Nurse Link

BY CAREPATHRX

CADD Solis PCA

2023

LEARNING GOALS

By the end of this module, nurse learners will be able to:

Apply best practice for CADD Solis PCA management when teaching and caring for home infusion patients.

Identify how to access appropriate NurseLink resources ,for home infusion patients to promote effective learning to safely administer home infusion therapy.

Identify routes of administration for management of pain.

Identify alternative mode of pain management administration in the absence of a VAD.

Identify subcutaneous needle selection, site selection and proper insertion technique.

Operate a CADD Solis pump: features of pump, cassette, tubing, priming, continuous and intermittent modes, PCA mode and battery.

Access to Nurse Link

To login, follow the link below and click "*Login to Nurse Link*."

https://carepathrxllc.com/nurselink-welcome/

Password: email nursingsupport@homeinfusion.com

Be sure to bookmark this URL and save your password for future use.

NL Patient Site:
https://carepathrxllc.com/nurselink-patient/

Patient teaching Videos	Patient Written Instructions	Nursing P & P	Links to RN virtual training	Nurse Videos	Home Infusion Society links	CarepathRX in the News

CAREPATHrx™
Specialty Pharmacy & Infusion Solutions

CarepathRx On Call

24 / 7 Access to the Clinical Pharmacy team

For after-hours, weekend and holiday support, troubleshooting, and delivery needs:

- CarepathRx Pharmacist
- Local pharmacy support varies by pharmacy.
- Dietitians

  1-877-ENTERAL
- Nurses
- Delivery

Contact the pharmacy by calling the phone number at the top of the medication label.

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Therapy Education

- Remind patients pumps must be returned to your pharmacy when therapy is completed.
  - Pumps are not disposable
- Supply reordering
  - Patients must speak to a pharmacy assistant to reorder supplies and schedule delivery
- Will need for re-deliveries:
  - List of supplies, medications and formula needed.
  - Complete inventory of supplies, medications and formula in the home.
  - Patient's response to therapy.
  - Script for order changes & when next doctor appointment is.

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Pump Returns

PUMPS ARE DELIVERED IN A MAIL-BACK RETURN BOX

- Instruct the patient to save the box, the return box will be plain and labeled “UPS PICK UP."
- If the patient discards the return box, they can package the pump in any box with appropriate padding and tape it shut.

CAREPATHRX WILL CONTACT THE PATIENT & ARRANGE PUMP PICK UP BY UPS.

- The pharmacy will print an UPS shipping label when pick up is arranged.
- The patient does not need to be home for the UPS driver to pick up the box.
- There is no fee to the patient for this service.

Nurses are NOT to remove pumps from patients’ homes.

(exceptions may apply)

Contact Carepathrx for equipment return.

Patient-Controlled Analgesia (PCA)

Patient-controlled analgesia (PCA) is a method of pain control that gives patients the power to control their pain. In PCA, a computerized pump called the patient-controlled analgesia pump, which contains pain medication as prescribed by a doctor, is connected directly to a patient's intravenous (IV) line or subcutaneous line.

The pump is set to deliver a constant or intermittent dose of pain medication. Additional doses of medication can be self-administered as needed by having the patient press a button.

Access Devices

Subcutaneous Needles

Peripheral Catheter

Midline Catheter

PICC (Peripherally Inserted Central Catheter)

Non-tunneled Central Venous Catheter

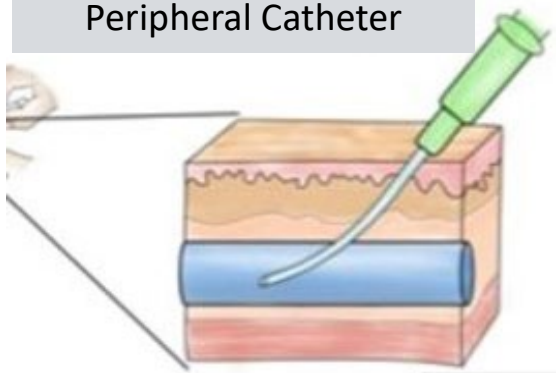
(CVC – Central Venous Catheter)

