



ANZSOM

The Australian and New Zealand
Society of Occupational Medicine Inc



ANZSOM and SOM Webinar

The Cost of Extraction: Protecting Miners from Traditional and Emerging Risks

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Wednesday 26th February 2025

Overview

- Mining in Australia – overview
- Mining injuries - selected examples
- Emerging risks
- Artisanal and Small Scale Mining

Mining

This interactive dashboard presents an overall picture of work-related injuries and fatalities in the Mining industry.

Latest Fatalities statistics: 2023

200

Total fatalities

1.4

Fatalities per 100,000 workers

Fatalities statistics: 2003 to 2023

4,707

Total fatalities

1.9

Fatalities per 100,000 workers

Fatalities (count) and Fatalities (rate) by Calendar Year

● Fatalities (count) ● Fatalities (rate)



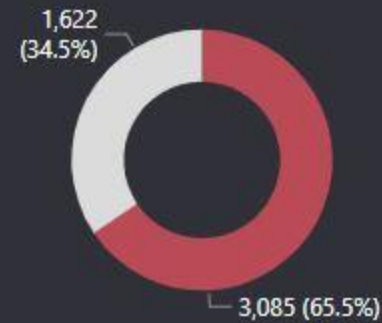
Proportion of Fatalities by Sex

● Male ● Female



Did the fatality involve a vehicle?

