

3M Transcript for the following interview: Ep 98 Andrew Stanbury –**Emergency Management**

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(R) Welcome to the 3M Science of Safety Podcast presented by 3M Australia & New Zealand Personal Safety Division. This is the podcast that is curious about the science and systems of all things Work, Health and Safety that keep workers safe and protect their health. I'm Mark Reggers, an Occupational Hygienist who likes to ask the questions. "Why?" "How?" And "Please explain." Whether you're a safety professional, Occupational Hygienist, someone with any level of WHS responsibility in the workplace, maybe you're a user of safety equipment, or maybe you're a bit of a safety nerd who finds this stuff really interesting – then this is the podcast for you.

Today, we're talking all about emergency management with Andrew Stanbury. Welcome, Andrew.

(S) Thank you. Thank you, Mark.

(R) Great to have you here. But can you please firstly, introduce yourself? Who are you? Where are you from and what do you do?

(S) Okay, well, currently I work for the West Australian Department of Mines or DMIRS (Department of Mines, Industry Regulation and Safety). And apart from other things, I'm the emergency management expert in the department here. Background-wise, I've got a fairly broad base of experience across oil and gas mining and other infrastructure in Australia and a little bit overseas as well, which gives me a fairly good overview of the effectiveness of systems in Australia.

(R) Excellent. So, the reason we're talking about emergency management is because this is actually a chapter off the OHS Body Of Knowledge. Now, two years ago (Episode 54), I spoke with Pam Prior

about the OHS Body Of Knowledge, which is a collective knowledge information source managed by the AIHS (The Australian Institute of Health and Safety) and they have a whole bunch of different chapters which cover principles and information that OHS generalists should have access to or be aware of when trying to address certain situations. We also did Episode 55 on Health and Safety in Design and Episode 56 on Rules and Procedures. So, I do highly recommend going back and listening to at least Episode 54 to set the foundation about the OHS Body Of Knowledge. Now it's freely available by the website ohsbok.org.au so everything we're going to be talking about from a chapter point of view, you can access that and that is free for individuals. So, Emergency Management is one of these chapters that you helped author, Andrew, so what is the objective of this specific chapter?

(S) It's to paint a picture of where Australia is. It's to highlight the critical elements that organizations in particular should focus on when planning and looking at their own risks, to ensure that they are effective and they are ready for emergencies, regardless of what they are.

(R) We're going to be talking very high level, to bushfire situations to individual organizations. But as far as I understand it, those four key components about Emergency Management systems are understanding threats, planning, response and recovery and their underpinning elements of an all-hazards approach. Have I got that correct there? Have I missed anything out?

(S) No, that that pretty well sums it up at a high level. And those principles cascade down to organizational frameworks and processes, and they drive risk assessment in organizations. They define the particular vulnerability of organizations. Importantly, they ensure that organizations look at their own internal capability and responding to emergency events and understanding their role in the broader picture and how they will interact with other agencies, other organizations, in the event of an emergency.

(R) There's certainly a lot there, when we think about emergency can take its shape in many different types of forms. So is a disaster and an emergency the same thing or they different based on the size of the situation?

(S) Look Mark, it's not quite as black and white is that. Generally, an emergency is something that's foreseeable and an organization can plan for that based on the resources they have both internally and

the resources they can draw on externally. Whereas a disaster is generally on a bigger scale. Quite often the scale is not known until it actually happens. So, things like earthquakes, major natural disasters and those sorts of things. Until they actually happen, it's very hard to understand the level of resources and things that are going to be needed. And quite often the resources are inadequate.

(R) So, thinking about it as Australia as a country, we've had many summer seasons with bushfire disasters, and that makes sense. We don't know how big or where it's actually going to be. So, that's why that falls under that disaster category. But how does Australia or a country take a proactive approach to emergency management rather than sitting back and waiting for something to happen?

(S) The most important thing - and I'll probably touch on this quite a few quite a few times - but the most important thing is standardization. And therefore, umbrella organizations inside the government or quasi-government organizations are absolutely critical in helping to bring together systems and ensure that companies and services do have that element of interoperability. But basically, in Australia, the peak agency for Disaster and Emergency Management is Emergency Management Australia or EMA. And that's the division of the Department of Home Affairs. And they really are responsible for looking at the preparation for emergencies and disasters at that level. They develop national plans, which state plans then dovetail into, and their role is really a coordination role. In those big events, you've also got Australian Fire and Emergency Services Authorities Council or AFAC, which is an umbrella organization and really helps pull together the agencies working in that space. And then the repository of the doctrine around Australian national response is the Australian Institute for Disaster Resilience (AIDR). And that's got a couple of partners in there, which is the Australian Red Cross, and Bushfire and National Hazards Cooperative Research Centre. So, between those organizations, that sets the scene and helps us establish the framework in Australia. Our response process, which is AIMS, is owned by those organizations too.

