



Risk Management: the cost of life versus the cost of property



ABOUT AFAC

AFAC is the Australian and New Zealand **National Council** for fire and emergency services.

Working for our members to build safer, more resilient communities.



The problem

- Residential fire safety is essential to the primary mission of AFAC member agencies to protect human life.



The problem

- The costs of residential fires extend significantly beyond damage to the property and are estimated to be about 10 times the reported cost²
- In Australia, the total cost of fire was estimated in 2009 to be approximately US\$12 billion per annum or 1.3% of the country's gross domestic product³



1 Fire and Rescue New South Wales *Submission to Commonwealth Senate Inquiry into Smoke Alarms*. Sydney: FRNSW, 2015.

2 Ashe B, McAnaney KJ, Pitman AJ. Total cost of fire in Australia. *J Risk Res* 2009;12:121–36. 10.1080/13669870802648528

3 Harvey LA, Ghassempour N, Whybro M, et al. Health impacts and economic costs of residential fires (RESFIRES study): protocol for a population-based cohort study using linked administrative data. *BMJ Open* 2020;10:e037709. doi:10.1136/bmjopen-2020-037709

The problem

- 2019 report filled a data gap regarding preventable fire fatalities over the last decade
- Deaths from residential fires have significant social, economic and emotional impacts on individuals, families, communities and also on the firefighters and other emergency service workers who attend these tragic incidents.



The problem

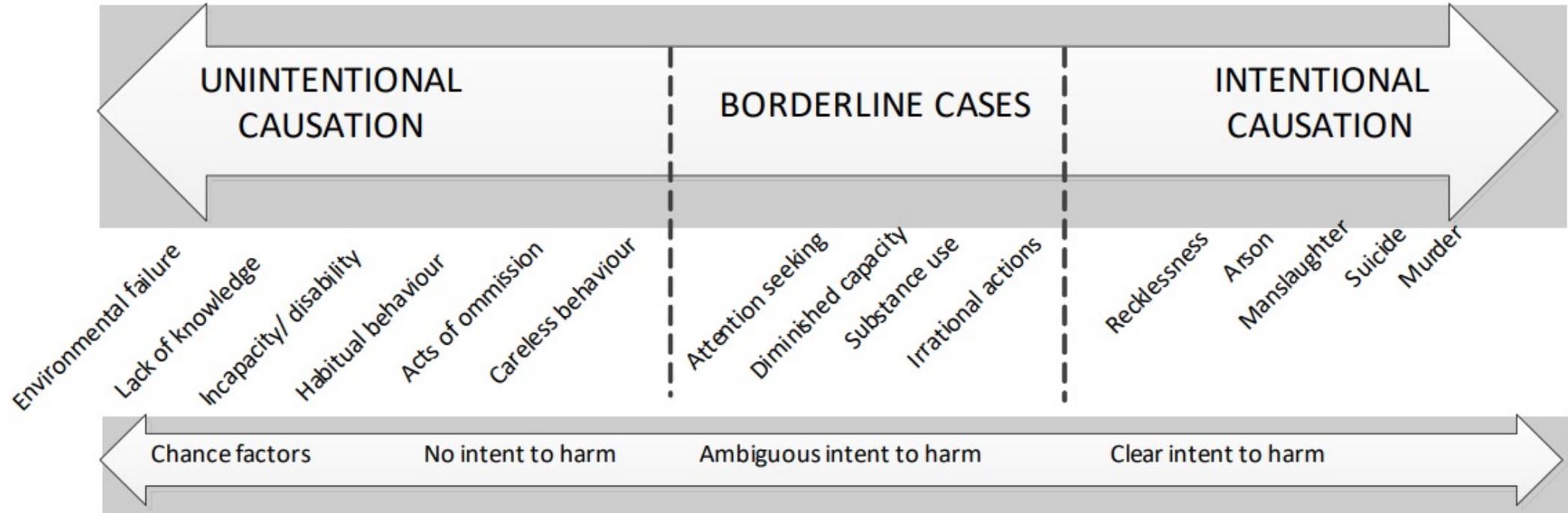
- The Report identified an average of 64 fatalities per year in Australia, or an annual national death rate of 0.29 preventable residential fire fatalities per 100,000 population.

