

# Equipment Catalogue

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**SIMULATION PROGRAM**  
**CENTRE FOR SIMULATION-BASED LEARNING**

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*Mission Statement:*

*Creating simulation-based educational opportunities for healthcare professionals to provide safer, more effective patient care.*

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## CONTACT INFO & POLICIES

If you would like to use any equipment listed within this catalogue, during your session within the Centre for Simulation-Based Learning (CSBL), please complete our online Resource Booking Form:

[http://simulation.mcmaster.ca/book\\_csbl\\_resource.html](http://simulation.mcmaster.ca/book_csbl_resource.html)

Requests for equipment are reviewed by the Simulation Team on an individual basis.

Please provide a **minimum notice of 4 – 6 weeks** for high-fidelity simulation requests. For all other equipment requests, please kindly provide 5 business days' notice. Training to operate CSBL equipment can be arranged prior to use.

Special permission must be granted for those wishing to use any equipment outside of the CSBL and is dependent on the equipment being requested and current Centre operations. After hours, weekend and student use is possible with the presence of a faculty member.

For questions regarding equipment, please contact a **Simulation Lab Technician:**

Lisa Bonney [bonneyl@mcmaster.ca](mailto:bonneyl@mcmaster.ca) Ext. 20268

Brenda Chrysler [bchrys@mcmaster.ca](mailto:bchrys@mcmaster.ca) Ext. 22047

## STANDARD ROOM EQUIPMENT

Each clinical teaching room is equipped with:

- A computer and wall-mounted monitor
- Learning Space (an audio/visual system for recording and observation)
- Exam table or hospital bed
- Diagnostic wall sets

## MANIKINS & SIMULATORS

### SimMan 3G

Quantity Available: 4



A realistic, full-body adult, patient simulator, SimMan<sup>®</sup> 3G has advanced clinical functionality to teach critical skills. Wireless, self-contained, rugged, and reliable, SimMan 3G helps you meet the critical need for flexible training solutions.

For more information on the manikin and its capabilities please visit: [SimMan 3G](#)

### SimMan

Quantity Available: 1



SimMan is a full body, adult (Male or Female) manikin that allows the simulation of basic and advanced life support skills and assessment to develop both individual and team skills. SimMan is not a wireless manikin.

## SimJunior

Quantity Available: 2



SimJunior facilitates interactive training of life-saving skills and responds to clinical intervention by instructor control and/or pre-programmed scenarios for effective practice of diagnosis and treatment of a patient. With spontaneous breathing, realistic airway, voice, heart, lung, and bowel sounds, ECG and other clinical features, SimJunior is a fully functional pediatric simulator. SimJunior allows observation and recognition of changing vital signs, which enables the instructor to assess the student's skills based on a realistic clinical situation.

For more information on the manikin and its capabilities please visit: [SimJunior](#)

## SimBaby

Quantity Available: 1



SimBaby is an advanced infant patient simulator. With realistic anatomy and clinical functionality, SimBaby allows learners to practice and perfect their skills on an infant in a risk-free environment.

For more information on the manikin and its capabilities please visit: [SimBaby](#)

**Please note our SimBaby is an older model and does not have all of the new features that come with the new SimBaby model.**

## SimNewB

Quantity Available: 1



SimNewB® is a newborn tetherless simulator co-created with the American Academy of Pediatrics, 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 such as lung recruitment maneuvers and advanced airway management.

For more information on the manikin and its capabilities please visit: [SimNewB](#)

## Newborn Baby HAL

Quantity Available: 1



Newborn HAL® allows you to take advanced simulation where you need to go and that can be at an accident scene, in an ER, in a Labor and Delivery room, or in a NICU. “Care in motion” also provides the opportunity for you to measure how well patient “hand-offs” take place.

For more information on the manikin and its capabilities please visit: [Newborn Baby HAL](#)

## SimMom

Quantity Available: 1



SimMom is an advanced full body birthing simulator with accurate anatomy and functionality to facilitate multi-professional obstetric training of birth management, with both manual and automatic delivery modes.

