IV Basic II CLASS

Our first subject is **Portacaths** also call POC.
In this class we are not going to teach access just Flush, blood draws and deaccess.
Access will be taught in the Advanced IV class.

Blood draws when non-coring needle already in place.
- ✓ Wash hands and don gloves.
- ✓ Assemble your equipment close to Pt. and explain procedure to Pt.
- ✓ Prepare you saline and heparin syringes you will need 3 10cc saline and 1 heparin 100u/ml 5cc.
- ✓ Label you blood tubes.
- ✓ Clean injection port with alcohol with friction and allow to dry.
- ✓ Flush with 10cc saline and withdraw 6cc of blood and dispose of in sharps container.
- ✓ Fill appropriate tubes- use luer lock vacutainer.
- ✓ Wipe cap with alcohol again, allow to dry and flush port with 20cc of normal saline using pulse/pause method. Wipe cap again and flush with heparin syringe.

We just reviewed the flush procedure if pt. receiving meds use the SASH method using 10cc saline and 5cc heparin 100u/ml.

Deaccess:
- ✓ Be sure if you are deaccessing a port that you flush with appropriate heparin prior to removing needle.
- ✓ Securely anchor Port by placing thumb and forefinger of non-dominate hand on the edges of the port while pulling the device straight up and out of the port septum.
- ✓ The Huber needles should all have a safety device to cover needle but they are all different.
- ✓ Hold pressure on the site until bleeding stops.
- ✓ Apply band aid to site.
- ✓ Document all care in IV portion of note.
- ✓ Note blood draw, where labs sent, amount of saline & heparin used.
- ✓ Document that removal was done, appearance of site Pt's response and instructions given to pt. or S/O.

Subcutaneous Access Devices:
Medications given via the subcutaneous route are usually given continuously. The rate is controlled by using an ambulatory pump. The infusion is usually a slow, steady rate which allows the body to absorb just the right amount of drug each hour.

The needle used is very thin and short, allowing it to puncture the subcutaneous layer of the body. The common areas used are upper arms, thighs, abdomen and sometimes the buttocks.

Procedure-
- ✓ Wash hands and explain procedure to the pt.
- ✓ Inspect the med for correct drug, expiration date, container intact, solution discolored or any precipitate.
- ✓ Attach tubing to med container.
- ✓ Open the subcutaneous needle package. Remove protective cover from the tubing end of needle and attach this end to the tubing of the med container.
- ✓ Flush air out of tubing, if cassette tubing not filled use prime button on pump.
- ✓ Select the site for the needle, avoid bony, swollen and bruised areas as well as near joints.
- ✓ Cleanse the area with alcohol and then PVP swabsticks using a circular motion. Allow to dry 30 seconds.
- ✓ Pinch the skin and insert needle firmly into skin.
- ✓ Cover needle with tegaderm and tape tubing for security.
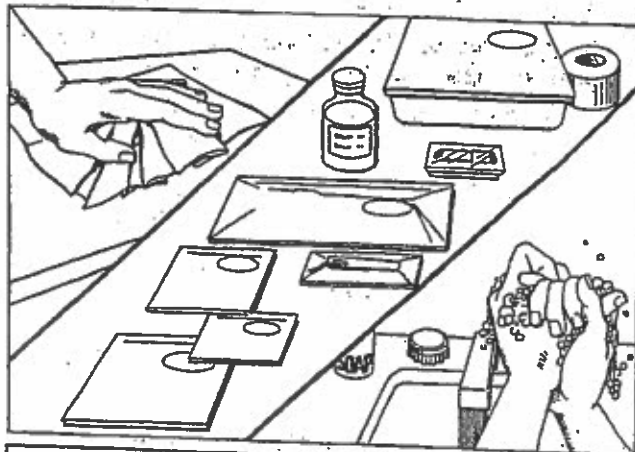- ✓ Turn on pump to begin infusion.

In your packet of handouts there is a **site rotation chart** you may use to teach the pt. the site should be changed q 3 days or sooner if problems. Teach the pt. to check site q 8 hours if redness or leaking rotate site. Teach pt. how to troubleshoot the pump and when to call the agency. The pt. may cover site with saran wrap or tegaderm to shower-cha

Subcutaneous Needle Insertion
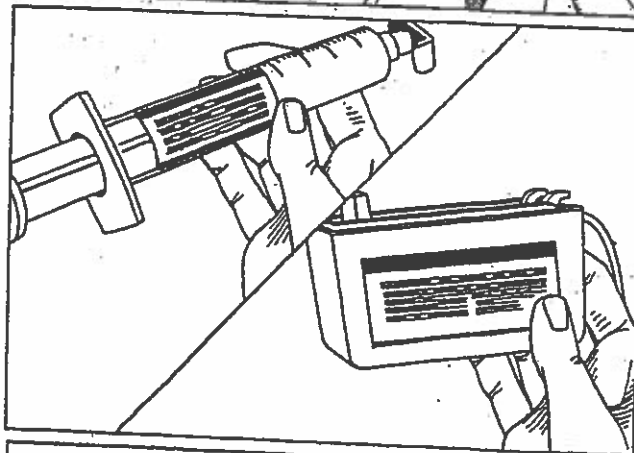
Supplies Needed:

- Prefilled medication container (at room temperature)
- Extension tubing, as needed
- Subcutaneous needle with attached tubing
- Alcohol swabsticks
- Povidone-iodine (PVP) swabsticks
- Gauze pad, as needed
- Transparent dressing, as needed
- Tape

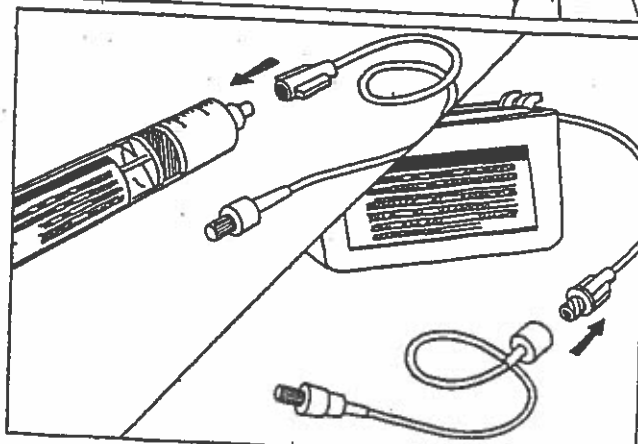1. Clean your workspace. Gather your supplies. Wash your hands.

