student-athletes, like all college students, are adapting to a new environment, are responsible for managing their time, attempting to meet the demands of college coursework, exploring their new-found freedom, and are making choices regarding their personal behavior regarding sexuality, alcohol and drug use.<sup>1-3</sup>

Participation in intercollegiate athletics imposes additional demands and stressors on student-athletes.<sup>1-3</sup> The typical day of a student-athlete is fully scheduled, whether they are in or out of season. Classes, tutors, study table, meetings with instructors or in class projects, the physical demands of conditioning or practice sessions, in and out of season contests, treatment or rehabilitation time in the athletic training room, coupled with community service or media interviews are time and effort commitments that leave little or no personal or private time for the student-athlete. These commitments may add additional stress to the student-athlete not found in the general student population.<sup>1-3</sup>

Many student-athletes define themselves by their identity as an athlete.<sup>1-3</sup> Threats to that identity may come in the form of a struggling performance level, a chronic, career-ending or time-loss injury, conflicts with coaches and teammates, or simply losing the passion for playing their sport.<sup>1-3</sup> These challenges other associated factors may put the student-athlete in a position to experience a psychological issue, or exacerbate an existing mental health concern.<sup>1-3</sup>

Studies are starting to reveal the growing prevalence in the types, severity, and percentage of mental illnesses in young adults age 18-25, the same age group of college students and student-athletes.<sup>4</sup> Given the number of over-all NCAA student-athlete participation rates of over 450,000 in the 2011-2012 year,<sup>5</sup> the probability of encountering a student-athlete, or multiple student-athletes, with a psychological concern within an athletic department is a

certainty. The goal of this Consensus Statement is to provide recommendations on developing a plan to address the psychological concerns of student-athletes at the collegiate level.

Recommendations will provide data on young adult mental disorders, stressors unique to being a student-athlete, recognition of behaviors to monitor, special circumstances faced by student-athletes which may impact their psychological health, developing a referral system that can be established in the intercollegiate setting to assist student-athletes with psychological concerns, risk management and legal considerations in developing a plan, and steps to consider when initiating the notion of a psychological concerns plan to administration through the completion of the plan. The inter-association work group included representatives from 10 national organizations and an attorney experienced in sports medicine and health related litigation; all members have special interest in and experience with psychological concerns in student-athletes. This multidisciplinary group of professionals included athletic training, general medicine, psychology, psychiatry, pediatrics, risk management, university counseling services, critical incident stress management, legal profession, and health and safety sports medicine information from the NCAA.

Recommendations of the Consensus Statement are directed toward the athletic health care team, athletic department administration and staff, and university administration. This includes athletic trainers, team physicians, coaches and athletic department administrators, university administrators such as the Office of Student Affairs, Risk Management, General Counsel, and university counseling services. It is imperative to remember that the student-athlete is first and foremost, a student of the university, and the inclusion and collaboration with university departments is a must.

Two critical points need to be established in this Consensus Statement. First, the term “Psychological Concern” is used instead of “Mental Illness” in the title of the Consensus Statement because only credentialed mental health care professionals have the legal authority to diagnose a mental illness. Suspecting a mental illness in a student-athlete which affects the student-athlete’s psychological health is a concern that non-credentialed mental health care professionals have, thus the term “Psychological Concerns” was selected for the Consensus Statement title, though the two terms are interchangeable within the Statement. This leads to the second critical point to be established in the Consensus Statement: only credentialed, licensed mental health care professionals are to legally evaluate, diagnose, treat, and classify a student-athlete for a mental illness. It is up to the credentialed mental health care professional to perform that medical-legal duty, not a non-credentialed individual, no matter how caring that person may be. This Consensus Statement was produced to inform the reader on recommendations on developing a plan to recognize potential psychological concerns in intercollegiate student-athletes, and establish an effective mechanism on referring the student-athlete into the mental health care system for the credentialed mental health care professional to assess and treat. This Consensus Statement doesn’t make recommendations in mental illness evaluation or care. Rather, this Consensus Statement was developed to assist the athletic trainer, in collaboration with athletic department and university administrations, in facilitating the evaluation and care of the student-athlete suspected of a psychological concern by credentialed mental health care professionals.

Throughout this Consensus Statement, the terms “psychological” and “mental” are used; various authors in both the text and in literature citations choose to use one or the other. While the terms are synonymous, the focus of the Consensus Statement is of recognition and referral,

not treatment. Treatment is left to the credentialed mental health care professional. An additional consideration for the athletic trainer, coach, or administrator when recognizing and referring a student-athlete for a potential psychological concern is to discuss the student-athlete's mental health "issue", "problem", or "illness", rather than a mental health "disorder". The stigmatization that accompanies those suffering from a mental health "disorder" prevents many student-athletes, similar to those in the general population, from coming forward to receive assistance. It is recommended that those involved with student-athletes also refrain from slang terms for those exhibiting potential psychological concerns.

### **Purpose of Consensus Statement**

The purpose of this Consensus Statement is for the reader to take the information provided and develop their plan to address the psychological concerns found in student-athletes as part of a comprehensive sports medicine health care program:

1. To provide essential information on mental illness in young adults.
2. To provide information on stressors unique to student-athletes, and examples of "triggers" that may create or exacerbate an existing mental disorder.
3. To provide appropriate information for recognizing potential psychological concerns in student-athletes through behaviors to monitor.
4. To review special considerations that may challenge a student-athlete's mental well-being.
5. Offer considerations in developing a routine and emergent referral system to send student-athletes for psychological concerns assistance.
6. To review data on suicide in young adults and preventative measures.

7. To develop an on-going relationship with university entities that will assist in the referral, care, and disposition of psychological issues in student-athletes.
8. Considerations in mental health emergencies and catastrophic incidents.
9. Considerations in the areas of risk management and legal liability for institutions when developing a student-athlete psychological concerns and referral plan.
10. To provide considerations for the athletic trainer to utilize in collaboration with athletic department and university administrations in developing a plan to effectively recognize, refer, and care for psychological concerns in intercollegiate student-athletes.

### **Organization of Consensus Statement**

This consensus statement is organized as follows:

1. Background and review of mental illness in young adults, Recommendations on recognizing potential psychological issues in student-athletes by discussion of stressors unique to being a student-athlete, and triggering mechanisms or events that may create or exacerbate an existing mental illness.
2. Behaviors to monitor.
3. Recommendations on special circumstances with potential impact on a student-athlete's mental health: psychological response to injury; concussions; substance and alcohol abuse; ADHD diagnosis, treatment, and documentation; eating disorders.
4. Review of and considerations for the preparation of team physicians and athletic trainers to recognize mental illness; pre-participation physical examination screening questions and tools to determine a history of a prior mental disorders; approaching a student-athlete with a potential psychological concern; and referring student-athletes into a campus



counseling service or to a community mental health care professional, including emergent mental health incidents.

5. Recommendations on confidentiality considerations.
6. Recommendations on suicide prevention.
7. Recommendations in collaborating with campus counseling center
8. Recommendations on meeting mental health emergency incidents and mental health catastrophic incidents.
9. Recommendations on considerations in risk management and legal duties in developing a psychological concerns plan for student-athletes.
10. Recommendations on collaborating with athletic department and university administration in developing a plan and document to share with athletic trainers, team physicians, athletic administration, coaches, and support staff to effectively address student-athlete psychological concerns.

## 11. Conclusions

The recommendations in this Consensus Statement utilize the Strength of Recommendation Taxonomy criterion scale proposed by the American Academy of Family Physicians based on the highest quality of evidence available.<sup>6</sup> A letter characterizes the quality, quantity, and consistency of evidence found in the available literature supporting a particular recommendation:

**A:** means the recommendation is based on consistent and good-quality patient-oriented evidence;

**B:** means the recommendation is based on inconsistent or limited-quality patient-oriented evidence;

**C:** means the recommendation is based on consensus, usual practice, opinion, disease-oriented evidence, or case series for studies of diagnosis, treatment, prevention, or screening.

While this Consensus Statement utilizes SORT level C evidence of best practices, the educational component of mental illness in young adults is based on SORT level A evidence.

## **EXECUTIVE SUMMARY**

### **Education of Mental Disorders in Young Adults**

1. The Plan for Recognition and Referral of Student-Athletes with Psychological Concerns (also known as the “Plan”) includes data on prevalence of mental disorders in American young adults, including the definition of a mental disorder per the American Psychiatric Association’s Diagnostic and statistical manual of Mental Disorders.
2. The Plan provides data on the severity of mental disorders in undergraduate students.
3. The plan reviews data on the comorbidity of mental disorders and the risk factors in developing mental disorders in adolescents and young adults.

*SORT Category: A*

### **Recognition of Psychological Concerns in Student-Athletes**

1. The Plan lists stressors unique to being a student-athlete.
2. The plan includes triggering events for psychological concerns in student-athletes.
3. The Plan lists behaviors to monitor in a student-athlete suspected of having a psychological concern.
4. The Plan provides a list of depression symptoms.

5. The Plan provides a list of anxiety symptoms.
6. The Plan includes a non-inclusive list of special considerations facing the student-athlete: psychological response to injury/loss of playing time or career; concussions; substance and alcohol abuse; ADHD information; eating disorders.

*SORT Category: A*

### **Referral of Student-Athlete for Psychological Concerns**

1. The Plan considers the familiarity of the team physician and athletic trainer in identifying potential psychological concerns and reviewing the prevalence of student-athlete mental disorders on their campuses. Developing a team approach to recognizing potential psychological concerns and referral of student-athletes may also include student-athlete leaders who recognize potential psychological concerns and refer them to the sports medicine staff.
2. The Plan offers questions regarding a student-athlete's prior history of a mental health issue or present psychological status at their pre-participation physical examination, with additional follow-up questionnaires if the student-athlete answers indicate further evaluation.
3. The Plan provides some questions to consider utilizing when approaching a student-athlete with a potential psychological concern.
4. The Plan addresses referring the student-athlete for psychological concerns, both routine and emergent. The Plan recommends including an institutional emergent referral plan.
5. The Plan includes a section on suicide with tables on suicide facts and figures, suicide risk and protective factors, suicide symptoms and danger signs, steps to take when one

fears someone may take their life, and information on surviving the loss of a loved one to suicide.

6. The Plan includes a section on confidentiality issues.
7. The Plan will include a section on campus counseling center referrals and relationship in developing and reviewing the Plan.

*SORT Category: B & C*

### **Emergencies and Catastrophic Incidents in Student-Athlete Mental Health Incidents**

1. The Plan recommends the incorporation of an Emergency Action Plan per the NATA Position Statement: Emergency Planning in Athletics in the event of student-athlete emergency stemming from a mental health incident (attempted harm to oneself or others).
2. The Plan recommends the incorporation of a Catastrophic Incident Guideline in the event of a student-athlete mental health incident catastrophe (suicide, homicide, permanent disability).
3. The Plan recommends developing, in collaboration with campus counseling services and/or other crisis management organizations, a crisis counseling plan following a catastrophic incident.

*SORT Category: A & B*

### **Institutional Risk Management and Legal Considerations**

1. The Plan offers information for managing risk to an athletic department and institution to be considered when collaborating with an institution's risk management department when developing a Plan.

2. The Plan reviews legal implications to be shared with institutional general counsel when developing the Plan, and recommending general counsel approval for the Plan prior to implementation.

*SORT Category: B & C*

### **Building a Student-Athlete Recognition and Referral for Psychological Concerns Plan**

1. Recommendations for establishing a need for the Plan with athletic department administration by utilizing data and other best practices information found in the Consensus Statement.
2. Write an initial draft of the plan document by utilizing information found in the Consensus Statement.
3. Share the Plan draft with athletics administration, counseling center, risk manager, general counsel, and institutional office of student affairs for feedback and approval by all entities.
4. Once the Plan is approved, distribute the Plan to all athletic trainers, team physicians, coaches, administrators, and institutional entities involved in the Plan for referral.
5. Review the Plan annually and/or update as necessary including all entities involved with the Plan.

*SORT Category: C*

### **BACKGROUND**

The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders states that "a mental disorder is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress or disability or with a significantly increased risk of suffering death, pain, disability, or

an important loss of freedom.”<sup>7</sup> The definition further states that a mental disorder, syndrome or pattern, “must not be merely an expectable and culturally sanctioned response to a particular event, for example, the death of a loved one. Whatever its original causes, it must currently be considered a manifestation of a behavioral, psychological, or biological dysfunction of the individual. Neither deviant behavior nor conflicts that are primarily between the individual and society are mental disorders unless the deviance or conflict is a symptom of a dysfunction in the individual.”<sup>7</sup> It is also important to note that classifying a mental disorder only describes what mental disorder an individual has, not the individual.<sup>7</sup> Thus, describing a student-athlete as a “schizophrenic”, or as an “alcoholic”, furthers the stigmatization of individuals having a mental disorder, instead of describing the individual as a student-athlete with schizophrenia or a student-athlete with alcohol dependence.<sup>7</sup>

Most DSM-IV disorders have a numerical ICD-9-CM code, and the DSM-IV disorders are grouped into 16 major diagnostic classes, classifying hundreds of mental disorders.<sup>7</sup> The DSM-IV diagnosis is applied to an individual’s current presentation not a previous diagnosis.<sup>7</sup> The severity and course of a mental disorder are indicated by “Specifiers”: Mild, Moderate, Severe, In Partial Remission, In Full Remission, or Prior History.<sup>7</sup> Additionally, recurrence of an original disorder may also be judged by the clinician.<sup>7</sup> It is imperative to note that the DSM-IV not be applied by untrained individuals. Only those individuals with appropriate clinical training and diagnosis may diagnose an individual with a mental disorder. The criterion in the DSM-IV serves as a guideline to inform clinic judgment of the mental health care professional, not as a cookbook to merely follow.<sup>7</sup>

Data indicates that approximately one in every four to five youth in America meets criteria for a mental health disorder; with severe impairment across a lifetime.<sup>8</sup> Nearly one in

three adolescents (31.9%) met criterion for anxiety disorder, 19.1% were affected by behavioral disorders, 14.3% experienced mood disorders, and 11.4% in the study had substance use disorders.<sup>8</sup> Data also documents the early onset of major classes of mental disorders.<sup>8</sup> Of the affected adolescents, half experienced their disorders by age 6 for anxiety disorders, by age 11 for behavioral disorders, by age 13 for mood disorders, and age 15 for substance use disorders.<sup>8</sup> Comorbidity rates of affected individuals have been reported at 40%, while 22.2% in the study reported having a mental disorder with severe impairment and/or distress that interfered with daily life.<sup>8</sup>

Studies have also shown that the average age of onset of major depression and dysthymia is between 11 and 14 years of age.<sup>9</sup> Another study discovered the rate of outpatient treatment for depression increased markedly in the United States between 1987 and 1997, and that 75.3% of those individuals being treated for depression were using antidepressant medication in 2007.<sup>10</sup>

