

# Giving Parenteral Nutrition through CVAD SKILL

## Watch the Video

- ▶ Watch the DVD included in your kit or go [HERE](#) to watch the video online.

## Overview

- ▶ Parenteral Nutrition (PN) is nutrition that is given directly into the blood through the CVAD. PN is used when a person is unable to get their nutrition from eating.
- ▶ PN is usually given over 8 hours or more each day. The CVAD infection rate is higher when PN is given through the line than with other fluids.
- ▶ It is important to follow good technique, watch for signs of infection and keep all appointments with your health care provider. They will check and adjust your PN as needed.

## Medications and Vitamins

Tell your health care provider about any other medications, supplements, or vitamins you are taking. Also, let them know if you have allergies.

## Storing Your PN and Supplies

- ▶ Place the PN in a clean and dry area away from sunlight, children, and pets.
- ▶ If you are given a several-day supply of PN, place the extra bags in the refrigerator. Check with your PN supplier for proper storage instructions.
- ▶ PN should be administered at room temperature. Giving cold PN fluid can cause your body temperature to lower to dangerous levels. If you refrigerate your PN bags, take your next dose out of the refrigerator 4 to 6 hours before use to allow it to warm to room temperature.
- ▶ **Do not microwave the PN solution.**
- ▶ Only use a sharps container for disposing of needles and syringes.

## BEFORE GIVING, CHECK YOUR PN

- ▶ Look at the fluid to make sure it is clean and free from particles in the bag.
- ▶ Do not use the PN if it is discolored or has any materials floating in it.
- ▶ Squeeze the PN bag to make sure there are no leaks. Never use a PN bag that has leaked before use.
- ▶ If you need to add medications to the PN bag, make sure to add the correct amount. Add any medications or vitamins just before starting the PN.
- ▶ Your PN bag will have an injection port and spike port. The injection port is where you will add in medications, and the spike port is where you place the tubing.
- ▶ Check the medication label to make sure it is correct.

## Watch for Side Effects

Tell your health care provider if you experience any of the following side effects:

- ▶ Fever
- ▶ Difficulty breathing
- ▶ Rapid weight gain or loss
- ▶ Upset stomach, vomiting, or nausea
- ▶ Muscle weakness or cramps
- ▶ Swelling of your hands or feet
- ▶ Confusion or memory loss
- ▶ Heart palpitations or skipped heartbeats
- ▶ Skin rashes

Institution/Pharmacy Name, Address and Pharmacy Phone number		
Name	Dosing Weight	Location
Administration Date/Time	Do Not Use After: Date/Time	
Base Formula	Amount/day	(Amount/L)
Dextrose	g	(g/L)
Amino acids*	g	(g/L)
IVFE*	g	(g/L)
Electrolytes		
Sodium chloride	mEq	(mEq/L)
Sodium acetate	mEq	(mEq/L)
Sodium phosphate	mmol of P (mEq of Na)	(mmol/L) (mEq/L)
Potassium chloride	mEq	(mEq/L)
Potassium acetate	mEq	(mEq/L)
Potassium phosphate	mmol of P (mEq of K)	(mmol/L) (mEq/L)
Calcium gluconate	mEq	(mEq/L)
Magnesium sulfate	mEq	(mEq/L)
Vitamins, trace elements and medications		
Multiple vitamins*	mL	
Multiple trace elements*	mL	
Insulin	Units	(Units/L)
H <sub>2</sub> antagonists*	mg	
Rate ____ mL/hour	Volume ____ mL	Infuse over ____ hours
Formulation contains ____ mL plus ____ mL overflow		
Discard any unused volume after 24 hours		
***Central Line Use Only***		

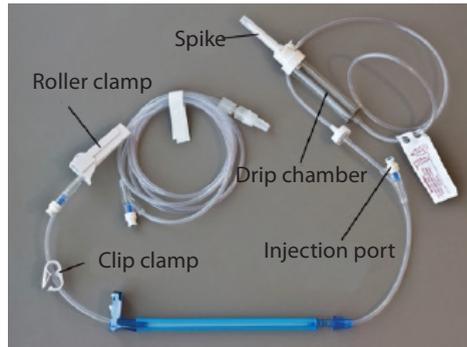
Medication label

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## STEP 1: PREPARE YOUR WORK AREA

Follow the same instructions as giving medication through a CVAD.

1. Clean and prepare your work area.
2. Gather your supplies: ●
  - Two (2) sodium chloride syringes
  - Two (2) alcohol wipes or chlorhexidine swabs
  - Clean gloves
  - Infusion bag
  - Infusion (IV) tubing
  - Medication additives
3. Wash your hands the right way.



IV tubing

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## STEP 2: PREPARE AND PRIME PN TUBING

1. Put on clean gloves.
2. Add in any medication to the injection port of the PN bag if needed.
  - Clean this injection port vigorously with alcohol or chlorhexidine before adding the medications.
  - Double-check the medication to make sure it is the correct additive.
3. Insert the IV tubing into the PN and flush the PN through the tubing.
  - Open the IV tubing supplies.
  - Remove fluid bag cover where the tubing spike will be inserted.
  - Clamp the tubing using the roller clamp prior to inserting the clamp into bag.
  - Remove spike cover and spike fluid bag.
  - Add the PN filter to the bottom of the IV tubing.



Fluid bag



Open supplies



Spike the bag

- Squeeze the drip chamber. This will clear the line of air and get it started.
- Unclamp the tubing and prime (fill) the tubing to remove all air. Never prime the tubing over a trash can.
- After priming is done, clamp the tubing using the roller clamp.



Squeeze the clip chamber

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## STEP 3: FLUSH THE NEEDLELESS CONNECTOR

See "Flushing The Line"

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## STEP 4: ATTACH FLUID TUBING

1. Connect IV fluids to needleless connector. Be sure no air is in the line, and be sure not to touch the tip of the tubing.
2. Twist and secure the tubing to the needleless connector.
3. PN will run through an IV pump. Confirm the rate on the pump and hit start.
4. Taper down your PN. Your pump may be set to gradually decrease the PN fluids over the last hour. This is recommended for children less than 3 years old and patients with known glucose control issues.

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## STEP 5: REMOVE PN TUBING AND FLUSH LINE

1. Wash your hands and put on clean gloves.
2. Clamp and remove the tubing from the needleless connector.
3. Flush the CVAD line through the needleless connector.
4. Uncover the heparin flush syringe and push out any air.
5. Flush the line with heparin if needed.
6. Remove the flush, and clamp the central line tubing.

**Discard the PN bag and tubing in the garbage. Do not re-use IV tubing after giving PN.**