

Leaders: Stand up for Patient Safety!

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Safety:

Freedom from accidental injury



The Extent of Medical Injury

- New York MPS '91 3.7%
- CO/UT MPS '99 3.3%
- Australia '94 13%
- UK Pilot Study '00 11%
- New Zealand '01 13%
- Denmark '01 9%
- Canada '04 7.5%

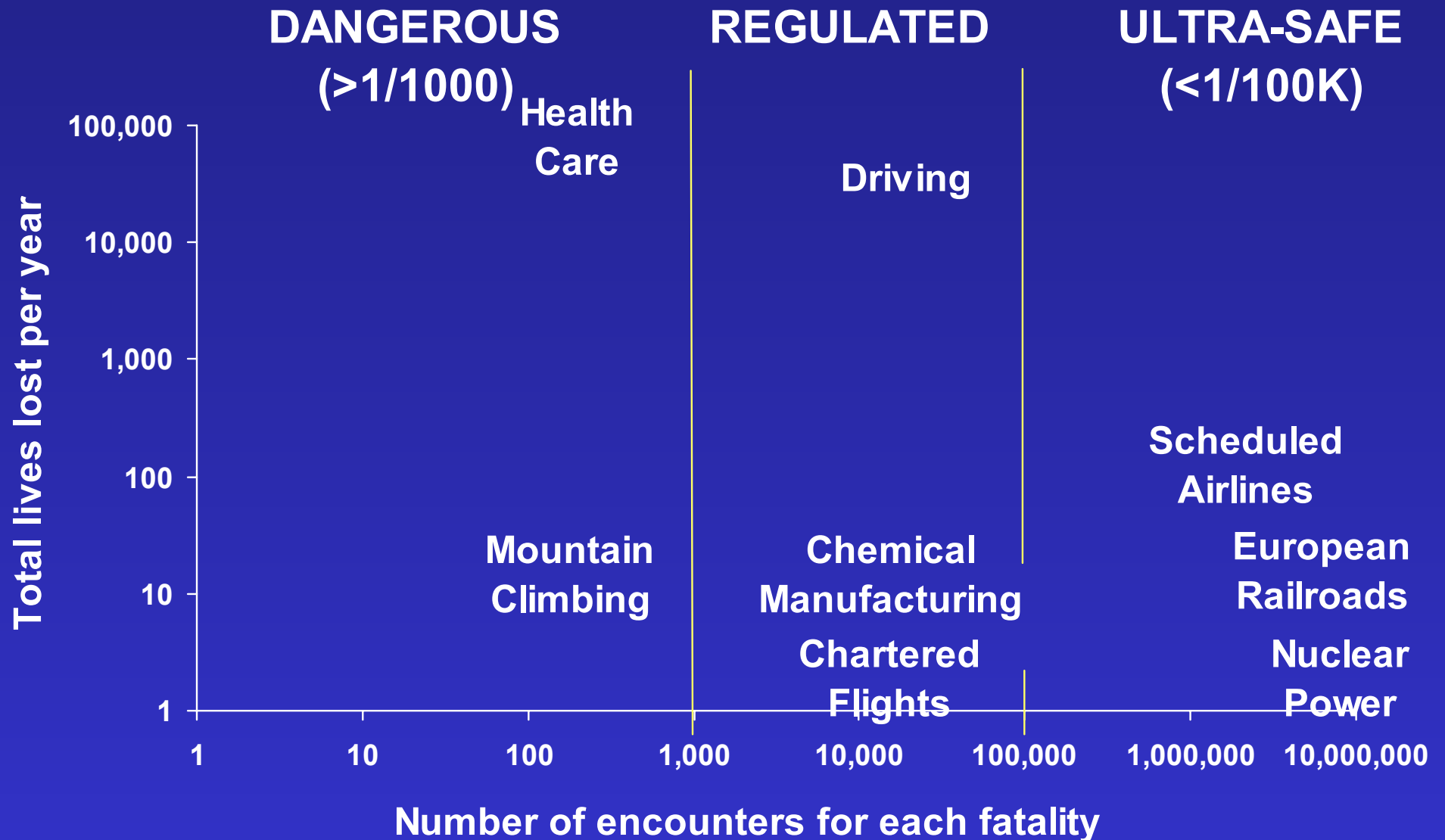


Preventable Deaths

	/1000	Total
• United States	3	98,000
• Australia	3	8,400
• UK Pilot Study	4	34,000
• New Zealand	2	1,300
• Denmark	3	3,080
• Canada	7	16,650



How Hazardous Is Health Care?



Adverse Drug Event Studies

<u>Study</u>	<u>ADE</u>	Preventable <u>ADE</u>
• Leape '91 (Records)	0.7%	0.4 %
• Bates '95 (Solicit +)	6.5%	2 %
• Gandhi '03 (Patient)	25 %	3 %



The patient safety movement has been propelled by a new idea:

Medical errors are caused by bad systems not by bad people

This is a **transforming concept**



Latent Errors

- Design of work
- Conditions of work
- Training
- Design and maintenance of equipment



