



INSTRUCTIONAL CHECKLIST:

Performing Home Infusions with the Mini-Bag Plus System

https://www.youtube.com/watch?time_continue=2&v=b_yZWSEcDbg&feature=emb_logo

For additional education please contact your agency

Four Steps for Performing Infusions:

Practice good hand-washing **1** Prepare supplies **2** Prepare IV line **3** Start and stop infusion **4**

Medication(s) to infuse:

Home Infusion Nurse (name, #):

Home Infusion Pharmacist (name, #):

Practice good hand-washing

Always wash hands when instructed

Soap and water preferred

Hand sanitizer (optional)

Wash for a full 20 seconds or rub until dry

STEP 1: PRACTICE GOOD HAND-WASHING

- Always remember to **WASH YOUR HANDS** for a full 20 seconds.
 - ❖ Soap and water is always preferred. If soap and water are not available, hand sanitizer is acceptable.
 - ❖ Make it a habit to wet your hands, apply soap, and lather for 20 seconds (hum the Happy Birthday song twice).
 - ❖ If using hand sanitizer, rub a dime-sized amount between your hands until dry. Never wave or blow on your hands to speed up drying.
 - ❖ Remember, if you are using gloves, you must still wash your hands.
 - ❖ Washing your hands helps reduce your chance of infection.

Prepare supplies

Remove medication from fridge

WASH HANDS

Clean workspace

WASH HANDS

Gather & arrange supplies

WASH HANDS

Prepare medication

STEP 2: PREPARE SUPPLIES

- Note the time to start the infusion: _____ AM PM
- Note the amount of time your medication should be left at room temperature: _____ MIN HR NAP
- Note the time to remove the medication from refrigerator (if refrigerated): _____ AM PM NAP
 - ❖ Remove medication from refrigerator BEFORE the infusion.

- ❖ Your medication will infuse at the correct rate if administered at room temperature. If administered while cold, you will feel the medication as it infuses AND the infusion may take longer.
- ❖ Do NOT attempt to warm the medication.

Double-check your medication to confirm the following information before the infusion:

- ❖ Medication has my name and date of birth.
- ❖ Medication name is correct.
- ❖ Medication dose is correct.
- ❖ Medication is not expired.
- ❖ If any of this information is incorrect, stop and call your home infusion pharmacist immediately.

WASH YOUR HANDS.

- ❖ Soap and water are preferred, hand sanitizer optional if soap and water are not available.
- ❖ Wash for 20 seconds (hum the Happy Birthday song twice) or rub with hand sanitizer until your hands are dry.

Clean your workspace and SASH mat with cleaning solution (alcohol/sanitizing wipes or Lysol + paper towels).

- ❖ Select a dry, hard work surface to set up your medication and supplies.

WASH YOUR HANDS.

- ❖ Soap and water are preferred, hand sanitizer optional if soap and water are not available.
- ❖ Wash for 20 seconds (hum the Happy Birthday song twice) or rub with hand sanitizer until your hands are dry.

Gather the following supplies and place on your workspace (do not put on top of your SASH mat yet):

- ❖ 4–5 alcohol pads (to clean your supplies and hub (IV line tip))
- ❖ 2 prefilled saline syringes (to clear your IV line)
- ❖ 1 prefilled heparin syringe (to clear your IV line and prevent blockage; your nurse will tell you if you need it)
- ❖ 1 Mini-Bag Plus (a bag of fluid and a vial of medication powder)
- ❖ 1 Medication orders (to check the infusion rate)
- ❖ 1 set of gravity tubing OR dial-a-flow tubing (tubing can be reused within 24-hours for the SAME medication)
- ❖ 1 red cap (to protect the end of your gravity tubing between infusions)
- ❖ 1 IV pole (to hang your IV medication)
- ❖ 1 Small Trash bag

Arrange your alcohol pads, wrapped syringes, medication bag and medication tubing **above** your SASH mat in their respective location. Do not place any of these items on top of your SASH mat yet.

- ❖ "S" = Saline
- ❖ "A" = Administer or Antibiotic (includes your mini-bag, tubing set and red cap)
- ❖ "S" = Saline
- ❖ "H" = Heparin

WASH YOUR HANDS.

- ❖ Soap and water are preferred, hand sanitizer is optional if soap and water are not available.
- ❖ Wash for 20 seconds (hum the Happy Birthday song twice) or rub with hand sanitizer until your hands are dry.

