

# How to use a CADD-Solis Pump

Your physician has ordered your medication \_\_\_\_\_ to be administered by a CADD-Solis Pump at a:

- Continuous rate: \_\_\_\_\_ mL/hr
- Intermittent rate: \_\_\_\_\_ mL/hr every \_\_\_\_\_ hours
- Taper length: \_\_\_\_\_/hr up \_\_\_\_\_/hr down

## 1. Getting started

- Remove medication from refrigerator at least \_\_\_\_\_ (minutes/hours) before using. Consult medication label for instructions on when to remove medication from refrigerator.
- **Never** speed the warming process by heating or microwaving the medication.
- Use a clean work area.
- Clean your hands thoroughly using antibacterial soap and warm water. (Use an alcohol-based hand sanitizer if no soap and water are available.)
- Dry your hands with a clean towel.

### Prepare your SASH mat (Image 1)

Gather:

- IV medication syringe
- Flush syringes  
→ \_\_\_\_\_ mL saline → \_\_\_\_\_ mL heparin \_\_\_\_\_ units/mL heparin
- Alcohol wipes
- Sharps container (if needed) and/or trash container

### Inspect the label (Image 2)

On your medication bag, verify:

- A.** Correct name of the patient
- B.** Correct name of the medication
- C.** Correct volume/amount of the medication
- D.** How to store the medication properly
- E.** Use by date of the medication

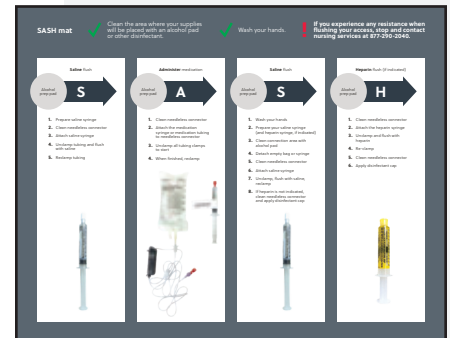


Image 1

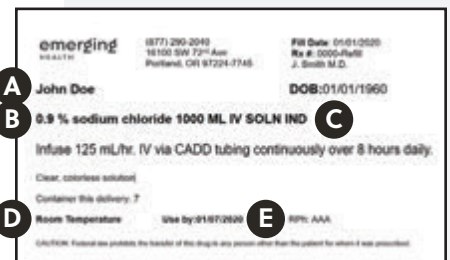


Image 2

## Inspect the medication in the bag

Ensure that the bag is free of leaks, floating particles, or discoloration. Call your nurse or pharmacist at 877-290-2040 if there are any problems with the bag or the label.

## Change the batteries every \_\_\_\_\_ days

(If you are using a rechargeable battery pack, follow your nurse's instructions.)

- A. Turn the knob counterclockwise to open the door.
- B. Remove used batteries and discard as instructed.
- C. Insert the new batteries matching the positive and negative markings on the batteries with the corresponding markings on the pump. Insert one battery at a time (*Image 3*).
- D. Close the battery door by turning the knob clockwise to lock. Let the pump power up; you will hear six beeps.

The pump will not turn on if the batteries are not installed correctly.



Image 3

## 2. If instructed, prepare your flush syringes to flush between medication bags

- A. Before using the syringe, push firmly on the thumb press with the white cap still on until you feel the plunger move slightly.
- B. Remove air and any excess saline from the syringe by taking off the cap and pushing the plunger forward, as instructed by your nurse (*Image 4*).
- C. Replace the white cap, making sure not to contaminate the cap or tip of the syringe. If it is contaminated in any way, start over with a new syringe of saline (flush). Once prepared, set aside until you are ready to use it.
- D. Repeat Steps A-C if you need multiple saline syringes.



Image 4

## 3. Prepare your medication

(If the tubing is already attached to medication, proceed to next step.)

- A. Remove IV tubing from the packaging.
- B. Remove the blue clip from the bottom of the cassette (*Image 5*).
- C. Place the tubing and the medication on a clean, flat surface.
- D. Remove the blue tab from the medication by pulling straight down. **Do not touch** the uncovered port (*Image 6*).
- E. Remove the cover for the spike of the tubing (*Image 7*). **Do not touch** the spike to anything but the inside of the medication bag, as it will contaminate it, and you will need to start over at Step A with new tubing.



