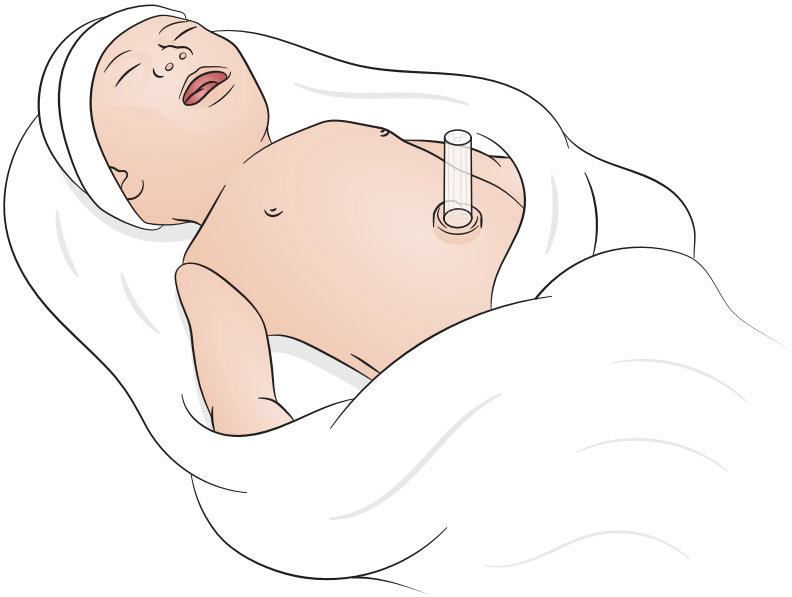
EN

SimNewB

User Guide



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helping save lives

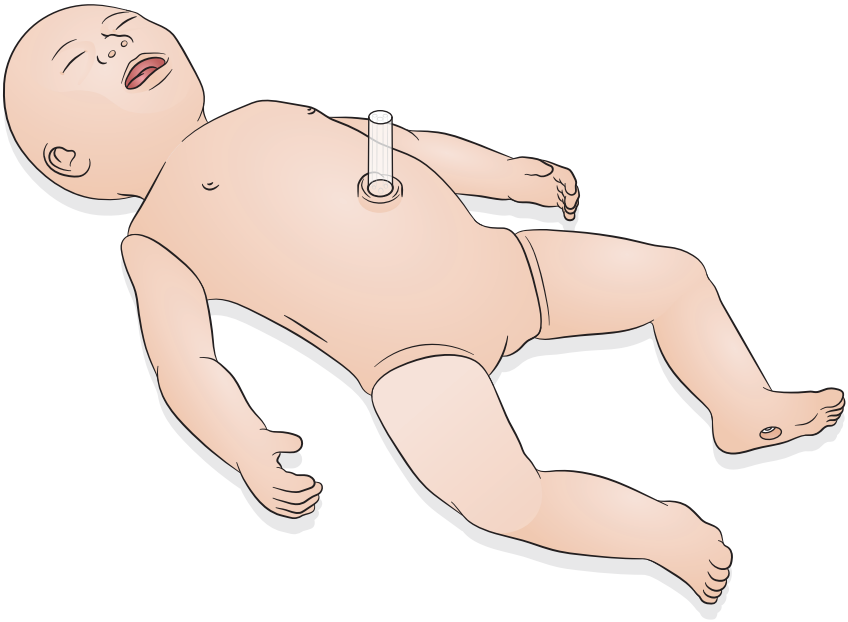
American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

Contents

Introduction

SimNewB is a tetherless newborn simulator designed to help improve neonatal resuscitation and to meet the specific learning objectives of neonatal resuscitation protocols. Focusing on the first 10 minutes of life, SimNewB provides realistic training for critical interventions.

Items included may vary in appearance and are subject to change.

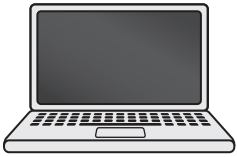


SimNewB can be controlled by the operator either by using a tablet or PC running Laerdal's LLEAP software, or using SimPad Plus which is Laerdal's proprietary tablet.

Both LLEAP and SimPad Plus allow the operator to run sessions either by using pre-programmed scenarios in Automatic Mode, or in Manual Mode.

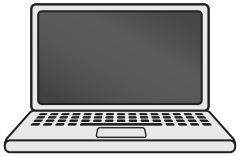
Using either LLEAP or SimPad Plus allow vital signs to be displayed on a simulated Patient Monitor (optional).

Both SimNewB and the Patient Monitor can be operated wirelessly.



LLEAP

SimPad PLUS

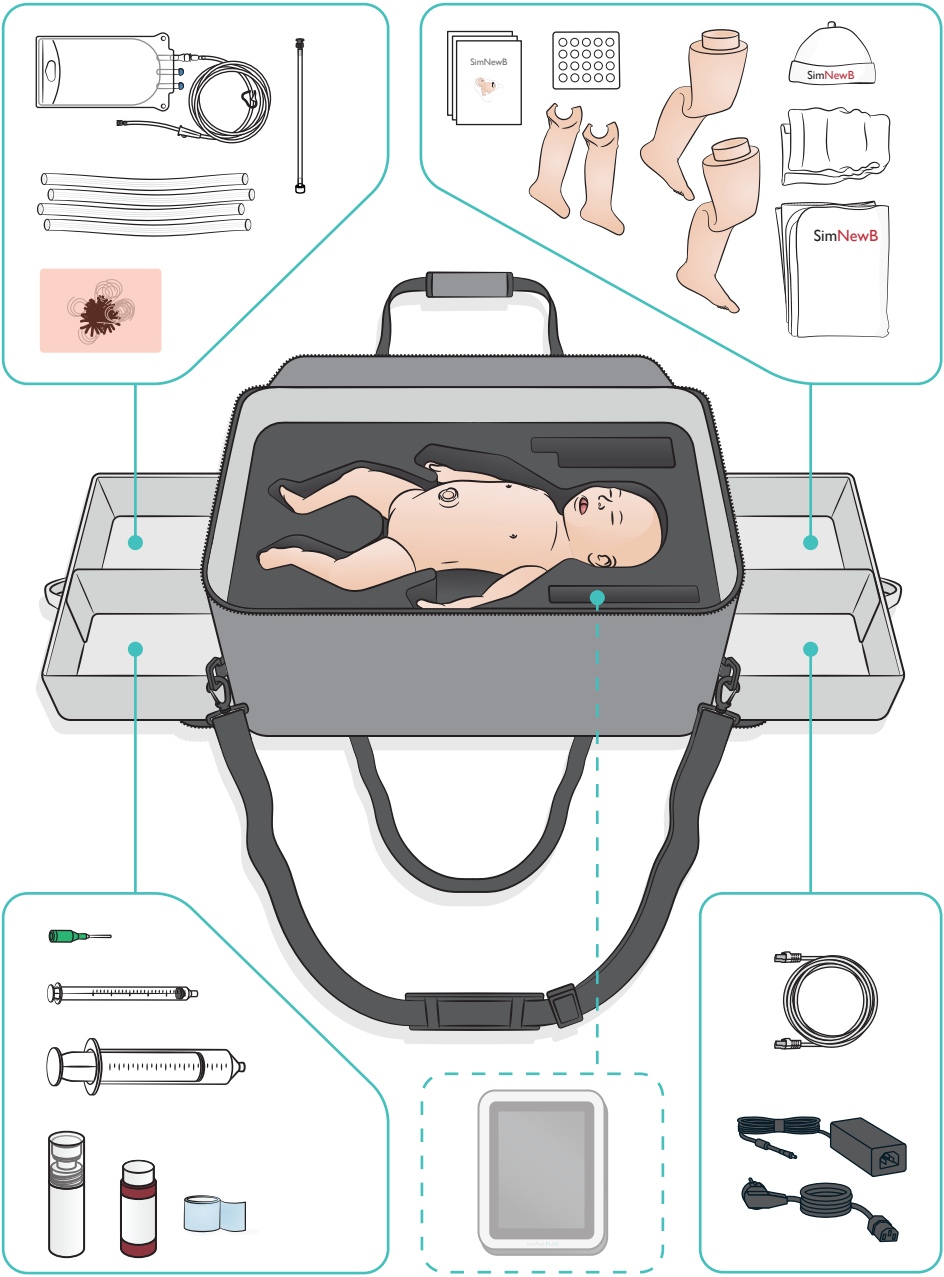


Patient Monitor

Note

- *Find SimPad PLUS User Guide on* www.laerdal.com/support
- *To access LLEAP help files, go to 'Help' on Laerdal Simulation Home*
- *For detailed connection instructions, download the 'Wireless Setup Overview' from* www.laerdal.com/SimNewB
- *To get the most out of your simulation training, download complimentary scenarios here:* www.laerdal.com

Items Included & Storage



Airway Features

- Anatomically realistic airway
- Nasal and oral ET tube insertion
- LMA insertion
- Sellick Maneuver
- Bilateral and unilateral chest rise and fall with positive pressure ventilation
- Right mainstem intubation
- Suctioning
- Variable lung resistance
- Gastric tube insertion
- Stomach distention
- Lung Recruitment Maneuver

Breathing Features

- Spontaneous breathing with variable rate and depth
- Bilateral and unilateral chest rise and fall
- Normal and abnormal breath sounds
- Anterior lung sounds
- Unilateral breath sounds
- Simulated Oxygen Saturation
- Unilateral thoracentisis
- Pneumothorax

Vascular Features

- Bilateral IO access
- Simulated umbilical cord
- Umbilical access
- Simulated blood flashback on cannulation

