



Wildfires and Public Safety Planned Shutoffs: Napa County's Experience

ABSTRACT

Dr. Karen Relucio and Shaun Vincent have both worked for Napa County, California for nearly five years. ASPR TRACIE asked them to compare their experiences with the 2017 and 2019 wildfires, to include the transport of evacuees and support of medical shelters. They also discussed the effect of public safety planned shutoffs on their community.

■ John Hick (JH)

Please tell our readers about your current roles and how long you have had them.

■ Dr. Karen Relucio (KR)

I am a health officer and the Public Health Director in Napa County, California (CA) and have been for almost five years.

■ Shaun Vincent (SV)

I am the healthcare coalition coordinator in Napa County, and I function as the Medical Health Branch Director during disasters—I've also been here for nearly five years.

■ JH

How has the coalition role evolved during wildfires and other experiences?

■ SV

In terms of the coalition itself, our healthcare coalition (HCC) serves as a supporting organization. We identify gaps and coordinate resources. We have evolved as far as being a response agency; coordination is key. During the 2015 fires, we used the HCC a bit; since then, we engage them much more.

■ JH

There is so much diversity in how HCCs function. Karen, do you represent Emergency Support Function (ESF) 8 at the Emergency Operations Center (EOC)?

■ KR

Yes, we do. Looking back, I agree—we have improved our response. I came from another county where I was involved in emergency preparedness. I didn't practice response as much because we didn't have too many major incidents other than the 2009 H1N1 pandemic, an airplane crash and pipeline explosion. When I started in Napa County, the EOC and the Departmental Operations Center (DOC) were two different entities, with Health and Human Services operating the DOC and our Office of Emergency Services (OES) operating the EOC. In the 2017 Valley Fire, we combined them, and it's been a great way to operate, especially in a smaller county like Napa.

■ JH

Let's discuss the 2017 fires—for example, what were the key functions each of you performed? And let's contrast that with key roles and responses during the recent planned power outages.

IKR

Two key roles we had were medical transport of evacuees (e.g., the Veterans Home) and regularly communicating with hospitals regarding status. Another critical role was supporting the shelters, including conducting epidemiological assessments in each and providing medical care. We used a modified/shortened version of **CASPER** (Community Assessment for Public Health Emergency Response) to understand the evacuees' needs. Messaging was also critical—I ran around from the EOC to town hall meetings to media interviews and messaged on health information. We also worked with the public information officer (PIO) in the EOC who set up a call center that allowed residents to ask about more general issues (our 911 system was overwhelmed with fire-related emergency calls).

ISV

Our responsibilities by California statute include identifying two individuals who function as the Medical Health Operational Coordinator. That role statutorily is held by Dr. Relucio (our county health officer) and my manager (the Emergency Medical Services [EMS] administrator). Under California's Medical Health Operational Area Coordination, or **MHOAC**, we have the responsibility to support our local healthcare system under 17 functional categories, as they relate to EMS, public health, environmental health, and mental health. During this relatively long event that picked up quickly, then slowed down for a period, we were initially focused on evacuation and life safety. Next, we focused on getting ambulance resources into Napa County.

In 2017, there was no way nine ambulances could have supported an evacuation that size without coordinated regional support. Evacuations occurred over multiple days. As the need arose and after orders were given by Unified Command, the Medical Health Branch supported those operations with personnel and equipment. However, each operation was performed in a matter of a few hours. Our next priority was supporting the shelters. In 2015, during the Valley Fires in Lake County, we learned that a general population shelter may not be a medical needs shelter, but a significant portion of those who go to those shelters have medical needs. They evacuate without their medication and durable medical equipment (e.g., canes, hearing aids). In 2017, we established four shelter operations with full 24/7 clinical staff comprised of local healthcare partners and Medical Reserve Corps volunteers from across the Bay Area—all drawn from the MHOAC program. These were operational for several weeks.

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-- Shaun Vincent



As Dr. Relucio mentioned, we conducted rapid health assessments of shelter occupants and since then our county has partnered with the University of California, Los Angeles (UCLA) to utilize their rapid mental health assessment **PsySTART™**. This single questionnaire merged **PsySTART™** and **CASPER** and allowed us to quickly identify medical and mental health needs. We used both paper surveys and tablets to collect information and securely send these questionnaires to the EOC and this helped us adjust our resource deployments. More recently, during the power shutoffs, we have tried to focus more on using tablets to collect, store, and share the data.

