



# 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 13

Fire & Life Safety Expert, Meri-K Appy

**Announcer:** You're listening to a special edition of MySafe:LA's Fire & Life Safety Podcast.

**David:** Hello everyone. This is David Barrett from MySafe:LA and welcome to another one of our Fire & Life Safety education podcasts. Today we're going to be talking about smoke alarms and fire safety. In Los Angeles, in an 18 day period of time, 7 people have lost their lives. Year over year for the past 3 years in Los Angeles, on average, 20 people a year die in building fires. I'm saying building because it could be an apartment, it could be multi-occupancy, it could be a single family dwelling, but what all of those buildings have had in common, not 1 working smoke alarm.

To talk about that today, I'm really delighted to have one of our most favorite consultants, Meri-K Appy. Meri-K spent 13 years at the head of public education for the NFPA, was President of the Home Safety Council and then Safe Kids, and is considered a national expert in areas of fire safety and public safety. Meri-K, welcome. How are you today?

**Meri-K:** David, I'm great. But as we get started, let me say to everybody in LA that our hearts are with you. We've heard the news about the recent fire deaths. It just is so troubling. I want to applaud MySafe:LA for reaching out because these are life-saving messages and we really want everyone in LA and everywhere else to hear them.

**David:** In addition to being on our team and providing us with your expertise, you're involved with an interesting organization called ... well, an initiative, I guess, I should say, called Vision 20/20, which is made up of fire marshals and fire safety organizations. MySafe:LA is proud to be able to participate in some of that dialogue. The issue of smoke alarms is not just simply that you should have one, is it? There's a lot of complexity to it.

**Meri-K:** There is. Vision 20/20 and all of the organizations that work with us, which really represent all the major fire organizations in the country, are kind of coming together to look at this issue and to plan and be

smarter about how we invest our time, our energy, and our resources in solving the world's ... the nation's fire problem.

1 thing to know about the US is we have one of the worst fire death rates in all of the industrialized world. There are so many countries that do better than we do when it comes to addressing fire deaths. Part of the reason is that many of these other countries invest a lot in prevention. Our country typically is best in class when it comes to responding to fires. We don't always do such a great job in helping people prevent them.

David: That's a key point. Right along lines with that, it is documented through multiple studies that the most basic metric is true. That is that people who die in fires are more likely to not have a working smoke alarm than to have one.

Meri-K: That's right. Nationally, 2/3 of fire death happen in homes that either have no smoke alarms or the smoke alarms are not working. 2 out of every 3.

David: If we were to take that and compare that metric to Los Angeles, 90% of the people who die in homes in LA don't have a working smoke alarm. I guess you could look at that in 2 ways. One, you could say, well, it's good that most people have a smoke alarm, but it also means that there's a lot of people that still don't have one. The knee-jerk reaction, of course, is we'll give everyone a smoke alarm, but as we know, and as many other studies have shown, just handing out smoke alarms doesn't work. Can you tell me a little bit about why that is?

Meri-K: Smoke alarms are ... Number 1, they're a fantastic device, and for people who haven't thought about their smoke alarms recently, we'll just remind them that in a fire, you're more likely to die from smoke than flames. Fire behavior is such that when a fire first breaks out and starts to grow in your home, it gets really hot very fast. It produces poisons that get into the atmosphere. If you're sound asleep in your bed and you breathe in this poisonous smoke, it can put you into a deeper sleep. You may just never wake up.

The beauty of a smoke alarm is that, when the fire is still small enough that you have a good chance of getting out safely, it wakes you up. But it can only do that if they're working. For fire safety experts and MySafe:LA, it isn't only having the smoke alarm. It's making sure that the smoke alarm has fresh batteries in it, that it's in the right place, that you have enough of them, and very importantly, that you know exactly what to do when they go off.

David: Yes. Practicing a family escape plan and utilizing the smoke alarm as part of that plan as perhaps the trigger mechanism is really important, because we also know that children will sleep through a smoke alarm.

Meri-K: So right. You're so right, David. That's something that's actually ... I've been doing this for 30 years. I would say, for 25 of those 30 years, we did not realize that smoke alarms, when they sound, they're so loud, you'd think they'd wake up everybody. But in fact, little kids sleep more deeply than adults, than middle-aged adults do.

They just, in order to grow and thrive, kids can't be waked up all the time. They spend more of the night in a deep sleep. Smoke alarms are not always effective at waking people up in a really deep sleep. We know that kids and older adults who may be experiencing some hearing loss often will sleep right through these blaring smoke alarms.

