



Going home with a CADD pump

This leaflet is for patients going home with a CADD pump to deliver chemotherapy at home. Your chemotherapy nurse will explain how to use the pump before you go home.

What is a CADD pump?

CADD stands for Computerised Ambulatory Delivery Device. The CADD pump means you can have your chemotherapy safely at home. It can deliver continuous chemotherapy or chemotherapy that is given at a particular time, as well as other medicines or fluids.

Your chemotherapy nurse will make sure that you understand how the CADD pump works. You should feel confident with using the pump before you agree to having your chemotherapy this way.



Backpack showing medication bag and CADD pump

How does the CADD pump work?

The pump will be attached to a cassette or infusion bag, which will contain the chemotherapy, medication or fluid. This will all be placed into a bag or pouch that you can wear on your back, over your shoulder or around your waist, depending on the weight of the liquid in the bag. Please ask if you have any questions about how to wear the bag or pouch.

Your chemotherapy nurse will program the pump to deliver the chemotherapy, medication or fluid at an exact dose per hour and at exact times, as prescribed by your doctor.

The pump will have a fully charged battery before you take it home. The key pad will be locked so that the programming cannot be changed by accident.



CADD pump

On the first day of your treatment, you will be given some appointment times and it is very important that you return to the Chemotherapy Day Unit (West Ward) for these appointments. We need to check that the pump is working well and replace the cassettes or bags. We may also need to change the pump or replace batteries.

If there are any problems with your pump, please contact West Ward during working hours:

Tel: 0118 322 7464 or 0118 322 6632 Monday to Friday, 9am to 5pm

If you need help outside of these hours or you are unable to get through to West Ward, please call the Triage line on 0118 322 7762.

Depending on the problem, you may need to return to the hospital to have the pump checked or replaced. **Do not disconnect the tubing yourself as this may cause the chemotherapy to spill.**

Using the CADD pump

When you start using the CADD pump you will need to make some minor adjustments to your daily activities:

- When you bathe, the pump can be put on a chair next to your shower. **It should not get wet as water can damage the pump.**
- When you sleep, the pump can be put on a chair next to your bed. You must make sure the pump and cassette/bag holding the fluid is **always upright**. This will allow the infusion to run without interruptions. If the bag is not left upright, it can cause an air bubble in the pump or a kink in the line, which will prevent the pump from working.
- **Do not play any contact sports.** You might hurt yourself, detach the pump or damage it.
- Protect the pump so it is not dropped or hit. The pump may be damaged if hit with a hard object.
- **If you have animals at home or contact with small children, keep the pump out of reach at all times.** You must also be careful with your central line, to make sure it does not get pulled or damaged.
- If someone in your home is pregnant, they should not come into contact with any chemotherapy spillage. If they do come into contact with it, **contact us immediately** using the phone numbers at the end of this leaflet. Remove any clothing and wash the affected area with large amounts of soapy water. If large areas are affected or you are unable to use a sink, shower the solution off immediately. If it comes into contact with your eyes, irrigate eyes thoroughly with 0.9% sodium chloride for at least 15 minutes. (This will be provided for you to take home)

How will I know that the CADD pump is working?

- If your chemotherapy or fluid has been programmed to run continuously, you should hear an intermittent low “whirring” sound. This means it is working correctly.
- If your chemotherapy or fluid has been programmed to start later in the day, for example at 9pm in the evening, then you will not hear this “whirring” sound until 9pm. It has a clock built in, so it knows what time it is, and it will start exactly on time.
- You should be able to see the amount of liquid in the bag or cassette gradually going down. In addition to this visual check, the top left hand corner of the CADD pump screen displays the volume of fluid left to be delivered.

- Also on the top of the CADD pump screen there should be a green message that says “Running”. If this is red and says “Stopped”, then the pump is not running.
- If you are having an intermittent infusion, the pump will display a countdown telling you when your infusion will start, e.g. “Delayed Start – Infusion starts in 6 hours 30 minutes”.

If you are worried that the CADD pump is damaged and may not be working, please contact us using the phone numbers at the end of the leaflet.