Latent Errors

Design characteristics that *induce* errors:

a) Require work that exceeds the capacity of the human brain

OR

b) Create conditions that generate known causes of errors



The Real Word

Healthy appearing decrepit 69 year old male,
mentally alert but forgetful

The skin was moist and dry

Occasional, constant, infrequent headaches

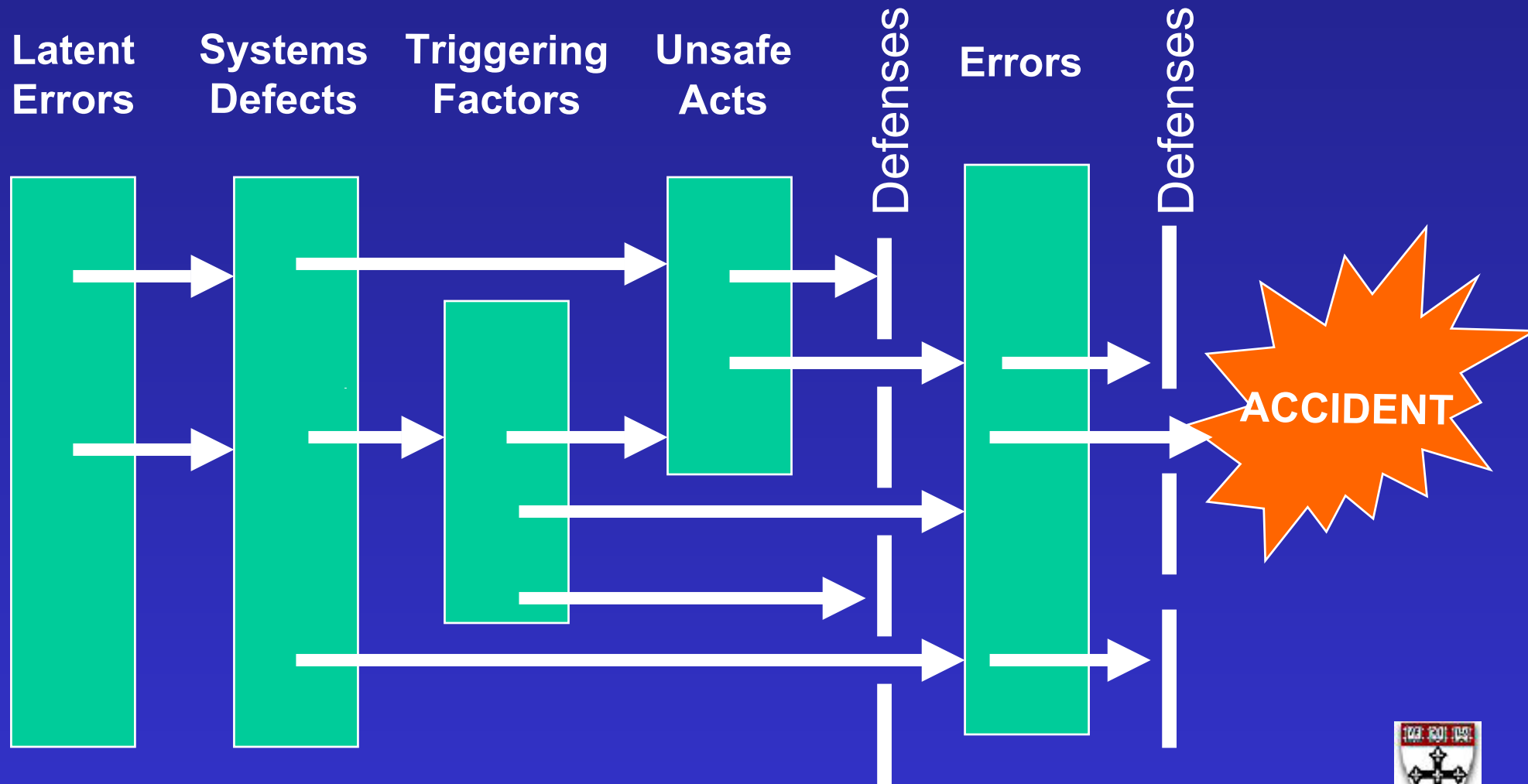
Patient was alert and unresponsive

Rectal examination revealed a normal sized thyroid

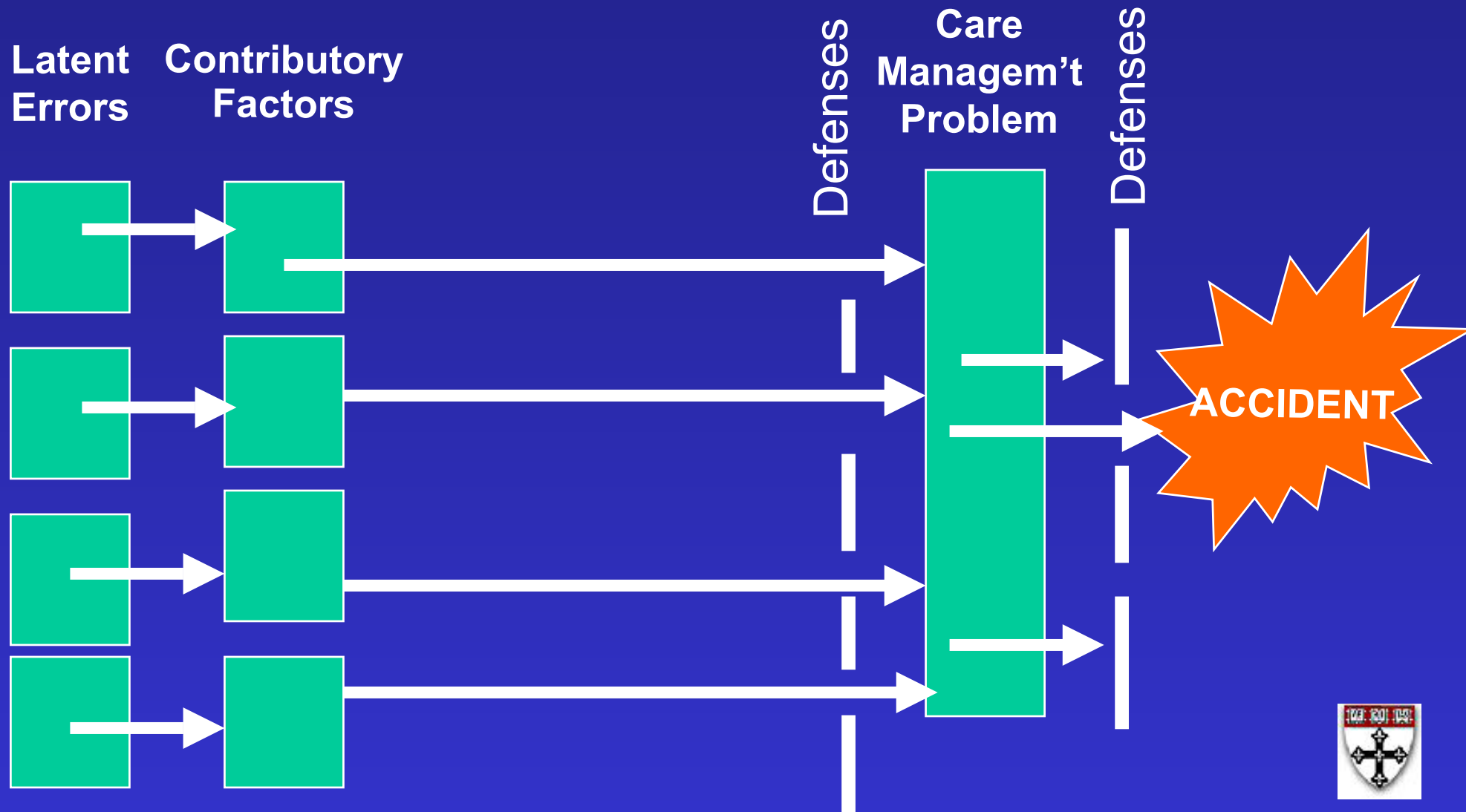
She stated that she had been constipated for most
of her life, until she got a divorce



