

Reducing risks for people and houses

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It's worth mentioning the pre webinar survey that was sent out and the fantastic response to that survey with over 200 individual responses to it.

I might just move through some of the highlights of those answers because they're quite informative around this topic of house and person survival. Out of the question around identifying easy and inexpensive house risk reduction options over 73% of respondents actually identified that they had pursued those risk reduction options and identified them. And I guess 41% also mentioned that checklists would be really helpful. Some of the previous webinars help define what those checklists could involve but I'd also encourage you to look up building best practice guidelines. CSIRO has one and I'll try to get a link attached to this webinar to help you find that. They can help you navigate those checklists.

The next question identified time consuming or expensive house risk reductions. Around 70% said they have looked into those. And then I guess how they trickle down to those more expensive time consuming ones is slightly less but quite a few people would appreciate that.

The next one is have you actioned any of those time consuming ones and nearly 50% had, so quite a lot of diligent proactive people within the survey group. Which is great.

How many of the surveys have identified vegetation risk reduction actions near around the house? Nearly 90% said yes so that's fantastic. But 30% of all those respondents also mentioned that a checklist would be really handy to help them navigate that topic.

How many of the respondents noted that they had houses designed and constructed to recent building regulations like AS3959? Quite a few there. 42% actually had regulated structures. So this discussion around what regulation achieves is quite relevant given that many responded.

And I guess for those that are thinking about using those construction guides as a retrofitting guide a word of warning and I'd encourage you to look carefully at those building best practice guides as say an ultimate guide.

The topic of do people store things under their house. Thankfully quite a few don't. The vast majority don't, so that message is getting through quite well.

Roofing materials were quite predominantly metal roof. Like of these 70% metal roof 24% tile. Metal roofs are significantly easier to seal up and ember proof because you don't have the issue of small gaps between each tile. But quite a few of the people with either roof types have recognized that there was still significant work to do for sealing those roofs up as well as other roof details like skylights and evaporative coolers.

The vast majority of decking around the structures were timber, either in the support structure and the materials that the deck itself was made from. That's concerning because timber decks are quite prolifically involved in bushfire and they're also quite challenging when you start to think about which ways you'd actually consider exiting a house and whether you need to exit over a deck. If that deck's on fire it very quickly rules that out as a safe exit path. And similarly with stairs.

Around bushfire vegetation, quite a high proportion 52% of people identified that they had trees or tree limbs that were close enough that if they fell they could impact the house. And it's worth noting that in a bushfire context trees fall over quite regularly and limbs fall off trees quite regularly. That's because fires find and exploit knots and the details in various trees. That can burn out and cause them to either fall over or lose limbs. Arborist's and tree experts are quite good at identifying which trees have a higher propensity to do that than others. So if you really want to retain certain trees then please get them looked at by a professional.

Quite a large proportion had bushes within 2m of windows. So we're talking about 58% of respondents. That's quite concerning because I guess there's good bushes and bad bushes. Windows with proximity to vegetation can definitely be a risk. So look very carefully at whether that's a threat. Referring to things like the CFA plant key can help you understand and unpack whether that bush is going to behave problematically in a bushfire or in a relatively benign way.

26% had tanbark within 1-2m of the house itself. That's definitely something to have a serious think about because even the tanbark burning itself is enough to crack windows or present a significant heat load to structures.

How does weather affect the vulnerability of your house? Very low percentage of not at all. Fantastic to see. 7% hardly, 19% moderate, 60% a lot. So we're definitely looking at a very well enlightened audience. The obvious answer is the weather is responsible for drying out vegetation and priming the landscape to support a fire are doing the exact same things to your house and all the elements around your house at the same time. All aspects of your house are at maximum and combustibility at the same time the landscape's primed to support a fire. We have to really keep reminding ourselves about that unfortunate alignment of a house becoming most vulnerable at the same time that fires become most prevalent in the landscape. And it's that double reason why looking very carefully at the combustible elements within, under, and attached to your structure is a key focus to managing house vulnerability.

Moving from the house perspective to a people perspective. Let's put ourselves in a situation where we've done a significant amount of preparation. We've got a plan but that plan's unfolded and you happen to be at home, you've recognized that the fire is impending, your option to safely be completely away from a bushfire prone area has passed, and you're actually presented with the inevitability of having to use your house as a shelter to try and get through that fire.

What that means is active monitoring. And we've had some very good previous webinar series that talk about what active sheltering means. I think it was Webinar 5 in 2021. Very worthwhile to go back and refresh yourself around what exactly active sheltering rather than simply picking a room in that house and staying there.

The reason why you're actively monitoring and moving around the house is because all parts of the house is survivable in a bushfire so there's very little risk in roaming around inside that structure and keeping an eye out for any signs. Now if something happens it may be within your means to suppress it, or put it out, or cover something up or protect a window that's cracked or something like that. So that's the other part of actively sheltering. It serves to have actively defending from the inside. But it's also about recognizing whether some aspect of the house is ignited and is likely to

develop into an entire house fire which really means that the clock has started to tick down for when that house will be untenable and you'll be no longer able to use it to survive.

So you'd have to start planning your exit from that house and that planning should have occurred long before that fire event. You need to have thought about these scenarios about planning an exit strategy of which you should have more than one exit strategy from a structure. And particularly what that exit strategy means. Which door? What route? To where? And what your options are when you get to those other locations are all key. But very well covered in webinar 5 in 2021. I guess those sheltering options are really about keeping you away from radiant heat and other sources. About minimizing your exposure to smoke and superheated air. And your options for moving into a car which can be driven and parked in open spaces or move into water bodies and things are all really key things to consider.

And that broadens that idea of not just thinking about getting your house through this event. It's about getting your house through the event but also expanding the range of options you have to maximize your chance if you're presented with this exact situation where you're doing your best to survive within your house but you're also planning for the unfortunate scenario that your house might not survive the entirety of that event and you need all these contingent backup plans to get through. And when you're faced with all those scenarios and all those planning it does then trickle down to your personal circumstance - how well you've equipped yourself with the proper personal protective gear, what you're doing to make sure you have enough lighting, and water and other processes and how you've put appropriate plans in place for the people and pets that may be dependent on you to get through that event with you. So how does your whole collective household work together to ensure you're all going to get through the process together?