

# Vanderbilt Youth Sports Health and Safety Conference – June 13, 2025

A Collaborative Effort to Evaluate Programs, Practices, and Protocols Supporting Youth Sports Safety and Injury Prevention, Mild Traumatic Brain Injury, and Concussion Management



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I AM *true* **BLUE**

*In partnership with  
Tennessee Department of  
Health*



# The MTSU and TDH Evaluation Project Team



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# The MTSU CHHS TDH Evaluation Project Team



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# Tennessee Department of Health – Mentimeter Exercise




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# Objectives for This Session:

- Identify and describe the Safe Stars youth sports injury prevention program, Pediatric mTBI Guidelines, and Return to Learn and Return to Play guidelines.
- Cite successes, challenges, and lessons learned throughout the evaluation project.
- State preliminary evaluation outcomes for the projects and articulate next steps.







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**MTSU Center for Health and Human Services**  
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**<https://chhs.mtsu.edu>**

# MTSU CHHS - Vision, Mission, and Core Values

## **Vision:**

The Center for Health and Human Services seeks to shape a healthier future and advance the **health and well-being of Tennesseans**.

## **Mission:**

The Center for Health and Human Services facilitates, through strategic partnerships, collaborative public health **research, and outreach projects** throughout Tennessee, to address **health disparities** and promote **healthy communities**.

**Core Values:** Collaboration, Innovation, Excellence, Engagement

# MTSU CHHS - Vision, Mission, and Core Values

**Youth safety and injury prevention are in alignment with our vision and mission!**

- Advancing health and well-being of Tennesseans;
- Addressing health disparities and promoting healthy communities;
- Strategic partnerships and collaborative public health outreach and research



# Tennessee Safe Stars Initiative

Safe Stars is a collaboration between the Tennessee Department of Health and the Vanderbilt Youth Sports Health Center.

- The Safe Stars Initiative **recognizes youth sports leagues** throughout Tennessee **for providing the highest level of safety** for their young athletes.
- Safe Stars consists of 3 levels: **Gold, Silver, and Bronze**, and involves implementation of policies around topics such as concussion education, weather safety and injury prevention.
- The criteria for achieving recognition as a Safe Stars league has been developed by a committee of health professionals dedicated to reducing sports-related injuries among youth.

***Goal is to provide resources and opportunities for every youth sports league to enhance their safety standards.***

Safe Stars Initiative



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# Safe Stars Kickoff

Wednesday, May 2, 2018

Bridgestone Arena | 10:30 a.m. - 12 p.m.  
Enjoy refreshments and giveaways!

Safe Stars recognizes youth sports leagues in Tennessee that adhere to high standards of safety. Join representatives from Tennessee professional & collegiate sports teams as well as other high profile organizations to learn about **the nation's first youth sports safety rating system.**

Register to attend this free event at:  
[ChildrensHospital.Vanderbilt.org/SafeStars](http://ChildrensHospital.Vanderbilt.org/SafeStars)



Vanderbilt Sports Medicine

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# Mild Traumatic Brain Injury (mTBI) Guidelines

[Clinical Guidance for Pediatric Mild TBI](#) | [Traumatic Brain Injury & Concussion](#) | [CDC](#)

- The CDC has developed guidelines for managing **mild traumatic brain injury (mTBI)**, commonly known as concussions. These guidelines provide recommendations for healthcare providers on **diagnosis, management, and recovery** strategies.
  - For **pediatric patients**, the CDC advises:
    - Avoiding routine imaging for diagnosis.
    - Assessing risk factors for prolonged recovery.
    - Providing customized return-to-activity instructions.
    - Encouraging gradual reintroduction to non-sports activities after **1-2 days of rest**

***Goal is to increase the use of mTBI Guidelines among providers***



25

YEARS OF SCIENTIFIC  
RESEARCH EXAMINED

19

SETS OF CLINICAL  
RECOMMENDATIONS  
CREATED

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# Return to Learn/Return to Play Survey

(Data to Action)

- RTL/RTP Survey (Data to Action) to Guidelines
  - RTL Concussion Mgt Team
  - RTL Concussion Mgt Process
  - TN Sports Concussion Law
  - Gradual RTP
- Conducted this 20-25 question survey since 2017
- Steady improvement in practices observed
  - Concussion, Heat, SCA, AEDs, EAPs, training, etc.
- Legislated policy and/or TSSAA policy enhanced compliance over time

***Goal is to enhance RTL/RTP policies and practices in schools and other youth sports organizations***



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# MTSU and TDH Evaluation Project - Timeline:

- December 9, 2022 – Notification of Award received for Safe Stars Project
- Contract Period after amendments – February 1, 2023 – July 31, 2026
- Year One 2/1/2023 – 7/31/2023
- Year Two 8/1/2023 – 7/31/24
- Currently in Year Three 8/1/24-7/31/2025 (second full year)
- Added Pediatric mTBI Guidelines and Return to Learn/Return to Play during Year Two.



# MTSU and TDH Evaluation Project - Goals:

## Safe Stars:

- Evaluate Safe Star organizations AND non-Safe Star participants
- Provide recommendations for improvement regarding barriers to application and/or program feasibility
- Develop three strategies to address identified barriers
- Develop fact sheet to address barriers and facilitate program participation

## CDC Pediatric mTBI Guideline:

- Evaluate health care provider utilization of the CDC Pediatric mTBI Guideline,
- Identify three strategies for disseminating results,
- Develop a fact sheet highlighting efforts, gaps, and actions to prevent mild TBI.



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# MTSU and TDH Evaluation Project - Goals:

## Return to Learn Return to Play:

- Evaluate barriers to implementing Return to Learn/Return to Play guidelines by school athletic professionals,
- Develop and promote at least one strategy annually to address barriers, and
- Develop a fact sheet to include barriers to implementing return to play strategies to overcome those barriers.



# MTSU and TDH Evaluation Project - Goals:

## Safe Stars:

- Surveys - Safe Stars organizations and non-participating organizations.

## Pediatric mTBI:

- Survey – Health Care Providers (min. 500, at least 25% response)

## Return to Learn Return to Play:

- Survey – School Athletic Professionals (min. 500, at least 25% response)
- Annual Focus Groups – Youth Sports Leagues or Schools (min. 20) from West, Middle, East



# MTSU and TDH Evaluation Project - Goals:

## Safe Stars:

- Data dissemination to a minimum of three stakeholder groups

## Pediatric mTBI:

- Data dissemination to a minimum of 100 TBI stakeholders

## Return to Learn Return to Play:

- Data dissemination to a minimum of three stakeholder groups



# Evaluation Plan and Surveys – Safe Stars :

- Evaluation Plan developed, submitted, and approved by TDH on 4/20/23 and again on 10/15/24 (submitted annually on 10/15);
- Two surveys were developed in consultation with TDH and MTSU psychometrician;
- **Survey #1: Participating Organizations** - Measures barriers and facilitators to achieving Safe Stars designation.
- **Survey #2: Non-Safe Stars organizations** - to assess familiarity with Safe Stars, barriers from leagues/schools from applying, commonalities among organizations that are not designated, and how the TDH can help.
- Institutional Review Board (IRB): Approval granted 8/1/2023 as an exempt protocol;
- Addendum prepared for paper copies and other survey changes.



## Surveys (continued):

- Organization lists were provided by the TDH Safe Stars team;
- Basic questions about organization – what sports, ages, genders covered, where located;
- **Participating Organizations** - their recognition level, what they already had in place before working toward Safe Stars, what the benefits have been;
- **Non-Safe Stars organizations** - familiarity with Safe Stars, what do they already have in place that would fit criteria, what would be difficult to achieve, what are barriers and facilitators;
- Dissemination to date: Multiple rounds of emails;
- Future dissemination: Revision of measures using PDSA, updating contact lists, additional email distributions and flyers.



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## Surveys (continued):

- Analyses, including any descriptive statistics and hypothesis testing, were conducted through the Qualtrics Reports feature and SPSS 29.
- Reporting includes both quantitative results and qualitative feedback.



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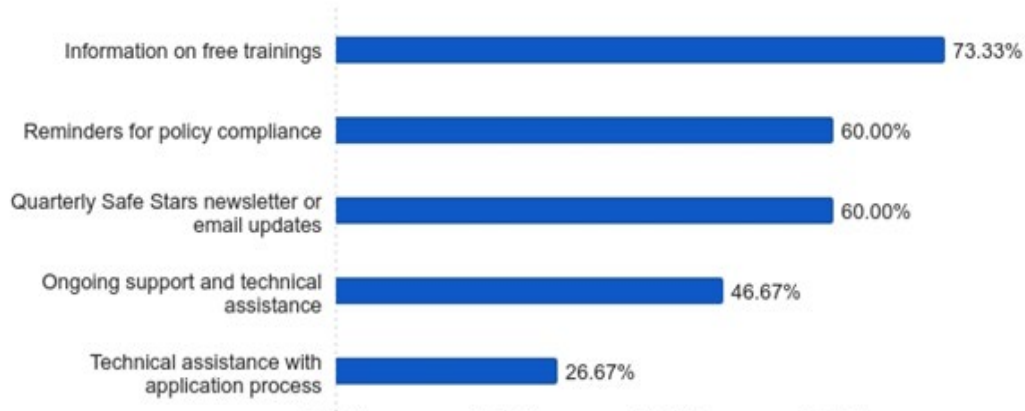
# Evaluation Plan and Surveys – Pediatric mTBI and Return to Learn/Return to Play:

- Evaluation Plan developed to include Pediatric mTBI and Return to Learn/Return to Play, submitted to TDH on 10/15/24, further consultation and discussion.
- Proposed timelines:
  - ✓ Create evaluation tools – by 12/31/24
  - ✓ IRB Approval – by 1/31/25
  - ✓ Collect Data – 2/1/25 – 6/30/25
  - ✓ Focus Group (RTL/RTP) – 4/1/25 – 6/30/25 (one per FY)
  - ✓ Analyze Data 7/1-7/15/25 (annually)
  - ✓ Analysis Report – by 10/15/25 (annually)
  - ✓ Disseminate Data – 10/15/25 and ongoing through 7/31/26
  - ✓ Develop Strategies – by 7/31/25 and 10/31/25
  - ✓ Develop Fact Sheets – by 7/31/25 and 10/31/25

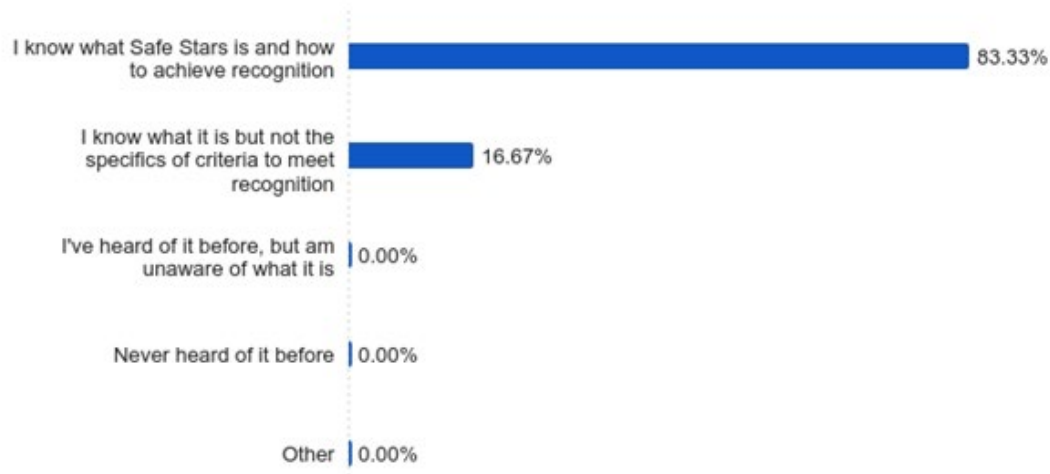


# Safe Stars Surveys – Early Responses:

Do you have recommendations for how the Tennessee Department of Health can support Safe Stars organizations to continue to meet the criteria?



What is your familiarity with the Safe Stars initiative?



