

Navigating Mental Health Screening in Student-Athletes: A Review of Best Practices

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Conflict Disclosure

- Developer of *PROMotion Health*, a mental health screening platform

Professional Ethics Statement

Reminder: Athletic Trainers cannot diagnose or treat mental health issues/illnesses/disorders

- This should be made clear to your patients/athletes if engaging in screening or discussion regarding mental health concerns.
- ATs *are* educated in recognizing signs and symptoms of mental health issues, that may warrant a referral to a mental health professional.

National Suicide Prevention Lifeline:

988

Crisis Textline:

Text "HOME" to 741-741

Objectives

for this session

1

Review NATA and NCAA Mental Health Consensus and Mental Health Best Practices documents.

2

Discuss recent literature regarding

mental health screening practices in the student-athlete population.

3

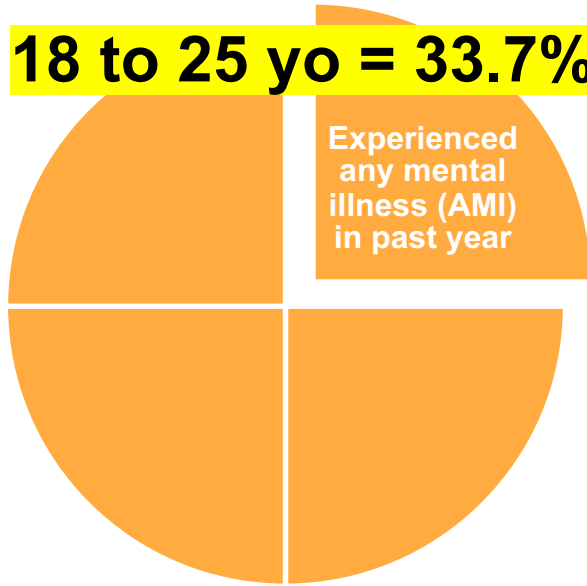
Apply various clinical scenarios for mental health screening and referral protocols.

4

Examine and appraise mental health screening tools based on current evidence in the literature.

Mental Health in the US

18 to 25 yo = 33.7%



1 in 5 youth experienced MDE

AMI

Multiracial:
35%

LGB adults:
2X risk

Transgender
adults:
4X risk

50% will be diagnosed with a mental health issue at some point in their lifetime

50% of all lifetime mental illness starts at **age 14**

75% by **age 24**



Mental Health Treatment

11 years

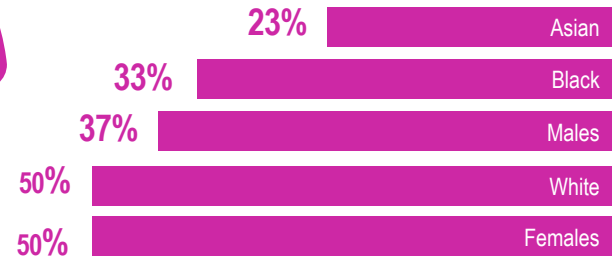
average delay in treatment

55 %

of US counties do not have a single practicing psychiatrist



Receiving Rx



Despite having the highest rate of serious mental illness, people aged 18 to 25 had the lowest rate of treatment compared to adults in other age groups.

Athletes & their Demand for Support

College Athletes Are Raising the Alarm on Mental Health From Locker Rooms and Group Chats All the Way to Capitol Hill

Anna Katherine Clemmons | Friday, May 26, 2023

WHY THIS MATTERS

As college campuses across the United States rally around and reckon with athlete mental health, Gen Z college athletes are taking efforts into their own hands.

“I say this out of complete respect for my university: There was no support system [around mental health],” Underwood says. “I can tell you 100 injuries and other ways they supported broken fingers and torn ACLs. But when it came to depression and anxiety, there was no support system or game plan.”

