

Recording: [00:02](#) Welcome to "Prep Talk," the emergency management podcast. Find out what you need to know about preparedness, get all the latest tips from experts in the field and learn what to do before the next disaster strikes. From the Emergency Management Department in the city that never sleeps, here are your hosts, Omar Bourne and Allison Pennisi.

Justin Bennett: [00:27](#) Hello everyone and thank you for listening. I am Justin Bennett. Omar Bourne is out on assignment.

Allison Pennisi: [00:35](#) And I'm Alison Pennisi, and you are our listeners, and as always, we thank you for joining us. We want you to come back as often as you can, so feel free to listen to "Prep Talk" on your favorite podcast provider. You can also follow us on social media, on our Twitter @nycemergencymgt, Facebook, Instagram, and much more.

Justin Bennett: [00:54](#) On this episode, we're on scene at the New York City Emergency Management 2020 Symposium, "Bridging the Gap to Communities," discussing the importance of establishing community emergency networks, prior to an emergency. Emergencies affect every community differently, but through planning you can help your community be prepared and resilient.

Allison Pennisi: [01:16](#) That's right, Justin. Communities with strong social ties are usually better prepared and often recover faster after an emergency. Today, our special guest will talk about the value of building resilient communities and detail the steps you can take to connect with neighbors, community organizations and government resources post disaster.

Justin Bennett: [01:34](#) But before we get to all that, you know what time it is. It's time for this situation report.

Recording: [01:41](#) Here's your "Prep Talk" situation report.

Allison Pennisi: [01:45](#) All right, this is the situation report. Let's get started.

Justin Bennett: [01:48](#) Thank you, Allison. Two dozen Australians in the state of New South Wales have been arrested since November 2019, for intentionally setting fires as record, large wildfires continue to burn across the country. New South Wales officials say starting a bushfire intentionally and being reckless and causing its spread can result in up to 21 years in prison.

Justin Bennett: [02:15](#) Since the start of the Australian fire season, at least 24 people have been killed and over two thousand homes have been destroyed by the bush fires. New South Wales has been particularly hard hit by fires this season. The state includes the capital of Sydney, Australia's largest city, and is the country's most populous state.

Allison Pennisi: [02:34](#) Thanks, Justin. A 6.4 magnitude earthquake recently rumbled across Puerto Rico, killing at least one person and knocking out power to virtually the entire island of more than three million people. The most recent quake was the largest in a series of earthquakes that have struck the U.S. territory in recent days and cause heavy damage in some areas.

Allison Pennisi: [02:52](#) The flurry of quakes in Puerto Rico's southern region began December 28, with a 4.7 magnitude quake. And over past several weeks, hundreds of small earthquakes have occurred in the same region. Now, Puerto Rican officials ordered non-essential government employees to stay home and urge residents to follow the island's emergency management social media sites for updated information.

Justin Bennett: [03:11](#) Winter weather is in full swing. Are you ready for the next winter storm? The best way to keep your family safe is to prepare now. During a winter storm, the best action is to stay indoors. So, be sure you have an emergency kit at home. Your emergency supply kit should include essential items such as a flashlight and extra batteries, and a battery powered radio, in case of a power outage. Your emergency kit should also incorporate nonperishable food, water, extra medication, warm clothing, and first aid supplies.

Allison Pennisi: [03:42](#) Thanks, Justin. The Department of Homeland Security recently released a bulletin through its National Terrorism Advisory System, warning of Iran's ability to carry out cyber attacks against critical U.S. infrastructure. In the bulletin, DHS noted that while there is currently, "No information indicating a specific credible threat to the home land." Iran does have the ability to attack the U.S. in cyberspace. The bulletin recommends that Americans implement basic measures to defend against cyber attacks, such as backing up data and using two factor authentication on sensitive accounts.

Allison Pennisi: [04:14](#) That is the situation report. Still to come, we will be speaking with Dr. Daniel Aldrich, director of security and resilience at Northeastern University. But first, here's a public service announcement from New York City Emergency Management and the Ad Council.