Tunneled Central Venous Catheter

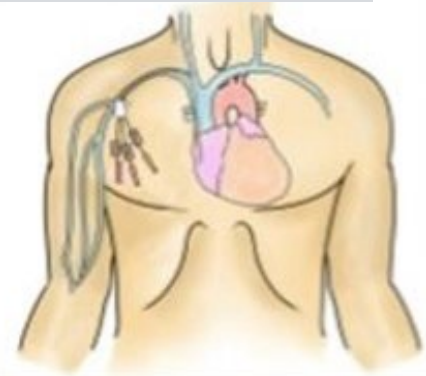
Implanted Ports

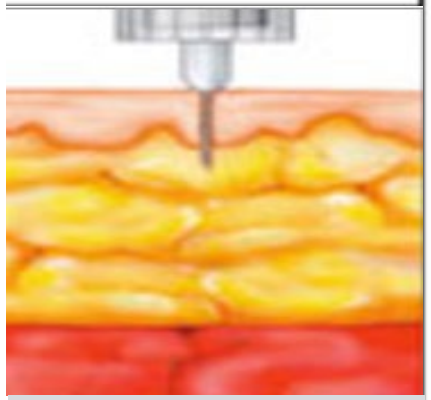
Catheter Lumens

Peripheral Catheter

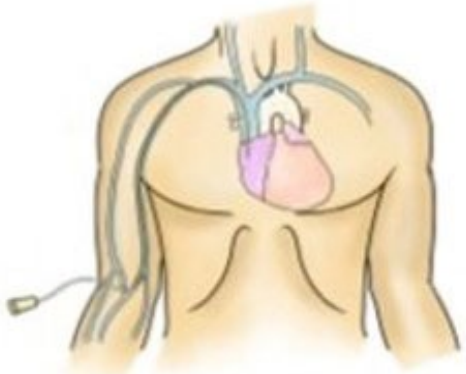


Non-tunneled Central Venous Catheter

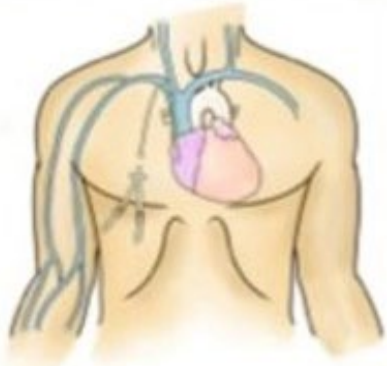




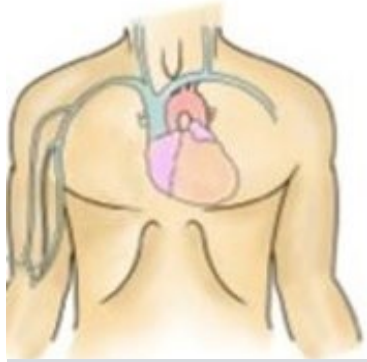
Subcutaneous Needles



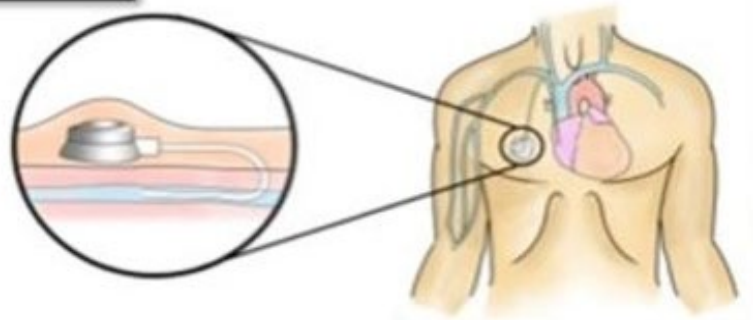
PICC (Peripherally Inserted Central Catheter)



Tunneled Central Venous Catheter



Midline Catheter



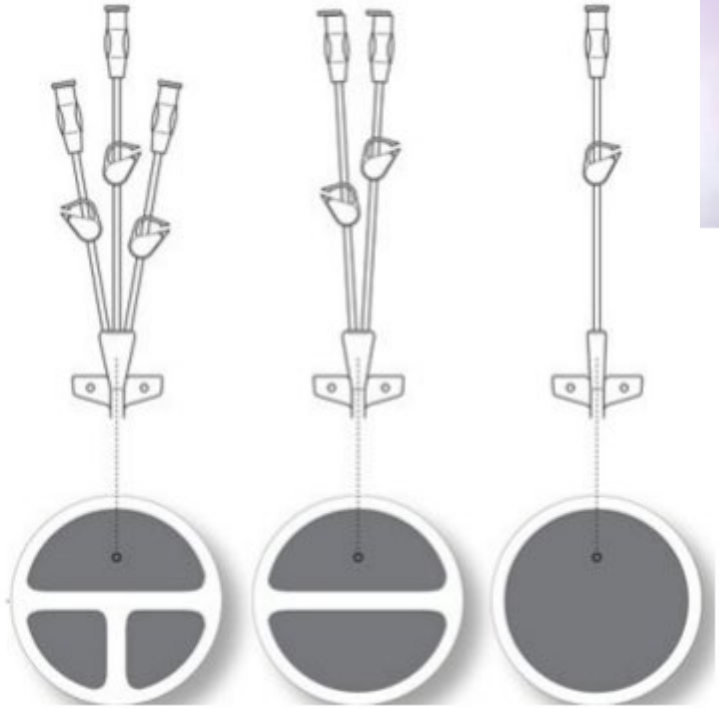
Implanted Ports

Catheter Lumens

Each lumen is separate from access point to the opening in the vein.

Catheter lumens are individual access points for IV administration in the same catheter.

- From access point to the tip of the catheter, each lumen is separate from the other lumen(s).
- Infused medication does not mix with medications infused in another lumen until it enters the blood stream.
- Medication compatibility for infusion is not required when infused in separate lumens.



SUBCUTANEOUS INFUSION THERAPY

Subcutaneous infusion therapy is a technique whereby fluids or medications are infused into the subcutaneous tissue via small gauge needles inserted into the abdomen, arms, back or thighs.

The subcutaneous route may be used to infuse isotonic solutions for treatment of dehydration, continuous opioid infusions for pain management, non-vesicant neoplastic agents, certain antibiotics, diuretics, antiemetics, immunoglobins, endocrine medications, gastrointestinal medications, monoclonal antibodies, and other therapies/medications as prescribed.

Subcutaneous infusion offers several advantages over intravenous infusion, including ease of administration, lower cost, and lack of potential serious complications.

