

## Patient Safety and Medical Simulation: Issues, Challenges and Opportunities

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Mark Scerbo  
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Mark Bowyer

<http://simcen.org/mmvr2006>

## Preamble

- Workshop CDs
- Workshop website  
<http://simcen.org/mmvr2006>
- Presentations and forum  
for discussion



"Hey you! Wake up when I'm talking."



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## Speakers

- Mark Scerbo
- Heidi King
- Mark Bowyer
- Alan Liu



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## Motivation

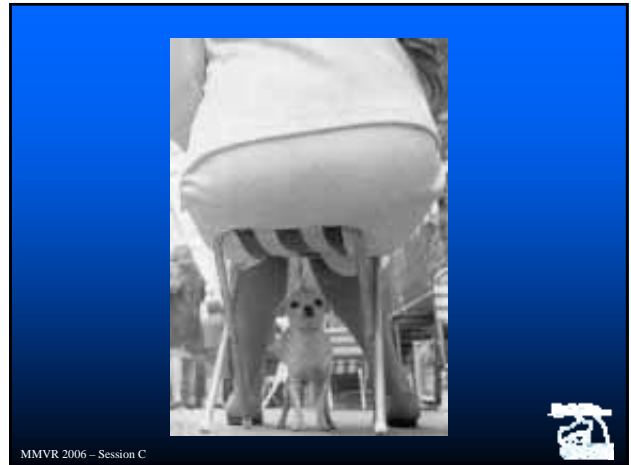


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Source: CNN.com

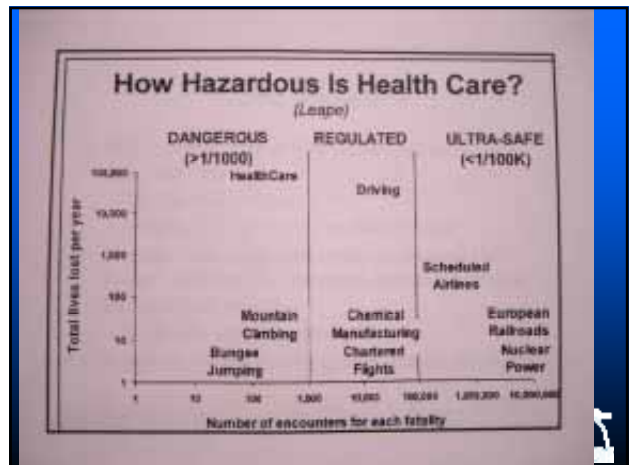


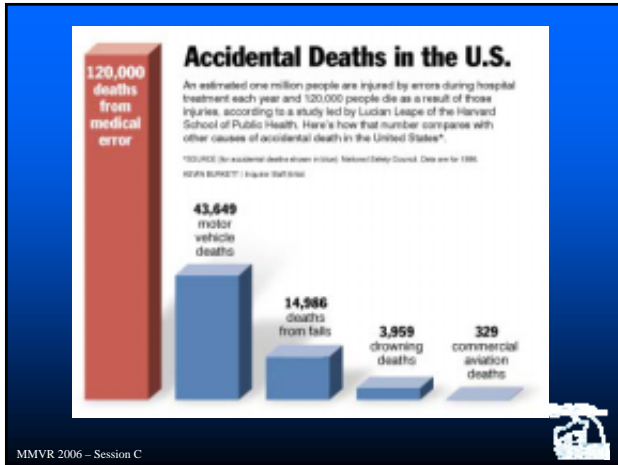
# People sometimes make errors

Edward Weiler  
Associate Administrator for Space Science, NASA

Source: CNN.com

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## What is Patient Safety?

- Freedom from accidental injury
  - Institute of Medicine report, *To Err is Human: Building a Safer Health System* (Washington, DC: National Academy Press, 1999)

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## National Defense Authorization Act 2001

- Collect & analyze medical error data within Military Health System
- Mandated all Military Treatment Facilities have a Patient Safety Program.
- Goal of the Program is to
  - Avoid medical harm
  - Improve patient safety
- Focus on improving systems & communication among health care teams.

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## Clinical Perspective

- Current state of affairs
- Trends
- Organizational changes
- The role of simulation

Image from Washington Post

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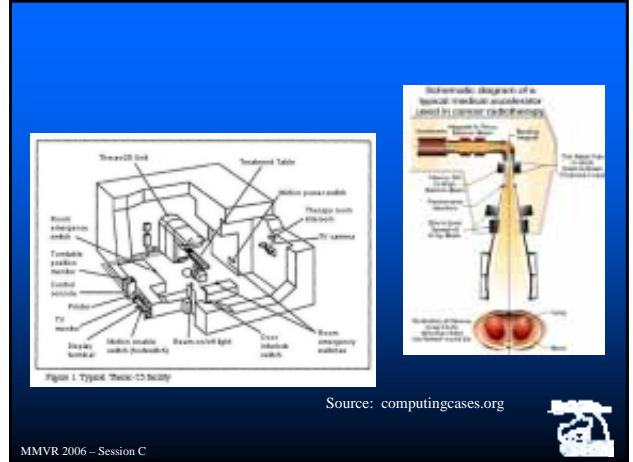


Figure 1 Typical "State-of-the-Art" Facility

Source: [computingcases.org](http://computingcases.org)



## SimCen Patient Safety Initiatives

- Using existing simulation technology to minimize patient risk in high-risk procedures.
- Using immersive virtual environments to improve human factors and model sentinel events

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## Schedule

- Introduction
- Patient Safety Overview
- A Human Factor's Perspective
- A Clinical Perspective
- DoD Patient Safety Programs
- Using Simulation To Enhance Patient Safety: Current Initiatives
- The SimCen Wide Area Virtual Environment
- Open Discussion

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