CADD pump alerts

If your CADD pump is sounding an alarm, please look at the CADD pump display screen – this will show you what the problem is. There are two alarms that we expect to happen:

1. Reservoir volume low

This is the pump notifying you that your infusion is almost finished. Please press the “acknowledge” button and the pump will continue to deliver the last of your chemotherapy.



CADD pump with example alert

2. Reservoir volume is zero

This is the pump alarming to advise you that your chemotherapy or fluids have completed their infusion. You should now turn the pump off completely using the power switch on the right hand side of the pump. It will ask “Power down?” and you should select “Yes”.



CADD pump infusion completed

Sometimes, other messages or alarms can occur. The pump will provide step-by-step instructions which can be easily followed.

The 3 most common alarms that can occur are:

1. Downstream occlusion. Clear occlusion between pump and patient.

If this message appears on your pump, please press the “silence” button, then the “help” button and follow the instructions. It might ask you to adjust the position of your arm, check that there are no kinks in the line and that all clamps are open. If you fix the problem, the pump should automatically start running. If it does not automatically start running please press the “stop/start” button. It should start running after that.



CADD pump downstream occlusion alert

2. Upstream occlusion. Clear occlusion between pump and reservoir.

If this message appears on your pump, please press the “silence” button then the “help” button and follow the instructions. Please be aware the pump will ask you to “fully insert spike” into the chemotherapy bag (displayed below). For safety reasons **DO NOT follow this instruction**. It puts you at risk of a chemotherapy spillage. Press “Next” to move on to the next instruction.



CADD pump upstream occlusion alert

3. Air in line detected

If this occurs then please immediately clamp the line. **DO NOT** follow the instruction to prime the tubing. Please call West ward (within working hours) or the Triage line (out of hours or if unable to get through to West ward) and tell them what has happened. You may need to return to the hospital so that the problem can be fixed by a nurse. Air in the line cannot be resolved at home and should be assessed by a chemotherapy trained nurse. Please do not disconnect yourself from the chemotherapy line.



CADD pump air in-line detected alert

If you are unsure about any alarms or alerts, please contact us as soon as possible.

Don't worry about these potential problems. Your chemotherapy nurse will show you what to do with all of these situations before you go home with the pump.

What else do I need to do?

You must check your central line site (PICC line or Hickman line) regularly and report any problems to your West Ward/Triage line or your CNS (clinical nurse specialist).

Problems may include:

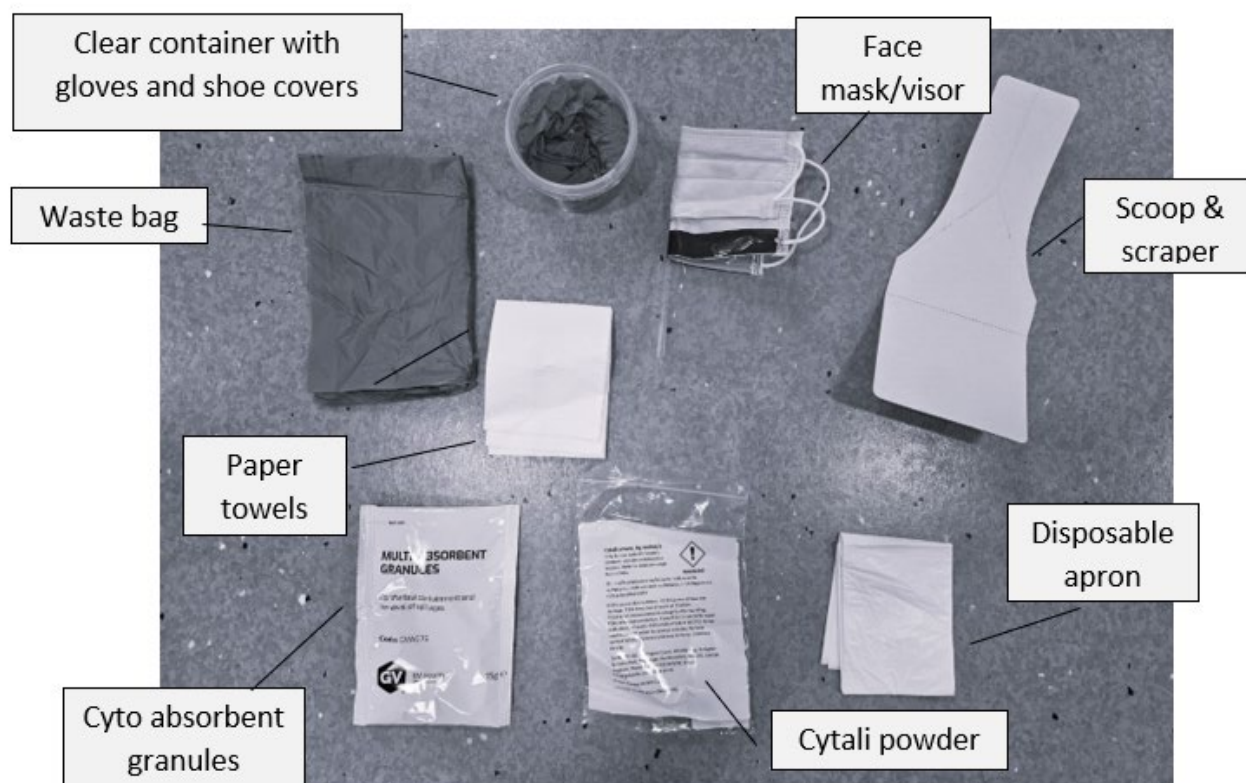
- Lifting of the waterproof dressing
- Visible leaking of fluid and/or swelling under the dressing
- Any leakage from the tubing
- Signs of infection at the site, including redness, pain, heat or swelling.

