

**Perceived Risk/Knowledge vs. Actual (*Likert is scaled from 1-6 points; No – 0 & Yes – 1*)**

Q1 - **Risk.** How much do you agree or disagree with the following statement - I consider **myself** to be **at risk** of heat, when attending an outdoor Auburn University sporting event?

1. Strongly Disagree (*less perc risk*)
2. Disagree
3. Somewhat Disagree
4. Somewhat Agree
5. Agree
6. Strongly Agree (*more perc risk*)

Q2 - **Know.** How familiar are you with the groups of people who are **most** at risk to excessive heat [i.e. temperatures exceeding 90 degrees Fahrenheit]?

1. Very Unfamiliar (*less perc knowledge*)
2. Unfamiliar
3. Somewhat unfamiliar
4. Somewhat Familiar
5. Familiar
6. Very Familiar (*more perc knowledge*)

Q3 – **ActKnow.** Please indicate (Y/N) **if** the following group(s) are **at risk** to excessive heat [i.e. temperatures exceeding 90 degrees Fahrenheit] 4 – N, 4 – Y

- Older adults aged 65 and above - **Yes**
- Infants and young children - **Yes**
- People living in air-conditioned homes - **No**
- People who take certain medications - **Yes**
- Young to Middle-Aged adults without health conditions - **No**
- People acclimated to Hot Climates - **No**
- Healthy young adults who exercise indoors - **No**
- Athletes and outdoor workers - **Yes**

Q4 - **Risk**. How much do you agree or disagree with the following statement - I am **concerned** about the impacts of heat exposure to **my** overall health, when attending an outdoor Auburn University sporting event?

1. Strongly Disagree (*less perc risk*)
2. Disagree
3. Somewhat Disagree
4. Somewhat Agree
5. Agree
6. Strongly Agree (*more perc risk*)

Q5 - **Know**. How **familiar** are you with the symptoms and risk factors associated with heat-related illness [Heat Rash, Heat Cramps, Heat Exhaustion, and Heat Stroke]?

1. Very Unfamiliar (*less perc knowledge*)
2. Unfamiliar
3. Somewhat unfamiliar
4. Somewhat Familiar
5. Familiar
6. Very Familiar (*more perc knowledge*)

Q6 - **ActKnow**. Please indicate (Y/N) which of the following **are** symptoms or signs of heat-related illness [Heat Rash, Heat Cramps, Heat Exhaustion, and Heat Stroke] 4 – N, Y - 4

- Group of tiny, itchy bumps on your skin - **Yes**
- Sore throat - **No**
- Nausea or Vomiting - **Yes**
- Un-dilated pupils - **No**
- Loss of taste or smell - **No**
- Respiratory distress (coughing, difficulty breathing, worsened symptoms of asthma or COPD) - **Yes**
- Slurred speech - **Yes**
- Diarrhea - **No**

Q7 - **Risk**. How much do you agree or disagree with the following statement – I **follow recommended practices, which can help reduce** the risk of **heat illness** [Heat Rash,

*Heat Cramps, Heat Exhaustion, and Heat Stroke*], when attending an outdoor Auburn University sporting event?

1. Strongly Disagree (*less perc risk*)
2. Disagree
3. Somewhat Disagree
4. Somewhat Agree
5. Agree
6. Strongly Agree (*more perc risk*)

Q8 – **Know**. How familiar are you about practices which can help **reduce** the risk of heat illness [Heat Rash, Heat Cramps, Heat Exhaustion, and Heat Stroke]?