IJH

Regarding EMS coordination and transport needs, where did the mutual aid come from?

ISV

We have a regional-to-state system; California is divided into six mutual aid regions. Napa County is part of Region 2 with all of the other coastal counties from Monterey all the way up to the Oregon border.

IKR

We used the **Standardized Emergency Management System** (SEMS) which originated in CA. We have several medical health operational areas in each mutual aid region.

ISV

Evacuating the Veterans Home was a pretty significant lift. We were ordering ambulance resources at the same time as Sonoma (a neighboring county) was. At one point early on, one of our first teams came from Sonoma because fire hadn't broken there yet. They immediately had to turn around to deal with their own fires, but we were able to leverage each other's resources as needed throughout the fires. At our peak, when we evacuated the home, we had about 75 ambulances in the county helping. The HCC identified destinations that could receive patients. We leveraged relationships with our local HCC members from skilled nursing, who have partnering agencies outside of the county and region—this allowed us to successfully evacuate, track, and repatriate 164 individuals.

IJH

How did you track those individuals?

ISV

At the time, most of our partners in Region 2 were using a system called "ReddiNet," which offers several modules to enhance healthcare situational awareness. We were granted access to ReddiNet, which enhanced our capability for tracking our patients. We have since procured the software and use it to coordinate with our HCC and EMS partners.

California's Health and Safety Code describes operational areas and the role of the county health officer and local EMS agency administrator under MHOAC.

There was no cellular coverage when we evacuated the Veterans Home; communication was very spotty. We had to use an "old school" big board, our triage tag tracking system, and pen and paper. Once we had all the information, we were able to upload it from the EOC.

IJH

Were there any other challenges during the 2017 wildfire responses you want to share with our readers?

IKR

Post-fire debris cleanup is complicated, and we had to message about it quite frequently. First, we messaged residents about wearing personal protective equipment while sifting through debris and advised on the safest

way to clean up ash if they were able to repopulate their homes. In addition, we declared both a local emergency and a local health emergency at the same time, which enabled us to access state and federal resources to help with debris cleanup. Both Sonoma and Napa Counties had to use federal resources to help with this task because of the large scale of the damage.

There are two phases of debris cleanup—the first phase entails removing immediately hazardous materials such as batteries, propane tanks, and chemicals. Normally, in a smaller-scale incident, this would be handled by the state's Department of Toxic Substances Control. Because of the scale of the response, California had to engage the U.S. Environmental Protection Agency to help with phase 1.

Phase 2 is removing the rest of the materials, which contain potentially toxic materials such as asbestos, lead, arsenic and other heavy metals. Removing thousands of tons of leftover materials from properties must be done a certain way to 1) prevent toxic dust from moving around, and 2) avoid the improper disposal that can negatively affect water systems and natural bodies of water. In a smaller incident, phase 2 would have been handled by Cal Recycle, but in this case, it was handled by the Army Corps of Engineers. We had a Recovery Operations Center open for months; debris removal and clean up were one of several focus areas. Once cleanup was done, the areas had to be tested for heavy metal and asbestos levels to ensure that the area was safe for rebuilding. This testing was run by the state. Our Environmental Health and Planning Department was busy, and I served as the deputy code enforcer to prevent and reduce as many public health threats as possible. Debris cleanup took over a year to complete.

IJH

How long were shelters in operation?

ISV

Just a couple of weeks. Several homes that burned in Napa were in less densely populated, affluent areas with large acreage, and in some cases not the owners' primary residence. Some who came to our shelters were there due to mandatory evacuation orders and returned home once the orders were lifted. This was not the case in Sonoma, where residents stayed in shelters for a bit longer.

IJH

Looking at the scheduled public safety power shutoffs (PSPS)—how are they driving some of your coalition activities?

