vitalcare INFUSION SERVICES

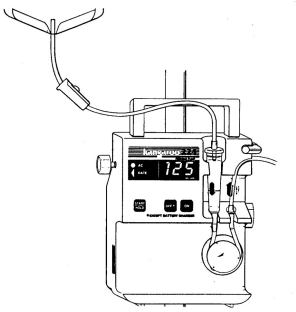
Infusion Pumps: General Pump Safety

Introduction

Your infusion pump is part of your home care and was designed with patient use in mind. Here are some basic safety tips for use of infusion pumps in the home.

(NOTE: the pharmacy may also give you written instructions written by the pump manufacturer.)

Guidelines for Safe and Effective Pump Use



- Read all instruction materials given to you by the pharmacy. Always review the section on alarms, and what to do if an alarm on the pump activates.
- Ask questions during your training session. If you need to, ask for additional teaching sessions.
- Follow all manufacturer guidelines for maintaining the pump. Examples include keeping the pump away from excessive moisture, food, drinks, children, and pets.
- Follow all prescriber, pharmacist, and nurse instructions for the use of your pump, and the rate of infusion.
- Wash your hands and use clean technique when handling your pump and therapy.
- Have extra "back up" batteries in the home. Replacement batteries will be provided by our pharmacy to assure the correct type are used.
- Always make sure that you can hear the alarms. You or your caregiver should be able to hear the alarm during the night. Your caregiver may need to hear it from another room.
- Keep a flashlight by your bed so you can see the pump display at night if it alarms.
- Ask your nurse if your pump is affected by transmitters such as cell phones, wireless computers, two-way radios, or microwaves.
- Most pumps use one specific type of administration tubing. They are typically not interchangeable. Always notify the pharmacy if the tubing or packaging appears different than they usually do.
- If your pump is pole mounted it will use wall A/C current. It might have a battery for short term (2-4 hours) use and backup power. Always plug your pump into a wall outlet to recharge the battery when idle.

- If your pump is a portable ("ambulatory") pump it will work on either disposable or rechargeable batteries. It might also have an optional A/C power adaptor. If using rechargeable batteries, always recharge them when the pump is idle.
- All A/C adaptors and plugs for infusion pumps require grounded outlets. Please let us know if your outlets are not grounded.
- Infusion pumps are designed with many safety features and alarms. These features are designed to protect you. Do NOT attempt to bypass the safety features of the pump. Do NOT try to deactivate the alarm features.

  - Always know how to turn your pump on and off.
  - Ask your nurse or pharmacist for instructions on taking baths or showers if you need to remain connected to your pump.
  - Have the number of your home care agency and our pharmacy posted in 2-3 places throughout your home.
  - Always notify the home care agency or our pharmacy immediately if your pump alarms and you are unable to restart the infusion. Also, let us know if your pump appears to be pumping too quickly or too slowly.
- When traveling by air, let the security personnel know you have an infusion pump. Ask for a manual search. Going through some types of security screening equipment might affect your pump.
- If traveling to another country, make sure your pump will work with that country's power system. Speak to your nurse about an adaptor if necessary.
- When unplugging your pump from the electrical outlet, firmly grasp the plug end to safely disconnect it. Never pull on the flexible cord itself as the pump could be damaged requiring replacement for which you may be financially responsible if the pump is being rented from the pharmacy.

Infusing Your Medication with an Infusion Pump

Introduction

Your infusion will be given by connecting the medication container/bag, and tubing, to your catheter. An electronic pump attached to the tubing will be used to control the drop rate of the medication. In this way, the rate of your infusion is carefully controlled.

Your pump might be a small hand-held device. These are called "ambulatory" because they allow you to walk around while connected. Your pump might be a larger pump that is mounted onto a pole. These are called "stationary" or "pole-mounted" pumps, and are usually used for short infusions, or long infusions if you are going to stay in bed.

There are many different models of infusion pumps. Buttons, alarms, and other features will vary. Our pharmacy might give you additional written information on your specific brand and model of pump.

Supplies

- Medication container
- Electronic IV pump
- Pump user guide
- IV pole (if applicable)
- Carrying case/pouch (if applicable)
- IV tubing (sometimes called "administration set")
- Alcohol wipes
- Sterile protective cap (if applicable; intermittent infusions within the same 24 hour period)
- Soap or alcohol-based gel for hand washing

Steps

1. Remove your medication from the refrigerator 4-6 hours (or as instructed) before you need to infuse it. Allow to warm to room temperature.
2. Prepare a clean working area.
3. Assemble your supplies.
4. Wash your hands as taught by your home care nurse.

5. Remove the protective cover from the spike port of the medication bag/container.
6. Close the clamp on the IV tubing and remove the protective cover from the spike.
7. Insert the spike into the medication bag/container.
8. Squeeze the drip chamber until it is half full, then slowly open the clamp. Allow the medication to fill the IV tubing. Close the clamp.
9. Following the manufacturer's instructions, and as taught by your nurse, open the pump mechanism, and insert the IV tubing.
10. Be certain that all "free flow" protection devices and other safety features are engaged properly.
11. Close the pump mechanism and lock the door or assembly as instructed.
12. Open the IV tubing clamp.
13. Turn the pump power on. Review the program to assure that it matches your nurse or pharmacist instructions.
14. If applicable, "reset" the pump to the beginning of the infusion cycle. (Refer to instructions from your home care nurse.)
15. Proceed with pre-infusion flushing. (See Patient Education: "Flushing Your Catheter.")
16. Use an alcohol wipe to clean the end of your needle-free access device.
17. Remove the cover from the end of the IV tubing.
18. Attach the IV tubing to your catheter and needle-free access device by applying pressure on the device with the tubing end and twisting clockwise. The tubing should become firmly locked onto the needle-free device.
19. Begin the pump's operation. Observe the pump and the tubing drip chamber (if applicable) to assure that the infusion is flowing properly.
20. Complete the infusion.
21. Remove the IV tubing from the needle-free device by turning counter-clockwise. Cover the end of the IV tubing with a sterile "dead end" cap if you will be re-using the same tubing for the next infusion dose.
22. Proceed with post-infusion flushing procedure. (See Patient Education: "Flushing Your Catheter".)

Notes and Instructions

Check One:

☐ Your medication/fluid should be infused over _____ minutes, every _____ hours

☐ Your medication/fluid should be infused continuously

Check One:

☐ Your pump tubing should include a filter of the following type: _____ micron

☐ Your pump tubing should NOT include a filter

Your pump should be programmed as follows:

_____

_____

_____

_____