What is an intravenous (IV) infusion and why do I need one? Information for young people

Having an intravenous (IV) infusion or ‘drip’ means you can have fluid or medicine straight into your veins rather than having to swallow it. A drip uses a cannula (narrow, bendy tube) that is put into a vein in the back of your hand or in your lower arm. Occasionally, someone might need to have a cannula in a vein in their foot but this doesn’t happen very often. This information sheet from Great Ormond Street Hospital (GOSH) explains about drips and what to expect when you have one.

Some medicines work better if they go straight into your veins, rather than swallowing them. An IV infusion is a way of putting medicine into your bloodstream over a longer time than having an injection.

If you can’t eat because you feel sick or your mouth is sore, you can have fluids through an infusion too – this can keep the minerals and salts in your blood at the right level until you can eat and drink again.

If you have fluid or medicine over a short period of time, we call it a ‘bolus’ or a ‘push’. If it takes longer, we call it an ‘infusion’ or ‘drip’.

How does it work?

The infusion is connected to a cannula, which is put into one of your veins. A cannula is a small, bendy tube with a plastic connector at the end. The nurses who put in cannulas have done it lots of time and will be as quick as they can. We will also make sure you can have local anaesthetic cream or cold spray so you don’t feel it so much.

A bag of fluid or medicine is joined to the cannula with a long tube and hung on a drip stand higher than your head. The tubing is usually fed into a pump that makes sure you get the right amount of fluid or medicine at the right rate — not too fast and not too slow.

Putting in the cannula

After you have had local anaesthetic cream or cold spray on your skin, the nurse will look at your hands and arms to find a good vein. Sometimes, they put a tight band (tourniquet) around your arm to make the veins stand out more. This can feel uncomfortable but the nurse will take it off as soon as they have put in the cannula.
Make sure you are sitting comfortably with your arm resting on a pillow or chair arm. The nurse will give your skin a quick wipe to clean it and then put the cannula into a vein – this shouldn’t hurt but you might feel them pressing a bit. They then take out the middle bit of the cannula, leaving the tube inside your vein.

If you don’t like having a cannula or are a bit nervous, look away or distract yourself with your phone or tablet. You could also ask one of our Play Specialists to sit with you to keep you busy for a minute or two. Try to stay relaxed about having a cannula put in – this will make it quicker and easier for the nurse and more comfortable for you.

The nurse will give the cannula a quick flush of salt water solution (saline) then put a see-through dressing over it, sometimes with some extra medical tape to keep it steady. The final step is to connect up the infusion bag of fluid or medicine. They will program the pump too if you are having one.

**What will it feel like?**

Having an infusion shouldn’t hurt so if you feel any burning or stinging tell your nurse immediately. Depending on which vein the cannula was put in, you might find it uncomfortable to use that hand or arm very much. This isn’t usually a problem but you might be aware of it if you lean on your hand or arm.

Most drip stands are on wheels so you can usually move about on the ward. Take care not to tip over the drip stand – the bags of medicine might be heavy and try not to move your cannula when you use the toilet for instance.

You can keep a cannula in place for several days – the nurse will keep an eye on any redness or swelling through the see-through dressing. When you are not connected to the drip, the cannula is closed shut – you won’t leak out of it.

**Taking out the cannula**

When you don’t need the drip any more, the nurse will remove the cannula. They will peel off the see-through dressing – they might use a spray to make this easier – and pull out the cannula.

This shouldn’t hurt at all. They will press down on the vein with a piece of gauze to stop it bleeding then tape it in place. You can take this off after 30 minutes or so. You might have a small bruise where the needle went in – this won’t last long and will fade over the next few days.

**Want to know more?**

Ask your nurse about infusions and why you need one.

**Disclaimer**

This is a general GOSH information sheet. If you have specific questions about how this relates to you, please ask your doctor. Please note this information may not necessarily reflect treatment at other hospitals.