



MySafe:LA Podcast

Fire and Life Safety Education

Our mission: providing children, families, and seniors in Los Angeles with life-saving education, resources, and benefits.

Episode 14

Vision 20/20 Project Manager, Jim Crawford

Announcer: MySafe:LA is the public education partner of the Los Angeles Fire Department. You're listening to a MySafe:LA Fire and Life Safety podcast.

David: Hello, everyone. Welcome to another Fire and Life Safety educational podcast from MySafe:LA. My name is David Barrett, and today we're going to be talking more about the smoke alarm issue and why people continue to perish in structure fires. We're addressing this from a variety of angles, the technology of what goes into an alarm and what they are made of, the problems that people face, how we get people to install them, dealing with disabilities and mobility problems, and how smoke alarms actually save lives.

Today, I am delighted to have the project manager for Vision 20/20, a national consortium of fire safety experts and agencies, with us. Jim has thirty-seven years of experience in the fire service, most recently as fire marshal for Vancouver, Washington, and prior to that for Portland, Oregon.

Jim, welcome.

Jim: Thank you, David. It's a pleasure to be here.

David: I think one of the first things that we should do because we're trying to let more people know about Vision 20/20 is give me the elevator pitch on what Vision 20/20 is all about.

Jim: That's probably a good way to describe it. Vision 20/20 is a more or less loosely knit coalition of, as you pointed out, individuals and organizations with an interest in fire safety. Only in the United States, I guess, would you find an array, such a variety of organizations that have an active interest in fire safety, and because of that, it's not a nationalized view. It really requires a collaborative, communicative approach to saying where should we collectively be heading.

Different organizations like the International Association of Fire Chiefs, the firefighters, different fire marshal organizations, Red Cross, Center for Disease Control, National Fire Protection Association, International Code Council, and a variety of others, David, basically came together because there was willingness to do so and talk about where we could put some positive energy into what has already been happening with

regard to fire prevention in the U.S. The elevator speech is it's collaborative; it's an opportunity to communicate about things that we can work on together. Our efforts are designed to supplement the important programs that different organizations already have underway to improve fire safety in the United States.

If that makes sense, I guess that's the best I can do at describing who and what we are.

David: It does make sense. If I remember right, in one of our earlier conversations together, you were talking about how this came about at a fire conference when people were talking about having meetings and having more conferences, and your idea was we need to have some action, right? We need to get something done.

Jim: Yes. Rather than inventing yet another organization but for us to collectively try and fill in some gaps, because there has been a lot of good things that have been done. Our fire loss statistics are far better than they were when I started in the fire service, David, in the mid-seventies. Significant progress has been made, but we know that when we compare ourselves with other industrialized nations like the United Kingdom, Australia, New Zealand, Sweden, Norway, we can do a lot better than we have been; in fact, up to forty percent better in terms of fire losses. We have much work to do and we're trying to put it in productive directions, and, as you pointed out, to create action, not just reports that sit on a shelf.

David: Let's put this in some perspective. For most people, if you're going to have a conversation about a smoke alarm or about fire safety, they're ready to go to sleep. It's boring. Nobody wants to hear about it; no one wants to know about it.

Jim: Right.

David: If you talk about entertainment, if your cable box goes out, you're on the phone, fix my cable box right now. If your smoke alarm chirps, it's a pain in the neck and I'm going to yank that battery out or smash it or ignore it or something unless you happen to be one of those people who is particularly proactive or who has experienced a fire. The idea that you need to be burned before you understand that you shouldn't be is very disturbing, I think, to anyone in the fire service, so people do research to find out about what works. Briefly, tell me a little bit about this report that Vision 20/20 brought out in January of this year that talks about what is the problem with smoke alarms.

Jim: Yeah. One of the beauties of this project is the ability to reach out to folks who are already working on particular issues. In this case, the state fire marshal's office in Maine had an analyst, Richard Taylor, and they were very much interested and focused on the smoke alarm problem, provided time for Richard while he was there to review available

research on smoke alarm issues. It probably took about a year, David, for him to identify and gather as much information as we possibly could on smoke alarms and then to produce a document designed to begin shedding light on what exactly is the smoke alarm problem.