Circulation Features

- Umbilical pulse
- Bilateral brachial pulse
- Central cyanosis

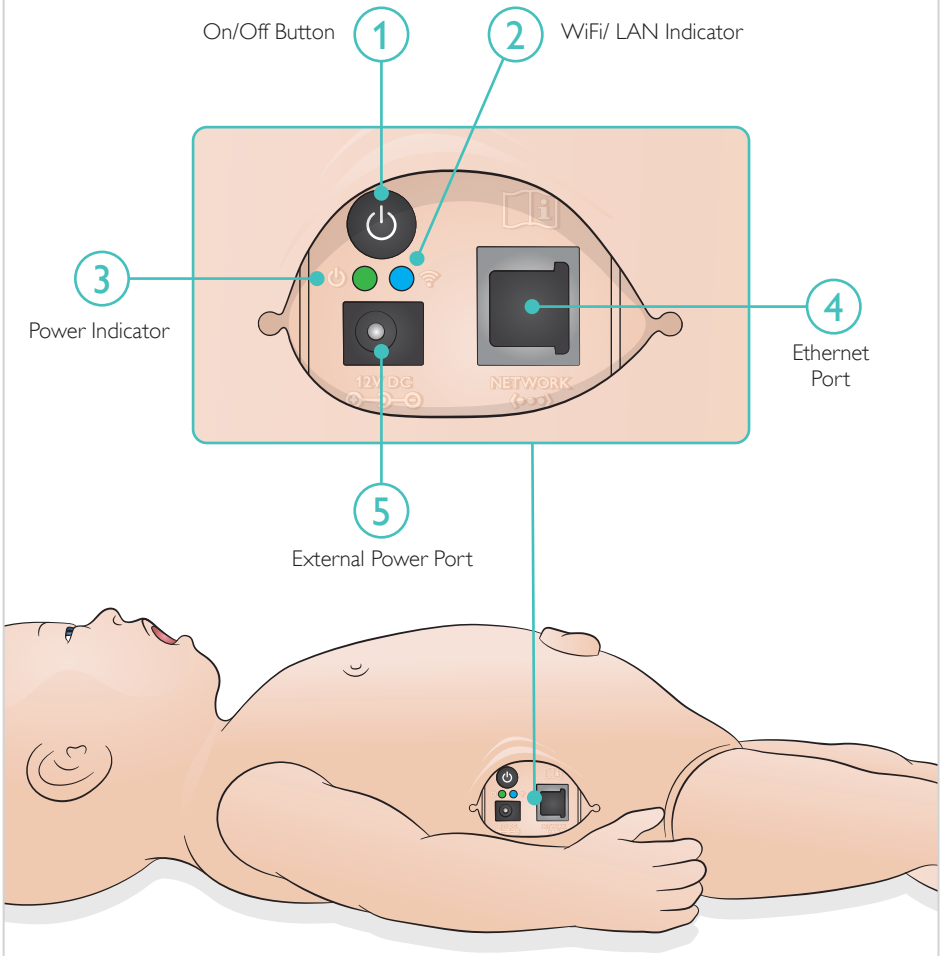
Cardiac Features

- Basic CPR training

Other Features

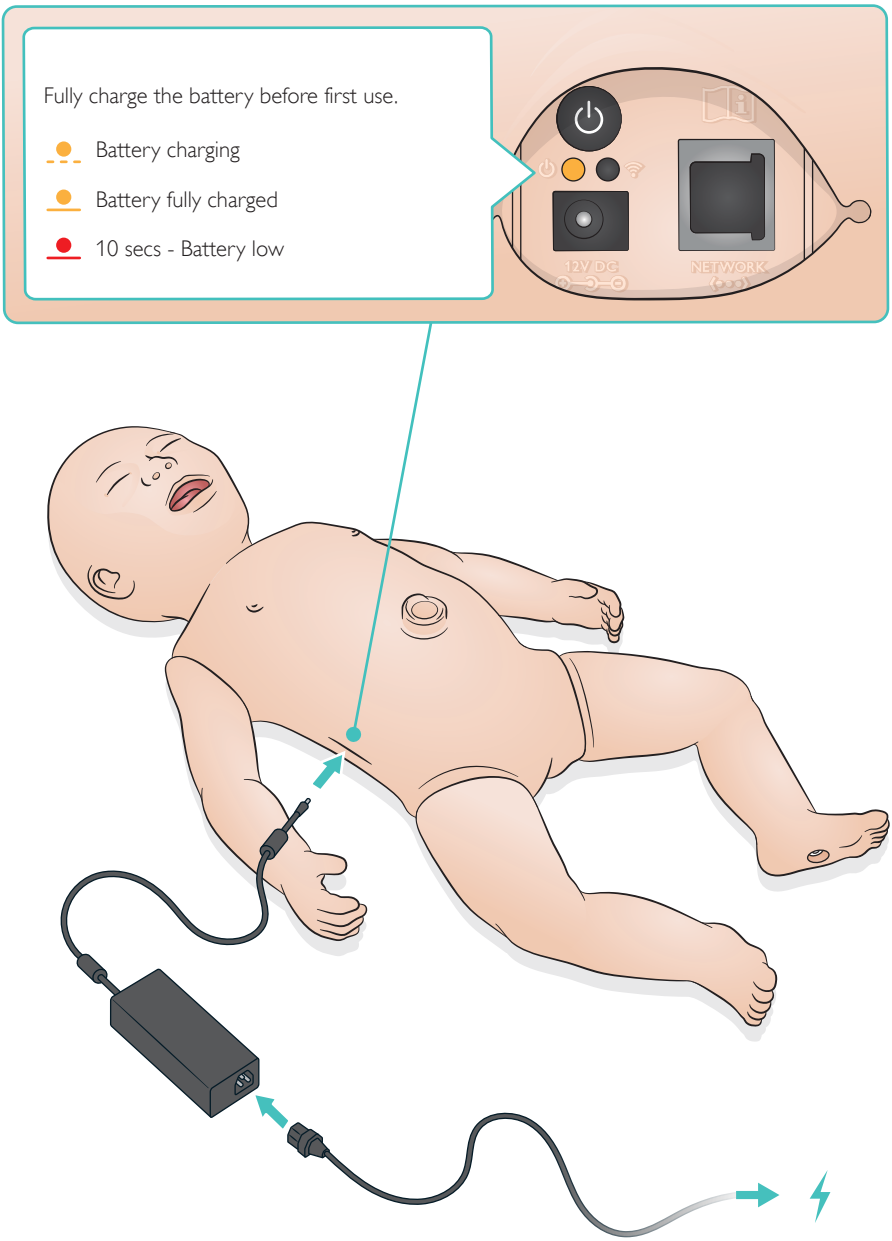
- Normal, blown and constricted pupils
- Vocal, lung and heart sounds
- Arms - movements and seizures

Power Panel

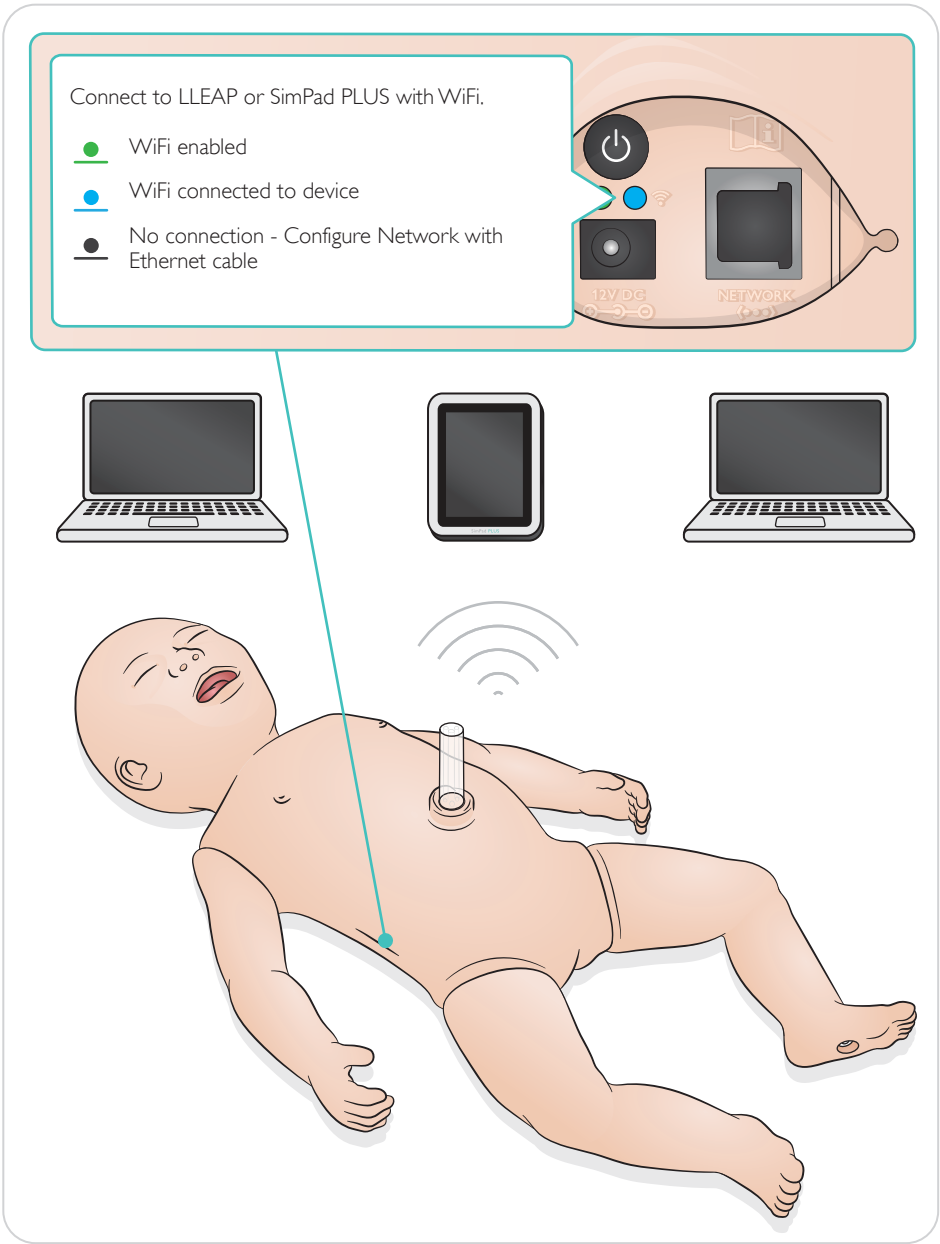


Power Indicator Status

- On
- Simulator booting
- Software updating
- Battery charging
- Failure updating software
- 10 secs - Battery low
- Service required
- Battery fully charged


Fully charge the battery before first use.
Battery charging
Battery fully charged
10 secs - Battery low
12V DC
NETWORK

Connect



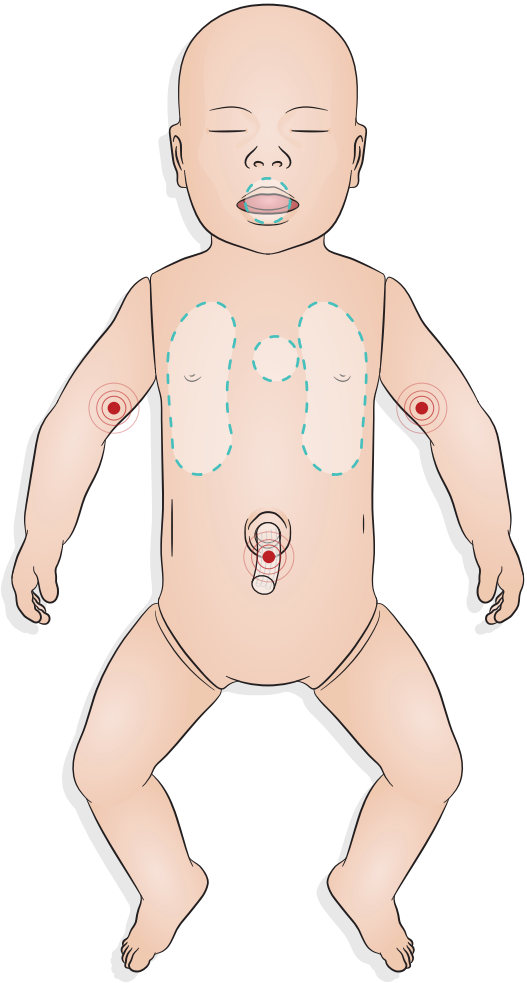
Note

For detailed connection instructions, download the 'Wireless Setup Overview' from www.laerdal.com/SimNewB

Pulses and sounds are controlled in SimPad PLUS or LLEAP.