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Subcutaneous Needle Selection

SC needle lengths

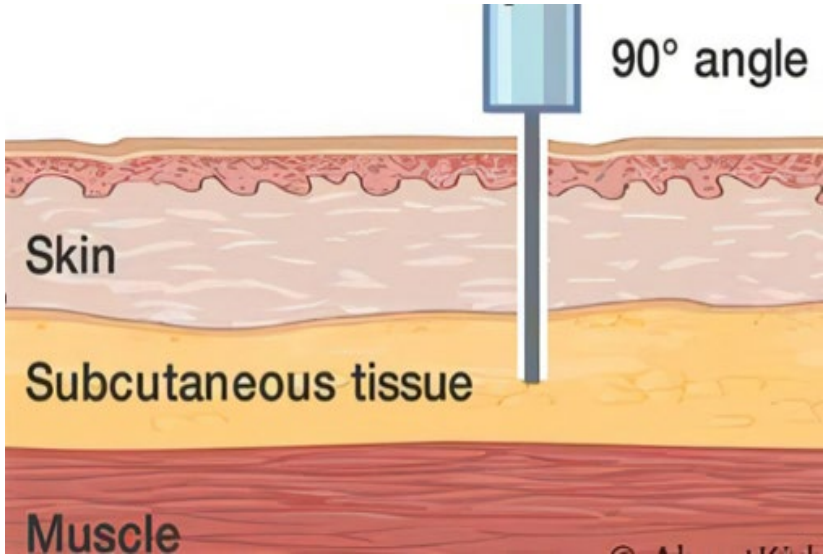
- 4mm
- 6mm
- 9mm
- 12mm
- 14mm

Needle must be long enough to be seated in the subcutaneous tissue, but not long enough to reach the muscle.

A longer needle may be needed if there is leakage at the puncture site.

Infusion into the muscle or skin tissue will cause pain and irritation.

Connect the SC administration set to the CADD Tubing before priming.



SUBCUTANEOUS SITE SELECTION

CONSIDER PATIENT'S MOBILITY, COMFORT AND SITE PREFERENCE

Select areas with intact skin and adequate subcutaneous tissue

Abdomen (at least 2 inches from umbilicus)

