



Impacts of Planned and Unplanned Power Disruptions on California's Public Health and Medical Systems



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- [Durable Medical Equipment in Disasters](#)
- [Impact of Planned and Unplanned California Power Outages on California's Public Health and Medical System \(Speaker Series Recording\)](#)
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- [Issue 17: Health Care Facility Water and Other Utility Outages](#)
- [Utility Failures Topic Collection](#)

California-Specific Resources

- [Alternate Source of Power for Skilled Nursing Facilities to Maintain Safe Temperatures, Life-Saving Equipment, and Oxygen-Generating Devices](#)
- [California Independent System Operator Daily Outlook](#)
- [PG&E Public Safety Power Shutoff Updates and Alerts](#)
- [PG&E's Weather Map](#)
- [Southern California Edison Public Safety Power Shutoff](#)

In 2012, the [California Public Utilities Commission](#) (CPUC) gave authority to electric investor owned utilities (IOUs) to proactively shut off power to prevent wildfires when conditions like strong winds and excessive heat events are present. While Public Safety Power Shutoffs (PSPS) reduce wildfire risk, they also leave communities and essential facilities without power. This can be particularly difficult for vulnerable populations who rely on electricity-dependent medical equipment and hospitals and other health care facilities that need to ensure a reliable backup power supply to ensure patient safety. IOUs have recently reviewed and modified their processes and infrastructure to reduce these impacts (e.g., installing microgrids and working closely with emergency management) and CPUC currently holds briefings where IOUs report on their PSPS preparedness strategies. In [this ASPR TRACIE speaker series recording](#), the following panelists from public health departments and health care systems in California share their experiences and lessons learned from PSPS:

- **Michelle Patterson**, MPH, Chief of Planning, Recovery and Evaluation, California Department of Public Health Center for Preparedness & Response
- **Kristine Guth**, MPH, Acting Manager of EMS/Emergency Preparedness, El Dorado County Emergency Medical Services Agency
- **Chad Cossey**, MS, TLO, CHEP, CHSP, HPP Program Supervisor, Orange County Emergency Medical Services
- **Christopher Riccardi**, CHSP, CHEP, Manager of Emergency Management and Business Continuity, Children's Health of Orange County
- **Nicola Harwood**, NHDP-BC, Safety and Health Specialist, City of Hope Orange County
- **Caroline Coraggio**, CHEC, Providence Mission Hospital

This resource summarizes key takeaways from the recording which, in addition to understanding power supply regulations in your jurisdiction, can help health care emergency planners prepare facilities, staff, and patients for PSPS and outages in general.

Information Gathering/Monitoring/Sharing Considerations

- Coordinate regular communications with power company; ensure they will recognize and prioritize health care for power restoration.
- Ensure health care facilities are included in PSPS messaging.
- Health care coalitions can survey their members throughout the year to ask about their anticipated needs, findings from recent exercises, and the like to get a snapshot of what the county/operational area looks like and what the coalition needs/anticipates.

- Coalitions can also share information within the system and community of upcoming outages, planning resources, and where to go for assistance during a PSPS.
- Monitor social media as one of the many sources that can be used to determine who is affected during a PSPS and the nature of help they are requesting.

Planning Considerations

- Conduct regular needs assessments to understand which facilities might be more vulnerable to a PSPS; incorporate findings into continuity of operations plans.
- Use the [EmPOWER program platform](#) to better understand the needs of community members who live independently and rely on electricity-dependent durable medical and assistive equipment and devices.
- Work with local utility provider and facility engineers to calculate your facility's "load shed" (e.g., the amount of generator power ventilators will need for a certain amount of time).
- Determine if your facilities have any/adequate back-up power sources.
 - » Are existing generators sufficient to power the facility? Does each building have the necessary hook-up to support additional generator power? Do you have the fuel needed to power generator(s) for set periods of time? Is there adequate on-site storage space for generators and fuel?
- Ensure back-up batteries (for communications and patient care equipment) are charged.
- Plan for outages of different durations.
- Maintain relationships and regularly update contact list for vendors (e.g., HVAC, fuel) that includes after-hours information.
- Consider other sources of power (e.g., solar) to mitigate the effect on air quality created by burning additional fuel.
- Store emergency light kits in each department (e.g., power failure lights, flashlights, magnetic lights, glow sticks). Test them regularly.
- Prioritize what needs to be powered (e.g., red outlets that power equipment considered "life support").
- Develop separate, complementary plans for each department to minimize recovery time.
- Develop alternate plans for maintaining patient records, information technology, and calculating bed availability during an outage. Ensure staff are trained in and able to use these methods.
- Understand impact of PSPS on traffic, and services such as food preparation (for staff and patients), dishwashing, and sanitation.
- Exercise regularly to train new staff, keep existing staff engaged, and to ensure equipment is operational. Include facility engineers and representatives from local utilities in exercises.
- Plan for concurrent events (e.g., wildfire smoke affecting your facility while the power is out). Work with the hospital command center to facilitate requests for assistance from other facilities and nearby jurisdictions.

In the end, all participants agreed that while these information and planning considerations are key, sharing lessons learned with each other is also critical. Learning from colleagues who have real-life experience resonates well with planners responsible for preparing health care facilities and community members for electrical outages.