"On average, more than one fire-related death occurs in a residential context every week in Australia.

That equates to approximately the same number of deaths as occurring during the Black Saturday bushfires every three years. These deaths are overwhelmingly preventable."

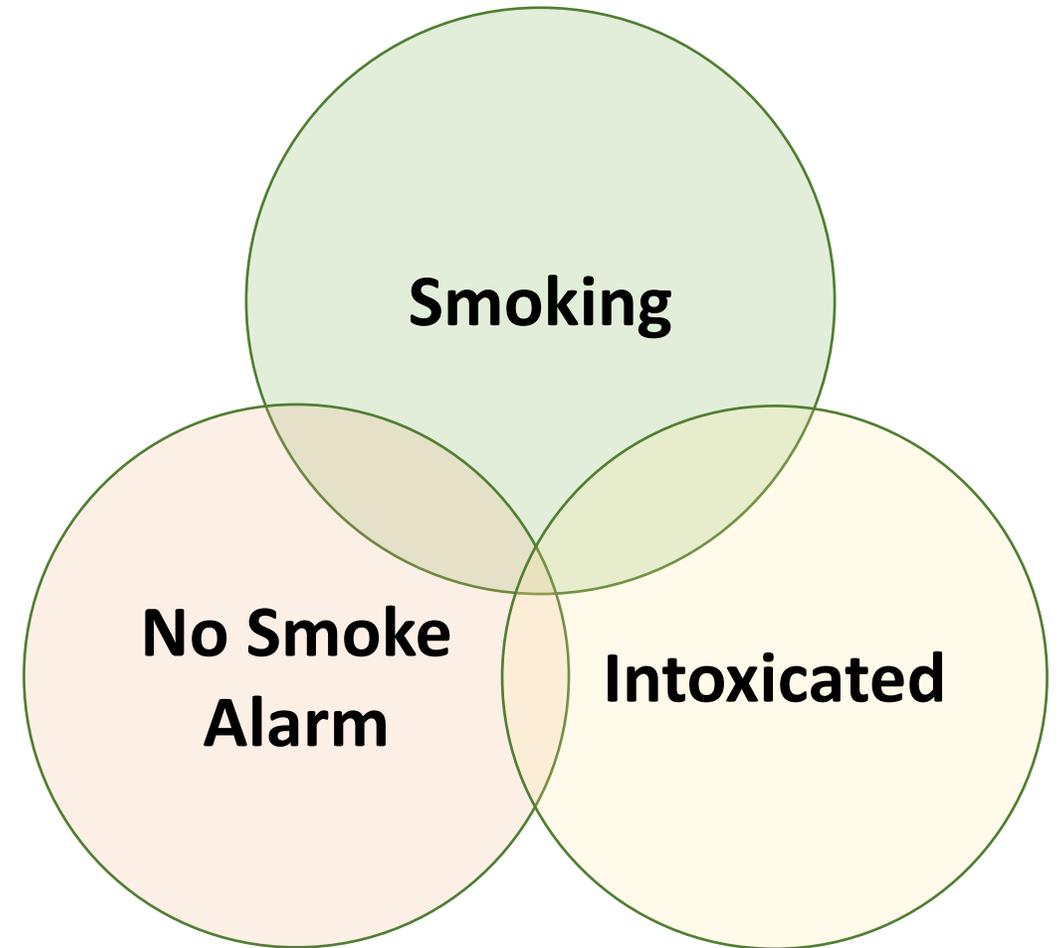
- Preventable Residential Fire Fatalities in Australia July 2003 – June 2017 Report

Defining a preventable residential fire death



At-risk Groups

- Data from the report highlighted that the conceptualisation of fire fatality risk is complex.
- A risk factor, whether behavioural, environmental or other external influences on their own may be a low risk, but as the factors converge the risk of death increases.