Accident Causation Model



Accident Causation Model

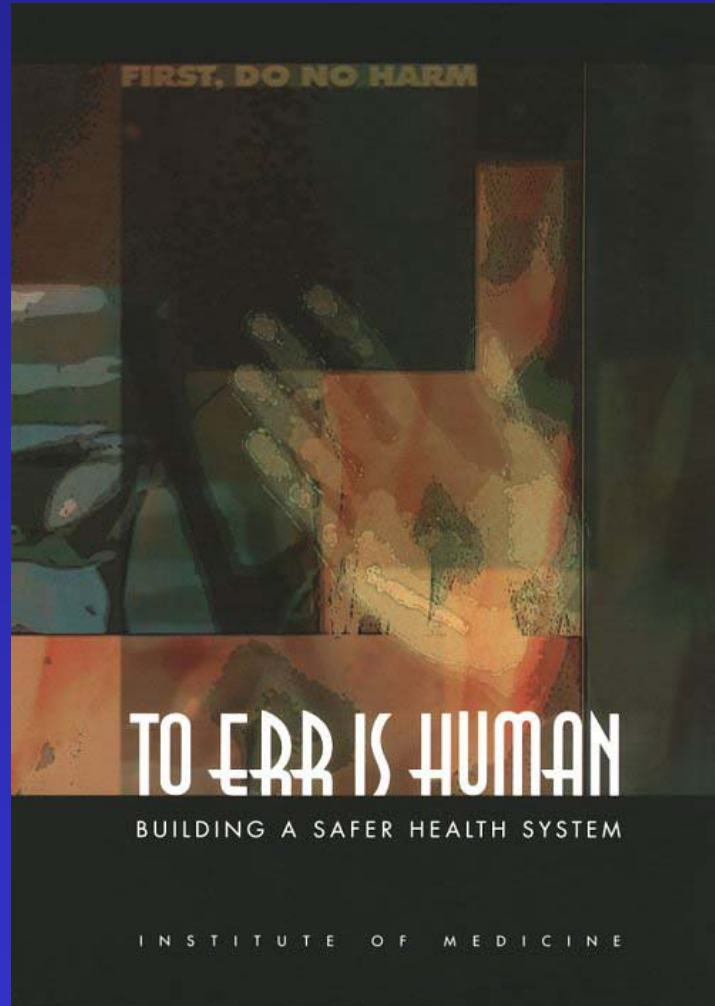


Types of Systems

- Process, tasks, and equipment
- Education and training
- Teamwork and interpersonal relationships
- Conditions of work
- Organizational culture



TO ERR IS HUMAN: BUILDING A SAFER HEALTH SYSTEM



Institute of Medicine
Committee on Quality
of Health Care in
America



What changes are needed to create a culture of safety?

Safety is not a destination, it is a journey



Safety is not a destination, it is a journey

STAGE

1. Awareness
2. Procedures, protocols and rules
3. Organizational change
4. “Soft stuff”
5. Organization – culture
6. Individual – Intention

A way of life

CHARACTERISTICS

1. Denial, anger, focus on numbers, reporting
2. Compliance
3. Policies, accountability
4. Teamwork, conditions, disclosure, 2nd victim
5. Shared values – fairness, justice, morale
6. Workers choose to be safe, take responsibility for others

Focus on people, learning from incidents

What changes are needed to create a culture of safety?

From:

Focus on Individual

Authoritarian culture

Fear, defensiveness

Secrecy, silence

Shame and blame

Humiliation

To:

Focus on Team

Communitarian culture

Openness and support

Transparency, apology

Systems and support

Mutual Respect



What is needed to create a culture of safety?

- Make safety a leadership priority
- Conceive of defect-free performance
- Overcome physician skepticism



What is needed to create a culture of safety?

