IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

COR 2020 003949

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

*Section 67 of the **Coroners Act 2008***

Findings of:	AUDREY JAMIESON, Coroner
Deceased:	Carol Fay Slade
Date of birth:	31 May 1966
Date of death:	22 July 2020
Cause of death:	1a: Severe burns sustained in a house fire (palliated)
Place of death:	The Alfred 55 Commercial Road Melbourne Victoria 3004
Keywords:	Fire, public housing, DFFH, Fire Rescue Victoria, smoking, smoke alarms, fire sprinklers

INTRODUCTION

1. On 22 July 2020, Carol Fay Slade was 54 years old when she died in hospital following a fire at her home. At the time of her death, Carol lived alone in Shepparton.

2. The owner and landlord of Carol's home was the Director of Housing[1] (established by the *Housing Act 1983* (Vic)), with its administrative functions and public housing tenancy management provided by the Department of Health and Human Services (**DHHS**)[2].

Background

3. Carol was the oldest of three children. The family grew up in Edithvale before moving to Frankston following the death of Carol's mother They later moved to Cobram where they reportedly had little stability.

4. Carol met her partner Peter when she was around 16 years old. They lived a largely transient lifestyle and were heavy users of illicit drugs including heroin and *"whatever they could get their hands on".* On 15 October 1987, Carol and Peter had a daughter, Jodie.

5. In June 2003, Carol and Peter were involved in a serious motorcycle collision while living in Echuca. She sustained severe head injuries requiring treatment at the Alfred Hospital and significant periods of rehabilitation. According to her family, her resulting acquired brain injury affected her awareness, and she suffered from memory loss, agitation and post traumatic amnesia.

6. Following her recovery, Carol and Peter moved into a caravan in Cobram. Peter later set fire to the caravan with Carol inside it, so that *"they would die together".* She survived this incident and her brother Bradley helped her to access supports and care in Tongala, where he lived.

7. Carol appeared to be doing well for a period and was on the methadone program. She then began taking more methadone than prescribed. She refused her family's help and moved to Shepparton. She spent most of her time drinking and taking drugs.

[1] Since Carol's death, amendments to the Housing Act had the effect of replacing the Director of Housing with Homes Victoria.

[2] A Machinery of Government change took place on 1 February 2021 creating the Department of Health and Department of Families, Fairness and Housing from the former Department of Health and Human Services (DHHS).

8. In late 2017, Carol fell asleep while smoking. The cigarette set alight her pyjama pants, causing serious burns to her right leg. Her family found her days later and found her with burns, in severe pain and *"off her head"*. She was initially taken to Shepparton Hospital, before being conveyed to Melbourne where she received skin grafts at Frankston Hospital.

9. On 17 November 2019, due to issues with her neighbours, Carol moved to another home owned by the Director of Housing in Gowrie Street, Shepparton. The home had received regular maintenance including an electrical inspection on 7 November 2019, at which time the smoke alarm was inspected and tested.

10. Carol was close with her friend Robert, whom she met in Shepparton and who regularly stayed with her. They spent most of their time together, drinking, smoking and using drugs in town or at Carol's home.

11. Carol had reported concerns for her safety at home, including that people may break into her home and that her power and gas had previously been turned off by unknown persons. In response to these reports, her home was assessed and safety screens were fitted to the windows.

12. Carol received funding from the National Disability Insurance Scheme (**NDIS**) for support services such as cleaning, gardening and meals. She used a wheeled walking frame to aid mobility.

THE CORONIAL INVESTIGATION

13. Carol's death was reported to the coroner as it fell within the definition of a reportable death in the *Coroners Act 2008* (**the Act**). Reportable deaths include deaths that are unexpected, unnatural or violent or result from accident or injury.

14. The role of a coroner is to independently investigate reportable deaths to establish, if possible, identity, medical cause of death, and surrounding circumstances. Surrounding circumstances are limited to events which are sufficiently proximate and causally related to the death. The purpose of a coronial investigation is to establish the facts, not to cast blame or determine criminal or civil liability.

15. Under the Act, coroners also have the important functions of helping to prevent deaths and promoting public health and safety and the administration of justice through the making of

comments or recommendations in appropriate cases about any matter connected to the death under investigation.

16. Victoria Police assigned an officer to be the Coronial Investigator for the investigation of Carol's death. The Coronial Investigator conducted inquiries on my behalf, including taking statements from witnesses – such as family, the forensic pathologist, treating clinicians and investigating officers – and submitted a coronial brief of evidence.

