



# 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 18

### CA Emergency Services, Kate Long

**Announcer:** My Safe L.A. is the public education partner of the Los Angeles Fire Department. You're listening to a to a My Safe L.A. fire and life safety podcast.

**Cameron:** Hello, everyone. This is Cameron Barrett, the education director for My Safe L.A., and you are tuned in to another My Safe L.A. Fire and Life Safety Podcast. We're talking about earthquakes today, and there's a good reason for that. After the 5.1 in La Habra and the 8.2 in Chile, a lot of us are thinking about earthquakes. And we are fortunate to be joined today by Kate Long, who works for the California governor's Office of Emergency Services. She's the Earthquake Deputy there, also the Earthquake and Tsunami Program Chief. And, I'm just so happy to have you on the line, Kate. I love chatting with you. I always have fun conversations with you. Thanks for joining us.

**Kate:** Thanks so much.

**Cameron:** So, 8.2 in Chile, just a couple of days ago. And there's a lot of talk of tsunami there. I think a lot of us in southern California don't know a lot about tsunami, so perhaps we should start there. Talk about the risks of tsunami in our area and what we can do about it.

**Kate:** Well, in southern California, our risk for tsunami is a little bit different than it is in Chile or in far northern California and Washington, Oregon, or in eastern Japan. All of those areas have a subduction zone under the ocean, just off the coast, and those can cause large waves which would arrive in minutes. Here in southern California, we're much less likely to have that type of event. If we have a very strong shaking off the coast, we could have some underwater landslides which could cause localized tsunami in a very small area. But we're almost never expected to see something that would be like the Japan tsunami. That doesn't mean we don't have a threat. We do. And it's really important to note if you live in an inundation zone or not. And there's an easy way to find out. You can go to [myhazards.ca.gov](http://myhazards.ca.gov) or just type in "my hazards" in your browser and then you can type in your address or the address where you live, work, or play and find out what kinds of hazards you face at that address. Not

just tsunami, but, are you near a fault? Are you in a high fire hazard zone? Are you in a flood zone? And that site also has information about what to do in all of those cases.

Cameron: So, if we go to that particular site, Kate, we can find out: where, perhaps, our evacuation zones are, where's best for us to head to ...

Kate: Yeah, at the "myhazards" site, you'll be able to see a map that shows where the maximum inundation zone is. That means, worst case scenario, if a tsunami were to come onshore- are you in danger of being inundated? Are you in danger of getting wet? And not every tsunami would hit every part on that zone. That just gives you if you're in any kind of danger from any tsunami. In most cases, tsunamis often come to California, but don't even come inland. That doesn't mean they don't cause damage. They cause damage in the harbors and the ports, and we tell people to stay off the beaches. The thing to know is, most tsunamis are going to come here from a distance. They're going to be some hours between the earthquake and the arrival of a wave here. For instance, if the tsunami that was generated by the Chile earthquake had made it to California, it would have come to southern California about 5 in the morning. And that was from, the earthquake was about 9 in the evening. So local officials would have initiated evacuation procedures. But knowing if you're in a zone or not makes you know whether you need to walk inland or if you're out of the zone and can stay put. So, go to "myhazards" or just type in "tsunami" and "California", there are several sites that show the state tsunami inundation map. Find out if you're in the zone, and then you can call your local city government and find out where the evacuation sites and evacuation locations are. But really, it's important to just go uphill or inland. You want to be about 100 feet up or 2 miles inland if you're in a very flat place.

Cameron: Tsunami, who'd have ever thought? We do think a lot about the Earth shaking, though, around these parts. So back on Friday; a 5.1 in La Habra.

Kate: It's- earthquake is a very common thread here. Tsunamis could happen and we need to know about them, but earthquake is really what we live with- it's what we exchange for living in such a beautiful, wonderful place as southern California. So everyone needs to know how to care for themselves and take care of themselves and their family during an earthquake. It's just, we live in earthquake country. If we lived in Maine, we'd have winter coats!

Cameron: That's a great way to think about it! You're right. We don't need snow boots in Los Angeles, but we do need preparedness items in our homes so that we can be safe and fed and OK for at 72 hours after an earthquake. Can you talk a little about that, Kate?