The United States Substance Abuse & Mental Health Services Administration reported in 2012 that 45.9 million American adults aged 18 or older, 20% of the survey population, experienced a mental illness in 2010. The rate of mental illness was more than twice as high in those in the 18-25 year old range (29.9%) than those aged 50 years and older (14.3%). The report also noted that adult women were also more likely than men to have experienced a mental illness in 2010, 23% for women and 16.8% in men. The report also discovered that those aged 12-17, 8% (1.9 million) had experienced a major depressive episode in 2010, with a major depressive episode being defined as having a depressed mood or loss of interest in daily activities that lasted at least two weeks.<sup>4</sup>

Studies are showing an early onset of mental disorders, suggesting that most seriously impairing and persistent mental disorders found in adults are associated with child and

adolescent onsets with high comorbidity.<sup>11</sup> Adversity in childhood and its relationship to developing a mental illness was studied. A study reported that adolescents aged 13-17 years old, that had experienced a childhood adversity of either parental loss, parental maltreatment, parental maladjustment, or economic adversity was highly occurring in that age group (58.3% of at least one childhood adversity, and 59.7% experiencing multiple childhood adversities), and was strongly associated with the onset of psychiatric disorders. The range of disorders went from 15.7% having fear disorders, to 40.7% having behavioral disorders. 28.2% of all onsets of psychiatric disorders were associated with one or more childhood adversity.<sup>12</sup>

In a landmark study, funded by the National Institute of Mental Health, the prevalence of a broad range of mental disorders in a nationally representative sample of US adolescents was completed. Participants in the national comorbidity survey-adolescent supplement included youth age 13-18 years old. The authors found that one in every three to four children experience a mental disorder in their lifetime while about one in ten children has a serious emotional disturbance that interferes with daily activities. In addition, few affected youth receive adequate mental health care. Mood disorders effects 14.3% of teens including twice as many females as males. Prevalence of these disorders increased with age, a nearly twofold increase from age 13-14 years old to age 17-18 years old. One in three adolescents (31.9%) met criteria for an anxiety disorder ranging from 2.2% for GAD to 19.3% for a specific phobia. These disorders are more commonly found in females.<sup>8</sup>

Epidemiological surveys estimate that as many as 30% of the adult population in the United States meet criteria for a year-long DSM- mental disorder.<sup>13, 14</sup> Fewer than half of individuals diagnosed with a mental disorder receive treatment.<sup>15, 16</sup> The range of mental disorders are widespread, with serious cases concentrated in a relatively small proportion of



cases with high comorbidity.<sup>17</sup> Anxiety disorders are reported often in mental disorder surveys,<sup>17</sup> and appear to exact significant and independent tolls on health-related quality of life.<sup>18</sup>

Mental health care professionals are discovering more information on the hundreds of various mental health disorders. For example, a study concluded that intermittent explosive disorder (IED) is a much more common condition than previously recognized.<sup>19</sup> The study noted an early stage onset (age 14), with significant comorbid mental disorders that have later ages of onset, with a low percentage of cases in treatment. Those with IED experience “episodes of failure to resist aggressive impulses that result in serious assaultive acts or destruction of property.”<sup>7</sup> The study also discovered that only 28.8% ever received treatment for their anger.<sup>19</sup>

In 2012, the American College Health Association reported a survey on the health of college students.<sup>20</sup> The Reference Group Executive Summary reported on a wide range of health topics, including mental health. The undergraduate students surveyed reported the following experiences within the last 12 months:

31.6% felt so depressed that it was difficult to function

86.8% felt overwhelmed by all they had to do

58.4% felt very lonely

81.9% felt exhausted (not from physical activity)

46.5% felt things were hopeless

61.9% felt very sad

38.1% felt overwhelming anger

51.3% felt overwhelming anxiety

5.8% intentionally cut, burned, bruised, or otherwise injured themselves

7.5% seriously considered suicide

1.2% attempted suicide

52.2% rated their overall level of stress at a more than average to tremendous level

79.5% reported that they were not diagnosed or treated for a mental disorder

8.1% reported being treated for a singular mental disorder

7.0% reported being treated for a comorbidity of depression and anxiety

5.7% reported being treated for two or more mental disorders

(Excluding the combination of depression and anxiety)

Psychiatric disorders, particularly alcohol use disorders, are common in the college-aged population. Though treatment rates varied across disorders, overall fewer than 25% of individuals with a mental disorder sought treatment during the past year in a survey taken by Columbia University.<sup>21</sup>

Approximately 22.2% (1 in 5 teens) in the United States suffer from a mental disorder that is severe enough to impact their daily activities either currently or at some point in their lives. The prevalence of many emotional and behavioral disorders in children and adolescents is higher than many of the well-known physical ailments, like asthma and diabetes, in the same age group. Anxiety disorders, such as panic disorders and social phobia, are the most common conditions with 31.9% of teens with the diagnosis. The next most common is behavior disorders, 19.1% of teens, which includes ADHD. Mood disorders, including major depressive disorder, were 3<sup>rd</sup> with 14.3% and substance use disorders 4<sup>th</sup> with 11.4%.<sup>8</sup>

Comorbidity is a significant issue as well within this age group as nearly 40% of subjects with one class of disorder also met the criteria for a second class of disorders at some point in their life.

In a review of several community survey studies from across the world, it appears that approximately one-fourth of youth experienced a mental disorder during the past year and about one-third did so across their lifetime.<sup>22</sup>

Incidence of depression increases with age as the rate at age 13 of 1-2% climbs to 3-7% at age 15 and continues to increase throughout early adulthood. Results are mixed when it comes to the effect of social class, race and ethnicity. Although rare in children, bipolar disorder, mania and hypomania, range from 0-0.9% in those age 14-18 with lifetime prevalence rates from 0-2.1%. As far as comorbidity, both MDD and bipolar are associated with multiple other disorders including ADHD, anxiety disorders, oppositional defiant disorder and conduct disorder.<sup>23, 24</sup> Suicide is the 3<sup>rd</sup> leading cause of death among adolescents and half of all adult mental disorders have their onset during adolescence.<sup>25</sup>

By 2020, it is estimated that psychiatric and neurologic conditions will account for 15% of the total burden of all diseases. Identified gaps in resources for child mental health that can be targeted for improvement can be categorized as follows: economic, manpower, training, and policy.<sup>22</sup> In young children, a high degree of comorbidity is present. Approximately 25% of affected youth will have a 2<sup>nd</sup> disorder. This actually increases 1.6 times for each additional year from the age of 2 (18.2%) to age 5 (49.7%). In addition, children with a physical illness are more likely to develop depression and those with emotional disorders have an increased risk of developing physical disorders.<sup>26, 27</sup>

The background data on the prevalence of mental disorders found in the United States and in the demographic age of student-athletes can be incorporated into the educational section of a psychological concerns document for the athletic department. The review of the prevalence of mental disorders can include an example of one of many disorders that can lead to aggression

and destruction of property, and the relatively early age that mental disorders present themselves. Considering the number of student-athletes within an intercollegiate athletic department and the statistical data of mental disorders in the United States, particularly those young adults in college, it stands to reason that there is a high probability that are student-athletes on intercollegiate athletic teams that experiences one or more mental disorders over a broad spectrum of classifications and severity. It is prudent that the athletic trainer, in collaboration with athletic department and institutional administration, to develop a plan to recognize student-athletes with psychological concerns and facilitate an effective referral system to mental health care professionals for the student-athlete to receive an evaluation and treatment.

## **RECOGNITION OF PSYCHOLOGICAL CONCERNS IN STUDENT-ATHLETES**

### **Stressors and Triggering Events Unique to Student-Athletes**

Participation in intercollegiate athletics imposes additional demands and stressors on the student-athlete. These demands range from the physical (e.g., physical conditioning, participating with injuries, environmental conditions), to the mental (e.g., game strategy, meeting coaching expectations, attention from media and fellow students, time spent in sport, community service requirements, and diminishing personal and family time). These and other demands of being an athlete, coupled with the requirements of being a student (e.g., classes, study time, projects, papers, mid-term and final examinations, attaining and maintaining a grade point average to remain academically eligible, and maintaining their scholarship), presents a continuum of expectations on a student-athlete.<sup>28-36</sup> Student-athletes are typically separated from the rest of the campus community in that they live together, eat together, and work out together. Often athletic facilities are separate from the general student population.

Pressure on a student-athlete is widely seen in the no off-season approach to training. The student-athlete is exposed to a predictable pattern and lack of sleep and under-recovery, putting the student-athlete at risk for anxiety and depression.<sup>37-49</sup> Student-athlete overtraining is often the main feature of a “well developed” training plan and in three separate samples found 21% to 45% of student-athletes reported staleness (physical, mental, and emotional disturbances and a precursor to burnout).<sup>32</sup> Recovery factors are closely related to factors of well-being and performance, and that many student-athletes are in consistent cycles of chronic fatigue.<sup>42</sup>

For student-athletes, the complex relationship of long-term training and uncontrollable life variables often leads to overtraining and puts them at risk for physical, mental, and emotional health problems.

All too often athletes are portrayed as super-human, larger than life, and unaffected by stress or issues of a clinical nature.<sup>34, 36, 50-54</sup> Part of the ill effects of the professionalization of collegiate sports has been that the perception of being super human has been highlighted. NCAA data from 2004-2008<sup>55</sup> focusing on sudden deaths highlights the significant need for prevention supports:

273 Deaths	6% Homicide
51% Accidents	2% Drug Overdose
16% Cardiac	2% Sickle Cell
9% Suicide*	2% Unknown
8% Other Medical	1% Heat Stroke
7% Cancer	1% Meningitis

Some student-athletes couple the stress of being an athlete with risky behavior, thus raising their stress level with their behavior, as evidenced by a report that student-athletes participated in risk taking behaviors, with male contact sports student-athletes taking more risks. Student-athletes that had one risk taking behavior were more likely to have multiple risk taking behaviors, such as not wearing seatbelts, alcohol consumption, use of smokeless tobacco, unsafe sexual practices, and involvement in physical fights.<sup>56</sup>

While many individuals are equipped to meet these student-athlete expectations, there is a segment of the student-athlete population that will have difficulty in effectively meeting the physical and mental demands required.

These stressors of being a student-athlete can “trigger” a new psychological concern or exacerbate or a recurrence of a past mental disorder. **Table 1** offers some “triggering” events and stressors to be aware of in student-athletes.

### **Behaviors to Monitor**

The athletic trainer, team physicians and others in the athletic department (athletic administrators, coaches, strength and conditioning staff, academic support staff, equipment staff) are in positions to observe and interact with student-athletes on a daily basis. In most cases, athletic department personnel have the trust of the student-athlete, and are someone the student-athlete turns to for advice or assistance during personal issues or crisis. Some student-athletes may seek out teammates or non-athletic students on campus, a professor, a friend or family member for help during a personal or psychological concern. Some student-athletes, however, will not be aware of how a stressor is affecting them, or if they are aware of their potential psychological concern, will not inform anyone, but may well act out in a non-verbal way to alert others that something is bothering them.<sup>1-3</sup> Often times, a student-athlete, athletic trainer, team

physician, coach, teammate, or parent considers a student-athlete's "health", they are inclined to think primarily of a physical injury and its effect on participation status, and that the student-athlete's "mental health" is secondary to that of physical health.<sup>57</sup> However, both physical and mental health is equally important for the student-athlete, and some medical problems often have psychological consequences.

### **Sub Clinical Considerations**

Due to environment and situational factors, clinical issues are undoubtedly higher in student-athletes when taking into account travel, changing sleep environments, time zone changes, and disruption in schedules. However, it is important to note health of all variations fall onto a continuum of care. Thus, sub-clinical issues can also develop creating a level of dysfunction moving the student-athlete away from their own base line of well-being.

Changes in mood and mental states of a sub-clinical nature impact our student-athletes and require further attention by sports medicine personnel. Symptoms can be understood by traditional markers of personal distress, maladaptive behavior, incapacitation, and odd or erratic behaviors. When taking into account sub-clinical states of health and the aforementioned markers it is often best to understand movements away from health have volume and intensity. Movements away from the student-athletes baseline of well-being shift from soft and subtle too consistent and loud just like volume on our iPods and television sets. These shifts or changes in mental status when identified early (in their soft and subtle tones) create opportunities for prevention and thus enhance the return to premonitory functioning. Similarly, changes to the student-athlete's well-being can also be due to environmental changes such as changes to team members, coaches, support staff, or with their family of origin. Our sensitivity to identify and

refer when situational changes/stress occur strengthens the possibility to move student-athlete's towards resilience and significant well-being.

Inversely, the nature of mental health issues all along the continuum welfare to performance can and will impact others especially when cohesion is a goal and an expectation. Thus, the stress created by negative mental health states, clinical or sub-clinical, are important to anticipate and alleviate so it does not spread. This concept is no different than using situational play and practice to inoculate, protect, and assist in making student-athletes more resilient in the face of predictable stress of competition. Prevention seeks to protect, inoculate and provide avenues to become stronger and stronger in the face of challenges. Student-athlete welfare requires prevention at each point along the welfare-performance continuum not just when symptoms have grown intense and consistent. Vigilance with the identification, education, and treatment process enhances the opportunity to move toward health, reducing chances of injury, underperformance, and the reduction of the student-athletes quality of life.

The vulnerabilities/challenges identified within this population lead us to propose that student-athletes encounter a different set of risks than non-athletes, and, more importantly, we believe that the extreme nature of the work student-athletes do under extreme conditions is often under acknowledged. Whether we are looking at changes that are diagnosable or not, prevention is key at all points along the welfare-performance continuum.

The behaviors to monitor listed in **Table 2** are not an all-inclusive list of behaviors to monitor, but rather a list of behaviors that may be a symptom that is indicative of a psychological concern in a student-athlete. The behavior may be singular or multiple, may be subtle in appearance, and may range in severity. The need for a referral to a mental health care



professional increases with the number and severity of symptoms, and/or the concerning behavior is a change from the student-athlete's normal lifestyle.

Tables of symptoms for the two most common mental disorders, depression and anxiety, are found in **Tables 3 and 4**.