Umbilical and Brachial Pulses

Vocal, Lung and Heart Sounds



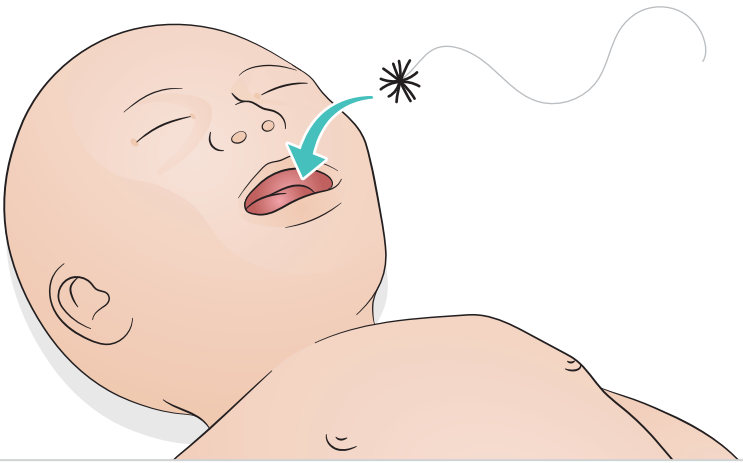
Preparing for Simulation - Inserting the meconium module

- Insert the module with a finger - do not use force.
- A suction catheter @ 100 mmHg will remove the meconium module.
- A tether has been added to ensure removal of the object.

Notes:

- *Do not add lubricant to the module*
- *Do not insert the meconium module past uvula*

1



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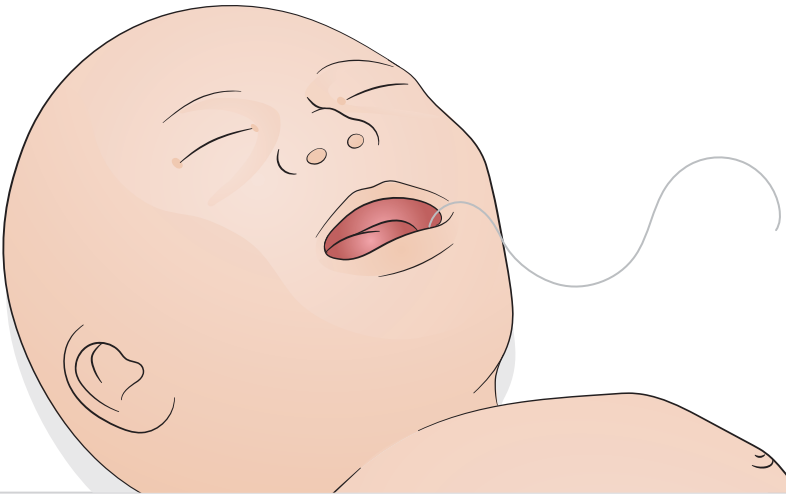
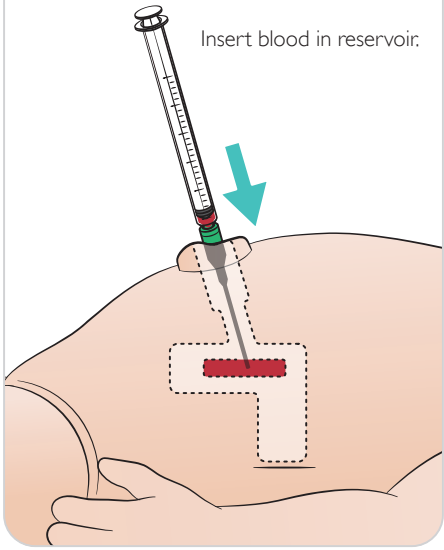


1

1 ml

Place tip and fill with maximum 1 ml blood.

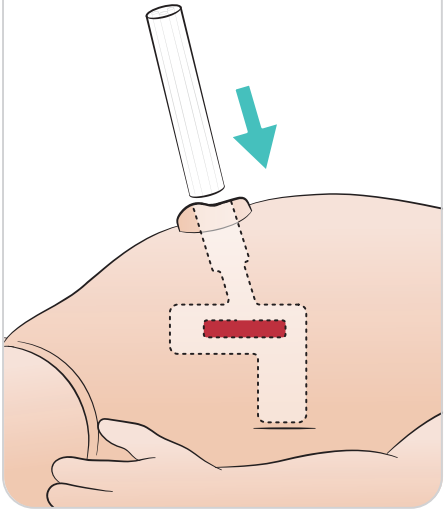
2



Insert blood in reservoir.

3

Place Umbilical Cord into naval.



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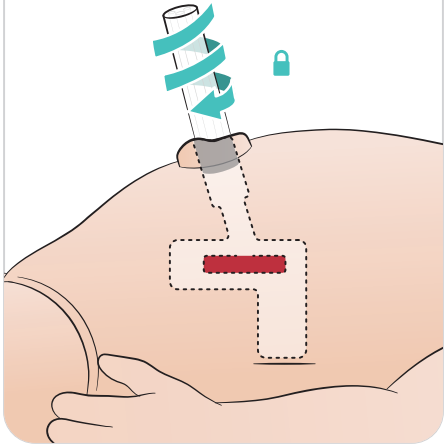

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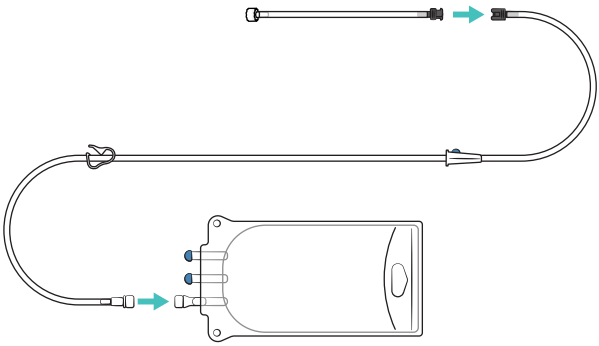
Large Volume Infusions

If scenario requires large volume infusions of fluid (exceeding 10 ml), connect empty drain bag to simulator.

1



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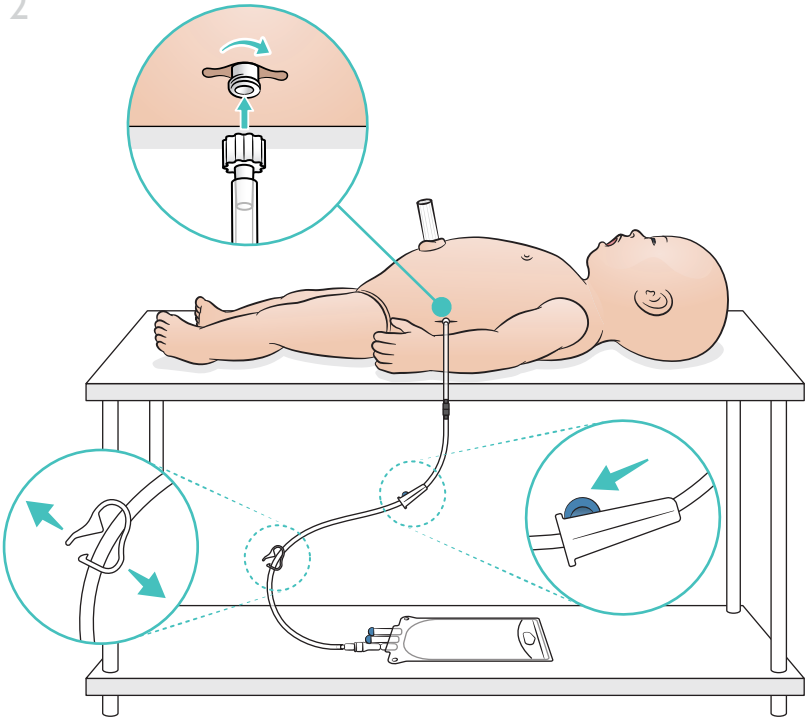