Image 5



Image 6

Image 7

- F. "Spike" the bag by pushing and twisting the end of the tubing into the bag port where you removed the blue tab (*Images 8 and 9*). Make sure the open end of the spike reached the medication and be careful not to puncture the bag. If the bag is punctured, start over by reinspecting and preparing another bag, and notify your pharmacy.

## If applicable, remove your current bag of medication

(If you have already completed the pump and/or are disconnected from the pump, skip to the next step.)

- A. When the current infusion is complete, press the "stop/start" button.
- B. Disconnect the used tubing from your IV catheter.
- C. Remove the tubing from the pump by pushing down on the silver metal latch until the cassette detaches. Dispose of the tubing in a trash container as instructed by your nurse.

## 4. Connect the new tubing to the pump

- A. With the pump powered on (press side button if not), insert the new cassette hooks into the pump's hinge pins (*Image 10*).
- B. Place the pump with cassette on a firm surface and push down on top of the pump.
- C. Press up on the silver metal latch to lock the new cassette to the pump. Ensure the silver metal latch is flush with the side of the pump.

## 5. Prime your IV tubing

**When priming the tubing, it should NEVER be connected to the patient. Priming with the IV tubing connected to the patient could result in overdose and may cause injury or even death to the patient.**

- A. "Prime tubing?" will appear on the screen; select "Yes."

Your pump was programmed by your pharmacist based on your healthcare provider's orders and was verified by another clinician. You will be unable to change the program.

- B. Confirm the tubing is disconnected from your IV catheter, open the clamps, and select "Prime."
- C. Continue priming, by selecting "Yes" when prompted, until fluid drips from the end of the tubing.
- D. You can stop priming at any time by selecting "Stop priming."
- E. "Reset reservoir volume" will appear on the screen; select "Yes." If the reservoir volume doesn't match the volume in your medication bag, please call us at 877-290-2040.
- F. After the pump resets the volume, "Ready to begin" will appear on the screen.



Image 8



Image 9



Image 10

## 6. If instructed, flush your IV line with the prepared saline syringes

Use one of your prepared saline syringes from Step 2.

- A. Scrub the needleless connector on your IV catheter with an alcohol wipe for at least **15 seconds** and allow to air dry for 5 seconds (*Image 11*).
- B. Remove the protective cap from the saline flush syringe. **Do not touch** the syringe tip after removing the cap. If the sterile tip touches any unclean surface after being uncapped, throw away the saline flush and start over.
- C. Attach the saline flush syringe to the needleless connector on your IV catheter using a push and clockwise twisting motion until secured together (*Image 12*).
- D. Open the clamp on your IV catheter and/or IV extension set, if indicated
- E. Flush your IV catheter using a "push/pause" method. If you meet resistance, **do not attempt** to flush; call your nurse or pharmacist.  
→ \_\_\_\_\_ mL saline
- F. Remove the saline flush syringe and discard it in a trash container. Double check the needles connector to ensure it is still attached firmly to the central line.



Image 11

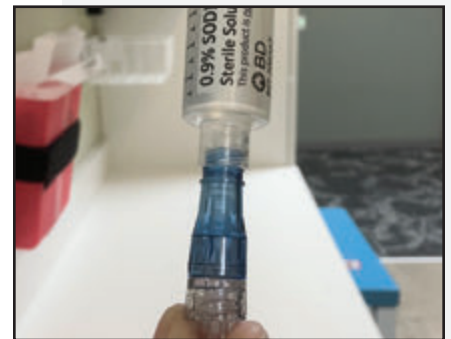


Image 12

## 7. Administer your medication

- A. Scrub the needleless connector on your IV catheter with an alcohol wipe for at least **15 seconds** and allow to air dry for 5 seconds (*Image 11*).
- B. Remove the protective cap from the IV tubing.
- C. Attach the IV tubing firmly to the needleless connector on your IV catheter using a push and clockwise twisting motion until secured together (*Image 13*).
- D. Open all clamps on the IV tubing and your IV catheter.
- E. "Start pump?" will appear on the screen; select "Yes." The message in the status bar will change to a green "Running" message, and "Infusion is starting now" will appear briefly. If pump times out, press "stop/start" button to start the infusion.
- F. The blinking green light means that the pump is running.