## **SPECIAL CONSIDERATIONS AFFECTING THE PSYCHOLOGICAL HEALTH OF THE STUDENT-ATHLETE**

### **Psychological Response to Injury/Sudden End of Playing Career**

The psychological response to an injury is something the athletic trainer, physician, and coach should consider when a student-athlete is injured. An injury, no matter how minor, is a cause of stress to the student-athlete. Each student-athlete is different than another, so one sign or symptom described by a student-athlete may not be what another student-athlete experiences. Given the stressors placed on a student-athlete, adding an injury, particularly one that is time-limiting, season-ending, or perhaps career-ending, may be a huge source of stress. There are many ways a student-athlete may respond to injury stress. Some may handle it well, with little impact, while others struggle, physically or emotionally. Some student-athletes may experience a personal injury for the first time while participating at the collegiate level, so there is a learning curve on handling the physical and emotional response to pain and disability that the athletic trainer must take into account and help the student-athlete navigate. It is during this time of psychological and physical stress of injury that the student-athlete must be observed for behaviors to monitor. Detecting any symptoms of psychological concern is part of the comprehensive care for student-athletes.<sup>58</sup> For example, the athletic trainer may be on the alert for a student-athlete who presents with a problematic emotional reaction to an injury or injuries: injuries that do not resolve not matter the correct diagnosis and care, symptoms that worsen over

time without explanation, or the student-athlete's reaction to the severity or symptoms of an injury that seems excessive.

Student-athletes often fear re-injury upon their return to participation. The athletic trainer should be aware of this situation, reassure the student-athlete of their readiness to resume participation, and monitor the student-athlete for any symptoms that would be a concern for developing a psychological problem.<sup>59</sup>

### **Concussions**

The evolving awareness of the after-effects of concussions includes the cognitive and psychological impact on student-athletes sustaining concussions.<sup>60-65</sup> Student-athletes sustaining a concussion should be monitored for any changes in behavior or self-reported psychological difficulties while symptomatic and after their return to activity following a concussion. It is also recommended that student-athletes, once asymptomatic and cleared to resume physical activity by a physician, follow the return to play protocol in its Concussion Management Plan for student-athletes, as mandated by NCAA legislation 3.2.4.17.<sup>66</sup> A review of the National Athletic Trainers' Association Position Statement: Management of Sports-related Concussion is recommended for further information on the care for concussions.<sup>67</sup>

### **Substance and Alcohol Abuse**

Total prevalence for substance use disorders is 11.4%, while specifically drug abuse/dependence is 8.9% and alcohol abuse/dependence is 6.4%. There is a five to 11 fold increase in the prevalence of these disorders with age and tend to be somewhat more frequent in males.<sup>8</sup> There has been a general decline in illicit drug use across the US. The prevalence rate for substance use in adolescents; specifically for alcohol or drug abuse or dependence is around 5%.

The rate does increase with age and is more common in whites while the distribution is fairly equal among the categories of socioeconomic status (SES).<sup>68</sup>

Despite the risk of negative consequences of loss of performance and scholarships, college athletes seem to use most substances and alcohol at higher rates than age-matched non-athletes in the college population.<sup>69-73</sup>

Comparing the National Collegiate Athletic Association (NCAA) survey data from 2005 to 2009, there was a drop in reported use of amphetamines (3.7% of U.S. college athletes reported using), ephedrine (0.9%), and anabolic steroids (0.6 %), and increases in cannabis (22.6% reported using), cocaine (1.8%), opioids (3.3%), alcohol (83.1%), and alcohol binges (38.8%).<sup>74</sup> While sometimes used initially for performance-enhancing reasons, many of these substances can represent gateways to other drug use. According to the Center for Disease Control, 66% of college students who have a substance use disorder also have a co-occurring mental illness. There are certainly risks of “stimulant stacking” (energy drinks, excitatory amino acids, caffeine, nicotine, ephedrine, and amphetamines) that can lead to “upper-downer” pairings (adding cannabis, alcohol, benzodiazepines, or prescription sleeping medications to stimulants).<sup>75</sup>

Student-athletes are exposed to alcohol either in high school or in college. There are state laws and university code of conduct regulations on the use of alcohol by under-aged individuals. A collegiate athlete population was surveyed for alcohol abuse as well as self-reported depression, anxiety, and other psychiatric symptoms. 21% of those respondents reported high alcohol abuse and problems associated with it, with significant correlations found between reported alcohol abuse and self-reported symptoms of depression and psychiatric symptoms. The

survey results suggested a possible causal link between psychopathology and serious alcohol abuse among college athletes.<sup>76</sup>

Research has shown that student-athletes are more likely to report binge drinking than the general student population because they viewed alcohol use as being more normative.<sup>72</sup> The college student-athlete reported high risk alcohol use at percentages much higher than previously reported, with team sport student-athletes reporting binge drinking at a greater percentage than student-athletes of individual sports.<sup>77</sup> Researchers also studied the factors influencing student-athletes to consume alcohol. Among its findings, studies reported on the relationship of sensation seeking to alcohol use most clearly distinguished student-athletes from non-athletes.<sup>78, 79</sup>

**Appendix A** provides an AUDIT-C Questionnaire and scoring sheet regarding alcohol use. Consider utilizing this questionnaire when evaluating a student-athlete for hazardous drinking or a student-athlete with an active alcohol use disorder. This questionnaire provides a useful screening test for problem drinking by a student-athlete.

Providers must be aware of these pairings and patterns of use among their athletes to avoid enabling. Those who suffer with a mood disorder may be more likely to use uppers, while those who suffer with anxiety may use downers to self-medicate. Having an untreated mental illness (Depression, Bipolar Disorder, ADHD, or anxiety disorders) makes it more likely for student athletes to use substances.<sup>80</sup> Proper treatment of the mental illness reduces substance use.<sup>81</sup>

## **ADHD Diagnosis, Treatment, and Documentation**

The prevalence of behavior disorders includes attention deficit hyperactivity disorder (ADHD) at 8.7%. ADHD affects males to females in a three to one ratio. Chronic and impairing behavior patterns result in abnormal levels of inattention, hyperactivity or their combination.<sup>8, 82</sup> Attention deficit/hyperactivity disorder (ADHD) in adults is considered a chronic neurobiological syndrome that is often characterized by inappropriate levels of either symptoms of inattention, or over-activity and impulsiveness. Athletes can meet criteria for ADHD sometime in both symptom categories. Though commonly diagnosed in childhood, adults as well may be diagnosed with ADHD. Common symptoms of ADHD are found in **Table 5**.

Athletic trainers often serve as an institutions site coordinator and educator for the NCAA drug testing program. Student-athletes may arrive on campus using prescribed medications that can be banned by the NCAA and other sport governing bodies. The NCAA bans classes of drugs because they can harm student-athletes and can create an unfair advantage in competition. Some legitimate medications contain NCAA banned substances, and student-athletes may need to use these medicines to support their academics and their general health.

Athletes should report all medications and supplements to the athletic trainer on their medical examination history form and when new prescriptions are started during the school year. One of the banned classes is stimulant medications often used in the treatment of attention deficit/hyperactivity disorder (ADHD).

ADHD does cause impairment in many areas of an athlete's life, including sports. Athletic trainers and conditioning coaches need to know which athletes are taking ADHD stimulant medications because of a greater risk for heat disorders, substance abuse problems, and academic challenges. It is treatable, however proper diagnosis is important. Proper referrals lead to proper diagnostic testing, diagnosis and management that will prepare the student-athlete for lifelong

success. The NCAA has specific requirements for a student-athlete that wants to compete with a banned stimulant used to manage ADHD.

The NCAA has a procedure to review and approve legitimate use of medications that contain NCAA banned substances through a Medical Exceptions Procedure. Alternative non-banned medications for the treatment of various conditions exist and should be considered before an exception is pursued.

The diagnosis of adult ADHD remains clinically based utilizing clinical interviews, symptom-rating scales, and subjective reporting from patients and others. The NCAA has guidelines to help institutions ensure adequate medical records are on file for student-athletes diagnosed with ADHD. These records will be used when requesting an exception for the use of a prescribed banned stimulant in the event a student-athlete tests positive during NCAA Drug Testing.

The NCAA process requires the institution to submit the written report summary of comprehensive clinical evaluation with attached supporting documentation. The athletics department should have on file a completed NCAA form with the required documentation supporting the medical need for a student-athlete to be treated for ADHD with stimulant medication. This is important to meet the short time frame of medical exception process.

Physician documentation should include the following information:

- Diagnosis.
- Medication(s) and dosage.
- Blood pressure and pulse readings and comments.
- Note that alternative non-banned medications have been considered, and comments.
- Follow-up orders.

- Date of clinical evaluation.

As noted on the NCAA form, the clinical evaluation should include individual and family history, address any indication of mood disorders, substance abuse, and previous history of ADHD treatment, and incorporate the DSM criteria to diagnose ADHD. Attach supporting documentation, such as completed ADHD Rating Scale(s) (e.g., Connors, ASRS, CAARS) scores.

Resources available for review and appeal for use of a banned substance for medical reason may be found at the following sites:

2012-13 NCAA Drug-Testing Medical Exceptions Procedures. 2012.

Available online at: <http://www.ncaa.org/>.

NCAA Banned Drugs and Medical Exceptions Policy Guidelines Regarding Medical Reporting for Student-Athletes with Attention Deficit Hyperactivity Disorder (ADHD) Taking Prescribed Stimulants. 2009. Available online at: <http://www.ncaa.org/>.

NCAA Medical Exception Documentation Reporting Form to Support the Diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) and Treatment with Banned Stimulant Medication. 2012. Available online at: <http://www.ncaa.org/>.

It is recommended to utilize the following document, **found in APPENDIX B**:

NCAA Banned Drugs and Medical Exceptions Policy

Guidelines Regarding Medical Reporting  
for Student-Athletes with Attention Deficit Hyperactivity Disorder (ADHD)

A form requesting documentation for ADHD testing and diagnosis is found in:

**APPENDIX C**

**Eating Disorders**

Eating disorders affect females twice as much as males but also increase with age. Total prevalence is 2.7%.<sup>8</sup> The estimates of lifetime prevalence of eating disorders from population-based studies of adults are relatively low (0.5%-1.0% for anorexia nervosa, and 0.5%-3.0% for bulimia nervosa).<sup>83-90</sup> Regarding children and adolescents, previous studies of eating disorders have focused on youths who met DSM-IV criteria without presenting on eating disorders data on youths that did not meet DSM-IV criteria. Those youths that did not meet DSM-IV criteria for eating disorders of anorexia nervosa or bulimia nervosa fall into a classification of eating disorder not otherwise specified (EDNOS). EDNOS tends to be more frequently diagnosed than anorexia nervosa or bulimia nervosa in the clinical setting.<sup>91-93</sup>

Comprehensive descriptions of unspecified or sub threshold eating conditions have not been addressed in any prior representative adolescent sample, and eating disorders in community samples of youths are relatively rare.<sup>94-96</sup> There are eating disorders and sub threshold eating conditions that are prevalent in the general adolescent population. The impact of eating disorders and sub threshold eating conditions is demonstrated by generally strong association with other



psychiatric disorders, role impairment, and suicide. The review noted that unmet treatment needs in adolescents place these disorders as important public health concerns that need to be addressed.<sup>94</sup>

For some athletes, the focus on weight management becomes obsessive and eating disordered behaviors develop. While misusing substances like diet pills, stimulants, or laxatives is expected with eating disorders, some athletes may develop a co-occurring substance use disorder.<sup>97</sup>

Signs to observe for in eating disorders are found in **Table 6**.

## **REFERRAL OF THE STUDENT-ATHLETE FOR PSYCHOLOGICAL EVALUATION AND CARE**

### **Team Approach**

It is useful to have a team in place to address the psychological concerns of student-athletes. This team includes the team physician(s), athletic trainers, campus counseling service, and community based mental health care professionals (clinical psychologists and psychiatrists). It is helpful to also have point persons overseeing various issues such as substance abuse and eating disorders programs. For mental health incidents where a student-athlete violates a code of conduct within an athletic department or institution, point persons for code of conduct violations may be part of a general plan. Code of conduct violations usually occur with a threat of, or acts of, harm towards oneself, others, or property. Check with institutional guidelines to establish a code of conduct violation definition.

Physicians practicing sports medicine frequently encounter psychological issues with student-athletes. Physicians also discuss psychological issues with injured student-athletes fairly frequently, although there is a wide range of comfort and perceived competence.<sup>98</sup>

Team physicians are called upon to meet with and evaluate a student-athlete for a reported psychological concern. Some team physicians prescribe medications to student-athletes for mental disorders, and encourage the referral for counseling by a mental health care professional. In many cases, the team physician is seeing a student-athlete for a psychological concern on the recommendation of the athletic trainer, coach, or parent of the student-athlete. The team physician should rely on their experience and limitation in expertise in evaluating and managing a student-athlete with a psychological concern, and working with mental health care professionals in developing the appropriate plan of care relative to medication or counseling for the student-athlete.

The National Athletic Trainers' Association Athletic Training Education Competencies lists competencies under "Mental Health and Referral", PS-11-18, and "Psychosocial Strategies and Referral", CIP-7 -8.<sup>99</sup> These competencies in mental health recognition and referral are "minimum requirements for a student's professional education, athletic training education programs are encouraged to exceed these minimums to provide their students with the highest quality education possible."<sup>99</sup>

This Consensus Statement recommends that each athletic training education program consider exploring more educational opportunities in psychology, communication, and critical thinking to enhance the ability of the athletic trainer to recognize and refer student-athletes for psychological concerns.<sup>100, 101</sup>

In 2010, athletic trainers were surveyed by the NCAA on student-athlete mental health issues. **Table 7** provides some highlights of the survey relative to athletic trainers' awareness with and comfort in managing student-athlete mental health issues.

Another concept for consideration is incorporating student-athlete leaders of teams for by-stander intervention of teammates or other student-athletes with a potential psychological concern. There are times when a student-athlete is reticent to disclose a potential issue to their coach or the athletic trainer, but will mention their concern to a teammate. A student wellness leader program, where student-athlete representatives from each team are nominated by their peers, receive unique health and wellness training to identify teammates or other student-athletes at risk to encourage them to go for assistance as well as understanding resources for help with a potential psychological concern. Recognize that this type of concept is unique to institutional dynamics, and that risk management review of this concept is recommended before implementation and formal training of student-athletes for this purpose.

### **Student-Athlete History of Mental Health and Pre-Participation Physical Examination**

#### **Questions on Mental Health Status**

The pre-participation physical examination is an optimal time to ask about a prior history of mental health issues as well as to screen for common mental health issues, including depression, anxiety, learning disabilities and eating disorders. Questions related to nutrition, weight, performance, eating disorders, learning disabilities or other mental disorders. The pre-participation physical examination offers an opportunity to ask open-ended questions and demonstrate openness to addressing mental health issues by ‘demystifying’ mental health as an important aspect of over-all health.

Some questions for consideration for a student-athlete’s mental health status for the pre-participation physical examination are found in **Table 8**.

It is recommended that any affirmative answers made in the mental health section of the pre-participation physical examination be brought to the attention of the physician so they may

have a discussion with the student-athlete on their history of mental health issues to ascertain if any follow-up evaluation, care, or medication considerations are required to assist the student-athlete.