17. This finding draws on the totality of the coronial investigation into the death of Carol Fay Slade including evidence contained in the coronial brief. Whilst I have reviewed all the material, I will only refer to that which is directly relevant to my findings or necessary for narrative clarity. In the coronial jurisdiction, facts must be established on the balance of probabilities.[3]

MATTERS IN RELATION TO WHICH A FINDING MUST, IF POSSIBLE, BE MADE

Circumstances in which the death occurred

18. Carol and Robert spent the day together on 17 July 2020. They had coffee together at her house, before going to the Victoria Park Lake to have a few drinks. They returned to her house late in the afternoon.

19. At around 6:30pm, a fire started at Carol's home. She called Triple Zero from inside the home, reporting that she was trapped and could not get out.

20. Firefighters arrived at the address at 6:34pm and found a single level brick residence with fire visible at the front windows and door. They performed an internal search and located Carol in the hallway, directly in front of her walking frame.

21. Firefighters removed Carol from the home and administered medical care until the arrival of paramedics. She was then conveyed by ambulance to the Goulburn Valley Base Hospital. She was found to have burns to more than 60% of her body.

22. Carol was later conveyed to the Alfred Hospital by air ambulance. She was admitted to the ICU where she was intubated, mechanically ventilated and commenced on intravenous fluids,

[3] Subject to the principles enunciated in Briginshaw v Briginshaw (1938) 60 CLR 336. The effect of this and similar authorities is that coroners should not make adverse findings against, or comments about, individuals unless the evidence provides a comfortable level of satisfaction as to those matters taking into account the consequences of such findings or comments.

analgesia and antibiotics. She was provided with surgical intervention including wound debridement and skin grafts.

23. Following consultation with her family, the decision was made to transition Carol to comfort care. She died on 22 July 2020 at 6:43pm.

Identity of the deceased

24. On 25 July 2020, the right palm print of the deceased was positively compared with the corresponding print on file for Carol Slade.

25. On 27 July 2020, Coroner Paresa Spanos considered the available evidence and determined that the cogency and consistency of all evidence relevant to identification of the deceased supported a finding that the deceased was Carol Fay Slade, born 31 May 1966. Accordingly, she signed a Determination by Coroner of Identity of Deceased (Form 8).

Medical cause of death

26. Forensic Pathologist Dr Heinrich Bouwer from the Victorian Institute of Forensic Medicine (**VIFM**) conducted an external examination of the body of Carol Slade on 24 July 2020. Dr Bouwer considered the Victoria Police Report of Death (Form 83), post mortem computed tomography (**CT**) scan and E-Medical Deposition Form from Alfred Health and provided a written report of his findings dated 31 July 2020.

27. The external examination showed extensive thermal burns to approximately 60% of the body with evidence of recent skin graft surgery. The post mortem CT scan showed an old right craniotomy with evidence of hydrocephalus ex vacuo. There were bilateral lung changes, small pleural effusions and a cyst with calcified wall in the abdomen.

28. Toxicological analysis of ante mortem blood samples identified the presence of the following:

    i. Carboxyhaemoglobin ~ 18 % saturation

    ii. Hydrogen cyanide ~ 0.6 mg/L

    iii. Methadone ~ 0.3 mg/L

    iv. EDDP (methadone metabolite) ~ 0.06 mg/L

    v. Tapentadol ~ 0.4 mg/L

vi. Methylamphetamine ~ 0.03 mg/L

vii. Diazepam ~ 0.4 mg/L

viii. Nordiazepam ~ 0.9 mg/L

ix. Temazepam ~ 0.05 mg/L

x. Oxazepam ~ 0.06 mg/L

xi. Citalopram ~ 0.03 mg/L

xii. Ketamine

29. Dr Bouwer commented that the detection of carboxyhaemoglobin and hydrogen cyanide were consistent with inhalation of products of combustion in the setting of a house fire.

30. Dr Bouwer provided an opinion that the medical cause of death was 1(a) SEVERE BURNS SUSTAINED IN A HOUSE FIRE (PALLIATED).

FURTHER INVESTIGATIONS

31. Carol's house was a small brick veneer house in the middle of the block, with a driveway along the southern boundary leading through high metal gates to a back yard.