1. Make safety a leadership priority

- National
- System, region
- Local: practice, hospital, ambulatory care center, nursing home



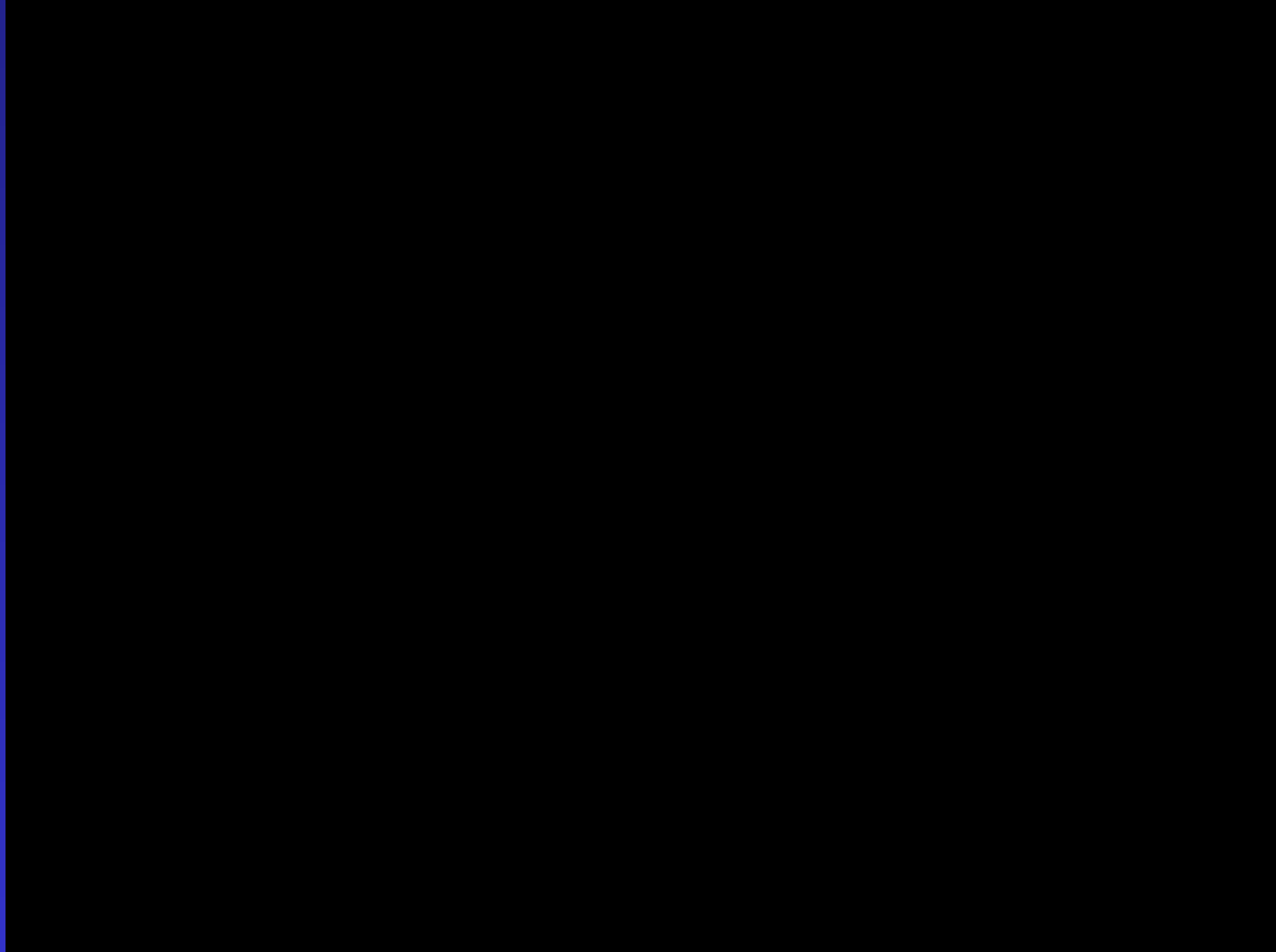
What is needed to create a culture of safety?

