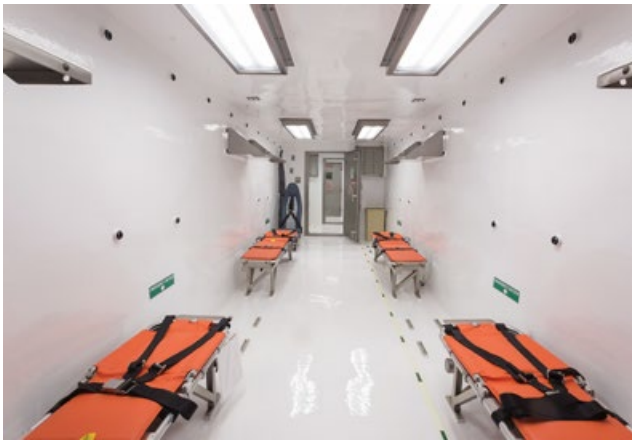
MRIGlobal

CBCS
CONTAINERIZED
BIO-CONTAINMENT SYSTEM

TRANSPORTING SAFELY

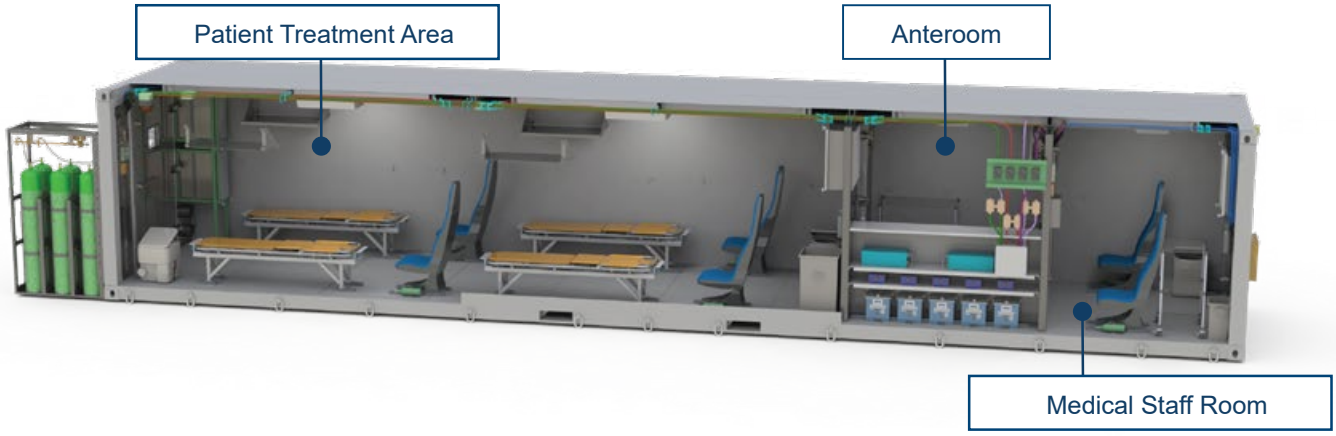
The Containerized Bio-Containment System (CBCS) supports and facilitates a critical care treatment environment, allowing for the transport and treatment of our critically ill patients infected with a highly contagious pathogen while maintaining full biocontainment. The units also accommodate four caregivers with additional space for two in an off-shift rest area-all in the safety of full biocontainment.



INTRODUCING THE CONTAINERIZED BIO-CONTAINMENT SYSTEM (CBCS)

The three areas of the CBCS are:

- Patient Treatment Area - Patients are loaded directly into this area with the lowest air pressure region. Video monitoring fed to the Medical Staff Room and outside of the CBCS. Epoxy coating on interior is compatible with multiple decontamination approaches (VHP, CI02).
- Anteroom - Transition area for staff to enter/exit patient treatment area with an Intermediate level pressure. Supplies for donning/doffing of PPE, medical supplies available, and staff decontamination equipment to allow transition to Medical Staff Room
- Medical Staff Room - Seating for two staff members to rest while off-shift of patient care without out PPR. Has the highest level pressure region of the CBCS (still negative to aircraft).



www.mriglobal.org • (816) 753-7600 • 425 Dr. Martin Luther King, Jr. Blvd. • Kansas City, Missouri 64110

MRIGlobal | CBCS CONTAINERIZED BIO-CONTAINMENT SYSTEM

DESIGN FEATURES

Performance Highlights

- Transport up to 4 patients and 4 medical staff
- 3-room pressure cascade with filtered supply end exhaust air:
  - Patient Room (hot zone)
  - Anteroom (warm zone)
  - Medical Staff Room (cold zone)
- Sealed bio-containment doors
- Sealed epoxy-coated walls compatible with typical decontamination solutions patient transport room (hot zone)

Aircraft Interface

- 8 ft tall, 8 ft wide, 44 ft long
- 24,000 lb
- Standard Intermodal shipping container lift points
- Loadable using standard 463L pallets (included In height)
- Multiple tie down points (20 @ 25k lb and 26 @ 5k lb) for securing to aircraft cargo floor
- Powered by aircraft 115/200 VAC, 3Φ, 400 Hz

Technical

- More usable laboratory space for the same shipping footprint and cost
- Designed to survive crash loads and rapid decompression per DoD Safe-to-Fly standards
- Designed for bio-containment and decontamination
- Seats, litters, and shelving are track-mounted for rapid mission reconfiguration or replacement
- Sound damping insulation
- Toilets with removable privacy curtains
- Removable storage
- 16 hours of medical oxygen for 4 patients
- Emergency oxygen for medical staff
- LED lighting with emergency backup
- CCTV and intercom
- Room pressure monitoring with configurable audio/visual alarms
- 2-hour battery backup for containment systems
- 12 air exchanges per hour
- 18 115VAC internal electrical outlets

MRIGLOBAL HISTORY

Since 2003, MRIGlobal has been designing, building, deploying, staffing, and maintaining mobile laboratory systems for clients at locations globally. The main building block of our mobile laboratory system is a 20’ ISO shipping container converted to provide a basic workspace suitable for laboratory use. The base container is then customized by our experienced field engineering team to meet the needs of any scientific discipline and their wide range of instruments.

www.mriglobal.org • (816) 753-7600 • 425 Dr. Martin Luther King, Jr. Blvd. • Kansas City, Missouri 64110

3933_12_25