For more information on the manikin and its capabilities please visit: [SimMom](#)

## Resusci Anne

Quantity Available: 4



The Laerdal Resusci Anne Simulator provides the ultimate in Quality CPR simulation training. With basic airway management, vital signs, spontaneous breathing and QCPR feedback during CPR training controlled by an easy to use wireless SimPad system, Resusci Anne Simulator is the new gold standard training simulator for basic and intermediate emergency medical personnel.

For more information on the manikin and its capabilities please visit: [Resusci Anne](#)



## Nursing Anne Simulator

Quantity Available: 1



From basic assessment to advanced practice, Nursing Anne allows students and nursing professionals the ability to practice core skills, enhance clinical knowledge, and experience highly realistic patient encounters that will prepare them to provide the highest level of care. This engaging and robust platform enables nurses to practice a wide range of competencies both as a skills trainer and as a highly realistic female simulator.

For more information on the manikin and its capabilities please visit: [Nursing Anne Simulator](#)

## Harvey – The Cardiopulmonary Simulator

Quantity Available: 1



The full-size manikin realistically simulates nearly any cardiac disease at the touch of a button by varying blood pressure, pulses, heart sounds, and murmurs.

For more information on this equipment and its capabilities please visit: [Harvey Cardiopulmonary Simulator](#)

## Vimedix Cardio Ultrasound Simulator

Quantity Available: 1



Vimedix is an innovative ultrasound training platform that makes it easier and faster to learn cardiac ultrasound. Our manikin-based simulator allows healthcare professionals to learn the psychomotor and cognitive skills needed for ultrasound scans. With over 150 pathologies and self-directed instructional content, Vimedix allows trainees to gain exposure to cases they may not normally get to see and also practice their skills without any risk to real patients.

For more information on this equipment and its capabilities please visit: [Vimedix Cardio Simulator](#)

**We only have a selected number of pathologies available, please contact our Sim Lab Technician for the full list of pathologies.**

## PARTIAL TASK TRAINERS: Physical Examination Skills

### Abdominal Examination Trainer

Quantity Available: 1



An anatomically accurate adult male torso, used to teach and practice the palpation, auscultation and percussion elements of abdominal or gastrointestinal (GI) examination. Interchangeable organs and pathologies. Ideal for OSCE preparation and assessment.

For more information on this equipment and its capabilities please visit: [Abdominal Examination Trainer](#)

## Breast Examination Trainer

Quantity Available: 4



The Basic Breast Examination Trainer provides a highly realistic learning platform for acquiring the skills required to perform Clinical Breast Examination (CBE). Featuring 6 readily interchangeable and multi-positional pathologies, providing healthcare professionals with the tools to identify various complications and pathologies, including carcinomas, cysts, fibrocystic disease and fibroadenoma.

For more information on this equipment and its capabilities please visit: [Breast Examination Trainer](#)

## Gynecologic Skills Trainers

Quantity Available: 6



A lifelike female pelvis for developing diagnostic skills in gynecologic procedures, anatomical instruction, abdominal palpation, and speculum instruction. These trainers allow the comprehensive, stress-free introduction of gynecological examinations, or more advanced tactile comparisons of pelvic pathologic conditions in a classroom setting, easing the way into clinical experience.

For more information on this equipment and its capabilities please visit: [EVA Gynecologic Model](#)  
[ZOE Gynecological Trainer](#)

## Childbirth Model

Quantity Available: 7



This childbirth simulator provides an excellent simulation of the normal delivery experience for the student and educator, as well as instruction in abnormal and multiple deliveries. It has a life-size pelvic cavity with major anatomic landmarks and may be used for demonstration of; normal vaginal delivery, complete, frank and footling breech birth, prolapse of umbilical cord, and placenta previa.

For more information on this equipment and its capabilities please visit: [Childbirth Model](#)

## PROMPT Flex Birthing Simulator (80100) with PPH Module

Quantity Available: 1



The PROMPT Flex Standard (Model # 80100) is an anatomically correct birthing simulator with a modular design, allowing for multiple training scenarios. It is an ideal training solution for all skills relating to both routine and non-routine deliveries, and can be used for hybrid simulation as well as stand-alone bench top training. The additional PPH module allows training in the management of post-partum bleeding, and offers a realistic simulation of an atonic and contracting uterus.