Deltoid

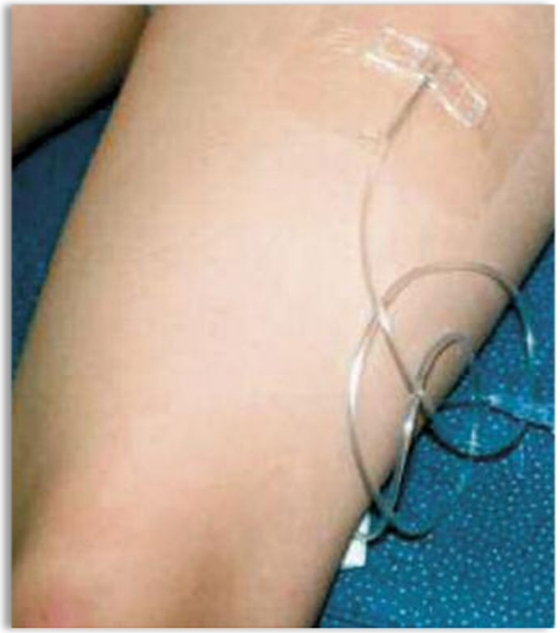
Flank

Hips

Thighs

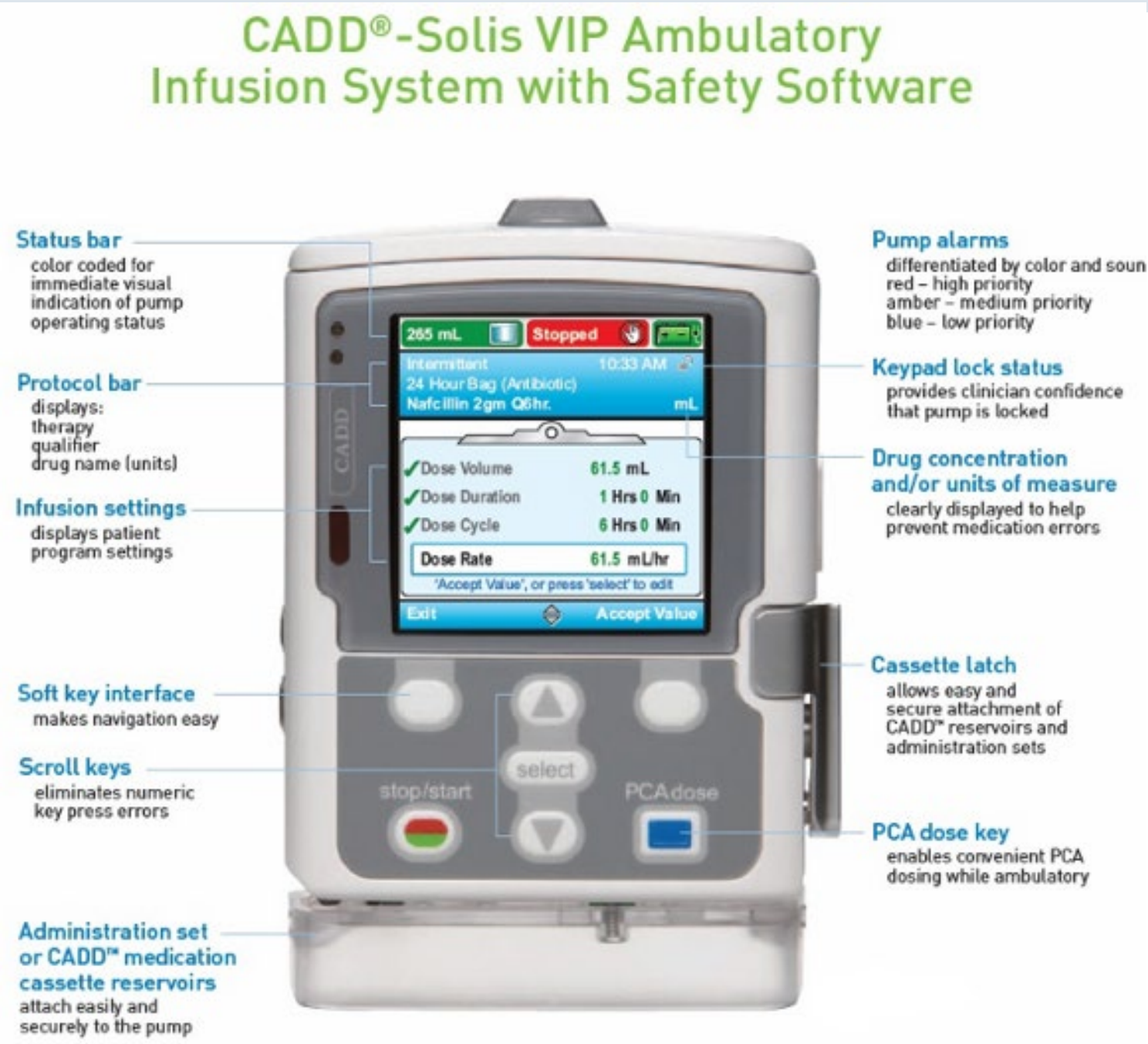
Subcutaneous Needle Placement

- 2-inchs between sites if using more than one needle and from umbilicus.
- Rotate sites with each infusion.
- Check needle placement **if indicated** on the package insert. Aspirate the SC infusion access device to confirm the absence of a blood return prior to medication administration.
- If blood is seen in the tubing, remove and discard the needle. Prepare a new infusion site and insert a new subcutaneous needle.
- Cleanse the skin. Cleanse entire area with antiseptic swab, not only individual insertion sites.
- Insert needle (already primed).
- Apply occlusive dressing over needle insertion site.



Tour of the pump

CADD Solis Features



CADD Solis Tubing and Cassettes

Low Volume Tubing

0.1-250 ml/hr

Low Volume Cassette

0.1-250 ml/hr

Variety of Cassettes

Low and High Volume

Tubing changes: PCA - weekly

CADD Solis –PCA Infusions

Keypad Code (617) is used by most pharmacies to modify and review patient-specific parameters

PCA Delivery Modes:

- **Continuous rate**, infusion of analgesia at a constant, programmed rate.
- **PCA dose**, a demand dose activated by the patient
- **Clinician bolus**, a dose activated by the clinician

Clinician Code (997) is used by most pharmacies to modify most advanced task settings, format the time and date, change delayed start and priming security options, select new protocols and deliver a CLINICIAN BOLUS.

Typically compounded in a puncture proof cassette

Cassette will be locked into place to prevent removal from the pump

A PCA key will be delivered with the pump

Bolus administration

- By PCA button on the front of pump
- By bolus cord
- When in use, deactivates PCA button on the front of the pump

CADD Solis Pump Codes

	Most Pharmacies	Chartwell PA Pumps
Keypad Code: • Delay start • Priming security • Adjust pump parameters	201	061
Clinical Code: • PCA Bolus	997	617

Pump settings and Parameter change label

Pump will arrive pre-programmed according to physician orders and safe infusion practices.

Settings need to be checked against Plan of Treatment and Product label.

PARAMETER CHANGE LABEL:

To alert the patient the pump parameters need to be changed before newly delivered medication can be given on the pump in the home.

Will be on a new Plan of Treatment and medication label sent to the patient.

Either a new pump will be delivered with the updated settings, or the pump in the home will need re-programmed.

Always confirm pump setting against orders prior to starting the pump

Clinician Code needed for pump setting changes:

For most pharmacies is 201

ABC PHARMACY
2700 Sesame Street, Springfield, FL 22022
(412) 920-7500 Toll Free 800-755-4704

Pt: Doe, John
MD: MYLES ZUCKERMAN
RX#:546941-0 Doses: 2 RPH:REO

Morphine Sulfate (HOSP) 500 MG
Sodium Chloride 0.9% (BAX) 50 ML

Administer Morphine IV continuously at 2mg/hr via Cadd SOLIS with a 1mg bolus every 15 minutes as needed. Use as directed.
Parameters: res vol=50mL, rate=2mg/hr, bolus=1mg every 15 minutes as needed, conc=10mg/mL.***Change cassette at least every 7 days***
CAUTION: Federal law prohibits transfer of drug to any person other than patient it was prescribed
PROTECT FROM LIGHT
Original Date: 12 18 19 REO REFRIGERATED
Filled: 12 18 19 Exp Date: 12 27 19

Product Label

Product label to be reviewed with each dose or bag change.

Pump settings to be reviewed on the pump with each dose or bag change.

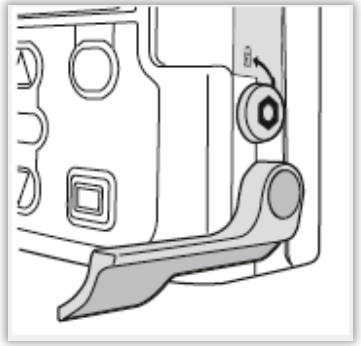
Pharmacy name and contact information.

Product label components to review:

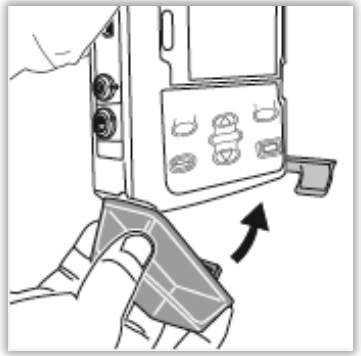
- Patient name
- Medication name and dose in bag or cassette
- Administration instructions / Pump parameters
- Storage instructions
- Expiration date

ATTACHING THE CASSETTE

Switch the pump on, press and hold the power switch. The pump carries out self-tests and sounds six beeps when the tests are complete. Screen shows “Start New Patient?”