2. Inspect the medication container.
   - **Is it the correct drug?**
   - **Has the drug expired?**
   - **Is the container intact?**
   - **Is the solution discolored?**
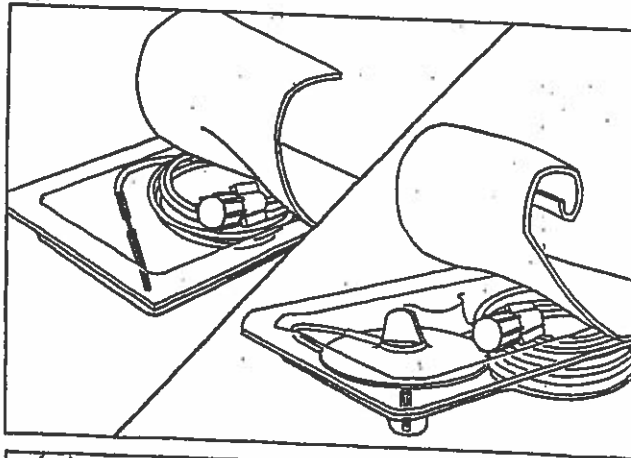   - **Are any specks seen?**

3. Attach the IV tubing to the medication container using aseptic technique.
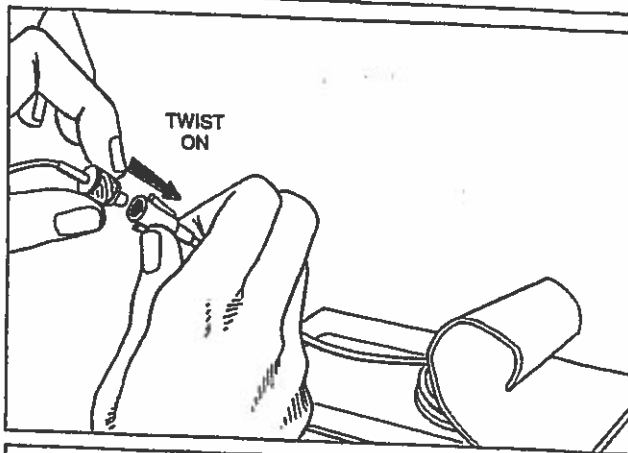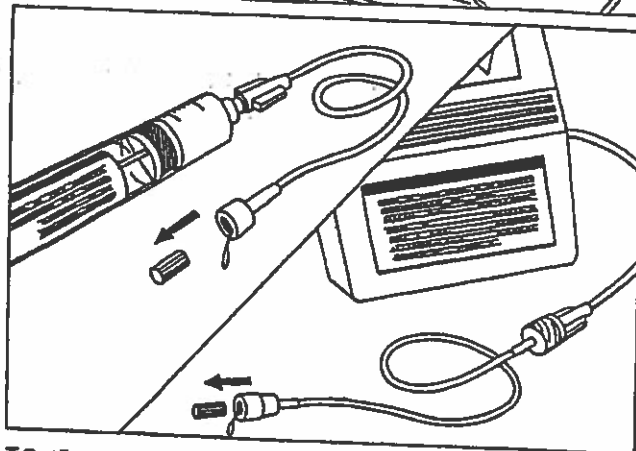
Subcutaneous Needle Insertion Continued

4. Open the subcutaneous needle package.

5. Remove the protective cover from the tubing end of the needle and attach this end to the tubing of the medication container.

TWIST ON

6. Fill the entire length of tubing removing all air bubbles. To fill a medication "cassette tubing" follow the pump instructions provided by your nurse.

7. Select the skin site for needle insertion. Avoid bony, swollen and bruised areas of the skin as well as areas near joints.

If there is a change in the condition of your skin, call your home care nurse.

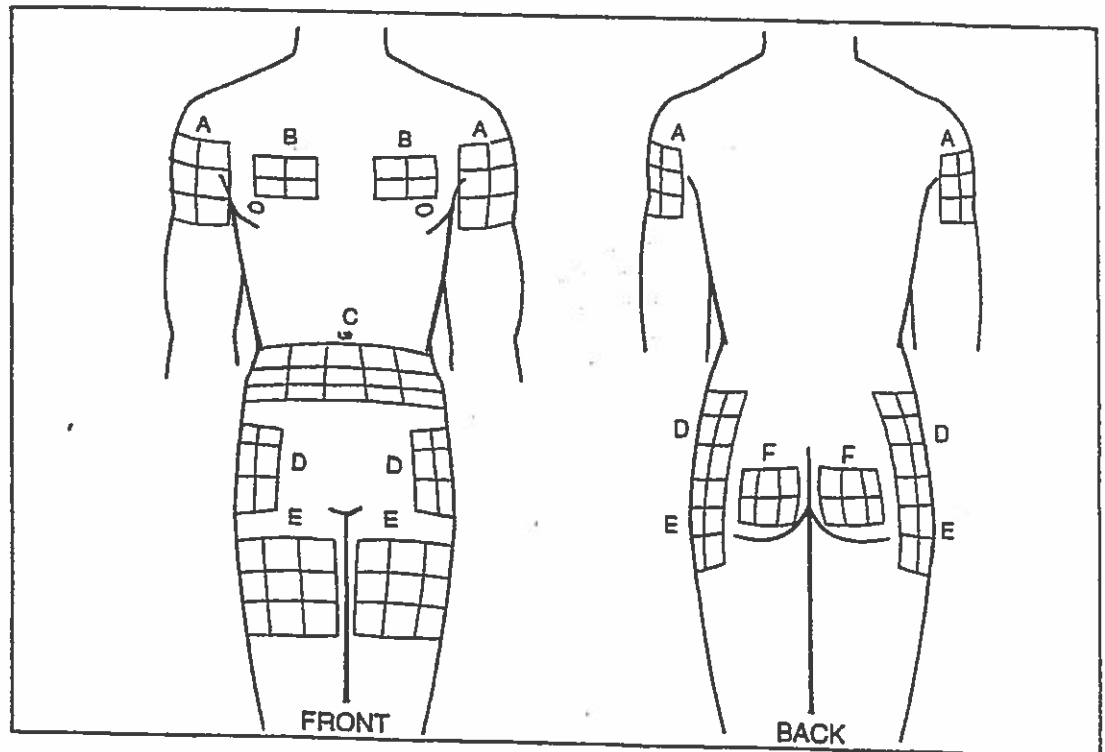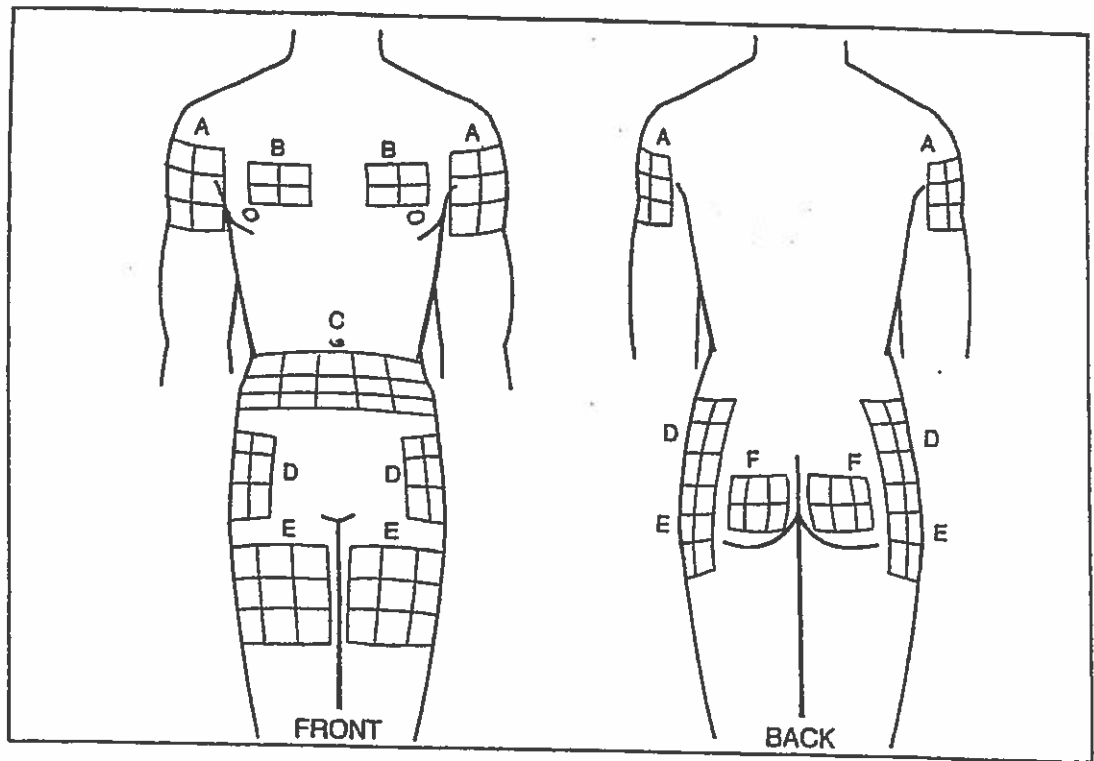15. Tape any extra tubing to your skin so the needle is secure during movement.

