

Giving home intravenous (IV) medicine using a Sapphire pump

This information sheet explains how to add medicine to the IV bag and use the Sapphire pump. It is important to follow these instructions below to make sure medicine is given correctly and reduce the risk of infection.

Before you start giving the medicine

- Make sure you are in a quiet room, away from anything that may distract you.
- Wash your hands for at least 20 seconds with soap and water.
- In between the different stages of preparing and giving the medicine. Use alcohol gel to clean your hands or wash your hands with soap and water.
- Clean the surface of the table or tray you are using to prepare the medicine. Use antibacterial surface cleaner, disinfectant wipes, or warm soapy water. Allow the surface to dry.
- Use this surface to prepare the IV medicine.

Then add medicine to the IV bag

1. Unscrew the top of the mixing liquid (diluent) and place it upright on the clean surface.
2. Open the packages containing the syringe and needle. Put them together, without touching the tip.
3. Remove the lid from the vial containing medicine.
4. Tear open the pouch containing a small disposable cleaning wipe. Use the wipe to clean the top of the vial for at least 30 seconds and allow time to dry.
5. Hold the vial in one hand and the syringe with the other. Push the needle through the rubber on top of the vial. Then mix the liquid from the syringe into the vial by pushing the syringe plunger.
6. Carefully shake the vial while holding the syringe in place until the medicine is fully dissolved.

7. Draw the mixed liquid from the vial into the syringe by slowly pulling the plunger up.
8. Clean the injection port of your IV bag with an alcohol pad for 15 seconds and allow to dry. Place the IV bag on the cleaned surface.
9. Insert the needle into the saline bag. Use the entry point on the bag that does not have a cap on it.
10. Add the medicine from the syringe into IV bag by pushing the plunger until the syringe is empty. Undo the syringe and the needle and put both in the sharps bin.

Giving medicine using the Sapphire pump

1. Take the giving set out of its package. Ensure the clamp is closed and place on a clean surface.
2. Pick up the saline bag that contains the medicine and remove the cap from the outlet port. The nurse will show you the outlet port.
3. Remove the cover from the giving set spike and hold it with one hand. Use your other hand to pick up the outlet port from the saline bag and insert the spike.
4. Hang the saline bag with the giving set in place.
5. Turn the Sapphire pump (pictured right) on by pressing the On/Off button
6. Open the safety door by using your thumb to press on front centre of door and swing it outwards.
7. Insert the administration cassette at an angle, by placing the 'saddle' onto the round metal anchor in the cassette's housing.
Check the arrow on the cassette is pointing towards the bottom of the pump.
Check the flange is inside of the cassette housing.
Clip the upper end of the administration cassette into the metal lock by pressing the cassette on until it clicks in.
8. Close the safety door over the administration cassette. Check that the safety door clicks on closure.
9. Before beginning the infusion, the administration set (tubing) needs to be primed. From the initial Start Up menu, press Prime on lower left-hand side of screen. A red screen will display a Disconnect Patient message. This is to remind you not to connect the administration set (tubing) before priming. Press OK.



10. A timer will begin to run while tubing is being primed. When priming is completed, the pump will display a reminder to connect the set (tubing) to the 'patient'.
11. Make sure that tubing is fully primed. If fluid does not reach the end of the tubing until at least a drop forms, repeat this sequence. Once it's fully primed, press OK.
12. Clean the Bionector on the end of your IV access vigorously for 30 seconds. Use an alcohol or an antiseptic wipe. Then allow the Bionector to dry for 60 seconds.
13. Attach a prefilled saline flush to the Bionector of your IV access and flush as shown by your nurse.
14. Disconnect the syringe from the Bionector of your IV access and put it in the sharps bin.
15. Attach the Sapphire administration set and tubing to the end of Bionector.
16. Press Repeat Last Infusion on screen.
17. Review the parameters are correct according to your Plan of Treatment, press OK. Make sure all clamps on administration set and tubing are open. Press Start.
18. The infusion will begin.

Important

Please note:

The display screen may:

- enter a screensaver mode with a dimmer screen showing the rate
- or the screen may turn off while running

The green light on the side bar will still flash to indicate that the pump is still running.

You can press anywhere on the main touch screen to bring back the original display if it is on the screensaver. Or touch the On/Off button if it has gone dark to bring it back up again.

At the end of infusion

1. When your infusion is nearly finished, an alarm may sound. You will also see the message display 'Infusion near end'. You do not need to do anything. But if you want to clear the message and alarm, press Mute and then press OK.
2. When infusion has completed, an alarm will sound, and screen will display a message – Infusion Complete. It will also display the volume infused, rate and total time it was running.
3. Press Mute then press OK. The pump will enter KVO (keep vein open) mode.
4. When you're ready to disconnect, stop your Sapphire pump by pressing Quit. The display will return to the home screen. Press the ON/OFF button and then press OFF on the screen.
5. Disconnect the tubing from the injection port of your IV access.
6. Attach a prefilled saline syringe flush to your IV access as shown by your nurse.
7. Disconnect the syringe and dispose of it as the nurse has shown you.
8. To remove the Sapphire tubing cassette from the pump. Open the safety door on the side by pressing it with your thumb and swinging the door open. Loosen the cassette by pushing the metal legs up. Remove cassette and close safety door. Dispose of the used tubing and medicine bag as shown by your nurse.
9. Wash your hands thoroughly.

Contact us

If you have any questions or concerns about your medicine, please speak to the staff caring for you.

More information

See videos and more information on the Home Intravenous (IV) therapy service page on Royal Brompton website (www.rbht.nhs.uk).

Was this leaflet useful?

If you have any comments about this information, we'd be happy to hear from you.
[email healthcontent@gstt.nhs.uk](mailto:healthcontent@gstt.nhs.uk)

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- Royal Brompton Hospital **phone** 020 7349 7715
- Harefield Hospital **phone** 01895 826 572

Or **email** gstt.rbhh-pals@nhs.net

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