For student-athletes reporting a history of a mental health problem on their pre-participation physical examination, **APPENDIX D** lists additional screening questionnaires, GAD-7 and PHQ-9, for the team physician to consider using to determine any further course of action. Additionally, some institutions may consider utilizing these screening tools as part of their over-all mental health pre-participation exam for all student-athletes at their initial pre-participation physical examination.

### **Approaching the Student-Athlete with a Potential Psychological Concern**

Approaching a student-athlete with a concern over their mental well-being can be an uncomfortable experience. However, the health and wellness of the student-athlete is paramount. It is important to have facts correct, with context, relative to the behavior of concern, before arranging a private meeting with the student-athlete. The conversation should focus on the student-athlete as a person, not as an athlete. Empathetic listening and encouraging the student-athlete to talk about what is happening is essential. **Table 9** provides a list of open-ended questions to consider asking the student-athlete to encourage them to discuss their situation.<sup>1-3</sup>

Encouraging a student-athlete to consider a mental health evaluation can be challenging, given the stubborn stigma that is still attached to receiving mental health care.<sup>102</sup> Though student-athletes experience as much or more psychological distress as non-athletes, research indicates student-athletes use professional mental health services less than non-athletes.<sup>103</sup>

A helpful component in student-athletes receiving a mental health evaluation and care is convincing them to start the process. Pointing out that mental health is as important as physical

health is one line of reasoning that may help the reticent student-athlete to seek help for their psychological concern. Assisting the student-athlete in accessing the mental health care system at the institution or community through the pre-arrangement of services eases the transition from deciding to go for help to meeting a mental health care professional, is the second component of getting a student-athlete for help for their psychological concern. It is important to note that in most cases, unless there is an imminent risk of harm to them and/or others, a student-athlete cannot be compelled to report for a mental health evaluation. In cases where the student-athlete is reticent to go for a mental health evaluation, the following suggestions may be made to the student-athlete:

- Express confidence in the mental health profession.
- Clarify what counseling is and how it could help the student-athlete's over-all health
- Offer to accompany the student-athlete to the appointment
- Emphasize the confidentiality of mental health care and referral
- Be persistent, but not pushy, in recommending a mental health evaluation

If a student-athlete reports that they have independently sought out mental health care without prior knowledge by the athletic trainer or athletic department, encourage the student-athlete to continue with their care, and assure the student-athlete that confidentiality of this arrangement will be maintained.

### **Mental Health Care Scenarios for Consideration: Routine and Emergent Referrals**

Once the student-athlete has been approached and agrees to go for a psychological evaluation or self-reports wanting to be evaluated for a psychological concern, they should be referred as soon as possible to a mental health care professional.

## **Routine Referral for Mental Health Evaluation**

The indications for referral can differ depending on the mental health issue being addressed, and it is useful to err on the side of safety when considering the speed in which an evaluation should be scheduled.

If possible, help the student-athlete make the initial appointment for a mental health care evaluation. This is where having a relationship with campus or community mental health care professionals prior to utilizing their services are important. Having a prior relationship may help access their services more expeditiously than having the student-athlete try and make the initial appointment for an evaluation. In some cases, speaking with the counselor while making the appointment for the student-athlete is advantageous if you know the mental health care professional. Often times, the mental health care professional may want to know some context for the referral, and trusts the judgment of the person making the referral. This helps the mental health care professional have a better understanding of the dynamics facing the student-athlete going into the initial appointment. Ask the student-athlete to report back to you that they have made their initial appointment, and ask if there is anything you as the athletic trainer, can do to help expedite their appointments. Emphasize to the student-athlete that whatever is discussed between the student-athlete and the mental health care professional is confidential. If the student-athlete shares what is discussed at their appointments, unless it is of a nature that indicates harm to themselves or others, reassure the student-athlete that information shared will be kept confidential.

## **Confidentiality**

The issue of informing the student-athlete's coach or parents invariably comes up. In a routine referral, inform the student-athlete that while their referral is confidential, it may be

helpful if they informed their coach and parents of their appointments. They are not compelled to do so, but emphasize that coaches and parents are concerned about the welfare of the student-athlete, and keeping them informed of their mental health care is no different than any other forms of physical care for the student-athlete. Encourage the student-athlete to inform their coach or parents, but do not insist. Some student-athletes believe that their coach, teammate, or parent may perceive receiving care for a mental health challenge is a sign of weakness, and are reticent to inform anyone they are receiving care.

It is recommended that information from this Consensus Statement be shared with coaches to better educate them on student-athlete psychological concerns and the importance of student-athlete mental health care confidentiality. Defer to risk management or general counsel on confidentiality matters regarding an under-aged student-athlete's mental health care.

When referring to community-based mental health care professionals where the student-athlete's medical insurance may be utilized, it is important to inform the student-athlete that their parents or guardians will receive notification of their mental health care treatment from their insurance company in the form of an explanation of benefits notification. Encourage the student-athlete to inform their parents or guardians of their impending sessions so it is not a surprise to the parents or guardians when they are notified by their insurance carrier of the student-athlete's mental health care costs.

### **Emergent Mental Health Referral**

In the event that a student-athlete demonstrates or voices an imminent threat to themselves, others, or property (which in many cases rises to a code of conduct violation), reports feeling out of control, unable to make sound decisions, is incoherent, confused or expresses delusional thoughts, an emergent mental health referral is recommended. The aforementioned list isn't all

inclusive; other troubling symptoms, severity, or number of symptoms affecting the student-athlete should also be given weight when determining a routine or emergent mental health referral is in order. Consider the following steps when developing an emergent mental health referral protocol:

- Obtain and have available in your plan the institutional protocol for emergent mental health evaluations for students. Follow the protocol. Contact the university Public Safety Department or the Office of Student Affairs to obtain a copy.
- If the student-athlete appears or acts violently, call for campus and/or local law enforcement and seek immediate assistance and steps to protect bystanders from harm.
- If the student-athlete is not violent, do not leave them alone. Call for assistance per the institutional protocol. Wait for instructions on how and where the student-athlete will be taken for an assessment. Offer to accompany the student-athlete to the place of evaluation- this may help reassure the student-athlete during the assistance process.
- Contact your supervisor in sports medicine, athletics administration, Office of Student Affairs, team physician, and the student-athlete's coach to alert them to an emergent incident.
- Get all phone numbers of those caring for the student-athlete for follow-up.
- Seek advice or assistance with athletic administration, office of student affairs or general counsel on contacting the student-athlete's family and informing them of this incident.

### **Suicide in Student-Athletes**

Suicide has been identified as the 3<sup>rd</sup> leading cause of death among NCAA student-athletes.<sup>55</sup> While most people with a mental issue or challenge do not harm themselves or others, over 60% of all people who die by suicide suffer from major depression. With over 30% of all



undergraduate students report feeling so depressed that it was difficult to function<sup>20</sup>, and that few youth or young adults receive adequate mental health care<sup>8</sup>, the specter of suicide in young adults, and in student-athletes, is present. Tables on suicide facts and figures (**Table 10**), suicide risk and protective factors (**Table 11**), suicide symptoms and danger signs (**Table 12**), steps to take when one fears that someone may take their life (**Table 13**), and information on surviving the loss of a loved one to suicide (**Table 14**), are included for use when developing a recognition and referral for student-athlete psychological concerns plan. Incorporation of information from these tables is useful in educating the athletic trainer, team physician, student-athlete, coach, and administrator on suicide and its prevention.

### **Campus Counseling Services**

Although college student athletes experience mental health concerns at rates similar to those of non-student athletes, student athletes typically underutilize available mental health care resources and are recognized as an underrepresented population within campus counseling services.<sup>104</sup> It has been suggested that one reason student-athletes are reluctant to seek counseling is because they are concerned about the negative perception coaches, teammates, student peers, and fans may hold if they become aware the student-athlete is seeking mental health counseling.<sup>105</sup> More specifically, many student-athletes report that they are concerned that their status on the team, including playing time, may be negatively impacted if their coaches become aware of the nature of their mental health problems.<sup>106</sup>

While privacy and confidentiality form the basis of any therapeutic relationship, the aforementioned concerns regarding student-athletes highlights the unique circumstances regarding their confidentiality when they seek mental health services on a college campus. The privacy and confidentiality guidelines that govern the work of therapists are determined by

relevant professional codes of conduct, as well as federal and state laws.<sup>107</sup> As it pertains to the provision of services within campus based counseling centers, the International Association of Counseling Services (IACS), the accrediting agency for university and college counseling services, provides strict guidelines regarding privacy and confidentiality.<sup>108</sup> The guiding philosophy behind legal and ethical safeguards for confidentiality is that clients have the right to determine who will have access to information about them and their treatment.<sup>107</sup> If the client does not trust that the information they provide to their therapist will be kept private, they may be reluctant to share relevant information with their treatment provider, thus negatively impacting the potential treatment success. As such, with few exceptions, all information a client provides to her or his therapist is strictly treated as confidential, and shall not be shared with family members, friends, or university officials, including in the case of student athletes, members of the athletic department.

While each state may have unique laws regarding confidentiality, generally speaking therapists are only permitted to break confidentiality in circumstances in which there is imminent threat of suicide or homicide, evidence indicating the abuse of a minor, or when it is court ordered. Aside from these aforementioned circumstances and those that are unique to any state law, client consent must be obtained for a therapist to release any client information. In such cases, clients are asked to provide written consent, indicating who information is to be provided to, the purpose for the information being released, the specific information to be released, and the time period for which the release is to be valid.<sup>107</sup>

Student-athletes are more likely to favorably view therapists they believe understand the world of athletics and the problems associated with the life of being a student-athlete.<sup>109</sup> It is important that the campus counseling center have a relationship with the athletic department and

understanding of the unique cultural variables of student-athletes. Counseling centers would benefit from conducting staff professional training that helps therapists better understand the nature and culture of student-athletes.

Student-athletes and coaches have often been raised within a sports culture that identifies help seeking and acknowledgment of pain as being a sign of weakness and student athletes have less positive attitudes towards help-seeking than non-athlete peers.<sup>104</sup> As such, it is essential that there be individuals within the athletic department that can challenge this perception and encourage seeking help.

It would be helpful to identify an individual within the athletic department who is primary point of contact. The process of referring students is not always a simple or straightforward one. If athletic departments have a primary point person who is a liaison to the counseling services, the referral process can be better facilitated. Since health and wellness falls under the purview of the athletic trainer, it is recommended that the athletic trainer be the point person for referrals.

Student athletes have unique time demands that require them to be on campus when classes may not be in session. At most universities, students are only considered eligible for services when they are actively enrolled in classes at that time. Work with university counseling services to waive that requirement as many student-athletes are on campus during summer and winter breaks. Encourage them to be seen regardless of current class status. Similarly, systems should be in place to help safeguard the privacy/confidentiality of high profile student-athletes. A student-athlete's status as a star player on a team should not preclude their ability to privately access the mental health services of the Counseling Center.

## **Emergencies and Catastrophic Incidents in a Student-Athlete with a Psychological Issue**

Although most psychological concerns in student-athletes rarely result in a medical emergency (injury to themselves or others) or a catastrophic event (suicide, homicide, permanent disability), it is prudent to plan for such circumstances.

In the event of a medical emergency as a result of an injury to the student-athlete with a psychological issue and/or to others, it is recommended that the Emergency Action Plan established for that venue be implemented immediately. It is recommended that the National Athletic Trainers' Association Position Statement: Emergency Planning in Athletics, be used as a reference when developing an athletic department Emergency Action Plan.<sup>110</sup>

In the unfortunate event of a catastrophic incident as a result of a student-athlete's psychological incident, it is recommended that an athletic department have in place a Catastrophic Incident Guideline. An example of a plan can be found in the NCAA Sports Medicine Handbook, under Guideline 1e, Catastrophic Incident in Athletics.<sup>111</sup>

## **Crisis Counseling for Student-Athletes Following a Catastrophic Incident**

Suicide has been identified as the 3<sup>rd</sup> leading cause of death among NCAA student-athletes.<sup>55</sup> Traumatic events have the potential to evoke both human resilience and distress simultaneously.<sup>112,113</sup> Student-Athletes may be exposed to a variety of potential traumatic stressors in the course of their athletic pursuits as well as in the course of their daily college lives. Examples of traumatic events common to students would include: Death or injury to friends /family members, exposure to suicide in the college community, significant motor vehicle crashes involving the athlete or friends, and exposure to violence, and significant injury during athletic events. These few examples serve to highlight the nature and severity of stressors that are likely to lead to a traumatic stress reactions including grief.<sup>114</sup>

Stress reactions following an event are typically expectable human reactions to the event. Many, if not most of these reactions are self-limiting and will resolve with support, time, and natural resilience. Recognition of the indicators that an individual is in need of formal assistance is based on the level of distress that the student-athlete experiences, and most importantly, the degree to which that distress impairs the athlete's ability to function in any domain (school performance, athletic performance, relationship, etc.) Initial reactions are often time limited and it is normal to experience temporary disruptions in daily functioning when experiencing traumatic stress. When these reactions persist, a referral to mental health support is indicated. Early intervention has shown to be more effective in resolving traumatic stress than a prolonged period of waiting before mental health care is implemented.<sup>114</sup>

In the initial days to weeks following a traumatic event, common reactions include: intrusive thoughts and images of the event, periods of emotional numbing alternating with periods of heightened emotions, anxiety symptoms including trouble sleeping, irritability, changes in appetite, fatigue, and an increase in general tension. Individuals differ in their rate of recovery from these initial signs of distress. Reactions that warrant an immediate referral for evaluation include: significant use of alcohol or substances to manage distress, suicidal thinking, thoughts of harming others, and severe panic.<sup>115</sup>

Severe physical stress reactions (repeated fainting, all chest pain, difficulty breathing, persistent vomiting, and severe persistent insomnia) are not common and should be referred to a medical professional immediately.

The athletic trainer is in a unique position to be helpful during and after a traumatic incident. The trainers' relationship with the student athlete allows the opportunity to provide

support and recognition of the need for referral to formal mental health support. The traumatic stress literature has identified several actions that can be taken to support those who have suffered a traumatic event.<sup>114</sup>

In the immediate aftermath of a catastrophe, the provision of individual crisis intervention (psychological first aid) can be helpful in facilitating relief from distress, promoting resilience, and identifying students-athletes in need of further support. Crisis intervention can be provided to individuals or groups who have shared a traumatic event. Athletic trainers can be effectively trained in principles of crisis intervention as a skill set similar to physical first aid.<sup>116</sup>

Hobfoll et al, outlined essential elements of Psychological first aid to include 1. Promoting a sense of safety 2. Promote calming 3. Promote self and collective efficacy 4.Promote Connectedness 5. Promote Hope. These elements can be accomplished through basic skills in active listening and crisis support, along with knowledge of resources for referral.<sup>115</sup>

Athletic teams may share traumatic events together; therefore the provision of Group Crisis support may be particularly suited for student- athletes. Models of group support such as Critical Incident Stress management are widely used for groups who have experienced traumatic events. Group models can provide the social support necessary for recovery and build on the relationships that existed prior to the event as a source of resilience. Some university counseling services provide critical incident stress management services. Athletic trainers are encouraged to be trained in these crisis support skills to provide effective support of their teams following a traumatic event.<sup>116, 117</sup>

Referral resources following a traumatic event should be utilized for students of concern. These resources should be trained in traumatic stress counseling as well as grief management to provide the student with trained professional support. Ideally, the resources for student athletes following traumatic events should be identified in advance to allow for more effective referral in a crisis.

