Caesar™
The World’s Most Rugged Patient Simulator

CAE Healthcare
Caesar
Point-of-Injury Trauma Care Simulator

Built for trauma, disaster response and combat casualty care, Caesar is the most rugged patient simulator available today. With life-sized realism and modeled physiology, Caesar offers clinical accuracy for basic to advanced point-of-injury training. Deploy Caesar to any challenging climate, terrain or training environment. Through tourniquet placements, patient decontamination, and extreme temperatures and conditions, Caesar remains tough-skinned and resilient.

- Realistic airway
- Automated verbal response and sounds
- Surgical cricothyrotomy
- Carotid pulse
- Articulation of neck, back, shoulders, elbows, forearms and wrists
- Blinking and directional eye movement
- Realistic size (193 cm/6'4") and weight (68 kg/150 lbs)
- Bilateral needle decompression
- Normal chest excursion
- Palpable ribs
- Bilateral radial pulse
- Bilateral femoral pulse
- Six bleeding ports in arms, legs, neck and abdomen are controlled by two channels
- Wireless and tetherless with blood on board
Tourniquet sensors in four limbs provide accurate response to properly applied tourniquets

Modular limbs with healthy legs optional

Ruggedized for harsh environments
Rigorously tested by CAE Healthcare’s team of engineers, Caesar is proven to withstand impact, extreme temperatures, humidity and exposure to rain, dirt, dust, and sand.

Resilient for trauma training
Caesar’s 10 Simulated Clinical Experiences (SCEs) are aligned with Tactical Combat Casualty Care (TCCC) curriculum, and include head injury, multiple gunshot wounds, improvised explosive device (IED) trauma and amputation.

Durable, realistic airway
Caesar’s durability-tested airway allows realistic practice of airway management procedures and supports most airway adjuncts.

Dramatic bleeding and moulaged limbs
With the capacity to hold up to 1.4 liters of blood on board, Caesar produces dramatic bleeding and automatic physiological responses to tourniquet applications. His interchangeable legs are moulaged for amputation or shrapnel wounds.

Enhanced realism for needle decompression
Needle decompression is more realistic, requiring digital palpation and providing a clinically accurate target area for learners.

Responsive speech and eye movements
Caesar’s eyes and speech reflect his states of consciousness as well as medical conditions. His speech patterns change when he is treated.

Fully posable
Caesar’s neck, back, shoulders, elbows, forearms and wrists have a full range of motion. He can be dragged by the arm or posed sitting up or lying on his side.

Caesar “Trains the Trainers” at the NATO Centre of Excellence for Military Medicine in Budapest, Hungary

In 2011, the NATO Centre of Excellence for Military Medicine in Budapest, Hungary, hosted a “train the trainer” course for military personnel who manage advanced first aid for battle casualties. Twelve experienced NATO medical instructors from Germany, Holland, Hungary and Romania participated in both classroom and field training. Using Caesar, they reviewed practical usage of tourniquets, bandaging and needle decompression.

“During the First Responder Trainer Training, the NATO Centre of Excellence for Military Medicine successfully made use of the Caesar trauma patient simulator. Caesar superbly facilitated near realistic practice of procedures that were previously taught in a classroom environment, which highly increased the success and effectiveness of the whole training.” — Lieutenant Colonel Rob Meijering (RNLAF), Deputy Chief Training Branch, NATO Centre of Excellence for Military Medicine in Budapest, Hungary

Caesar “Trains the Trainers” at the NATO Centre of Excellence for Military Medicine in Budapest, Hungary
Müse + Tablet PC
Ease of Operation and Rugged Portability

Simulated Clinical Experiences (SCEs) bundle ready-to-go patient, scenarios, educational content and setup preferences to automatically load together when you run a SCE.

SCE timeline provides the ability to place bookmarks throughout a SCE and to return to the patient’s bookmarked physiology at any point.

Patient status display can be customized to show vital signs, cardiac output, respiratory signals and more, including SpO2, ECGs and capnogram.

Recent Event Logs on the Run Screen keep you updated, while complete event and physiological data is logged in the SCE history.

Scenarios automatically load as part of the SCE. Scenario states and progression can be controlled directly from the Run Screen.