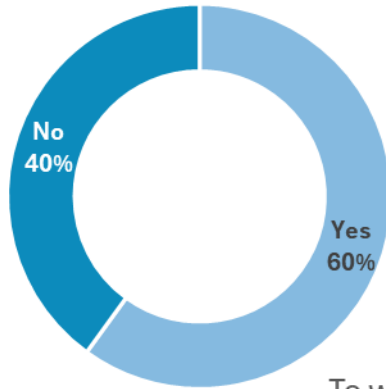
- To date, 16 organizations with existing Safe Stars designations have provided full responses.
  - **75%** urban respondents.
  - **100%** reported that their designation has increased safety policies and procedures overall.
  - **73%** are interested in information on free trainings, and a majority would like both reminders for policy compliance and quarterly Safe Stars newsletters or email updates.
- Thus far, 18 organizations who do not currently participate have given meaningful responses.
  - **72%** of respondents are from urban counties.
  - All know what Safe Stars is, and most know how to achieve recognition.
  - **100%** already have an AED on-site for all hosted events within 3-5 minutes of the site.

# Safe Stars Surveys: Early Feedback (Non-Participating Organizations):

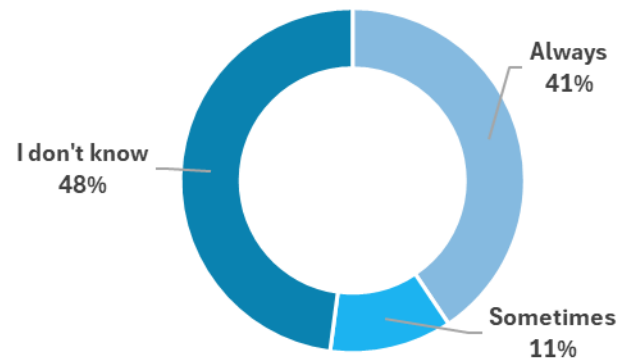
- **The criteria that the fewest have in place are:**
  - Opioid abuse and misuse awareness/education
  - Completion of Safe Stars Coaches and Parents/Guardians Code of Conduct
  - All coaches CPR/AED certified
- **The most difficult criteria to achieve was reported as:**
  - Medical professional (ATC, first responder, etc.) on site for practices or games
  - All coaches CPR/AED trained
  - Completion of Safe Stars parents, guardians, and coaches code of conduct
  - All athletic equipment undergoes safety checks
- The top two things listed as what would help facilitate their ability to apply were personnel and technical assistance with the application process.
- The top two barriers reported were that they already comply with TSSAA and that they need additional knowledge on Safe Stars detail.

# Return to Learn/Return to Play Survey – Early Responses: Select Survey Results

Are you aware of the Return to LEARN concept?



To what extent does your organization implement Return to LEARN in classrooms?

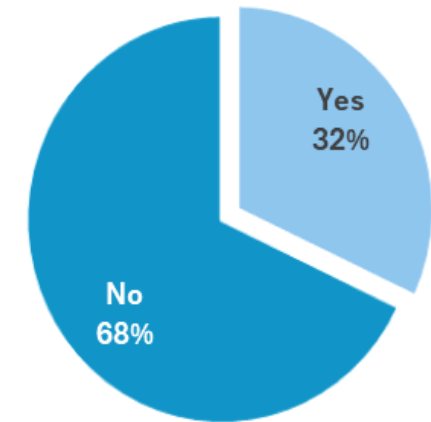


- **165** completed responses to the RTL/RTP survey disseminated by TDH with assistance from TSSAA to a sample of their membership.
- **62%** of respondents were head coaches of a team, and **30%** were assistant coaches.
- **53%** indicated they had over 15 years of professional experience in education or athletics.
- **2/3** completed concussion training through the National Federation of State High School Associations.
- For Sudden Cardiac Arrest Training, **93%** used NHFS Learn's course
- **94%** indicated they received AED training through their CPR training
- **94%** having an AED accessible at all practices.
- While **91%** of respondents said their team has an Emergency Action Plan, just over **1/4** do not practice it.

# CDC Pediatric mTBI Guideline Survey – Early Responses:

- Most providers who have responded as of June 4, 2025 are in East TN, primarily in the Chattanooga and Knoxville vicinities.
- **40%** were non-NP nurses & many others were surgeons (**24%**) or emergency physicians (**16%**).
- Of the 10 non-NP nurse respondents, **40%** were familiar with the CDC's Pediatrics mTBI Guideline.
- Of the 10 combined surgeons and emergency physicians, **20%** were familiar with the Guideline.
- Sample sizes are too low to analyze in detail at this time.
- **50%** of respondents indicated they used the Returning to School After a Concussion HEADS UP School Letter,
- None reported barriers to accessing or using the Guideline.

Are you familiar with the CDC Pediatric mTBI Guideline for healthcare providers?



# Safe Stars Other Activities:

- Disseminate evaluation findings – soliciting suggestions! 😊
- Develop strategies/activities (Years 3 and 4 – 2025 and 2026) that address the recommendations
- Products such as fact sheets, social media messaging, e-mail blasts, etc.
- Contract amended to do similar activities for CDC Pediatric mTBI guidelines (both healthcare providers and athletic providers included) and Return to Learn/Return to Play.





## Successes:

- Ease of IRB application database and approval once all Safe Stars materials were created;
- Easy collaboration with project stakeholders and program coordinator to provide expert recommendations for survey creation to funders;
- Project stakeholders were always available for conversation if any questions were had by the CHHS team. Additionally, quick responses were given if a problem could be easily solved via email;



## Successes (continued):

- Prior to the grant start, TDH team was very clear in their expectations of CHHS and program deliverables.
- As of June 4, 2025, the participating organization survey responses are 16 and the non-participating organizations survey responses are 18.
- Lastly, support from the TDH team to assist in sending out additional emails stating that they have partnered with CHHS and to urge organizations to take the surveys.



# Challenges:

- Contract delays early on;
- Collaboration on surveys and timing (summer) and creating a concise survey (26 policy and training standards);
- Typical dissemination challenges (e.g., difficulty receiving survey responses with no incentives, “cold call” e-mails, unfamiliarity with e-mail sender, spam, e-mail filters);
  - Very recently, MTSU gained the ability to possibly alleviate the issue of having surveys filtered to spam or quarantine as frequently.
- Any adjustments to surveys or dissemination methods require IRB approval prior to implementation.



## Lessons Learned:

- Reminded that teamwork gets things done!
- Expect delays with research
- Anticipate and plan for recruitment challenges
- Leverage resources and connections
- Fresh perspectives bring great ideas



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# What's Next?

- Working on manuscript for publication
- Continued work on “products”
- Continuing to collect data
- Working on updates to evaluation plan for last project year
- Seeking opportunities to continue to support TDH and youth sports safety and injury prevention beyond the term of the project



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# Tennessee Department of Health Lessons Learned

- The CDC Core SIPP funding is only "seed money"
- **Partnerships** – Vanderbilt, TSSAA, TDOE, TN Athletic Trainers Association, Project ADAM, TN EMS Board and others are CRITICAL to success
- **Champions Make it Happen** – Alex Diamond, Tim Lee, Mark Reeves, Joe Blair, Scott Boyd, Brad Rohling, Greg Wyant, TDH SLT
- **Sharing the Work** – Evaluation and publishing important

*Injury and death have been prevented by our efforts*



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# Questions?

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*Thank you!*

# Questions?

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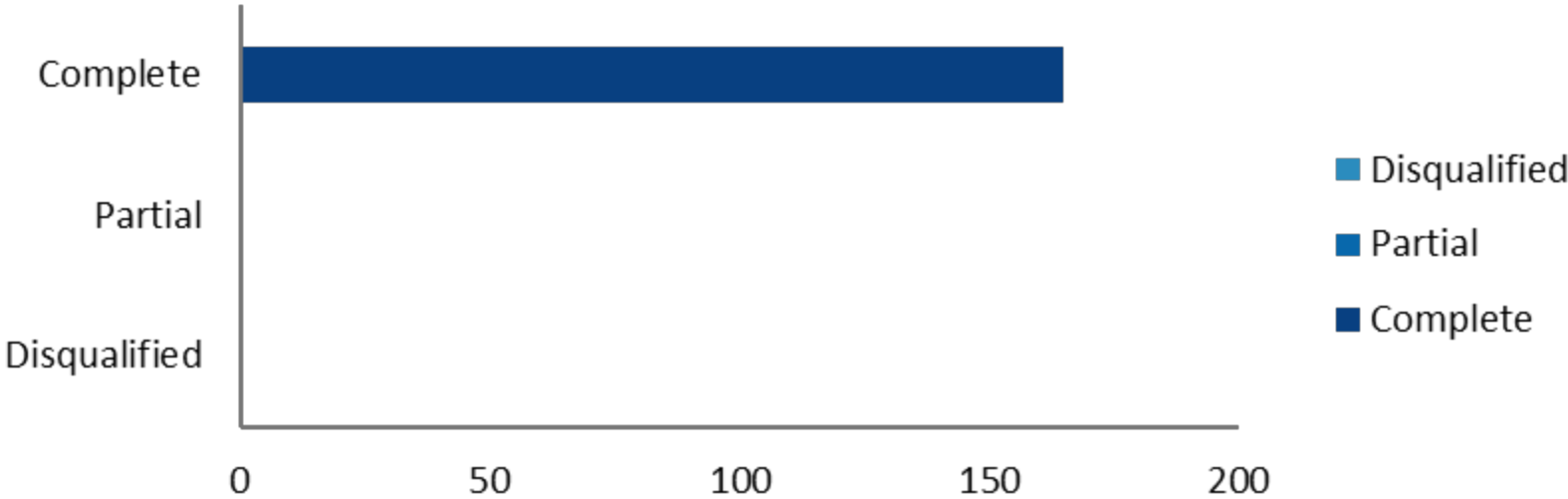
*thank you!*