### **Risk Management and Legal Counsel Considerations in Developing a Plan to Address Psychological Concerns in Student-Athletes**

University administrators face the challenge of managing the risks associated with mental health amongst its student-athlete population. In order to prepare and respond to mental health incidents, administrators should be conscientious of the following risk management implications and consider the following actions below.

#### **Risk Management:**

- The process of identifying, assessing and controlling uncertainty in the environment
  - Selecting strategies and making decisions so that the Athletic Department's and the institution's objectives can be achieved
  - Good management and operational practices. For this topic, the following are important to consider.
1. Develop a plan that would include a policy statement and related procedures for identifying and referring potential mental health issues of its student-athletes to appropriate qualified University administrators, counselors, etc. The policy and procedures should be flexible yet

scalable depending upon the facts and circumstances of the situation. The goal would be to promote a comprehensive and consistent communication and response plan to student mental health incidents within the University including but not limited to Athletics, Student Affairs including counseling and judicial affairs, etc.; to properly record student mental health incidents to preserve confidentiality; and, to be consistent with applicable laws and regulations (including international laws in the case of foreign travel and non-government regulations such as the NCAA) and case law including medical provider authority. The Plan should be reviewed for critical “trip words” such as: should, could, must, have to, etc. that could establish a level of actions that might not be practical for every campus and all sports medicine staff.

2. Carefully evaluate an institution’s various insurance policies that may be triggered in the event of a mental health incident.
  - a. While most blanket accident athletic insurance policies trigger coverage based on an injury; mental health is not always a covered condition. However, mental health issues could potentially be covered under an athletic accident policy if there was an incident such as a concussion or traumatic event, which was documented as an injury event/ occurrence that happened while the policy was in force. Likewise, if an institution is a member of the NCAA, institutions should review the NCAA’s Catastrophic Injury Insurance policy for potential coverage.
  - b. Institutional general liability or professional malpractice insurance policies should also be reviewed for applicable defenses and indemnification coverage for accusations of a cause of action or in the event or claim is presented due to the accusations of University’s negligence or that of its officers, employees, agents or contractors. Some liability



policies have crisis response endorsements that provide reimbursement for certain type of extra expense related to counseling, etc. for events that could give rise to a liability claim. Notice requirements within the applicable policy should be reviewed and adhered to in order to avoid late notice and a carrier disclaiming coverage. All disclaimer or reservation of rights letters should be reviewed by the institution's Risk Management Department and/or General Counsel's Office.

3. Confidentiality. Generally, having a legal and ethical responsibility, Athletic Sports Medicine Staffs should be cognizant of confidentiality in the management and treatment of student-athletes. Without the student-athletes (patient's) consent, medical providers cannot disclose the medical information. Compliance with federal and state mental health laws and privacy laws including HIPAA should be followed including any appropriate exceptions.

Legal considerations promote the idea that an interdisciplinary approach including individuals in various departments within the institution of higher education should be a goal in confronting the complex issues of mental health and the student-athlete. Importantly, a plan should be developed in advance that can provide guidelines to the individual(s) confronted with individual cases. Among those involved might include representatives from the offices of the general counsel, athletic director, team physician, athletic trainer, risk management, student health and student affairs. Obviously if the institution has the benefit of a staff member who is a mental health care provider that addition would be of significant benefit.

One in five college-age adults has a personality disorder; fewer than 25% of these young adults with mental-health problems actually seek treatment. The goal is to assist the individual student-athlete in getting to the right treatment professional. Two good resources on the issues involved are "Managing the Student-Athletes' Mental Health Issues" from the NCAA and

"Student Mental Health and the Law: A Resource for Institutions of Higher Education" from the Jed Foundation.<sup>57, 118</sup>

As noted in the NCAA handbook the "job is not to evaluate, counsel or treat. Rather, it is to assist the individual in getting to the right treatment professional".<sup>57</sup> A dilemma occurs if the student-athlete resists evaluation and treatment and does not accept a referral when the judgment exists that such a referral is necessary for the well-being of the student-athlete. Generally it is understood that absent imminent risk to the patient or others that the student-athlete can only be encouraged to seek a counseling evaluation and cannot be compelled to be evaluated. The NCAA suggests that "[i]n such a case, the student-athlete should be told that he or she is considered to be 'injured' and that it is your responsibility to take care of your injured student - athletes."<sup>57</sup>

Confidentiality of medical and health care information is of paramount importance. As noted in the NCAA handbook "one of the most important aspects of psychological management and treatment involves the issue of confidentiality. Health care practitioners are legally and ethically required to maintain the privacy and confidentiality of their patients. They cannot divulge any information about their patients to anyone (even the patient's parents) without the patient's written consent."<sup>57</sup> The legal aspects of confidentiality can be complex and multi-faceted which is why a "plan" should be developed in advance with input from the office of the general counsel. A number of legal and ethical standards may become applicable - including the Family Educational Rights and Privacy Act (FERPA) which protects the privacy of the student education record, (and exceptions to FERPA), individual state laws which in some instances may be more limiting than FERPA, the Health Insurance Portability and Accountability Act (HIPAA), disability laws including the Americans with Disabilities Act (ADA) of 1990, the

ADA Amendments Act of 2008 (ADAAA) and Section 504 of the Rehabilitation Act of 1973, and policies of individual institutions of higher education. Clarification on some of these issues may be provided by court decisions, letters to universities and colleges from the Office for Civil Rights and offices of the attorney general within individual states.<sup>118</sup>

Although legal considerations within any institution and applicable state laws in light of the federal laws necessitate input from legal counsel at the institution, consideration needs to be given in those cases of an "emergency" where there is an imminent risk to the patient or others. As noted in the NCAA handbook "[i]f you feel the individual needs assistance at the time, take him or her to the referral person or facility".<sup>57</sup> If such options do not exist on campus then consider going to the nearest hospital emergency room. DO NOT leave the student athlete alone. The question of assessing the level of risk is judgmental - what has become known as a "threat assessment". The Office for Civil Rights has described "a significant risk to the health or safety of the student or others" as follows: "a significant risk constitutes a high probability of substantial harm, not just slightly increased, speculative or remote risk".<sup>118</sup>

Such considerations should be described and defined in the "plan" of the institution as suggested above so that individuals have guidance in how to operate in such emergency situations to protect the health or safety of the student-athlete as well as others. In discussing FERPA "information may be disclosed in emergency situations to 'appropriate persons if the knowledge of such information is necessary to protect the health or safety of the student or other persons".<sup>118</sup>

Finally, consideration can be given to student waivers of otherwise confidential information referred to as Release of Information forms - however state laws may become applicable as well.

Although confidentiality of medical and health-care information is of paramount importance - in such emergency situations it has been noted that institutions and individuals involved might rather deal with a lawsuit claiming that they breached a student's confidentiality under FERPA than face one in the aftermath of a tragedy.<sup>119</sup> Additionally, establishing a strong mental health safety net for the student-athlete, who is first and foremost a student of the university, should be a priority for every college or university.<sup>120</sup>

If institutions of higher education work in developing a "plan", with input from the relevant departments and individuals including the office of general counsel, then the individuals faced with interacting with student-athletes with a mental illness or disorder will have established guidelines to protect themselves and the institution while promoting the health and safety of the student-athlete and others.

### **Building a Student-Athlete Recognition and Referral for Psychological Concerns Plan**

The primary purpose of this Consensus Statement was to offer recommendations to the athletic trainer, working in collaboration with athletic department and institutional administration, a plan to recognize and refer student-athletes with psychological concerns. The information on building that plan is contained in the various sections of this Consensus Statement, and information on approaching building a plan is also provided.<sup>2,3</sup> Considerations in building a recognition and referral plan for student-athlete psychological concerns:

1. ***Establishing the need for a plan on recognizing and referring student-athletes with psychological concerns.*** Utilizing data provided in this Consensus Statement, a memorandum to administration outlining the prevalence of mental disorders in college-age students, the stressors found in student-athletes, and the availability of mental health care at the institution and community should be outlined. Once the decision has been made to start this process, initiate a draft of a document. Consider using the information contained in this Consensus Statement as a starting point for the document.
2. ***Draft the plan for student-athlete psychological concerns document.*** Consider using the following sections: Introduction; education on mental health issues facing the college-age student with the data contained in this Consensus Statement (background section, stressors and triggers) to raise the awareness to coaches, administrators and staff; list of behaviors to monitor; special considerations for the student-athlete; suicide data and prevention; a procedure for referral, including the institution's emergent mental health incident procedure, and phone numbers of who to call for assistance and informing.. Issues of confidentiality should also be included. Be sure to make clear that when unsure of what to do, to call the appropriate institutional entity, for example the

Risk Manager, Office of Student Affairs, or other institutional entity for direction.

3. ***Once the draft of the document is finished, share it with athletics administration, the counseling center, health services, risk management, office of student affairs, and general counsel of the institution for review.*** Consider including a copy of this Consensus Statement for all parties to review as the plan is being developed. Consider highlighting sections of the Consensus Statement per institutional department, particularly risk management and general counsel, for the respective department's consideration in developing the Plan. Having a relationship with the above departments is important; this way the athletic trainer has an easier path for introduction and discussion of the Plan. Have all departments review it, amend and approve of the Plan for legal and procedural purposes. Remember, this document contains "considerations" of what to do, other than any hard rules on emergent care as deemed by the institution, use care when developing the Plan with hard and fast rules that can't be applied to all situations. No one plan can contain guidance on every situation. Each institution will have a variation of the plan based on their particular dynamics. Compassion, communication, and confidentiality are the three "C"s of the plan.

4. ***Once the plan has been approved by all parties, send it to all sports medicine staff, physicians, coaches, and administrators, along with all approving departments for use.*** Encourage each professional to carry the document with them, for no one can tell when a student-athlete may report wanting assistance; having a plan in front of you to help navigate the process is helpful. Insure that all relevant staff receives instructions regarding the plan.
5. ***Review and update your plan annually or as necessary.***
6. ***Remain in contact with the counseling services, community mental health care professionals, and institutional departments that interface with the mental health considerations of college students and student-athletes.*** Call the counselors to talk with them without having to schedule an appointment for a student-athlete; this maintains the connection to the department. Consider having training sessions with campus counseling services relative to recognizing behaviors to monitor and effective referral methods per institution. Meet with the risk manager annually or more often to go over the sports department and various protocols or recent trends in risk to athletics to see if anything needs addressing.

Utilizing the information contained in this Consensus Statement, along with practical considerations in developing a plan for recognizing and referring student-athletes for psychological concerns will assist the athletic department and institution in developing a plan and assisting student-athletes in need. Variables such as institutional human resource guidelines,

state or federal laws, statutes, rules, and regulations may impact the development and implementation of these recommendations.

## **CONCLUSION**

The most important factor in helping a student-athlete with a psychological concern is education, early recognition of a potential psychological issue, and effective referral into the mental health care system. The athletic community is in a unique setting to observe and interact with student-athletes. By raising one's awareness to the prevalence of mental disorders in college-age students, to understanding the stressors placed on student-athletes, observing for behaviors to monitor, and facilitating an evaluation and care through effectively referring the student-athlete to mental health care professionals for assistance, the athletic trainer, physician, coach, or administrator may make a difference in the life of a student-athlete's health and well-being. Developing a plan to address this growing concern may make the recognition and referral of student-athletes with psychological concerns more effective, as well as addressing risk to the athletic department and institution.

It is recommended that this Consensus Statement be shared with coaches, athletic administrators, counseling services, office of student affairs, risk managers, and general counsel to better educate and create an interest in developing an institutional plan for recognizing and referring student-athletes with psychological concerns.



**Table 1**

**Triggering Events**

There are events that may serve to trigger or exacerbate a mental or emotional health concern with a student-athlete. Some examples of these triggering events are:

- Poor performance or perceived “poor” performance by the student-athlete
- Conflicts with coaches or teammates
- A debilitating injury or illness, resulting in a loss of playing time or surgery
- Concussions
- Class issues – schedule, grades, amount of work
- Lack of playing time
- Family and relationship issues
- Changes in importance of sport, expectations by self/parents, role of sport in life
- Violence – being assaulted, a victim of domestic violence, automobile accidents, or merely witnessing a personal injury or assault on a family member, friend or teammate
- Adapting to college life
- Lack of sleep
- Prior history of mental disorder
- Mental strain
- Burnout from sport or school
- Financial pressures
- Traveling
- Anticipated end of playing career
- Sudden end of career due to injury or medical condition
- Death of a loved one or close friend
- Alcohol or drug abuse
- Significant dieting or weight loss
- History of physical or sexual abuse
- Gambling issues.
- Post – Traumatic Stress Disorder (PTSD) for combat veterans who are now enrolled in college and participating in intercollegiate athletics

**Source: NCAA Guideline 2o: Mental Health: Interventions for Intercollegiate Athletics. NCAA Sports Medicine Handbook 2012-2013. Available online at: <http://www.NCAA.org/health-safety>**

**Table 2**

**Behaviors to Monitor**

- Changes in eating and sleeping habits
- Unexplained weight loss/weight gain
- Drug and/or alcohol abuse
- Gambling issues
- Withdrawing from social contact
- Decreased interest in activities that have been enjoyable, or taking up risky behavior
- Talking about death, dying, or “going away.”
- Loss of emotion, or sudden changes of emotion within a short period of time
- Problems concentrating, focusing, or remembering
- Frequent complaints of fatigue, illness, or being injured that prevent participation
- Unexplained wounds or deliberate self-harm
- Becoming more irritable or problems managing anger.
- Irresponsibility, lying
- Legal issues, fighting, difficulty with authority
- All-or-nothing thinking
- Negative self – talk
- Feeling out of control
- Mood swings
- Excessive worry/fear
- Agitation/Irritability
- Shaking, trembling
- Gastrointestinal complaints, headaches
- Overuse injuries/unresolved injuries/continuously being injured

**Sources:**

NCAA Managing Student-Athletes’ Mental Health Issues. Available online at: <http://www.NCAA.org/health-safety>

NCAA Guideline 2o: Mental Health: Interventions for Intercollegiate Athletics. NCAA Sports Medicine Handbook 2012-2013. Available online at: <http://www.NCAA.org/health-safety>