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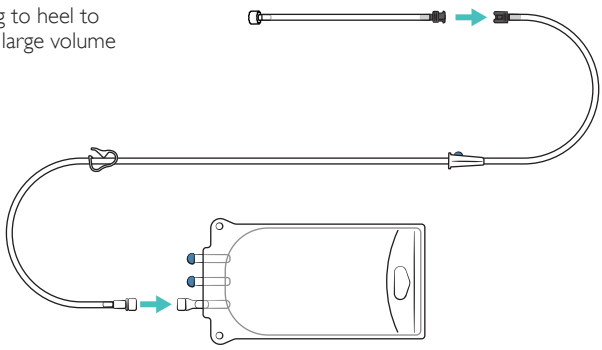
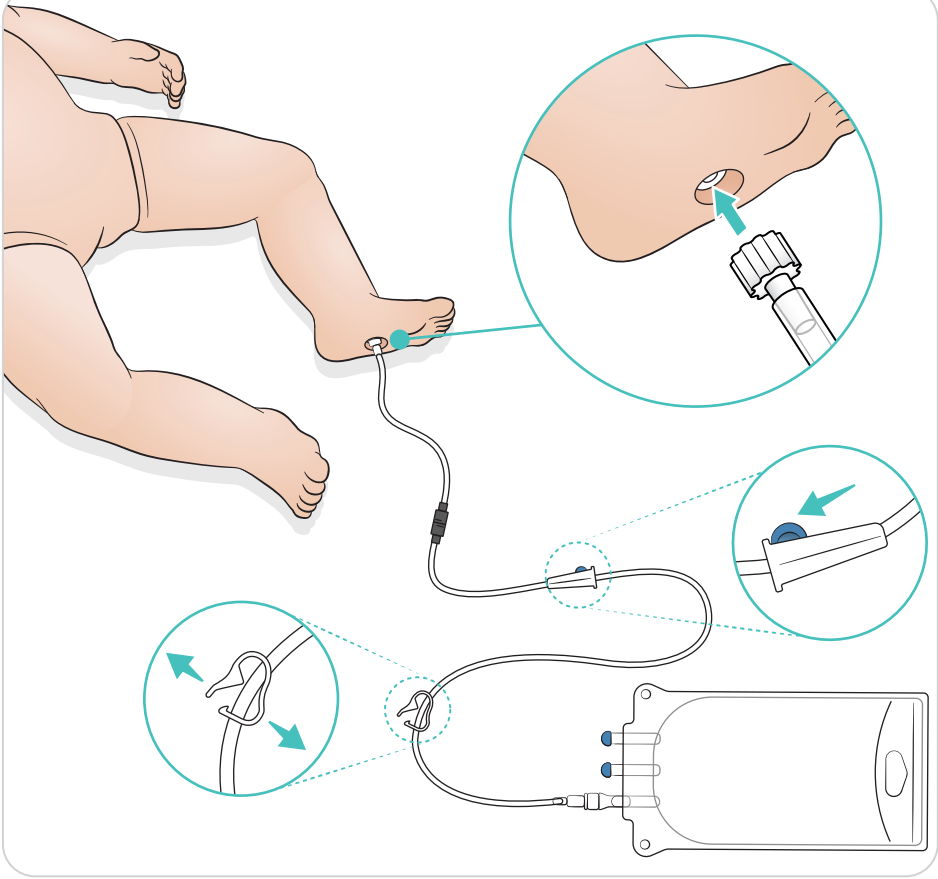
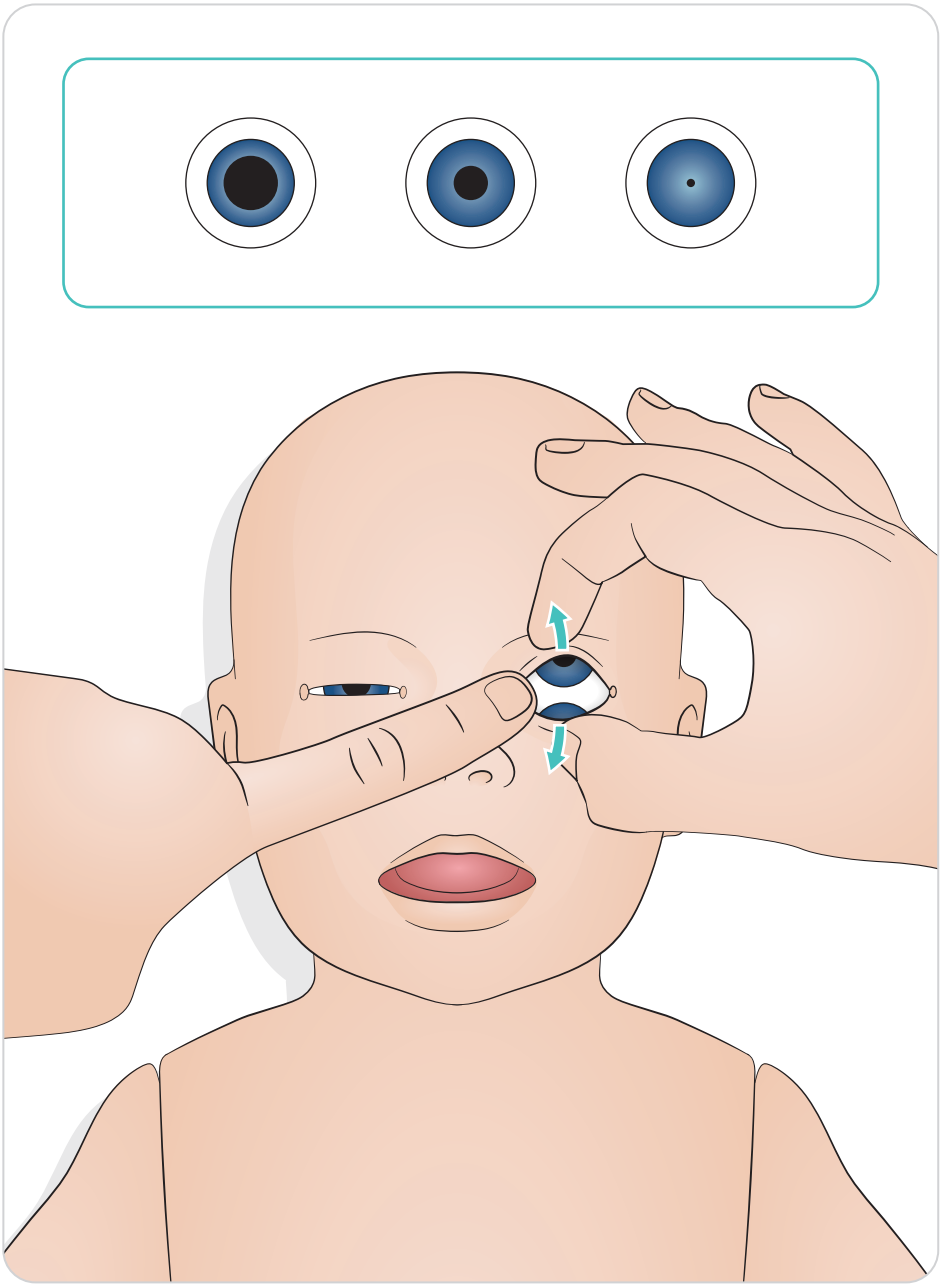
Connect empty drain bag to heel to prepare for intraosseous large volume infusion of medication.





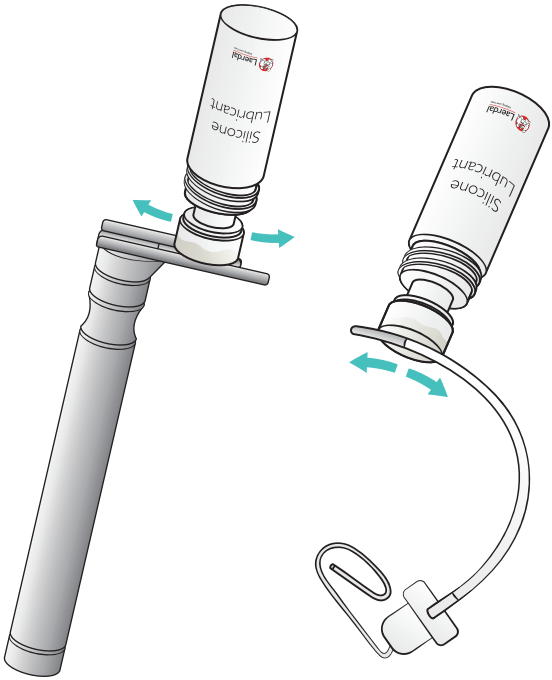
Preparing for Simulation - Choose Pupils

Rotate the eyes to select pupil type.



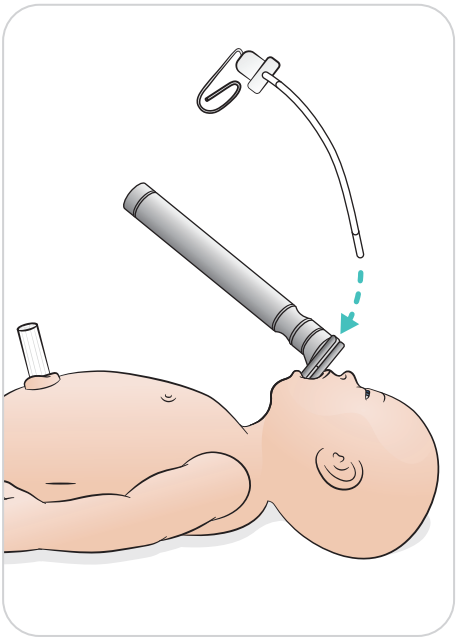
Lubricate Tools

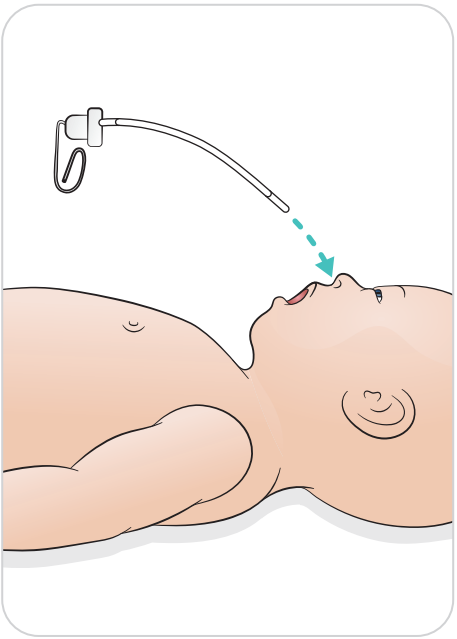
Lubricate laryngoscope blade and tubes prior to insertion into the airway. Non-lubricated instruments and tubes may cause damage to the airway. Only use Silicone Lubricant provided by Laerdal Medical.

