

# Biomedical/Clinical/Hospital Engineering Providing a Safe Health Care Environment

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# What is a Safe Health Care Environment?

- An environment where patients can be treated and cared for without compromising their health and safety.

# Where is a Health Care Environment

- Hospital
- Nursing Home
- Patient Home
- In Transit

# Safe Health Care Environment

- Proper Operating Medical Equipment
- Electrical Safety
- EMI
- Emergency Power
- Alarms

# Safe Health Care Environment

- Patient Monitoring – Long Term Care
- Call Systems
- Safe Beds
- Security - Nursery

# Safe Health Care Environment

- Gas Systems
  - Proper gas
  - Sufficient
  - Installation
- MRI - magnet

# Safe Health Care Environment

- Proper Networking
- Patient Records

# Safe Health Care Environment

- HVAC – Proper Air
- Infection Control
- Construction

# Safe Health Care Environment

- Moisture – Mold
- Water
  - Legionella
  - Proper Bath Water Temperature

# Safe Health Care Environment

- Proper Fire Prevention
- Proper Fire Protection
- Construction
- Structural Safety

# Safe Health Care Environment

- Back-up Systems
  - Emergency
- Hospital Contamination
  - Emergency Room
  - Decontamination

# Safe Health Care Environment

- Safe Homes
  - Electrical
  - Water Quality
  - Communications

# Hospital Engineering

A Safe Health Care Environment depends on Biomedical/Clinical and Hospital Engineering.