1. Very Unfamiliar (*less perc knowledge*)
2. Unfamiliar
3. Somewhat unfamiliar
4. Somewhat Familiar
5. Familiar
6. Very Familiar (*more perc knowledge*)

Q9 - **ActKnow**. Please indicate (Y/N) which of the following behaviors or practices **can** help **reduce** the risk of heat illness [Heat Rash, Heat Cramps, Heat Exhaustion, and Heat Stroke] 3 - N, 5 - Y

- Wearing dark-colored, heavy clothing - **No**
- Wearing loose, light-colored clothing - **Yes**
- Wear a cooling towel or personal fan - **Yes**
- Taking frequent breaks in shaded or cool areas - **Yes**
- Exercising outdoors during the hottest part of the day - **No**
- Consuming alcohol and sugary drinks for hydration - **No**
- Wear a hat, sunglasses, sunscreen - **Yes**
- Hydrate with water - **Yes**

QRobot. What is  $14 + 6 =$

-6. -6

22. 22

48. 48

20. 20

8. 8

Q10 – **Risk**. How much do you agree or disagree with the following statement – I **should** seek heat related and weather information to **reduce** my risk to heat, while attending an outdoor Auburn University sporting event.

1. Strongly Disagree (*less perc risk*)
2. Disagree
3. Somewhat Disagree
4. Somewhat Agree
5. Agree
6. Strongly Agree (*more perc risk*)

Q11 – **Know**. How much do you agree or disagree with the following statement - Most information about excessive heat [i.e. temperatures exceeding 90 degrees Fahrenheit] is **too technical** for me to understand. (***Reverse Coded***)

6. Strongly Disagree (*more perc knowledge*)
5. Disagree
4. Somewhat Disagree
3. Somewhat Agree
2. Agree
1. Strongly Agree (*less perc knowledge*)

Q12 - **ActKnow**. Please indicate (Y/N) **if** the following is a measure **used** to determine how **hot** it feels **outdoors**. 5 – N, 3 - Y

- Heat Index -**Yes**
- Wind Chill Index - **No**
- Wet Bulb Globe Temperature (WBGT) - **Yes**
- Air Quality Index (AQI) - **No**

- UV Index - **No**
- Palmer Drought Severity Index (PDSI) - **No**
- Soil Moisture Index (SMI) - **No**
- Apparent Temperature - **Yes**

**Behaviors (Scaled 1-6 points)**

Q13. Please indicate the level of which you take preventative measures, during an outdoor Auburn University sporting event, to combat the heat?

Normal (x1)	<ul style="list-style-type: none"> <li>• Purchase water or sports drink – 13_1</li> <li>• Reduce alcohol intake – 13_2</li> <li>• Encourage friends or family to hydrate – 13_4</li> <li>• Wear a hat and/or sunglasses – 13_6</li> <li>• Wear sunscreen – 13_7</li> <li>• Seek more shaded seating – 13_10</li> <li>• Find a location with a/c too cool down (ex: bathrooms) – 13_12</li> <li>• Check weather and/or temperature (phone app) – 13_15</li> </ul>
Abnormal (x2)	<ul style="list-style-type: none"> <li>• Bring in either a sealed, clear water bottle or an empty, clear plastic water bottle – 13_3</li> <li>• Wear longer clothes (pants, SPF long sleeve, etc.) – 13_5</li> <li>• Wear a cooling towel or personal fan – 13_8</li> <li>• Use an umbrella for shade – 13_9</li> <li>• Seek cooling stations, fans &amp; misters – 13_11</li> </ul>
Extreme (x3)	<ul style="list-style-type: none"> <li>• Avoid attending games, completely – 13_13</li> <li>• Avoid attending games during the hottest part of day (morning, afternoon) – 13_14</li> </ul>

### **Open-Ended**

Q14. On hot game days, how do you adjust your usual outdoor activities & behaviors during Auburn University sporting events?

Q15. Have you ever been directly impacted, due to heat, at an outdoor Auburn Sporting event?

Q16. Do you recall which home game(s) this experience occurred (ex: LSU football - 2018, Georgia football - 2023, Arkansas baseball - 2023)? Please put N/A if you cannot recall.

Q17. Can you provide details of behaviors (i.e. in sun for prolonged time, consumption of alcohol, etc.), which leadup to this experience of heat illness symptoms (ex: dizzy, nausea, fainting, etc.). As best as you can recollect?

Q18. Please add anything else (suggestions, comments, etc.) you would like to say, in regards to experiences with heat during outdoor Auburn gamedays, that you feel were not covered in the questionnaire & feel Campus Safety should know!