32. The front door opened off a central porch directly into the lounge room which occupied the southeastern quarter of the building. There was a walkway across the northern end of the room, to a door opening into the small central hall. An upholstered couch extended across the loungeroom beside the walkway. There was a gas heater on the southern wall.

33. There were two bedrooms on the northern side of the house. The front bedroom contained bedroom furniture, and the rear bedroom contained a portable air conditioner. In the centre rear of the building was a small bathroom. The southwestern quarter of the house contained a kitchen, with a door in the southwestern corner leading to the laundry.

34. The smoke alarm in Carol's house was installed on 11 February 2015. A carbon monoxide alarm was installed on 2 August 2018, and a new gas heater installed on 31 May 2019.

35. The smoke alarm had last been inspected and tested on 7 November 2019 as part of a check of the entire electrical installation at the property. Carol had reported an electrical fault on 13 July 2020, and the faulty safety switch was replaced the same day.

36. Robert initially explained to investigators that he believed the fire had started from the heater in the loungeroom, at which time he *"bolted outside".* He said Carol had been asleep in the bedroom at the time. Investigators noted that Robert appeared to be heavily intoxicated and changed his story of what happened numerous times. It remains unclear where Carol was in the home when the fire started.

Victoria Police

37. Scientist John Kelleher of the Victoria Police Forensic Services Centre conducted an examination of the scene on 18 July 2020, assisted by Fire Rescue Victoria (**FRV**) and the Country Fire Authority (**CFA**). He provided a statement detailing his findings.

38. Mr Kelleher noted that there had been a fire in the loungeroom which burnt the upholstery of the couch and the northern dining chair. The coffee table and two other chairs were burnt but scorched rather than deeply charred. There was severe burning to the ceiling and walls of the loungeroom. The fire had spread through the open door into the central hallway, causing damage to the walls and ceiling and scorching to the doors and door frames. It had not spread to other rooms and there was a pattern of decreasing smoke damage and decreased heat effects further from the door to the loungeroom.

39. Mr Kelleher observed an ashtray and cigarettes on the coffee table in the loungeroom. There was also a lighter and cigarette butts on the bedside table and many small burns, probably cigarette burns, on the bed.

40. Mr Keller concluded that the cause of the fire was the ignition of combustible material, probably the eastern cushion on the couch in the lounge room. The source of the ignition was not determined, but in his opinion was probably a carelessly discarded or improperly extinguished cigarette falling or being dropped on the cushion. There was no obvious evidence to indicate direct ignition, such as by match or cigarette lighter.

41. Mr Kelleher explored the possibility that Carol had been trapped in the house at the time of the fire. He noted that there was no sign of physical entrapment, with both the front and rear doors open. Should Carol have been on the couch, her initial movement away from the couch would have been to the southern end of the room, where the windows were secured by metal grilles. He said that the fire on the couch would make exit to the north an uncomfortable proposition, and the fire spread to the northern dining chair, effectively blocking this end of the room. At the same time, Carol would have been exposed to volumes of toxic smoke from

burning cushions filling the room. The smoke would have caused breathing difficulties and possible disorientation and would lead to a rapid loss of consciousness.

Fire Rescue Victoria

42. Fire Rescue Victoria compiled a Fatal/Serious Injury Fire Investigation Report following Carol's death.

43. FRV investigators observed a smoke detector that was melted and displaced from the ceiling in the hallway. Electrical cabling was observed, indicating that it was hardwired. It had a battery backup, as was required for the specific class of dwelling. They noted that the smoke alarm was operable at the time of the fire and was heard in the background of the call to Triple Zero.

44. There was cigarette burns observed throughout the home, including to the mattress and bedside tables. A packet of 'CCF' branded cigarettes was located in the bedroom. Investigators noted that subsequent investigators failed to identify a producer/distributor of CCF branded cigarettes, and the pack did not display mandatory warnings as on other packets of commercially sold cigarettes.

45. The gas heater was connected by an electrical cable to a general-purpose outlet. Examination of the outlet indicated that the electrical supply to the heater was switched off at the time of the fire. The area of origin of the fire was determined to be the couch, located in the centre of the living room.

46. The FRV report noted that the loungeroom where the fire occurred had a window fitted with an aluminium security grill and mesh screens, which would have impeded Carol from using the window as a potential exit.