**Table 3**

**Depression Signs and Symptoms**

Individuals may feel:

- Sad
- Anxious
- Empty
- Hopeless
- Guilty
- Worthless
- Helpless
- Irritable
- Restless
- Indecisive
- Aches, pains, headaches, cramps, or digestive problems

Individuals may present with:

- Lack of energy, depressed, sad mood
- Loss of interest in activities previously enjoyed (hanging out with friends, practice, school, sex)
- Decreased performance in school or sport
- Loss of appetite or eating more than normal resulting in weight gain or weight loss
- Problems falling asleep, staying asleep or sleeping too much
- Reoccurring thoughts death, suicide or suicide attempts
- Problems concentrating, remembering information, or making decisions
- Unusual crying

**Source: National Institute of Mental Health (2012)**

**Table 4**

**Anxiety Disorders – Warning Signs and Symptoms**

Common anxiety signs and symptoms:

- Feeling apprehensive
- Feeling powerless
- Having a sense of impending danger, panic or doom
- Having an increased heart rate
- Breathing rapidly
- Sweating
- Trembling
- Feeling weak or tired

Other aspects to consider:

- You feel like you're worrying too much and its interfering with your work, relationships, or other parts of your life
- You feel depressed, have trouble with alcohol or drug use, or have other mental health concerns along with anxiety
- You think your anxiety could be linked to physical health problems
- You have suicidal thoughts or behaviors (seek emergency treatment immediately)

**Source: Mayo Clinic**

**Table 5**

**ADHD Signs and Symptoms**

Student-athletes who have symptoms of inattention may:

- Be easily distracted, miss details, forget things, and frequently switch from one activity to another
- Have difficulty focusing on one thing
- Become bored with a test after only a few minutes, unless they are doing something enjoyable
- Have difficulty focusing attention on organizing and completing a task or learning something new
- Have trouble completing or turning in homework assignments, often losing things needed to complete tasks or assignments
- Not appearing to listen when spoken to
- Daydreaming, become easily confused, and moving slowly
- Have difficulty processing information as quickly and accurately as others
- Struggling to follow instructions

Student-athletes who have symptoms of hyperactivity may

- Fidgeting constantly
- Talking nonstop
- Dashing around, touching or playing with anything and everything in sight
- Have trouble sitting still during dinner, school, or traveling (constantly getting up and down in their seat, frequently walking around the bus or plane)
- Being constantly in motion
- Having difficulty doing quiet tasks or activities
- 

Student-athletes who have symptoms of impulsivity may:

- Be very impatient
- Blur out inappropriate comments, show their emotions without restraint, and act without regard for consequences
- Have difficulty waiting for things they want or waiting their turn in line
- Often interrupting conversations or other's activities

**Source: National Institute of Mental Health**

**Table 6**

**Eating Disorders – Signs and Symptoms**

Anorexia Nervosa	Bulimia Nervosa
<ul style="list-style-type: none"><li>• Extreme thinness (emaciation)</li><li>• A relentless pursuit of thinness and unwillingness to maintain a normal or healthy weight</li><li>• Intense fear of gaining weight</li><li>• Distorted body image, a self-esteem that is heavily influenced by perceptions of body weight and shape, or a denial of the seriousness of low body weight</li><li>• Lack of menstruation among girls and women (amenorrhea)</li><li>• Extremely restricted eating</li><li>• Compulsive exercise</li></ul> <p>Other Symptoms may develop over time, including:</p> <ul style="list-style-type: none"><li>• Thinning of bones (osteopenia or osteoporosis)</li><li>• Brittle hair and nails</li><li>• Dry and yellowish skin</li><li>• Growth of fine hair all over the body (lanugo)</li><li>• Mild anemia and muscle wasting and weakness</li><li>• Severe constipation</li><li>• Low blood pressure, slowed breathing and pulse</li><li>• Damage to the structure and function of the heart</li><li>• Brain damage</li><li>• Multi-organ failure</li><li>• Drop in internal body temperature, causing a person to feel cold all the time</li><li>• Lethargy, sluggishness, or feeling tired all the time</li><li>• Infertility.</li></ul>	<ul style="list-style-type: none"><li>• Chronically inflamed and sore throat</li><li>• Swollen salivary glands in the neck and jaw area</li><li>• Worn tooth enamel, increasingly sensitive and decaying teeth as a result of exposure to stomach acid</li><li>• Acid reflux disorder and other gastrointestinal problems</li><li>• Intestinal distress and irritation from laxative abuse</li><li>• Severe dehydration from purging of fluids</li><li>• Electrolyte imbalance (too low or too high levels of sodium, calcium, potassium and other minerals) which can lead to heart attack.</li></ul> <p><b>Source: National Institute of Mental Health</b></p>

**Table 7**

**2010 NCAA Managing Student-Athlete's Mental Health Issues**

**Follow-up Questionnaire Findings of Athletic Trainer Survey**

- Almost 85% of ATCs surveyed indicated that anxiety disorders are currently an issue with student-athletes on their campus.
- 83% of ATCs surveyed indicated that student-athlete eating disorders and disordered eating are an issue.
- Mood disorders (77 %), substance-related disorders (69%) and management and treatment issues (46%) also were listed by ATCs surveyed as current issues with student-athletes on campus.
- 87% of ATCs surveyed indicated that they engage campus counseling assistance for student-athletes, 71% indicated engaging other athletics personnel, and 66% indicated that they refer to off campus mental health care assistance for student-athletes.
- Surveyed ATCs indicated other methods of assisting student-athletes with mental health issues included engaging coaches (60%) ,and referring to the NCAA Handbook (23%).

**Source: 2010 NCAA Managing Student-Athlete's Mental Health Issues Follow-Up Questionnaire Findings**

**Table 8**

**Considerations for Use in Student–Athlete Pre-Participation Medical History**

**Mental Health Related Questions**

<b>Statement</b>	<b>Y/N</b>
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 much 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 (frustration, anger, impatience)	
I have feelings of hurting myself or others	
<p><b>Source: Carroll JFX, McGinley JJ. A screening form for identifying mental health problems in alcohol/other drug dependent persons. <i>Alcohol Treat Q.</i> 2001;19(4):33-47</b></p>	
I feel stressed out or under a lot of pressure	
I feel hopeless	
I feel safe at my home or residence	
I have never tried cigarettes, chewing tobacco, snuff, or dip	
In the past 30 days, I have used chewing tobacco, snuff, or dip	
I drink alcohol or use other drugs	
I have taken performance enhancing substances (including anabolic steroids)	
I have taken supplements to help me gain or lose weight	
I use a seat belt when in an automobile	
I use a helmet when riding a bike	
I use condoms during sex	
<p><b>Source: Roberts, W, D Bernhardt, editors, 4<sup>th</sup> Ed. 2010. <i>Preparticipation Physical Examination</i>. American Academy of Family Physicians, American Academy of Pediatrics, American College of Sports Medicine, et al. Elk Grove, IL: American Academy of Pediatrics</b></p>	



**Table 9**

**Questions to Ask**

**Approaching The Student-Athlete With A Potential Mental Health Issue**

- “How are things going for you?”
- “Tell me what is going on.”
- “Your behavior (mention the incident or incidents) has me concerned for you. Can you tell me what is going on, or is there something I need to understand or know why this incident happened?”
- “Tell me more (about the incident).”
- “How do you feel about this (the incident or the facts presented).”
- “Tell me how those cuts (or other wounds) got there.”
- “Perhaps you would like to talk to someone about this issue?”
- “I want to help you, but this type of issue is beyond my scope as (coach, athletic trainer, administrator), but I know how to refer you to someone who can help.”

**Source: NCAA Guideline 2o: Mental Health: Interventions for Intercollegiate Athletics. NCAA Sports Medicine Handbook 2012-2013. Available online at: <http://www.NCAA.org/health-safety>**

**Table 10**

**Suicide Facts and Figures**

The latest data available from the Centers for Disease Control and Prevention indicates that 38,364 suicide deaths were reported in the U.S. in 2010. This latest rise places suicide again as the 10<sup>th</sup> leading cause of death in the U.S.

**National Statistics**

**General**

- The rate of suicide has been increasing since 2000.
- Every 13.7 minutes someone in the United States dies by suicide.
- Nearly 1,000,000 people make a suicide attempt every year.
- 90% of people who die by suicide have a diagnosable and treatable psychiatric disorder at the time of their death.
- Most people with mental illness do not die by suicide.
- Men are nearly 4 times more likely to die by suicide than women. Women attempt suicide 3 times as often as men
- Over 38,000 people in the United States die by suicide every year.
- Suicide is the fourth leading cause of death for adults between the ages of 18 and 65 years in the U.S.
- Every day, approximately 105 Americans take their own life.
- There are an estimated 8-25 attempted suicides for every suicide death.

**Youth**

- Suicide is the fourth leading cause of death among those 5-14 years old.
- Suicide is the third leading cause of death among those 15-24 years old.
- Between the mid-1950s and the late 1970s, the suicide rate among U.S. males aged 15-24 more than tripled (from 6.3 per 100,000 in 1955 to 21.3 in 1977). Among females aged 15-24, the rate more than doubled during this (from 2.0 to 5.2). The youth suicide rate generally leveled off during the 1980s and early 1990s, and since the mid-1990s has been steadily decreasing.
- Between 1980-1996, the suicide rate for African-American males aged 15-19 has also doubled
- Risk factors for suicide among the young include suicidal thoughts, psychiatric disorders (such as depression, impulsive aggressive behavior, bipolar disorder, and certain anxiety disorders), drug and/or alcohol abuse and previous suicide attempts, with the risk increased if there is a situational stress and access to firearms.

## **Depression**

- Over 60 percent of all people who die by suicide suffer from major depression. If one includes alcoholics who are depressed, this figure rises to over 75 percent.
- Depression affects nearly 10 percent of Americans ages 18 and over in a given year, or more than 24 million people.
- More Americans suffer from depression than coronary heart disease (17 million), cancer (12 million) and HIV/AIDS (1 million).
- About 15 percent of the population will suffer from clinical depression at some time during their lifetime. Thirty percent of all clinically depressed patients attempt suicide; half of them ultimately die by suicide.
- Depression is among the most treatable of psychiatric illnesses. Between 80 percent and 90 percent of people with depression respond positively to treatment, and almost all patients gain some relief from their symptoms. But first, depression has to be recognized.

## **Alcohol and Suicide**

- Ninety-six percent of alcoholics who die by suicide continue their substance abuse up to the end of their lives.
- Alcoholism is a factor in about 30 percent of all completed suicides.
- Approximately 7 percent of those with alcohol dependence will die by suicide.

## **Medical Illness and Suicide**

- Patients who desire an early death during a serious or terminal illness are usually suffering from a treatable depressive condition.

**Source: 2013 American Foundation for Suicide Prevention**

**Table 11**

**Suicide: Risk and Protective Factors**

A combination of individual, relational, community, and societal factors contribute to the risk of suicide. Risk factors are those characteristics associated with suicide – they may or may not be direct causes.

**Risk Factors**

- Family history of suicide
- Family history of child measurement
- Previous suicide attempt(s)
- History of mental disorders, particularly clinical depression
- History of alcohol and substance abuse
- Feelings of hopelessness
- Impulsive or aggressive tendencies
- Cultural and religious beliefs ( e.g., belief that suicide is noble resolution of a personal dilemma)
- Local epidemics of suicide
- Isolation, a feeling of being cut off from other people
- Barriers to accessing mental health treatment
- Loss(relational, social, work, or financial)
- Physical illness
- Easy access to lethal methods
- Unwillingness to seek help because of the stigma attached to mental health and substance abuse disorders or to suicidal thoughts

Protective factors buffer individuals from suicidal thoughts and behavior. To date, protective factors have not been studied as extensively or rigorously as risk factors. Identifying and understanding protective factors are, however, equally as important as researching risk factors.

**Protective Factors**

- Effective clinical care for mental, physical, and substance abuse disorders
- Easy access to a variety of clinical interventions and support for help seeking
- Family and community support (connectedness)
- Support from ongoing medical and mental health care relationships
- Skills in problem solving, conflict resolution, and nonviolent ways of handling disputes
- Cultural and religious beliefs that discourage suicide and support instincts for self-preservation

**Source: Centers for Disease Control and Prevention**

**Table 12**

**Suicide: Symptoms and Danger Signs**

Warning Signs of Suicide

While some suicides occur without any outward warning, most people who are suicidal do give warnings. Prevent the suicide of loved ones by learning to recognize the signs of someone at risk, taking those signs seriously and knowing how to respond to them. Risk is greater if a behavior is new or has increased and if it seems related to a painful event, loss or change. These signs may mean someone is at risk for suicide.

- Unrelenting low mood
- Pessimism
- Hopelessness
- Desperation
- Talking about wanting to die or to kill oneself
- Looking for a way to kill oneself, such as searching online or buying a gun
- Talking about feeling hopeless or having no reason to live
- Talking about feeling trapped or in unbearable pain
- Talking about being a burden to others
- Increasing the use of alcohol or drugs
- Acting anxious or agitated; behaving recklessly
- Sleeping too little or too much
- Withdrawn or feeling isolated
- Showing rage or talking about seeking revenge
- Displaying extreme mood swings

Additional Warning Signs of Suicide

- Preoccupation with death.
- Suddenly happier, calmer.
- Loss of interest in things one cares about.
- Visiting or calling people to say goodbye.
- Making arrangements; setting one's affairs in order.
- Giving things away, such as prized possessions.

The emotional crises that usually precede suicide are often recognizable and treatable. Although most depressed people are not suicidal, most suicidal people are depressed. Serious depression can be manifested in obvious sadness, but often it is rather expressed as a loss of pleasure or withdrawal from activities that had been enjoyable. One can help prevent suicide through early recognition and treatment of depression and other psychiatric illnesses

If you witness, hear or see anyone exhibiting the signs above, do not leave the person alone and get help IMMEDIATELY. Contact an athletic trainer, coach, or a campus mental health professional or other campus resources for assistance; call 9-1-1; or the National Suicide Prevention Lifeline at 1-800-273-TALK (8255) for help.

### Campus Resources

Help is available on or around campuses through the following resources:

- Student counseling center.
- Student health service.
- Resident hall director, dean, academic advisor, tutor, or faculty.
- Campus religious or spiritual leader
- Community mental health center
- Local crisis center or hotlines

### In an Emergency

If you cannot reach the contacts listed above during a crisis:

- Take the individual to an emergency room or mental health walk-in clinic
- Do not leave the person alone until professional help is with him/her.
- Remove any firearms, alcohol, drugs, or sharp objects that could be used in a suicide attempt.

**Source: 2013 American Foundation of Suicide Prevention**

**Table 13**

**When You Fear Someone May Take Their Life**

Most suicidal individuals give some warning of their intentions. The most effective way to prevent a friend or loved one from taking his or her life is to recognize the factors that put people at risk for suicide, take warning signs seriously and know how to respond.