## **Demographics**

*Gender.* Select Gender

1. Male
2. Female
3. Prefer to self-describe
4. Prefer not to Disclose

*Age.* Type your age

*Race/Ethnicity.* What is your racial or ethnic background?

1. Asian
2. American Indian or Alaskan Native
3. Black or African American
4. Hispanic or Latino or Spanish Origin of any race
5. Native Hawaiian or Other Pacific Islander
6. White
7. Prefer to self-describe
8. Prefer not to disclose

*Health.* Do you have any of the following health conditions?

1. Impaired Mobility
2. Diabetes
3. Heart Problems
4. Respiratory issues (such as asthma, COPD, or emphysema)
5. Prefer not to disclose
6. None listed

*Health2.* Have you ever experienced any of the following physical health condition(s) due to heat, at an outdoor Auburn University sporting event? (Please select all that apply)

1. Discomfort related to heat
2. Heat cramps (muscle spasms due to a loss of a large amount of salt and water through exercise)
3. Heat exhaustion (can include heavy sweating and a rapid pulse due to overheating)
4. Heat stroke (results in a body temperature greater than 104 °F and confusion)
5. Fainting or dizziness
6. Respiratory distress (such as irritation of the airways, coughing, difficulty breathing, worsened symptoms of asthma or chronic obstructive pulmonary disease, or lower respiratory infections)
7. I have not experienced any of these conditions or illnesses

*Role.* What is your role at Auburn University?

1. Undergraduate Student
2. Graduate Student
3. Alumni
4. Faculty
5. Staff
6. Stadium Personnel (i.e. Concessions, Athletics, Campus Safety/EM)
7. Fan (General)
8. Other

*Education Level.* What is the highest degree or level of education you have completed to date?

1. High School Diploma
2. Associates
3. Bachelor's
4. Professional (MBA, Law)



5. Masters
6. Doctoral
7. Prefer not to disclose

*Attendance.* How long have you been attending Auburn University sporting events [football, A-Day, baseball, soccer, etc.], in approx. years?

*Attendance2.* What is/are the outdoor sports(s) that you attend most regularly?

1. Baseball
2. Softball
3. Football
4. Track & Field, XC
5. Tennis (M) or (W)
6. Golf (M) or (W)
7. Equestrian
8. Soccer (W)
9. Other

## **Constructs (Themes)**

Perceived Knowledge: (Q2, Q5, Q8, Q11) – How much the individual believes they know about extreme heat information – Likert 1 to 6 – Total Score Possible: 6 per question **(24 max)**

Actual Knowledge Score: (Q3, Q6, Q9, Q12) - How well the individual scored on heat related information – Knowledge Inventory - Total Score Possible: 8 per question **(32 max)**

Perceived Risk Score: (Q1, Q4, Q7, Q10) – How at risk an individual feels they are when attending Auburn sporting events - Likert 1 to 6 – Total Score Possible: 6 per question **(24 max)**

Actual Risk Score: How at risk the individual actually is based on their demographics and other construct scores – Six factors – Total Score Possible: **6**

Gender – Female (0); Male (1) *[Males are more at risk than females]*

Age – Below the age of 65 (0); Above the age of 65 (1) *[Elderly are more at risk]*

Race/Ethnicity – Non-Black/Hispanic or Latino/American Indian or Alaskan Native (0); Black/Hispanic or Latino/American Indian or Alaskan Native (1) *[Non-white ethnicities are more at risk]*

Health1 – No options selected (0); Any health option selected (1) *[Those with health issues are more at risk]*

Knowledge Score - Above 25% correct (0); Below 25% correct (1) *[Those with more knowledge/understanding of heat information should have reduced risk]*

Behaviors Score – More than 25% of behaviors taken (0); Less than 25% of behaviors taken (1) *[Those that take behaviors to reduce their risk should have reduced risk]*