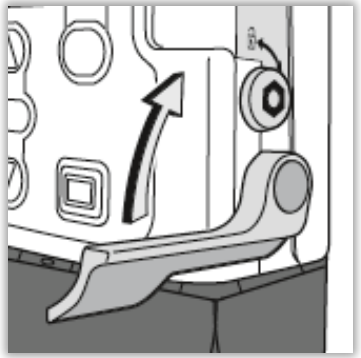


Clamp the tubing, make sure the cassette latch is unlocked and open the cassette latch to 90 degrees.



Insert the cassette hooks into the hinge pins on the bottom of the pump.

Without holding the cassette latch, push up on the cassette until it firmly clicks into place.

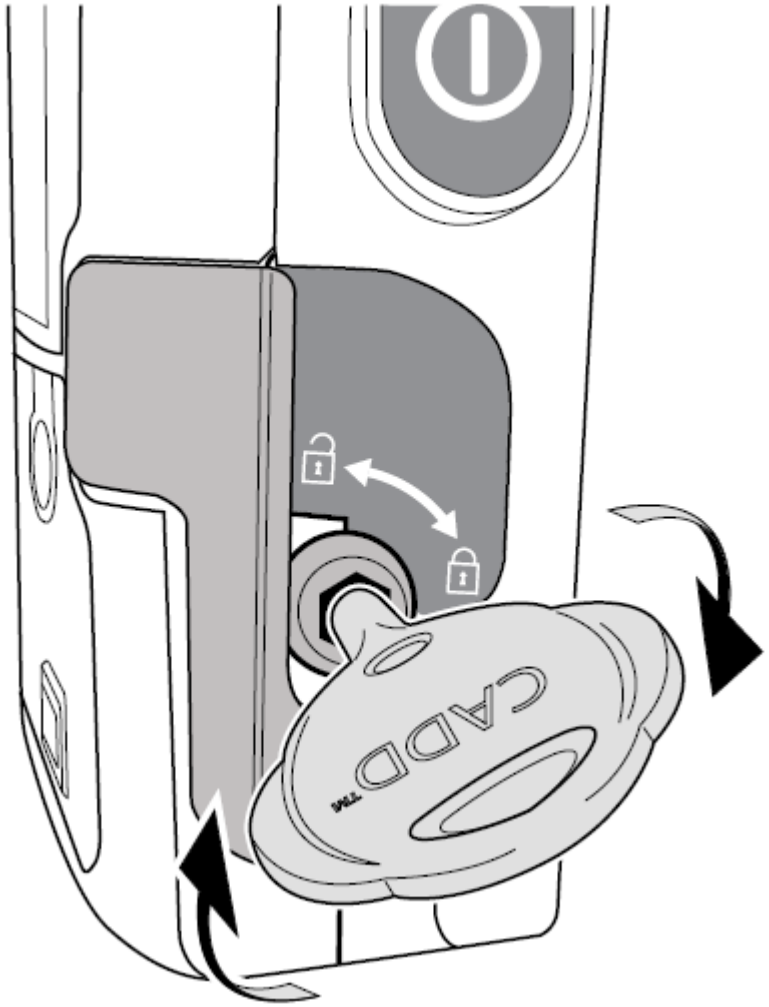


Lift the cassette latch up into the closed position.

Insert the pump key and turn it clockwise to lock the cassette.

LOCKING CASSETTE INTO PLACE

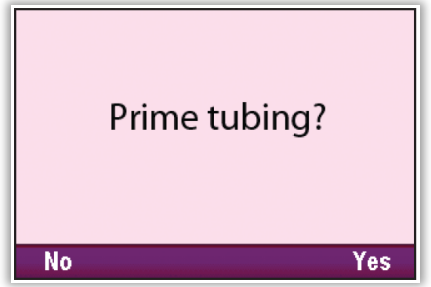
Lock the cassette by inserting the pump key into the cassette/key lock and turning it clockwise to the locked position. “Cassette Locked” appears briefly in the pump display.

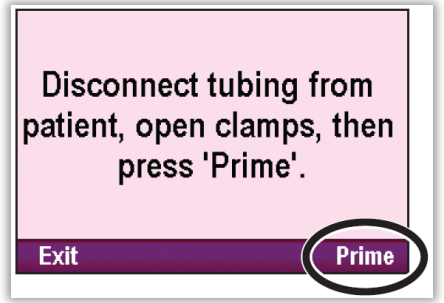


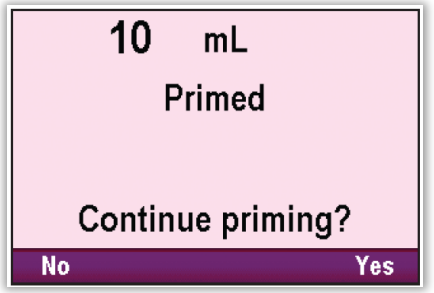
PRIME TUBING

Prime the tubing before connecting it to the patient's infusion set

1. When a cassette is attached after the pump is powered on, a "Prime Tubing?" screen always appears
2. Select Yes
3. Unlock the keypad, if required
4. If you have not already done so, disconnect the tubing from the patient, open the clamps and select Prime
5. Stop priming at any time by selecting Stop Priming. Priming automatically stops after 10 mL are primed. Continue priming as needed.







CADD SOLIS PRIMING

Always prime on its side, with the lever side down to prevent “Air In Line” alarms

CADD Solis – Resetting the Reservoir Volume

The reservoir volume setting indicates the amount of fluid contained in the reservoir. Once this number is set, the pump keeps track of how much fluid has been delivered and adjusts the reservoir volume setting accordingly.