In a nutshell, we have been relying on phone surveys in the past that tell us ninety-six percent of homes in the United States have smoke alarms with no reflection on whether they are working or not. We know from actual field visits, and as you have found in your experience locally, that number is probably far less than that when you actually get into someone's home and start conducting home safety visits and checking their smoke alarms. One particular case in Tucson, Arizona, as few as ten percent of the homes in certain high-risk areas had one working smoke alarm. From ninety-six percent of homes having them to ninety percent of homes having none, we've got a problem in the United States. Richard's report made an attempt to highlight a few specific areas that we might focus on.

David: One of the areas that the research didn't spend too much time on or allude to other projects, but for which there's a lot of data, is that just giving away smoke alarms is not necessarily an effective thing, particularly if a fire department just gives smoke alarms away. You have some data about that, don't you?

Jim: We do have some data, some reports that have been done for Johns Hopkins University. Center for Disease Control had a program for smoke alarms for several years, smoke alarm installation efforts for several years. We have some information from that. I wouldn't call it a scientific study, but my own experience in Portland, Oregon, when I was there and after I left, indicated that when you give smoke alarms away, you cannot count on people installing them. People like things that are free, but converting that into they are important enough for me to take the time and install them is a different matter.

In one particular case in Portland, less ... I should say right around fifty percent, David, of the homes where smoke alarms were given away actually ended up installing them. The next level of that, if you want to go into that a little bit, is once they are installed, six months later how many are still operating. I have an anecdotal example for that as well.

David: Let's hear it. Share it with us.

Jim: The best thing that I can think of is Tualatin Valley, Oregon, their fire department there outside of Portland was very aggressive in multifamily occupancies. You have owner-occupied issues. You have rental issues with landlords and tenants, et cetera. Regardless of that, Tualatin Valley went into some apartment complexes and identified that about half of the smoke alarms were not working. They replaced non-working alarms regardless of the landlord's responsibility and made sure that the apartment complexes were up to one hundred percent coverage. Six

months later, they went back in and had identified that fifty percent of the smoke alarms had been disabled again.

When they investigated, they found that the problem was the tenants thought if they had a nuisance or a false alarm, that they could be evicted from their apartment. When Tualatin Valley ended up working with the apartment managers and basically changed the paradigm and the rental agreement at the same time, they told people upfront, you will not be disabled if you have a nuisance alarm. Excuse me, you won't be evicted if you have a nuisance alarm. You will be evicted if you disable your smoke alarm.

They changed the paradigm and that, I think, is part of the core of what Richard Taylor's report is trying to point out. On one level, we know that giving smoke alarms away is not the best methodology. Even when we get into homes and install them, it's not necessarily a matter of those smoke alarms are going to be working six months or a year later. There's got to be an educational component that goes along with that and perhaps a different look at the smoke alarm technology entirely that would reduce that nuisance alarm. That's also part of what Richard's report was trying to get at.

David: When you're in an urban environment like Los Angeles and we have four million residents, approximately, and probably as much as a million visitors at any one particular time, when a lot of people die in a short period of time ... In this case, eight people have died in the first six weeks of 2014 in single-family structure fires and within those fires not one working smoke alarm. In fact, only one structure had a smoke alarm, and it was disabled. That creates an uproar of fear and concern and what do we need to do about that. One of the things that needs to be addressed first of all, I would think, regardless of where you are, not just a single Los Angeles house, but what are the conditions in which these fatalities took place. We've, unfortunately, had some children involved in these fatalities, but typically, we're finding statistics related around age, mobility, and perhaps hoarding, packrat conditions in some of these homes.

What are you finding in your research relative to the most likely kind of a structure in which a fire would take place where there's no alarm?

Jim: I don't think you're any different than really any other place around the country, and I need to preface it by saying we still have data-collection and analysis problems in the United States, David. We get enough information to do some educated planning, but there's a lot of gaps that need to be filled in in that arena as well in order to answer the questions that you're talking about, and that is not just whether a fire occurs but why it occurs, and as important, who is involved.

We have some research to rely on and we do make some educated assumptions about people who are at risk. If you start off with that slice,

the first thing is it's where people live. That is no shock to anyone. Fires occur far less frequently in industrial commercial properties. You can't afford to ignore them because of the extent of damage that can occur. They occur less frequently, but sometimes the damage is more than collectively residential fires combined.

