PURPOSE

1. Determine the current level of knowledge that NCAA Strength and Conditioning Coaches (SCCs) possess regarding exertional heat stroke (EHS) prevention and recognition.

2. Determine if SCC certification type had any effect on this knowledge.

3. Gain additionally information about SCC’s attitudes and current practices in dealing with prevention and recognition of EHS.

METHODS

Exertional heat stroke (EHS) is preventable and the strength and conditioning coach (SCC) may be held responsible if an EHS death occurs as a result of inappropriate exercise prescription or program monitoring. A total of 1305 Strength and Conditioning coaches (SCCs) from across the country were surveyed via an online questionnaire. Participants were grouped according to certifications earned: CSCS only (CSCS) = 116, SCCC only (SCCC) = 46, Combined CSCS/SCCC (CSCS/SCCC) = 62, and No certification (NC) = 95. The General Linear Model was used to test for interactions among certification, division, experience, and education. Statistical Analyses: Descriptive statistics were generated with SPSS frequencies for demographic questions. Frequencies for number of correct responses in each of the content areas were calculated. Differences between groups found (F (3, 315) = 10.455, p = .000)

RESULTS

- Differences between groups found (13, 315) = 10.376, p = .000)
- CSCS/SCCC scored significantly higher than NC group (p = .000) and SCCS group found (p = .000)
- No differences between CSCS and SCCC group found (p = .614)
- Differences between groups found (F (3, 315) = 5.893, p = .001)
- Differences between groups found (F (3, 315) = 3.012, p = .031)

- Differences between groups found (F (3, 315) = 0.931, p = .427)
- Differences between groups found (F (3, 315) = 0.036, p = .960)
- Differences between groups were considered for the analysis
- No differences between groups were considered for the analysis
- No differences between groups were considered for the analysis
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Acclimatization, WBGT & Return to Play Practices

- 23% of 340 SCCs reported use of WBGT
- No SCCs reported use of WBGT
- No SCCs reported use of WBGT
- No SCCs reported use of WBGT
- No SCCs reported use of WBGT

SUMMARY & CONCLUSIONS

- SCCs demonstrated-level of knowledge on EHS is low (60% correct answers)
- Coaches that have earned the CSCS certification appeared to have a greater level of knowledge as related to the total score than each individual construct than SCCs without any certification
- Coaches with the CSCS certification or both CSCS and SCCC certifications performed significantly better on total score than coaches holding SCCC alone.
- Coaches appeared to be unable to identify that highly motivated or overzealous athletes, that are overweight (BMI ≥ 30) or with a high body fat percentage, and athletes with a current illness or fever were at an increased risk for EHS.
- Coaches that held the CSCS certification or both the CSCS/SCCC certification did not score significantly higher than the IRF group than those that did not have an SCC certification.
- Coaches that held both SCC certifications did not score significantly higher than those that did not have any SCC certification.
- EHS concepts where knowledge appeared to be low included: WBGT & Return to Play Practices.
- Although 88% of SCCs reported following an acclimatization period for athletes, the methods reported were inconsistent between the SCCs.

REFERENCES