You must call 999 if you develop any chest pain, difficulty breathing (e.g. wheezing, shortness of breath) or any swelling of your throat or face. These symptoms means you are having a serious allergic reaction.

What should I do if my chemotherapy spills or leaks?

It is possible to accidentally spill chemotherapy if the connection between the pump and your line comes loose or if the line becomes damaged while treatment is running.

You will be given a spillage kit by the hospital, including instructions for how to use it. Keep the kit and the information nearby when you have your chemotherapy pump attached and make sure that your carer or family members also know how to use it.



The main instructions to follow when a leak or spill occurs are:

- Keep all people away from the spillage area and out of the room (especially children, pregnant women and pets). Allow only the minimum number of people required in the area to clear the spillage up.

If your chemotherapy spills you must:

1. Turn off the CADD pump. Press the power button at the right-hand side of the pump. It will ask you “Stop pump?”, please select “Yes”. It will then ask you “Power down?”, please select “Yes”.
2. Please stay connected to your CADD pump and chemotherapy line.
3. Open the spillage kit (away from the spillage).
4. Put on all protective clothing: gloves, face mask/visor, apron and overshoes.
5. Sprinkle Cyto absorbent granules over the spill and allow to absorb.
6. Pour Cytali powder sachet into 250ml clear container and fill $\frac{3}{4}$ full with tap water.
7. When granules have absorbed the spill, open waste bag and collect granules using the scoop and scraper and place in waste bag along with used scoop and scraper.
8. Once Cytali powder has dissolved, use paper towels and solution to wipe surface where spill happened. Ensure area is fully wiped with solution and leave to dry.
9. Pour unused solution into sink with running water. Ensure all used protective clothing and items are put in waste bag provided with your gloves in last. Tie bag top to seal. Wash hands thoroughly after. Ensure you return to the hospital as soon as possible with the bag and all contents so that they are disposed correctly.

Chemotherapy that spills onto skin may cause irritation. If this happens, immediately remove clothing and wash affected skin with large amounts of soapy water. If a large area is affected or you are unable to rinse in the sink, shower off the spillage immediately. Do not scrub the skin as unbroken skin provides protection. If any chemotherapy comes into contact with eyes, irrigate eyes thoroughly with 0.9% sodium chloride provided for at least 15 minutes.

How to contact us

West Ward

Tel: 0118 322 7464 or 0118 322 6632 (Monday to Friday 9am to 5pm)

Triage line

Tel: 0118 322 7762 (Out of hours/if unable to contact West Ward)

Acute Haematology CNS

Tel: 0118 322 5111 – ask for Haematology Acute CNS (Monday to Friday 9am to 5pm)

Adelaide Ward

Tel: 0118 322 7471

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT Haematology Department, October 2025. Next review due: October 2027.