47. Geoff Kandoorp, Acting Manager of At Risk Groups team of the FRV Community Resilience Department, completed an FRV Prevention Report. Mr Kandoorp identified several risk factors, including:

    - Behavioural risks – unsafe smoking practices including smoking in bed, alcohol use and drug use.

    - Personal risks – Poor mobility requiring the use of a manually operated mobility walker.

48. Mr Kandoorp's report made recommendations for the coroner to consider, including:

    i. Maintain a watching brief on fire related deaths which occur as a result of an ignition caused by a cigarette;

    ii. Consider the efficiency of reduced fire risk cigarettes in reducing the occurrence of fire related deaths which occur as a result of an ignition caused by cigarettes; and

    iii. Maintain a watching brief on fatal fires that occur in properties owned by DHHS.

COMMENTS

Pursuant to section 67(3) of the Act, I make the following comments connected with the death.

1. Fire deaths in residential properties are unfortunately not a rare occurrence and are a significant public health issue. A 2019 report by the Bushfire and Natural Hazards Cooperative Research Centre, Preventable residential fire fatalities: July 2003 to June 2017[4], identified that on average, more than one fire-related death occurs in a residential context every week in Australia.

2. Deaths from residential fires have wide ranges impacts – socially, economically and emotionally – on individuals, families, communities and the emergency services who respond.

3. In rental properties in Victoria specifically, 55 fire-related deaths were reported to the Court for the period of 1 January 2010 to 16 June 2025.

4. The Bushfire and Natural Hazards CRC report highlighted that the conceptualisation of fire fatality risk is complex, and it follows that so too is preventing it. The report noted that single risk factors alone are unlikely to significantly increase someone's risk of dying, but *it is the co-occurrence of a range of factors surrounding the person, their behaviours, their residential environment and other external factors that is likely to impact their overall level of risk of having a fire that results in their death.*

5. The report identified that the majority of preventable residential fire fatalities were found to be caused by human errors or unsafe behaviours. Preventable fires are defined as *fires where individuals, fire services or other stakeholders may have been able to identify the risks (related*

[4] Coates, L et al. 2019, *Preventable residential fire fatalities in Australia: July 2003 to June 2017*, Bushfire and Natural Hazards CRC.

to a person and/ or a physical environment) and take actions or develop intervention strategies which, if applied, may have reduced the risk of a fire taking place.

6. Carol's death appears to fall within the above definition of a preventable fire. She had several risk factors contributing to their increased risk of dying in a fire, including that she was a smoker, had impeded mobility, lived in public housing and used alcohol. I have kept these risk factors front of mind in considering the prevention opportunities that arise from her death.

7. I was assisted in my investigation and prevention role by Fire Rescue Victoria and the Country Fire Association, who I was grateful to meet with to discuss my investigation, and five other cases occurring in similar circumstances around the same time period as Carol's death. They provided me with important knowledge and insight and put forward recommendations for me to consider.

Public housing

8. Of the 55 fire related deaths occurring in rental properties investigated by the Court, 18 occurred in properties owned by the Director of Housing, or Homes Victoria as it is now.

9. Homes Victoria owns considerable property. At December 2022, Homes Victoria owned approximately 72,300 properties, of which approximately 64,300 are used as public housing. Public housing properties owned by Homes Victoria are single dwellings (Class 1a), small and large rooming houses and crisis accommodation (Class 1b and 3(a)) and multi-storey dwellings (Class 2).[5]

10. The fact that someone lives in public housing is not necessarily a risk factor in and of itself. Moreso, the nature of public housing is that many of its residents have unique vulnerabilities and risk factors that may make them more at risk of a fatal residential fire than the general population.

11. The Final Report of the Victorian Government's Social Housing Regulation Review[6] acknowledged that social housing tenants represent a disproportionate share of victims in preventable house fires. It noted the following factors that can be attributed to the higher incidence of house fires in social housing:

[5] Buildings are classified under the National Construction Code (NCC) 2022. See https://www.vba.vic.gov.au/building/regulatory-framework/building-classes.

[6] Engage Victoria, Social Housing Regulation Review, Final Report < file:///C:/Users/vicrv3r/Downloads/social-housing-regulation-review-final-report_f0bb.pdf>.

i. Hoarding, recorded as an issue in around 8% of properties, which increases the fuel load available to any fire and assists fire to spread. It can also make escape difficult.

ii. Chronic illness, mental and physical disability and old age, which can contribute to the starting of fires and can also make escape difficult.

