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TO: Vaccines for Children (VFC) Providers

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       Division of Communicable Disease Control
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SUBJECT: Vaccine Management During Public Safety Power Shut-offs (PSPS)

SUMMARY

In an effort to protect public’s safety, and prevent wildfires during periods of high risk, the California Public Utilities Commission (CPUC), CalFire, and the Office of Emergency Services have been working with electric utility companies throughout the state in order to turn off electric power lines to protect public safety under California law, specifically California Public Utilities Code (PU Code) Sections 451 and 399.2(a). This shut-off of electric power is referred to as "de-energization" or Public Safety Power Shut-offs (PSPS). Factors driving a PSPS may include forecasted sustained high winds, extreme heat, low humidity levels and dry conditions, or red flag warning days issued by the National Weather Service. Unlike localized power outages that occur due to storms, or local events, PSPS can last days depending on dangerous weather conditions, and their impact may extend across city or county lines.

As we enter fall, the danger of fall wildfires driven by high winds (typical of October California weather) may increase the chances of a PSPS in high fire danger areas and beyond. Steps outlined in this communication can help your clinic prepare and respond to an extended power outage due to PSPS from your electric company and reduce the risk of spoiling your entire vaccine supply.

PLAN

If you have not yet registered with your utility company’s and county’s emergency contact list to receive alerts or notifications of Public Safety Power Shut-offs, sign up as soon as possible. Check with your utility company to see where you are in the grid and if your alternate vaccine storage location is within the same power grid. Although a power
shut-off can impact any location (given that power lines often span multiple counties and regions), you can view if your clinic is in a high fire-threat area through the CPUC High Fire Threat District Map.

**Vaccine Management Plan**
To ensure that your clinic is prepared during a power outage, review your Vaccine Management Plan with your staff and update information if necessary. It is a VFC requirement that your staff review and update the plan at least annually, and that regular vaccine transport drills are conducted to maintain competency and readiness for emergencies (VFC Provider Agreement Addendum 1B and 2G).

**Alternate Vaccine Storage Location**
Your Vaccine Management Plan should include an alternate location to temporarily store your vaccines during an emergency. The alternate location must have storage units and temperature monitoring devices that meet VFC Program Requirements. You may want to consider places with a back-up generator (e.g., hospitals, retail pharmacies, large healthcare providers with generator power). Keep in mind, if an entire city or county within the same power grid is out of power, other providers may be seeking to store their vaccines at the same location.

**PREPARE**

**Vaccine Storage Units & Transport Supplies**
Maintain enough thermal mass in your vaccine storage units to maintain temperatures in the event of a loss of power. You can achieve sufficient thermal mass by adding water bottles to your refrigerator (including pharmaceutical or laboratory grade units) and ice packs to your freezer. Refer to the Refrigerator Setup and Freezer Setup job aids for more information.

Before an emergency, check to make sure that you have the proper supplies and materials needed (hard-sided cooler, cold packs or frozen water bottles, insulating cushioning material, data logger) for vaccine transport. VFC’s Vaccine Management Plan template has a useful checklist to help you prepare for planned or unexpected situations.

**Back-up Power Sources**
Although not required, VFC sites in high fire danger areas or experiencing frequent PSPS incidents may want to consider:

1. Utilizing vaccine storage equipment that can maintain temperatures for days. Prior to purchasing these types of units, review the detailed specifications to ensure that they meet VFC Program Requirements for vaccine storage.
2. Having a back-up source of power, such as a battery power system or commercial generator. Prior to purchasing, consider your clinic’s power and installation needs. For generators, clinics should ensure they are ready to safely operate. Check out your utility company’s PSPS resource page; these pages often include information on proper and safe use of generators.

3. Having qualified pack-out containers or vaccine carriers for vaccine transport. These types of units maintain temperatures for multiple days utilizing phase-change material technology.

RESPOND

Depending on the cause of a power outage, prepare to respond accordingly. However, you should never risk your own safety, or that of your staff, to transport vaccines during an emergency.

PSPS Events: These events may last from hours to several days, depending on the conditions that triggered the event. Transport to your clinic’s pre-determined alternate location for vaccine storage may be required depending on the length of the shut-off. When feasible, electric companies will issue advance notification 24-48 hours in advance. However, keep in mind that PSPS may affect widespread areas, so your alternate location must have a back-up power source as well if located within the same affected area.

Non-PSPS Events: Not all emergencies require that you move and transport vaccines to an alternate location. Monitor temperatures to determine any actions needed. Follow the appropriate action based on your emergency situation:

- **In the event of appliance failure:**
  Place vaccines in any VFC-approved backup storage unit with a VFC-compliant data logger, or transport vaccines to the designated alternate storage facility. (Refer to “Transporting Vaccines” in the VFC Provider Operations Manual)

- **For power outages after hours:**
  Report any excursion to the Storage and Handling Online Triage System (SHOTS) the next morning and take appropriate action. (Refer to “Taking action for Temperature Excursions” in the VFC Provider Operations Manual)

- **For planned outages expected to be short-term (approximately fewer than 4 hours)*:**
  Monitor storage unit temperature and report any excursions once power has been restored. (Refer to “Taking action for Temperature Excursions.”)

- **For planned/unplanned outages expected to be longer than approximately 4 hours,* or for any outage that extends beyond the current business day:**
Transport vaccines to the designated alternate storage facility. (Refer to “Transporting Vaccines.”) Keep in mind that PSPS may affect wide areas, so your alternate location must have a power source/back-up power source as well if located within the same affected area.

- If transport or relocation is not feasible (e.g., alternate location is not available or travel conditions are unsafe), keep vaccine storage units closed and notify the VFC Call Center as soon as possible.

*Note: Practices using purpose-built (pharmacy-, biologic-, and laboratory-grade) and commercial-grade storage units may need to transport vaccines to an alternate location sooner than 2 hours as temperatures in these units tend to increase faster during power failures.

If vaccines are not transported properly, you may risk spoiling the vaccines, thus making them non-usable. If vaccine transport is indicated, feasible, and safe, follow the Transporting Refrigerated Vaccine and Transporting Frozen Vaccine job aids for detailed information, and document the vaccine and temperature information on the Refrigerated and Frozen Vaccine Transport Logs. Utilize your back-up data logger(s) to monitor temperatures during transport.

RESTORE

Once power is restored and your vaccine storage unit temperatures are within range, transport the vaccines back to your clinic following the same guidelines for refrigerated and frozen vaccine transport. Review the vaccine storage unit temperature of the alternate location and temperatures during transport by downloading the data logger reports. If vaccines remained at the clinic and were not transported to an alternate site, download and review the data logger reports.

If the vaccines were exposed to any out-of-range temperatures during storage or transport, report the incident to SHOTS through your MyVFCvaccines account, and follow instructions given by the SHOTS system.

QUESTIONS?

If you have any questions, please contact your VFC Field Representative, or call the VFC Program at 877-243-8832 (877-2GET-VFC), or visit www.eziz.org.

Resources

- California Public Utilities Commission Website: https://www.cpuc.ca.gov/deenergization/
- Public Safety Power Shutoff Website: https://prepareforpowerdown.com