Recording: [04:28](#) Your daughter doesn't want to talk about why her room is a horrible mess. Your son doesn't want to talk about why he's wearing mismatching socks. Your spouse doesn't want to talk about their bad haircut. Families don't have to talk about everything, but they should talk to plan for an emergency. Pack basic supplies in a Go Bag: water, canned food, flashlights, batteries, medical supplies, IDs and some cash. Talk about where you'll meet, in case you lose one another. And of course, don't forget to pack the dog treats. Talk to your family and make an emergency plan. Go to NYC.gov/readyny or call 311 to make your family's emergency plan. Brought to you by New York City Emergency Management and the Ad Council.

Recording: [05:28](#) You are listening to "Prep Talk," the emergency management podcast.

Justin Bennett: [05:33](#) You are listening to "Prep Talk" and we are back. Joining us for this episode is Dr. Daniel Aldrich, director of security and resilience at Northeastern University. Dr Aldrich, thank you for coming on the show.

Daniel Aldrich: [05:47](#) Thanks for having me.

Allison Pennisi: [05:48](#) So, Dr Aldrich, each year, New York City Emergency Management will host the symposium to help connect individuals with disabilities, access and functional needs to their communities. While it is a tool for connecting New Yorkers to community organizations and government resources, it also highlights the importance of community planning in general. So, how do you think events like this can help communities prepare?

Daniel Aldrich: [06:09](#) I think most of us envision disasters and preparation in terms of individual work. So, it's my job to get my kit ready or my batteries or a cell phone that can handle several days without charging. But I think part of the message from today's symposium is that what really drives us and helps us get through a shock are our neighbors, our friends, and our community.

Daniel Aldrich: [06:29](#) Several things come from today. One is that we meet new people; people we haven't met before. It gives us a broader network: individuals who might be working other organizations or in CERT or OEM or whoever else. It's really powerful. But also to take home to our families, our communities, our organizations, the messages we're hearing today, most of which are about the power of community.

- Justin Bennett: [06:47](#) You've done a lot of research on the impact of disasters, on communities really around the world. What initially sparked your interest in this work?
- Daniel Aldrich: [06:56](#) So actually, going through a shock with my family back in 2005 really drove what I do. We had moved down to New Orleans in July 2005 and had six pretty good weeks there in our new home with a new car. It was my first jobs, so we bought everything we could, filled the house with furniture, our kids are going to go to school. And of course, as you know, in August of 2005, Hurricane Katrina arrived in new Orleans. So we and a million other people evacuated at the very last minute. Our home, our car, everything that we owned was destroyed.
- Daniel Aldrich: [07:23](#) My university was Tulane. They shut down for the semester, so we had no place to stay. I had no job. My kids' school was shut down and we were pretty much stateless and shocked in Houston, Texas for about a week or so. I began thinking as an academic ... not just as a survivor, but as an academic, is my experience now going to be unique? Will I have something that happens to me that hasn't happened elsewhere?
- Daniel Aldrich: [07:46](#) We noticed immediately that it wasn't that the government or insurance stepped in. I had this vision that somehow FEMA would come in on a white horse or a big check would come in from our insurance company. We actually had no coverage from our insurance companies for our car or for our house and products. And FEMA said no to our requests for about six months.
- Daniel Aldrich: [08:02](#) So, what really helped us out were friends, friends of friends, community based organizations, people that we'd never really met before who heard about our need for assistance and helped us. I began wondering if we're getting by, not because of the government or the market, is that the case around the world? And proposed a project that became a book called "Building Resilience." It took me to India, Japan, and the Gulf coast to understand, what helps people get through a shock?
- Allison Pennisi: [08:26](#) So, Dr. Aldrich, you were our keynote at the 2020 Community Preparedness Symposium, and what you discussed was how social ties within neighborhoods increased resilience in the face of disaster, and how New Yorkers can build communities that are more prepared. Tell us a little more about that.
- Daniel Aldrich: [08:43](#) Yeah. So, I tried to talk about the different phases during a shock. Things like evacuation, survival and recovery. And oftentimes, when we talk about that in the newspapers or local

journalists, they talk things about, were there enough people on the ground to help out? Was there enough money? But actually what we found in our research was, those three things: evacuating, surviving, and then thriving afterwards, are based on the exact same factor, which is the degree to which your community and you are connected.