For more information on this equipment and its capabilities please visit: [PROMPT Flex Birthing Simulator](#)

## Rectal Exam Trainers

Quantity Available: 3



A realistic representation of buttocks, anus and rectum allowing for the practice of diagnostic skills associated with rectal examination. An additional rectal examination perineum is included which contains 2 rectal pathologies. This model allows for digital examination of prostate, digital rectal examination, insertion and use of anoscope and proctoscope. Includes interchangeable perineum's and prostates.

For more information on this equipment and its capabilities please visit: [Rectal Exam Trainer](#)

## Male Pelvic Exam Trainers

Quantity Available: 2



This anatomically accurate trainer is an ideal platform for teaching and learning 'hands-on' male pelvic examination and diagnosis. It's user-friendly design, combined with clear anatomic landmarks and a range of pathologies creates a realistic training experience for students across all levels of healthcare education. Model includes normal anatomy, testicular abnormalities, abdominal and pelvic pain, dry catheterization and allows for testicular and rectal examinations and dry catheterization.

For more information on this equipment and its capabilities please visit: [Male Pelvic Trainer](#)

## PARTIAL TASK TRAINERS: Specialized Skills

### Adult Airway Management Trainers

Quantity Available: 8



This airway management trainer realistically simulates a non-anesthetized patient. It can also be used to demonstrate and practice intubations, ventilation, suction and bronchoscopy. Realistic practice is the key to developing proficiency in airway management skills. The Airway Management trainer's lifelike upper torso and head simulates real-world complications when practicing a variety of intubation, ventilation, and suction techniques.

For more information on this equipment and its capabilities please visit [Airway Management Trainer](#)

### Pediatric Airway Management Trainers

Quantity Available: 2



The Pediatric intubation trainer realistically simulates the head and upper body of a six-year old patient. It is specifically designed for learners in the field of pediatric airway management techniques. This trainer has realistic chest rise/fall and allows for intubation, oral/nasal airway insertion, suctioning, and positive pressure ventilation. Includes endotracheal tubes and oropharyngeal and nasopharyngeal airways.

## Neonatal Intubation Trainers

Quantity Available: 2



The Neonatal intubation trainer is a lifelike manikin head which realistically simulates that of a newborn baby. It is specifically designed for learners in the practice of oral and nasal intubation. It allows for positive pressure ventilation and bag-valve-mask ventilation. Correct tube placement can be checked by practical inflation test.

## Difficult Airway Trainer

Quantity Available: 2



The Deluxe Difficult Airway Trainer is a lifelike manikin torso which realistically simulates a patient. This model features a manually inflatable tongue to simulate an obstructed airway and is specifically designed for training professionals in the practice of difficult airway management.

For more information on this equipment and its capabilities please visit: [Difficult Airway Trainer](#)

## Cricothyrotomy Trainer

Quantity Available: 2



Designed for learning and practicing the technique necessary to perform an emergency cricothyrotomy. Palpable landmarks are accurately placed and include the cricoid and thyroid cartilage. The prominent laryngea is prominent on the hyperextended neck.

**The CSBL has limited stock of kits for procedures, please contact either Simulation Lab Technician (Lisa Bonney [bonneyl@mcmaster.ca](mailto:bonneyl@mcmaster.ca) or Brenda Chrysler [bchrys@mcmaster.ca](mailto:bchrys@mcmaster.ca)) for further details.**

## CPR Training Manikins

Quantity Available: 8 Adult (7 Prestan, 1 Brayden) + 1 Infant + 1 Child



Realistic to the eye and touch, these CPR manikins provide students with audible feedback for the depth of compressions. The easy to set up Face-Shield Lung-Bags make quick work of cleaning and maintenance. The CPR Rate Monitor (located in the shoulder) provides instant visual feedback on compression rates.