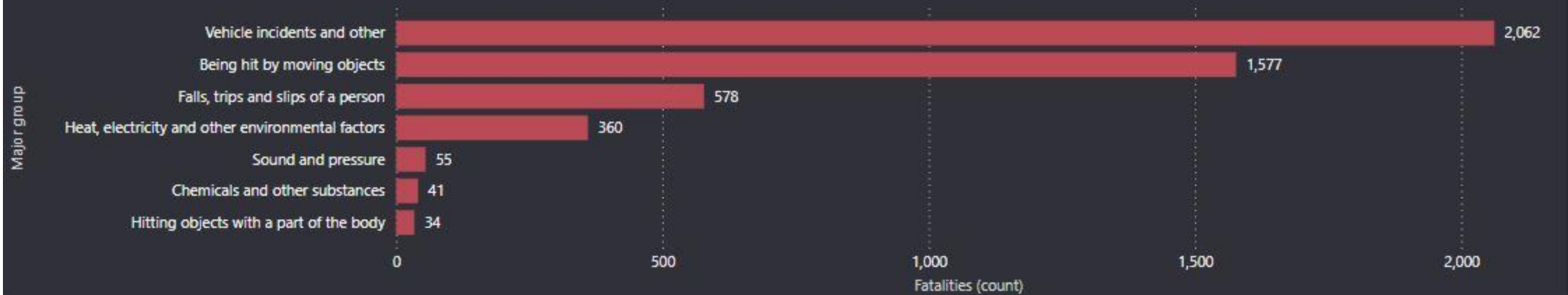
● True ● False



Fatalities by Age group

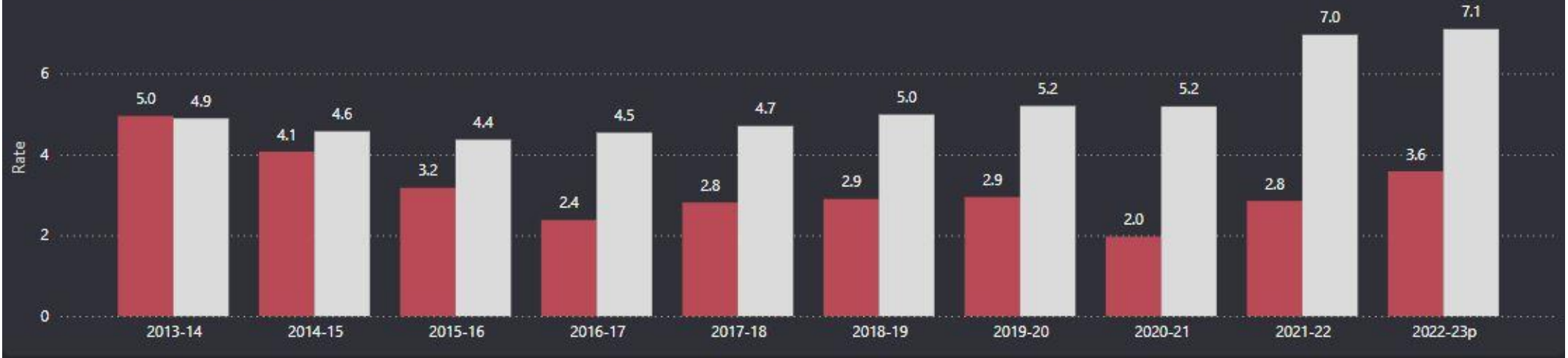


Fatalities by Mechanism*

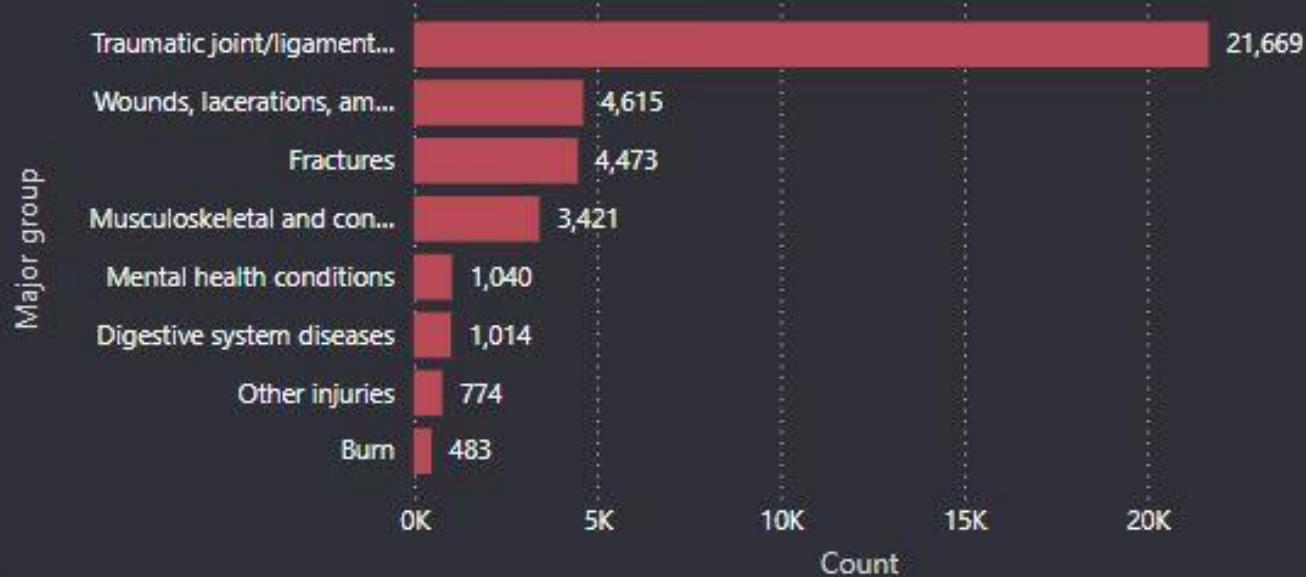


Fatalities and Claims in Mining by Financial year

● Fatalities (rate) ● Claim (frequency rate)



