Analysis of heat illness policies and guidelines published by sports organisations in Victoria, Australia

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Background

Heat illness risk
- Gradual increase in annual mean temperature in Australia\(^1\)
- Exertional heat illnesses (EHI) are a major public health concern

Sport participants
- EHI: a significant cause of morbidity and mortality
- Limit participation

Safety policies and guidelines
- Sport governing bodies owe a duty of care to protect athletes
- Publish safety policies and guidelines to prevent injuries and illnesses

- Large number of resources for safety promotion, but often overlap in their focus
- Variability in the quality of EHI preventive recommendations\(^5\)

\(^1\) Meteorology Bo. Special climate statement 48., 2014; \(^2\) Finch and Boufous., 2008; \(^3\) Driscoll et al., 2008; \(^4\) Bekker and Finch., 2016; \(^5\) Larsen et al., 2007
Aims

EHI related policies and guidelines published by peak sports organisations in Victoria, Australia

Document analysis

Content analysis

Research questions

✓ What type of documents exists?
✓ What information they deliver?
✓ Is this information in line with current best practice recommendations?
Method – Document Analysis

1. Document search (21 sports)

   - Strategy 1 - Systematic search within sports organisation website
   - Strategy 2 - Custom search within sports organisation website
   - Strategy 3 - Google search using search terms and synonyms

2. Document categorisation

   - Type of document (e.g. heat policy, match rules)
   - Year of publication
   - Referencing to SMA resources

Bowen., 2009.; Beat the heat.; Hot weather guidelines; UV exposure and heat illness guide
3. Summarise current best practice recommendations

(Casa et al., 2015; Racinais et al., 2015)

4. Extract and summarise information in the selected EHI documents

(under five main-topic and sub-topic areas)

- Background knowledge
- Risk factors
- Preventive recommendations
- Event organisation
- Emergency measures

5. Content analysis against current best practice recommendations

(graded under four categories)

- In line with current best practice recommendations
- Addressed, in part, but needing review
- Not in line with current recommendations
- Not addressed

Bowen., 2009
Results – Document Analysis

- Published before 2011 = 12 (57%)
- Referenced to SMA guidelines = 11 (44%)
- Total documents = 25
- Range = 0-3 documents per sport
- No documents identified = 5 sports

Number of documents identified in each sport:

- Number of documents published in each year:
  - Number of documents: 1, 0, 0, 3, 4, 3, 3, 3, 3, 3, 3, 3, 3
# Results – Content Analysis

## Grading against current best practice recommendations

| Main-topic                  | Sub-topic                | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
|-----------------------------|--------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| **Background knowledge**    | EHI Definition & categorisation | X | X | X | X | X | X | X | X | X | 80% | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
|                            | EHI symptoms and signs   | X | X | X | X | X | X | X | X | X | 72% | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| **Risk factors**            | Climatic risks           | X | X | X | X | X | X | X | X | X | 48% | 84% | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
|                            | Intrinsic risks          | X | X | X | X | X | X | X | X | X | 76% | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
|                            | Extrinsic risks          | X | X | X | X | X | X | X | X | X | 76% | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| **Preventive recommendations** | Heat acclimatisation     | X | X | X | X | X | X | X | X | X | 80% | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
|                            | Cooling strategies       | X | X | X | X | X | X | X | X | X | 80% | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
|                            | Other preventive measures | X | X | X | X | X | X | X | X | X | 80% | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| **Event organisation**      | Event modification strategies | X | X | X | X | X | X | X | X | X | 80% | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
|                            | Event cancellation strategies | X | X | X | X | X | X | X | X | X | 80% | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| **Emergency measures**      | First aid and treatment  | X | X | X | X | X | X | X | X | X | 88% | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
|                            | First aid and treatment  | X | X | X | X | X | X | X | X | X | 60% | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

- **In line with current best practice recommendations**
- **Addressed, in part, but needing review**
- **Not in line with current recommendations**
- **Not addressed**
Summary

Outcome
✓ Highlighted the gaps and limitations in the existing EHI documents

• Most documents mainly focused on:
  - Climatic factors as major risks
  - Importance of hydration as a preventive measure
  - Event modification and cancellation strategies to mitigate EHI

• Only a few documents were comprehensive enough to address all aspects

Conclusion
✓ Considerable variation in the content of the documents, and quality of information

Recommendations
✓ Suggest revise and upgrade the current EHI documents
  ➔ More comprehensive
  ➔ Updated information
Thank you