Background

Home parenteral support includes parenteral nutrition and intravenous fluids. Patients receiving these therapies may need to store their infusions in a refrigerator to keep their shelf life, and need electricity to charge and power their infusion pumps.

There have been reports that British households could lose power for up to three hours per day this winter, occurring at times of high demand (possibly in the morning, or more likely between 4pm and 7pm). It has been proposed that customers would be notified at least a day in advance about power cuts.

It is important to remember that with good advanced planning, patients and carers can ensure they are not adversely affected by short duration power outages.


Guidance

In the event of a power cut:

1. **Keep the fridge door closed.** When the power supply returns, record the fridge temperature. If the temperature is above 8 degrees, continue to monitor hourly to make sure it is cooling down. Infusion bags take longer to warm up than the air temperature in the refrigerator so there may not be a change in shelf life. Contact your homecare provider for advice if you are concerned.

2. Take your bag for the day out of the refrigerator before the power cut so it doesn’t need to be opened while the power is off. Compounded parenteral nutrition and intravenous fluid bags can be stored at room temperature for 24 hours (this includes your infusion time). It means that you can safely use your infusion bag at room temperature as long as it will finish infusing within 24 hours of removal from the refrigerator. This may not be possible if you have homecare nurses - speak with your homecare nursing team if unsure.

3. Keep a small stock of room temperature intravenous fluids and/or parenteral nutrition to use in case your refrigerated bags are not safe to use. Make sure you regularly check that they are in date. Ask your hospital team or homecare provider for advice if unsure.

4. If your homecare delivery of refrigerated items is during a power cut, keep the items in cool boxes, if available, until the power is switched back on. You may be able to ask for your delivery to be rescheduled or delayed, but this may not be possible as other patients in your area will be in the same position.

5. Keep your infusion pump(s) fully charged and request a spare battery from your homecare provider if you do not have one. Charge your pump when not in use and when you are not moving around e.g. in bed.

6. If your pump is not fully charged avoid connecting your infusion during a power cut if possible.

7. If there is a power cut during your infusion and your pump runs out of charge, clamp the line until the power is turned back on. When power is returned, plug in your pump and restart your infusion.

8. As part of your regular infusion bag inspection, if there are any unusual changes do not use the bag until you have contacted your homecare provider helpline for advice.

This guidance can be applied to home parenteral support supplied using the NHS England Home Parenteral Nutrition Framework. For any other prescribed medicines, contact your hospital team or homecare provider for additional advice.

Produced by the British Pharmaceutical Nutrition Group (BPNG) Executive Committee, with input from the British Association for Parenteral and Enteral Nutrition (BAPEN), NHS England National Home PN Clinical Advice and Management Group, the Home Parenteral Nutrition Stakeholders Group, Pharmacy Quality Assurance, and with support from PINNT (Patients on Intravenous and Naso-gastric Nutrition Treatment), a support group for people receiving artificial nutrition.