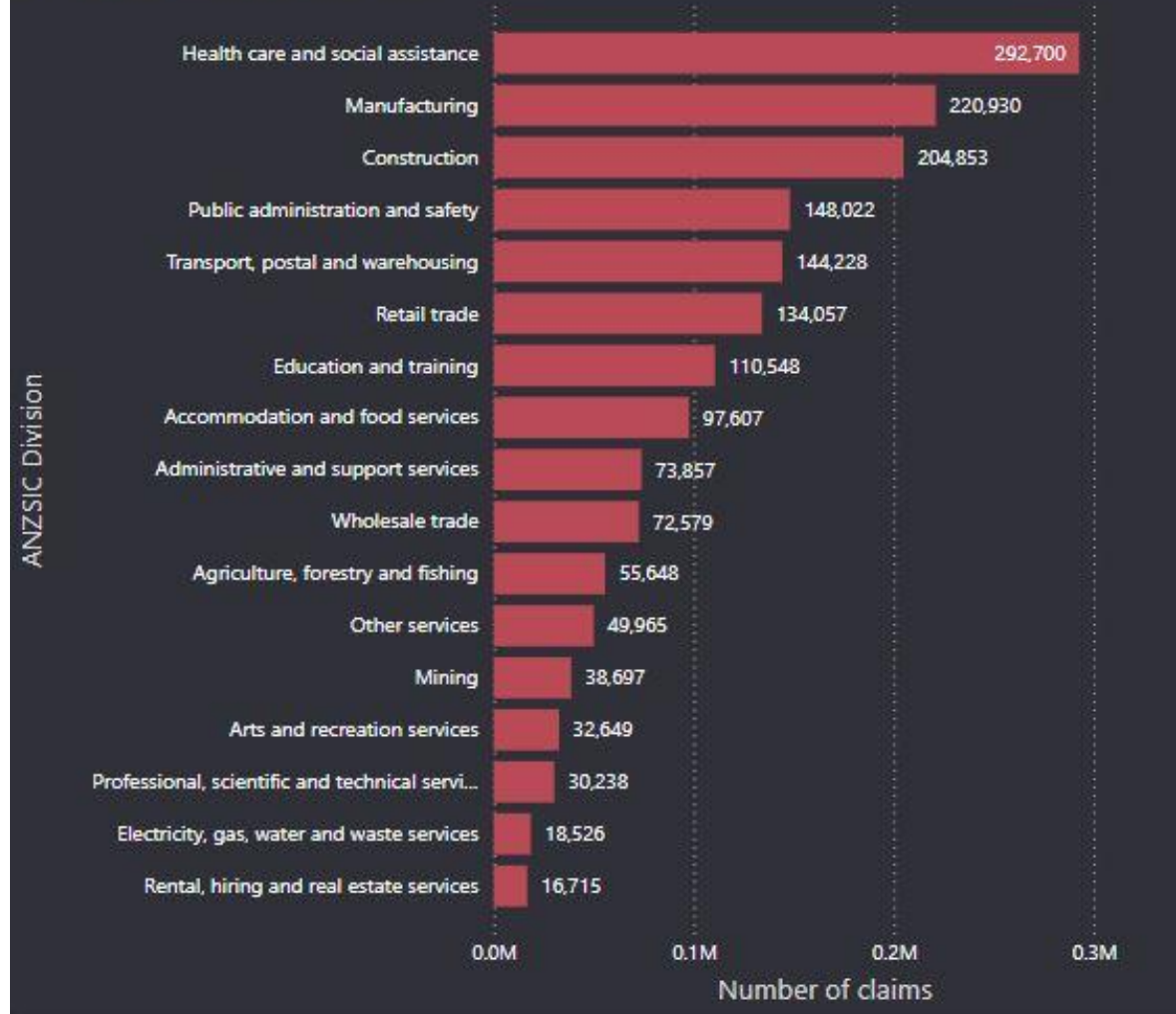
Claims in Mining by most common Nature



Median time lost and Median compensation paid in Mining



Number of claims by Industry



A man wearing a white hard hat with a headlamp and an orange high-visibility shirt is shown in profile, looking towards a large, layered rock formation in a mine. The background is a dark, rocky landscape with some concrete structures.

How safe are Australia's mines? New analysis shows reform has been stalled for a decade

Published: March 18, 2024 11.27am AEDT

David Cliff

Professor of Occupational Health
and Safety in Mining, The
University of Queensland

Black lung: Queensland underground coal mines warned to reduce dust levels below safety standards





HAND INJURIES

IN THE WESTERN AUSTRALIAN WORKERS' COMPENSATION SCHEME

TYPES OF INJURIES/DISEASES

There were 4,615 hand injury claims lodged in the WA workers' compensation scheme in 2020/21, accounting for 18% of claims. The number of work-related hand injuries decreased by 37% over the last decade, from 7,292 to 4,615 claims.

In 2020/21, the most common types of claims involving the hand were...