Image 13

## Pausing an infusion

- A. The infusion can be paused by pressing the "stop/start" button.
- B. To resume your infusion where you left off, press the "stop/start" button.

Your pump will alert you if you do not restart it within a few minutes. The alarm is a reminder to start the pump.

## Stopping your infusion

Stop the infusion when changing your medication bag or if instructed.  
Always infuse your medication as directed.

- A. If your infusion is complete **or** you are disconnecting between doses, stop the pump by pressing the "stop/start" button.
- B. The menu will ask, "Stop pump?" Select "Yes."
- C. Disconnect the IV tubing and discard all equipment as directed in a trash container.

If you will be using the tubing again within 24 hours, cover the exposed end with the sterile red cap provided.

## Flushing an IV line with saline

Flush with saline after the infusion is completed or between doses if disconnecting, as instructed.

- A. Scrub the needleless connector on your IV catheter with an alcohol wipe for at least **15 seconds** and allow to air dry for 5 seconds (*Image 11*).
- B. Remove the protective cap from the saline flush syringe. **Do not touch** the syringe tip after removing the cap. If the sterile tip touches any unclean surface after being uncapped, throw away the saline flush and start over.
- C. Attach the saline flush syringe to the needleless connector on your IV catheter using a push and clockwise twisting motion until secured together (*Image 12*).
- D. Flush your IV catheter using a "push/pause" method. If you meet resistance, **do not attempt** to flush; call your nurse or pharmacist.  
→ \_\_\_\_\_ mL saline
- E. Close the clamp on your IV catheter and/or IV extension set unless you have been instructed to use heparin.
- F. Remove the saline flush syringe and discard it in a trash container.

**When beginning a new bag, return to Step 1. Getting started.**

## Flushing your IV line with heparin

(Flush with heparin when the infusion is complete or if you were instructed to disconnect between doses.)

- A. Scrub the needleless connector on your IV catheter with an alcohol wipe for at least **15 seconds** and allow to air dry for 5 seconds (*Image 11*).
- B. Remove the protective cap from the heparin flush syringe. **Do not touch** the syringe tip after removing the cap. If the sterile tip touches any unclean surface after being uncapped, throw away the saline flush and start over.
- C. Attach the heparin flush syringe to the needleless connector on your IV catheter using a push and clockwise twisting motion until secured together (*Image 12*).
- D. Open the clamp on your IV catheter and/or IV extension set, if indicated.

- E. Flush your IV catheter using a "push/pause" method. If you meet resistance, **do not attempt** to flush; call your nurse or pharmacist.  
→ \_\_\_\_\_ mL heparin \_\_\_\_\_ units/mL heparin
- F. Close the clamp on your IV catheter and/or IV extension set, if indicated.
- G. Remove the heparin flush syringe and discard it in a trash container.

## Alarm messages

**System fault** – An unrecoverable error may have occurred, such as a hardware or software fault. With this alarm, the amber indicator light is continuously lit, the screen is red, and a two-tone alarm sounds. If a system fault alarm occurs, contact your nurse or healthcare provider.

**High priority** – This alarm always pauses or stops the pump. This alarm is accompanied by a red screen and persists until acknowledged by a key press or until the condition that triggered the alarm goes away. If silenced, the alarm sounds again after two minutes if the alarm condition still exists.

**Medium priority** – This alarm does not stop the pump (delivery continues). This alarm is accompanied by an amber screen and persists until acknowledged by a key press or until the condition that triggered the alarm goes away. If silenced, the alarm sounds again after two minutes if the alarm condition still exists.

**Low priority** – This alarm does not stop the pump (delivery continues). The alarm is accompanied by a blue screen and persists for five seconds (or more with some alarms) unless it is acknowledged by a key press or until the condition that triggered the alarm goes away.

**Informational priority** – These messages do not stop the pump. They appear in the status bar for five seconds, are almost always silent, and require no acknowledgement. Examples include "cassette locked" and "cassette unlocked."



CADD-Solis Pump

## SASH summary

- Flush IV with \_\_\_\_\_ mL **Saline**
- **A**dminister medication continuously by infusion pump as instructed
- With any interruption in the infusion or when the infusion is complete:
  - Flush with \_\_\_\_\_ mL **Saline**
  - Flush with \_\_\_\_\_ mL **Heparin**, if instructed