Daniel Aldrich: [09:09](#) So, even during the evacuation stage, we've done research and we've shown evacuation is not a function just of how old you are or young you are. It's really a function of how broad your network is. Individuals who have more connections, individuals with a broader network, those are individuals who have left areas like Miami or Houston before hurricanes have arrived. We've shown in multiple papers we've written now that getting out means you've got to hear, more than one time, in more than one way, that it's time to leave.

Daniel Aldrich: [09:34](#) Maybe if only my friend tells me, I won't listen. But if the NOAA, if the local weatherman says something, if my grandparents say something, if a friend of a friend said something, that combination of messages is much more effective than just people that I know. And by the way, even people that I know might tell me, "Stay." Right? "Shelter in place. It's going to be okay," which is can be very dangerous for some people.

Daniel Aldrich: [09:51](#) So, that first stage of evacuation we found is very much driven by how broad the network is. Broader networks mean you're more likely to evacuate. Then in the survival stage, when you have a really big shock, and I'm thinking right now about the 2011 tsunami in Japan, this 60 foot wave that came ashore, some people envisioned that it was a question of geography or geology or the age of the people living in the communities.

Daniel Aldrich: [10:11](#) We've had to show, in fact, if you survived, it was more likely when you had a community that was connected because they came and knocked on their door before the wave hit and said, "There's something coming. Get out with me." For the elderly, for the infirm, people with disabilities and functional needs, they really needed help to get out. There's about 40 minutes between the earthquake and the arrival of that wave. For people who had connections, much, much easier to get on someone's back or on a bicycle or a van and go up to higher ground. Individuals who weren't connected, who didn't have that kind of neighborliness, much more challenging for them to survive this kind of event.

Daniel Aldrich: [10:41](#) So evacuation, survival and then thriving in the long term. Which cities rebuild, which countries, areas are the ones that

have more bridges, roads, businesses and schools put back together quickly. We find vertical ties really matter there, or horizontal ties matter during the survival and the evacuation stages. Having connections to decision makers, whether in the central government or local government, made a big difference. Those communities that were more connected got more money coming in, more construction firms involved.

- Daniel Aldrich: [11:07](#) So, those ties aren't some abstracts that we're talking about here, right now, during peacetime, sort of the blue skies phenomenon. When we have them during peacetime as well, during the normal day, they're really powerful events to help us get through shocks and crisis.
- Allison Pennisi: [11:19](#) That's excellent. You often mention in your work terms like social capital and community resiliency. Can you explain those concepts to our listeners further?
- Daniel Aldrich: [11:28](#) Sure. Social capital is a fancy way of saying the connections that we have to people, and there are both horizontal ties: people with the same level of power and responsibility, and vertical ties: ties to people who have power. I think about this in terms of bonding, bridging, and linking, bonding ties connect people who are quite similar. So, if you come from a certain school or an area or an ethnic group or a different country, maybe many of your friends look and sound like you. Bridging ties go beyond that ethnicity, your religion or race. And this might come through our church, a synagogue, a mosque, maybe through a 4H club or a workplace. Those are ties that go beyond where we're born into.
- Daniel Aldrich: [12:05](#) Finally, vertical ties are what we call linking ties. These are between normal people like me and someone with power, so maybe the mayor or the governor, someone on the FEMA board, or someone in the Red Cross. What we've argued in our research as a lab for many years now has been that these kinds of connections, horizontal and vertical, are critical at different stages.
- Daniel Aldrich: [12:25](#) So, bonding ties, the horizontal ties, are really important during the shock, and then vertical ties become important afterwards in the recovery phase, and then long-term equilibrium bonding become important again. So it's not that we all have one type of connection or the other, it's that we have a mix of kinds of ties, and those play a different role at different moments.
- Justin Bennett: [12:42](#) What can community networks or leaders do to help shape a network of resiliency?