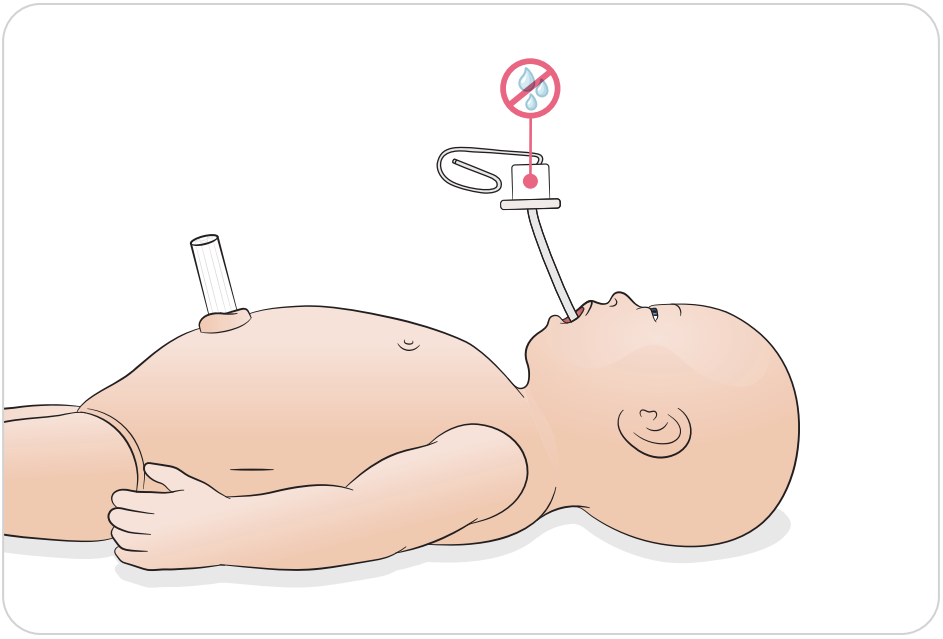


Use - Intubation

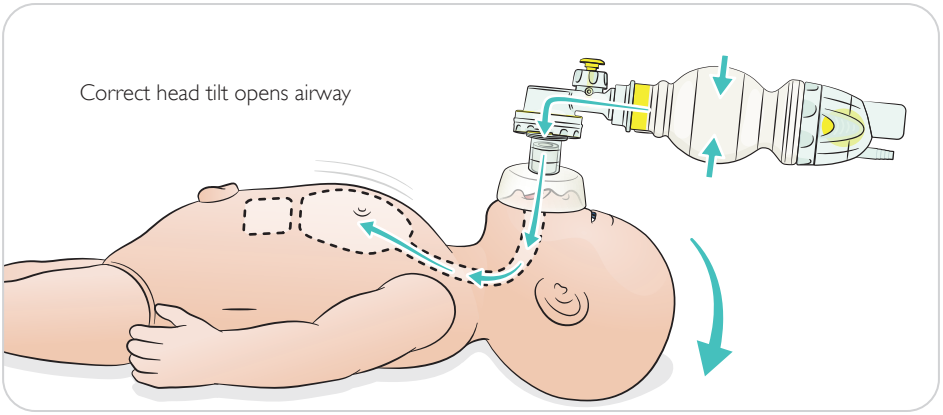
Perform nasal or oral intubation.

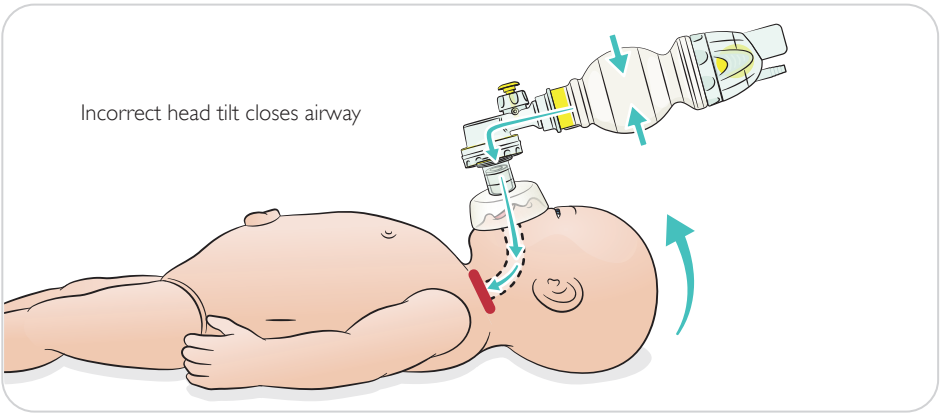


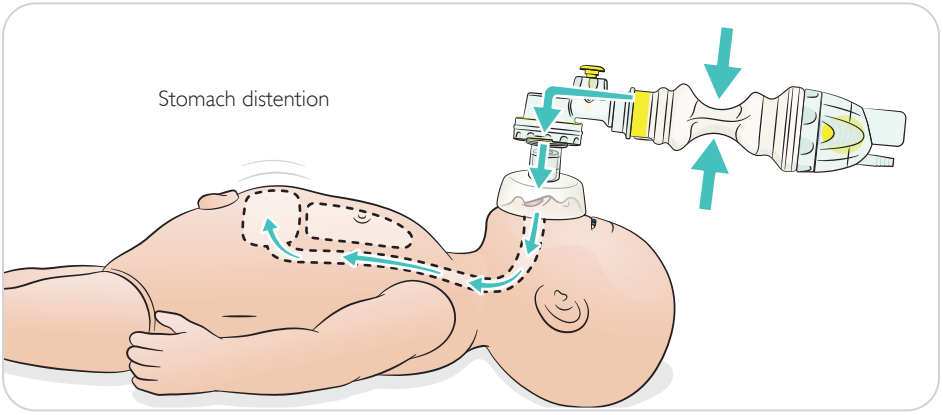




Perform ventilations with visual chest rise.

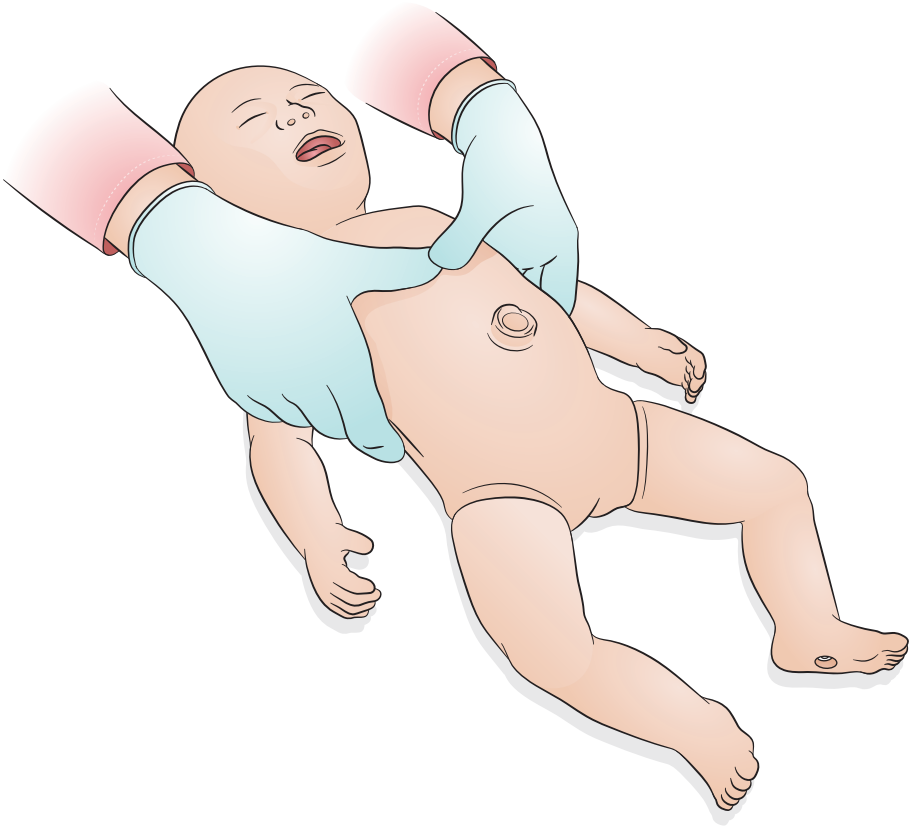




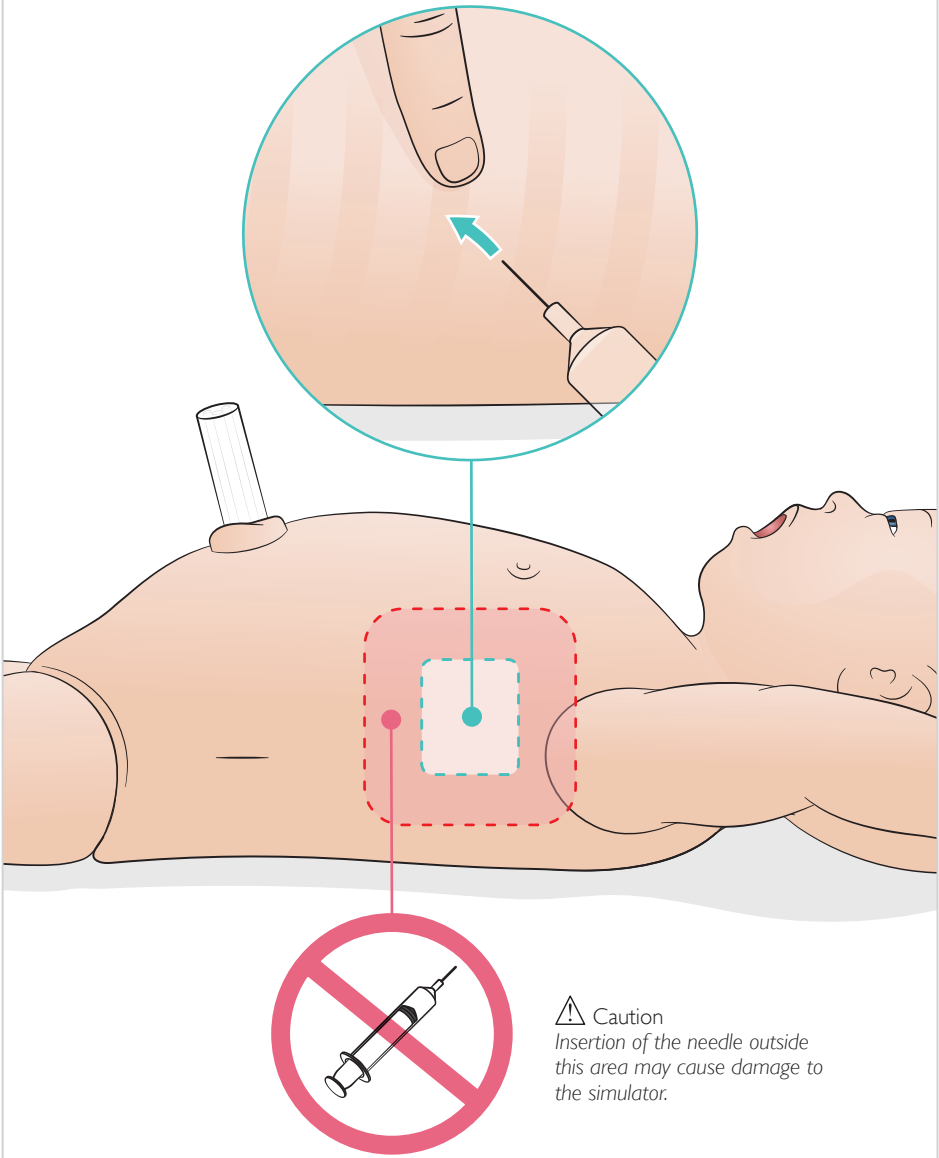


Use - CPR

Perform basic CPR.