# **Report for Tennessee Department of Health Return to Learn/Return to Play Survey 2025**

Tennessee Department of Health Return to Learn/Return to Play  
Survey 2025








# Response Statistics 1500 surveyed (11% return rate)

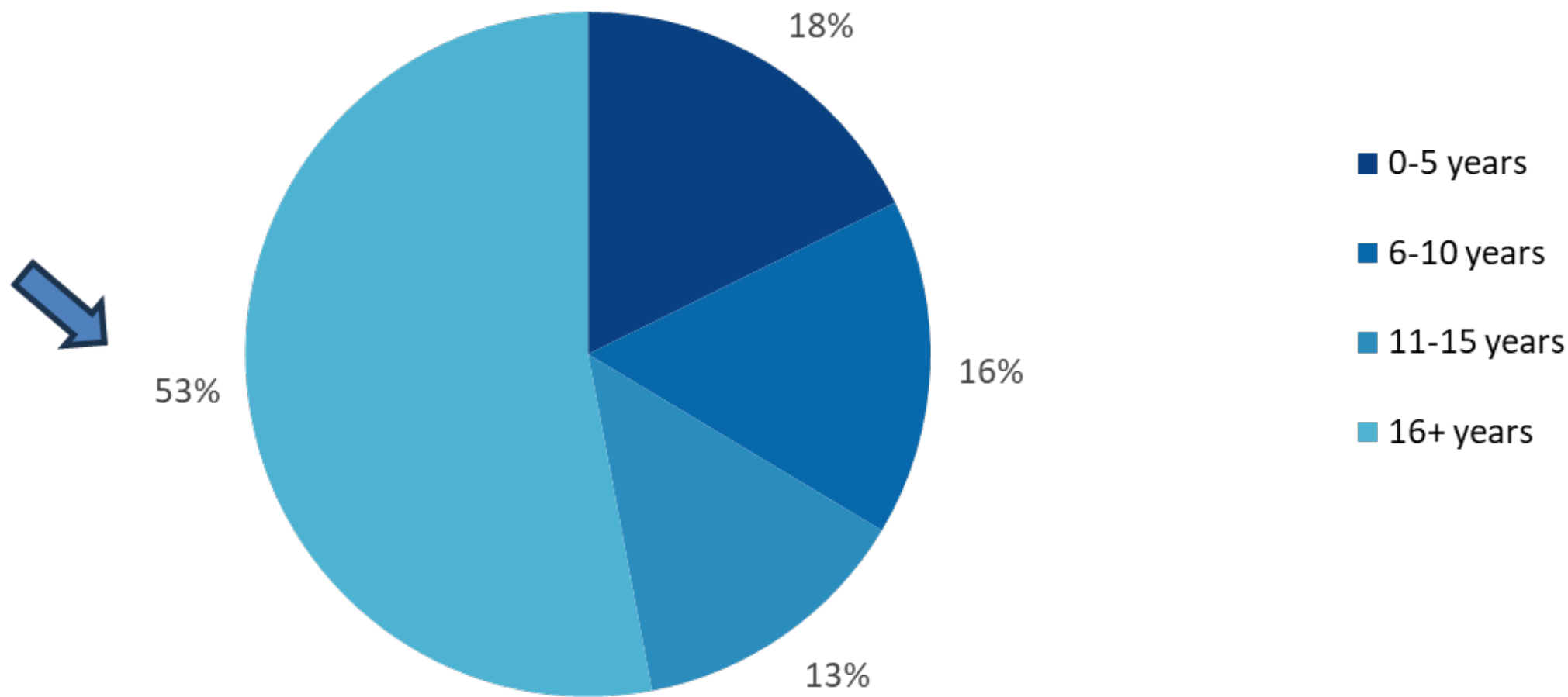


	Count	Percent
Complete	165	100
Partial	0	0
Disqualified	0	0
Totals	165	

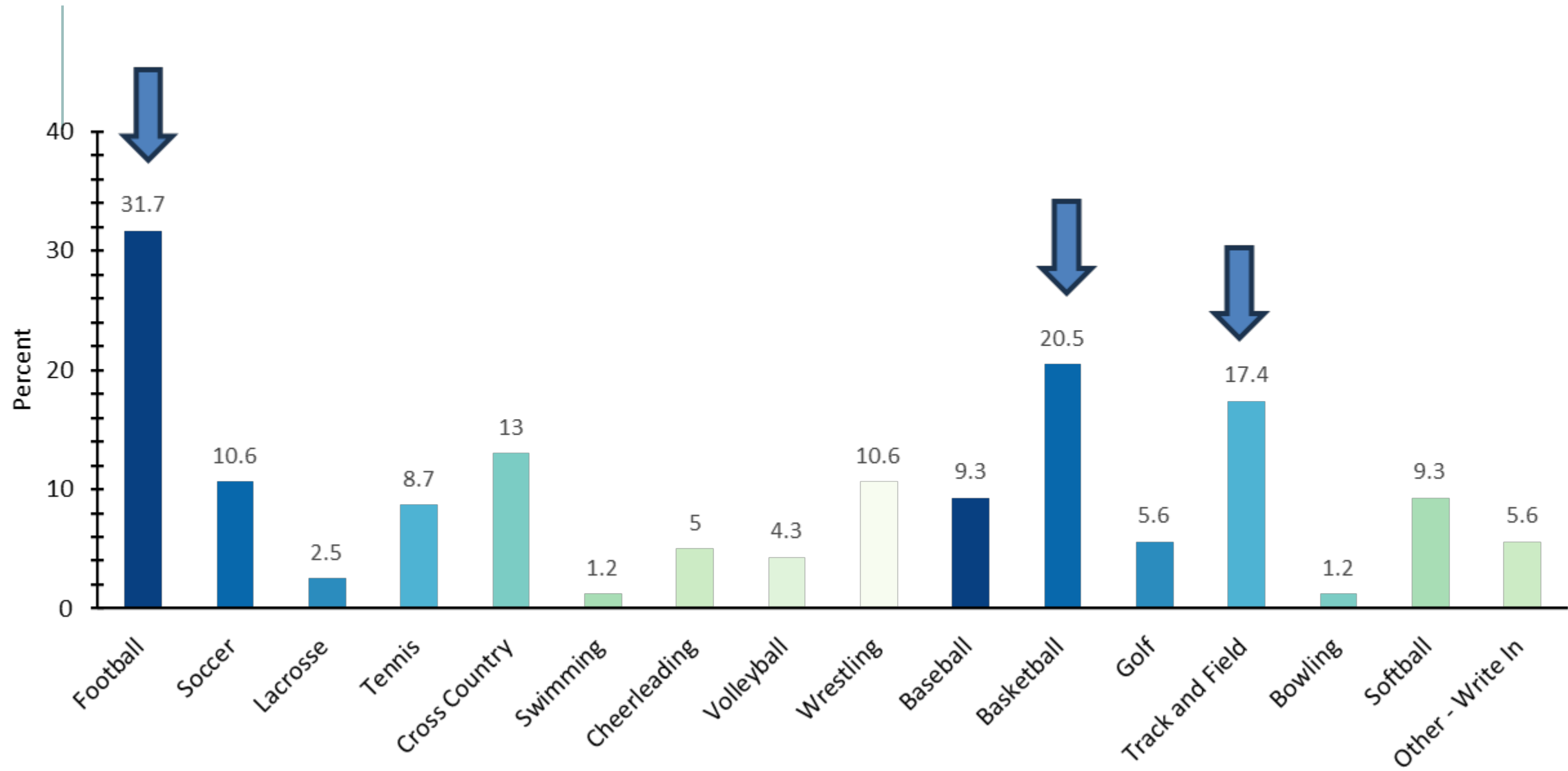
# 1. What is your position? (Check all that apply)

Value		Percent	Count
Athletic Director		9.4%	15
Head Coach		64.2%	102
Assistant Coach		30.8%	49
Retired Coach		1.3%	2
Other - Write In		5.0%	8