- Daniel Aldrich: [12:49](#) Yeah. The great news for us around the world is, our stores of social capital aren't set. In the same way that if we save money or we change jobs or we're really efficient, we can have financial capital that builds up, social ties can also be built. Part of our work has really been to understand, if these social ties drive survival and recovery, how do we then enhance them? Whether are in a small level like a community or neighborhood, on the big level a city or the national level.
- Daniel Aldrich: [13:15](#) There are all kinds of things that we can do. So if you've ever watched Mr. Rogers, when I was a kid, he told me every day to be a good neighbor. That advice applies today as well in 2020, thinking through, most people in New York or Boston or Mumbai or Tokyo, unfortunately don't know their neighbors. That's really too bad because if there's a shock, like a fire or a flood or a heart attack, those neighbors will be at your door long before the first responders get there. So, having that first level of ties is really important.
- Daniel Aldrich: [13:41](#) Knowing the community itself. Do you have friends who live further away? Maybe a block or two away. Many of the programs that we try to enforce, like the community neighbor day in Australia, we have neighbor fest in San Francisco. These are programs that actively try to make connections between people. But we also help cities promote different types of parks: dog parks, walking parks, athletic events, outside, things that gets you outside of your home, outside your comfort zone, meeting new people.
- Daniel Aldrich: [14:05](#) We've also tried to encourage cities to think about things like civic engagement. How do you make people go to meetings like a zoning board meeting or school board or a PTA? That's really where democracy happens. If more of us go to those kinds of meetings, we build trust in each other and the system. And finally, we've talked about ideas like community currency or time banking. That's when you think about, how do I get paid back for the work that you find community? How do I get an incentive to go back?
- Daniel Aldrich: [14:28](#) So in Ithaca, New York, in Toronto, Canada, in Boston and Mumbai, a lot of places right now, if you volunteer for an hour, they'll give you some kind of currency, and that currency can't be taken to a Walmart or a Burger King or McDonald's. It only works at local stores: mom and pop stores, farmer's markets, barbershops. What you do is, if you volunteer for the hour, you get that currency back, then you go a local store and spend it. That store now has that currency. Where can they go? To other local stores. So your volunteer hours, so to speak, circulate

locally. We call it a positive cycle. So these are all different ways we try to envision, it's possible to actively build these social ties. How do we encourage each other to do more in the community, do more volunteer work, more civic engagement?

Allison Pennisi: [15:10](#) These are all excellent points about social and community resiliency. I think it's also important for our listeners to know that New York City Emergency Management uses a host of tools to help communities prepare for, respond to, and recover from emergencies. So, that ranges from the individual level, making an emergency plan, but then it also expands. We have training classes, we have the community emergency response team or CERT program where volunteers help their communities before an emergency and even during and after a disaster as well.

Allison Pennisi: [15:41](#) We also have a lot of preparedness resources for those with disabilities access and functional needs, non-English-speaking New Yorkers, even for the youth of New York City. We also work with establishing community networks to our city's emergency operations center during a disaster as well. So, with all of those things, during your research, have you found any programs or initiatives that are effective in helping communities build stronger relationships prior to a disaster?

Daniel Aldrich: [16:09](#) Yeah, we'd like to envision that each community has their own interests, culture, and needs, but we think there are types of programs that work really well. So, programs that begin by asking citizens, what do they want from the community? It's been really effective, for example, in San Francisco and in Boulder, Colorado, where people sat down from the city's office, from NGOs, churches, mosques, synagogues, and the community and said, "What kind of community do we want to build?" Not even talking about disasters per se, just about what kind of vision do we have? Is it a safe community? A walkable community? Is it one where people say hello to each other?

Daniel Aldrich: [16:40](#) And then they thought through, okay, well, if we don't have that right now, how do we all get there? How does the community work? How do the NGOs, churches and mosques, synagogues and the City work together? I think those kind of bottom up programs that often are based around, whether it's an event, like a symposium like today, or more regular events. For example, it might be a May Day. It could be an outdoor sports festival for children. In Japan, it might be a Matsuri or festival. In some place like India, it might be a local wedding actually that brings people together who haven't gotten together. The whole community might show up.