Unwrap both saline syringes and the heparin syringe (if needed). Place the syringes in the correct location **on top** of your SASH mat.

Check the unwrapped syringes for any air bubbles. If there are air bubbles, do the following:

- ❖ Remove the protective cap from the syringe and place the cap flat-side down on your SASH mat.
- ❖ Hold the syringe with the end up and plunger at the bottom.
- ❖ Pull back on the syringe plunger slightly to break the seal. You will be able to see the air bubble in the syringe.
- ❖ Slowly push the plunger to let the air bubble out.
- ❖ Once the air is removed, pick up the protective cap from the table and put the cap back on the end of the syringe. Place the syringe back in its spot on the SASH mat. Repeat for the other syringes.

Remove the mini-bag from the plastic wrapping. Place the mini-bag in the correct location (“A”) **on top** of your SASH mat.

Inspect the mini-bag and vial for any leakage, damage or discoloration. If you have any of these or other concerns with your medication, contact your home infusion pharmacist immediately.

Remove the gravity or dial-a-flow tubing set from the plastic wrapping if you are preparing for your first infusion of the day. Close the clamp on the tubing. Place it in the correct location (“A”) **on top** of your SASH mat.

Do not unwrap the red cap yet. Keep it **above** the “A” of your SASH mat.

Grasp the mini-bag in one hand and the vial in the other.

Bend the connection between the bag and the vial until you feel the plastic stopper break.

Hold the bag above the vial and squeeze to push fluid from the bag to the vial.

If the fluid is not flowing into the vial, bend the connection to break the plastic stopper again.

Once fluid has entered the vial, gently shake the vial to dissolve the powder.

Hold the vial above the bag. Squeeze air from the bag into the vial to force the dissolved medication from the vial into the bag.

Repeat these mixing steps until all the powder is dissolved and the fluid is in the mini-bag. It is okay if a small amount of fluid is left in the vial.

Place the mini-bag in the correct location (“A”) **on top** of your SASH mat.

WASH YOUR HANDS.

- ❖ Soap and water are preferred, hand sanitizer is optional if soap and water are not available.
- ❖ Wash for 20 seconds (hum the Happy Birthday song twice) or rub with hand sanitizer until your hands are dry.

‘Spike the bag’ in order to attach the tubing to your medication bag:

- ❖ If Dial –a-flow, Turn the dial (called a flow-regulator) on your dial-a-flow tubing until the green line is on “open.” If gravity, disengage the roller clamp on the tubing.
- ❖ Pull the plastic protective tab off the medication bag. Just pull. Do not twist.
- ❖ Remove the clear protective cap from the spike (located on your dial-a-flow tubing).
 - Make sure the spike does not touch anything. If the spike touches anything, throw that tubing set away and begin again with a new tubing set.
- ❖ Insert the tubing spike into the medication bag (where the tab was removed).
 - Use a “push and twist” motion (like putting a key into an ignition).

- You will know the bag is spiked when you see the tip of the spike in the medication bag. You can confirm the bag is spiked by squeezing the chamber to add medication to the chamber.

WASH YOUR HANDS.

- ❖ Soap and water are preferred, hand sanitizer is optional if soap and water are not available.
- ❖ Wash for 20 seconds (hum the Happy Birthday song twice) or rub with hand sanitizer until your hands are dry.

Remove all the air in the tubing by running fluid through it. This is called priming the tubing:

- ❖ Hang the medication bag on the IV pole.
- ❖ Squeeze the drip chamber until it fills halfway.
- ❖ Open the white clamp on the tubing. If dial-a-flow, the dial should be OPEN. The medication will run through the tubing. Be prepared to clamp the tubing quickly.
- ❖ Close the white clamp on the tubing as soon as you see medication drip out of the end.
- ❖ Change the dial-a-flow rate from “open” to the rate on your medication orders. Rate: _____



STEP 3: PREPARE IV LINE

WASH YOUR HANDS.

- ❖ Soap and water are preferred, hand sanitizer is optional if soap and water are not available.
- ❖ Wash for 20 seconds (hum the Happy Birthday song twice) or rub with hand sanitizer until your hands are dry.

‘Scrub the hub.’ Clean the end cap (hub) by wrapping the alcohol pad over and around the sides for at least 15 seconds.