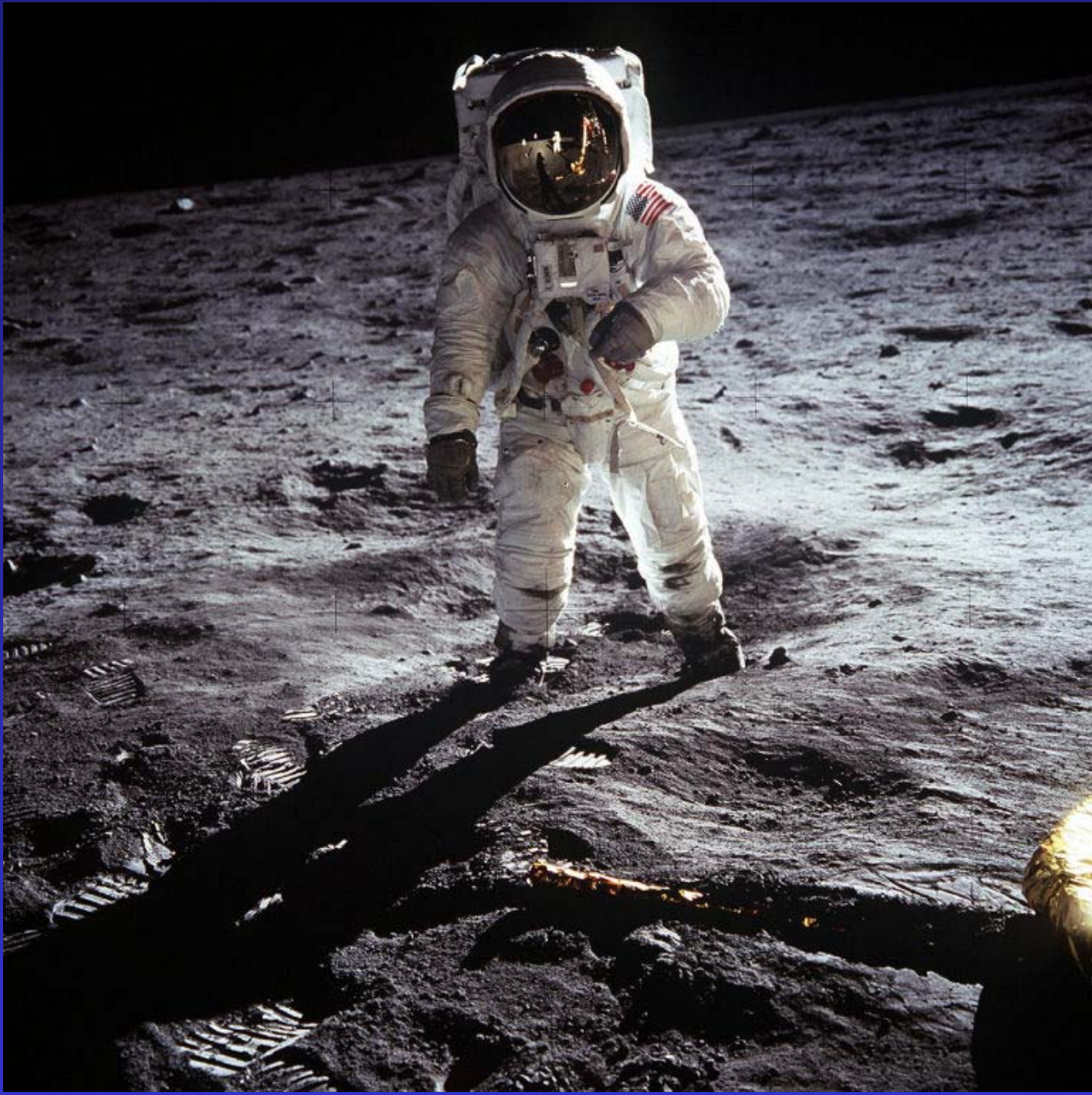
1. Make safety a leadership priority
2. Accept the challenge of defect-free performance – “Getting to Zero”

First, we have to conceive that it is possible.