(Practicing) Behaviors Score: (Q13) – How likely an individual is to conduct a behavior which can reduce the risk of heat related illness - Likert 1 to 6 - Total Score Possible: 6 per behavior w/ corresponding weights (x1 Normal - 8, x2 Abnormal - 5, x3 Extreme - 2) **(144 max)**

Demographics: Dummy coded variables 0 or 1 for each choice in demographic questions

**RQ1. Does being of a different demographic, or group [score], predict an individual's perceived risk?**

Independent	Dependent	Variable Type	Analysis
Knowledge Score (Q3, Q6, Q9, Q12) Perceived Knowledge Score (Q2, Q5, Q8, Q11) Behavior Score (Q13) Gender Age Race/Ethnicity Health1 Health2 Role at Auburn Education Level Attendance1	Perceived Risk Score (Q1, Q4, Q7, Q10)	Discrete  Dummy Coded for Categorical data	Regression

**RQ1a. How does perceived risk compare to actual risk?**

Independent	Dependent	Variable Type	Analysis
Perceived Risk Score (Q1, Q4, Q7, Q10)	Actual Risk Score = [Gender + Age + Race/Ethnicity + Health1 + Knowledge Score + Behavior Score]	Group Means	Paired T-test ANOVA?

**RQ2. Does being of a different demographic, or group [score], predict an individual's perceived knowledge?**

Independent	Dependent	Variable Type	Analysis
Perceived Risk Score (Q1, Q4, Q7, Q10) Behavior Score (Q13) Gender Age Race/Ethnicity Health1 Health2 Role at Auburn Education Level Attendance1	Perceived Knowledge Score (Q2, Q5, Q8, Q11)	Discrete  Dummy Coded for Categorical data	Regression

**RQ2a. How does perceived knowledge compare to actual knowledge?**

Independent	Dependent	Variable Type	Analysis
Perceived Knowledge Score (Q2, Q5, Q8, Q11)	Actual Knowledge Score (Q3, Q6, Q9, Q12)	Group Means	Paired T-test ANOVA?

**RQ3. Does being of a different demographic, or group [score], predict an individual's likelihood of taking preventative measures (behaviors)?**

Independent	Dependent	Variable Type	Analysis
Knowledge Score (Q3, Q6, Q9, Q12) Perceived Knowledge Score (Q2, Q5, Q8, Q11) Perceived Risk Score (Q1, Q4, Q7, Q10) Gender Age Race/Ethnicity Health1 Health2 Role at Auburn Education Level Attendance1	Behavior Score (Q13)	Discrete  Dummy Coded for Categorical data	Regression

**RQ4. What are people's experiences and attitudes during outdoor Auburn University sporting events?**

Question Number	Question	Variable Type	Analysis
Q14	On hot game days, how do you adjust your <u>usual</u> outdoor activities & behaviors during Auburn University sporting events?	Open-Ended	Thematic Coding
Q15	Have you ever been directly impacted, due to heat, at an outdoor Auburn Sporting event?	Yes/No	
Q16	Do you recall which home game(s) this experience occurred (ex: LSU football - 2018, Georgia football - 2023, Arkansas baseball - 2023)? Please put N/A if you cannot recall.	Open-Ended Categorical (Grouping)	
Q17	Can you provide details of behaviors (i.e. in sun for prolonged time, consumption of alcohol, etc.), which leadup to this experience of heat illness symptoms (ex: dizzy, nausea, fainting, etc.). As best as you can recollect?	Open-Ended	Thematic Coding

Q18	Please add anything else (suggestions, comments, etc.) you would like to say, in regards to experiences with heat during outdoor Auburn gamedays, that you feel were not covered in the questionnaire & feel Campus Safety should know!	Open-Ended	Thematic Coding
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**Demographics** – Will be dummy coded for each option

*Gender.* Select Gender

- Male (0)
- Female (1)
- Prefer to self-describe
- Prefer not to Disclose

*Age.* Type your age

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- Asian
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- Track & Field, XC
- Tennis (M) or (W)
- Golf (M) or (W)
- Equestrian
- Other