David: We're talking about enforcement.

Jim: Yes.

David: We're talking about in the commercial environment, your commercial and industrial inspection, enforcement through the fire marshal's office of whatever city is what's making that difference.

Jim: Right. One fire and thirty million dollars worth of damage can skew your local statistics where thirty fires in residential property wouldn't come anywhere close to achieving that. It just means that you have to have a balance, David, in your approach of how you're handling it. If you're going to focus on where people are being injured and where they are being killed, it is very obviously on residences, where people live. If you start breaking that down, probably the highest correlating factor is income level, between income level and age, where you already pointed out the mobility issues.

Then there are things like elderly people living at home or aging, populations that are aging, living at home, getting more forgetful. There is a combination of factors that point to a higher level of risk, and low income being one of them. Hoarding, that type of behavior is certainly a contributing factor. I think probably the highest level is age and income levels. Then the final one would be race, ethnicity, some populations having higher levels of fire incidents, which is a combination, perhaps, of cultural attitudes but also income levels.

Is that answering your question? Does that give you an idea of where fires are occurring nationally?

David: It does. Of course, it creates or describes the potential paradox, in that those most likely to be in need of a smoke alarm are perhaps (a) least likely to be able to afford it when compared to other things that they need in their daily lives, and secondly, if someone was even to offer to come into their home and install it, they're probably the most likely to want to be left alone.

Jim: Yeah.

David: We have this catch-22 situation. How do we break through? How do we make certain that we can make a difference? I can, just from my perspective, share one aspect, which is by keeping not only smoke alarms on first-responder apparatus, but information cards just like the police would have. When you respond in Los Angeles, for example, we have eighty-five percent medical responses out of approximately eleven-twelve hundred incidents a day, thirty-five hundred pieces of apparatus

moving a day, five hundred plus people transported to hospitals a day. We're in people's homes throughout Los Angeles and in some of the most at-risk homes every day. When we see something, when a firefighter sees something in a home, there's no alarm or something else, it's a perfect opportunity to very easily make that adjustment. That's layer one.

Layer two, perhaps part of the public-private partnership concept could be that a support organization could reach out. Tell me a little bit about your impression or your opinion about how that might work.

Jim: I actually have some experience with it, David, and it's all going to boil down to process steps. I can tell you how it unfolded in Portland, Oregon, while I was there and then how it later unfolded in Baltimore, Maryland. When we were getting ready to conduct some prevention efforts in Portland, we had identified a segment of the city that had five percent of the population but accounted for twenty-six percent of the fire deaths. I made an assumption that everybody liked firefighters and we would just go knock on doors and give smoke alarms away and they would be happy to see us. This was a largely African American community in Portland that did not like and did not trust the fire department for a variety of reasons.

When we conducted our market research to determine what would, in fact, be reviewed and received favorably in that part of the city, they came back and told us we had no credibility with that segment of the population and we needed to work with other organizations that did, many of them faith-based, David. In this case, Albina Ministerial Alliance was one of the principal partners. But the process of identifying who was at risk and what were their attitudes towards fire safety, what were their attitudes towards the fire department led to that public-private partnership that you point out where we ended up having two hundred volunteers trained to go door-to-door, talk with people, install smoke alarms, et cetera.

From my perspective, it was the fact that they were involved in decision-making that led them to the conclusion we own this problem. This is our problem to fix, and the fire department is going to help us fix it. It is not them coming in and telling us how to run our lives. That program produced measurable results over a period of time, where prior to that effort they were experiencing three to five fire deaths a year to zero for many years following that. I think it's not just because of the smoke alarms, but because they owned the problem and raised their awareness level, and we gave them some education on how they could prevent incidents from occurring in the first place.

That's a long-winded windup to the exact same process was used in Baltimore, Maryland. You identify the area; you identify the people. Then my definition of market research is basically qualitative, going out and talking with people about what's going to work and what's not, and

they found just the opposite. Folks in those communities were more concerned about their neighbors and feeling threatened, and the only people that they did trust were the fire department, so it ended up being that the fire department had to do the visits and had to knock on doors.