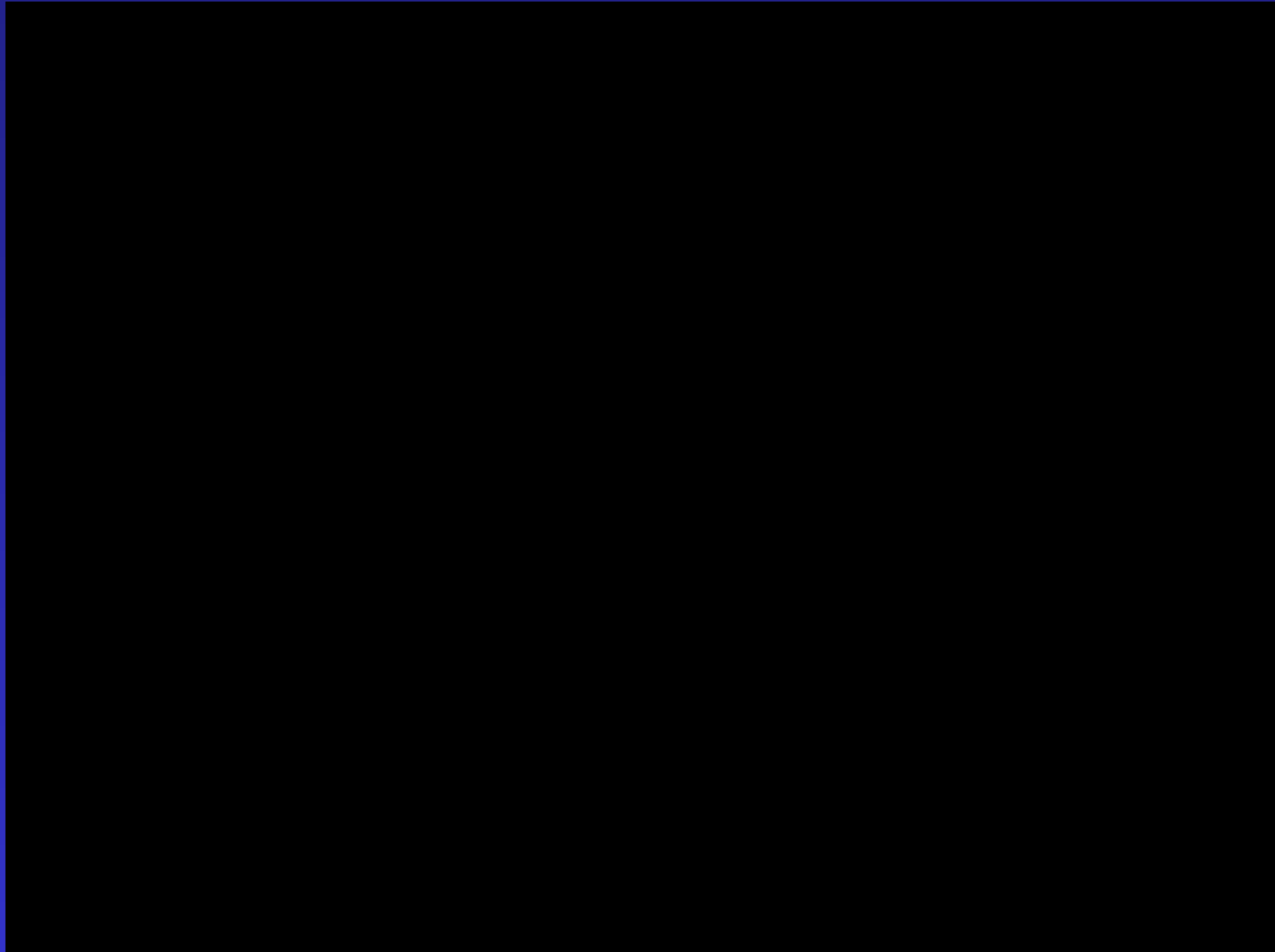


To The Moon

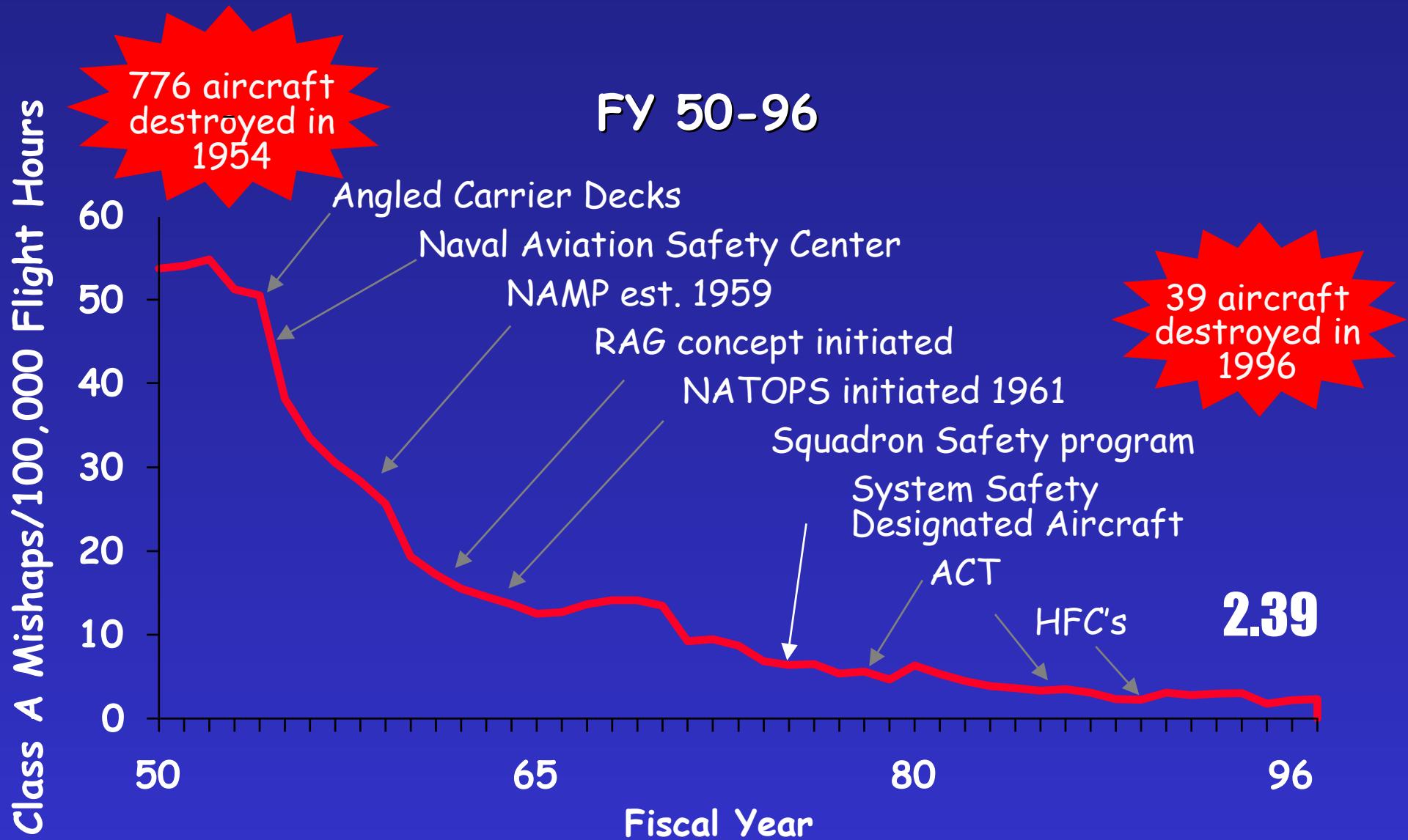