**Psychiatric Disorders**

- More than 90 percent of people who kill themselves are suffering from one or more psychiatric disorders.
- Depression and the other mental disorders that may lead to suicide are -- in most cases -- both recognizable and treatable. Remember, depression can be lethal.
- The core symptoms of major depression are a “down” or depressed mood most of the day or a loss of interest or pleasure in activities that were previously enjoyed for at least two weeks
- Between 25-50 percent of people who kill themselves had previously attempted suicide. Those who have made suicide attempts are at higher risk for actually taking their own lives.

**The signs that most directly warn of suicide include:**

- Threatening to hurt or kill oneself
- Looking for ways to kill oneself (weapons, pills or other means)
- Talking or writing about death, dying or suicide
- Has made plans or preparations for a potentially serious attempt

**Other warning signs include expressions or other indications of certain intense feelings in addition to depression, in particular:**

- Insomnia
- Intense anxiety, usually exhibited as psychic pain or internal tension, as well as panic attacks
- Feeling desperate or trapped – like there’s no way out
- Feeling hopeless
- Feeling there’s no reason or purpose to live
- Rage or anger

**Certain behaviors can also serve as warning signs, particularly when they are not characteristic of the person’s normal behavior. These include:**

- Acting reckless or engaging in risky activities
- Engaging in violent or self-destructive behavior
- Increasing alcohol or drug use
- Withdrawing from friends or family

**In an Acute Crisis**

- If a friend or loved one is threatening, talking about or making plans for suicide, these are signals of an acute crisis.
- Do not leave the person alone.
- Remove from the vicinity any firearms, drugs or sharp objects that could be used for suicide.
- Call for campus resources for assistance.
- Take the person to an emergency room or walk-in clinic at a psychiatric hospital.
- If a psychiatric facility is unavailable, go to your nearest hospital or clinic
- If the above options are unavailable, call 911, or the National Suicide Prevention Lifeline at 1-800-273-TALK (8255).

**Source: 2013 American Foundation for Suicide Prevention**



**Table 14**

**Information on Surviving the Loss of a Loved One to Suicide**

The loss of a loved one by suicide is often shocking, painful and unexpected. The grief that ensues can be intense, complex and long term. Grief and bereavement are an extremely individual and unique process.

There is no given duration to being bereaved by suicide. Survivors of suicide are not looking for their lives to return to their prior state because things can never go back to how they were. Survivors aim to adjust to life without their loved one.

Common emotions experienced with grief are:

- Shock
- Pain
- Anger
- Despair
- Depression
- Sadness
- Rejection
- Abandonment
- Denial
- Numbness
- Shame
- Disbelief
- Stress
- Guilt
- Loneliness
- Anxiety

The single most important and helpful thing you can do is listen. Let them talk at their own pace; they will share with you when (and what) they are ready. Be patient. Repetition is a part of healing, and as such you may hear the same story multiple times. Repetition is part of the healing process and survivors need to tell their story as many times as necessary. You may not know what to say, and that's okay. Your presence and unconditional listening is what a survivor is looking for. Recommend to the surviving loved one to seek mental health care to better deal with their grief.

Survivors of suicide support groups are helpful to survivors to express their feelings, tell their story, and share with others who have experienced a similar event. These groups are good resources for the healing process and many survivors find them helpful.

**Additional Resources**

- Survivors of Suicide ([www.survivorofsuicide.com](http://www.survivorofsuicide.com))
- Suicide Awareness: Voices of Education (SAVE) ([www.save.org](http://www.save.org))
- American Foundation of Suicide Prevention (AFSP) ([www.afsp.org](http://www.afsp.org))

**Source: American Association of Suicidology**

Appendix A

(Attached)

Appendix B

(Attached)

Appendix C

(Attached)

Appendix D

(Attached)

## REFERENCES

1. NCAA Guideline 2o, Mental Health: Interventions for Intercollegiate Athletics, 2012-2013 NCAA Sports Medicine Handbook; NCAA.org/health-safety.
2. Neal TL. Recognizing the signs. *Training and Conditioning*. 2012;23(3):36-43.
3. Neal TL. Game Changers: Mental-health issues can impair a student-athlete's performance, so support is critical. *Advance for Physical Therapy and Rehab Medicine*. 2010;21:32-33.
4. Substance Abuse & Mental Health Services Administration, Results from the 2010 National Survey on Drug Use and Health: Mental Health Findings, NSDUH Series H-42, HHS Publication No. (SMA) 11-4667, Rockville, MD: Substance Abuse and Mental Health Services Administration, 2012.
5. NCAA *Champion Magazine*, Fall 2012, page 15.
6. Ebell MH, Siwek J, Weiss BD, et al. Strength of recommendation taxonomy (SORT): a patient-centered approach to grading evidence in the medical literature. *Am Fam Phys*. 2004;69(3):548-556.
7. Am. Psychiatric Assoc. 2000. *Diagnostic and Statistical Manual of Mental Disorders*. Arlington, Va:Am. Psychiatr. Assoc. 4<sup>th</sup> Ed., text revision.
8. Merikangas KR, Jian-ping H, Burstein, M, et al. Lifetime prevalence of mental disorders in U.S. adolescents: results from the national comorbidity survey replication-adolescent supplement (ncs-a). *J Am Acad. Child Adolesc. Psychiatry*. 2010;49(10):980-989.
9. Lewinsohn PM, Rohde P, Seeley JR. Major depressive disorder in older adolescents: Prevalence, risk factors, and clinical implications. *Clin Psychol Rev*. 1998;18:765-794.
10. Marcus SC, Olfson M. National trends in the treatment for depression from 1998 to 2007. *Arch Gen Psychiatry*. 2010 Dec;67(12):1265-1273.
11. Kessler RC, Wang PS. The descriptive epidemiology of commonly occurring mental disorders in the United States. *Annu. Rev. Public Health*. 2008;29:115-129.
12. McLaughlin KA, Greif GJ, Gruber MJ, et al. Childhood adversities and first onset of psychiatric disorders in a national sample of US adolescents. *Arch Gen Psychiatry*. 2012 Nov 1;69(11):1151-1160.

13. Kessler RC, McGonagle KA, Zhao S, et al. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: results from the National Comorbidity Survey. *Arch Gen Psychiatry*. 1994;51(1):518-19.
14. Reiger DA, Kaelber CT, Rae DS, et al. Limitations of diagnostic criteria and assessment instruments for mental disorders: implications for research and policy. *Arch Gen Psychiatry*. 1998;55(2):109-115.
15. Kessler RC, Berglund PA, Bruce ML, et al. The prevalence and correlates of untreated serious mental illness. *Health Serv Res*. 2001;3(6):987-1007.
16. Kessler RC, Zhao SK, Katz SJ, et al. Past-year use of outpatient services for psychiatric problems in the National Comorbidity Survey. *Am J Psychiatry* 1999;15(6):115-123.
17. Kessler RC, Chiu WT, Demler O, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*. 2005;62(6):617-627.
18. Comer JS, Blanco C, Hasin DS, et al. Health-related quality of life across the anxiety disorders: results from the national epidemiological survey on alcohol and related conditions (NESARC). *J Clin Psychiatry*. 2011;72(1):43-50.
19. Kessler, RC, Coccaro, EF, Fava M., et al. The prevalence and correlates of DSM-IV intermittent explosive disorder in the National Comorbidity Survey Replication. *Arch Gen Psychiatry*. 2006;63(6):669-678.
20. American College Health Association. American College Health Association-National College Health Assessment II: Undergraduate Reference Group Executive Summary Spring 2012. Hanover, MD: American College Health Association; 2012.
21. Blanco C, Okuda M, Wright C, Hasin DS, Grant BF, Lui SM, Olfson M. Mental health of college students and their non-college-attending peers: results from the National Epidemiologic Study on Alcohol and related Conditions. *Arch Gen Psychiatry*. 2008 Dec;65(12):1429-37.
22. Merikangas KR, Nakamura EF, Kessler RC. Epidemiology of mental disorders in children and adolescents. *Dialogues in Clinical Neuroscience*. 2009;11(1):7-20.
23. Lewinsohn PM, Moerk KC, Klein DN. Epidemiology of adolescent depression. *Econom Neurosci*. 2000;2:52-68.

24. Lewinsohn PM, Duncan EM, Stanton AK, et al. Age at first onset for nonbipolar depression. *J Abnorm Psychol.* 1986;95(4):378-383.
25. Belfer ML. Global burden of child mental disorders. *Journal of Child Psychology and Psychiatry.* 2008;49(3):226-236.
26. Cohen P, Pine DS, Must A, et al. Prospective associations between somatic illness and mental illness from childhood to adulthood. *Am J Epidemiol.* 1998; 147(3): 232-239.
27. Parry-Langdon N, Clements A, Fletcher D, et al. Three Years on Survey of the Development and Emotional Well-Being of Children and Young People. Newport, UK: Office for National Statistics. 2008.
28. Etzel, EF, AP Ferrante, JW Pinkney. 1996. *Counseling college student-athletes: issues and interventions* (2<sup>nd</sup> Ed.). Morgantown, WV: Fitness Information Technology.
29. Etzel EF. Understanding and promoting college student-athlete health: essential issues for student-affairs professionals. *Journal of Student Affairs Research and Practice.* 2006;43(3):894-922.
30. Humphrey, JH, DA Yow, WW Bowden. 2000. *Stress in college athletics: causes, consequences, coping.* New York, NY: Haworth Half-Court Press.
31. Kohlstedt, S. E. S. 2012. Psychosocial development in college students: a cross-sectional comparison between athletes and non-athletes. PhD diss., American University.
32. Raglin JS, Wilson GS. Overtraining in athletes (pg. 191-207). In: Hanin, Yuri. 2000. *Emotions in sport.* Champaign, IL: Human Kinetics.
33. Weiss, SM. A comparison of maladaptive behaviors of athletes and nonathletes. *The Journal of Psychology.* 1999;133(3):315-322.
34. Wilson, G. & Pritchard, M. (2005). Comparing sources of stress in college student athletes and non-athletes. *Athletic Insight: The Online Journal of Sport Psychology.* Retrieved July 6, 2008: <http://www.athleticinsight.com/Vol7Iss1/StressAthletesNonathletes.htm>.
35. Zaichkowsky L, Kane MA, Blann W, Hawkins K. 1993. Career transition needs of athletes: A neglected area of research in sport psychology. Proceedings: 8th World Congress of Sport Psychology (pp. 785-787), Lisbon, Portugal.

36. Etzel EF, Watson JC, Visek, AL, Maniar, SD. Understanding and promoting college student-athlete health: Essential issues for student affairs professionals. *NASPA Journal*. 2006;43(3):518-546.
37. Derman W, Schwellnus MP, Lambert MI, Emms M, Sinclair-Smith C, Kirby P, Noakes TD. The 'worn-out athlete': a clinical approach to chronic fatigue in athletes. *J Sports Sci*. 1997;15(3):341-51.
38. Gould, D. Personal motivation gone awry: burnout in competitive athletes. *Quest*. 1996;48(3):275-289.
39. Gould, D., Dieffenbach K. Overtraining, under-recovery, and burnout in sport (pg. 25-35). In: Kellmann M. (Ed.). 2002. *Enhancing recovery: preventing underperformance in athletes*. Champaign, IL: Human Kinetics.
40. Hanin, Yuri. Individually optimal recovery in sports: An application of the IZOF model (pg. 199-217). In: M. Kellmann, M. (Ed.). 2002. *Enhancing recovery: preventing underperformance in athletes*. Champaign, IL: Human Kinetics.
41. Kellmann, M., K.W. Kallus. Mood, recovery-stress state, and regeneration (pg. 101-117). In: M. Lehmann, C. Foster, U. Gastmann, H. Keizer, & J.M. Steinacker (Eds.). 1999. *Overload, fatigue, performance incompetence, and regeneration in sport fatigue, performance incompetence, and regeneration in sport* (pp. 101-117). New York, NY: Plenum.
42. Kellmann, M. Psychological assessment of under-recovery (pg. 37-55). In M. Kellmann (Ed.). 2002. *Enhancing recovery: preventing underperformance in athletes*. Champaign, IL: Human Kinetics.
43. Puffer J C, McShane JM. Depression and chronic fatigue in athletes. *Clinics in Sport Medicine*. 1992;11(2):327-338.
44. Raedeke TD. Is athlete burnout more than just stress? A sport commitment perspective. *Journal of Sport & Exercise Psychology*. 1997;19(4):396-417.
45. Shuer ML, Dietrich MS. Psychological effects of chronic injury in elite athletes. *WJM*. 1997;166(2):104-109.
46. Silva JM. An analysis of the training stress syndrome in competitive athletics. *Journal of Applied Sport Psychology*. 1990;2(1):5-20.
47. Tsuno N, Besset A, Ritchie K. Sleep and Depression. *J of Clinical Psychiatry*. 2005;66(10):1254-1269.

48. Voelker R. Stress, sleep loss, and substance abuse create potent recipe for college depression. *JAMA*. 2004;291(18):2177-2179.
49. Yang J, Peek-Asa C, Corlette JD, Cheng G, Foster DT, Albright J. Prevalence of and risk factors associated with symptoms of depression in competitive collegiate student athletes. *Clinical Journal of Sport Medicine*. 2007;17(6):481-487.
50. Andersen MB, Denson EL, Brewer BW, Van Raalte JL. Disorders of personality and mood in athletes: recognition and referral. *Journal of Applied Sport Psychology*. 1994;6(2):168-184.
51. Armstrong S, Oomen EJ. Social connectedness, self-esteem, and depression symptomatology among collegiate athletes versus non-athletes. *J Am Col Health*. 2009;57(5):521-526.
52. Broshek DK, Freeman JR. Psychiatric and neuropsychological issues in sport medicine. *Clin Sports Med*. 2005;24(3):663-679.
53. Davis H. Neurophysiologic consequences of competitive upset: An MRI and CBT study. Paper presented at the annual meeting of the Association for the Advancement of Applied Sport Psychology, Vancouver, British Columbia, October 2005.
54. Donohue B, Covassin D, Lancer K, Dickens Y, Miller A, Hash A, Genet J. Examination of psychiatric symptoms in student athletes. *J of General Psychology*. 2004; 131(1):29-35.
55. Harmon KG, Asif IM, Klossner D, Drezner JA. Incidence of sudden cardiac death in National Collegiate Athletic Association Athletes. *Circulation*. 2011;123:1594-1600.
56. Nattiv A, Puffer JC, Green GA. Lifestyles and health risks of collegiate athletes: a multi-center study. *Clin J Sport Med*. 1997;7(4):262-272.
57. NCAA Managing Student-Athletes' Mental Health Issues. Available online at <http://www.NCAA.org/health-safety>
58. Ray R, DM Wiese-Bjornstal. 1999. *Counseling in sports medicine*. Champaign, IL: Human Kinetics Books.
59. Ardern CL, Taylor NF, Feller JA, Webster KE. A systematic review of the psychological factors associated with returning to sport following injury. *Br. J Sports Med*. 2001;45(7):596-606.
60. Giza CC, Hoyda DA. The neurometabolic cascade of concussion. *J Athl Train*. 2001 Jul-Sep;36(3):228-235.