(R) So, what does AIMS stand for? One of the things that I fall into, and I'm just as guilty as anyone, using all these acronyms. So, what is AIMS?

(S) So AIMS is our National Incident Management System and specifically it's the Australasian Inter-Service Incident Management System. And basically, it's the framework that lets us respond in a

coordinated manner, regardless of where we are, to an emergency or disaster, essentially. It describes the structure. It describes competencies that are required and also the process of response.

(R) So that's what allows these different bodies to actually sing off the same song sheet, so to speak, to use that very basic analogy there, because if you're singing to a different tune, it's not going to be that good in the event of a disaster or an emergency, which is what they're planning for.

(S) Absolutely, and that has been the case without going to specifics in some emergencies and disasters in the past, where there hasn't been that a coordinated response. And it's a case of the left hand knowing what the right hand's doing and working together. So, that's the intent of AIMS.

(R) And I'm sure there's always room for improvement, like any system, but you want to find those improvements in the training or between the actual disasters and emergencies. So, good to know there's those systems out there that I personally hadn't heard of before having a chat with yourself. But can you explain what is the tiered management structure when it comes to emergencies?

(S) The tiered management structure is... I guess there's a lot of variations on a theme with this, depending on the organization, depending on what the framework is that they're working under. But essentially, the tiered response system, if you like, is; at a level one that's the crash bang, put the fire out, respond directly to the emergency or the disaster. So, that's the boots on the ground sort of response. And there's a control framework that controls that. But given that the emergency response teams and emergency response personnel are generally quite focused on the task at hand, they need support. And so above them you have a level two or an incident management team. So, while they're still focused on the tactical response, they're also looking ahead a little bit. They are trying to anticipate what sort of resources will be required, where they're going to come from and that incident management team has got a fairly specific structure. So, you've got planning, you've got logistics, you've got operational functions and a few other functions as well as obviously a lead in there. And they are really a support mechanism and the planning mechanism for the people at ground level. The third level is really a strategic function. So they'll look at stuff like stakeholder engagement, longer term business continuity, the impact of the emergency on the future of the business, that agency in the country. And really from the word "go" in a big event, your crisis management team is going to be looking long distance, and they're going to be looking at recovery, even at the start of the event. So,

between those three levels - and it's all about timeframes and focus - between those three levels, that's how the incident generally is managed. And regardless of the incident management systems that are being used, whether it be AIMS or any other sort of framework, generally, that's the sort of structure that's going to be employed.

(R) So, if we were to narrow down, we've been talking high level emergency disasters in my mind, but if we had to narrow that down to individual workplaces or sites or compounds, for those kind of workplaces and their Emergency Management systems what should they be considering?

(S) The first thing that any workplace or organization should be looking at is what are their risks? So, it all starts... and it's the same with Health and Safety. They need to look at the risks, the things that they're exposed to and how in the event of those things going wrong, how they're going to manage them. The second thing is, looking at their own internal capability. So, do they have the resources to manage things when they go wrong? Or do they need to call on external resources? And a very, very simple analogy there is: If you're at home and your house catches fire, you ring the Fire Brigade, because that's the resource that you're going to need. And you're not capable of dealing with the emergency yourself.

(R) So, thinking about components of emergency systems. As you said, understanding threats, planning, recovery and response, which, you know, the concept applied in a risk management context and aligned to those Emergency Management systems. Are they covered in the chapter from the Body Of Knowledge?