2. How long have you been an educator/athletic professional?

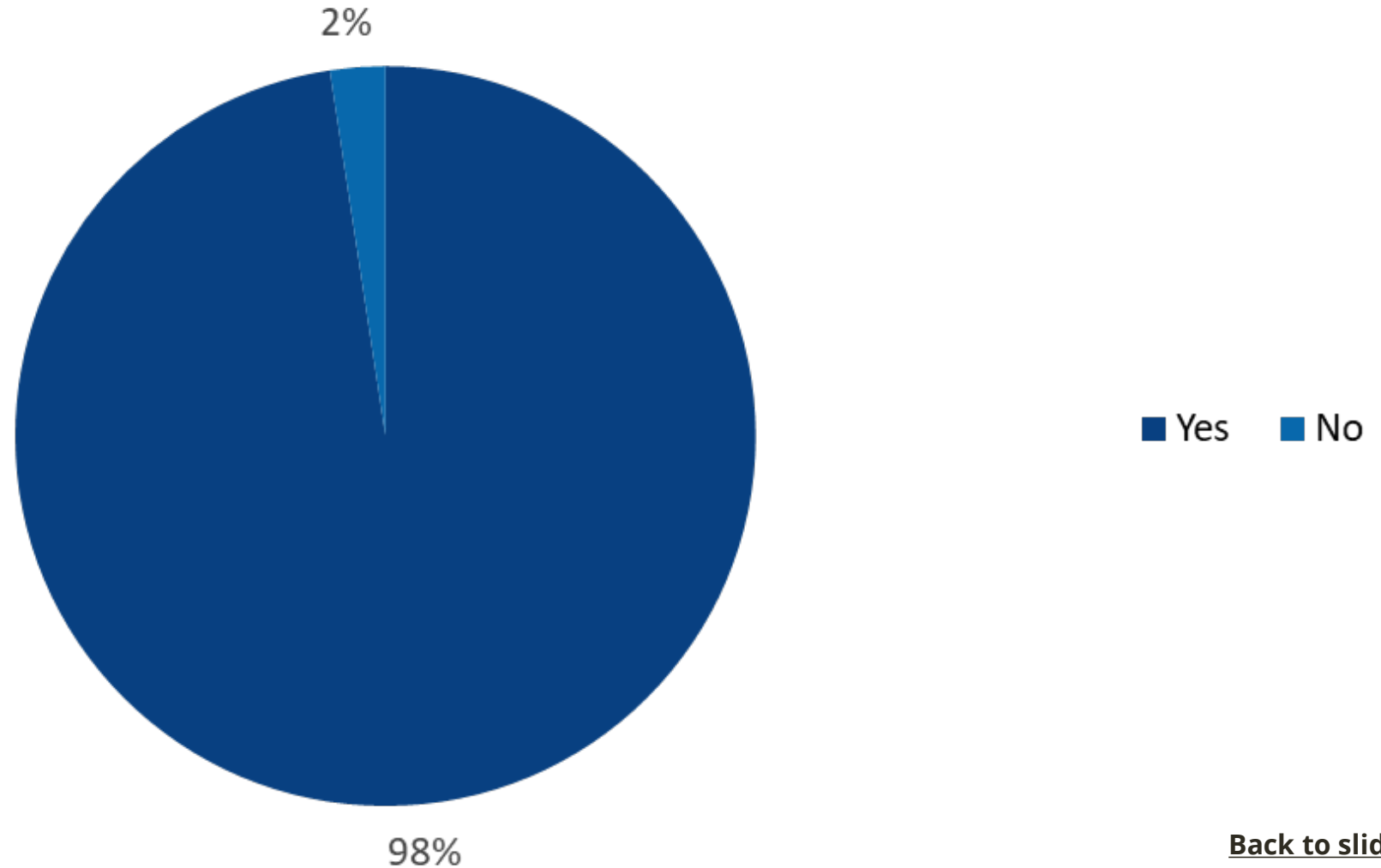


3. What sport(s) do you coach? (Check all that apply)



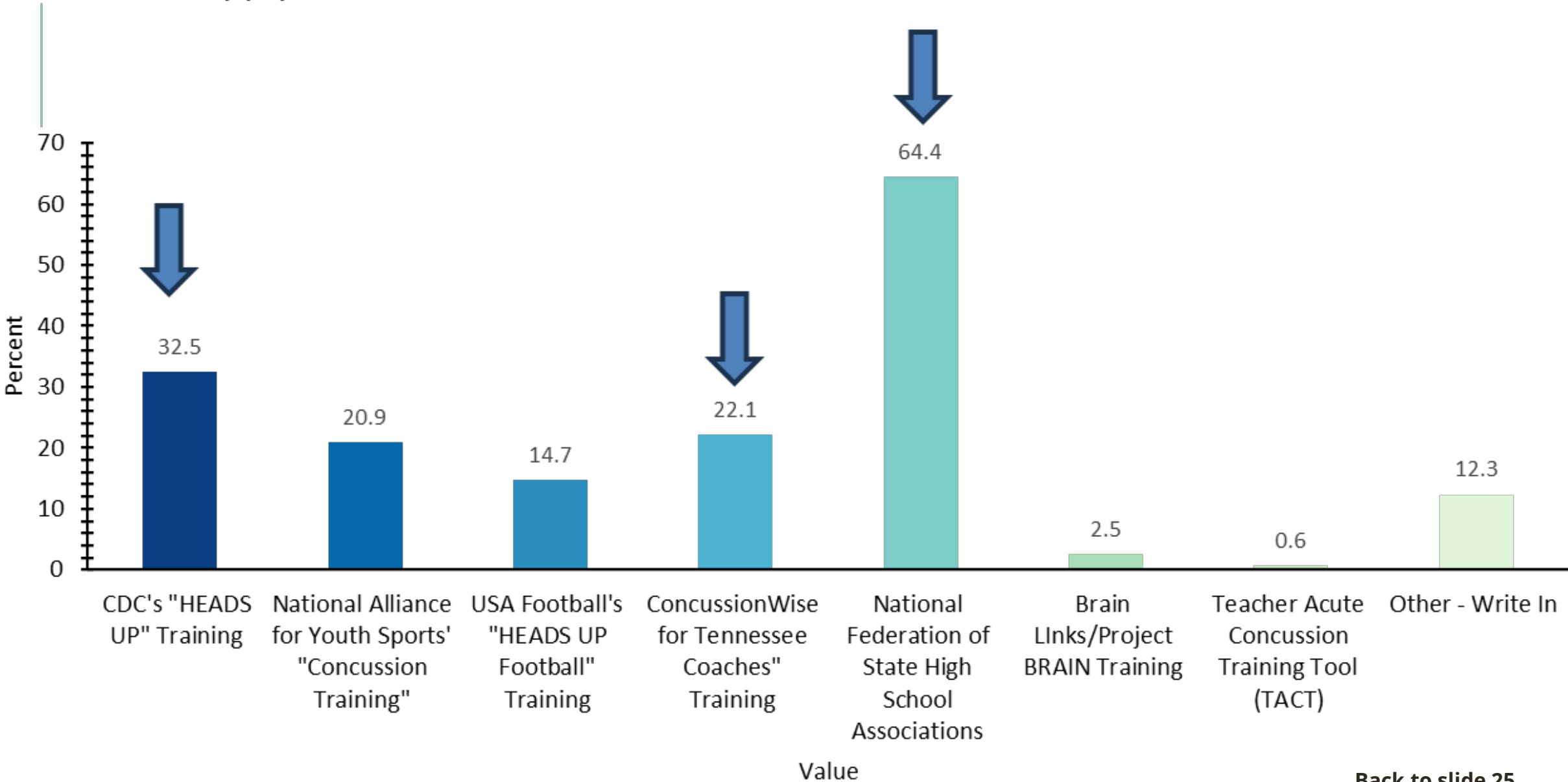


5. Have you completed any training on recognizing the signs and symptoms of a concussion?

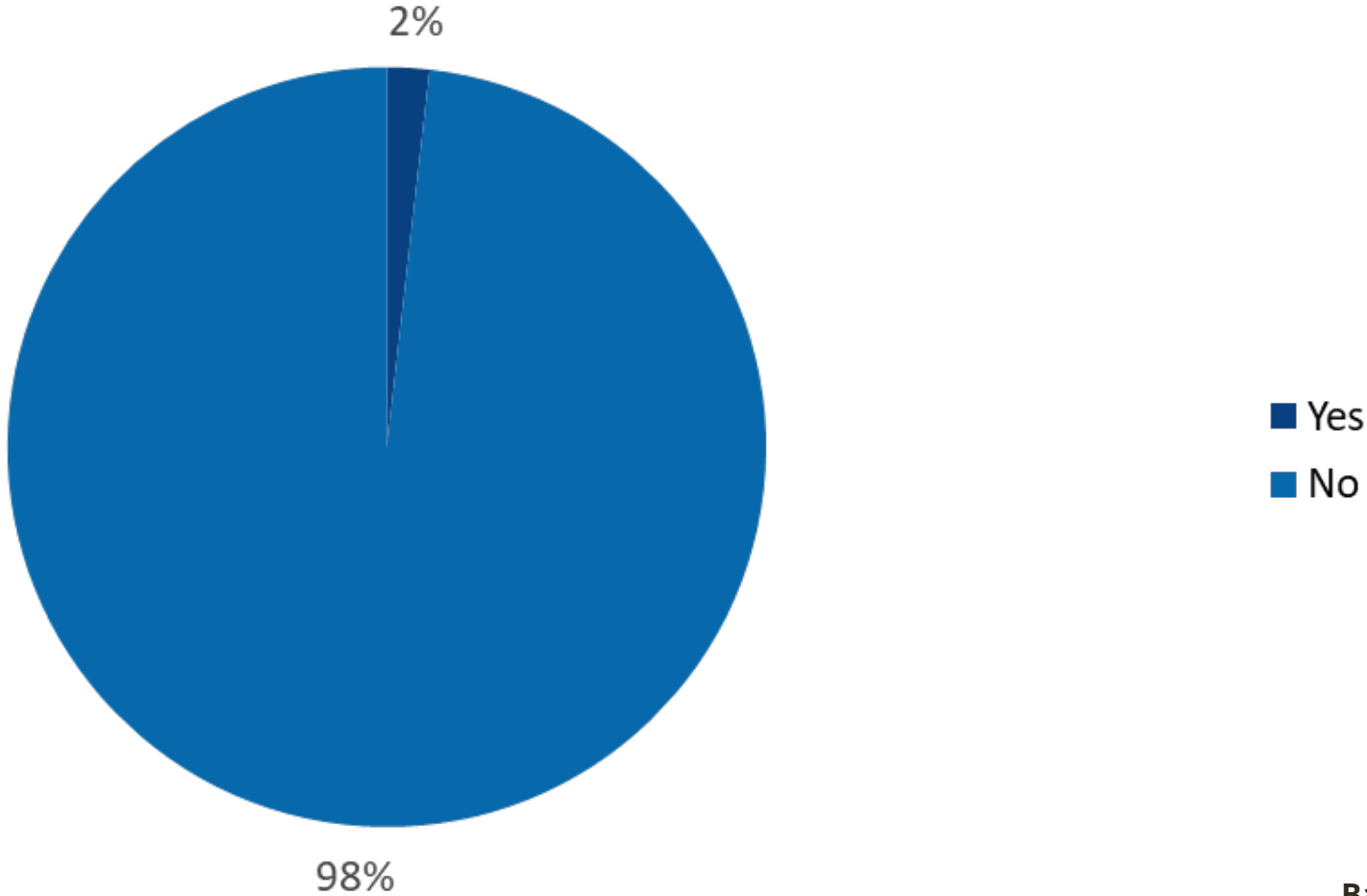


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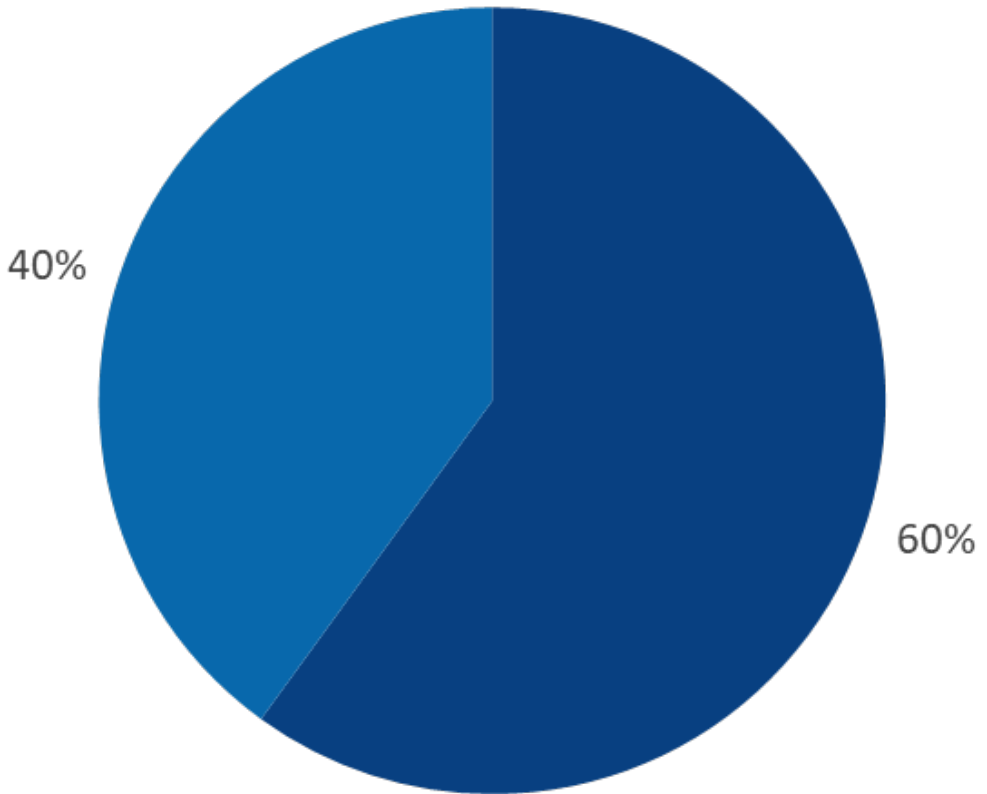
6. Which training(s) did you complete to recognize the signs and symptoms of a concussion?  
Check all that apply.



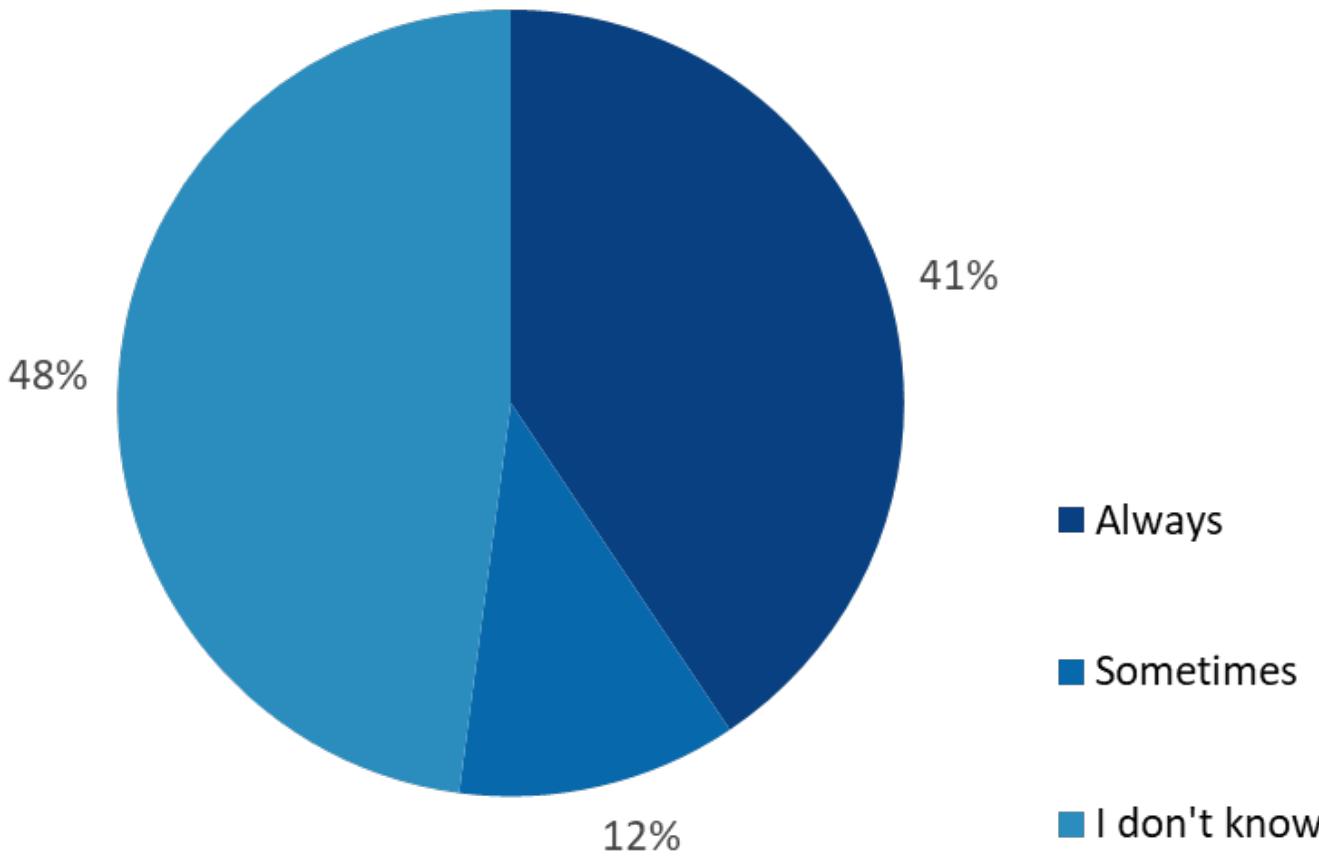
8. Do you have to have loss of consciousness to have a concussion?