Kate: Well, I think it's important to think about what you would do if you had to camp at your house. Because, if you think of it that way, you don't want to have to go a shelter after strong shaking. Perhaps there's no utilities, perhaps you're wondering if your house is safe- you'd have a lot of broken glass in the house, and so you might want to be able to just get outside your house and not have to go to a Red Cross shelter. And that's what that kit is for. And we say at least 72 hours because, if a big earthquake, if it affects a wide area of California, it'll be more time consuming for us to get supplies in and water in to help everyone. So the longer you can stay self-sufficient, particularly water, I actually keep two weeks of water just because I know my neighbors are going to be coming to my house. We live in a dry area, and once the water's out, that's the number one thing you need. One of the things that I think is really important is to have enough water. Certainly, the other thing is to have the kinds of things your family might want if you were camping or sheltering in places. If your kids hate pork and beans, don't put them in your emergency kit, - that kind of thing. Really think about what you might need- emergency medications, for instance, copies of your prescriptions in case you do have to evacuate. Those are the kinds of things that will get you through the response period. And think it seems for a lot of people, like, "Uh, what a lot of work?" Or "I don't have the space" and so I just recommend when you go the store buy one thing each time: extra batteries for you flashlight, an extra pair of reading glasses to put in the car, different kind of things that are not just for earthquakes. There's contingency planning that you might use more often. Another thing is, we're all a little bit prepared without having done it just for the earthquake. If your water is strapped and braced so it doesn't fall over in the earthquake, you have 40 gallons of water right there.

Cameron: Neat, right? I think a lot of folks forget about that. We live in a time when so many things are automated, so many things are just there, that we forget to be engineers of the sort. Be clever. Think about these kinds of things. Learn about them. There's tons of places to learn that, not just mysafela.org but I know that the governor's Office of Emergency Services has a lot those tips online.

Kate: We do, and you know what? "My hazards" is a great site because that'll link you to ways to be prepared and to be- ... but the other places are, shakeout.org has great information, that's where we try to get everyone to practice once a year, because we want everybody to have that muscle memory of what to do. Earthquakecountry.org is a great site. Or you can just type in "7 steps and earthquake"- we have seven steps that will prepare you to survive and recover from the earthquake. Because that's all we all want- we want to be able to get through the shaking and get our lives back on track. And the steps are this: One of things you want to

do is secure your space, because a lot of the injuries that happen after an earthquake aren't from building falling in, those are quite unusual, it's really from non-structural, or what we call "non-structural hazards"- your bookcase falling over, grandma's china from the top shelf bonks somebody on the head. There are things you can do- simple, cheap things which will not only make you safer in your house during earthquake shaking, but also- you want to have grandma's punch bowl there, it's not something you can replace. You want to have your TV later, you don't want to have to buy another one. So strapping down big appliances and moving things down from high shelves can make a big difference, not only in the first few hours in keeping you safe, but also in how soon you can get back to normal.

Cameron: Mm-hmm. (Affirmative) I think, the number one injury ... let's stick with these seven steps, they're so imperative, and talk to me about securing your space. The number one injury after an earthquake, that folks showing up in emergency rooms, are cut feet, and that's really serious stuff.

Kate: That's true.

Cameron: Not just infection but, you got to walk, right?

Kate: Well, that was true after North Ridge. The number one injury that people appeared with at emergency rooms was glass in their feet because they ran out of the house, which is a response that people do automatically.

Kate: You know what I'd do? I have a pair of tennis shoes, an older pair of tennis shoes, and I have them by my bed and I have them tied to the bed leg, and I have a pair of glasses and my car keys in them.

Cameron: I never heard of tying them to the bed frame! That's brilliant!

Kate: Somebody suggested that to me- because, if things shake around a lot and it's dark, so a flashlight, your car keys, for me, glasses, and tennis shoes so I can get out of the house without cutting my feet. I also have an emergency kit that I keep near the door, and that's in case I have to evacuate quickly. And that just has the things that I would need immediately if I couldn't go back to my house. I have a little thumb drive that has a copy of my papers, my insurance information, things like that. I have a toothbrush, I have a rain poncho, I have some water and some protein bars- just if I had to leave quickly and that could be because of fire or for any reason. And certainly, that kind of a kit is really important if you live in a tsunami evacuation zone.

Cameron: So secure your space, having that kit available- there's two of our seven steps. What are the other ones?