Mental Health Best Practices/Consensus



NATA Consensus Statements

NCAA Mental Health Best Practices

Journal of Athletic Training 2013;48(5):716-720
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www.nata.org

Inter-Association Recommendations for Developing a Plan to Recognize and Refer Student-Athletes With Psychological Concerns at the Collegiate Level: An Executive Summary of a Consensus Statement

Consensus Statement

Timothy L. Neal, MS, ATC (Chair)*; Alex B. Diamond, DO, MPH†; Scott Goldman, PhD‡; David Klossner, PhD, LAT, ATCS§; Eric D. Morse, MD, DFAPA||; David E. Pajak, MBA, DRM, ARM¶; Margot Putlikian, MD, FACS¶¶; Eric F. Quandt, JD§; John P. Sullivan, PsyD**; Cory Wallace, PhD‡; Victor Weitzant, PsyD††

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Collegiate Setting (Neal et al., 2013)

PURPOSE
The full range of mental health issues in young adults ages 18 to 25 years, the age group of college students and student-athletes, is being recognized. Given the National Collegiate Athletic Association's (NCAA) commitment to the well-being of its student-athletes, it is imperative to develop a plan for the recognition and referral of college student-athletes with psychological concerns.

INTRODUCTION
The growing prevalence in the types, severity, and duration of mental health issues in young adults ages 18 to 25 years, the age group of college students and student-athletes, is being recognized. Given the National Collegiate Athletic Association's (NCAA) commitment to the well-being of its student-athletes, it is imperative to develop a plan for the recognition and referral of college student-athletes with psychological concerns.

BACKGROUND
Approximately 1 in every 4 to 5 youths in America meets the criteria for a mental health disorder and experiences associated psychological concerns in adulthood.

Mental Health
When a student-athlete is injured, the AT and team physician should consider the patient's possible psychological concerns that may affect a Student-Athlete's Mental Health.

Consensus Statement

Interassociation Recommendations for Developing a Plan to Recognize and Refer Student-Athletes With Psychological Concerns at the Secondary School Level: A Consensus Statement

Timothy L. Neal, MS, ATC (Chair)*; Alex B. Diamond, DO, MPH†; Scott Goldman, PhD, CC-AASP‡; Karl D. Liedtke, MS§; Kembra Mathis, MEd, ATC||; Eric D. Morse, MD, DFAPA¶; Margot Putlikian, MD, FACS¶¶; Victor Weitzant, PsyD§§; Stacey J. Ritter, MS, ATC††; John P. Sullivan, PsyD‡‡; Cory Wallace, PhD‡‡

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Secondary School Setting (Neal et al., 2015)

PURPOSE
The full range of mental health issues in young adults ages 18 to 25 years, the age group of secondary school students and student-athletes, is being recognized. Given the National Collegiate Athletic Association's (NCAA) commitment to the well-being of its student-athletes, it is imperative to develop a plan for the recognition and referral of secondary school student-athletes with psychological concerns.

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Consensus Statement

MENTAL HEALTH BEST PRACTICES

SPORT SCIENCE INSTITUTE

INTER-ASSOCIATION CONSENSUS DOCUMENT: BEST PRACTICES FOR UNDERSTANDING AND SUPPORTING STUDENT-ATHLETE MENTAL WELLNESS

(NCAA, 2016)



Identify MH provider & develop multidisciplinary team



Develop a routine MH referral protocol



Develop an emergency MH referral protocol



Determine MH screening process



Create an open environment

Management Strategies

Self Reflection:

Do you/your employer have a written mental health management plan for student-athletes/patients?

- What does it include?
- Have you started mental health screening?

Mental Health Screening for Student-Athletes: Navigating Logistics through Best Practices

Why?

Who?

How?

What?

When?

Where?

Dear Athlete,

**Mental Health
doesn't define you**

*but we should still
talk about it.*

Why Implement a Mental Health Screen?

(Kroshus, 2016)

- Less than half (39%) of NCAA institutions had a written MH protocol

D1: 55% DII: 21.2% DIII: 20%

- Less than 1/3 implemented MH screening (28%)

D1: 41.7%. DII: 21.7% DIII: 20.7%

(Drew, Petrie & Palmateer, 2021)

- Formal MH screening:

- **D1: 89%**

- **DII/DIII: 53%**



**MENTAL HEALTH
BEST PRACTICES**
NCAA SPORT SCIENCE INSTITUTE
INTER-ASSOCIATION CONSENSUS DOCUMENT: BEST PRACTICES FOR
UNDERSTANDING AND SUPPORTING STUDENT-ATHLETE MENTAL WELLNESS



Who?