Always power up before attaching tubing cassette

Listen for series of beeps and self check before attaching the tubing cassette

To reset the reservoir volume after attaching a new cassette:

1. The pump displays a question asking if you wish to reset the volume to the default amount. If this screen does not appear, the reservoir volume may already be reset.

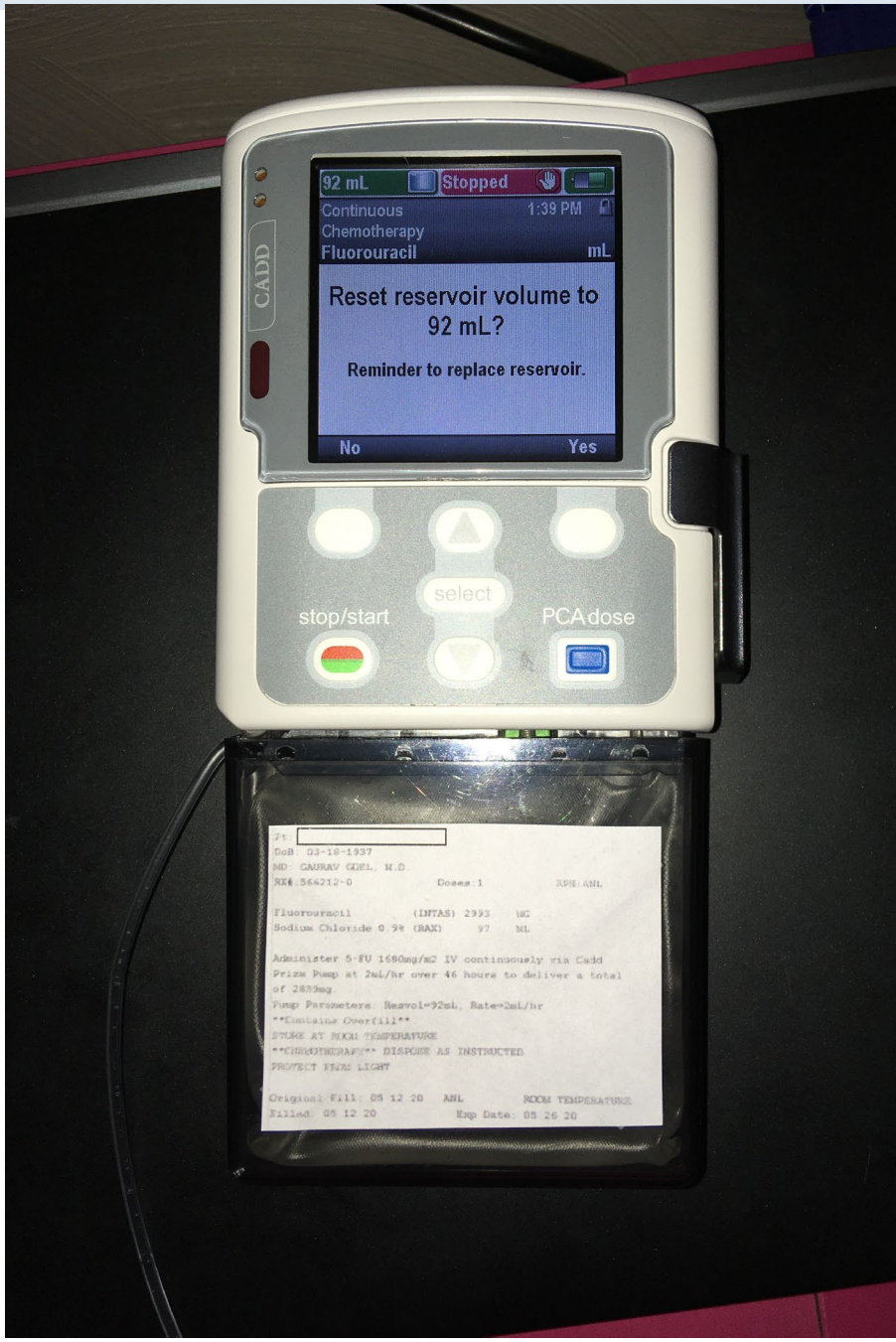
2. Select Yes to reset the volume and infusion. Select No to keep the reservoir volume at the current setting.

To reset the reservoir volume without changing the cassette:

1. Stop the pump if it is running

2. In the Tasks menu, press ▲ or ▼ until Reset Reservoir Volume is highlighted, and then press Select

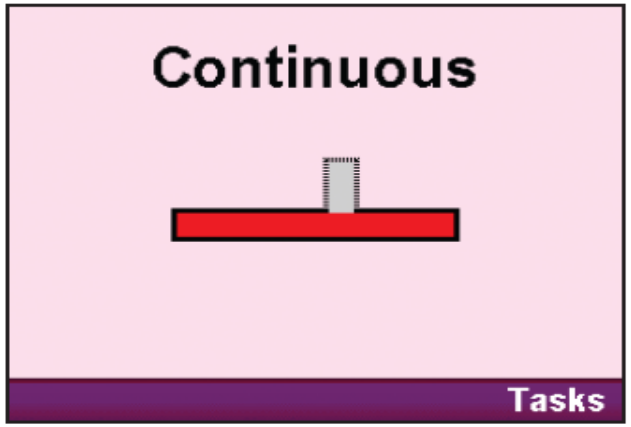
3. The pump displays a screen asking you to confirm that you want to reset the reservoir volume. Select Yes.