At-risk Groups

Risk Factors include:

- Smoking
- Living alone
- Living with a disability
- Taking medication
- Socio-economic disadvantage
- Age

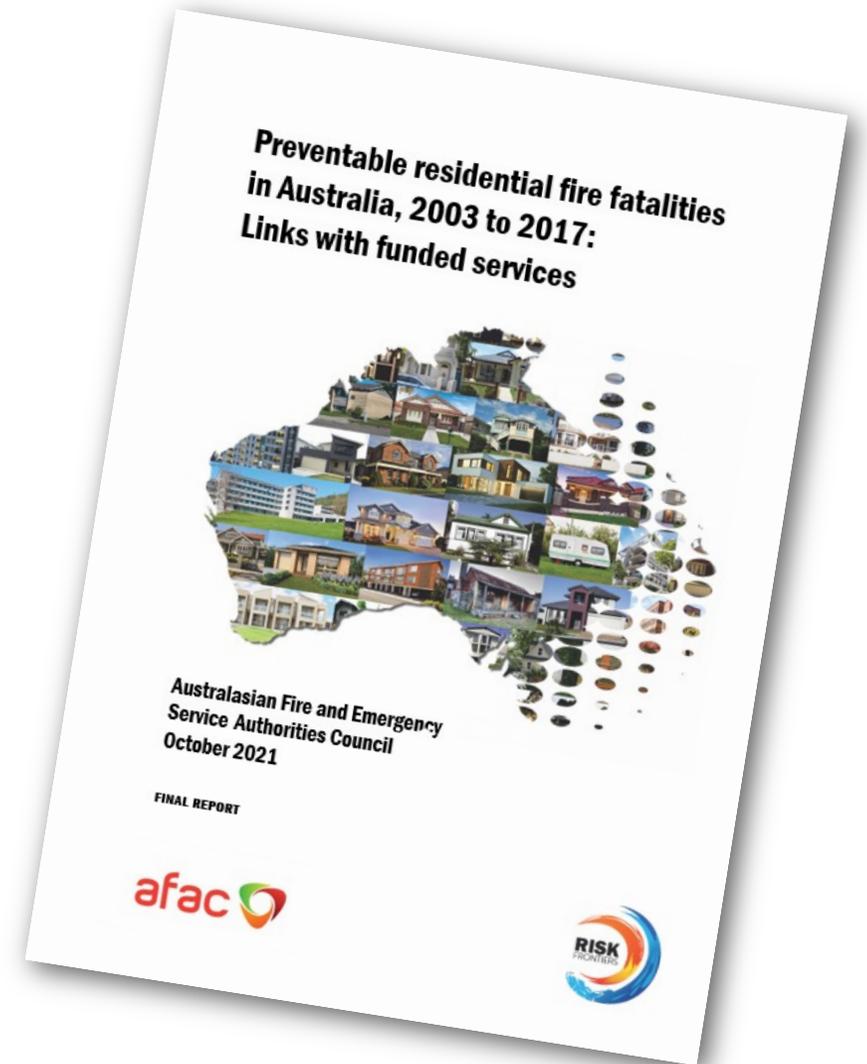
Additional Factors include:

- Lack of working smoke alarm
- Societal trends towards ageing in place



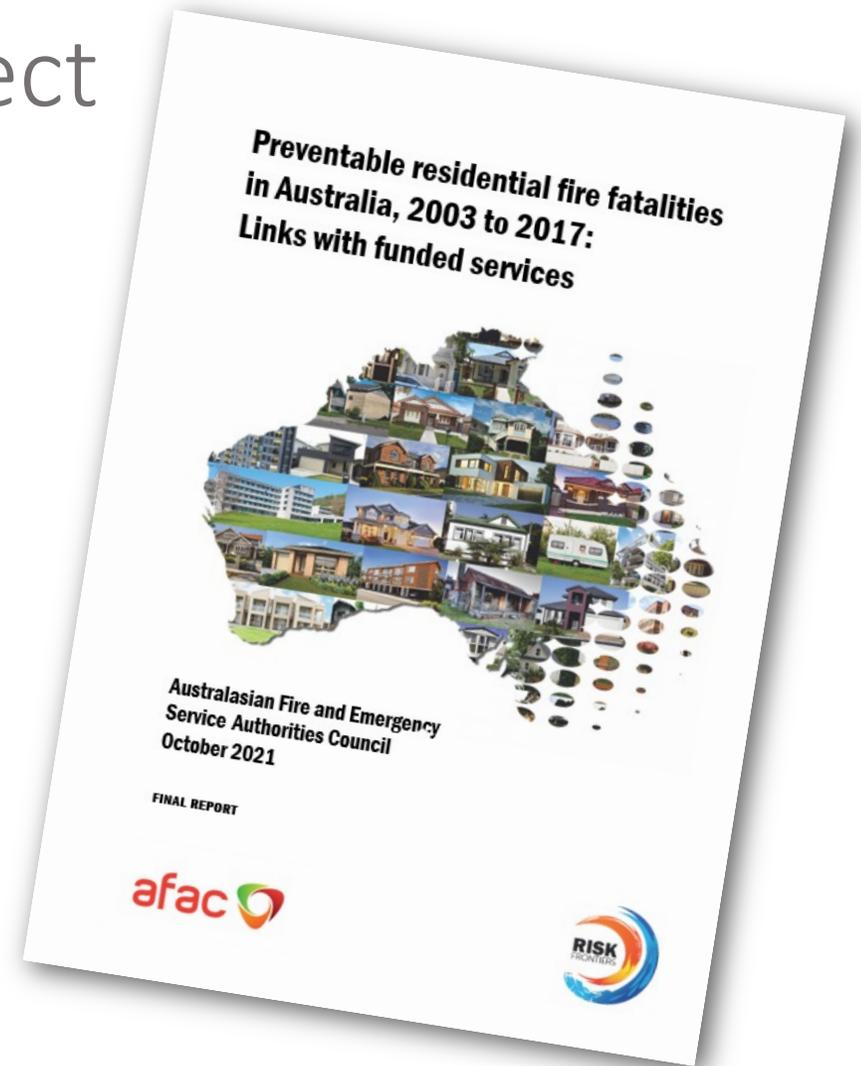
Nature of risk

- The second phase of the research undertook a study to link the Report findings with records held by the Australian Institute of Health and Welfare (AIHW) National Aged Care Data Clearinghouse.
- This data matching report found:
 - The proportion of decedents which were accessing funded services at the time of a fatal fire incident
 - The types of funded services decedents may have been accessing prior to fatal fire incidents.



Nature of risk – data matching project

- Of the 739 people who died in preventable residential fires in Australia from July 2005 to June 2017 (after Coates et al, 2019), a substantial proportion were receiving some form of support service.
- The types of funded services decedents were accessing prior to becoming a victim of a residential fire across Australia, from July 2003 to June 2017, were:
 - Commonwealth Home and Community Care program – 30% of residential fire fatalities.
 - Home Care Packages program – 7% of residential fire fatalities
 - Transition Care program – 2% of residential fire fatalities
 - Commonwealth Home Support program – 1% of residential fire fatalities
- Across Australia, 66% of people aged 65 or over who died in a preventable residential fire were Home and Community Care program recipients.



What we are doing

- AFAC Council adopted the *Residential Fire Fatality and Injury Prevention Strategy: towards zero fatalities* in 2021.
- The purpose of this Strategy is to develop a framework that will support fire and rescue services to reduce the number of preventable residential fire fatalities towards zero.