Stakeholders & Administration

- Athletic Trainers
- Mental Health Providers
 - Counseling Center – psychologists, therapists, social workers
 - School MH providers - guidance counselors (understand credentials), school psychologists, school social workers
- Team Physicians



SCREENING MEASURES



What Screening Measures?

Selection Considerations

- **NATA / NCAA Recommendations**
 - to provide a starting point
- **Must consult with the mental health provider(s) you are collaborating with**
- **Most prevalent mental health concerns in SA:**
 1. Depression
 2. Anxiety
 3. Sleep issues
 4. Alcohol & substance abuse
 5. Eating Disorders
 6. ADHD

- **Validity & Reliability**
 - Age group
 - **Student-athletes**



Mental Health Specific Screeners

Depression

- PHQ-9*
- HADS
- HANDS
- HAM-D
- CES-D
- BDI-II
- BDSA

Anxiety

- GAD-7*
- BAI
- HARS

Sleep

- ISI*
- STOP-BANG
- PSQI

Disordered Eating

- SCOFF*
- EAT-26
- BEDA-Q
- SEDA
- FAST

Alcohol / Drug Abuse

- AUDIT-C*
- CUDIT-C

Other

- ASRS* (ADHD)
- CAS (COVID Anxiety)
- ABQ (Athlete Burnout)
- AIMS (Athlete Identity)

*Indicates clinical use by WCU Sports Medicine Department in PPE

Yellow indicates measure was referenced in NCAA MH Best Practices (NCAA, 2016)

Adolescent Mental Health Specific Screener Examples

Depression

- Patient Health Questionnaire-9 Adolescents (PHQ-A)

Sleep

- Insomnia Severity Index - Child (ISI – Child)

Alcohol Abuse

- Alcohol Use Disorders Identification Test (AUDIT)
- AUDIT-Concise (AUDIT-C)

Anxiety

- Generalized Anxiety Disorder 7-item screen (GAD-7)

Disordered Eating

- SCOFF
- Child Eating Disorder Examination Questionnaire (ChEDE-Q8)

ADHD

- Adult ADHD Self-Report Scale (ASRS-18)


Student-Athletes & Under-reporting

INTERNATIONAL REVIEW OF SPORT AND EXERCISE PSYCHOLOGY
<https://doi.org/10.1080/1750984X.2022.2095658>

 **Routledge**
Taylor & Francis Group



Anonymous vs. non-anonymous administration of depression scales in elite athletes: a meta-analysis

Sebastian Harenberg ^a, Chloe Ouellet-Pizer^b, Margaret Nieto^c, Laura Kuo^c, Justine Vosloo^c, Lindsey Keenan^d and Sayre Wilson^e

^aDepartment of Human Kinetics, Saint Francis Xavier University, Antigonish, Canada; ^bDepartment of Rehabilitation & Technology, University of Wisconsin at Milwaukee, Milwaukee, WI, USA; ^cDepartment of Exercise Science and Athletic Training, Ithaca College, Ithaca, NY, USA; ^dDepartment of Sports Medicine, West Chester University, West Chester, PA, USA; ^eCollege of Community and Public Affairs, Binghamton University, Binghamton, NY, USA

Table 2. Results of meta analyzes.