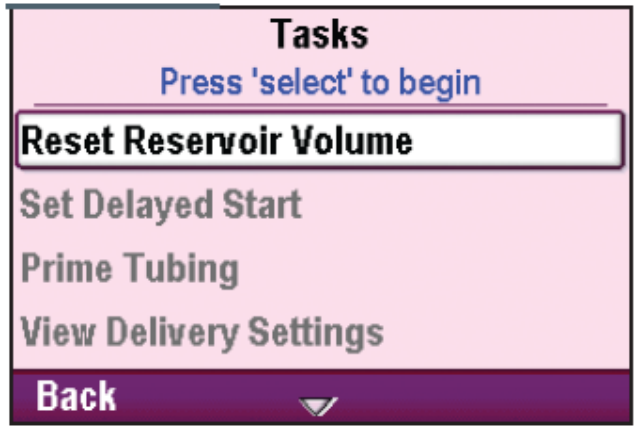
CADD SOLIS

Resetting Reservoir Volume

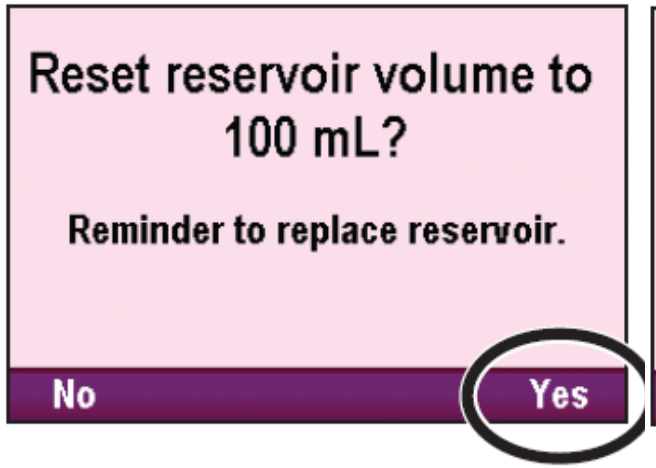
Press the soft button under Task



Press Select with Reset Reservoir Volume highlighted

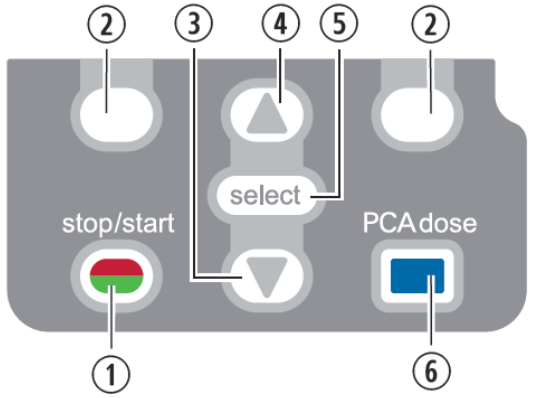


Press the soft button under Yes



Pump will reset

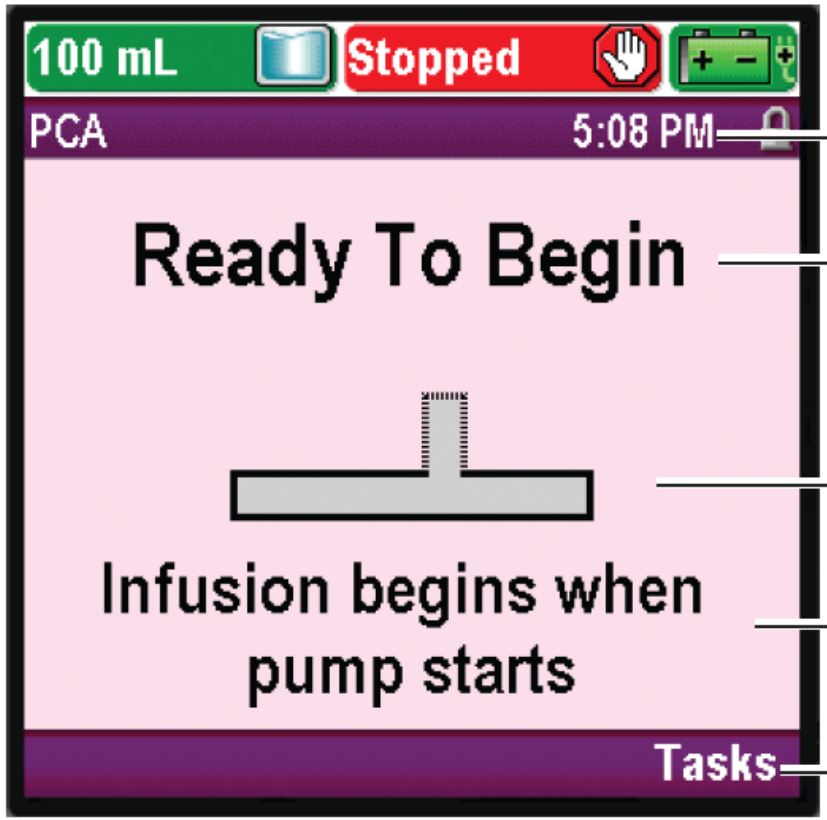
START THE PUMP



1. stop/start
2. soft keys
3. scrolls down
4. scrolls up
5. select

Infusion begins when the pump starts. When the pump is running, “Running” appears on the status bar, the graphic on the home screen is green, and the green indicator light flashes.

1. Press Stop/start
2. When “Start Pump?” appears, select Yes
3. The pump begins running. The red “Stopped” message in the status bar changes to a green “Running” message, and “Infusion is starting now…” appears briefly on the screen.