12. Accordingly, Homes Victoria, or the Director of Housing as it then was, has a unique responsibility in considering their tenants' health, wellbeing and risk. As stated in the DHHS operational guidelines in force at the time of Carol's death:

As a Social Landlord the Director has an obligation to combine responsibilities for property management and tenant well-being. Some of the Social Landlord principles that are relevant for home visits and inspections are:

- *to actively visit tenants to consider the repairs or works needed so their properties are maintained to a reasonable standard*
- *where underlying causes for tenancy issues are understood or risks to a person's well-being are identified (for example during home visits), the best efforts are made to arrange referrals to relevant services*.[7]

13. Homes Victoria manages Capital Development guidelines for its own operations and on behalf of DFFH, which detail the policies, procedures and processes to manage the risk to life due to fire in its properties, including public housing. The Guidelines were developed in collaboration with fire authorities and jointly signed off and endorsed.

14. Guideline 7.8, Fire Risk Management for Single Dwellings, requires the following fire safety inspections and testing:

All fire safety equipment must be inspected and tested:

- *Prior to the commencement of a new tenancy*
- *As part of any upgrade works*
- *Within 24 hours of a fault being reported*

[7] Home Visits and Inspections in Public Housing Operational Guidelines, 1 January 2020. Available at <https://providers.dffh.vic.gov.au/home-visits-and-inspections-public-housing-operational-guidelines>

- *At least once every five years*

Smoke alarms (dusting and testing) should be checked by tenants on a regular basis and should be a requirement included in the tenant agreement unless otherwise expressed.

For single dwellings owned by Homes Victoria, each property will be subject to a compliance check at least once every five years.

15. Homes Victoria advised that all existing properties have been upgraded by installing mains powered smoke alarms complying with the applicable standard, AS3786-2014, and comprising of an inbuilt, non-removable rechargeable battery with an expected lifespan of 10 years. Tenants are unable to remove the battery from the device to stop it from working. This also reduces reliance on the tenant to regularly test smoke alarms.

16. The evidence is that the Director of Housing was engaged with Carol and undertook regular inspections and maintenance on her property. I note that she had security screens installed on her windows after she reported feeling unsafe in her home. At the time of her death, a practice note, Fire Risk: Management Non-Standard Security Fittings, applied to Guideline 7.8. The practice note indicated that if secondary exits were available, then protection of the windows by way of security fittings would be acceptable. It appears that the installation of security fittings on the windows at Carol's home was in line with the applicable Guidelines and practice notes and was an appropriate means of protecting her safety in the home. I also note that due to her mobility issues, she may have been unable to use the window as a method of egress regardless of whether security fittings were in place.

17. Homes Victoria have advised that since Carol's death[8], they have implemented several measures to reduce the risk of fire related deaths in Homes Victoria owned public housing properties, including:

    - Developing a new Client Risk Assessment Form that Housing Officers can use for public housing tenants who are identified as posing a potential fire risk to themselves or need assistance to evacuate. The completed form is referred to the DFFH Fire Services Team who arrange for a fire risk assessment, to assess the required fire safety measures.

[8] These measures were not implemented as a response to Carol's death but rather occurred around the same time period.

- Working with FRV and the CFA to develop fire safety brochures to warn renters of potential fire risks in their homes, including portable heaters and smoking.

- Regularly engaging with FVA, the CFA, Victoria Police, Institute of Engineers Australia and Victorian Public Tenants Association through the Public Housing Fire Safety and Arson Committee. These meetings are aimed at determining how Homes Victoria can improve fire safety in public housing and discuss any new policies and new fire safety issues that may be apparent in their properties.

- Retrofitting fire sprinklers and other fire safety measures to properties where it was assessed that renters were unable to physically evacuate in the event of a fire.

- Retrofitting fire sprinklers to the common corridors of high rise public housing towards (where units were already protected) and installing smoke lobbies in front of the lifts.

- Updating the standard specification for all new builds (including Class 1a properties) to prohibit the use of combustible aluminium composite panels and rendered Expanded Polystyrene on external walls.

- Developing a program to sprinkler protect all family violence refuges.

18. I am satisfied that Homes Victoria and DFFH are cognisant of the risks of fatal fire in their residential properties. I encourage them to continuously consider whether improvements can be made to their policies and processes and housing stock to reduce the risk of a fatal fire in their properties, particularly for those tenants with vulnerabilities.