16. Turn on your infusion pump and begin your infusion.

Site Rotation Chart For Subcutaneous Needle Insertion Continued

FRONT   BACK

FRONT   BACK

MEDICATION ADMINISTRATION VIA FREEDOM 60 PUMP

Freedom 60

SUPPLIES:

- Syringe of medication
- Freedom 60 tubing (tubing to be changed every M-W-F)
- (2) Sodium Chloride (Saline) syringes
- (1) Heparin syringe (if necessary)
- (1) Blue cap

PROCEDURE:

1. Gather equipment. Clean work area. Wash hands.

2. Prepare your flushes as instructed by your nurse.

3. **Verify that tubing is labeled "Freedom 60 tubing."** Remove tubing from package.

4. Attach tubing to end of syringe.

5. Freedom pump should be rewound for this dose of medication, which will have moved the black tab to the end of its track.

9. When the next dose is due, remove used syringe from tubing, and replace with a new syringe of medicine. Repeat process of administration of medication.

IMPORTANT:

SUPPLIES AND WASTE CAN BE DOUBLE BAGGED AND DISPOSED OF WITH YOUR HOUSEHOLD GARBAGE.

Revised 5/2009

CURLIN 4000 PUMP

Equipment

Pump
Administration tubing
Medication at room temperature
Saline flush (if applicable)
Waste container

Procedure

1. **Wash hands**

2. **Clean a work area**

3. **Gather up your equipment**

4. **Check your IV site (check for signs of redness, tenderness, swelling or drainage. Notify your nurse if any signs present)**

5. **Check your medication for:**

   The right name
   The correct medication and dose: _____
   The expiration date
   Particles or discoloration

6. **Prepare the medication and tubing**

   Open the tubing any close any clamps
   Pull the tab off the medication bag
   Pull the cap off the spike end of the tubing
   Push the spike into the medication bag port
   Break off the yellow tab from the free flow valve
   Prime the tubing by squeezing the yellow free flow clamp until all air is
      removed

7. **Set up infusion pump**

   Open the door on the infusion pump by lifting the lever on top of the pump
   Swing the door arm of the pump to the open position
   Place the tubing into the pump by inserting the yellow clip into the slot
      marked with the yellow arrow
   Insert the blue clip into the slot marked with the blue arrow
   Close the door arm of the pump. Be careful not to pinch the tubing
   Click the door lever down to lock the door in the closed position

Infusion Therapy – Cadd Legacy and Cadd Prism Pumps

Considerations:

1. Use 2 patient identifiers
2. This procedure is for administrating a medication using an ambulatory pump
3. Ambulatory pump may be used on a midline or a central line
4. For patient controlled analgesia specific physician orders must include:
   a. Medication and dose
   b. Name and amount of diluent
   c. Route of Administration
   d. If programmed in Mg or ML
   e. Basal rate
   f. Bolus rate
5. Before hooking up pump:
   a. Inspect cassette/bag for correct patient name, medication, dose expiration date, separation or particulate matter
   b. Review all parameters such as medication, concentration, basal rate, bolus rate, amount given, bolus doses attempted and delivered
   c. Clear the amount given, bolus attempted and dose delivered at least once a week
   d. Call physician or pharmacist if any questions or concerns about med, pump, or rate of infusion
6. Instruct patient/caregiver on management and storage of meds and supplies
7. Tubing is changed with each cassette/bag change
8. Follow manufacturer's directions for preparing tubing and connecting to pump

Cadd Legacy Plus:

Equipment

Pump

Medication cassette/bag (at room temp)

Alcohol wipes

Key

2 AA batteries

Procedure:

1. Assess patient's pain
2. Wash hands and clean work area
3. Gather your equipment
4. Check the infusion site for redness, tenderness, swelling or drainage
5. Stop the pump by holding the start/stop button until 3 - - - appear
6. Disconnect from completed infusion
7. Unscrew the medication tubing from cap or SC needle
8. Close the clamp on the used medication cassette/bag
9. Unlatch the medication cassette/bag from the pump using the key
10. Have patient or caregiver discard the used medication cassette/bag
11. Change the batteries on the pump
12. Insert the new medication reservoir hooks into the hinge pins on the pump
13. Place pump upright on a hard surface

14. Using the key, push in and turn the lock until full locked on
15. Open all clamps
16. Clean the cap on IV or remove SC needle from packaging
17. Reconnect your medication to the IV cap or SC needle
18. If an SC needle is used, prefill needle and tubing with the medication in the pump
19. With Reservoir Volume on the screen press the Enter/Clear button until total volume appears
20. Start the pump by holding the Start/Stop button until the 3 - - - disappear
21. Review parameters once again as they scroll through

Changing Medication doses for Cadd Legacy Plus:

1. Hold stop button down until 3 - - - appear and pump screen says Stopped
2. Hit lock button
3. Scroll to lock level 0 and hit enter
4. Enter Code 63 and hit enter again
5. Screen will return to Stopped
6. Hit next button until continuous rate shows
7. Change the rate to the desired rate and press Enter
8. Hit next to get to bolus dose,
9. Change rate if needed and hit Enter
10. Hit next to see doses per hour
11. Change if needed and hit Enter
12. Hit lock button and scroll to lock level 2 hit enter
13. Enter code 63 and hit enter again check to be sure it is in lock level 2 so no changes can be made
14. Continue to hit next button and review all parameters to ensure accuracy
15. Hit Start/Stop and hold until it says run It will once again run through the parameters
16. Check pump before you leave to make sure it says run

Cadd Prism Pump:

Equipment:

Pump

IV medication cassette/bag (at room temp)

Saline flushes if needed (not for PCA line)

Alcohol wipes

Coin or key for PCA

Sharps container

9 volt battery

Procedure:

1. Assess patient's pain if PCA
2. Wash hands and clean work area
3. Gather your equipment
4. Check the infusion site for redness, tenderness, swelling or drainage
5. Stop the pump by pressing the start/stop button
6. Disconnect from completed infusion
7. Unscrew the medication tubing from cap or SC needle