60%

Wounds, lacerations, amputations



18%

Fractures



13%

Traumatic joint/ligament & muscle/tendon injury

CLAIMS



LOST-TIME CLAIMS

2,360

had an absence of a day/shift or more off work

NO LOST-TIME CLAIMS

2,255

had treatment and expenses only

TOP INDUSTRY DIVISIONS



17%

Manufacturing



14%

Construction



10%

Mining

TOP OCCUPATION GROUPS



39%

Technicians & trades workers



23%

Labourers



12%

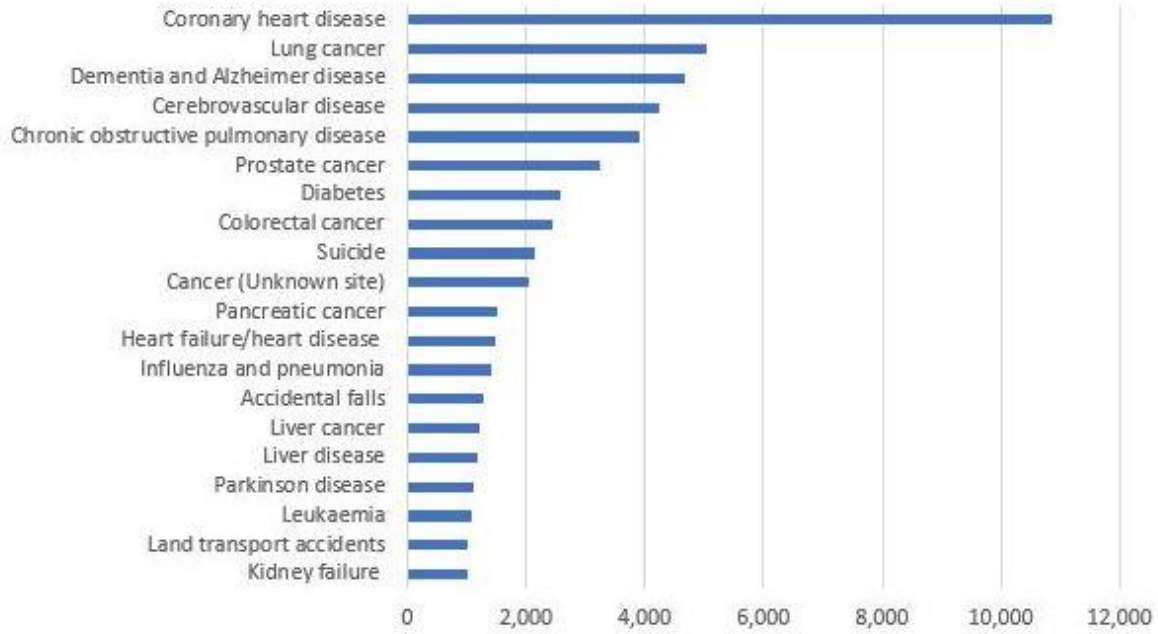
Machinery operators & drivers



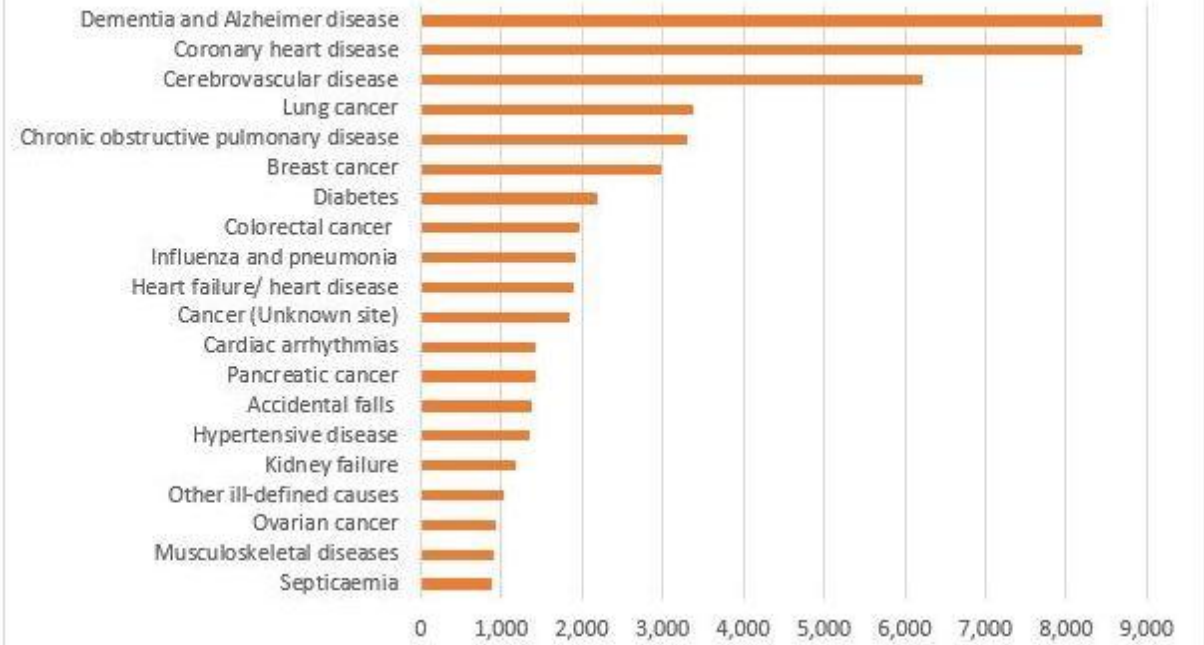
Solar ultraviolet exposure – a review of risks and preventive strategies in Australian workplaces

- UV radiation, in the form of sunlight - Australia's most prevalent occupational carcinogen.
- Estimated working population - 37% of males and 8% of females are significantly exposed to solar radiation at work.
- UV radiation exposure - major cause of melanoma and non-melanoma skin cancer (NMSC).
- Australia - highest incidence of melanoma in the world and skin cancer accounts for over 80% of all new cases of cancer diagnosed each year.

Top 20 Causes of Death - Males



Top 20 Causes of Death - Females



Climate Change





The 2024 report of the *Lancet* Countdown on health and climate change: facing record-breaking threats from delayed action

The record-breaking human costs of climate change

Data in this year's report show that people all around the world are facing record-breaking threats to their wellbeing, health, and survival from the rapidly changing climate. Of the 15 indicators monitoring climate change-related health hazards, exposures, and impacts, ten reached concerning new records in their most recent year of data.