For more information on this equipment and its capabilities please visit:

[Brayden CPR Training Manikin With White Indicator Lights](#)

[Prestan Adult CPR-AEDS manikin with CPR monitor](#)

[Prestan Infant CPR-AEDS manikin with CPR monitor](#)



## Adult Multi-Venous IV Training Arms

Quantity Available: 7



Full-size lifelike arms, which realistically simulates that of a patient. Specifically design for training in the practice of adult venipuncture. Anatomy represented: Dorsal veins of hands (3), Cephalic, Median, Basilic, Antecubital.

For more information on this equipment and its capabilities please visit: [Adult Multi-Venous IV Training Arms](#)

## Vascular Access Training Pads

Quantity Available: 3 + 1 with nerve block capabilities

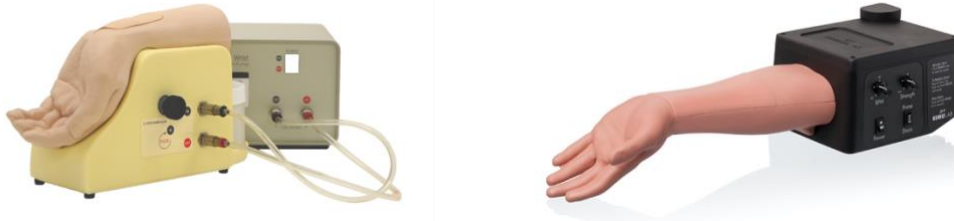


Branched 4 Vessel vascular access ultrasound training model helps clinicians develop, practice and maintain the skills necessary for ultrasound guided venous access and arterial access procedures. Excellent for clinicians beginning to use ultrasound as well as more advanced users seeking more challenging vascular access insertion technique training. The branched vessels offer multiple training opportunities; independent linear vessels for initial training in addition to multiple overlapping branched vessels for more advanced ultrasound training. Can be used with any ultrasound imaging system.

For more information on this equipment and its capabilities please visit: [Vascular Access Training Pads](#)

## Arterial Line Vascular Access Ultrasound Trainers

Quantity Available: 2 (1 of each)



Full-size lifelike arms realistically simulate that of a patient. They are designed to practice taking blood samples with high reality anatomy (radial artery) and adequate tissue feedback. The ABG trainer can work with different blood pressures and pulses with the realism of patients in variable states.

For more information on this equipment and its capabilities please visit: [Simulab Arterial Line Trainer Arterial Puncture Wrist](#)

**The CSBL will provide syringes, needles and other supplies for practice.**

## Ultrasound Guided Central Line Trainer

Quantity Available: 2



This upper torso ultrasound guided central line placement trainer allows users to develop and practice the skills necessary to gain proficiency in using ultrasound to guide central catheter insertions in the internal jugular vein (IJ), subclavian vein, and axillary veins, and has anatomical landmarks such as venous and arterial vessels as well as accessory bony structures.

For more information on this equipment and its capabilities please visit: [Blue Phantom Central Line Trainer](#)

**The CSBL has a limited stock of kits for procedures, please contact either Simulation Lab Technician (Lisa Bonney [bonneyl@mcmaster.ca](mailto:bonneyl@mcmaster.ca) or Brenda Chrysler [bchrys@mcmaster.ca](mailto:bchrys@mcmaster.ca)) for further details. Recommended needle size is between 18-21gauge and catheter size up to 7 Fr.**

## IV Torso Trainer

Quantity Available: 1



The Laerdal IV Torso gives you the possibility to practise IV access to the external jugular vein, to the internal jugular vein via the anterior, central and posterior approach, to the subclavian vein and to the femoral vein. Long catheters can also be placed into the training model. A pulse bulb enables the instructor to create a palpable pulse in the manikin's arteries.

For more information on this equipment and its capabilities please visit: [Laerdal IV Torso](#)

**The CSBL has a limited stock of kits for procedures, please contact either Simulation Lab Technician (Lisa Bonney [bonneyl@mcmaster.ca](mailto:bonneyl@mcmaster.ca) or Brenda Chrysler [bchrys@mcmaster.ca](mailto:bchrys@mcmaster.ca)) for further details.**

## Lumbar Puncture Baby

Quantity Available: 1



The pediatric lumbar puncture trainer simulates a two-week-old infant that can be positioned either lateral or decubitus. The body form is anatomically correct with a partial iliac crest and umbilicus. The replaceable tissue has L3-L5 vertebrae with partial sacrum and the gluteal crest. Each tissue includes a spinal cord filled with simulated CSF and the epidural venous plexus filled with simulated blood.