Parameter controls allow you to use instructor overrides or operate on the fly.

Patient reset button allows you to quickly save and return to the patient’s original baseline physiology without having to restart the SCE.
Operating Caesar is quick, easy and intuitive with the standard Müse interface. The Run Screen features event logs, a patient status display with streaming data emulating that of clinical monitors and quick links to medical conditions, interventions and medications. With three levels of control over CAE Healthcare’s physiological modeling, Müse allows instructors to run scenarios, modify patient parameters or operate the simulator on the fly.

Instructors’ Ruggedized Tablet PC
Lightweight, rugged tablet PC is built to survive harsh work environments. Tablet stays connected with integrated WiFi 802.11.

Tablet durability features include MIL-STD-810G protection against drops and IP52 rating against dust and moisture.

SCE Development Software
Create and edit Müse patient scenarios when away from the instructor’s workstation. Four licenses included with each simulator.
Mannequin
Wireless (can be wired as well)
Autonomous physiological response
Realistic size (193 cm/6'4") and weight (68 kg/150 lbs)
Ruggedized for outdoors (4C-40C/40F-104F) — water, sand, dirt, heat, humidity and impact resistant with a IP53 rating against dust and moisture
Sternal IO access
Palpable ribs
Bilateral IV access
Articulation of neck, back, shoulders, elbows, forearms and wrists
Fully posable — spinal axis, hip rotation, can maintain a sitting position
Modular limbs
Easy-to-refill fluids
Simulator can be reset within 5 minutes
Six-hour battery with hot-swap capability for continuous operation

Assessment features
Directional eye movement, blinking
AVPU (levels of consciousness) depicted in speech patterns and eye response
Pulses — independent control of carotid, radial, femoral, dorsalis pedis pulses
Proper verbal and non-verbal responses to injuries and applied treatments
   — Lucid speech
   — Moaning/confused speech
   — Unconscious
Hemorrhage control
Four tourniquet locations with sensors
High-pressure, dramatic bleeding
Arterial and venous bleeding
1.4 liters of blood on board
Wound packing capabilities

Airway Management
Intubation – realistic airway supports most airway adjuncts
Bag-valve-mask
Surgical cricothyrotomy
Bilateral needle decompression

Realistic field environment
Lightweight, rugged tablet PC is built to survive harsh work environments.
Tablet durability features include MIL-STD-810G protection against drops and IP52 rating against dust and moisture

Standard Equipment
Caesar mannequin
Instructor's Tablet PC
Müse user interface
SCE development software
3 preprogrammed patients
10 preprogrammed Simulated Clinical Experiences (SCEs)
TouchPro patient monitoring software
Amputated right leg and healthy left leg
One-year support and maintenance

Optional Equipment
Additional tablet battery and charger
Additional mannequin battery and charger
TouchPro patient monitor computer
Additional amputated right leg
Blast wound left leg
Healthy right leg
Strap wounds (available late 2012) with right hand glove with gunshot wound, abdominal multiple gunshot wound, wrist injury forearm, facial wound trauma
Trauma limbs (available early 2013) with right and left arm multiple shrapnel wounds, right and left below-the-knee shrapnel wounds and amputated left leg

Simulated Clinical Experiences
Polytrauma Improvised Explosive Device
Partial and Complete Amputation, Traumatic Brain Injury, Abdominal Injury
Multiple Gunshot Wounds to Chest, Right Arm and Leg
Head and Chest Injury, Femur Fracture, Amputation
Fragmentation Wound to Neck and Extremities
Facial Trauma and Cricothyrotomy
Closed Head Injury and Blunt Chest Trauma
Burns and Spinal Shock
Bilateral Lower Limb Amputation and Burns Amputation and Fragmentation Wounds
CAE Healthcare offers advanced patient, imaging, surgical and learning simulation-based solutions to improve patient safety and outcomes. Our leading-edge products and learning applications provide risk-free practice and professional development to physicians, nurses, EMS responders, military medics, students and allied health professionals around the world.

caehealthcare.com

For more information about CAE Healthcare products, contact your regional sales manager, the CAE Healthcare distributor in your country, or visit caehealthcare.com.
Tel +1 941-377-5562
Toll-free in North America 866-233-6384