Smoking

19. Smoking is a significant risk factor. The Bushfire and Natural Hazards CRC report identified that smokers are over-represented to a large extent in residential fire fatalities. For cases where the fire cause was known, 26.7% were caused by smoking materials and over a third related to smoking in bed.

20. Smoking and alcohol use are interconnected as risk factors – research from Victoria found that the odds of smoking materials being the cause of the fire were 4.4 times greater where the victim had consumed alcohol.[9]

21. It is difficult to envision how to reduce or prevent fire deaths associated with smoking as it involves human choice, behaviour and addiction.

22. I note that as of 2010, all cigarettes manufactured or imported into Australia must be reduced fire risk cigarettes, which are designed to self-extinguish if the smoker does not draw on them. While this was certainly a positive step, I am unsure the extent to which this has contributed to a reduction in fires, fatal and non-fatal. While there is limited data, the Bushfire and Natural Hazards CRC report suggested that they may not have had a significant impact in reducing the number of fatal fires caused by cigarettes. I also note the huge upshot in the prevalence of illegal tobacco in recent years – which I assume are not subject to the same standard as legal imports.

23. There is ample information available about safe smoking practices, including on the FRV website which suggests:

- If you can, smoke outside the home in a single location.
- If smoking occurs in the home, there should be a smoke alarm in every room.
- Never smoke in bed.
- Don't smoke when affected by alcohol, drugs or medications that may cause drowsiness.
- Use heavy, high-sided, non-combustible ashtrays to dispose of cigarette butts. Pour some water on the ash and butts to make sure they're out.
- "Stick it don't flick it" – never flick cigarette butts, either inside or outside.
- Never leave a lit cigarette unattended and butt out your cigarette before you walk away.

[9] Bruck, D, et al. 2011, *Fire Fatality and Alcohol Intake: Analysis of Key Risk Factors,* Journal of Studies on Alcohol and Drugs, 72(5), pp 731 – 736.

- Keep matches and cigarette lighters out of reach of children.

24. Evidenced by the presence of cigarette burns at Carol's home, people are not taking heed of such advice, and I would assume are even less likely to do so while also under the influence of alcohol.

25. I intend to make a recommendation to the Department of Health around the inclusion of fire warnings on cigarette packaging, so that the risk is front of mind. However, again, these would only apply to cigarettes legally sold in Australia.

Smoke alarms

26. Smoke alarms are arguably the most important fire safety device – they are reliable, inexpensive and are mandated by law to be present in residential properties. Fortunately, they were present in Carol's property.

27. The Bushfire and Natural Hazards CRC report noted that the risk of death in a residential fire is higher in homes which do not have a smoke alarm. The Australian and New Zealand National Council for fire and emergency services (AFAC) reported in 2005 that the absence of smoke alarms can increase the possibility of a fatal fire by 60%, and low-income households are least likely to have a smoke alarm installed.

28. In 37 of the fire-related deaths in rental properties investigated by the Court, information was known about the presence of smoke alarm in 37 deaths. In 19 of those 37 deaths, a smoke alarm was either not present or was inoperable.

29. All Victorian residential properties must have smoke alarms installed on every level. If the property was built before 1 August 1997, they must be battery powered. If the property was built or majorly renovated after that time, they must be hard wired and have a back-up battery. Properties constructed or majorly renovated after 1 May 2014 are required to have interconnected, hard wired smoke alarms and have a back-up battery.

30. In rental properties, section 68AA of the *Residential Tenancies Act 1997* (Vic) requires that:

> (2) A residential rental provider must ensure that any smoke alarm installed in rented premises is—
>
> (a) correctly installed and in working condition; and
>
> (b) fitted with batteries or replacement batteries; and

(c) tested at least once every 12 months in accordance with any instructions by the manufacturer of the smoke alarm.

31. Renters must notify the rental provider if a smoke alarm is faulty or not working, and they must not deactivate or remove a smoke alarm or interfere with its operation in any way.

32. FRV advised me that they believe there are gaps in the current legislative and technical frameworks, which have been in the same form for many years and reflect minimum requirements. They noted that other Australian jurisdictions have additional requirements around smoke alarms such as requiring smoke alarms in bedrooms, interconnected smoke alarms in all residential buildings, and compliance checks upon property sale.

33. FRV and the CFA suggest that smoke alarms must:

    a) Meet the applicable Australian Standard (AS3786-2014);

    b) Be less than 10 years old;

    c) Operate when tested; and

    d) Be interconnected with every other required smoke alarm within the dwelling so all activate together.