Circulation

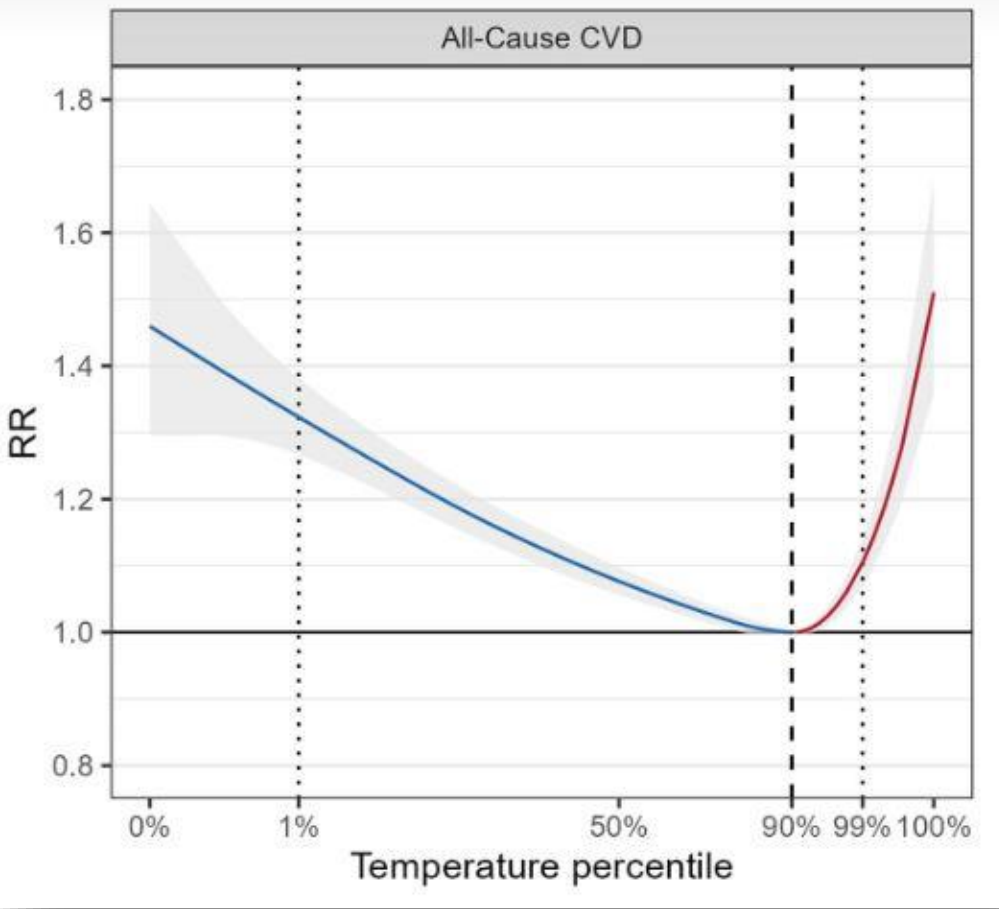
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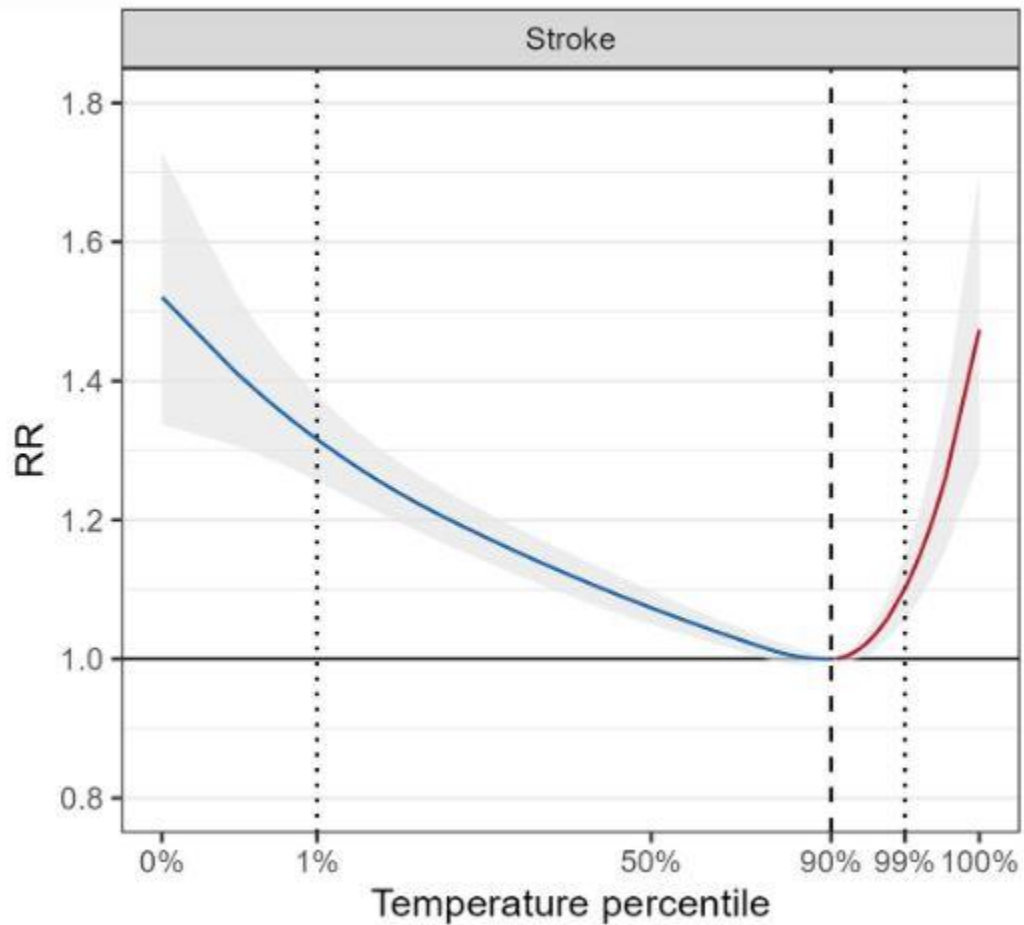