8. Close the clamp on the used medication cassette/bag
9. Unlatch the medication cassette/bag from the pump using the coin or key
10. Have patient or caregiver discard the used medication cassette/bag if PCA
11. Change the batteries on the pump and wait for pump to complete self test
12. Insert the new medication reservoir hooks into the hinge pins on the pump
13. Place pump upright on a hard surface
14. Using the coin or key, push in and turn the lock until full locked on
15. Open all clamps
16. Clean the cap on IV or remove SC needle from packaging
17. Reconnect the medication to IV cap or SC needle
18. If an SC needle is used, prefill needle and tubing with medication in the pump
19. Screen will say press next to continue
20. Pump will ask if you want to change reservoir volume press Y for yes
21. If needed pump will ask if you want to prime tubing If yes press the Y button lift finger and hold Y button until tubing is full (Be sure pump is not attached to patient when priming)
22. Pump will ask if you want to start the pump
23. Review the parameters of pump before starting and be sure pump is in lock level 2
24. Wipe cap with alcohol if IV
25. Flush IV line if you are not using PCA
26. Attach pump to cap and hit Y for yes to start pump
27. If using SC needle clean site with antiseptic pinch skin and place needle straight in to skin
28. Cover needle and site with tegaderm
29. Start the pump by pressing Y, It will once again complete the self test
30. While pump is running the green light will flash
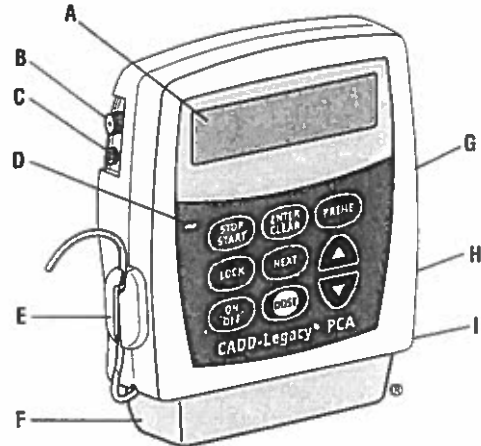
Changing medication doses for Cadd Prism:

1. Stop the pump by hitting start/ stop button
2. Hit the lock button
3. Scroll to lock level 0
4. Enter Code 61
5. Hit lock button again
6. Screen will return to stopped hit next until basal rate appears
7. Change rate to desired rate and press enter
8. Hit next to get to bolus dose
9. Change rate if needed and hit enter
10. Hit next to see doses per hour
11. Change doses per hour if needed and hit enter
12. Hit lock button and scroll to lock level 2
13. Hit lock button and enter code 61
14. Hit lock button again
15. Hit the next button and check all parameters to ensure accuracy
16. Hit Start/Stop button it will once again run through the parameters
17. Green light will be flashing if running

Revised 12/14/2017 BB

CADD-Legacy®

PCA

Infusion Pump
Model 6300

Quick Reference Card for Clinicians
Lock Level 0 (LL0)

A Display shows programmed values and messages

B AC Adapter Jack used to plug in AC Adapter

C Accessory Jack used to plug in Remote Dose Cord

D Indicator Light indicates AC power in use

E Air Detector

F Cassette (part of reservoir or administration set that attaches to pump)

G Threaded Mounting Hole for use with Polemount Bracket Adapter (back of pump)

H Battery Compartment (back of pump)

I Cassette Lock attaches cassette to pump (side of pump)

KEYPAD	
STOP/START	Stops and starts the infusion
ENTER/CLEAR	Enters or clears displayed value
PRIME	Fills tubing with fluid
LOCK	Displays or changes Lock Level (security level)
NEXT	Advances to next programming screen
▲ ▼	Increases or decreases displayed values or scrolls through menu items
ON/OFF	Turns the pump on or off (low power)
DOSE	Delivers demand dose

Read the entire Operator's Manual before operating the CADD-Legacy® ambulatory infusion pump. Failure to properly follow warnings, cautions and instructions could result in death or serious injury to the patient.

WARNING: This Quick Reference Card should be used by clinicians only. Do not permit patients to have access to this card, as the information would allow access to all programming and operating functions.

Assistance with the CADD-Legacy® PCA pump is available to clinicians 24-hours-a-day by calling (800) 426-2448 in the U.S.A. and Canada.

PROGRAMMING / SET-UP SEQUENCE

Batteries must be installed; pump must be stopped and in LL0.
NOTE: Value Not Saved is displayed if a value is scrolled and ENTER/CLEAR is not pressed. Press NEXT to continue programming.

WARNING: If the pump is dropped or hit, inspect it for damage. Do not use a pump that is damaged or is not functioning properly.

Main Screen	Press NEXT.
Enter Reservoir Volume	1. Press △ or ▽ to select desired Reservoir Volume. 2. Press ENTER/CLEAR. 3. Press NEXT.
Enter Units	4. Press △ or ▽ to select desired units. 5. Press ENTER/CLEAR. 6. Press NEXT.
Enter Concentration	NOTE: This screen does not appear if programming in milliliters. 7. Press △ or ▽ to select desired Concentration. 8. Press ENTER/CLEAR. 9. Press NEXT.
Enter Continuous Rate	10. Press △ or ▽ to select desired Continuous Rate (select the upper limit if the program will be adjusted in LL1). 11. Press ENTER/CLEAR. 12. Press NEXT.
Enter Demand Dose	13. Press △ or ▽ to select desired Demand Dose (select the upper limit if program will be adjusted in LL1). 14. Press ENTER/CLEAR. 15. Press NEXT.
*Enter Dose Lockout	WARNING: When you enter a new value, any lockout time in effect will be cleared. A demand dose could be requested immediately upon starting the pump, resulting in over-delivery. 16. Press △ or ▽ to select desired Demand Dose Lockout. 17. Press ENTER/CLEAR. 18. Press NEXT.
Enter Doses Per Hour	NOTE: This screen will only appear if you have programmed a demand dose and dose lockout is less than 1 hour. 19. Press △ or ▽ to select desired Doses Per Hour. 20. Press ENTER/CLEAR. 21. Press NEXT.
*Clear Doses Given	22. Press ENTER/CLEAR to clear the value for the number of Doses Given. The display will show 0. 23. Press NEXT.
*Clear Doses Attempted	24. Press ENTER/CLEAR to clear the value for the number of Doses Attempted by the patient. The display will show 0. 25. Press NEXT.
Clear Given (ml, mg, mcg)	26. Press ENTER/CLEAR to clear the Given value. The display will show 0.00. 27. Press NEXT.
Verify Air Detector Status	28. Verify the setting is correct. (To change setting, see Biomed Functions section.) 29. Press NEXT.

*These screens will appear only if you have programmed a demand dose.

PROGRAMMING / SET-UP SEQUENCE (CONTD.)

Verify Upstream Sensor Status	30. Verify the setting is correct. (To change setting, see Biomed Functions section.) 31. Press NEXT.
Verify Programming	32. Press NEXT repeatedly to review program.
To Operate in LL1 with Upper Limits, Decrease Continuous Rate and/or Demand Dose	*If pump will be operated in LL1 to allow adjustment of Continuous Rate and/or Demand Dose (up to the maximum entered in LL0):* 33. Change lock level to LL1. 34. Press NEXT to go to Continuous Rate or Demand Dose screen. 35. Press ▽ to select desired starting value. 36. Press ENTER/CLEAR.