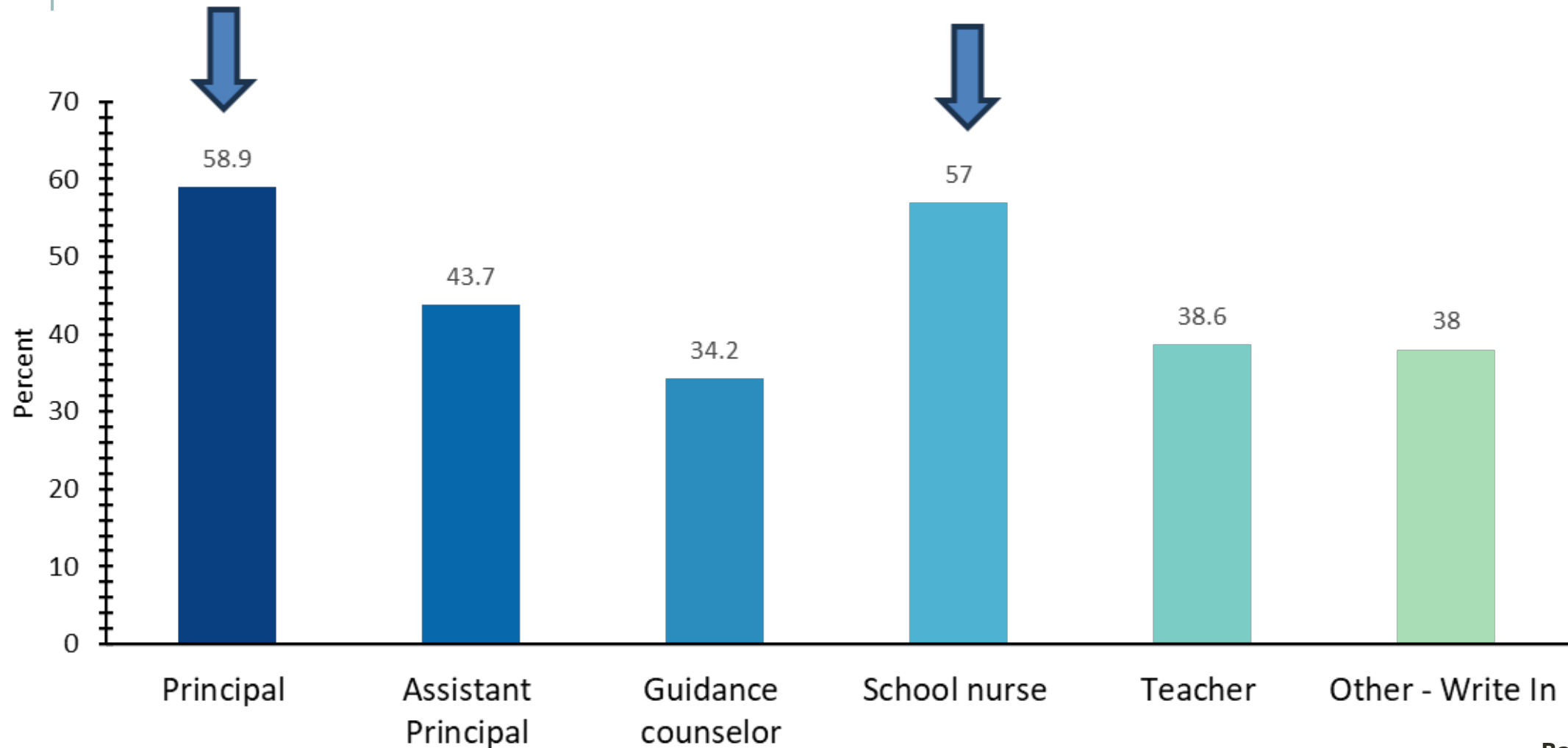
11. Are you aware of the Return to LEARN concept?



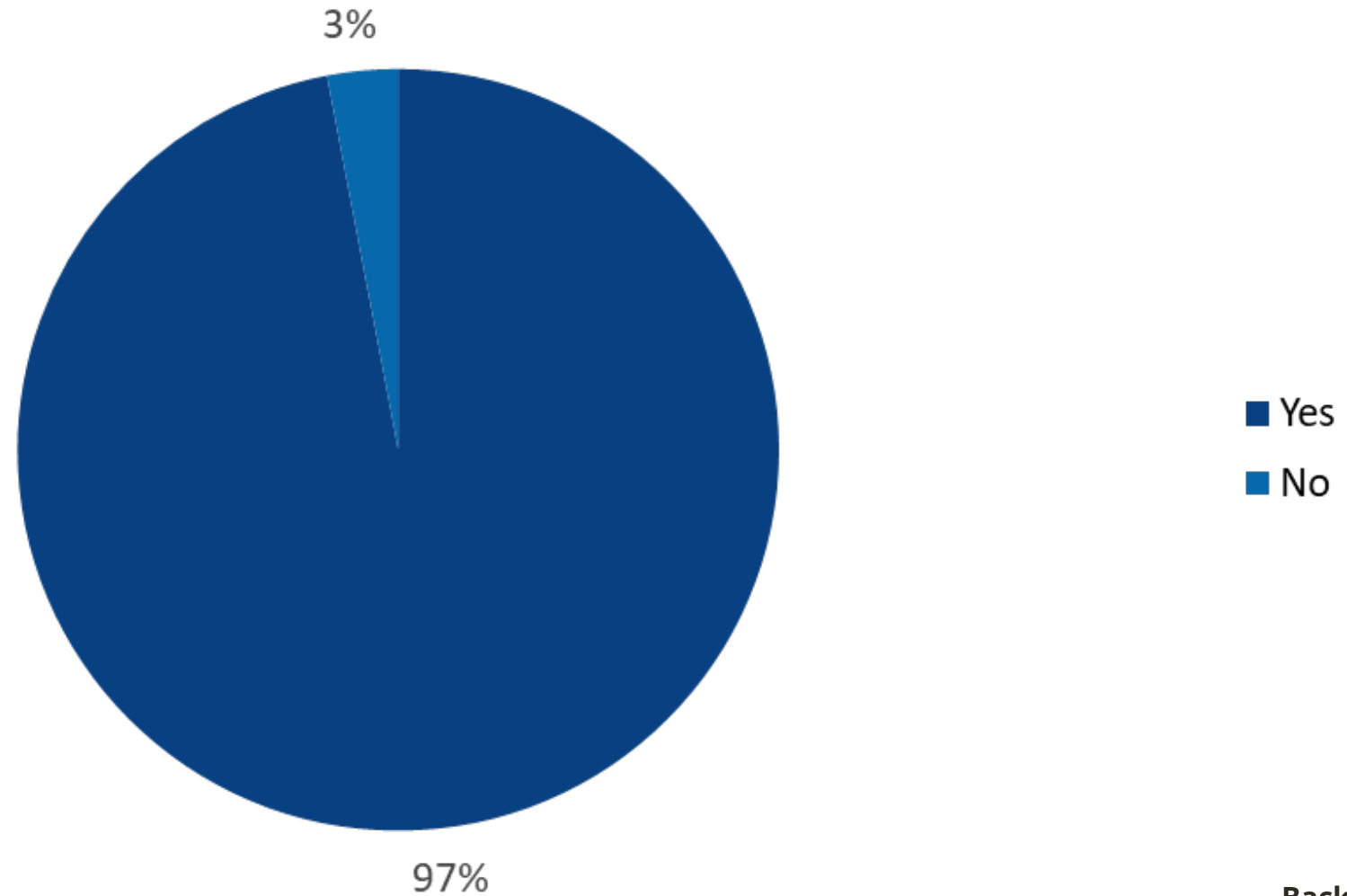
12. Referring to the Return To LEARN concept, to what extent does your organization implement Return to LEARN in classrooms?



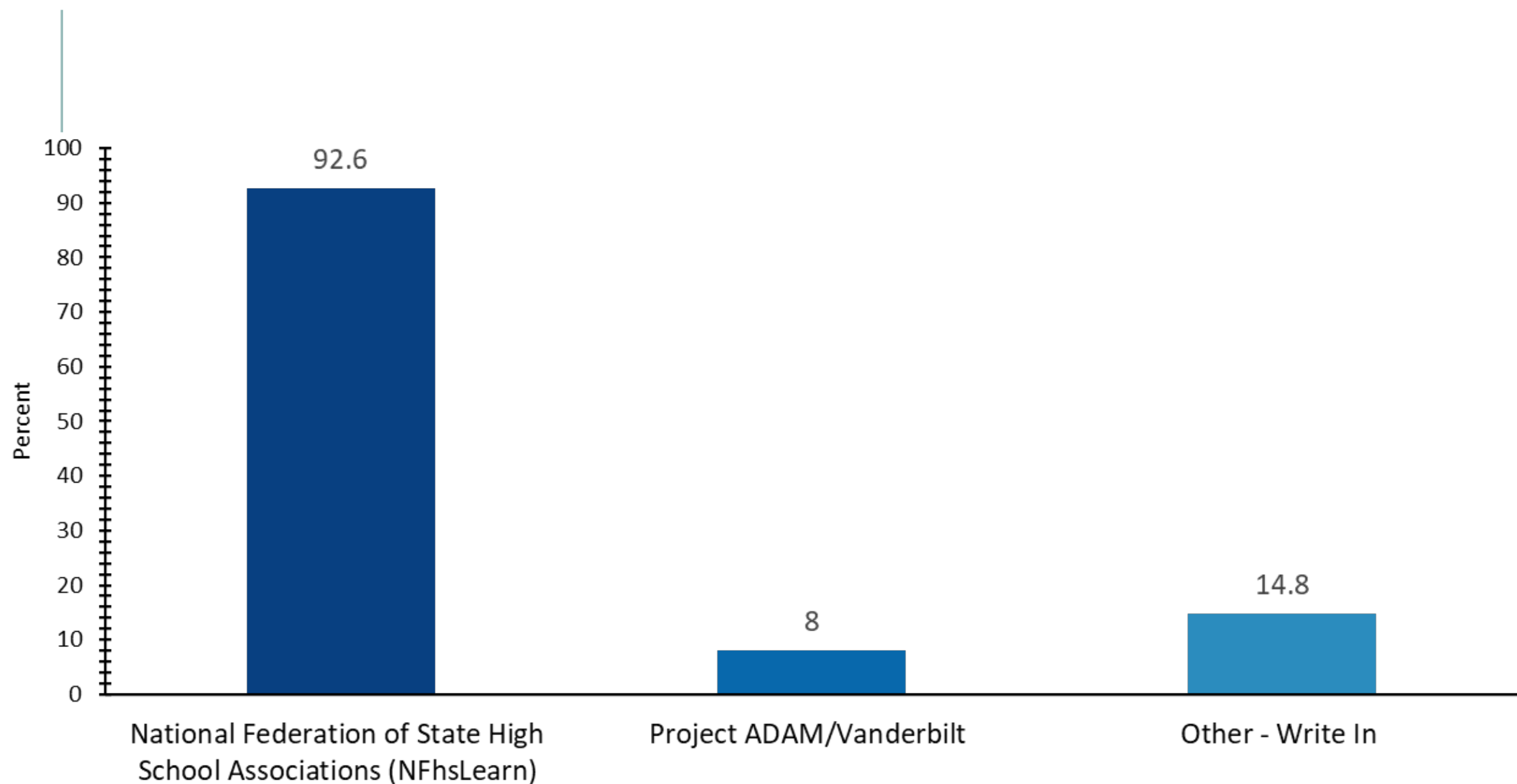
13. With whom would you connect or discuss Return to LEARN to ensure it is in place for your athlete? Check all that apply.