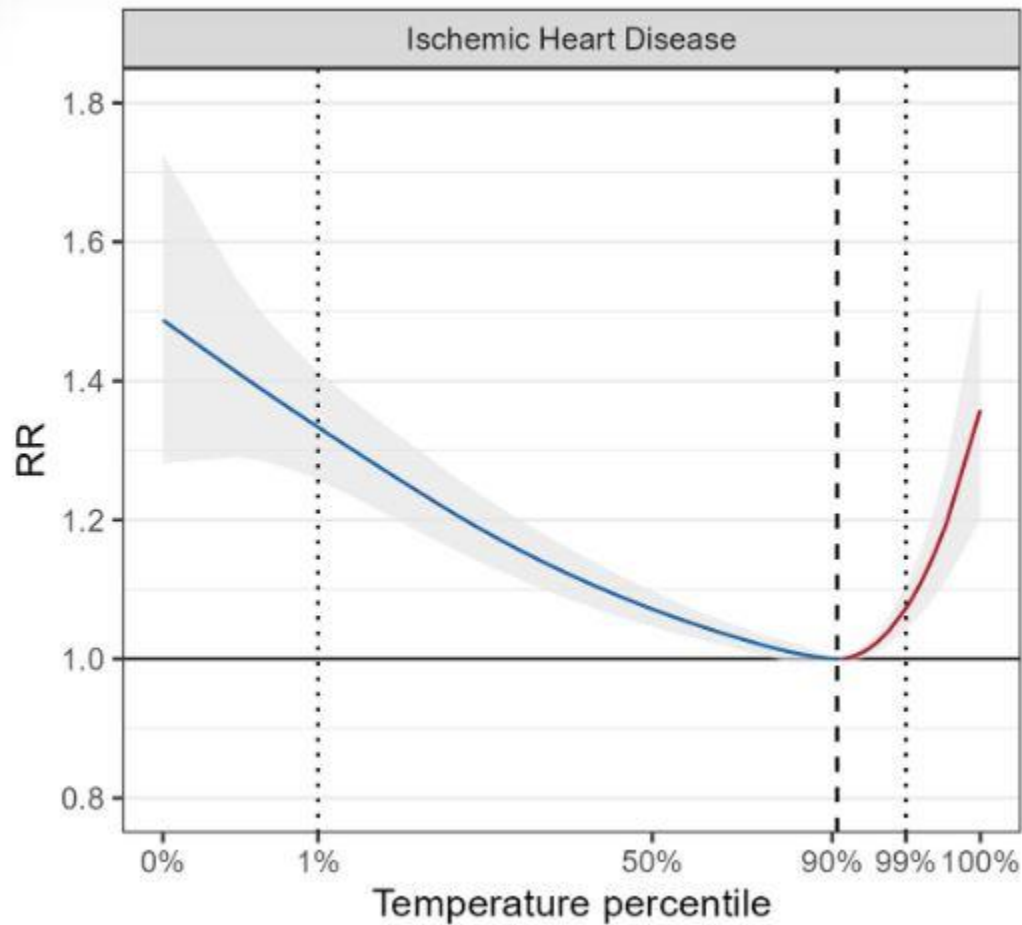
RESEARCH ARTICLE | Originally Published 12 December 2022 | | | Check for updates