- ❖ Use the first alcohol pad above your SASH mat (the one before the first “S”).
- ❖ Once you have cleaned the hub, hold the hub with two fingers. Keep the hub from touching anything else.
- ❖ If your hub touches anything, **wash your hands** and scrub the hub again with a new alcohol pad.

Flush your IV line with saline (“pulse flush”):

- ❖ Hold the hub in one hand. Grasp the saline syringe on the first “S” of your SASH mat with your other hand.
- ❖ Remove the protective cover on the saline syringe. Screw the syringe onto the hub using a “push and twist” motion. It’s like putting a key into an ignition.
- ❖ Once the syringe is connected to the hub, open the clamp on your IV line and slowly push 1 to 2 mL of saline at a time. Stop and push 1 to 2 mL more. Repeat this “pulse flush” until the saline syringe is empty. Flushing this way each time helps keep your IV line from getting clogged.
- ❖ If you have trouble flushing your IV line, make sure the clamp on your IV line is open. If your clamp is open and you are still having trouble, stop and call your home infusion nurse.

Remove the empty saline syringe from your IV line. Throw it away. Do not remove the hub from your IV line.

Before connecting your tubing to the hub of your IV line, double-check the three questions found across the top of your SASH mat.

1. Did you check the prescription?
2. Did you check the expiration or “Do Not Use After” date?
3. Did you wash your hands?

WASH YOUR HANDS.

- ❖ Soap and water are preferred, hand sanitizer is optional if soap and water are not available.
- ❖ Wash for 20 seconds (hum the Happy Birthday song twice) or rub with hand sanitizer until your hands are dry.

‘Scrub the hub’ of your IV line with a NEW alcohol pad for at least 15 seconds.

- ❖ Use the second alcohol pad above your SASH mat (the one before the “A”).
- ❖ Once you have cleaned the hub, hold the hub with two fingers. Keep the hub from touching anything else.
- ❖ If your hub touches anything, **wash your hands** and scrub the hub again with a new alcohol pad.

Connect your tubing to the hub of your IV line:

- ❖ Hold the hub in one hand. Find the end of the medication tubing. Remove the medication tubing cap.
- ❖ Connect the medication tubing to the hub of your IV line. Use the same “push and twist” motion as before.



STEP 4: START AND STOP INFUSION

- Before starting the infusion, make sure your IV pole is extended. This way, the medication bag stays your heart during the infusion.
- ❖ If the bag is below your heart, it can slow the infusion and cause blood to back up in the IV line. If you notice this, don't panic. Stop and call your home infusion nurse for help.

- Open the clamps on your IV line and dial-a-flow tubing. Medication will begin to drip through the drip chamber.

- Adjust the rate on your dial if you have not done so already. Turn the numbers on the dial to match the rate on your medication orders. If gravity tubing, you need to count the number of drops to match your drops per minute on your orders.

- Rest and relax! The medication will infuse for a varying amount of time, depending on the time prescribed by your doctor and on how warm the medication was. You will know your infusion is complete when the medication bag is empty and the drip chamber is less than half-full.

- Once your infusion is almost complete (Only a very small amount left in the bag), **WASH YOUR HANDS.**

- ❖ Soap and water are preferred, hand sanitizer is optional if soap and water are not available.
- ❖ Wash for 20 seconds (hum the Happy Birthday song twice) or rub with hand sanitizer until your hands are dry.

- To stop the infusion, close the clamp on the tubing.

- Wrap any excess tubing on the IV pole.

- Will you be using your tubing again?

Yes: You need to perform another infusion with the same medication later today. You can reuse this dial-a-flow tubing.

- ❖ You may reuse the same tubing for the same medication for up to 24 hours.

No: You only have one infusion for this medication today, or this dial-a-flow tubing was last used yesterday. Throw away the dial-a-flow tubing.

- ❖ NEVER use the same tubing for two different medications.
- ❖ Do not reuse the same tubing for the same medication after 24 hours.

- Disconnect your medication tubing from your IV line. Grasp the end cap (hub) of your IV line with one hand while using your other hand to unscrew the tubing. Do this until it is disconnected from the hub. Do not remove the hub from your IV line.
- If you will reuse your tubing, remove the red cap (above the “A” of your SASH mat) from the plastic wrapping. Apply the clean red cap to the end of the dial-a-flow tubing.
 - ❖ When it is time to prepare a new medication bag for the next infusion that day, throw out the old bag and repeat the process of washing your hands, spiking a new bag using the same tubing, priming the tubing for the second infusion, and connecting the tubing to the hub of your IV line.
- If you will not reuse your tubing, throw away the tubing. You will not need the red cap.
- WASH YOUR HANDS.**
 - ❖ Soap and water are preferred, hand sanitizer is optional if soap and water are not available.
 - ❖ Wash for 20 seconds (hum the Happy Birthday song twice) or rub with hand sanitizer until your hands are dry.