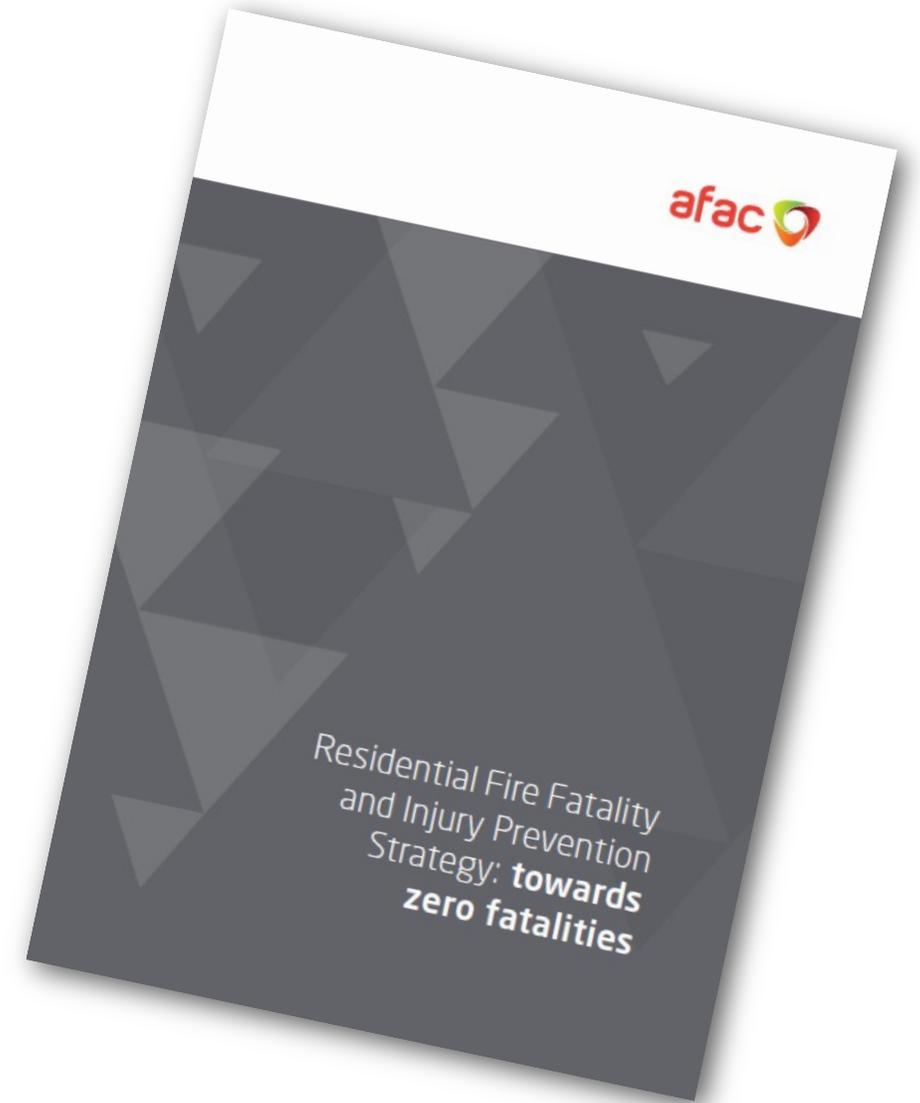


Strategy Recommendations

2 key recommendations from the Strategy:

- Developing and maintaining national fire fatality and injury datasets
- Strengthening partnership approaches to reduce residential fire risk

Work has also been adopted into AFAC's Strategic Directions Measuring and Evaluation Framework.



What we are doing - HFSCA

Mission

The mission of the Home Fire Sprinkler Coalition is to reduce the impact of residential fires on Australia's people, their property, our environment and the economy.



HFSCA Strategy

HFSCA's Six strategic priorities:

- Advocacy
- Education
- Research
- Capability and capacity development
- Technical Advice
- Standard setting



What we have done

- The Proposal for Change (PFC) to NCC 2019 for the mandatory inclusion of sprinklers in Class 2 and 3 buildings between four storeys and 25 metres came into effect on 1 May 2019.
- The National Construction Code 2019 (NCC 2019) now requires new Class 2 and 3 buildings or any other class of building containing a Class 2 or 3 part to have sprinklers installed throughout the building if the building is 4 or more storeys and less than 25 metres in effective height.



What we are doing

- Developing a cost-effective technical specifications for Class 1a homes based on the FPAA101D systems.
- Scoping how residential systems can be expanded to be used as defensive sprinklers in bushfire prone areas.
- Supporting fire services to advocate for residential sprinklers in social housing.





For more information,
visit Home Fire Sprinkler
Coalition Australia at:

Stand 402,
Exhibition Hall.



QUESTIONS?



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