Intravenous (IV) antibiotics (elastomeric device)

How to give your child's treatment at home

Information for children, families and carers

We have given you this factsheet because your child has been prescribed intravenous (IV) antibiotics (antibiotics that are given directly into a vein) to have at home rather than in hospital. This is known as outpatient parenteral antimicrobial therapy (OPAT). Before your child goes home, you will receive full training on how to deliver IV antibiotics to them safely and be required to sign a consent form.

This factsheet provides information, along with step-by-step instructions, on how to give your child IV antibiotics safely at home using an elastomeric device. We hope it will help to answer some of the questions you may have. If you have any further questions or concerns, please contact us using the details at the end of this factsheet.

This factsheet should be read alongside the 'Children's outpatient parenteral antimicrobial therapy (OPAT)' factsheet we have given you.

Equipment

To give your child IV antibiotics, you will need the following equipment:

- a plastic tray
- universal disinfectant surface wipes (for example, Clinell wipes – these will be large and rectangular)
- 2% chlorhexidine disinfectant line wipes (these will be small and square)
- IV saline flush(es) x ___
- IV Hepsal flush x 1 (not required if only changing the device once a day)
- IV elastomeric device (a device that contains antibiotics) x ___
- yellow clinical waste bags
- spare bandages or Tubigrip (to cover your child's line when not receiving IV antibiotics)

We will provide you with all the equipment you will need when your child is ready to leave hospital.

How to set up and give your child IV antibiotics

It is important that you follow the instructions below carefully to reduce your child's risk of infection.

Preparing the environment

The first step to giving your child IV antibiotics is preparing the environment around you. This involves:

- finding a quiet room, away from any distractions (for example, pets or other children)
- cleaning the surface where you will prepare the medication and then allowing it to dry (you should use antibacterial surface cleaner, disinfectant wipes, or warm soapy water)

Giving the IV antibiotics using an aseptic non-touch technique (ANTT)

1. Use alcohol gel or wash your hands with liquid soap and warm water and then dry them on a clean piece of kitchen roll (see separate hand washing technique advice factsheet we have given you or visit the NHS website: **www.nhs.uk/live-well/best-way-to-wash-your-hands**).

2. Clean the plastic tray with a universal disinfectant surface wipe (large rectangular one) for 30 seconds. Then allow the tray to dry for 30 seconds.

3. If using a PICC (peripherally inserted central catheter), remove the bandage or Tubigrip covering your child's line.

4. Gather all the equipment you will need for the procedure (see page 1). **It is important that you check the expiry dates on the elastomeric device(s) and flushes before removing the packaging.** Place all the items in the clean, dry tray.

5. Wash your hands with liquid soap and warm water, and then dry them on a clean piece of kitchen roll.

6. Make sure **all** the flushes being used are free of air bubbles. To do this, you will need to:
   - Point the syringe up towards the ceiling.
   - Remove the syringe cap.
   - Pull down on the plunger to release the airlock and then carefully push it back up until there is no air left in the syringe.
   - Replace the cap.

7. Clamp your child's existing elastomeric device and line before disconnecting the elastomeric device. Place the empty device to one side (not in the plastic tray).

8. Open one of the 2% chlorhexidine disinfectant line wipes (small square one) fully and clean the end of the line (known as the bung) for 30 seconds. Then allow to dry for 30 seconds. Once cleaned, it is important that the bung **does not touch anything** (for example, your hands, clothes or skin). If the bung comes into contact with anything, you must repeat the cleaning process with a new disinfectant wipe.

9. Remove the cap from the saline flush syringe and insert the syringe into the centre of the bung, gently turning it clockwise to screw it into place. Unclamp the line and pull back on the syringe plunger until you can see some blood in the syringe tip (this is known medically as 'flashback').

10. Once you see some blood in the syringe tip, slowly give the saline flush using the stop/start flushing technique we have shown you (gently push the plunger down, allowing a brief pause approximately every 0.5ml). If you cannot easily flush the line, ask your child to cough, change position or raise their arm.

11. Clamp the line and then disconnect the saline flush syringe from the bung. Place the empty saline flush syringe to one side (not in the plastic tray).