**The CSBL does not have lumbar puncture kits for infant size, however, there are needles and syringes of various sizes available. Please contact either Simulation Lab Technician (Lisa Bonney [bonneyl@mcmaster.ca](mailto:bonneyl@mcmaster.ca) or Brenda Chrysler [bchrys@mcmaster.ca](mailto:bchrys@mcmaster.ca)) for further details.**

## Lumbar Puncture & Spinal Epidural Ultrasound Capable Trainers

Quantity Available: 1



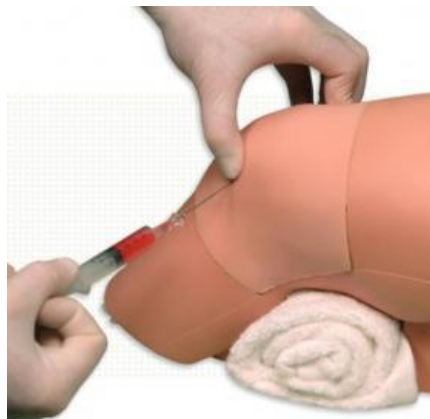
This ultrasound compatible trainer includes the lumbar vertebrae, iliac crest, spinous process, ligamentum flavum, the epidural space and dura with a reduction disc thickness for a training variation. It is an excellent training platform for lumbar puncture, lumbar epidural, and cervical epidural procedures. It can be used for blind insertion techniques or ultrasound-guided lumbar puncture and spinal epidural procedures. It can be positioned in the upright or lateral decubitus position allowing users to accurately position the model for appropriate training scenarios.

For more information on this equipment and its capabilities please visit: [Lumbar Puncture & Spinal Epidural Trainers](#)

**The CSBL has a limited stock of lumbar puncture kits for procedures, please contact either Simulation Lab Technician (Lisa Bonney [bonneyl@mcmaster.ca](mailto:bonneyl@mcmaster.ca) or Brenda Chrysler [bchrys@mcmaster.ca](mailto:bchrys@mcmaster.ca) ) for further details. Recommended needle size is between 18-21gauge.**

## Arthrocentesis Training Model

Quantity Available: 1



Practice diagnosing and managing the presence of knee effusion with this anatomically correct arthrocentesis model. The trainer represents an extended left leg with ultrasound compatible areas,

including the patella, patellar ligament, tibia, fibula, femur, synovial sac, and synovial fluid. Synovial fluid can be aspirated from a joint cavity using the medial or lateral approach. And insertion sites include suprapatellar and parapatellar. The model is ultrasound compatible.

For more information on this equipment and its capabilities please visit: [Arthrocentesis Training Model](#)

## Paracentesis Ultrasound Training Model

Quantity Available: 1



This ultrasound guided paracentesis training model is designed to aid clinicians in the use of ultrasound to recognize intraperitoneal fluid collections and development of the psychomotor skills associated with ultrasound guided paracentesis procedures. The superb realism helps users learn to use ultrasound to identify appropriate anatomy and to guide needle and catheter placements in the mid abdominal region in a patient with intraperitoneal fluid consistent with hemoperitoneum, ascites or other pathological scenarios.

For more information on this equipment and its capabilities please visit: [Paracentesis Training Model](#)

**The CSBL has limited stock of kits for procedures, please contact either Simulation Lab Technician (Lisa Bonney [bonneyl@mcmaster.ca](mailto:bonneyl@mcmaster.ca) or Brenda Chrysler [bchrys@mcmaster.ca](mailto:bchrys@mcmaster.ca) ) for further details.**

## Thoracentesis Ultrasound Training Model

Quantity Available: 1



This ultrasound training phantom aids users in developing and practicing the skills associated with a mid-scapular approach to ultrasound guided thoracentesis procedures. This model is excellent for assisting clinicians in gaining proficiency in using ultrasound to identify and guide needle and small gauge catheter insertions in a patient with pleural effusions for diagnostic and/or therapeutic purposes.

