How do we better assess strengths and weaknesses in healthcare and public health infrastructure?
Programs and regulations

- FEMA PS – PREP
- NFPA 1600
- ISO 22301
- ANSI / ASIS Spc.1-2009
- TJC / DNV
- HHS – sector CIP lead
  - RIST
  - THAM
NFPA 1600

6.3 Mitigation.

6.3.1* The entity shall develop and implement a mitigation strategy that includes measures to be taken to limit or control the consequences, extent, or severity of an incident that cannot be prevented.

6.3.2* The mitigation strategy shall be based on the results of hazard identification and risk assessment, an analysis of impacts, program constraints, operational experience, and cost-benefit analysis.

6.3.3 The mitigation strategy shall include interim and long-term actions to reduce vulnerabilities.
FIGURE 7.1 Scenario showing effects of a 4800 nT/min geomagnetic field disturbance at 50° geomagnetic latitude scenario. The regions outlined are susceptible to system collapse due to the effects of the GIC disturbance; the impacts would be of unprecedented scale and involve populations in excess of 130 million. SOURCE: J. Kappenman, Metatech Corp., “The Future: Solutions or Vulnerabilities?,” presentation to the space weather workshop, May 23, 2008.
Facility - Mission Essential Functions

- Structure
- Utilities
- Heating, AC, air-handling
- Medical gases
- Telecommunications / internet / IT systems
- Electronic health records
- Medical supplies
- Transport

- Nutrition
- Pharmacy
- Lab
- Radiology
- Security
- Laundry
- Human Resources
- Environmental Health
Flood waters surround the south side of Mercy Medical Center in Cedar Rapids, Iowa, early June 13, 2008.
Key Strategies

- Design
- Mitigate
- Prepare
  - Redundant systems are *rarely* equal to native!
- Monitor / identify threats
Specificity

• Comes at a price
  – Time
  – Cost
  – Remediation

• Threshold?

• Still not enough!
Opportunities

• Improve – community infrastructure
• Design / best practices
• ROI analysis
  – What are the thresholds that make sense?
  – New vs. old construction
• Develop specifics
• Incentivize / funding
• Regulation