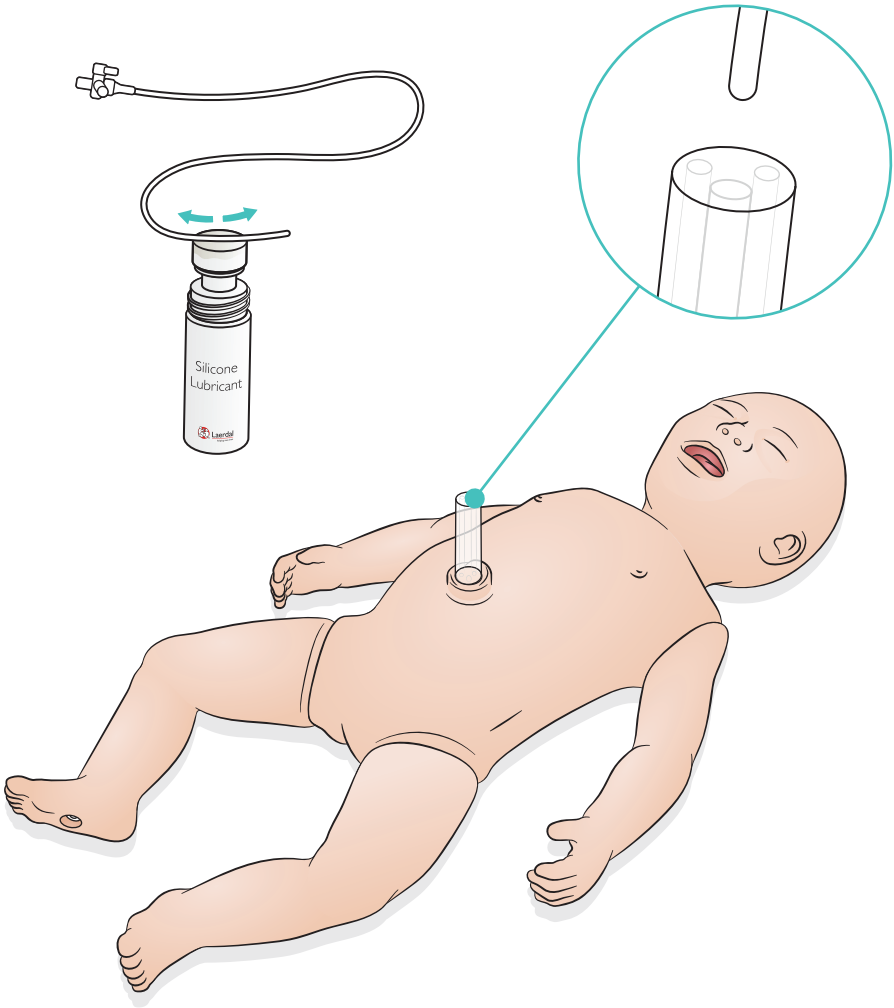
Insert the needle in the intercostal space between the 4th and the 5th rib.



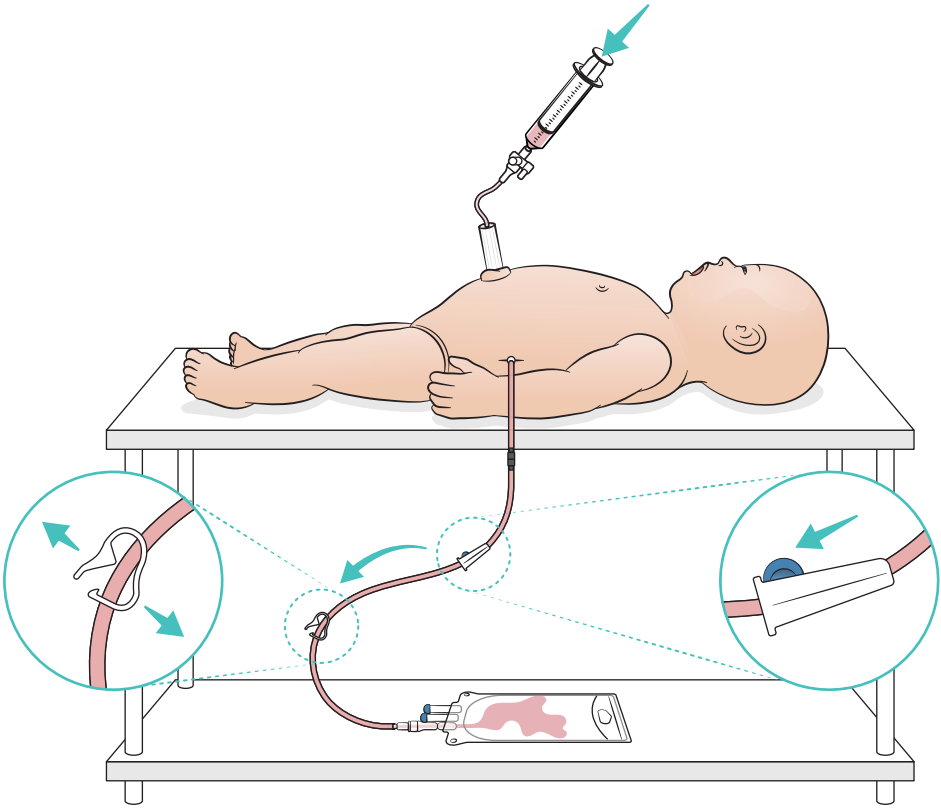
⚠ Caution
Insertion of the needle outside this area may cause damage to the simulator.

Use - Umbilical Venous Catheterization

Simulated umbilical cord with venous and arterial access.
Simulated blood flashback on cannulation.



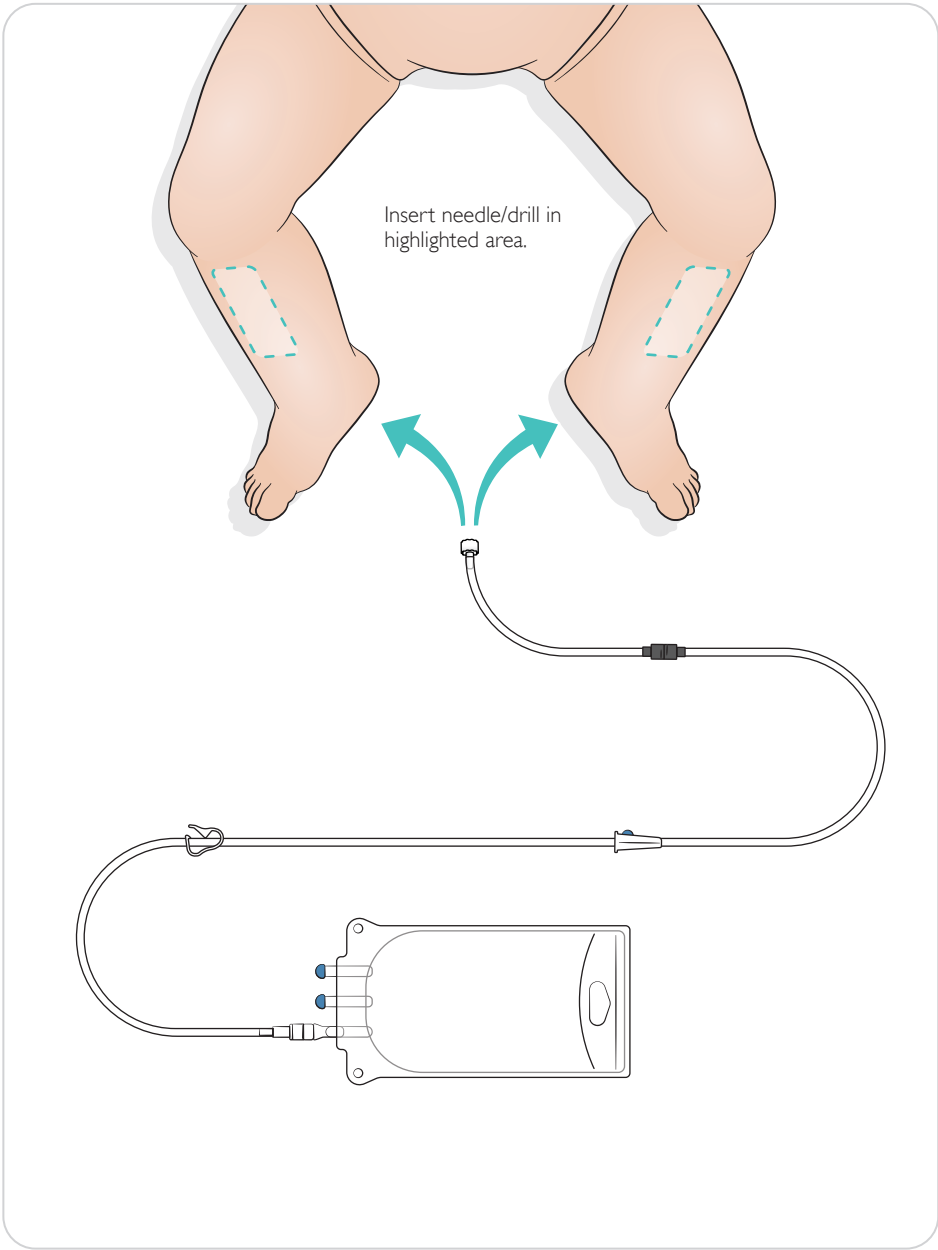
For large volume infusions of fluid (exceeding 10 ml), connect empty drain bag to simulator.



Use - IO Leg

Note

The IO Leg should be patched or replaced after each simulation when using fluids.

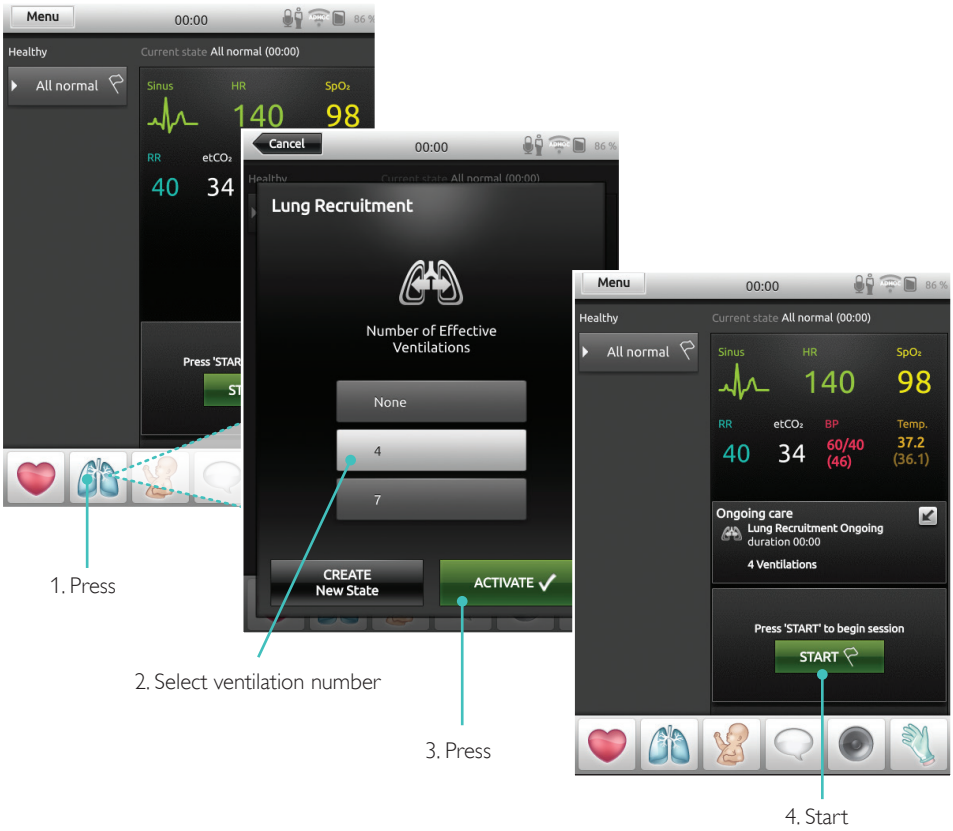


Lung Recruitment Settings

Change between 4 and 7 opening breaths before you start session.