- ‘Scrub the hub’ of your IV line with a NEW alcohol pad for at least 15 seconds.
 - ❖ Use the third alcohol pad above your SASH mat (the one before the second “S”).
 - ❖ Once you have cleaned the hub, continue to hold the hub. Do not let it touch other surfaces.
 - ❖ If your hub does touch anything, **wash your hands** and scrub the hub again with a new alcohol pad.
- Flush your IV line with saline again via the “pulse flush” method by doing the following:
 - ❖ While holding your hub in one hand, grasp the saline syringe on the second “S” of your SASH mat with your other hand.
 - ❖ Remove the protective cover on the saline syringe. Screw the syringe onto the hub using a “push and twist” motion (like putting a key into an ignition).
 - ❖ Once the syringe is connected to the hub, make sure the clamp on your IV line is open. Slowly push 1 to 2 mL of saline at a time. Stop and push 1 to 2 mL more. Repeat this “pulse flush” until the saline syringe is empty.
 - ❖ If you have trouble flushing your line, check to make sure the clamp on your IV line is open. If your clamp is open and you still have difficulty, stop and call your home infusion nurse.

- Remove the empty saline syringe from your IV line using a gentle “twist and pull” motion. Throw it away in your trash. Be careful, and do not remove the hub from your IV line.

- If you are not using heparin, close the clamp on your IV line and **WASH YOUR HANDS** for a full 20 seconds.

- If you are using heparin, ‘scrub the hub’ of your IV line using a NEW alcohol pad for at least 15 seconds.
 - ❖ Use the last alcohol pad above your SASH mat (the one before the “H”).
 - ❖ Once you have cleaned the hub, hold the hub with two fingers to avoid contaminating the hub with other surfaces.
 - ❖ If your hub does touch anything, **wash your hands** and scrub the hub again with a new alcohol pad.

- Flush your IV line with heparin via the “pulse flush” method by doing the following:
 - ❖ Hold your hub in one hand. Grasp the heparin syringe on the “H” of your SASH mat with your other hand.

- ❖ Remove the protective cover on the heparin syringe. Screw the syringe onto the hub using a “push and twist” motion (like putting a key into an ignition).
- ❖ Check that the clamp on your IV line is open. Slowly push 1 to 2 mL of heparin at a time. Stop and push 1 to 2 mL more. Repeat this “pulse flush” until the heparin syringe is empty.
- ❖ If you have trouble flushing your line, check to make sure the clamp on your IV line is open. If your clamp is open and you still have difficulty, stop and call your home infusion nurse.

Remove the empty heparin syringe from your IV line using a gentle “twist and pull” motion. Throw it away in your trash. Be careful, and do not remove the hub from your IV line.

Close the clamp on your IV line.

WASH YOUR HANDS.

- ❖ Soap and water are preferred, hand sanitizer is optional if soap and water are not available.
- ❖ Wash for 20 seconds (hum the Happy Birthday song twice) or rub with hand sanitizer until your hands are dry.

Congratulations! You have successfully infused your medication!

Make a habit to:

- Find a **CLEAN WORKSPACE** to perform infusions and store supplies.
- WASH YOUR HANDS** for at LEAST 20 seconds.
 - ❖ Soap and water preferred (use hand sanitizer if soap or water are unavailable).
 - ❖ Hum the Happy Birthday song twice.
- CHECK YOUR MEDICATION** to confirm:
 - ❖ Your name and date of birth AND the dose, expiration date and medication name.
- REMOVE YOUR MEDICATION** from the refrigerator **BEFORE** the infusion.
- FOLLOW THE SASH PROTOCOL:**
 - ❖ Saline flush → Administer medication → Saline flush → Heparin flush

Disclosure: This project was funded under grant number 1K08HS025782-01 from the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services (HHS). The authors are solely responsible for this document’s contents, findings, and conclusions, which do not necessarily represent the views of AHRQ. Readers should not interpret any statement in this report as an official position of AHRQ or of HHS. None of the authors has any affiliation or financial involvement that conflicts with the material presented in this report.