PUMP OPERATIONS

Change the Lock Level	1. Stop the pump. 2. Press LOCK. 3. Press △ or ▽ until desired lock level appears. 4. Press LOCK or ENTER/CLEAR. 5. Press △ or ▽ until the lock level code appears. 6. Press LOCK or ENTER/CLEAR.
Stop the Pump	1. Press and hold STOP/START until (──── ──── ────) appears on the display. 2. Release STOP/START key. STOPPED will appear on the display when the pump is stopped.
Start the Pump	1. Press and hold STOP/START until (──── ──── ────) disappears from the display. 2. Release STOP/START key. RUN will appear on the display when the pump is running.
Prime the Fluid Path	*Pump must be stopped and in LL0 or LL1.* WARNING: Do not prime the fluid path with the tubing connected to a patient as this could result in over delivery of medication or air embolism. 1. Press and hold PRIME until the word PRIME appears on the display, along with (──── ──── ────). 2. Release the PRIME key. 3. Press and hold PRIME until priming appears on the screen. Continue priming until the fluid path is free of air. 4. Press NEXT to return to the main screen.
Reset the Reservoir Volume	1. Stop the pump. 2. Press NEXT to display the Reservoir Volume screen. 3. Press ENTER/CLEAR to reset the value to previously programmed amount.
Turn the Pump On	1. Press and hold ON/OFF until pump beeps and powers up.
Turn the Pump Off	1. Press and hold ON/OFF until (•••• •••• ••••) appears on the display. 2. Release ON/OFF key. 3. The screen will go blank as the pump goes into a lower power state.
Change the Batteries	1. Stop the pump. 2. Push down and hold the arrow button on the battery door while sliding the door off. Remove and discard old batteries. IMPORTANT: Always stop pump before removing batteries. 3. Install new batteries, matching polarities shown on the pump. Replace battery door and close. 4. Start the pump. WARNING: If a gap is present anywhere between the battery door and the pump housing, the door is not properly latched. If the battery door becomes detached or loose, the batteries will not be properly secured which could result in loss of power or nondelivery of drug. WARNING: Do not use rechargeable NiCad or nickel metal hydride (NiMH) batteries. Do not use carbon zinc ("heavy duty") batteries.

CADD PRIZM-Intermittent

Equipment

- ✓ Medication at room temperature with attached tubing
- ✓ Pump
- ✓ 9 volt battery
- ✓ Saline flush
- ✓ Alcohol wipes
- ✓ Coin
- ✓ Sharps container
- ✓ Waste container

Procedure

1. **Wash your Hands**

2. **Clean your Work Area**

3. **Gather up your Equipment**

4. **Check your IV site (check for signs of redness, tenderness, swelling or drainage-notify your nurse if any signs present)**

5. **Check your Medication for:**
   - ➢ The right name
   - ➢ The correct medication and dose:_____
   - ➢ Particles or discoloration
   - ➢ Expiration date

6. **Stop the Pump**
   - ➢ Press the "START/STOP" pump
   - ➢ "Stop the pump?" will appear on the screen
   - ➢ Press the "Y" button

7. **Disconnect Completed Medication**
   - ➢ Unscrew tubing from your IV

8. **Administer Saline Flush**
   - ➢ Clean the cap on your IV with an alcohol wipe
   - ➢ Remove the cap from the saline flush
   - ➢ Remove any air from syringe
   - ➢ Twist the saline syringe onto your IV
   - ➢ Depress the plunger slowly to administer the flush
   - ➢ Remove the syringe and discard

10.   **Change the battery in the pump**

11.   **Reconnect your medication**

Clean the cap on the end of your IV with an alcohol wipe
Remove the cap from the end of the medication tubing
Attach the tubing to your IV

12.   **Reset Pump Program**

Press the "ENTER/CLEAR" button
RES VOL should read _____
Star the pump by pressing and holing the "START/STOP" button until the 3 - - -
   disappear

Your medication is due every _____ hours
The pump will administer your medication at _____
Change your medication bag/cassette every _____ hours between _____ and _____

smiths medical
bringing technology to life

CADD®-Solis
Ambulatory Infusion System

Protocol Programming
using Code or Key

A Battery Compartment
B Display
C Indicator Lights
D USB Port
E Blue AC Power Light
F AC Power Jack
G Remote Dose Cord Jack
H Cassette
J Cassette Latch
K Keypad
Power Button

Charging the battery

Stop the pump

1. Press Stop/Start.
2. "Stop Pump?" displays. Press Yes.
3. Remove the used batteries.
4. Insert the new batteries.
5. Press the power switch to turn the pump on.
6. The screen displays "Do you want to start a new patient?" Press No.
7. Press Stop/Start to start the pump
8. "Start Pump?" displays. Press Yes.

Screensaver:

The screensaver allows the pump to conserve battery power when not in an edit mode and if no keypad buttons have been pressed for 30 seconds. The pump displays a blank screen. Press any button on the keypad to return the display on

Alarms and troubleshooting

Alarm Conditions

High Priority Alarm

If the pump is running, it always stops when a high priority alarm is activated. Accompanied by a red screen, it continues until acknowledged or until the condition that triggered the alarm goes away.

Medium Priority Alarm

This alarm does not stop the pump. Accompanied by an amber screen, it continues until acknowledged or until the condition that triggered the alarm goes away.

Low Priority Alarm

A low priority alarm does not stop the pump. Accompanied by a blue screen, the alarm automatically clears after 5 seconds or until the condition that triggered the alarm goes away

Informational Message

This alarm does not stop the pump. This message appears in the status bar. It is displayed for 5 seconds and is generally silent, requiring no acknowledgement

Alarms and troubleshooting ...

Troubleshooting

Screen is blank and alarm is sounding

Alarm Priority High. The pump has lost power and is no longer delivering. The pump was delivering and the batteries were removed or the battery door was opened. Clear this alarm by replacing the batteries or closing the battery door. Then turn the pump back on or the alarm stops after the power has been off for a minimum of 2 minutes.

Air-in-line detected. Press "acknowledge" then prime tubing.

Alarm Priority High. The pump is stopped and can not run. The air detector has detected air in the fluid path; the fluid path may contain air bubbles. Acknowledge the alarm. Then, if the fluid path contains air bubbles, close the clamps, disconnect the fluid path from the patient, and follow the instructions for priming to remove the air.

Battery depleted. Pump stopped.

Alarm Priority High. Install 4 new AA batteries or a fully charged rechargeable battery pack. In order to start delivery, good batteries must always be installed, even when an external source of power is connected. If appropriate, restart the pump.

Battery low; replace battery.

Alarm Priority Low. Change the rechargeable battery pack or the 4 AA batteries soon.

Delivery limit reached. Or, delivery limit reached and partial dose delivered.

Pump's status bar reads "KVO = 0"

Alarm Priority Low. The programmed delivery limit has been reached, and the pump is not delivering fluid. This alarm occurs when the continuous rate or a PCA dose has caused the delivery limit to be exceeded. Acknowledge the alarm (the alarm automatically clears after 5 seconds).

Pump's status bar reads "Del Limit"

Alarm Priority Low. The programmed delivery limit has been reached, and the pump is delivering fluid at the KVO rate of 0.1ml/hr. This alarm occurs when the continuous rate or a PCA dose has caused the delivery limit to be exceeded. Acknowledge the alarm (the alarm automatically clears after 5 seconds)

Alarms and troubleshooting ...

Downstream occlusion. Clear occlusion between pump and patient.

Alarm Priority High. The pump has detected high pressure, which may be resulting from a downstream blockage, kink in the fluid path, or a closed tubing clamp. Delivery pauses and resumes if the occlusion is removed. Remove the obstruction or stop the pump to silence the alarm for 2 minutes, then remove the obstruction and restart the pump.