## 14. Have you completed any training on Sudden Cardiac Arrest?



15. Which Sudden Cardiac Arrest Training did you participate in? (Check all that apply)

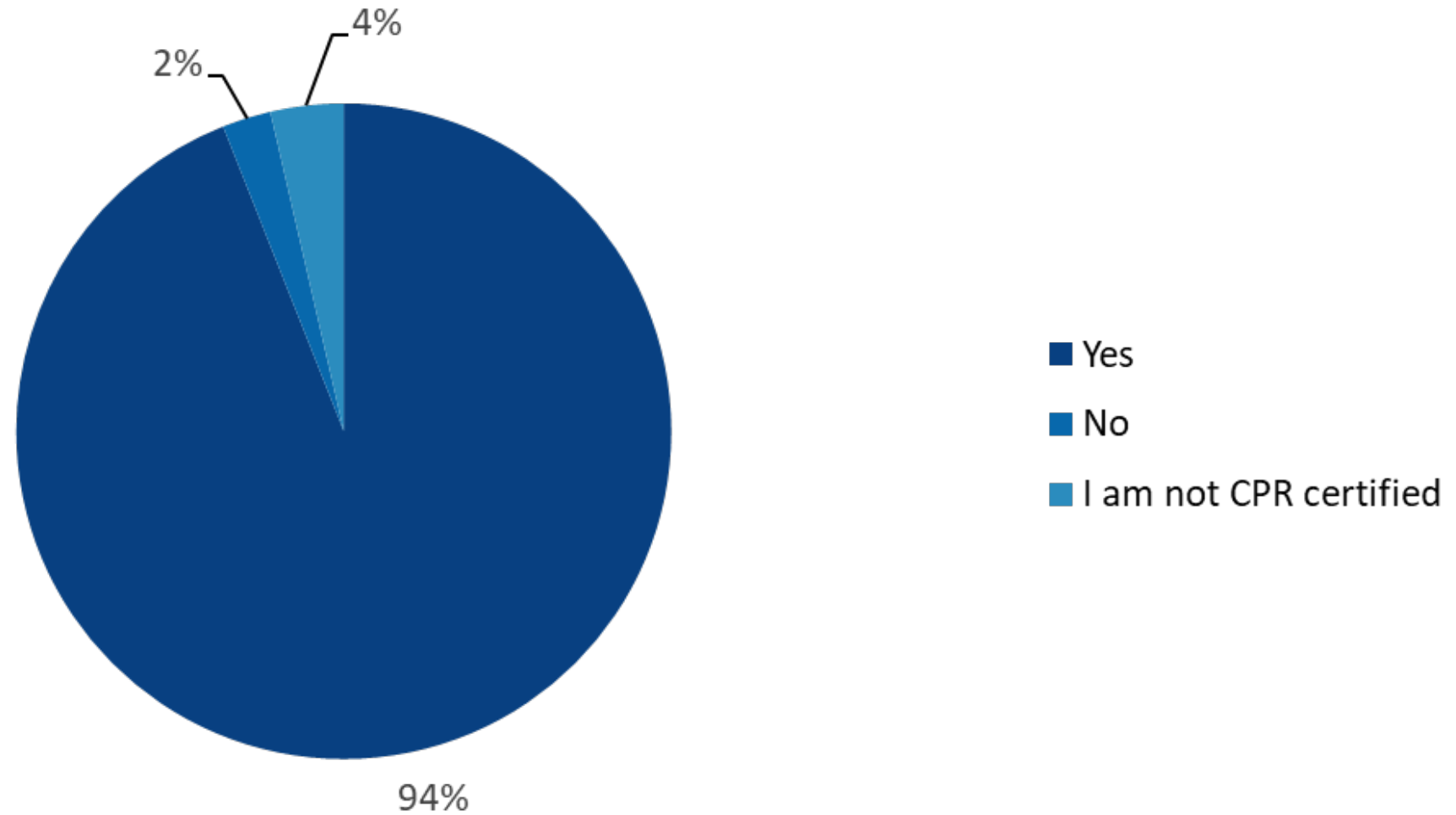




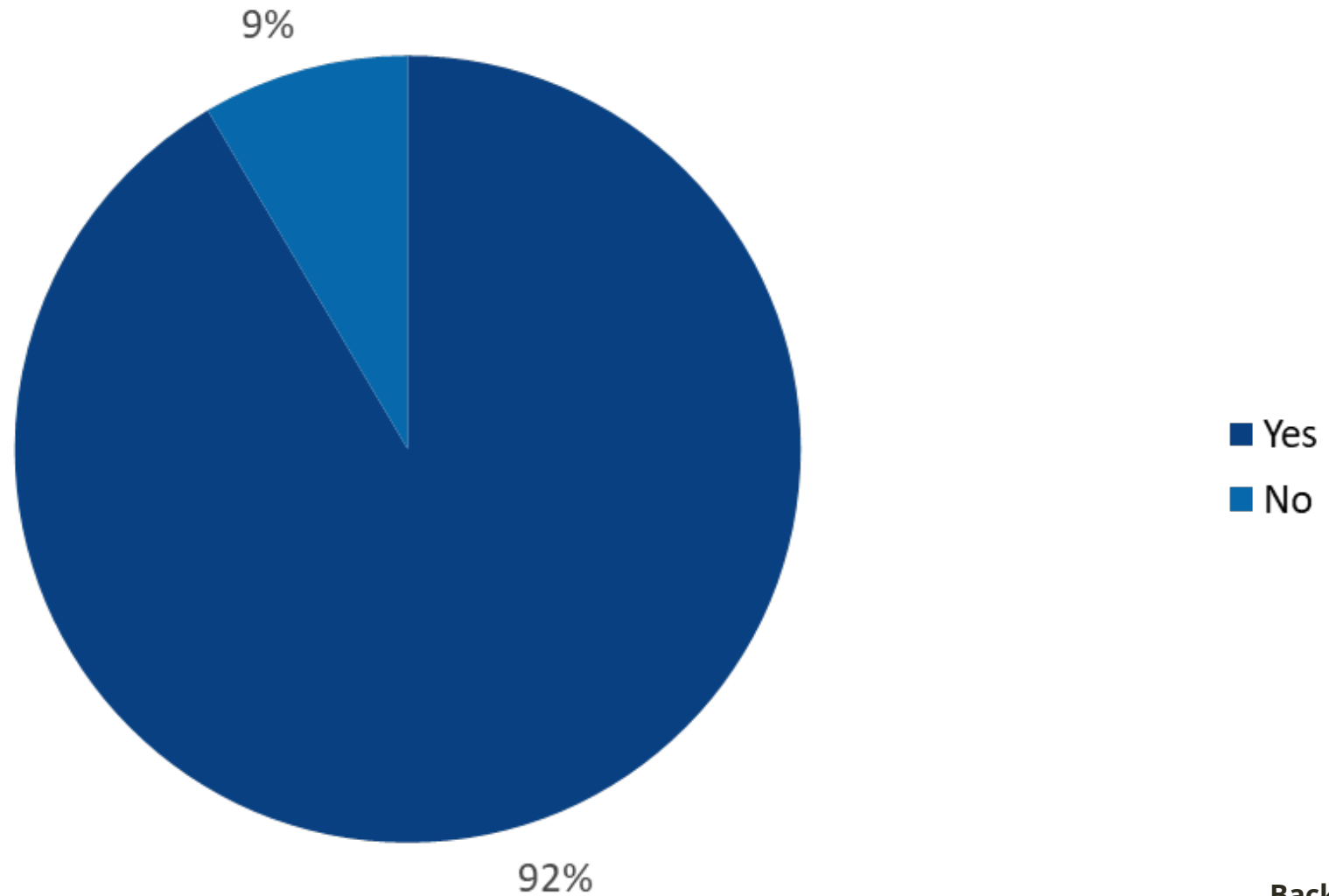
## 15. Which Sudden Cardiac Arrest Training did you participate in (Other)

- American Heart Association (5)
- District Training/School Training/System Sponsored (5)
- American Red Cross (4)
- CPR Training/CPR Certification (3)
- First Aid Training
- Athletic Trainer Education
- SET Team Training

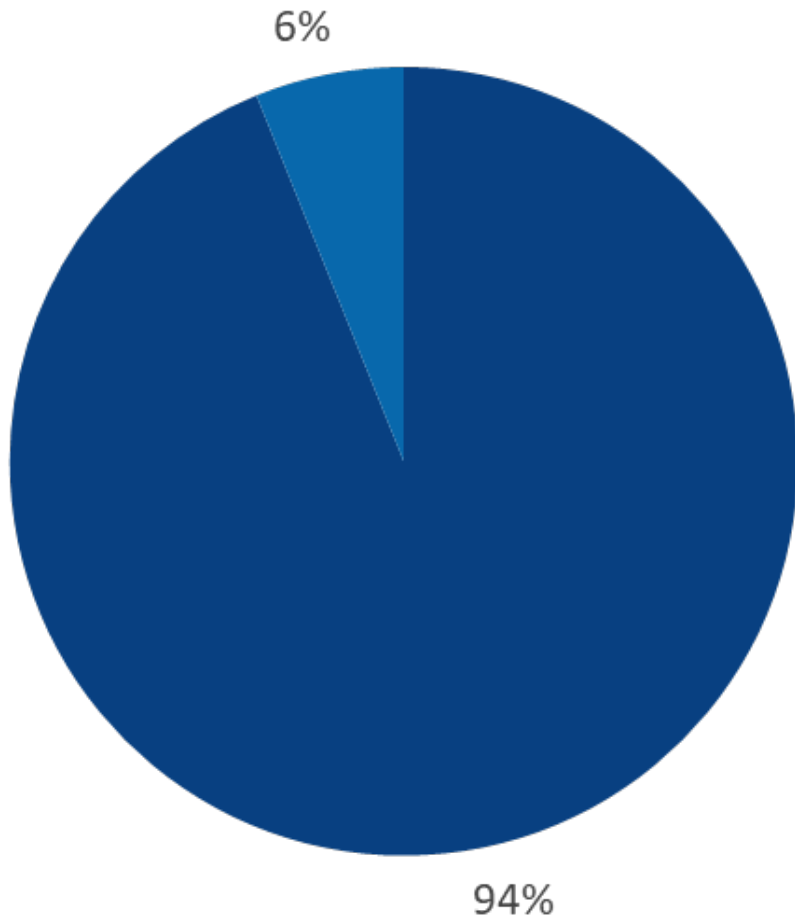
## 16. Did your CPR training include AED (Automated Defibrillator) training?



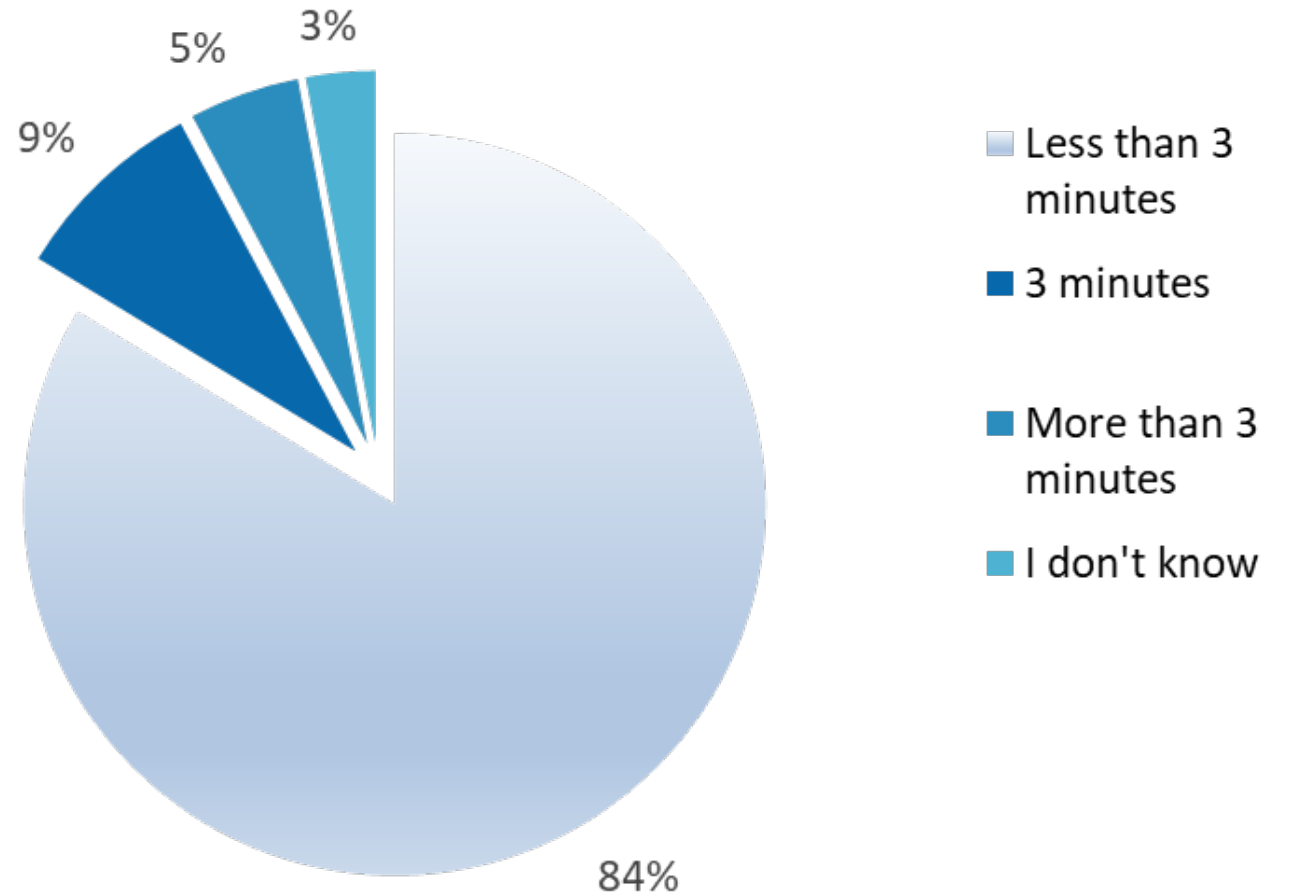
17. Is an AED accessible at all practices?