- Daniel Aldrich: [17:10](#) We think that each community needs to build for itself a program that will attract local members. For example, if you know for a fact that square dancing and clogging are not going to interest your community, don't run that kind of program. If, on the other hand, you're really into, who knows, pole vaulting or outdoor activities or dog walking, those should be the incentives that you have to get people out. But what we really want to do is have people realize, oftentimes we think it's someone else's job to take care of us or to get our needs met. Or even during a shock, like a disaster or crisis, they'll come in to us.
- Daniel Aldrich: [17:40](#) Part of the building the community idea is, it really has to be a bottom-up process. The members themselves take responsibility for where they live, feel this sense of connection to each other and place where they are, and want to do more for it. And that, we think, really builds long term connections, whether they're renters or homeowners, whether they're for a year or longer. But also helps people think through, how do I then ask my city for things that I need? Maybe we don't have yet, for example, a park that's fully accessible to people with functional needs.
- Daniel Aldrich: [18:05](#) Maybe we don't have a dog park nearby or maybe there's not ... The sidewalks, I used to live in Indianapolis for example, were pretty bad. So those kinds of needs need to come from the bottom up.
- Justin Bennett: [18:12](#) So what's the first step? We see a lot of community members who want to help their communities. What advice do you have to someone on starting a community network?
- Daniel Aldrich: [18:23](#) Yeah, I think the first thing is to build a vision of what the community wants. If we have one really active person who's out there knocking on doors, who knows everyone's first and last name, who spends the time picking up garbage or whatever else, we want that person then to build that sense of connection across the area. Not just one leader, but a network of leaders and activists in the community. Once they have that, then it's much easier to go to the government or to an NGO or the park authorities and say, "Here's our vision for a stronger, more improved, more resilient community," and then ask for those kinds of needs.
- Daniel Aldrich: [18:54](#) Where the challenges come, oftentimes it's the same five people at every meeting: every PTA meeting, every zoning board meeting, every school meeting, oftentimes the same five people ... Now, we want those people to be involved, but we

also want people who maybe don't have English as a first language. We want people with multiple jobs who are older or younger, people who have things they're doing outside the community, to be involved as well. I think that's the real challenge. How do we get them to feel they're part of the community?

Daniel Aldrich: [19:15](#) I think honestly this is also part of the job of the City here. What can the City do to make people feel comfortable in reaching out? Are there always translators available for multiple languages at an event, whether it's going to be sign language or Creole or French, is it going to be the availability of parking and childcare? Something else going on for people who have kids to bring with them? There are kinds of things to make those moments of meeting easier and more likely.

Daniel Aldrich: [19:39](#) If I've got children at home and I know there's no childcare, I'm not going to come to a five o'clock meeting. If I hear there is food, childcare and some kind of event going on, then it's much more likely I'll show up, even if I've had a busy day. When I think through, what are the factors at the meeting itself, and from the community to get them thinking this is a joint problem that we want to solve. We really want everyone to show up who could.

Allison Pennisi: [19:57](#) It's all about working together and that coordination, and it starts with the individuals in the community. We often say this too, is that people who live in these communities, they know what their community needs better than anyone else.

Justin Bennett: [20:09](#) Absolutely.

Allison Pennisi: [20:10](#) The government will know, but it's a matter of establishing that network. There needs to be a network among the community first, and then establishing it with, as you said before, the NGOs, the government, local, state, federal level. So, we appreciate that. And for our listeners, if you're interested in learning about New York City's involvement in community preparedness, you could visit our website NYC.gov/emergencymanagement, or you could check out our community emergency planning toolkit, which you could access by visiting NYC.gov/communitypreparedness. Dr Aldrich, thank you so much for joining the show. Do you have any last words for our listeners?