(S) Yeah, absolutely. They are. I think one of the important things to understand - and this is where Emergency Management has evolved over a period of time - most people would be familiar with the old PPRR (Prevention, Preparedness, Response and Recovery) model. But what that tends to make people think of is that it's a linear process, whereas I mentioned before, recovery planning really starts when the event happens. You know, people start to have a separate function that can be looking at how we're going to recover from this or how we're going to continue with our business-as-usual, once the fire is out, sort of thing, what resources are needed. So, that's something that runs in parallel, but certainly understanding the threats. As I said, any organization at any level - whether it be a very, very small company, whether it be a large organization, whether it be a collective or a government agency -

understanding the threats is absolutely key to being able to plan to mitigate them. In a lot of cases, particularly with regard to we talked about the difference between emergencies and disasters before, but in a lot of cases, some things are just not foreseeable, particularly in regard to natural disasters and those sorts of things. So, it's important to take an all-hazards approach and to ensure that the resources that are there are capable of dealing with many different types of things, even the things that you can't foresee.

(R) And is at that stage where what they can control, you'd be looking at minimizing vulnerability or controls in place to minimize the likelihood of some of these things, that we may be able to foresee?

(S) Absolutely. In a lot of cases and I guess the classic analogy is fire, we understand that fires are going to happen, so trying to minimize the impact of those - in other words, put the fire out as quickly as possible - is absolutely critical, a critical part of the planning. So, in a lot of cases with emergency management, we accept that things are going to happen. Certain areas might be vulnerable to floods, for instance. So, it's about mitigating the impact of those, because you can't prevent the event happening.

(R) Now you mentioned organizational capability, interoperability and flexibility. But when it comes to planning, like how critical is the competency side of things when working out what a workplace may or may not have the skills and aptitude to do?

(S) In a workplace, competency is probably one of the hardest things to maintain. Simply because although plans might be established on paper, the risks, the threats might be identified and plans built around them, ensuring that competent people are there to fulfil the roles in those three levels we talked about - in other words, the response the incident management team, the crisis management team - is very, very difficult. Particularly in this day and age, a lot of organizations have transient workforces, so when people leave, the skills go with them. And quite often it's only when the event happens that you understand, or you realize that the skills that you need there are gone. The way to really mitigate that is to ensure that you that there is ongoing training. It's very focused. It's linked back to the risks of the organization and that very, very importantly, that exercises are run and that the organization's capability is tested on a regular basis. It also comes back to change management, too. When people leave key

positions, just what the impact is going to be and what the organization is going to do to respond to that.

(R) In the response side of things, do you have any advice about how to minimize the impacts when you are responding to an event?

(S) So, there's two types of impacts that need to be minimized. There's first of all, there is the danger to the organization from the emergency. And then there's the danger to the response function as well. So, for instance, fire or other response agencies, before they leap into something, they'll go through a process of risk assessment to make sure that their people aren't put at risk and add to the disaster or the emergency. There's also the longer-term risk or minimization of impact if you like, and usually the people that looking at that are people in crisis management teams and those sorts of things. For instance, if you had a major oil spill, you've obviously got the response to try and stop the oil spill and those sorts of things. But then you've got the longer-term view of what's going to be the environmental impact? What's going to be the reputational impact? And those sorts of things. And different people are looking at those different types of impacts.

(R) You used the analogy before about a fire in someone's house and you call the emergency services, which would still be a similar concept for workplaces if an event occurs. Now working with those emergency services is really key. What advice would you give to workplaces in that regard? How to plan and prepare for that interaction with those bodies?

(S) Look, it's probably one of the key things and as I said before, there have been many instances both here and overseas where with the best intent you will have - particularly on bigger disasters and emergencies - you'll have many agencies and many organizations responding to a single event. So, the term interoperability is absolutely critical here. And you can only establish that before the emergency or the disaster. And that's about working closely together. That's about training together. That's about ensuring that very simple things, like the organization may plan for or an emergency on their site within their boundaries, but perhaps that emergency - it may be a fire, a chemical spill, whatever - if that's going to extend outside the boundaries, then handing over control...Who's in charge? At what point? All those sorts of issues are absolutely critical, because if they're not established beforehand, if you're trying to establish those rules of engagement, if you like, in the middle of a disaster, all that's going to

do is exacerbate the impact of the disaster and impede the response. And I've personally seen that happen on quite large scales, where there just hasn't been established prior to the event. So, it's probably one of the most important things for people to consider when they are putting their plans together.

(R) Now the OHS Body Of Knowledge is for the OHS generalists and the professionals out there. So, what are the implications and involvement that OHS professionals can get involved and have their contribution, when we talk about these emergency management plans?