The message there is, even if your kids have had wonderful fire safety, and I know happily in LA they're getting great safety training through MySafe:LA, but even still, it's a parental, it's an adult caregiver responsibility to make sure that when the smoke alarms sound, you're responding immediately, you're getting to your kids, getting to your older loved ones, making sure they wake up, and helping them to get outside.

David: Our culture's become so much more complicated, but there are some basic things that we just react to. If we're sitting around with our family and the cable goes out, and all of a sudden, we have a blank television screen, what do we do? We start yelling and we get on the phone, and where's my TV?

If your smoke alarm beeps, beep, and then a minute later, beep, and it's telling you that the batteries need to be replaced, a lot of people just yank the battery out and say, "I don't want to hear that anymore." Tell us a little bit about the annoyances that people tend to think of when they think of smoke alarms and how we can overcome that.

Meri-K: OK. First, I want to again do a little shout-out for MySafe:LA because a couple of months ago, I was in LA with you and I got to attend one of your school programs, presentations, for fifth graders. The firefighters who were doing the presentation had a smoke alarm that was making that chirping sound that you just ... that chirp, chirp sound. When we were asking kids, a lot of them ... The firefighters said, "What does this mean when you hear the sound?" A lot of the kids were raising their hands and saying, "It means my smoke alarm is working."

This, to me, was a big concern, and to you as well, I know, because that chirping sound, no, it doesn't mean that it's working. It means your battery is about to die. But when the sound happens, often it's in the

middle of the night, it wakes you up, and it is a pain. Very often, the tendency is just to take the battery out, to silence the alarm, and then in the morning, you get busy. You forget about it. Now you don't have the protection of the smoke alarm.

One of the things that I know MySafe:LA is doing and we're trying to do through Vision 20/20 is help make sure that everybody knows that funny little chirping sound is telling you something really important. It means 1 of 2 things. Either your battery is dying and you need to put a new battery in your smoke alarm, or it may mean your whole alarm is old and it needs to be replaced. One way or another, it's telling you you need to take action right now.

David: That action right now is something that is a life-changing event, because if you've never had it happen, then you don't think that it ever will. Once you have had it happen, you'll never miss the opportunity to practice and be prepared again. I think that's a really interesting kind of a tipping point for people that, in so many cases, you have to have had a fire or have to experience smoke and the alarm going off and getting out, to recognize how important it is.

Here in Los Angeles, when we have so many fatalities in such a short period of time, the natural governmental reaction, of course, is let's put a smoke alarm in every home, let's just get smoke alarms everywhere, when in fact what we really need to be saying is, "Let's get smoke alarm education everywhere."

Meri-K: That's right. You're right. It's a package deal. Yes, certainly, we need alarms. There's no question. You've got to have smoke alarms. Everybody needs and deserves working smoke alarms in their home. That's part of the solution, but it's not the whole solution. You can have the alarms and if ...

They've done some interesting studies on this, actually, of people who hear the alarm, they wake up, but they spend time verifying that something's happening, so they'll walk around the home or they'll see what's going on, not realizing that really their window of opportunity to get to safety may be as little as 3 minutes. That's how long it can take for a fire to go from a first ignition to flashover. You've got to have the whole thing, the alarm, the plan, and the practice, to make sure that you're really set.

David: You said you've been doing this for 30 years. I can't believe you started when you were only 1 year old. That was [spanning that 00:10:13].

Meri-K: So charming.

David: 30 years ago, the content of people's homes was different than it is today. If we were thinking about the initial application of a smoke alarm, the content of a home would be wood and steel and paper and glass [crosstalk 00:10:29]. Today it's synthetics. It's plastics. It's all kinds of things which will, when ignited or when burning, will produce a wide array of poisonous gases, including cyanide. There are situations where if you're awakened by a smoke alarm, if you stand up into that smoke and take 1 breath, you're quite literally dead.

Meri-K: That's right. That's right. The speed, too. You're so right that 30 years ago, and I was around when they were doing, when the government was doing studies on fire, how long does a fire take to grow, how long does it take for the smoke alarm to go off ... These were the kind of the early studies on that. Back then, a fire would break out. We would set a fire for research purposes, and then do the test. Really, you might have 10 or 15 minutes back then to wake up, to get your family, get everybody outside, before flashover happened. David, I'm going to let you explain flashover, because I think a lot of people just don't know what that is.

David: I think the simplest way, without being too technical, is to say that there's enough heat that has built up in your home and combined, of course, with that combustible, that is what we would call a near-simultaneous ignition of those combustible materials in an enclosed area. If fire is growing within the corner of a house ... For example, let's say you had a heater and the heater ignites or there's an electrical problem, then you're going to start having surfaces within the home start to undergo what's called thermal decomposition.