Daniel Aldrich: [20:46](#) Yeah. Just to emphasize this theme again, I think oftentimes, when we think for the government work or our own jobs, this idea of the government taking over or the individuals getting kits ready, we missed the chance to think about disasters and

crisis or even community building as a community process. So, of course we want you to have your batteries in your food and your tuna cans. That's really important. And also, we want a government that's active and responsive. Also really important.

- Daniel Aldrich: [21:09](#) But what we found around the world, and this has been true in North America, in Japan, in India, is that communities that are better connected are the ones who have better survival rates, better recovery rates, and better mental health rates in the long term. So this shouldn't be about getting ready for the once in a 500-year flood or getting my kit ready. It should be, do I know my neighbors? Do I feel comfortable where I live? Do I want to live here longer? What can I do to make other people find this place home?
- Daniel Aldrich: [21:32](#) Once we build that sense of connection then and have that spread out, then we're building a broader community engagement network that will be successful whether there's a disaster or not. So we don't want to frame this as getting ready for a shock, but rather building a community where you want to live every day, right? A community that's walkable or engaged and trusting. I can take a walk at night with my family, where I know my neighbor if there's a challenge. So, I think part of this thing is, shifting our mindset. Rather than an envisioning it's me and my kit or the government and their work, it's what are we doing in my community where I live to build those ties?
- Allison Pennisi: [22:00](#) And it even goes back to the individual emergency plan of making that emergency support network. You can rely on your neighbors, your neighbors can rely on you in turn, which I think is really important. That's how we build our communities. So thank you very much for your insights. All right, for our listeners, it's rapid response time and if you are a first time listener, it's simple. Justin and I will ask questions and our guest will give the first answer that comes to mind.
- Recording: [22:23](#) It's time for "Prep Talk" rapid response.
- Allison Pennisi: [22:29](#) All right, it's rapid response time. Dr Aldrich, what is one emergency item you cannot live without?
- Daniel Aldrich: [22:35](#) My wife.
- Allison Pennisi: [22:36](#) That's the second time we've had that on the show.
- Justin Bennett: [22:37](#) That is.

Allison Pennisi: [22:38](#) But I still think it's a great one. So you get brownie points for that. Off air, we were talking about different places that we've all lived and you said you've moved about 17 times?

Daniel Aldrich: [22:48](#) That's correct.

Allison Pennisi: [22:49](#) Okay. What was your favorite place to live? Or where was your favorite place to live?

Daniel Aldrich: [22:53](#) I'd have to say that Hawaii was pretty amazing. We had a rental on Waikiki, and my office was the University of Hawaii, just up the hill. So I'd walk up for about a mile into my office in the clouds. My kids would be playing on the beach. I'd walk down again at the end of the day, we'd go swimming. It was pretty idyllic.

Justin Bennett: [23:10](#) Wow.

Allison Pennisi: [23:10](#) That sounds great.

Justin Bennett: [23:11](#) Do you remember all 17 locations?

Daniel Aldrich: [23:14](#) I had to recall them once for some kind of security check, so actually I had to write them down. I was pretty good. I think I got 16 the first time.

Allison Pennisi: [23:20](#) Not bad.

Justin Bennett: [23:21](#) What's your favorite movie or TV show?

Daniel Aldrich: [23:23](#) My addiction now is "The Expanse," which is this Syfy Channel, adapted from a series of books, about future space travel. It's fantastic. Galactic opera, it's really good stuff. Make "Star Wars" and "Star Trek" look very small scale.

Justin Bennett: [23:37](#) Okay.

Allison Pennisi: [23:38](#) That's a bold statement. Sum up the work you do in one word.

Daniel Aldrich: [23:42](#) Connections.

Allison Pennisi: [23:44](#) I love it. Well, thank you so much again for joining us for this special edition of "Prep Talk." And for our listeners, if you want to learn more about community preparedness, you can visit NYC.gov/emergencymanagement for more information.

Recording:

[24:01](#)

That's this episode of "Prep Talk." If you like what you heard, you can listen any time online or through your favorite RSS feed. Until next time, stay safe and prepared.