Reservoir volume low.

Alarm Priority Medium or Low (depending on how the alarm is programmed in Admin Settings). Level of fluid in the reservoir is low. Prepare to install a new reservoir, if appropriate

Reservoir volume is zero. Pump stopped

Alarm Priority High. The reservoir volume has reached 0.0 ml. The pump stops and can not run. Acknowledge the alarm. Install a new fluid container. Reset or edit the value of the reservoir volume.

Upstream occlusion. Clear occlusion between pump and reservoir.

Alarm Priority High. Fluid is not flowing from the fluid container to the pump, which may be resulting from a kink, a closed clamp, or air bubble in the tubing between the fluid container and pump. Delivery is paused and will resume if the occlusion is removed. Remove the obstruction to resume operation. The alarm clears when the occlusion is removed. You will be required to acknowledge this alarm after it clears if it has occurred and cleared more than 3 times within 15 minutes.
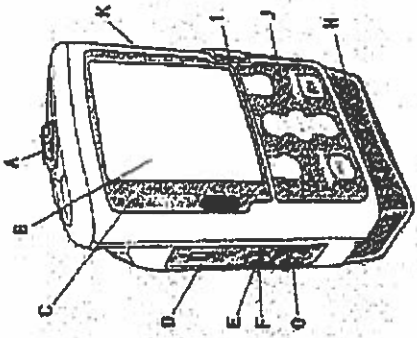
Setting up the pump for a new patient

Prepare the pump for a new patient

1. Begin without the cassette attached to the pump.
2. Insert four new 1.5 volt AA alkaline batteries or a rechargeable battery pack.
3. Press the power switch to turn the pump on.

Start new patient

4. Screen displays "Do you want to start a new patient?" Press Yes.
5. Unlock the keypad using the security code or the pump key.
6. The "Select Therapy" menu is displayed.
7. Scroll ↑ or ↓ to highlight the desired therapy. Press Select.
8. Scroll ↑ or ↓ to highlight the desired qualifier. Press Select
9. Scroll ↑ or ↓ to highlight the desired drug and concentration for unit. Press Select.
10. Confirm that you have selected the correct therapy, qualifier, drug and concentration for unit. Verify and press Yes.
11. "Review pump settings" displays. Press Review.
12. To edit for a patient specific parameter press Select. Scroll ↑ or ↓ to the new value then press Save. *NOTE: If the desired value is outside the soft limit, press Confirm. Verify the soft limit override by pressing Yes.*
13. Continue until all patient specific parameters have been reviewed and/or edited. Press Accept Value for each setting. A checkmark appears next to each patient specific parameter you have accepted. When completed press Next.
14. To change a patient specific parameter after you have accepted it, repeat step 12.
15. "Cassette not attached. Attach cassette before starting pump." is displayed.

When programming for the new patient is complete

16. Attach, latch, and lock the cassette to the pump.
17. "Prime Tubing?" displays. Press Yes if priming is needed.
18. "Disconnect tubing..." displays. Press Prime. Press Stop Priming when complete.
19. "Continue Priming?" displays. Press Yes or No.
20. "Start pump?" displays. Press Yes when you are ready to begin the infusion. The pump begins running.

Changing a patient's current program while the pump is running

With the pump running, all parameters can be changed except reservoir volume

Program the pump

1. Scroll ↑ or ↓ to highlight the patient specific parameter you want to change. Press Select.
2. Unlock the keypad using the security code or the pump key.
3. The patient specific parameter is displayed. Scroll ↑ or ↓ to the new value then press Save. *NOTE: If the desired value is outside the soft limit, press Confirm. Verify the soft limit override by pressing Yes.*

Repeat steps 1 and 3 for each patient specific parameter that you want to change.

NOTE: If a security code was used to unlock the keypad, always relock the keypad after making a change by pressing the right soft key twice (Tasks, then Lock Keypad). If a key was used, turn the key clockwise to relock the cassette and keypad.

4. Verify that the keypad and cassette are locked.

Changing a patient's current program with the pump stopped

Stop the pump

1. Press Stop/Start.
2. "Stop Pump?" displays. Press Yes.

Program the pump

3. Scroll ↑ or ↓ to highlight the patient specific parameter you want to change. Press Select.
4. Unlock the keypad using the security code or the pump key.
5. The patient specific parameter is displayed. Scroll ↑ or ↓ to the new value then press Save. *NOTE: If the desired value is outside the soft limit, press Confirm. Verify the soft limit override by pressing Yes.*

Repeat steps 3 and 5 for each patient specific parameter that you want to change.

When programming is complete

6. Press Stop/Start.
7. "Review pump settings" displays. Press Review.
8. Choose Accept Value to confirm the value is correct for the highlighted patient specific parameter or press Select to edit the highlighted parameter.
9. Continue until all patient specific parameters have been reviewed, accepted and display checkmarks. Press Next.

Changing a patient's current program with the pump stopped — continued

10. "Start Pump?" displays. Press Yes. *NOTE: If a security code was used to unlock the keypad, the keypad automatically relocks when the pump is started. If a key was used to unlock the cassette/keypad, use the key to relock the cassette/keypad lock.*

Resetting the reservoir volume without changing the cassette

Changing the IV bag or syringe without changing the tubing

Stop the pump

1. Press Stop/Start.
2. "Stop Pump?" displays. Press Yes.

Aseptically remove the empty IV bag or syringe from the tubing and attach the new IV bag or syringe.

Reset reservoir volume

3. Scroll ↑ until Reservoir Vol is highlighted. Press Select.
4. Unlock the keypad using the security code or the pump key.
5. The screen displays the current reservoir volume and scroll range.
6. Press Select to reset the reservoir volume or scroll ↑ or ↓ to adjust the value. Press Save.

When programming is complete

7. Press Stop/Start.
8. "Review pump settings" displays. Press Review.
9. Choose Accept Value to confirm the value is correct for the highlighted patient specific parameter or press Select to edit the highlighted parameter.
10. Continue until all patient specific parameters have been reviewed, accepted and display checkmarks. Press Next.
11. "Start Pump?" displays.

NOTE: If a security code was used to unlock the keypad, the pump will automatically relock when the pump is started. If a key was used to unlock the cassette/keypad, use the key to relock it. Press Yes.

12. If you're not starting the pump immediately, press No when "Start Pump?" appears. Lock the keypad by pressing the right soft key (Tasks, then Lock Keypad). Ensure that the cassette is also locked by turning the cassette/keypad lock clockwise to the locked position.

Clinician bolus

Pump must be running

1. From the home screen press Tasks.
2. "Give Clinician Bolus" displays. Press Select.
3. Enter the clinician security code.
4. The screen displays the clinician bolus scroll range available. Scroll ↑ or ↓ until the desired value appears. Press Deliver. *NOTE: If the desired value is outside the soft limit, press Confirm. Verify the soft limit override by pressing Yes.*
5. Choose Stop Bolus anytime during delivery to cancel the bolus. *NOTE: Never leave the pump unattended while on the Clinician Bolus Edit screen. You must press Deliver to deliver the programmed value or Cancel to leave the screen.*

Viewing reports

Pump reports should be cleared in accordance with institution policy.

Pump may be running or stopped to view reports.