SimPad Plus

Activate Lung Recruitment in Manual Mode before starting scenario.

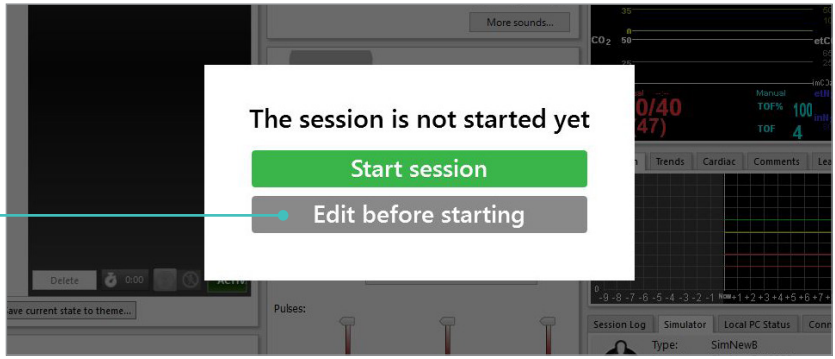


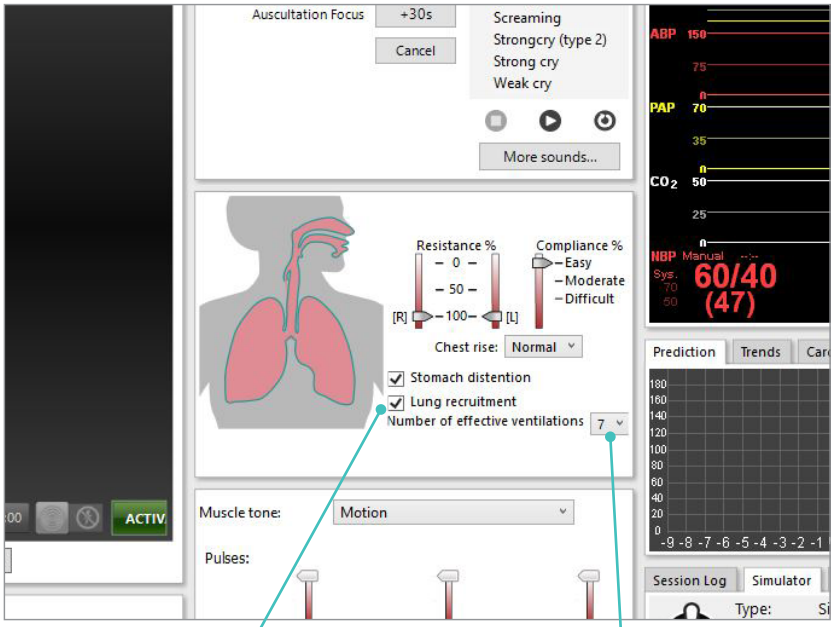
Use - Lung Recruitment Settings

LLEAP

Activate Lung Recruitment in Manual Mode before starting scenario.

1. Press





2. Check this box to engage Lung Recruitment

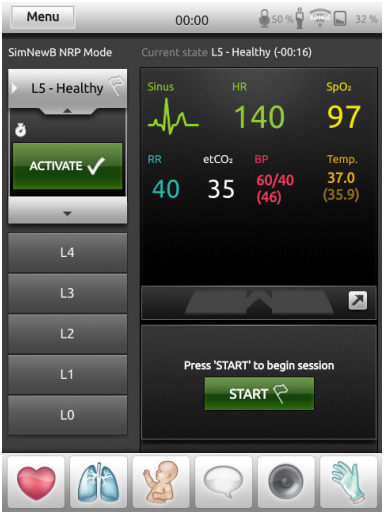
3. Select ventilation number

Level Settings

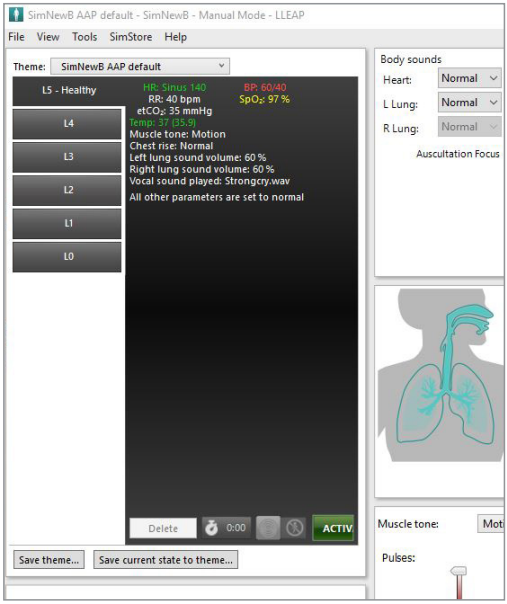
Use Levels to simplify operation when running sessions in Manual Mode. Each Level 0 - 5 represents a predefined set of vital signs.

Toggle directly between Levels as the session progresses to change the clinical state of SimNewB.

SimPad Plus



LLEAP



Care and Cleaning

General Care

- To maintain simulator skins, wash hands before use and place the simulator on a clean surface.
- Use gloves during simulation scenarios. Avoid using colored plastic gloves, as they may cause discoloration of the simulator skin.
- If a training session involves the use of fluids in the Umbilical Reservoir and IO Leg, drain the fluid immediately after the training session.

Skin

- Use a lint free cloth to remove dirt and dust.
- Clean skin with mild soap and water. Do not submerge.
- To remove birthing lubricant, use lukewarm soapy water.

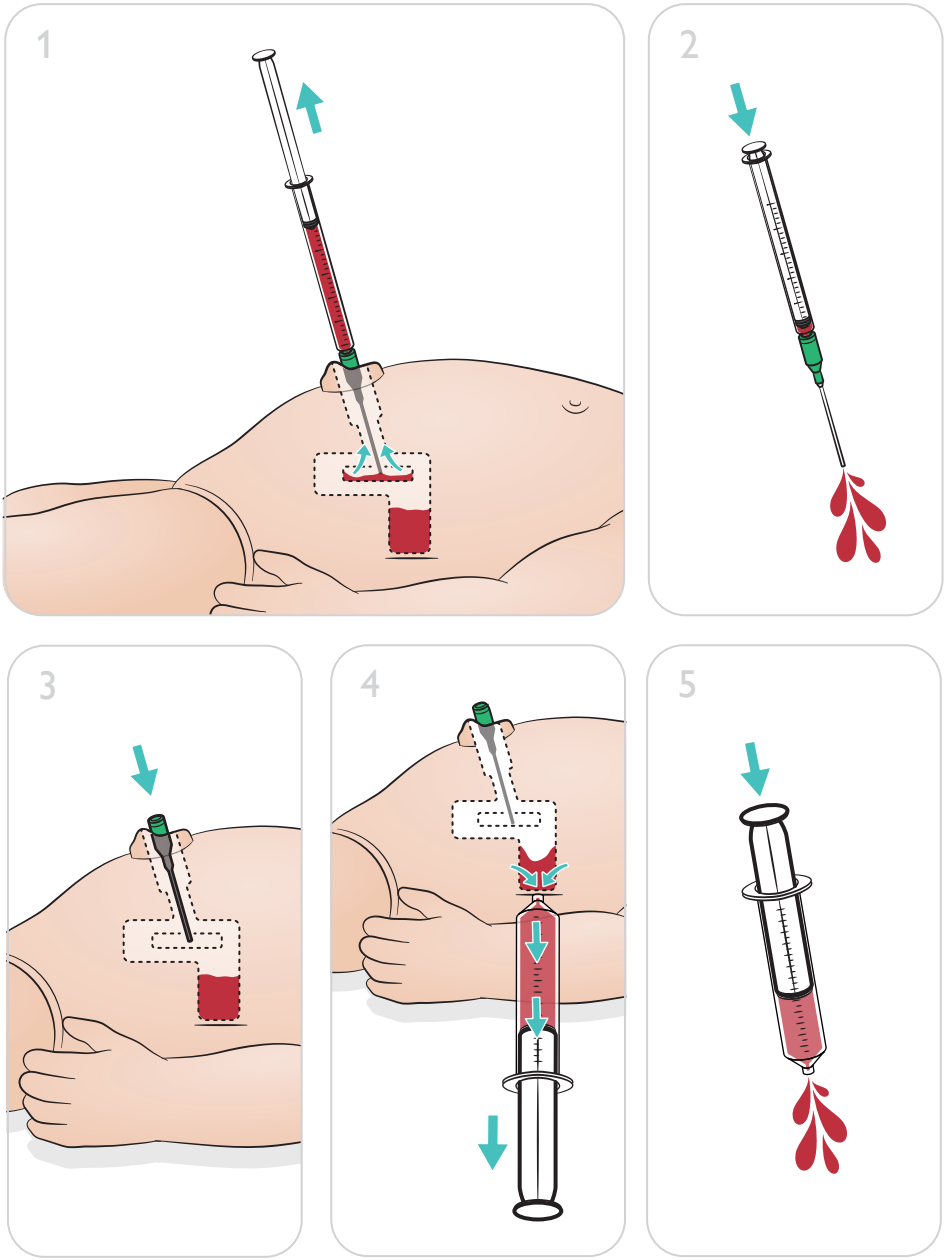
Notes

These can discolor the manikin:

- *Pigments from lipstick and pens*
- *Latex gloves*
- *Using clothes other than what is originally provided with the simulator.*

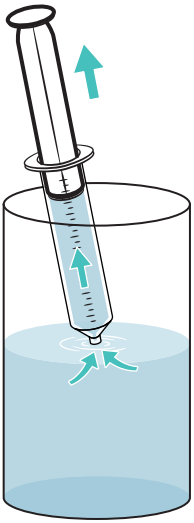
Cleaning Umbilical Reservoir

Flush with water and repeat until clean.