Kate: Well, planning to be safe is kind of, almost, the most important thing. Because we all want to reunite with our families, so having an idea of- talk to your children about, "If there's a fire, where will we meet?" A local meeting place. We'll meet across the street in Mrs. Johnson's front yard. If you're at school, where will we meet you? With your partner ... my husband works out in Ontario ... we have an agreement. If he has to evacuate south, where we'll try to reunite. If I have to go north, where we'll try to reunite. That's important. Everybody in the family having a common phone number of somebody out of state. Now, phones might be down immediately, but eventually when they come up, long distance phones come up before local phones because the local infrastructure might be damaged. So, I ...

Cameron: The other thing that happens with phones is that cells towers are going to be either going to be jammed or perhaps knocked down in a severe earthquake. And so, your mobile phone might not work for calls but data might still work. Do you talk to people about texting?

Kate: Well, I think, if you are anxious to try to reach people immediately, text is more likely to go through than a voice phone. However, we don't even know if that will go through if it's super crowded. So, if you do need to reach someone immediately, please text. But be aware you might not be able to reach anybody immediately and you're going to feel much more confident and calm, if you and your family have talked about how to reunite and have talked about where the important emergency supplies are. There's a lot of information, if you type in "7 steps to earthquake safety," you'll get a lot of information about how to make a plan. Red Cross also has great information about how to make a plan. And you know what? It's not about having this binder, it's about sitting down at the dinner table every night and saying, "Hey, what would we do if there were a fire? What would we do if there were an earthquake?" And talking about it with the family, because making those decisions together makes sure that everybody understands, everybody agrees and really, it's just going to give a peace of mind to have had those conversations with the people you love.

Cameron: Also remember that plans can change- and that's a really important element too. Just because you made a family escape plane when the kids were three and five- and now they're teenagers, doesn't mean that escape plane shouldn't be revisited and repracticed. Can you talk about practicing? When do you practice your escape plan, Kate?

Kate: Well, you know, we use "shake out" every year, and we use the first of the year- New Year's Day. New Year's Day, we change the battery in our

smoke detectors. We change the water in our barrels of water that we keep- we happen to keep two 55 gallon drums of water outside the house. But as I said, that's just because we know the neighbors know that we're emergency managers and are going to come our house, so we use those opportunities. What we haven't done recently, and we sort of did with some friends as a competition in our neighborhood- we all said, "What if we had half an hour to get out of the house? What if we had fifteen minutes to get out of the house? What would you bring?" And then we all ran around and, frankly a lot of the couples argued furiously. And then we all ended up in our front yards and we saw what everybody ended up getting out within fifteen minutes, I think, was our limit. And then we had a barbecue. So, it was fun-because I think making it fun helps especially if you have kids. And also- who are the people who you're really going to depend on in an emergency situation? It's really your neighbors. So doing it as a group gave us all a chance to talk about it.

Cameron: Southern Californians are not known for being tight with their neighbors. So this is a great way to kind of break that stereotype and get to know the folks that live next door.

Kate: Well, talking to your neighbors makes your safer every day. Having someone say, "Hey did you see those people? Does Cameron ... I thought she was out of town, who's that guy on her front yard." Talking to your neighbors and knowing your neighbors helps you every day. Trying to have a reason, you know, a block party- just have everyone bring your own coffee cup and talk about- is there anybody in the neighborhood that has special needs? We have a lady in the neighborhood who that elderly and alone, so we know we're going to need to check on her. But she's home all the time, so she's always watching the neighborhood for us. It really helps if you can meet your neighbors. And that is, as you say, an ongoing thing 'cause people move.

Cameron: Yeah, you know- another part of our family? Our pets. And that has to be part of your plan. I think folks often pack that kit and forget to include water for their pets, food for their pets, medication. And making them part of the plan as well. Do you have pets, Kate?

Kate: I do. I have a cat and a dog. And they have their own kits. And they, actually, frankly, I purchased those kits. Most kits I make myself. But I was feeling a little guilty that I didn't have good kits for my pets. And so for Christmas last year, I bought myself pet kits. And I have, also, foldable cages for them. Little carry cages that fold up because if you do go to a shelter, many shelters aren't designed to keeps pets- so you really need to be able to contain your pet, because we love our pets.

We're going to leave them behind, only in the most dire of circumstances.

Cameron: How very true? How true? I love those stickers that the pet shelters in your area or all kind of organizations, actually, my vet gave me a sticker that says, "In case of emergency, please rescue my pets." In case you're away from your home when a disaster strikes, you can put that sticker in your window, and they know there's a loved pet in there that needs help.

Kate: I was at my nephew's apartment recently and a neighbor had one of those on their door. So in the apartment somebody would be aware that there were pets in the place.