Option 1:

1. From the home screen press Reports. Scroll ↑ or ↓ to the desired report and press Select.
2. Press Back to return to the Reports menu, and then press Back again to return to the home screen

Option 2:

1. From the home screen press Tasks. Scroll ↓ to View Reports and press Select. Scroll ↑ or ↓ to the desired report and press Select.
2. Press Back to return to the Reports menu. Press Back again to return to the home screen

To clear Given and PCA dose counters

1. From the home screen press Reports. Scroll ↑ or ↓ to the "Given and PCA Dose Counters" report. Press Select.
2. Choose Clear Given to clear Total Given and set a new time.
3. Scroll down to "PCA doses Given/Attempted". Press Clear Doses to clear and set a new time.
4. Press Back to return to the reports menu, and then press Back again to return to the home screen

Medication Administration: **CADD Solis VIP® Pump**

Wash Hands

How to Start/Stop the Pump

1. Insert batteries (see instructions).
2. Turn pump on by holding the power button (right side of the pump).
3. Self-test will run when powered up.
4. Press the **START/STOP** button.
5. Screen will show brief message *Stop pump? Or Start pump?*
6. Press the keypad below the **YES** or the **NO** for desired action.
7. **RED** *"Stopped"* message or **GREEN** *"Running"* message appears on screen to confirm action completed.
8. To power down the pump, press the power button on right side of pump. Screen will display "Power Down?" Press the white keypad button below **YES**.

Installing New Batteries

With Each Bag Change:

1. Turn the pump off.
2. Open the battery door by turning the knob on the battery compartment (top of pump) counterclockwise.
3. Remove the used batteries.
4. Always use 4 new batteries when changing batteries.
5. Match + and − marking on the new batteries with the markings on the pump.
6. Close the battery compartment door and lock it by turning the knob on the door clockwise.
7. The pump will only run if the batteries are installed correctly.
8. Turn the pump on (power up).
9. You will hear 6 beeps.

Our mission
is to enhance the lives of those we care for each day.

Contact Us:
P: 000.000.0000   F: 000.000.0000

CADD Solis VIP® Pump Troubleshooting

When you see:	Take this action:
Battery Low OR Battery Depleted	Change the battery.
PCA: Cassette Unlocked	Cassette must be locked before it will start. If alarm sounding, press any key to silence the alarm. Lock cassette, then start pump.
PCA: Dose not delivered Dose locked out	You must wait until more time passes before you can receive another dose (PCA Pump).
Dose Overdue	Acknowledge the problem to clear the alarm and restart the pump to start the infusion.
Downstream Occlusion	There may be a kink in the tubing or a clamp may be closed. Unkink the tubing or open the clamp and pump will resume delivery. If alarm continues call your nurse.
Upstream Occlusion	Fluid is not flowing from the medication container to the pump. Check for kinks or a closed clamp between the medicine container and the pump. You may press **START/STOP** to stop the infusion and silence alarm for 2 minutes, then remove the kink and press **START/STOP** to restart the infusion.
Reservoir Volume is Zero	Medicine bag is empty. Press **START/STOP** to stop the alarm. Install new medicine bag/cassette. Change medicine bag/cassette at the same time each day. Change medicine bag/cassette before it is empty.
System Failure Error	There is a problem with the pump. Disconnect the medicine bag/cassette from your IV line. Flush your IV line. Remove the pump. Call the infusion company to troubleshoot or replace the pump.
Cassette Not Attached	Make sure the cassette is attached properly then start the pump.

Call your nurse with any unresolved issues

Medication Administration: Curlin Pump

Wash Hands

How to Start Pump

1. Press **ON/OFF**.
2. Program will be highlighted. Press **YES**.
3. Press **YES** to *Repeat RX* — which will be highlighted.
4. Press **YES** to highlighted program (TPN, cont., inter.)
5. Pump will cycle through the program.
6. Press **RUN/PAUSE**.

How to Prime Tubing

1. After reviewing program, instead of pressing **RUN/PAUSE** Select **PRIME**.
2. Be sure that tubing is not attached to patient.
3. Press and hold **PRIME**.
4. Repeat Step #3 if necessary.

Installing a New Batteries

- **With each bag change**

1. Stop the pump.
2. Open the battery compartment door (on bottom of pump).
3. Press and release pin (use a penny) to slide door down/off or slide release to open.
4. Remove batteries noting + or -.
5. Slide battery door back on.

Our home infusion

and transitional care services can allow you to recover at home with family and friends.

Our mission is to enhance the lives of those we care for each day.

Contact Us:

Curlin® Pump Troubleshooting

When you see:	Take this action:
Empty Battery	The battery no longer has sufficient power to run the pump. Turn the pump off. Replace both "C" size batteries. Recharge or replace the battery pack. Attach to AC adapter.
Door open of Set not properly installed	Door latch not completely closed or administration set not installed correctly. Recheck door latch assembly and securely lock door. Remove and reinstall set if alert continues.
Empty Bag	Occurs when volume infused for prescription is equal to the **Bag Vol** **Bag Vol** may have been reduced due to priming. Verify volume remaining is sufficient to complete current therapy. Change bag.
Alarm Down Occlusion	There may be a kink in tubing or a clamp may be closed between the pump and the patient. Unkink the tubing or open the clamp and pump will resume delivery. If the alarm continues call your nurse.
Alarm Up Occlusion	Fluid is not flowing from the medicine container to the pump Check for kinks or a closed clamp between the medicine container and the pump Open the door of the pump and check for kinks.

• Call your nurse with any unresolved issues

Curlin® Pump Programs

Intermittent

Bag Volume: _____

Amount/Dose: _____

Does Rate: _____

Dose Time: _____

Dose Frequency: _____

KVO (mL/hr): _____

Dose/Bag: _____

Reg Volume (mL): _____

Total Time: _____

Continuous

Bag Volume: _____

Amount To Be Infused: _____

Rate: _____

Time: _____

KVO Rate (mL/hr): _____

PCA

Reservoir Volume: _____

Basal Rate (mL/hr): _____

Bolus Dose: _____

Bolus Interval: _____

Bolus Per Hour: _____

Max Doses Per Hour: _____

Total Volume: _____

Amount Remaining: _____

TPN

Reservoir Volume: _____

Infusion Volume: _____

Infusion Period: _____

Taper Up Period: _____

Taper Down Period: _____

Plateau Rate: _____

KVO: _____

Desferal 50mg. iv. over 8 hrs. 5xwk. The cassette contains 2.5gms in 20cc

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

Pump
CADD Prizm ▼

Lock level [3] Code [61]

Gravity
<gravity> ▼

Infuse
Desferal *50mg.* ▼

added
[   ]

Delivery
Res Vol cc [20]

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

Delivery
Res Vol cc	20
Inf Vol cc	
Dose Vol cc	4
cc/hr	
Over hrs	8
Cycle q hrs	
KVO/cc/hr	
Bolus mg	
q min	
Taper up over/hr	
Taper down over/hr	

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

Bolus mg [   ]
q min [   ]
Taper up over/hr [   ]
Taper down over/hr [   ]

Container
Cassette ▼

length *5* day

First dose
[   ]

Comments
[   ]

(Cadd Prizm does not display "cc/hr" in intermittent mode.)