(S) So, there's two reasonably well-defined areas. One is the more strategic role, which takes a longer-term view of things. And a lot of that involves the OSH professional in the pre-planning and ensuring that the arrangements, the emergency management arrangements are integrated with things like risk assessment. Organizational risk assessments shouldn't be compartmentalized. They should be holistic risk assessments so that the whole organization is across all of them. If you try and separate emergency management risks too much, then people can lose sight of them. So, the OSH professional plays a very important, a key role in pulling that together and also helping high level management keep on track, in a strategic role. At a lower level, there's an operational role, which is usually fulfilled by OSH practitioners who work obviously very closely with OSH professionals. Their role is a very, tactical role, and they have an integral part in the response to the emergency in that they might be looking after things, the safety of responders and those sorts of things and ensuring that the response goes well and that people aren't unduly put at risk. We talked about minimizing impacts before, so those operational impacts to the responders are very critical.

(R) Now, we've covered a lot today at a very high level, from a country-wide response system point of view to what individual workplaces or organizations should be considering with those similar principles. But to wrap this all up, what would be a key takeaway point or points that you would want to leave with our listeners?

(S) There's probably a couple of points. One is the organization's capability. So, I see a lot of organizations that I worked with over the years that, there again with best intent, plan very, very well. But there's a lot of assumptions, sometimes about their own capability. I'll give you an example. For instance, of mine site may on paper have a level of response resources that may be equipment,

people, all of those sorts of things. But in reality, when the emergency happens, are those resources available? You've got people on leave, people that are sick, people that have left and been replaced and aren't competent. You've got equipment being maintained and a whole bunch of things like that that are going to have a severe impact on organizational response capability. So, I think that's probably the first takeaway. And the first question that I ask organizations in whatever industry sector is: If we had an emergency right now here today, what resources do you have and do those line up with the plans that you've made? It's probably one of the key things. And secondly, as we've discussed, the most important thing is making sure that your plans, your operational structure, dovetails in with all of the other stakeholders, all of the other response agencies, other organizations that might be in the vicinity that you work in, and make sure that there's a high level of interoperability. There's a lot of organizations, for instance, you might have an area in cities where you have oil refineries and other major hazard facilities, and they have mutual aid agreements. So, in the event in the event of a disaster, they know how they're going to work together. So, that's probably the second major thing. And the third and final thing is - and it follows on from what I've just been speaking about - is that regardless of what structure you use, you know, whether it be AIMS, whether it be, ICS or NIMS or whatever sort of structure that your organization uses, is to make sure that it's compatible with our national structure. So, ensuring that roles are similar. If you've got a planning officer in your structure, make sure that they know to talk to the planning officer in the fire brigade, for instance, or whatever response agencies are going to assist you in the event of an emergency. Absolutely critical.

(R) So, there's certainly a lot here, and obviously we can't get too specific, cause emergencies are very broad, will be different for every organization and our listeners out there. But for those that did want to get a bit more information about this emergency management planning and some of the different things that you've mentioned, where would be a couple of good locations they could head.

(S) One is the OSH Body Of Knowledge, obviously. But more importantly, is the Australian Institute for Disaster Resilience (AIDR) is the custodian of the collection of handbooks which they publish and are regularly updated and a lot of that information is in this chapter. So, I would say that's probably the first port of call. But from an organizational perspective, one of the best sources of information is your local emergency response agencies. Go and talk to them. Interact with them. Find out how they're going to respond in different sorts of emergencies and what you need to dovetail into that.

(R) Fantastic we will make a number of those links available on our blog post, so people can easily find them. And that <https://ohsbok.org.au> is the address for the OHS Body Of Knowledge and Chapter 36 is that Emergency Management one, we've been discussing some of those key principles from today. So, thank you so much for your time today, Andrew, I really appreciate it.

(S) No problem. Thank you.

(R) Well, thanks for listening, everyone. You can get in contact with the show by sending an email to scienceofsafetyanz@mmm.com if you have any questions, topic suggestions or you would like some assistance in your workplace when it comes to the appropriate selection, use and maintenance of PPE, 3M is certainly here to help. You can also visit our website; <https://3m.com.au/sispodcast> for further resources on Emergency Management that we've discussed today with Andrew, as well as a transcript of the chat we just had. Plus, it has all the other previous episodes we have recorded with similar resources. Be sure to subscribe, rate review and share through Apple Podcast, Spotify, Google Podcast or wherever you get this podcast from. And as Robert Downey Jr says, "Don't let someone who has done nothing tell you how to do anything." Thanks for listening and have a safe day.