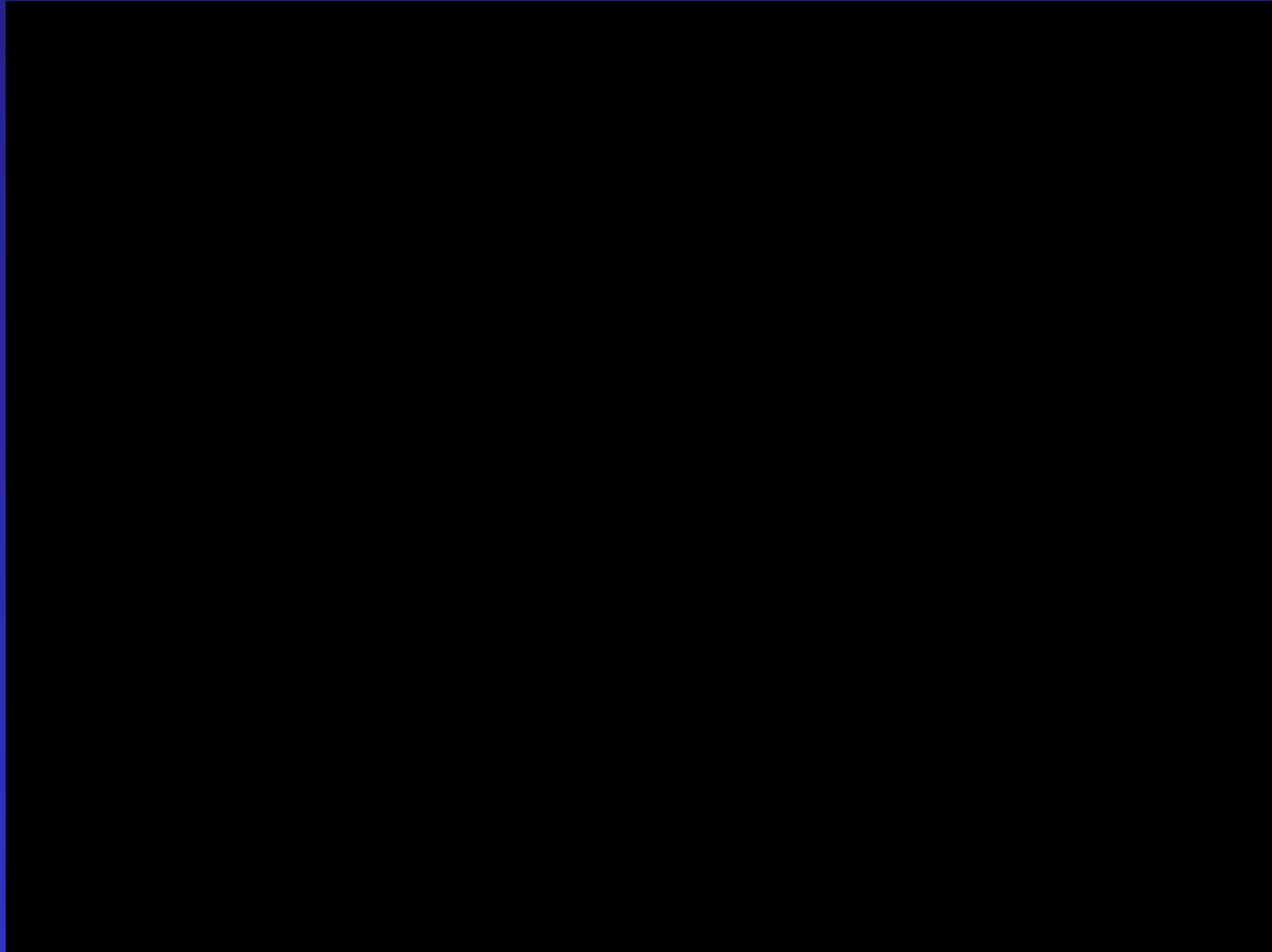
USS Leyte (CV 32)



