In the previous topic, you learned how to prepare an infusion. This topic addresses the administration of primary and secondary infusions.

After completing this topic you will be able to:

- Change a primary solution container.
- Program a secondary infusion with Guardrails® Suite MX protection.
- Stop a secondary infusion.
- Program a secondary infusion without Guardrails® Suite MX protection.
Changing a Primary Solution Container

Earlier in the training you learned how to remove and reload an administration set during an infusion. It is also important to know how to change the primary solution container during an infusion, without removing the administration set. As you review the detailed steps on the next pages, remember that the primary solution container should hang 20 inches above the Alaris® Pump module.
Changing a Primary Solution Container

To change a primary solution container without removing the administration set from the Alaris® Pump module:

1. Press the **PAUSE** key on the Alaris® Pump module to stop the infusion.

2. Remove the empty solution container.

3. Insert the administration set spike into the new solution container, following accepted hospital procedure, and hang the container 20 inches above the Alaris® Pump module.

4. Press the **CHANNEL SELECT** key on the Alaris® Pump module.
Changing a Primary Solution Container

5. Press the VTBI soft key and use the numeric keys to enter the value.

6. Press the START soft key to resume the infusion.
Secondary Infusion

Secondary Mode is designed to support automatic secondary ("piggybacking") infusions on the same instrument channel. When the secondary VTBI reaches zero, the primary infusion resumes automatically.

When the instrument is programmed and delivering in the secondary mode, the primary infusion is temporarily stopped and fluid is drawn from the secondary container. Delivery from the primary container resumes when the fluid level in the secondary container is level with the fluid in the primary container.
Preparing a Secondary Infusion

As you review the detailed steps for preparing a secondary infusion on the following pages, keep these key concepts in mind:

- Secondary infusions require the use of a check valve set on the primary IV line.
- The secondary solution container must be higher than the primary solution container.
- The clamp on the secondary administration set must be opened. If the clamp is not opened, the fluid will be delivered from the primary container.
- The secondary administration set must be primed prior to beginning the secondary infusion.
Preparing a Secondary Infusion

To prepare a secondary infusion while the primary infusion is running:

1. Open a secondary administration set package, remove set, and close clamp.
2. Insert administration set spike into prepared fluid container and hang secondary container, following accepted hospital procedure.
3. Fill drip chamber to 2/3 full.
4. Attach secondary administration set to upper injection site on the primary set.
5. Lower primary fluid container using hanger provided with the secondary administration set. Make sure the fluid level in the secondary container is least 9.5 inches above the fluid level in the primary container.
Programming a Secondary Infusion with Guardrails® Suite MX Protection

To program a secondary infusion while the primary infusion is running and after preparing the secondary infusion:

1. On the pump that is running the primary infusion, press the CHANNEL SELECT key.

2. Press the SECONDARY soft key.
Programming a Secondary Infusion with Guardrails® Suite MX Protection

3. Press the soft key next to the desired drug. If applicable:

   - An optional hospital-defined therapy or clinical indication for delivery of this infusion may appear.
   - A weight-based, nonweight-based, or BSA-based option for delivery of this infusion may appear.
   - Multiple concentration listings for delivery of this infusion may appear.

4. Press the **Yes** soft key to confirm the drug selection.
Programming a Secondary Infusion with Guardrails® Suite MX Protection

5. Verify parameters are correct and press the NEXT soft key to confirm.

6. Use the numeric keys to enter the secondary infusion VTBI. (Note: The screen defaults to a Volume/Duration infusion, but you can change it to a Rate/Volume infusion by pressing the RATE/VOLUME soft key.)

7. Based on your hospital's guidelines, an initial starting duration may be pre-populated. To change the starting duration, press the DURATION active soft key and enter the desired amount using the numeric keys.

8. Verify the parameters are correct, open the clamp on the secondary administration set, and press the START soft key.
Secondary Infusion Status

During a secondary infusion:

- The Green Infusing Status Indicator illuminates.
- The secondary rate appears in the Channel Rate Display.
- The secondary VTBI counts down on the Main Display.
- SECONDARY and the drug name and dose scroll in the Channel Message Display.

At the completion of a secondary infusion:

- The switchover alert sounds with six beeps (unless disabled in the system configuration).
- The primary infusion resumes.
- The primary rate displays.
Activity: Programming a Secondary Infusion

In this activity you will program a secondary infusion of Vancomycin with Guardrails® Suite MX protection.

To start the activity, click the link below. At any time during the activity you can click the Internet Explorer Back button in the upper left corner of the screen to return to this page. Then click Next to continue the topic.

Start Activity
Stopping a Secondary Infusion

You may need to stop a secondary infusion and return to the primary infusion. To do this:

1. Press the CHANNEL SELECT key on the appropriate channel.
2. Press the SETUP soft key.
3. Press the PRIMARY soft key.
4. Close the clamp on the secondary administration set or disconnect the set from the upper injection port.
5. Press the START soft key.
6. Press the Yes soft key to stop the secondary infusion and begin infusing the primary.
Programming a Secondary Infusion without Guardrails® Suite MX Protection

To program a secondary infusion while the primary infusion is running and after preparing the secondary infusion:

1. On the pump that is running the primary infusion, press the CHANNEL SELECT key.

2. On the Infusion Setup screen, press the SECONDARY soft key.

3. On the Guardrails® drugs screen, press the BASIC SEC soft key.
Programming a Secondary Infusion

4. Press the RATE soft key and enter the secondary infusion rate using the numeric keys.

5. Press the VTBI soft key and enter the secondary volume-to-be-infused using the numeric keys.

6. Open the clamp on the secondary administration set.

7. Verify the infusion parameters and press the START soft key.