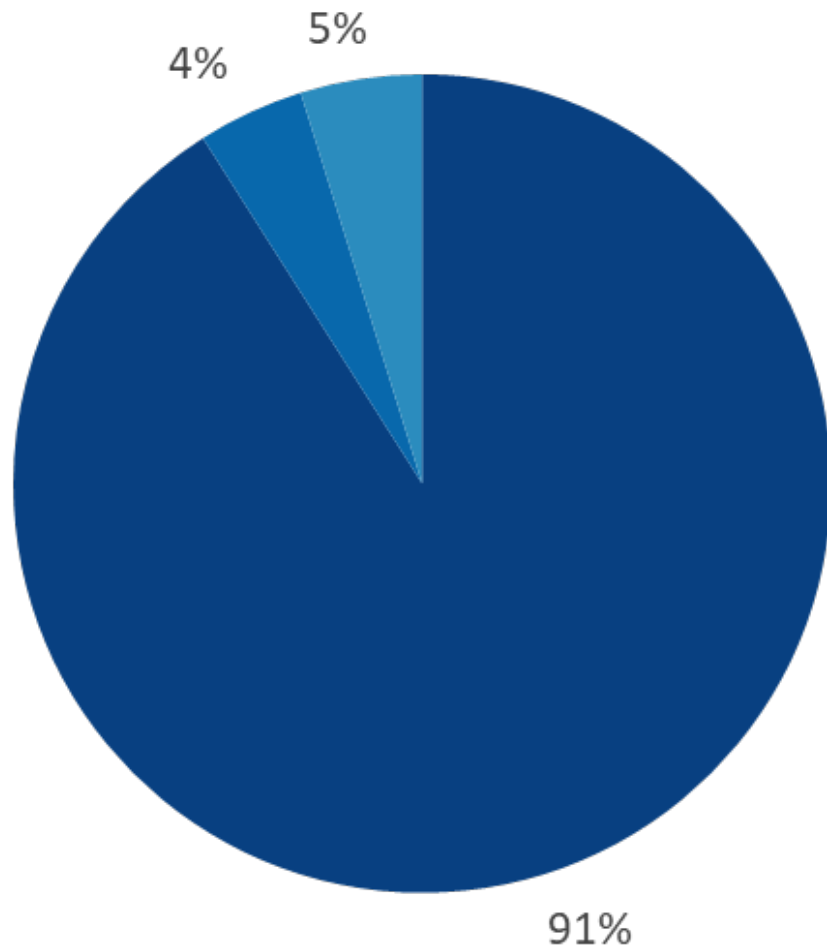
18. Is an AED accessible at  
all home games?



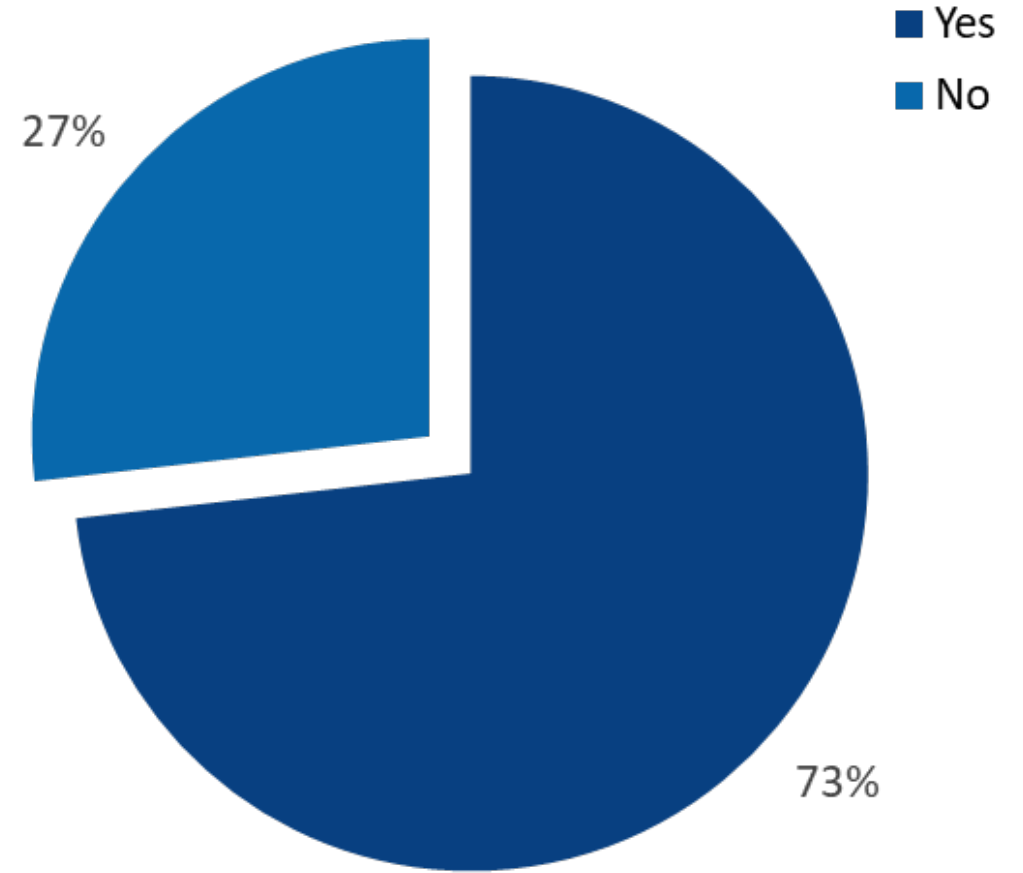
19. How long would it take you to reach an AED?