34. They suggest that smoke alarms be installed in every living area and bedroom, including hallways and stairways, and be required in any garage that is connected to a building.

35. Of course, the utility of a smoke alarm relies on it being operable, which is not the case where the alarm has been tampered with or removed by the resident. FRV and the CFA have suggested measures that make removing or tampering with the smoke alarm more difficult, including flush mounting the alarm to the ceiling, the installation of damage stoppers over the alarm, and the use of 10-year batteries that are unable to be removed.

36. I will make a recommendation that the Victorian Government consult with FRV and the CFA to improve smoke alarm requirements.

Residential fire sprinklers

37. I consider improved smoke alarm requirements to be a significant prevention opportunity to reduce the risk of deaths in residential fires. However, the risk certainly still exists, particularly

where the resident tampers with that smoke alarm or has other risk factors impeding on their ability to escape the fire, such as mobility issues or hoarding blocking egress.

38. In such cases, home fire sprinklers appear to be an obvious infrastructure improvement that may reduce fatalities, by allowing occupants extra time to escape or be rescued. It seems likely that had they been installed in Carol's home, her chance of survival would have been higher.

39. Fire sprinklers control the spread of fire significantly by reducing its size and damage but also have a positive environmental impact by reducing the size and amount of combustible material consumed by the fire, subsequently reducing the carbons and toxic gases released.

40. The evidence is clear that fire sprinklers save lives. According to a 2020 study by the US National Fire Protection Association that examined structure fires between 2017 and 2021, civilian death and injury rates in home structure fires were sprinklers were present were 89% and 31% lower, respectively, than in home structure fires with no sprinklers.[10]

41. The issue of fire sprinklers in residential buildings has previously been identified and discussed by Victorian coroners.

42. In November 2022, Coroner Simon McGregor handed down his finding into the death of DVR[11], a young boy who died at the Royal Children's Hospital from smoke inhalation from a fire at his apartment, owned by DFFH. Coroner McGregor made three recommendations, including, relevantly:

I recommend that the Department of Families, Fairness, and Housing (DFFH) consult with relevant organisations and conduct a feasibility study into whether fire sprinkler systems could be installed in all current (and future) public housing premises.

43. DFFH advised the Court that it supported the recommendation and agreed to work closely with relevant organisations to investigate whether it is feasible to install fire sprinklers in all current and future public housing properties.

44. In 2023, Coroner John Olle made a recommendation to the Australian Building Codes Board, which produces and maintains the National Construction Code:

[10] McGree, T. 2024, *US Experience with Sprinklers*, National Fire Protection Association. Available at <https://homefiresprinklers.org.au/wp-content/uploads/2025/04/ossprinklers.pdf>.
[11] COR 2020 004470.

I recommend that the Australian Building Codes Board commence consultation with other appropriate organisations to consider whether there is a strong rationale to amend the National Construction Code 2019 to require all new residential buildings, regardless of storeys or height, to have fire sprinkler systems installed to significantly reduce the risks and consequences from fire.

45. The Australian Building Codes Board replied to the recommendation, stating:

The [Australian Building Codes Board] recently commenced a process of stakeholder and community consultation on the opportunities and challenges related to new buildings in Australia. We have included a topic on Sprinklers, with a particular focus on home sprinklers, within that dialogue and we will work with relevant stakeholders and organisations to consider options.

46. Fire sprinklers are currently mandated in Class 2 and 3 buildings with a rise of four or more storeys, but not required in Class 1a dwellings[12], as was Carol's home, and 1b dwellings[13].

47. FRV and the CFA have been advocating for home fire sprinklers, particularly in social housing, and have worked with the Home Fire Sprinkler Coalition Australia (**HFSCA**), the leading national resource for independent, non-commercial information about home fire sprinklers.

48. In doing so, FRV, the CFA and the HFSCA have identified barriers to the cost-effective installation of home fire sprinklers, including:

- Water pipes and meters to a residential property are generally 20mm in diameter. Home fire sprinklers require a 25mm diameter pipe and meter to be effective. Water authorities do not have policies that support the installation of home fire sprinklers.
- A lack of clarity as to who can design, install and certify home fire sprinklers.