IV: IV, Henry

Infusion #2 | Insertion #1 | Inserti ◄ ►

Device
Peripheral 24 ga ▼

Site
R forearm ▼

☑ Dressing applied

☑ + blood return

Line Flushed
N/S 3 cc ▼

<flush> ▼

Comments
[   ]

4

Oxacillin 2gm q 4 hrs via PICC, dressing change. Solution bag contains 24gm. In 620cc NS. Dose volume = 50.4cc

IV: IV, Henry

Maintenance #1 | Maintenance #2 ◄ ►

Site
[Picc ▼]

Upper arm circumference [ ] in

Dressing
[changed ▼]

Insertion site
[Unremarkable ▼]

☑ + blood return

Line Flushed
[N/S 5 cc ▼]
[<flush> ▼]

☐ Tubing change

IV: IV, Henry

Maintenance #1 | **Maintenance #2** ◄ ►

Insertion site
[Unremarkable ▼]

☑ + blood return

Line Flushed
[N/S 5 cc ▼]
[<flush> ▼]

☐ Tubing change
☐ Extension change
☐ Cap Change

Comments
[ ]

IV: IV, Henry

Lab Draw | Meds | **Infusion #1** | In ◄ ►

Pump
[CADD Prizm ▼]

Lock level [2] Code [61]

Gravity
[<gravity> ▼]

Infuse
[Oxacillin 2gm ▼]

added
[ ]

Delivery
Res Vol cc [620]

IV: IV, Henry

Lab Draw | Meds | **Infusion #1** | In ◄ ►

Delivery
Res Vol cc [620]
Inf Vol cc [ ]
Dose Vol cc [50]
cc/hr [50]
Over hrs [1]
Cycle q hrs [4]
KVO/cc/hr [0.4]
Bolus mg [ ]
q min [ ]
Taper up over/hr [ ]
Taper down over/hr [ ]

IV: IV, Henry

Lab Draw | Meds | **Infusion #1** | In ◄ ►

Bolus mg [ ]
q min [ ]
Taper up over/hr [ ]
Taper down over/hr [ ]

Container
[Bag ▼]

length [2] day

First dose
[ ]

Comments
[ ]

TPN, Electrolytes 2L IV qd over 14 hr. taper up/down 1hr. Add MVI 10cc,
Reg. Insulin 10u. IV's via Y-tubing to Hickman line. Rocephin 1gm IV qd.
CBC with diff., chem. 20, LFT today and q Mon.

Maintenance #1	Maintenance #2	Lab Draw	Meds	Infusion #1	Infusion #2	Insertion #1	Insertion #2	Removal

IV: IV, Henry

Maintenance #1 | Maintenance #2 ◄ ►

Site
Hickman ▼

Upper arm circumference ☐ in

Dressing
dry & intact ▼

Insertion site
Unremarkable ▼

☑ + blood return

Line Flushed
N/S 5 cc ▼
<flush> ▼

☐ Tubing change

IV: IV, Henry

Maintenance #1 | Maintenance #2 ◄ ►

Insertion site
Unremarkable ▼

☑ + blood return

Line Flushed
N/S 5 cc ▼
<flush> ▼

☐ Tubing change
☐ Extension change
☑ Cap Change

Comments
Double lumen Blue line = TPN.
Red line = free

Maintenance #1	Maintenance #2	Lab Draw	Meds	Infusion #1	Infusion #2	Insertion #1	Insertion #2	Removal

IV: IV, Henry

Maintenance #2 | Lab Draw | Meds ◄ ►

Pre Flush
N/S 5 cc ▼

Discard ☐ 6 ☐ cc blood

Post Flush
N/S 20 cc ▼
<flush> ▼

Labs drawn
CBC/Diff/Platelets ▼
Chem 20 ▼
LFT ▼
<test> ▼

Labs sent

IV: IV, Henry

Maintenance #2 | Lab Draw | Meds ◄ ►

Discard ☐ 6 ☐ cc blood

Post Flush
N/S 20 cc ▼
<flush> ▼

Labs drawn
CBC/Diff/Platelets ▼
Chem 20 ▼
LFT ▼
<test> ▼

Labs sent
Drawn from red line. Fax results to
Apria. 1 781 255 1455 + mD

14

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

Administered

w/ pre flush

N/S 5 cc ▼

Rochephen 1 gm ▼

over [ ] hrs [30] min

w/ post flush

N/S 5 cc ▼

Heparin 100 units/cc 5 cc ▼

First dose

Via red line

Administered

w/ pre flush

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

First dose

[ ]

Administered

w/ pre flush

<flush> ▼

<Med> ▼

over [ ] hrs [ ] min

w/ post flush

<flush> ▼

<flush> ▼

First dose

[ ]

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

Pump

606D Sabretek ▼

Lock level [2] Code [911]

Gravity

<gravity> ▼

Infuse

TPN Electrolytes ▼

added

MVI 10cc Reg. Insulin 10 units

Delivery

Res Vol cc [2050]

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

Delivery

Res Vol cc [2050]

Inf Vol cc [2000]

Dose Vol cc [ ]

cc/hr [142]

Over hrs [14]

Cycle q hrs [ ]

KVO/cc/hr [Δ, 5]

Bolus mg [ ]

q min [ ]

Taper up over/hr [1]

Taper down over/hr [1]

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

Bolus mg [ ]

g min [ ]

Taper up over/hr [1]

Taper down over/hr [1]

Container

Bag ▼

length [1] day

First dose

[ ]

Comments

TPN via Y connecter to blue line
TPN via Blue line

15

Nafcillin 2gm over 2 hr. q 6 hrs via ML. Clindamycin 600mg via dial-a-flow q
8 hrs. At what hours could Clindamycin be given during Nafcillin infusion?

IV: IV, Henry

Maintenance #1 | Maintenance #2

Site
Midline

Upper arm circumference [10] in.

Dressing
dry & intact

Insertion site
Unremarkable

☑ + blood return

Line Flushed
N/S 5 cc
<flush>

☐ Tubing change

IV: IV, Henry

Maintenance #1 | Maintenance #2

Insertion site
Unremarkable

☑ + blood return

Line Flushed
N/S 5 cc
<flush>

☐ Tubing change
☐ Extension change
☐ Cap Change

Comments

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In

Administered
w/ pre flush
N/S 5 cc
Clindamycin 600mg
over [ ] hrs [30] min
w/ post flush
N/S 5 cc
<flush>
First dose
Interrupt pump after dose. Give at
Administered
w/ pre flush

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In

Administered
w/ pre flush
<flush>
<Med>
over [ ] hrs [ ] min
w/ post flush
<flush>
<flush>
First dose

Administered
w/ pre flush

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In

First dose

Administered
w/ pre flush
<flush>
<Med>
over [ ] hrs [ ] min
w/ post flush
<flush>
<flush>
First dose

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

Pump
CADD Prizm

Lock level [1] Code [61]

Gravity
<gravity>

Infuse
Nafcillin 2gm

added

Delivery
Res Vol cc [403]

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

Delivery
Res Vol cc   [403]
Inf Vol cc   [   ]
Dose Vol cc   [48]
cc/hr   [24]
Over hrs   [2]
Cycle q hrs   [6]
KVO/cc/hr   [.4]
Bolus mg   [   ]
q min   [   ]
Taper up over/hr   [   ]
Taper down over/hr [   ]

IV: IV, Henry

Lab Draw | Meds | Infusion #1 | In ◄ ►

Bolus mg   [   ]
q min   [   ]
Taper up over/hr
Taper down over/hr [   ]

Container
Bag

length [2] day

First dose
[   ]

Comments
Set pump for 6am, 12noon, 6pm, 12midnight

17