Cameron: Yeah, I mean, we do have to leave them at home. Very few of us can bring them to work- which is something that we should be working to change but obviously- you and I are pet lovers, so that so foremost in our minds. I always suggest to people to look into CERT, the Community Emergency Response Teams that train these free in the city and that's all about neighbors helping neighbors, isn't it?

Kate: Well, that's another great way to meet neighbors and also- there's so many things we're used to having wonderful, reliable emergency services in southern California. We have great emergency services. We have ... the fire department's wonderful. We have mutual aid that helps if there's a big event. But, in a big, regional disaster, there just won't be enough responders to come immediately. We have so many things in place: the state, the federal government, mutual aid- everything will rush to support us after a big earthquake. However, that doesn't mean that there won't be an extended period when my house might not be the first house that people get to. And CERT is a great way to not only have more confidence about what you can do during a disaster, but having experience with your neighbors about how to organize so that you can do the things that need to be done for each other- move the piano that has fallen on top of Mr. Smith, organize who's got water, who's got food, fight small fires if you need to. Everybody should know how to use a fire extinguisher- that's one of the things they teach in CERT. And plus, it's really kind of fun. I felt very empowered by taking CERT.

Cameron: I do too. Every time I recertify in CPR or first aid, it kind of gives you a little confidence boost. It's great.

Kate: And you're not going to be able to, in the moment of a disaster, you're not going to be able to look up how to remember to do CPR. It's something you're going to have to physically practice. Same thing with 'Drop. Cover. Hold on.' Our natural reaction in a disaster is not necessarily to do that. And if you've physically practiced it, then you'll have the muscle memory to do it. You're not going to have to think about

it, you'll just do it. And the reason we ask you to do the "Drop. Cover. Hold on," is, as I said, the number one hazard is things falling on you. You want to protect your head and neck. Protect your vital organs. So getting under something sturdy or next to something sturdy, if there's not a table or something to get under, that's a way to protect yourself because you can't do all the recovery stuff unless you get through the shaking.

Cameron: Let's paw ourselves back. We kind of drove down into the individual things that we can do as southern Californians to make sure that we're resilient, but let's pull back and take a look at the region- at the community and then at the regional level. We always hear about devastating earthquakes in Turkey, Pakistan, and Haiti, where thousands of people are killed. And we always say, "That's not going to happen in southern California. We have better preparations, better building codes, better emergency services, better everything. That's never going to happen here." But, are we kidding ourselves?

Kate: Yeah, we do have better emergency services here and there will be times when our capacity is exceeded. The way it works is that your local fire departments, your local police departments, and emergency managers deploy to respond to a disaster. There's wonderful mutual aid, so it's a ... relatively small area that's badly damaged. Say, the North Ridge earthquake, terrible damage but Orange County and Ventura County could come to our assistance. If it's a regional disaster, that means, the mutual aid resources, the state and federal resources are all going to martial to help us- but they're not going to be able to get here immediately.

Even though we do have a better situation, we still have to be prepared ourselves to bridge that gap. We also have better building codes and better buildings. For most of us, if you live in a wood-frame home- your home is pretty likely to come down in most earthquakes. So the issue is, your home may not be able to be reinhabited if it's badly damaged. But people's fear that every building is going to collapse is not necessarily accurate. There will be some building that come down, depending on the shaking. So you want to look at your home. If it's a wood-frame, single-residence, there's many things that you can do. Just bolting your home, strengthening the cripple walls under your home will make a big difference. If you live in other types of buildings or an apartment, try to find out from your landlord when the building was built, whether it's bolted to the foundation. If you live in a brick building, it should have been retrofitted, so hopefully, you can ask your landlord if your building has been retrofitted, but really, if you're inside, stay inside, get low, get under something sturdy and then once the shaking has stopped assess your situation and then you can go outside. Now, if you're downtown and

among many tall buildings with tall glass, you may assess the situation, decide to stay inside.

Cameron: Now this is something that I think seems so counter-intuitive to a lot of folks that are not in emergency services professions. The first thing that people want to do is get the heck out of the building that they're in- because they, of course, think that it will come down. That's kind of the stereotype that we see when we see disaster movies or we see news coverages of these crumbled, destroyed buildings that have fallen and trapped people inside. It's actually very counter intuitive. What you most often, especially in southern California, want to do is stay inside, don't you?

