Managing heat and smoke in the Top End: Stories from vulnerable people

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Acknowledgement of Country

I acknowledge the Larrakia people, the traditional owners of the land where this research was conducted. I acknowledge the palawa/pakana people of lutruwita/Tasmania, the traditional owners of the land where I live and work.

I pay respects to Elders past and present as the knowledge holders and sharers. I honour their strong culture and knowledge as vital to the self-determination, wellbeing and resilience of their communities.

I stand for a future that profoundly respects and acknowledges Aboriginal perspectives, culture, language and history.
Today...

• What is the issue?
• What did we do?
• What did we find out?
• What does it mean?
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What is the issue?

• Darwin is hot
• And humid
• Or smoky
• These conditions make people sick, and place additional burden on the health system
• High proportion of vulnerable groups in NT
  • Elderly
  • Young
  • People with existing medical conditions (heart/lung)
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Darwin Heat Mitigation and Adaptation Strategy:
Feeling Cooler in Darwin

Darwin is hot and getting hotter

Mitigating and adapting to heat will save money and improve liveability and health outcomes

Act
Darwin’s buildings, streetscapes and urban environments are geared to cool, and thermal comfort in priority public areas is improved

Adapt
Darwin residents, visitors and businesses are prepared for heat and heat related illness is minimised

Innovate
Darwin becomes a leader in heat mitigation and adaption in the wet-dry tropics

Feeling cooler in Darwin

Darwin – a vibrant, connected and liveable tropical city
What did we do?

- People who live, work and play in the Top End
- Settings identified in *Feeling Cooler in Darwin*
  - Outdoor workers
  - Teachers and carers
  - Sports people
- Focus groups – an in depth dive
  - How do people experience these conditions? What do they do to adapt? What could be done better?
- Conducted in May 2022
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What did we find out?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Increasing temperatures</th>
<th>Seasonal smoke</th>
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</thead>
<tbody>
<tr>
<td>Impact</td>
<td>Work / Health / Activity</td>
<td></td>
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<tr>
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Impacts on work, health and activities

“I’ve had people who have lived in Darwin their whole life, first day on the job, they go down with heat stress. Yeah, it’s a productivity thing as well, and if you’re constantly being affected by heat stress, it impacts on the relationships with the people that you work with…”

“It’s anxiety causing, very much so. So, stepping out into a smoky environment, it triggers something within me anyway, where oh my goodness if I’m not getting the air in, it just exacerbates other feelings and sensations.”

“It clouds your thinking as well, so when you get really hot, you’re finding it hard to think straight, especially if you’re dealing with anything that needs fine motor skills or coordination…”
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Lack of policies and infrastructure for local conditions

“They changed it, because the national policy would mean that we never played here. So the scientists who came up with it originally, what was a good number to play to not damage whatever is getting damaged, they had to adjust it because we wouldn’t play above the 26th parallel. So they had to change it.”

“We definitely don’t have sufficient [shade]. I’m trying to cram them into shade whilst also being COVID safe. I’m like, ‘You there, you there.’ And it’s a nightmare. I don’t know whether [to prioritise] heat or COVID. So definitely more shade structures around the facility.”

“I think they just put it in the too hard basket to do a policy specifically for more tropical climates. Compared to the policy for the southern climates. Because even across the NT, that would be different as well…so, we’d need separate policies within the NT.”
What did we find out?

Problem:
- Increasing temperatures
- Seasonal smoke

Impact:
- Work / Health / Activity

Barrier:
- Lack of policy / infrastructure

Outcome:
- Adaptive behaviours
- Doing the same things as usual

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Adaptive behaviours include:

- Finding shade
- Working at non-conventional times
- Water, ice and electrolyte intake/application
- Taking breaks inside A/C
An expectation to keep doing the same thing, even though things are not the same...

“The heat policy they have brought in up here, it’s only been around for four years. And so they brought it out for a reason. And they didn’t have one before that. Because it’s just getting hotter.”

“It’s actually not that hard to fix it. Just put them all on at night. But you have to break down, ‘Oh, hockey’s traditionally played on a Saturday afternoon. Or footy is a Saturday afternoon. That’s what we’ve done for 150 years, footy.’ Well, bad luck, you’re going to play on a Tuesday night now.”

“Darwin does have - it is changing slowly, but it does have that ‘we’re territory tough’ attitude. “Oh yeah, doesn’t matter that it’s 37 degrees, get out there and work.”

“Because the standard response is, ‘Oh, we’ve been doing it here for 70 years,’ …I don’t think that stacks up.”
What does it mean?

• The risks of exposure to extreme heat and poor air quality are already high...and continue to increase

• There are specific gaps in policy and infrastructure that would support behaviour change to improve health outcomes

• Co-designed community projects are key to future solutions
Thank you

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