12. Remove the cap from the new elastomeric device and insert into the centre of the bung, gently turning it clockwise to screw it into place (**do not overtighten**).

13. Unclamp the line and the elastomeric device (the device will then run).

14. Dispose of all used equipment in the yellow clinical waste bag.

15. Wash the tray with liquid soap and warm water and then wash your hands with liquid soap and warm water.

When your child comes to the end of their treatment plan (finishes their last elastomeric device), follow steps 1 to 11 and then:

- Remove the cap from the Hepsal flush syringe and insert the syringe into the centre of the bung, gently turning it clockwise to screw it into place.
- Unclamp the line and slowly give the Hepsal flush using the stop/start flushing technique we have shown you (gently push the plunger down, allowing a brief pause approximately every 0.5ml) and then clamp the line as you are injecting the last 1ml of Hepsal flush.
- Disconnect the Hepsal flush from the line and dispose of all used equipment in the yellow clinical waste bag.

How often and for how long your child will need to be given IV antibiotics at home will vary depending on what your child is being treated for. Your child's OPAT team (sometimes referred to as pOPAT team – the 'p' stands for paediatric) will have discussed this with you, but if you are unsure, please contact them for advice.

How to store your child's medication

You should store your child's IV antibiotics:

- in a plastic container in a: ☐ fridge ☐ cupboard ☐ other _____
- away from unpackaged food
- out of reach of children

How to transport your child's medication

If you go on a long journey (more than two hours) and you usually store your child's re-constituted antibiotics in the fridge, use a cool box to transport them to ensure they stay cool.

How to dispose of your child's medication and equipment

You should place all waste into the yellow clinical waste bag that we have provided you with. This bag will then be collected and disposed of safely by the community nurse when they visit your child for follow-up appointments.

What to do with any unused medication

You should return any unused medication to your child's community nurse or local hospital for disposal.

What to do if your child's line becomes blocked

If you cannot flush your child's line at all or without having to use significant pressure:

- ask your child to cough, change position or raise their arms
- contact your child's community nurse or pOPAT team for further advice (see contact details at the end of this factsheet)

Do not try to force saline or Hepsal into your child's line.

Signs to look out for when flushing your child's line

Before flushing your child's line, it is important that you check the line site and the area around it for:

- discharge
- redness
- swelling
- leakage

If you notice any of the symptoms above, **do not** give your child their IV antibiotics and contact the pOPAT team or your child's community nurse for advice straight away.

If your child suddenly complains of pain while you are flushing their line, stop flushing the line immediately and contact the pOPAT team or your child's community nurse for advice straight away.

What to do if your child has a reaction or becomes unwell

Follow the action plan in the box below if your child:

- vomits and/or suddenly feels dizzy or faint
- experiences swelling or tingling of their lips
- becomes wheezy or breathless, has a hoarse voice, or feels a lump or swelling in their throat
- develops a fever (a temperature of 38°C or more)
- has a rash or becomes itchy all over
- starts shaking

Action plan

- Stop giving the medication immediately and clamp the line (**do not flush anything else**).
- **If your child is breathless**, sit them up.
- **If your child is drowsy or unconscious**, lie them on their side.
- Dial **999** for an ambulance and stay with your child until help arrives.

Make sure to have any medications you were using at the time your child experienced symptoms to hand when the paramedics arrive.

Contact us

If you have any further questions or concerns, please contact:

Your child's community team
Telephone: _____ (Monday to Friday, 8am to 4pm)

pOPAT team
Mobile: **07776 497313** (Monday to Friday, 8am to 4pm and weekends, 9am to 1pm)

If you have any **urgent** concerns while your child is receiving treatment at home, take your child to your nearest emergency department or call **999**.

Useful links

www.what0-18.nhs.uk

If you are a patient at one of our hospitals and need this document translated, or in another format such as easy read, large print, Braille or audio, please telephone 0800 484 0135 or email PFSH@uhs.nhs.uk

For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit www.uhs.nhs.uk/additionalsupport

Version 1. Published August 2026. Due for review August 2029. 3819