61. Schoenhuber, R, Gentilini M. Anxiety and depression after mild head injury: a case control study. *J Neurology, Neurosurgery, and Psychiatry*. 1988;51:722-724.
62. Guskiewicz KM, Marshall SW, Bailes J, McCrea M, Cantu RC, Randolph C, Jordan BD. Association between recurrent concussion and late-life cognitive impairment in retired professional football players. *Neurosurgery*. 2005;57(4):719-726
63. Karzmark P, Hall K, Englander J. Late-onset post-concussion symptoms after mild brain injury: the role of premorbid, injury-related, environmental, and personality factors. *Brain Injury*. 1995; 9(1):21-26.
64. Kerr ZY, Marshall SW, Harding HP, Guskiewicz KM. Nine-year risk of depression diagnosis increases with increasing self-reported concussions in retired professional football players. *Am J Sports Med*. 2012 Oct;40(10):2206-12.
65. Chen JK, Johnston KM, Petrides M, Ptito A. Neural substrates of symptoms of depression following concussion in male athletes with persisting post-concussion symptoms. *Arch Gen Psychiatry*. 2008;65(1):81-89.
66. NCAA Guideline 2i: Concussion or Mild Traumatic Brain Injury (TBI) in the Athlete. 2012-2013 NCAA Sports Medicine Handbook. NCAA.org/health-safety.
67. Guskiewicz KM, Bruce SL, Cantu R, Ferrara MS, Kelly JP, McCrea M, Putukian M, McLeod-Valovich TC. National Athletic Trainers' Association Position Statement: Management of Sports-related Concussion: *J Athletic Training*. 2004;39(3):280-297.
68. Johnston LD, O'Malley PM, Bachman JG, et al. Monitoring the Future National Results on Adolescent Drug Use: Overview of Key Findings. Bethesda, MD: National Institute on Drug Abuse; 2007.
69. Greene GA, Uryasz FD, Petr TA, et al (2001). NCAA study of substance use and abuse habits of college student athletes. *Clin J Sports Med*. 2001;11(1):51-56.
70. Yusko DA, Buckman JF, White HR, et al. Alcohol, tobacco, illicit drugs, and performance enhancers: a comparison of use by college student athletes and nonathletes. *J Am College Health*. 2008;57(3):281-290.
71. Buckman JF, Yusko DA, Farris SG, et al. Risk of marijuana use in male and female college student athletes and nonathletes. *J Stud Alcohol Drugs*. 2011;72(4), 586-591.
72. Ford JA. Alcohol use among college students. *Substance Use and Misuse*. 2007;42(9):1367-1377.



73. Ford JA. Nonmedical prescription drug use among college students: a comparison between athletes and nonathletes. *J Am College Health*. 2008;57(2):211-220.
74. Hendrickson, B. *NCAA drug-use study shows large majority have not used banned drugs*. From: <http://www.ncaa.org/wps/wcm/connect/public/ncaa/resources/latest+news/2012/january/ncaa+druguse+study+shows+large+majority+have+not+used+banned+drugs/> Accessed 28 April 2012.
75. McDuff DR, Baron DA (2005). Substance use in athletics: a sports psychiatry perspective. *Clin J Sports Med*. 2005;24(4):885-897.
76. Miller BE, Miller MN, Verhegge R, Linville HH, Pumariaga AJ. Alcohol misuse among college athletes: self-medication for psychiatric symptoms? *J Drug Educ*. 2002;32(1):41-52.
77. Brenner J, Swanik K. High-risk drinking characteristics in college athletes. *J Am College Health*. 2007 Nov-Dec;56(3):267-72.
78. Yusko DA, Buckman JF, White HR, Panding RJ. Risk for excessive alcohol use and drinking-related problems in college student athletes. *Addict Behavior*. 2008;33(12):1546-1556.
79. Martens MP, Dams-O'Connor K, Beck NC. A systematic review of college student-athlete drinking: prevalence rates, sport-related factors, and interventions. *J Sub Abuse Treat*. 2006 Oct;31(3):305-16.
80. From <http://www.drugabuse.gov/publications/research-reports/comorbidity-addiction-other-mental-illnesses/why-do-drug-use-disorders-often-co-occur-other-men>.
81. From <http://www.drugabuse.gov/publications/research-reports/comorbidity-addiction-other-mental-illnesses/how-common-are-comorbid-drug-use-other-mental-diso#adhd>.
82. Putukian M, Kreher J, Coppel D, Glazer J, McKeag D, White R. Attention Hyperactivity Disorder and the athlete: an American Medical Society for Sports Medicine Position Statement. *Clin J Sports Med*. 2011;21:392-401.
83. Preti A, Girolamao G, Vilagut G, Alonso J, Graaf R, Bruffaerts R, Demyttenaere K, Pinto-Meza A, Haro JM, Morosini P. ESEMed WMH Investigators.. The epidemiology of eating disorders in six European countries: results of the ESEMeD-WMH project. *J Psychiatr Res*. 2009;43(14):1125-1132.
84. Hudson JI, Hiripi E, Pope HG Jr, Kessler RC. The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. *Biol Psychiatry*. 2007;61(3):348-358.

85. Garfinkel PE, Lin E, Goering P, Spegg C, Goldbloom D, Kennedy S, Kaplan AS, Woodside DB. Should amenorrhea be necessary for the diagnosis of anorexia nervosa? Evidence from a Canadian community sample. *Br J Psychiatry*. 1996;168(4):500-506.
86. Walters EE, Kendler KS. Anorexia nervosa and anorexia-like syndrome in a population-based female twin sample. *Am J Psychiatry*. 1995;152(1):64-71.
87. Bijl RV, Ravelli A, van Zessen G. Prevalence of psychiatric disorder in the general population: results of the Netherlands Mental Health Survey and Incidence Study (NEMESIS). *Soc Psychiatry Epidemiology*. 1998;33(12):587-595.
88. Bushnell JA, Wells JE, Hornblow AR, Oakley-Browne MA, Joyce P. Prevalence of three bulimia syndromes in the general population. *Psych Med*. 1990;20(3):671-680.
89. Kendler KS, MacLean C, Neale M, Kessler R, Heath A, Eaves L. The genetic epidemiology of bulimia nervosa. *Am J Psychiatry*. 1991;148(12):1627-1637.
90. Garfinkel PE, Lin E, Goering P, Spegg C, Goldbloom DS, Kennedy S, Kaplan AS, Woodside DB. Bulimia nervosa in a Canadian community sample: prevalence and comparison of subgroups. *Am J Psychiatry*. 1995;152(7):1052-1058.
91. Eddy KT, Celio Doyle A, Hoste RR, Herzog DB, le Grange D. Eating disorder not otherwise specified in adolescents. *J Am Acad Child Adolesc Psychiatry*. 2008;47(2):156-164
92. Fairburn CG, Bohn K. Eating disorder NOS (EDNOS): an example of the troublesome “not otherwise specified” (NOS) category in DSM-IV. *Behav Res Ther*. 2005;43(6):691-701.
93. Turner H, Brant-Waugh R. Eating disorder not otherwise specified (EDNOS): profiles of clients presenting in a community eating disorder service. *Eur Eat Disord Rev*. 2004;12(10):18-26.
94. Swanson SA, Crow SJ, Le Grange D, Swendsen J, Merikangas KR. Prevalence and correlates of eating disorders in adolescents: results from the National Comorbidity Survey Replication Adolescent Supplement. *Arch Gen Psychiatry*. 2011;68(7):714-723.
95. Roberts RE, Roberts CR, Xing Y. Rates of DSM-IV psychiatric disorders among adolescents in a large metropolitan area. *J Psychiatr Res*. 2007;41(11):959-967.

96. Merikangas KR, He JP, Brody D, Fisher PW, Bourdon K, Koretz DS. Prevalence and treatment of mental disorders among US children in the 2001-2004 NHANES. *Pediatrics*. 2010;125(1):75-81.
97. Currie A, Morse ED. Eating disorders in athletes: managing the risks. *Clin J Sports Med*. 2005; 24: 871-883.
98. Mann BJ, Grana WA, Indelicato PA, O'Neill DF, George SZ. A survey of sports medicine physicians regarding psychological issues in patient-athletes. *Am J Sports Med*. 2007;35(12):2140-2147.
99. The National Athletic Trainers' Association Athletic Training Education Competencies, 5<sup>th</sup> Ed. 2011. National Athletic Trainers' Association.
100. Stiller-Ostrowski JL, Ostrowski J. Recently certified athletic trainer's undergraduate educational preparation in psychosocial intervention and referral. *J Athl. Train*. 2009 Jan-Feb;44(1):67-75.
101. Misasi SP, Davis CF, Morin GE, Stockman D. Academic preparation of athletic trainers as counselors. *J Athl Train*. 1996 Jan;31(10):39-42.
102. Schwenk TL. The stigmatization and denial of mental health illness in athletes. *British J of Sports Med*. 2000;34(1):4-5.
103. Pinkerton RS, Hinz LD, Barrow JC. The college student-athlete: psychological considerations and interventions. *J of ACH*. 1989;37(5):218-226.
104. Watson JC. College student-athletes attitudes toward help-seeking behavior and expectations of counseling. *Journal of College Student Development*. 2005;46(4):442-449.
105. Brewer BW, Van Raalte JL, Petipas AJ, Bachman AD, Weihold RA. Newspaper portrayals of sports psychology in the United State, 1985-1993. *The Sport Psychologist*. 1998;12(1):89-94.
106. Etzel EF, Pinkney JW, Hinkle JS. College student-athletes and needs assessment. In: Thomas CC(Ed). 1994. *Multicultural needs assessment for college and university student populations*. Springfield, IL: C. C. Thomas.
107. Baird, BN. 2007. *The internship, practicum, and field placement handbook. A guide for the helping professions* (5<sup>th</sup> Ed.). New Jersey: Pearson Education Inc.
108. International Association of Counseling Services. Standards for University and College Counseling Services. *Journal of College Student Psychotherapy*. 2011; 25(2):163-183.

109. Maniar SD, Curry LA, Sommers-Flanagan J, Walsh JA. Student athlete preferences in seeking help when confronted with sport performance problems. *The Sport Psychologist*. 2001;15(2):205-223.
110. Anderson JC, Courson RW, Kleiner DM, McLoda TA. National Athletic Trainers' Association Position Statement: Emergency Planning in Athletics. *J Athletic Training* 2002;37(1):99-104.
111. NCAA Guideline 1e, Catastrophic Incident in Athletics, 2012-2013 NCAA Sports Medicine Handbook; NCAA.org/health-safety.
112. Bonanno GA. Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? *Am Psychol*. 2004;59(1):20–28.
113. Everly GS, Jr., Welzant V, Jacobson JM. Resistance and resilience: The final frontier in traumatic stress management. *International Journal of Emergency Mental Health*. 2008;10(4):261-270.
114. Everly, GS, JT Mitchell. 2008. *Integrative Crisis Intervention and Disaster Mental Health*. Ellicott City, MD: Chevron
115. Hobfoll S, Watson P, Bell C, Bryant R, Brymer M, Friedan M, et al. Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. *Psychiatry*. 2007;(4):283-315.
116. Everly, Jr. GS, Flynn BW. Principles and practical procedures for acute psychological first aid training for personnel without mental health experience. *International Journal of Emergency Mental Health*. 2006;8(2):93-100.
117. Parker CL, Everly, Jr. GS, Barnett DJ, Links JM. Establishing Evidence-Informed Core Intervention Competencies in Psychological First Aid for Public Health Personnel. *International Journal of Emergency Mental Health*. 2006;8(2):83-92.
118. The Jed Foundation, Student Mental Health and the Law: A Resource for Institutions of Higher Education. New York, NY, 2008. Available online at: <http://www.jedfoundation.org/legal>.
119. The Yellin Center for Mind, Brain, and Education -Official Blog - February 24, 2012 "Mental Health Issues on College Campuses". Available online at: <http://blog.yellincenter.com/2012/02/mental-health-issues-on-college.html>.
120. The Jed Foundation. 2006. *Framework for developing institutional protocols for the acutely distressed or suicidal college student*. New York, NY: The Jed Foundation.

**Inter-Association Writing Group**  
**Developing a Plan for Recognition and Referral of Student-Athletes with Psychological Concerns**  
**at the Collegiate Level**  
**Participating National Organizations, and Endorsing National Societies**

<p><b>Chair</b>  Timothy L. Neal, MS, ATC  Assistant Director of Athletics for Sports Medicine  Syracuse University, Syracuse, NY</p> <p>Alex B. Diamond, D.O., MPH  Assistant Professor of Orthopedics and Rehabilitation  Assistant Professor of Pediatrics  Vanderbilt University, Nashville, TN</p> <p>Scott Goldman, Ph. D.  Director of Clinical and Sports Psychology  University of Arizona, Tucson, AZ</p> <p>David Klossner, Ph. D., LAT  Director of Health &amp; Safety  NCAA, Indianapolis, IN</p> <p>Eric D. Morse, M.D., DFAPA  Carolina Performance, Raleigh, NC</p> <p>David E. Pajak, MBA, DRM, ARM  Director of Risk Management  Chief Emergency Management Officer  Syracuse University, Syracuse, NY</p> <p>Margot Putukian, MD, FACSM  Director of Athletic Medicine  Princeton University, Princeton, NJ</p> <p>Eric F. Quandt, JD  Scharf Banks Marmor, LLC</p> <p>John P. Sullivan, Psy.D.  Founder/CEO  Clinical &amp; Sports Consulting Services,  Providence, RI</p> <p>Cory Wallack, Ph.D.  Director of Counseling Center  Syracuse University, Syracuse, NY</p> <p>Victor Welzant, Psy.D.  Director of Education and Training  The International Critical Incident Stress Foundation, Inc., Ellicott  City, MD</p>	<p>National Athletic Trainers Association</p> <p>American Academy of Pediatrics</p> <p>Association of Applied Sports Psychology</p> <p>National Collegiate Athletic Association</p> <p>International Society of Sports Psychiatry</p> <p>University Risk Management and Insurance Association</p> <p>American Medical Society for Sports Medicine</p> <p>Attorney</p> <p>American Psychological Association</p> <p>Association for University and College Counseling Center Directors</p> <p>International Critical Incident Stress Foundation</p>
--	--