For more information on this equipment and its capabilities please visit: [Thoracentesis Training Model](#)

**The CSBL has a limited stock of thoracentesis kits for procedures, however, can provide syringes and needles of appropriate size for practice. Please contact either Simulation Lab Technician (Lisa Bonney [bonneyl@mcmaster.ca](mailto:bonneyl@mcmaster.ca) or Brenda Chrysler [bchrys@mcmaster.ca](mailto:bchrys@mcmaster.ca)) for further details.**

## Pericardiocentesis Ultrasound Guided Trainer

Quantity Available: 1



This simulator allows trainees to practice pericardiocentesis: inserting the needle under ultrasound guidance using subxiphoid or parasternal approach, piercing the pericardial sac and aspirating pericardial fluid.

For more information on this equipment and its capabilities please visit: [Pericardiocentesis Trainer](#)

**The CSBL has limited stock of kits for procedures, please contact either Simulation Lab Technician (Lisa Bonney [bonneyl@mcmaster.ca](mailto:bonneyl@mcmaster.ca) or Brenda Chrysler [bchrys@mcmaster.ca](mailto:bchrys@mcmaster.ca)) for further details.**

## Chest Drain & Needle Decompression Trainer

Quantity Available: 1



Designed to meet the specific requirements of healthcare professionals training in surgical or guidewire-assisted thoracostomy. This product allows for a variety of chest drain insertion techniques to be performed including ultrasound-guided techniques.

For more information on the manikin and its capabilities please visit: [Chest Drain & Needle Decompression Trainer](#)

**The CSBL has limited stock of kits for procedures, please contact either Simulation Lab Technician (Lisa Bonney [bonneyl@mcmaster.ca](mailto:bonneyl@mcmaster.ca) or Brenda Chrysler [bchrys@mcmaster.ca](mailto:bchrys@mcmaster.ca) ) for further details.**

## OTHER EQUIPMENT

### Ultrasound Machines

Quantity Available: 4 (2 Vscan, 1 Venue 40, 1 Logiq E)

[GE Venue 40 Ultrasound Machine](#)

[GE Logiq E Ultrasound Machine](#)

[GE Viscan Portable Ultrasound](#)

GE Venue 40 and Logiq E have cardiac, vascular and abdominal probes available for use.

GE Viscan offers a dual probe allowing views for cardiac, abdomen, carotids, thyroid and lungs.





## Bronchoscope

Quantity Available: 1



Bronchoscopy is a technique of visualizing the inside of the airways for many different diagnostic and therapeutic purposes. The Bronchoscope can be inserted through the airways, usually the nose or mouth, occasionally through a tracheostomy. It is also utilized as an adjunct with a difficult airway.

## GlideScope Video Laryngoscope System

Quantity Available: 2



The GlideScope Video Laryngoscope system (GVL) is useful for anterior airways, neonatal intubations, obese patients, trauma patients, and patients with limited neck extension. Additionally, it is useful for teaching purposes, verification of endotracheal (ET) position, nasal intubation and ET exchange. The GVL is designed for “1<sup>st</sup>” pass success, providing a consistent clear view of a patient’s airway, enabling quick intubation. Adult and Pediatric appropriate laryngoscope blade sizes are available.

## Crash Cart with Zoll M & R Series Defibrillators

Quantity Available: 3

Fully stocked for use with simulated adult or pediatric patients. Simulated resuscitation medications, airway management devices, vascular access supplies & equipment (including IO drill), and fluid management supplies.



## Sling Lift

Quantity Available: 1



Specifically, for lifting, repositioning and transferring residents who are limited in their mobility.

## Ventilator (LTV 1200 Series MR)

Quantity Available: 1



This ventilator is for use in all patients 5 kg and above. Allows for invasive and non-invasive modes of ventilation. Offers a wide range of ventilation therapies to meet demanding patient needs, including volume control, pressure control, pressure support and spontaneous breath types.