Type	<i>N</i>	Estimated prevalence	CI 95%	SE	<i>Z</i>	<i>p</i>
All studies	31	15.3%	11.7–18.9%	.018	8.38	<.001
All studies (standard cut-offs)	23	16.2%	12.1–20.3%	.021	7.79	<.001
Anonymous	12	22.3%	17.4–27.1%	.025	9.00	<.001
Non-Anonymous	19	11.4%	7.4–15.3%	.020	5.67	<.001

Validating Depression Screeners in SA

Journal of Athletic Training 2023;58(10):821–830
doi: 10.4085/1062-6050-0558.22
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www.natajournals.org

Original Research

- **Lower cut-scores**
 - **6 on PHQ-9 (vs. 10)**
 - **15 on CESD (vs. 20)**

Validation and Clinical Utility of the Patient Health Questionnaire-9 and Center for Epidemiologic Studies Depression Scale as Depression Screening Tools in Collegiate Student-Athletes

Lindsey Keenan, PhD, LAT, ATC*; Yvette Ingram, PhD, LAT, ATC†; Branden Green, MS, LAT, ATC‡; Rachel Daltry, PsyD*; Sebastian Harenberg, PhD§

*West Chester University, PA; †Lock Haven University, PA; ‡Ursinus College, Collegeville, PA; §St Francis Xavier University, Antigonish, Nova Scotia, Canada

Key Points

- Athletic trainers have the unique opportunity to incorporate mental health screening measures into clinical practice during the preparticipation examination and throughout clinical practice.
- A cutoff of 6 on the Patient Health Questionnaire-9 or 15 on the Center for Epidemiologic Studies Depression Scale provides strong evidence for clinical utility in ruling out depression in the collegiate student-athlete population; clinicians should carefully select measures and cutoff scores based on the available evidence and resources.
- Clinicians may consider lowering the cutoff scores for both the Patient Health Questionnaire-9 and Center for Epidemiologic Studies Depression Scale in the student-athlete population from those previously reported for the general population.

Patient Health Questionnaire-9 (PHQ-9)

NAME: _____

DATE: _____

Over the **last 2 weeks**, how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	No. at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way	0	1	2	3

+

+

10. If you checked off **any** problems, how **difficult** have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all _____

Somewhat difficult _____

Very difficult _____

Extremely difficult _____

Validating Anxiety Screeners in SA

The Sport Psychologist, 2020, 34, 300-309
<https://doi.org/10.1123/tsp.2020-0028>
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Human Kinetics 
APPLIED RESEARCH

Using the GAD-7 and GAD-2 Generalized Anxiety Disorder Screeners With Student-Athletes: Empirical and Clinical Perspectives

Alisia G.T.T. Tran
Arizona State University

Highlights

- (a) GAD-7 and GAD-2 evidence validity as anxiety screens for college student-athletes.
- (b) They may also be useful for screening for depression and suicidality.
- (c) Cut points of 6 (GAD-7) and 2 (GAD-2) are advised.

GAD-7 — Seven-Symptom Checklist for Anxiety

Your Name: _____ Date: _____

Over the last 2 weeks, how often have you been bothered by any of the following problems? Read each item carefully, and circle your response. Then total your responses below.

Generalized Anxiety Disorder 7-item Screen (GAD-7)

	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
Add columns:		___ +	___ +	___ =
TOTAL	[]			

8. If you checked off any problem on this questionnaire so far, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all _____ Somewhat difficult _____ Very difficult _____ Extremely difficult _____
---	---

General Index / Wellness Screenings

Table 9. Mental Health–Related Survey^a

Statement	Yes/No
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.	

Carroll JFX, McGinley JJ. A screening form for identifying mental health problems in alcohol/other drug dependent persons. *Alcohol Treat Q.* 2001;19(4):33-47

- Mental Health Related Survey – NATA Consensus Statements (Neal et al., 2013 & 2015)
- *“Any affirmative answers to the mental health questions of the preparticipation physical examination should be brought to the attention of the physician for a discussion with the student-athlete”* (Neal et al., 2013, pg.240)
 - **63% of SA** (Keenan, Daltry, Harenburg, & Green, In Prep)
 - Sensitivity/specificity undetermined in SA population