ISV

We have two hospitals in Napa County, and one is in the shutoff area. This vulnerability has heightened their awareness and helped them bolster their already hardy preparedness efforts. Our coalition will serve a support and coordination purpose. For example, if you run a generator for a month, there is bound to be some kind of mechanical issue. The coalition would facilitate the sharing of ideas and resources. Identifying gaps in facilities that others can backfill is ongoing, but the majority of our HCC members are relatively self-sufficient. Most of our medical health response efforts are focused on outreach and identifying and working with the more vulnerable residents in the county and making sure they had plans for PSPS. We used **emPOWER** and some of our local programs to mitigate risk. Communicating about and ensuring food and water safety also took up a large amount of time.

IJH

How do you communicate with vulnerable populations?

IKR

We make phone calls to our most vulnerable residents. The goal is to talk to someone live. We also engage law enforcement and Community Emergency Response Teams (CERT) to go to homes and check on people.

ISV

If you have several overlapping events, we do try to avoid duplicating communication efforts.

IJH

Has the hospital in the shutoff area changed any of their logistics because of this risk?

ISV

They are working through that. They have a single generator for their facility and recognize the significant gap. Their facilities director is assessing how and when to purchase a second generator. They are an older facility that specializes in cardiac care and are working on several initiatives to harden the facility's infrastructure.

IJH

Are there any long-term care facilities in that area?

ISV

There is one, and they have a generator. We also have seven skilled nursing facilities in Napa County; six of them are in the city. One of them is located in the impacted area, but they had generators and we worked directly with them to ensure a smooth response.

In terms of PSPS, we can declare an emergency, but we won't receive any financial support—it's essentially an unfunded disaster. We have been trying to help the public utilities commission understand this. We have responded to nine shutoffs since 2018; seven were in 2019. We do not get reimbursed for this response and it takes away staff time for other necessary, billable services.

-- Karen Relucio



IJH

Karen, can you talk through some of the challenges associated with these “planned disasters?”

IKR

As Shaun alluded, we are most worried about our medically vulnerable residents who are dependent on electricity for health reasons (e.g., ventilators, cardiac devices, people on home dialysis, people who need power for mobility's sake). One goal is to work with this population to help them plan and not use 911 unless it is absolutely necessary.

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I JH

What level of services aside from contacting those at-risk individuals are available? Do you set up hotlines or shelters, for example?

I KR

Sometimes we find people who don't have the physical ability to either be prepared or manage their response—they may have a generator but can't physically refill it with gas. We also had a lot of people on CPAP or BIPAP calling us and telling us that they needed a place to sleep overnight. The shelters set up by the power company were only open during the day, and hotels in our area can be very expensive.

I SV

We were able to work with Community Organizations Active in Disasters (COAD), provide support with Meals on Wheels, and help some individuals with procuring hotel rooms. When a private, for-profit organization is making the decision to shut off power, they create a manufactured disaster, and we work within the parameters we've been given. When you have 50% of the counties in the state without power and there's no state declaration or mechanism to receive some reimbursement, even if it reduces the risk of wildfires, there are many unintended consequences. When a wildfire took place at the same time as one of the shutdowns, we were able to activate the traditional disaster declaration process and receive the financial support necessary to support Napa County's response efforts establishing shelters.

Beyond the generators having mechanical issues, oxygen suppliers do a really good job backfilling with tanks when you run out of concentrator, but when 50% of the state is out of power, and people who rely on oxygen have used up their backup supplies, the suppliers run out. This is a statewide issue. Even if they were being ordered based on protocol, there were no resources to backfill that. This was a big gap for us. We have worked with suppliers since then and they are going to bolster their backup supplies, especially in anticipation of the next fire season.

I JH

What's been the longest duration of a PSPS so far?

I SV

The October 26, 2019 event lasted about 48 hours in total, but Pacific Gas and Electric Company (PG&E) uses their own algorithm to generate a red flag warning. Once an area is shut down, it takes three to five days to reenergize the areas. We had one weather event on October 26, 2019

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-- Shaun Vincent



and another on October 29, 2019, and some people were not reenergized for five days.

I JH

Is this the new normal?

I KR

It looks like this is our new normal for at least a decade because that is how long it is estimated to take PG&E to update the infrastructure and bury the lines.

I JH

Any last things you want to touch on?

I KR

These shutoffs are called "public safety power shut offs," but unless the health consequences are considered, they aren't protecting or promoting public safety. ■