49. I intend to make recommendations aimed at addressing these barriers. I also support the recommendations made by my colleagues. I encourage DFFH to install fire sprinklers in its properties where feasible, and for the Australian Building Codes Board to consider expanding

[12] A single dwelling being a detached house; or one of a group of attached dwellings being a town house, row house or the like.
[13] A boarding house, guest house or hostel that has a floor area less than 300 m^2 and ordinarily has less than 12 people living in it.

the requirements for fire sprinklers to other classes of buildings in the next edition of the National Construction Code, expected to be released in 2028.

RECOMMENDATIONS

Pursuant to section 72(2) of the Act, I make the following recommendations:

(i) With the aim of preventing like deaths and promoting public health and safety, I recommend that the Victorian Government consult with Fire Rescue Victoria and the Country Fire Authority to introduce improvements to the smoke alarm requirements within the Victorian Building Regulations.

(ii) With the aim of preventing like deaths and promoting public health and safety, I recommend that the Victorian Government consult with Fire Rescue Victoria and the Country Fire Authority to introduce an auditable regulatory compliance inspection process for domestic smoke alarms as part of the sale of residential property.

(iii) With the aim of preventing like deaths and promoting public health and safety, I recommend that the Victorian Building Authority publishes guidance to clarify who can design, install and certify home fire sprinklers to the FPAA101D specification.

(iv) With the aim of preventing like deaths and promoting public health and safety, I recommend that the Department of Energy, Environment and Climate Action work with Victorian water authorities to develop policies that streamline the approval process to allow for the cost-effective installation of water meters that meet the pressure and flow requirements for home fire sprinklers to be installed.

(v) With the aim of preventing like deaths and promoting public health and safety, I recommend that the Department of Transport and Planning and the Australian Building Codes Board conduct research (either jointly or individually) in consultation with Fire Rescue Victoria, the Country Fire Authority and the Home Fire Sprinkler Coalition Australia into adopting home fire sprinklers to the FPAA101D technical specification within the National Construction Code (NCC), where not currently required under the NCC.

(vi) With the aim of preventing like deaths and promoting public health and safety, I recommend that the Australian Government Department of Health, Disability and Ageing consider whether warnings about the risk of fire/and or burns should be included as part of the mandatory health warnings on cigarette packaging.

FINDINGS AND CONCLUSION

1. Pursuant to section 67(1) of the *Coroners Act 2008* I make the following findings:

    a) the identity of the deceased was Carol Fay Slade, born 31 May 1966;

    b) the death occurred on 22 July 2020, at the Alfred Hospital, 55 Commercial Road, Melbourne, Victoria 3004;

    c) I accept and adopt the medical cause of death ascribed by Dr Heinrich Bouwer and I find that Carol Fay Slade died from severe burns sustained in a house fire;

2. AND, having considered the available evidence including that provided by Victoria Police and the Metropolitan Fire Brigade, I am satisfied that the residential fire causing Carol Fay Slade's death was caused by an improperly extinguished/discarded cigarette setting alight the couch, in circumstances where Carol was likely impaired by the effects of illicit and prescription drugs and had reduced mobility, causing her to be unable to escape.

I convey my sincere condolences to Carol's family for their loss.

Pursuant to section 73(1A) of the Act, I order that this finding be published on the Coroners Court of Victoria website in accordance with the rules.

I direct that a copy of this finding be provided to the following:

Jodie Oelfke, Senior Next of Kin

Department of Families, Fairness and Housing

Victorian Building Authority

Consumer Affairs Victoria

Department of Energy, Environment and Climate Action

Department of Transport and Planning

Department of Health, Disability and Ageing

Australian Building Codes Board

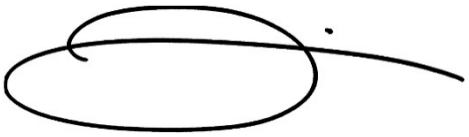
Fire Rescue Victoria

Country Fire Authority

Home Fire Sprinkler Coalition Australia

Sergeant Shaun-Maree Brock, Coronial Investigator

Signature:



AUDREY JAMIESON

CORONER

Date: 4 March 2026

NOTE: Under section 83 of the ***Coroners Act 2008*** ('the Act'), a person with sufficient interest in an investigation may appeal to the Trial Division of the Supreme Court against the findings of a coroner in respect of a death after an investigation. An appeal must be made within 6 months after the day on which the determination is made, unless the Supreme Court grants leave to appeal out of time under section 86 of the Act.