That thermal decomposition is the release of flammable gas. When all of those exposed surfaces in an area are heated to their auto-ignition temperature, and that's called a flashpoint, and it's typically around 500 degrees centigrade or 930 degrees, roughly, Fahrenheit, if memory serves, then that means that it all ignites simultaneously.

Meri-K: Yup. [crosstalk 00:12:36] If you were a layperson looking at it, it would look like the whole room explodes into fire at once. The way the fire service thinks about it is, everybody needs to be in a safe place before flashover happens, because when flashover happens in a home fire, it's almost ... There's almost nothing more you can do to be safe.

Our goal here is to help people understand the whole issue of the speed of fire, to know when a fire may be breaking out in your home, to wake up, martial the family, get everybody outside to safety if you can, within the time it takes to get to flashover. Now, as we were just talking, that time has gone from 10 to 15 minutes, 30 years ago when I started, down to like 3. Really we have no time. We have no time to look around and say, "Oh, is this really a ... Is my smoke alarm really going off?"

I can give you a personal example. I live in Washington, DC in a big old apartment building, and we have a new fire system here that they've been testing. Believe it or not, it went off in the middle of the night, 3:30 in the morning. I was up like a shot. I didn't stop to get dressed. I didn't grab anything but my purse, which I always keep right by the door, took my key, and I was out that door within 1 minute.

But a lot of people in my building sauntered out. They were coming out 5 minutes, 10 minutes, 20 minutes later. The alarm was still sounding and sounding. It turned out it was not a real fire. It was something else I won't bother everybody with. But what made me happy was, number 1, I knew my alarms worked. That's good. What made me unhappy is there are a whole bunch of people living in my building who didn't respond fast enough. We've got work to do right here in my own neighborhood too.

David: I think the answer is, is that we have work in all of our neighborhoods.

Meri-K: Yeah.

David: Each neighborhood that we live in can benefit from collaboration. That's part of what the MySafe:LA mission is, is collaboration at all levels. We support the Los Angeles Fire Department however we can with programs, with education. We support the community. As it relates to this recent rash of fire fatalities in Los Angeles, MySafe:LA, through its relationship with First Alert, is donating 3,500 alarms to the city fire department, the Los Angeles Fire Department, for distribution to those who are [need 00:15:19] in the city at no charge. These are free smoke alarms.

Separately from that, as you know, Meri-K, and as we want all of our listeners to know, MySafe:LA operates in schools with the Los Angeles Fire Department and visits senior centers, rec centers, museums, and libraries that teaches older adults about fire safety. Anyone who is in need of a smoke alarm gets one from MySafe:LA at no charge.

We have given out thousands of alarms and we will continue to give out thousands of alarms, but our message is, "You need to be aware of how the alarm works, you need to have it properly installed, and you need to maintain it." We have a wonderful cadre of fourth and fifth graders who are junior fire inspectors who inspect their homes, and you've met some of them, Meri-K.

Meri-K: I have. They're amazing.

David: These kids are full of energy and they're not old enough to hate their parents yet and they want their parents to be part of their team, so it's a wonderful way for us to get the word out. During the course of the

next week to 10 days, MySafe:LA will be publishing other podcasts related to this important issue of smoke alarm and fire safety.

We're going to talk with a smoke alarm manufacturer. We're going to talk with an academic who is involved in research studies related to this. Hopefully we'll talk to some folks from Vision 20/20. The whole idea is to help the public, city officials, firefighters, anyone in the town, to know that this is an important issue, and the best way to be safe is to be aware and educated about the process and then to follow it. Any final thoughts, Meri-K?

Meri-K: Just that we are so proud, on behalf of Vision 20/20, to be part of your team. Fire is something that affects us all. The really sad fact is we know that almost every fire death could be prevented. It all starts in people's homes, which is where most of these fire deaths occur. We're working with the United States Fire Administration as well on a campaign called Fire is Everyone's Fight. I really believe that. I know the fire departments out there are best in the world, but they can't do it alone. Fire is everyone's fight and it starts at home.

David: Fire is everyone's fight. Thank you very much, Meri-K. For everyone listening, thank you for being part of our audience today. MySafe:LA is a public benefit, nonprofit corporation. We take no money from the City of Los Angeles, Los Angeles Fire Department. All of our revenue comes from people just like you. To learn more about us or perhaps to help us out with a donation, please visit our website, [www.mysafela.org](http://www.mysafela.org). For MySafe:LA, I'm David Barrett. Thanks very much for listening.

Announcer: You've been listening to a MySafe:LA Fire & Life Safety Podcast. MySafe:LA is the public education partner of the Los Angeles Fire Department. Visit us at [mysafela.org](http://mysafela.org) and [lafd.org](http://lafd.org).