Note
Remove the needle from the navel when the cleaning procedure is completed.

6



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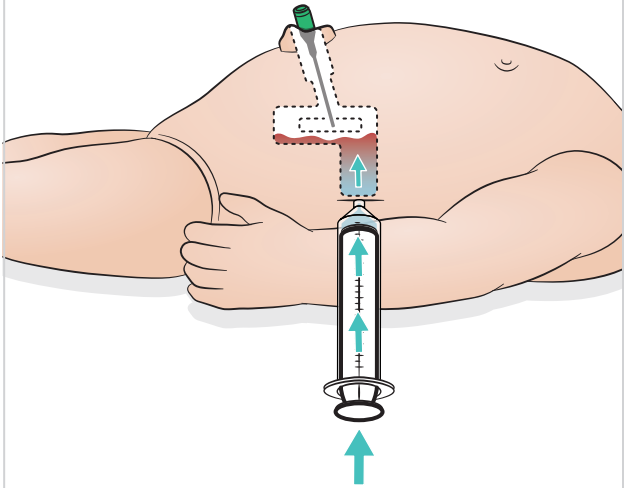

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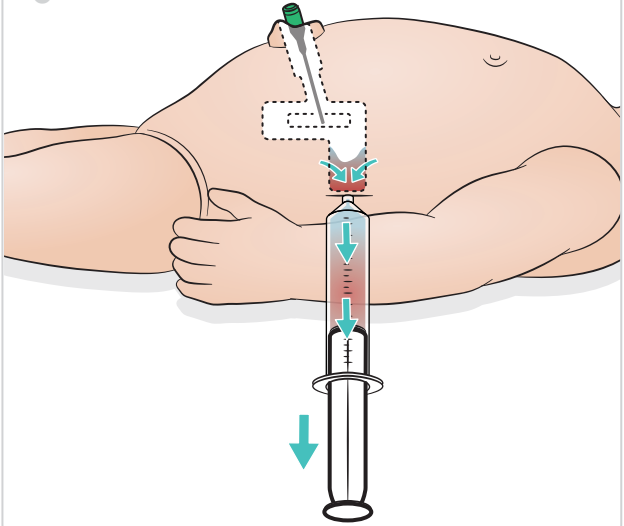

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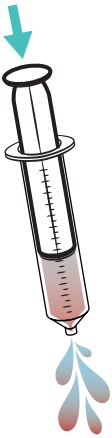
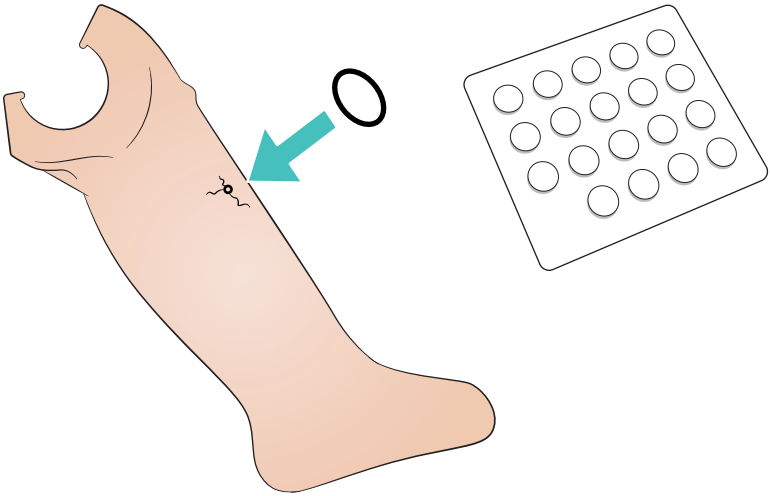


Repair IO Leg Module

After performing IO procedures using fluids, clean and repair, or replace the IO leg module.

1



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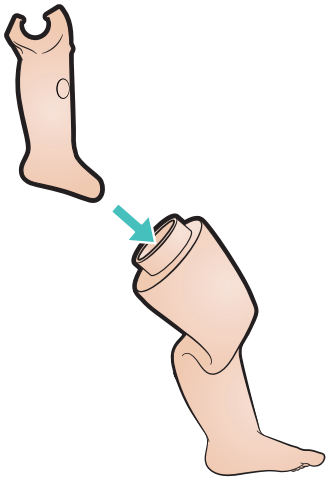

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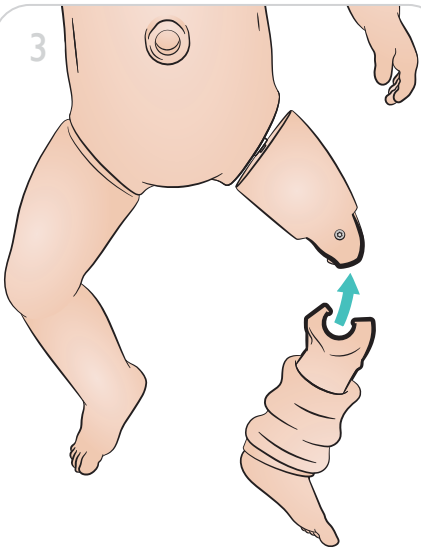
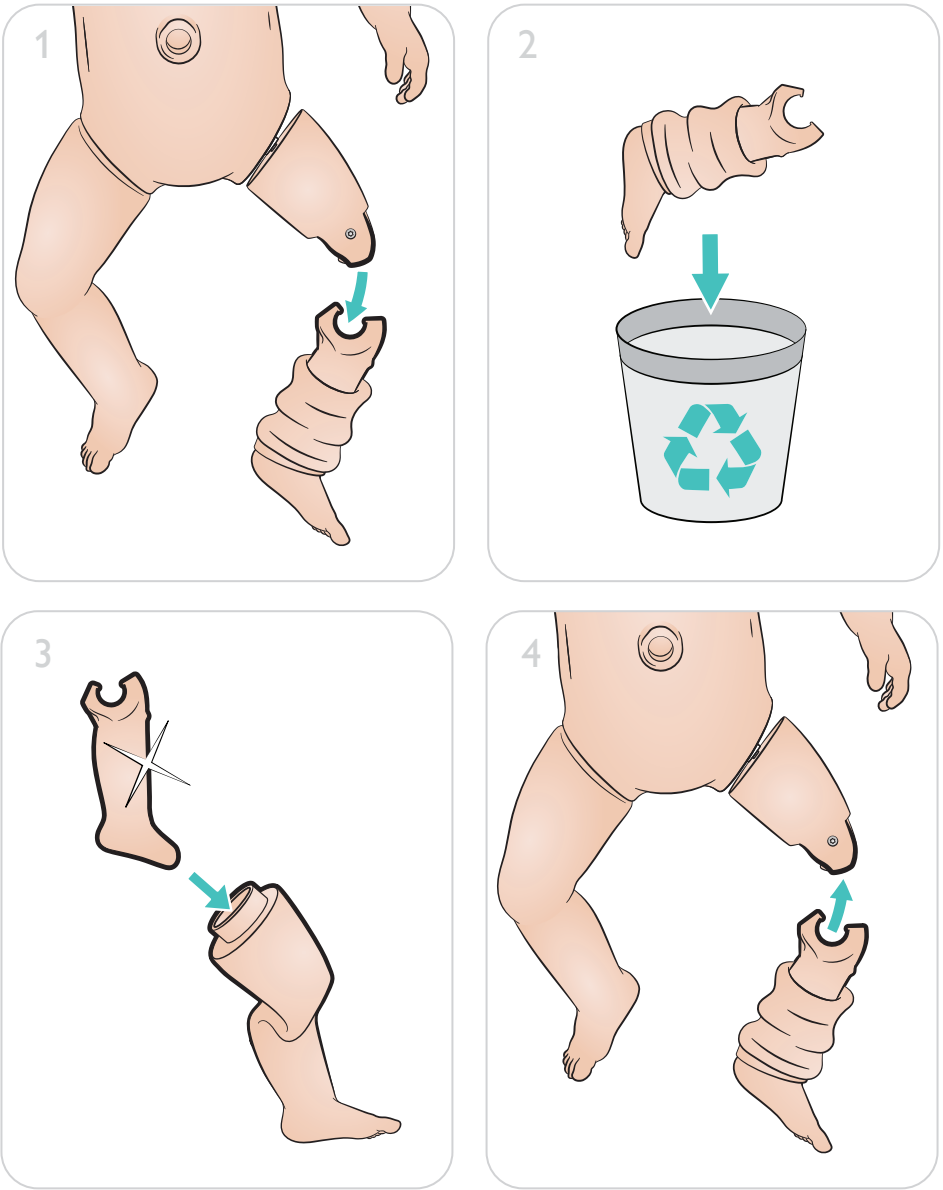


Remove and Replace IO Leg Module



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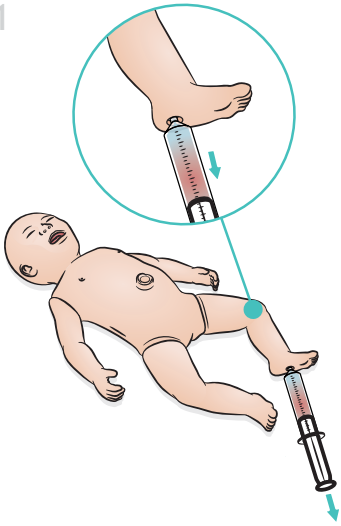

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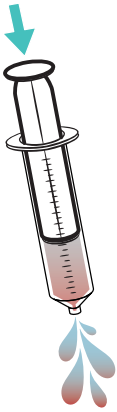

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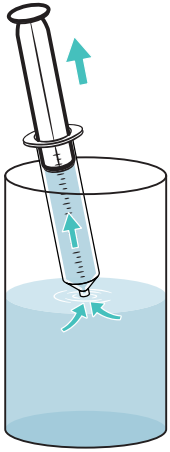

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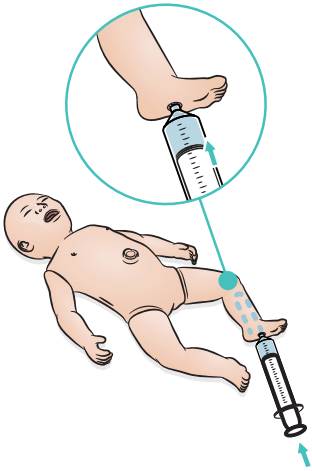

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Frequently Asked Questions

Customer Service

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