Variations of that occur everywhere, David, but if it's making any sense, some cases will lead to very different paths if you follow the process steps involved. I have been able to find that nationally, in many cases partnerships with different organizations leads to much higher credibility with your arguments. I think that there is that fundamental piece of having people own their own problems and be involved in decision-making to resolve them is a process step that garners participation long term.

David: One other topic before we wind up our discussion today. I think it's important to cover this with you because of your experience as a fire marshal. When you first came into the fire service, maybe a little bit after, but generally the late seventies, early eighties, the time from ignition until flashover in a typical room, a single room within a structure, was about fifteen minutes. Those rooms included wood and glass, steel, and paper. Today, we have so many plastics and synthetics that ignition of flashover could occur in as little as three minutes. What happens after that is a deadly cocktail, a poison.

Tell me a little bit about how that changes the importance and urgency of having working smoke alarms. I would tell you right now that in most of the fatality fires we're experiencing, people are being killed by the smoke, not by the flame.

Jim: Right. That has been the case since I got started. That's why I like your themes down there, David. Fire burns-

David: Our theme of fire burns, smoke kills?

Jim: Absolutely. Because it's true. Most of the people who die in fires aren't killed because of burns; most of them die from smoke inhalation. As you have pointed out, that's even worse today than it was back when I started. Ironic, when I first started, we were still dealing with balloon construction where there were no fire stops, and a fire would begin at the bottom and go all the way to the top before you knew it. More modern construction techniques help to mitigate that problem, but leap forward to the last ten years where you're talking about greater open space, open floor plans, where the fire is not compartmentalized.

Then you've already mentioned that all of the materials that we place inside means that a fire can progress much more rapidly than it did before. In fact, one guy from Underwriters Laboratory actually presented it as it's not your grandfather's fire. It's not. It burns much

more quickly, so you have less time to get out than you think. That is why smoke alarms, as you have already identified, are so critical.

What we also find from this research and what we've been doing in other areas with the Vision 20/20 project is that people don't think it's going to happen to them. I think there's another level of it, too, David, that's important to note. That is the right kind of technology that's going to make a difference because I used to feel like the biggest problem with regard to smoke alarms was having the kind of technology that would provide you with the earliest alert, whether it's a slow smoldering fire or a fast-moving flaming fire, ionization or affordable electric alarm technology would give you generally a quicker alert. I'm beginning to think that the larger problem is the fact that nuisance alarms are causing people to disable their smoke alarms when they do have them or not to have them in the first place.

I think it's a combination of educating and finding the right technological balances for which type of smoke alarms work best in which setting to minimize those nuisance alarms problems. We're never going to get to the point where a smoke alarm is as important as somebody's Blu-ray player or their air conditioning, but we can provide greater utility than we have in the past, I think.

David: You've just touched on one other technology issue, which is Blu-ray is almost obsolete and everything is almost downloaded. But smoke alarm technology, while it needs to advance, is still a basic fundamental process just like having a telephone.

Jim: Yeah. I guess I dated myself, didn't I, David?

David: A little bit, but you know something? I think the way in which you've dated yourself is with experience. It's experience that's going to help lead the charge relative to these issues, because, frankly, the most basic fundamental response is just give them away, and what we're learning is that that's not the best and most effective way in which to mitigate the danger of people perishing in structure fires, whether they be multiple occupancy or single-family dwellings.

We're out of time, Jim. Gosh, it was just terrific to listen to your observations, experiences, and anecdotes. This is a very important topic, particularly for those members in the fire service, in the public community as well as residents and visitors in LA. We will be addressing other issues in upcoming podcasts, including mobility and some of the technology issues, why are there so many different kinds of alarms and how are they used.

Jim, once again, thank you so much. MySafe:LA is proud to be building a relationship with Vision 20/20, and regardless of where that goes, we think you're onto something important. We wish you the very best.

Jim: Really appreciate that, David. Appreciate the opportunity and it works both ways, especially just so emotional for the tragedies that are occurring there in LA and appreciate the level of passion that you bring to the table in addressing it.

David: Have a great rest of the week and let's all stay safe out there. This is David Barrett for MySafe:LA. Hoping that you tune in for our next Fire and Life Safety podcast. Take care.

Announcer: You've been listening to a MySafe:LA Fire and Life Safety podcast. MySafe:LA is the public education partner of the Los Angeles Fire Department. Visit us at mysafela.org and lafd.org.