20. Does your team have an Emergency Action Plan?

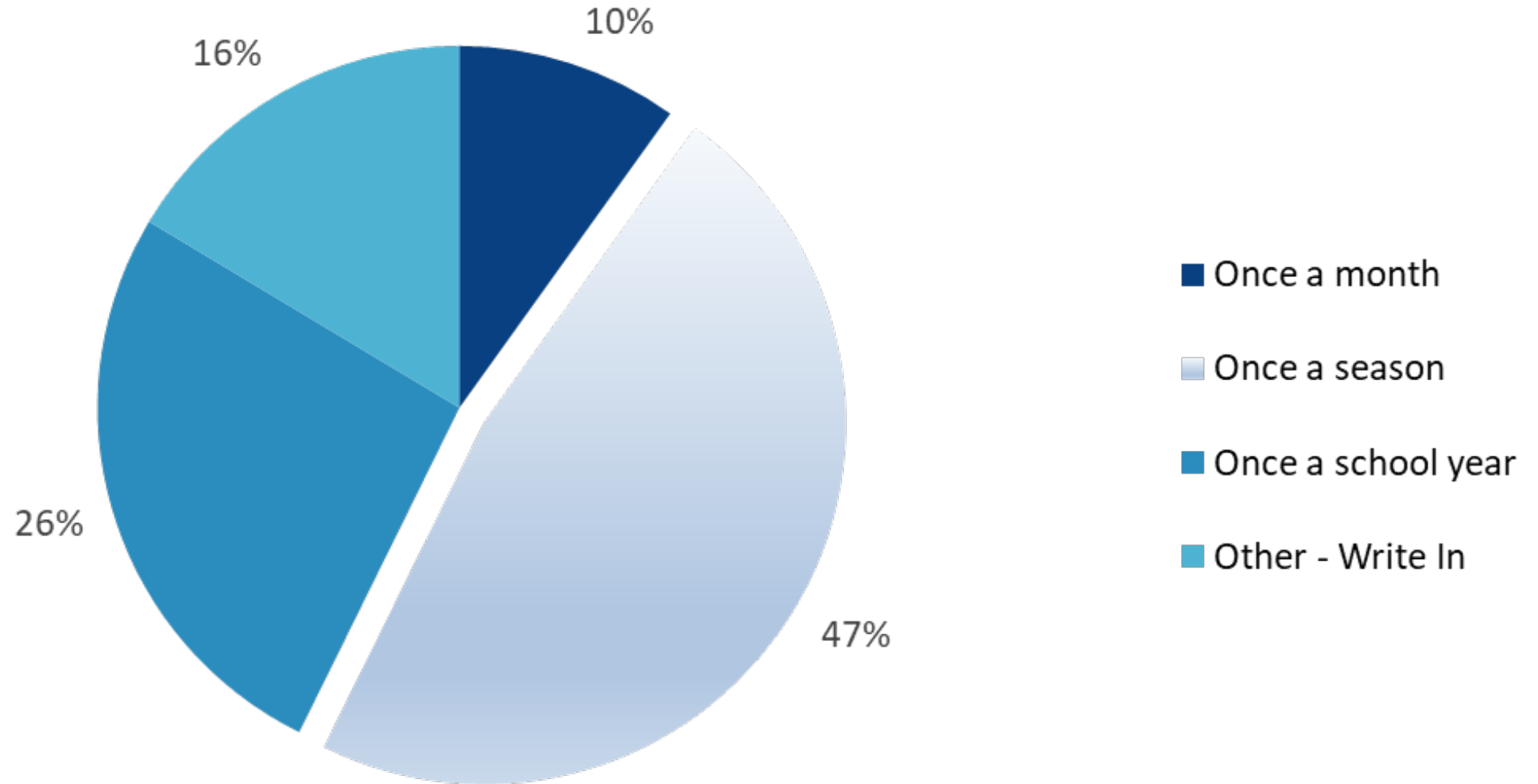


21. Do you **practice** your Emergency Action Plan?

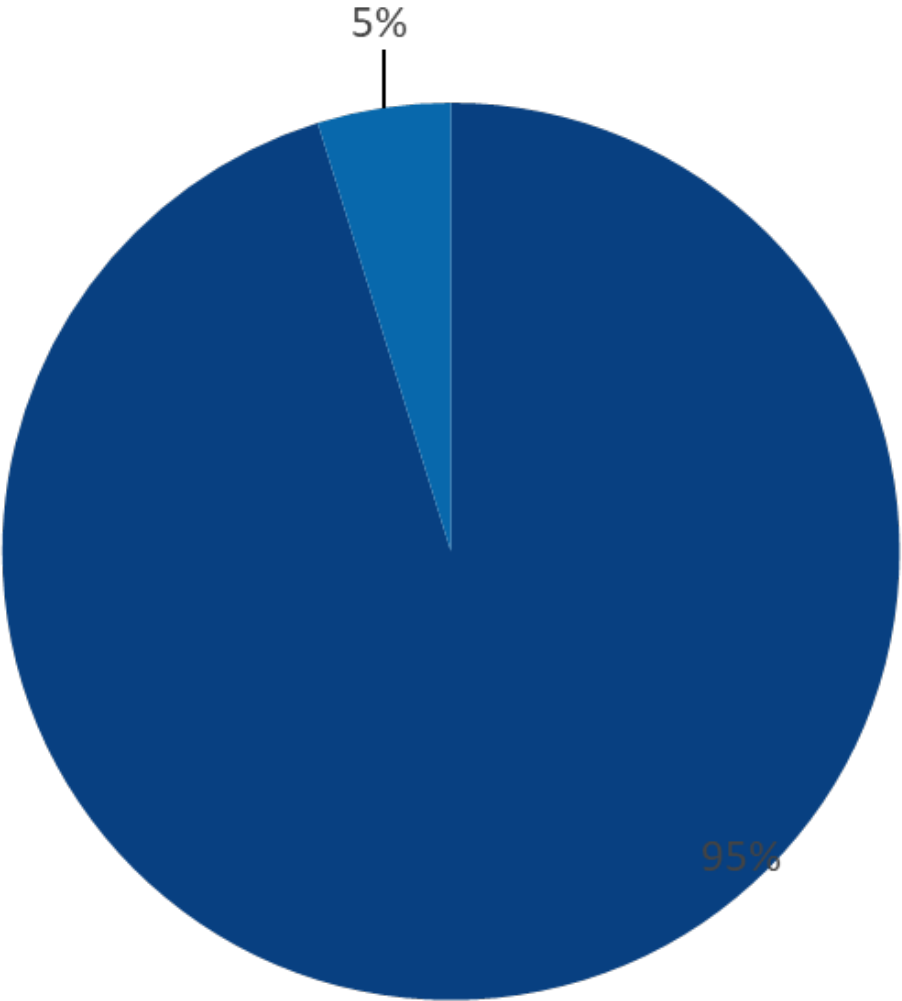


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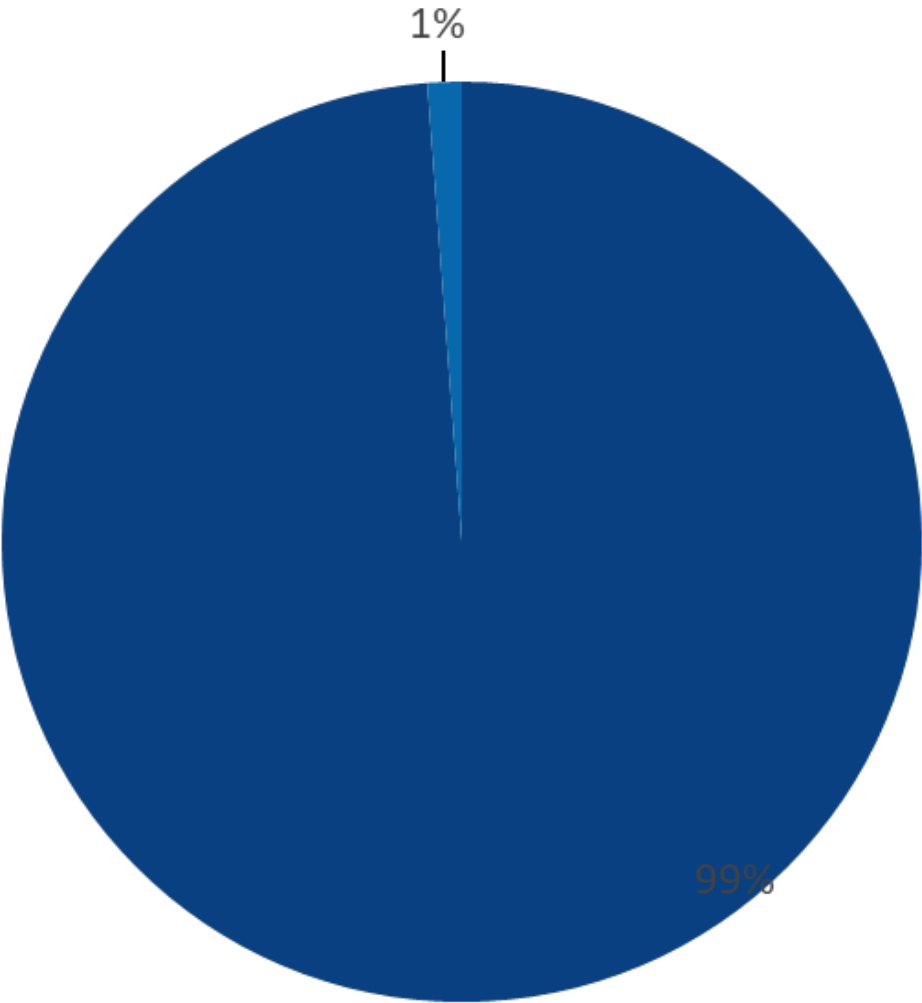
## 22. How often do you practice your Emergency Action Plan



23. Do you have a severe weather policy?



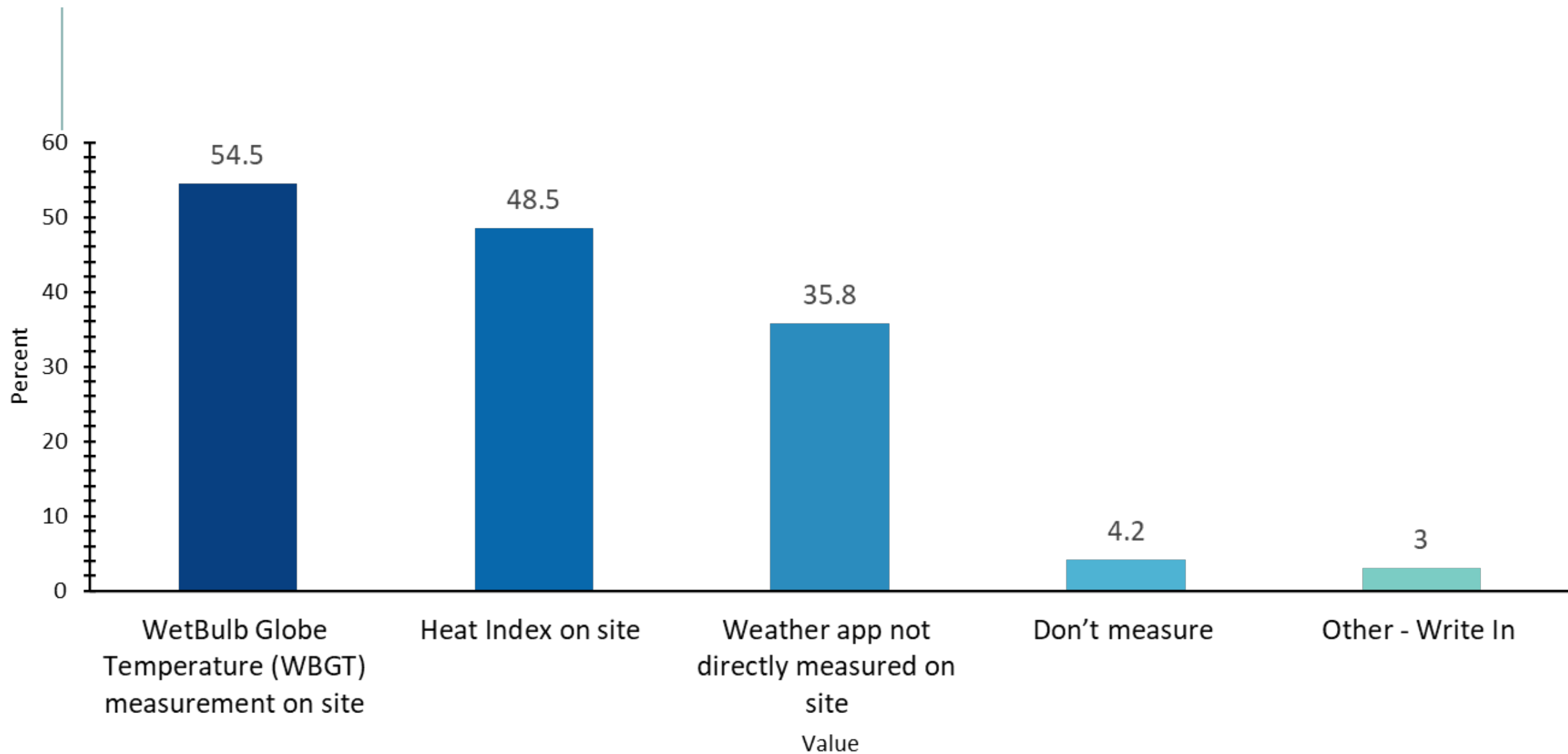
24. Are you aware of the state's acclimatization and heat policies?



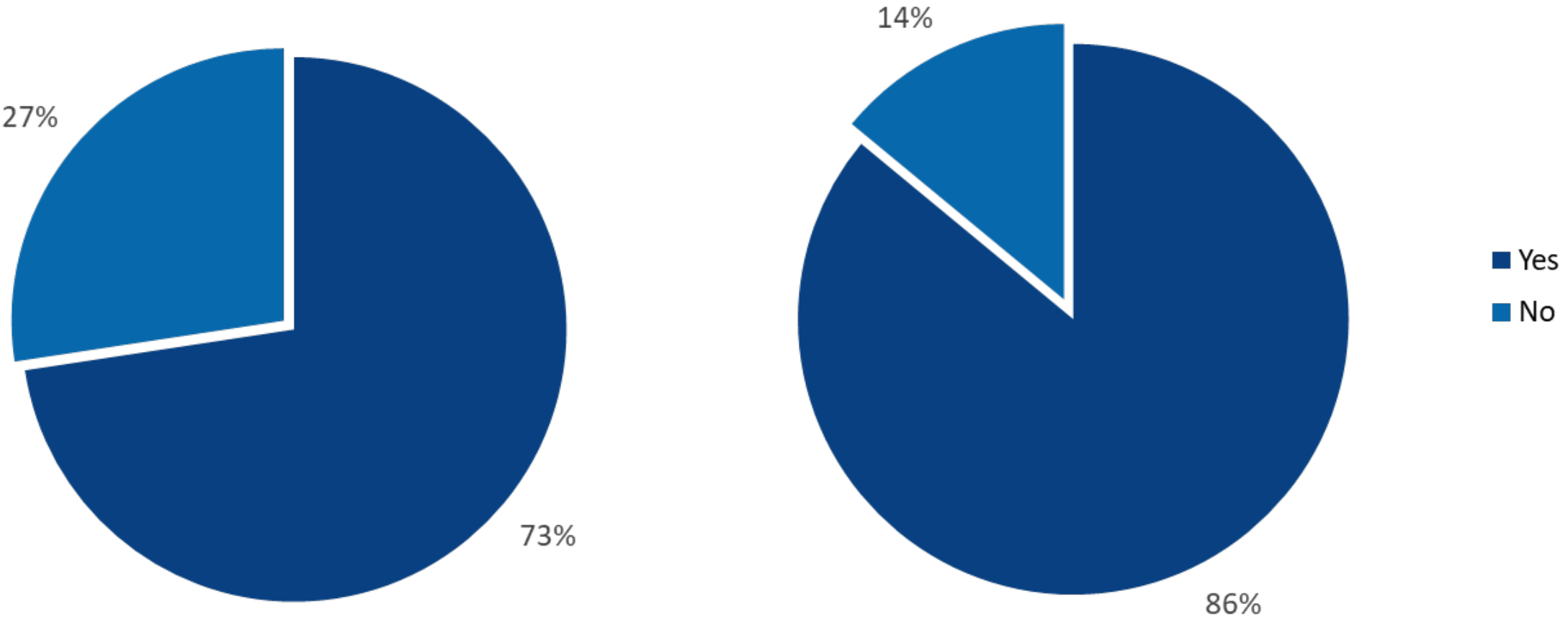
■ Yes  
■ No



25. What do you use to measure heat? Check all that apply.



26. Does your team have access to a Certified Athletic Trainer at practice vs games?



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