STOPPING THE PUMP

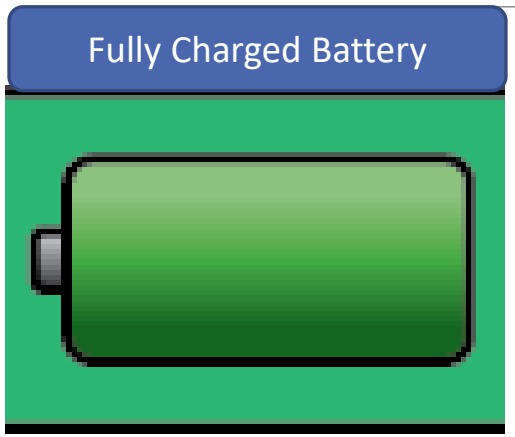
Stopping the pump stops delivery. After the pump is stopped, “Stopped” appears in red on the status bar, the graphic on the home screen is red, the amber indicator light flashes, and the green indicator light is off.

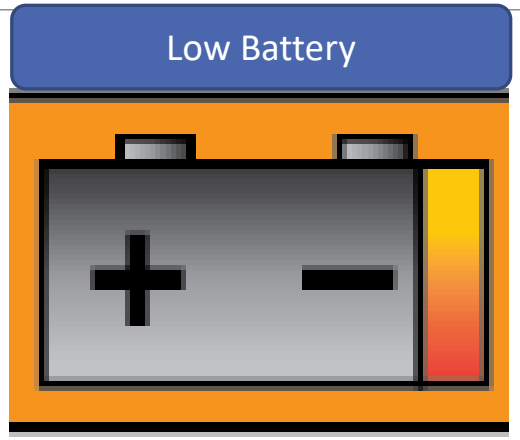
Press Stop/Start.

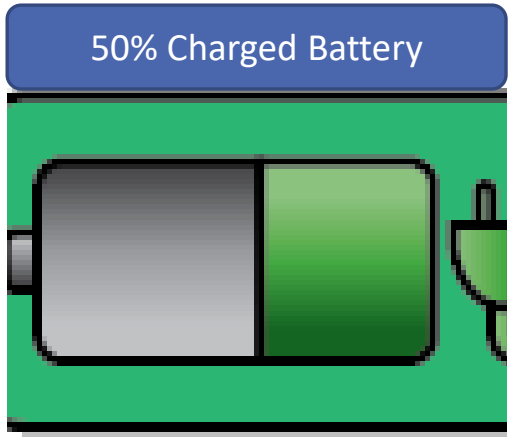
- In a PCA protocol, if a PCA dose is in progress, “Stop PCA dose?” appears. Select Yes to stop the dose.
- In a PCA protocol, if a clinician bolus is in progress, “Stop clinician bolus?” appears. Select Yes to stop the bolus. A confirmation screen appears stating, “Clinician bolus stopped.” Select OK to continue.
- In a taper protocol, “Taper down instead?” appears. Select No to stop the infusion. When “Stop Pump?” appears, select Yes

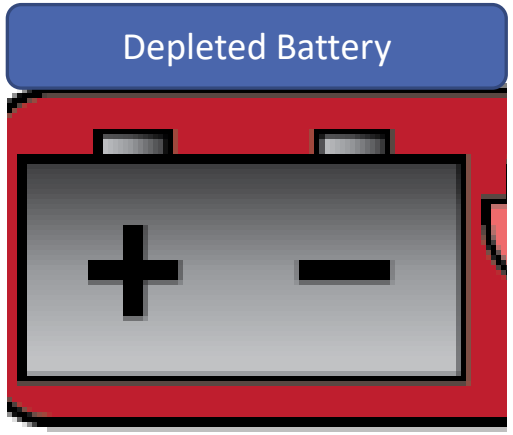
The pump stops running. The green “Running” message in the status bar changes to a red “Stopped” message, and “Pump is stopping…” appears briefly on the screen.

CADD Solis Battery Use



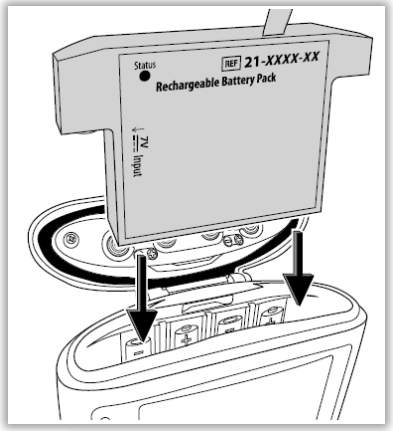






Powered by Battery

- 4 – AA Batteries
  - Remove batteries between infusions
  - Replace batteries when:
    - Low Battery
    - Depleted battery
- Rechargeable Battery
  - Plug in pump for a minimum of 4 hours each day, to maintain battery charge. An AC adapter can be used as a power source or to recharge the rechargeable battery.



CADD Solis PCA Video Library

Solis Administration https://youtu.be/z5WPP_nlUUl

Solis Exterior Pump Tour https://youtu.be/E9xmBJ4qMKg

Solis PCA Administration https://youtu.be/vzyx6KufPmE

Solis PCA Clinician Bolus https://youtu.be/ZFskRUYh4QA

Solis Re-set Reservoir Volume https://youtu.be/7HJShhXTx9M

Solis Battery & Charging https://youtu.be/ensxR-Qw7r4

Prism SC PCA https://youtu.be/9m-288bg2qI
Prism PCA Bolus https://youtu.be/iyxcgxiu-MU

CarepathRx Contacts:

nursingsupport@homeinfusion.com

Christie Fisher MSN, MBA, RN, CRNI, IgCN
National Director, Nursing
Cell: 412-295-7849

Product Label Pharmacy Contact Information:

CarepathRx Pharmacy
2700 Sesame Street, Springfield, FL 22022
(412) 920-7500 Toll Free 800-755-4704

Thank you for participating!

Please reach out with questions or for information on additional training opportunities.