SMHAT-1

The International Olympic Committee Sport Mental Health Assessment Tool 1

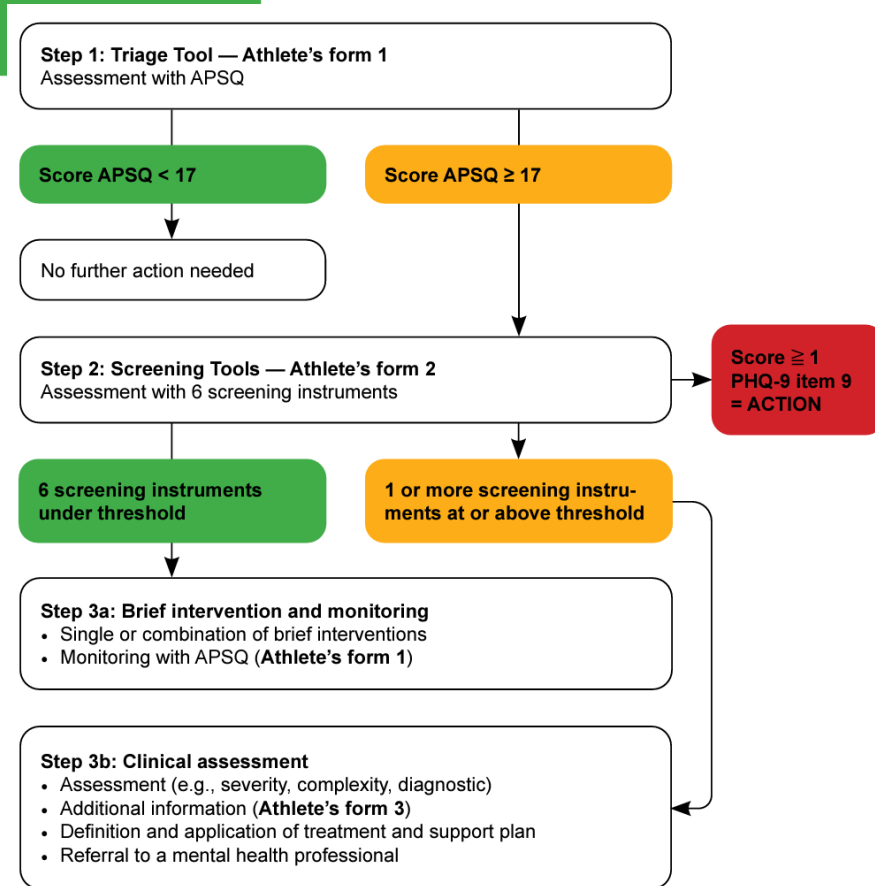
DEVELOPED BY THE IOC MENTAL HEALTH WORKING GROUP



BMJ Open
Sport &
Exercise
Medicine

Mental health screening: severity and cut-off point sensitivity of the Athlete Psychological Strain Questionnaire in male and female elite athletes

Simon Rice ^{1,2}, Lisa Olive,^{1,3} Vincent Goutteborge ^{4,5,6}, Alexandra G Parker,^{2,7} Patrick Clifton,⁸ Peter Harcourt,⁸ Michael Llyod,⁹ Alex Kountouris,⁹ Ben Smith,¹⁰ Beau Busch,¹¹ Rosemary Purcell^{1,2}



