

Storage of Parenteral Nutrition Multi-Chamber Bags and Intravenous Fluids for Home Parenteral Nutrition / Fluid Patients in Temperatures Above 25°C

Information for patients

Introduction

In the current high temperatures, many patients have been reporting room temperatures greater than 25°C, so are asking for advice on how they should store their feeds and fluids.

Multi-Chamber Parenteral Nutrition Bags (MCBs) and Intravenous Fluids (IVFs) usually have 25°C as a maximum for storage at room temperature. This is based on the information from the manufacturers when they apply for a license to make the product in each country. This is a standard room temperature for most medicines, but further information about more “unusual” temperatures is held by manufacturers.

Pharmacists sometimes have to work out reduced shelf lives in case a medicine is stored outside the normal limits e.g., for accidental freezing, fridge failure, room temperature above 25°C storage. There is national guidance available from Specialist Pharmacy Services and Medicines Information to help them do this.

In most cases, there will be no change in shelf-life needed, as long as bags aren't stored at room temperature for more than a few days. If this happens, speak to your homecare provider who can talk to a specialist pharmacist for more advice. It should be noted that many patients take MCBs and IVFs abroad to hotter countries for holiday / business without a refrigerator and have experienced no adverse effects.

Guidance

- All products should be moved to the coolest part of the house where possible
- IVFs can continue to be used as usual
- MCBs should be checked before popping / rolling, paying particular attention to the lipid (white) section of the bag. Look for an oily layer forming on top of the lipid. DO NOT USE if there is anything visible that doesn't completely mix back in when shaken well for at least 10 seconds. Make sure you give yourself an alternative feed or IVF, and contact your homecare provider to replace supplies, and Nutrition / Intestinal Failure team for any other advice
- Continue to check the bag occasionally while it is running to make sure it is still mixed
- Make sure ALL parenteral nutrition infusions are protected from light, and not exposed to high temperatures while you are infusing them e.g., sunbathing
- Once the MCB is mixed, or compounded bag is out of the fridge, the use of ice packs / blocks next to bags during infusion is not necessary
- Ensure you rotate your stock of MCBs and fluids, using them in date order
- If any of your MCBs or fluids have been stored at higher temperatures, always use this stock first
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- Remember to monitor yourself for signs of dehydration and run additional IVFs if needed
- High and low room temperatures can affect the functioning of even pharmacy fridges - pay particular attention to monitoring the maximum and minimum temperatures of the fridge you use for any medicines and contact your homecare provider for advice if these go outside the normal range. Opening the fridge too frequently will affect the temperature, so check your thermometer once a day when you take your feed out
- This guidance can be applied to all medicines supplied using the NHS England Home Parenteral Nutrition framework. For any other prescribed medicines, you should contact the prescriber or pharmacist for advice

Further information for healthcare professionals can be found on the British Pharmaceutical Nutrition Group website [PN Temperature Excursions | British Pharmaceutical Nutrition Group \(bpng.co.uk\)](https://www.bpng.co.uk)

This guidance has been produced by Pharmacists from the NHS England National Home PN Clinical Advice and Management Group, the British Pharmaceutical Nutrition Group, and the Home Parenteral Nutrition Stakeholders Group, with input from Hospital Pharmacy Medicines Information, Pharmacy Quality Assurance and PN manufacturers, and with support from PINNT.