Associations Between Extreme Temperatures and Cardiovascular Cause-Specific Mortality: Results From 27 Countries

Conclusions:

Across a large, multinational sample, exposure to extreme hot and cold temperatures was associated with a greater risk of mortality from multiple common cardiovascular conditions. The intersections between extreme temperatures and cardiovascular health need to be thoroughly characterized in the present day—and especially under a changing climate.





estimates. Extreme temperature percentiles were compared with the minimum mortality temperature in each location. Excess deaths were calculated for a range of extreme temperature days.



International Occupational Medicine Society Collaborative (IOMSC)

**Artisanal and small-scale mining
(ASM) project proposal**

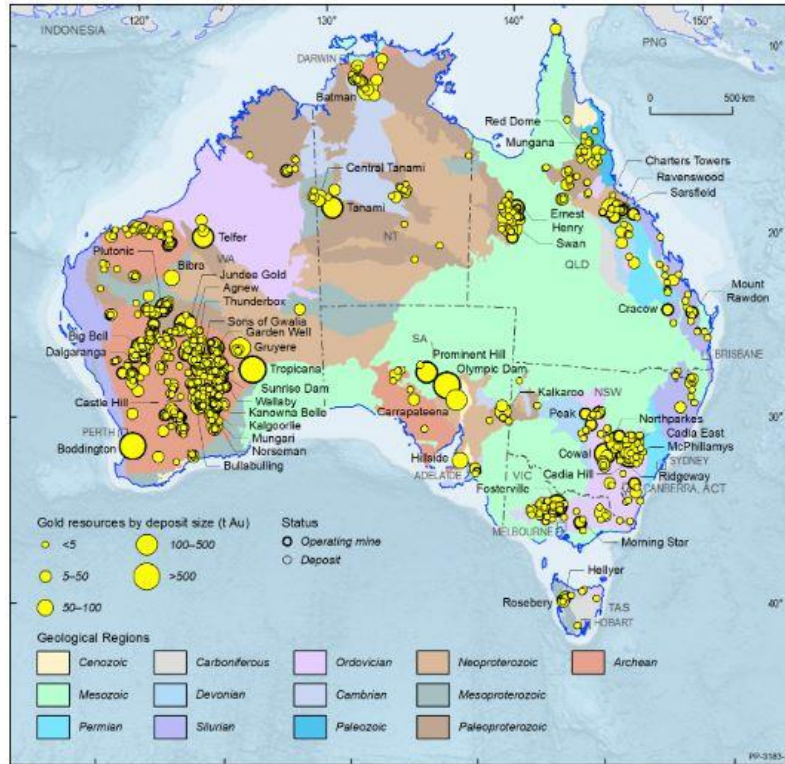
Dr Will Ponsonby



Artisanal and Small-Scale Mining in Australia

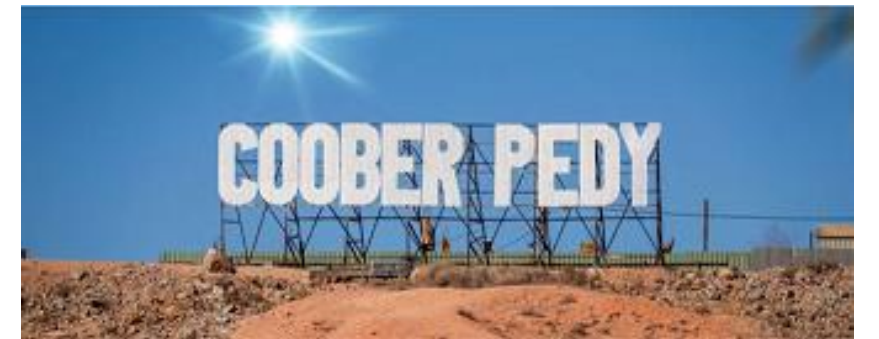


Artisanal and Small-Scale Mining in Australia



WA Amalgamated Prospectors and Leaseholders Association (APLA) president James Allison said there were about 43,000 registered prospectors in WA.

Artisanal and Small-Scale Mining in Australia





IOMSC Members – Countries Represented

- Argentina
- Australia (2)
- Brazil (2)
- Canada (2)
- Chile
- China
- Colombia
- Costa Rica
- Croatia
- Denmark
- Egypt
- Estonia
- France
- Germany
- Greece (2)
- Guatemala
- Honduras
- India
- Indonesia
- Ireland
- Italy
- Ivory Coast
- Japan
- North Macedonia
- Malaysia
- Netherlands
- New Zealand
- Nigeria
- Norway
- Peru
- Philippines
- Portugal
- Qatar
- Russian Federation
- Singapore
- Slovakia
- South Africa
- South Korea
- Switzerland
- United Arab Emirates
- United Kingdom (2)
- United States
- Venezuela (2)
- Zimbabwe



Questions and Discussion