MH Screening – When & Where

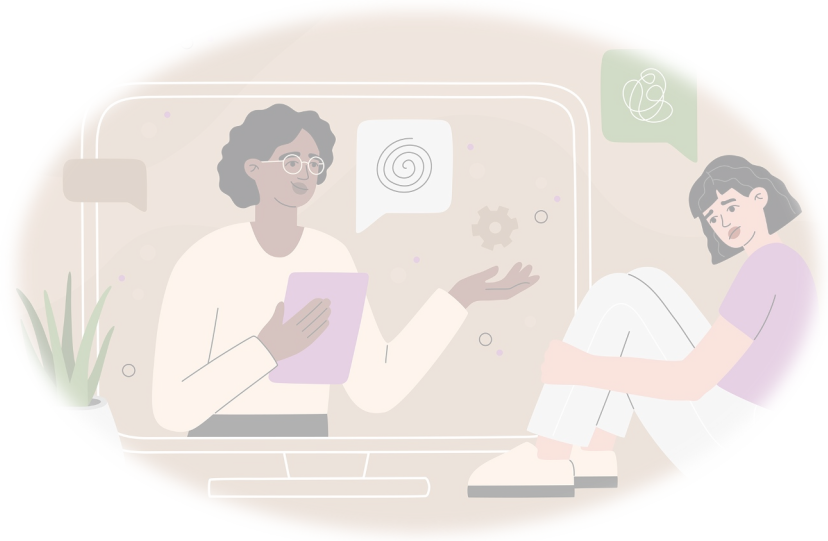
- **WHEN:**

- Preparticipation Exam (NCAA, NATA, IOC)
- Post-concussion (Mantey, Omega-Njemnobi, & Kelder, 2021)
 - Amsterdam Consensus (Patricios et al., 2023)
- Post season/career-ending injuries
- Post-surgical
- Negative life event
- Beginning/middle/end of season

- **WHERE:**

- Virtually or in-person
- Safe / private space / environment
- Remove stigma; no coaches

- Where & how may affect reporting behaviors (Harenberg et al., 2022)



Considering Suicidality & Self-Harm Inquiries

- *carefully considered by the AT, team physician, & MH provider*
- *administered when a timely follow-up is possible*
- *inquire about suicidal ideation and self-harm if using an instrument that does not include these items*
- ***depression screening may be one of the only opportunities a student-athlete has to report suicidal thoughts or self-harm***



24/7 CALL, TEXT, CHAT

Implementation of MH Screening – How?

Considerations:

- Time (ease of access, length of administration, length of scoring, time between screening & follow-ups)
- Resources
- Confidentiality
- Costs

Administration Tool/Platform:



A call for electronic screening widely used in the general population for PPEs and throughout athletic health care (Balcombe & DeLeo, 2020; Kroshus, 2016)

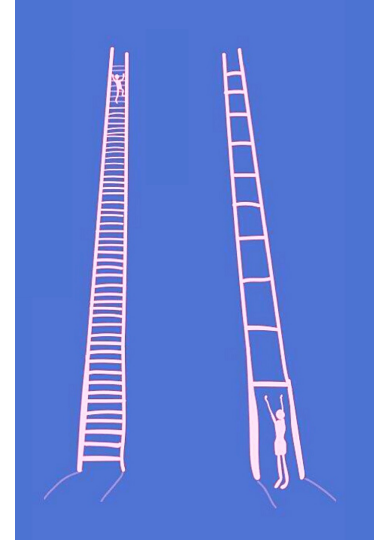
Implementation of MH Screening Steps



1. Administration of screeners
2. Calculation of scores for each measure
3. Identification of red-flag scores
4. Immediate follow-ups to assess for suicidality and/or self-harm
 - Take precaution to protect confidentiality if conducting mass-screening
5. Conduct follow-ups for all red-flag scores
 - Possible referrals

Implementing Screening

- Implement over time
 - Can take small steps with screening and work up to goals
 - Screening is part of creating an open environment
 - What does this signal to the student-athletes?
- Challenges along the way
 - Developing protocols
 - Stakeholders on board
 - Reducing stigma
 - Encouraging positive reporting behavior
 - Normalizing seeking help for mental health



El-Araby awoke in the hospital two days later, a breathing tube in his mouth. Later, one of the team's athletic trainers, while trying to understand what had happened, told El-Araby that he hadn't seen any warning signs. El-Araby says that was because he hadn't felt like he could tell the team and coaches about his mental struggles.

The Why

ABDELRAHMAN ELARABY SHARES SUICIDE ATTEMPT, ENCOURAGES OTHERS TO SEEK HELP | Comments: 19



The Louisville senior has shared his story of attempted suicide and encourages others suffering from depression to seek help. Archive photo via NCAA Photos

Athlete Mental Health Organizations



Morgan's
Message™



Self Reflection:

- In what ways can you modernize your PPE and clinical approaches regarding mental health?
- Are you ready to implement MH screening?
 - How can you address barriers?

Suicide & Crisis Lifeline:
988

Crisis Textline:
741-741



QUESTIONS?



Find me on LinkedIn:



LKeenan@wcupa.edu

Thank you!

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