Kate: Well, the thing is, people are more likely to be injured, statistically, the more they try to move during earthquake shaking, because trying to run when the earth is shaking pretty violently can throw you down. So really, if you have time, if it starts to shake and it's not shaking so badly that you can't move, my recommendation would be that you get low. First get low so that you don't get knocked down, and then- if you're near a big window, try to crab-crawl away. But you really want to get low so you're stable. If you're near a big bookshelf, if you're near something that might fall on you, you do want to try to get away from it if you can- but to try run away from it is potentially dangerous. So get low. Drop- that's the first thing. If you can, take cover and hold on to that cover. If you can't get under something, just protect your head and neck with your arms. If you're in a wheelchair and you can't get down, set your brake and protect your head and neck the best of your ability. If you're in a supermarket aisle, I'd say, get low, get next to it, and be prepared. Some things may fall on you, but trying to run when there's things falling and things in the aisle is not necessarily safer than just trying to- make yourself a small target and wait the shaking out.

Cameron: Yeah, I get a lot of questions, especially from children, saying, "What if I'm outside?"

Kate: Yes, I think if you're outside, same thing. You hopefully want to move away from anything that could fall on you, so if you can, get to an open area where you're not under falling hazards. So, if you're under power wires, if you can move, great. But really, it's about assessing your situation for all of us. You have to say "Can I move?" You may not be able to move. It may be shaking violently. If it's not shaking violently, you may be able to, as I said, crab-crawl away. Or, you may be able to take a few steps before you get low. But you never know how big an earthquake is going to be. Did you see the news during the 4.1 when Chris and Megan on Channel 5 ...

Cameron: Yeah, yeah.

Kate: Got under their desk, which was great.

Cameron: It was terrific.

Kate: There was a comedy about Chris's face, but they did the right thing, because you never know when it starts to shake, how bad it's going to get. And the time to protect yourself is before whether you find out it's violent shaking or not. Don't wait ...

Cameron: [Inaudible 00:26:57].

Kate: ... until it's shaking violently. When you first start to feel it, look around, make a choice about what's the safest thing to do, and take quick action.

Cameron: So another question I get asked all the time, and it's such a wonderful, southern California question. We spend so much time, I think, in our cars. What if it strikes and we're driving?

Kate: Well, often people in cars don't realize ...

Cameron: Don't even know.

Kate: That it's an earthquake, they think that there's something wrong with the car, that they've gotten a flat tire, but if you realize that an earthquake is happening, you want to just pull over to the side of the road, put it in park, and stay in your car. It's actually a relatively safe place. If you're on a bridge or under an overpass, get off the bridge or off the overpass if you can.

Cameron: And it is true, your car is a pretty safe cocoon, isn't it?

Kate: Well, I think it just follows that same logic that the more you try to move, the less safe you are. You certainly don't want to get out of your car, because, say you were in a parking lot, cars may jiggle and bump into each other. If you're in your car, you're safer than if you're out of your car.

Cameron: Finally, to wrap things up, I don't want to say, "Be afraid. Prepare now." But you should probably tell folks, the ground is shaking, we've had a couple of significant earthquakes here and now Chile's just had a very significant earthquake when it comes to plate tectonics, everything affects everything else. We're in the ring of fire here. We really need to be tuned to the possibility of another earthquake very soon, don't we?

Kate: Well, we live in earthquake country. We don't know exactly when damaging earthquake are going to strike or where, but we know they're coming. It's just part of living here. And there's a lot we can do now that

will make our lives so much better when the earthquake comes. So if we just make it part of our lives- that we take the steps we can: have a kit in your car, keep your kit refreshed at home, make a plan with your families, secure your stuff- and then, you know, when I sit down in a restaurant, I look where the exits are. I'm not going to run during an earthquake, but I'm going to want to know where they. I have a flashlight in my purse, and actually, a teenager just showed me that my Iphone is also a flashlight. That shows you how hip I am to today's technology. But I'm very excited to know my Iphone is a flashlight too. And anyway, there's so much that you can do that'll make you have the peace of mind and confidence that when the earth does shake, you're going to be as ready as you can be. Earthquakecountry.org, that's a great place to go. My Safe L.A. is another great website. There's so much we can do in a limited time, so we have the confidence to get our lives back, which is what we all want.

**Cameron:** Kate Long, the earthquake deputy for the California governor's office of emergency services. Thanks so much for joining here on the My Safe L.A. fire and safety podcast. As always, it was a blast talking to you, Kate.

**Kate:** My pleasure, Cameron. Thanks for having me.

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