NAVAL AVIATION MISHAP RATE



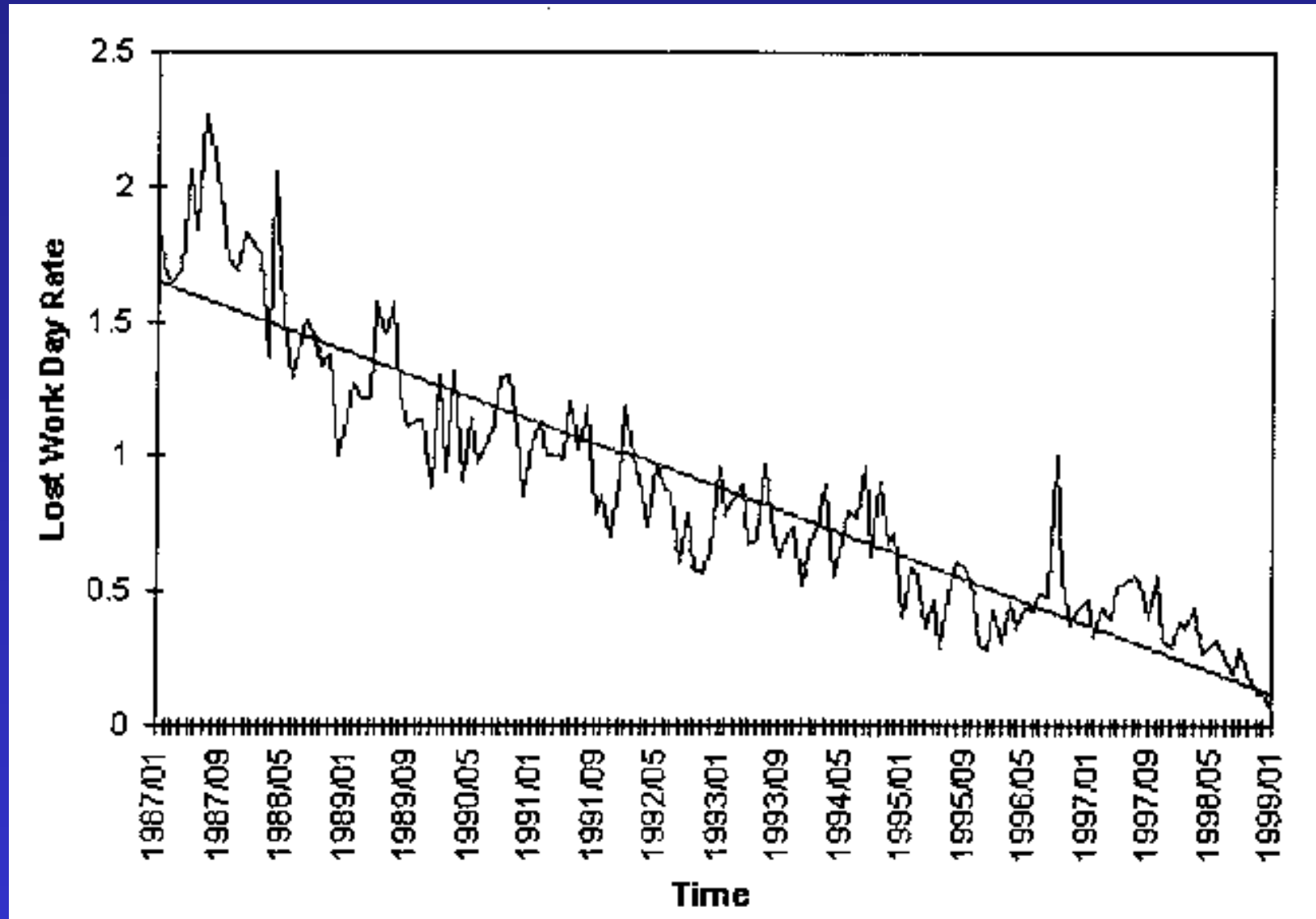
Carrier Ops – 21st Century







Safety at Alcoa



Getting to zero

- What is the right thing to do?
(Which are the evidenced- based practices?)
- Have we done the right thing?
(Implemented the practice)
- Have we done the right thing right?
(Made sure that 100% of patients get it, get it on time, and get it without mistakes – ZERO defects)



JHH Catheter Sepsis Intervention

Getting to zero

The Protocol

- Cleaned hands
- Sterilized procedure site
- Draped patient in sterile fashion
- Used hat, mask, sterile gown
- Used sterile gloves
- Applied sterile dressing



JHH Catheter Sepsis Intervention

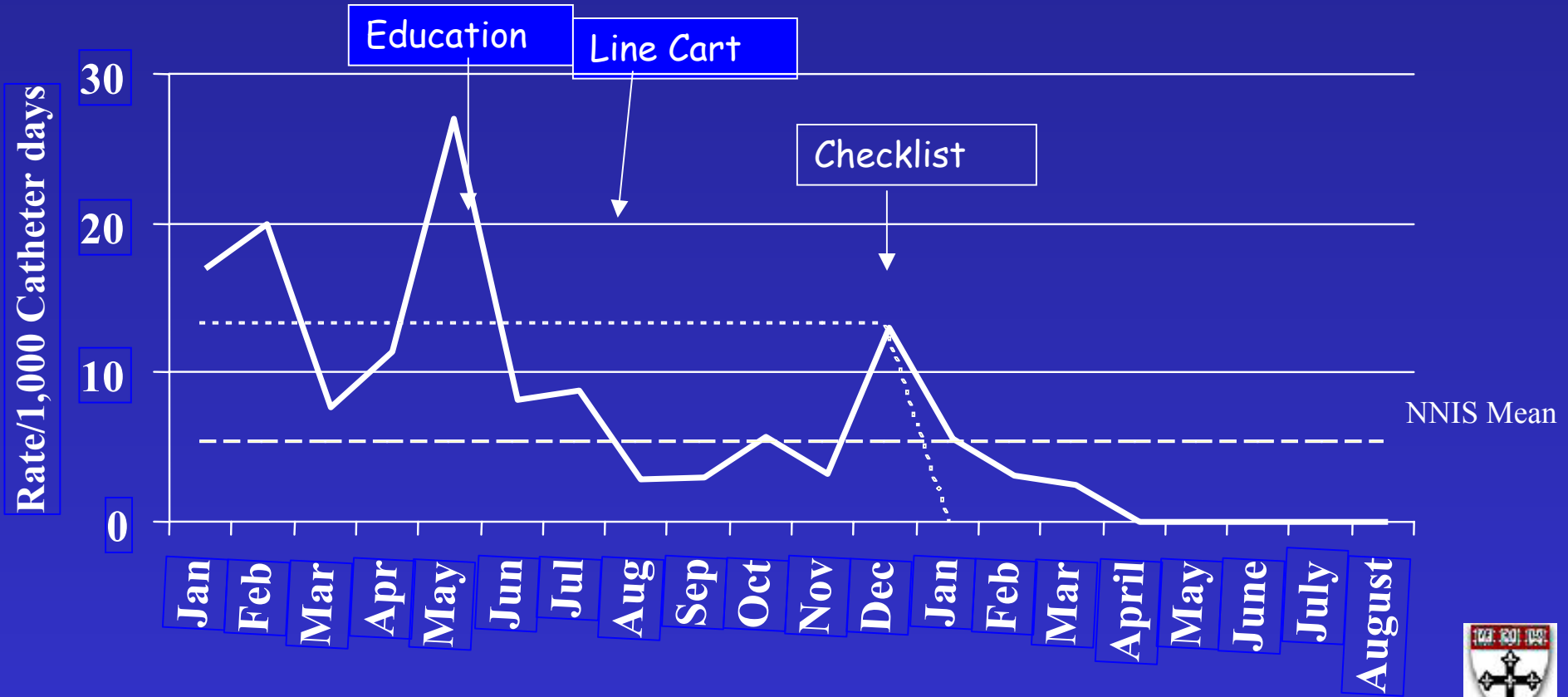
Getting to zero

The Program

- Education regarding Control Practices
- Created a Central Catheter Insertion Cart
- Ask daily whether catheter can be removed
- Implemented checklist for insertion protocol
- Empowered nurses to stop procedure if guidelines were not followed.



JHH ICU Catheter-related Blood Stream Infections



Baptist Hospital, DeSoto, MS

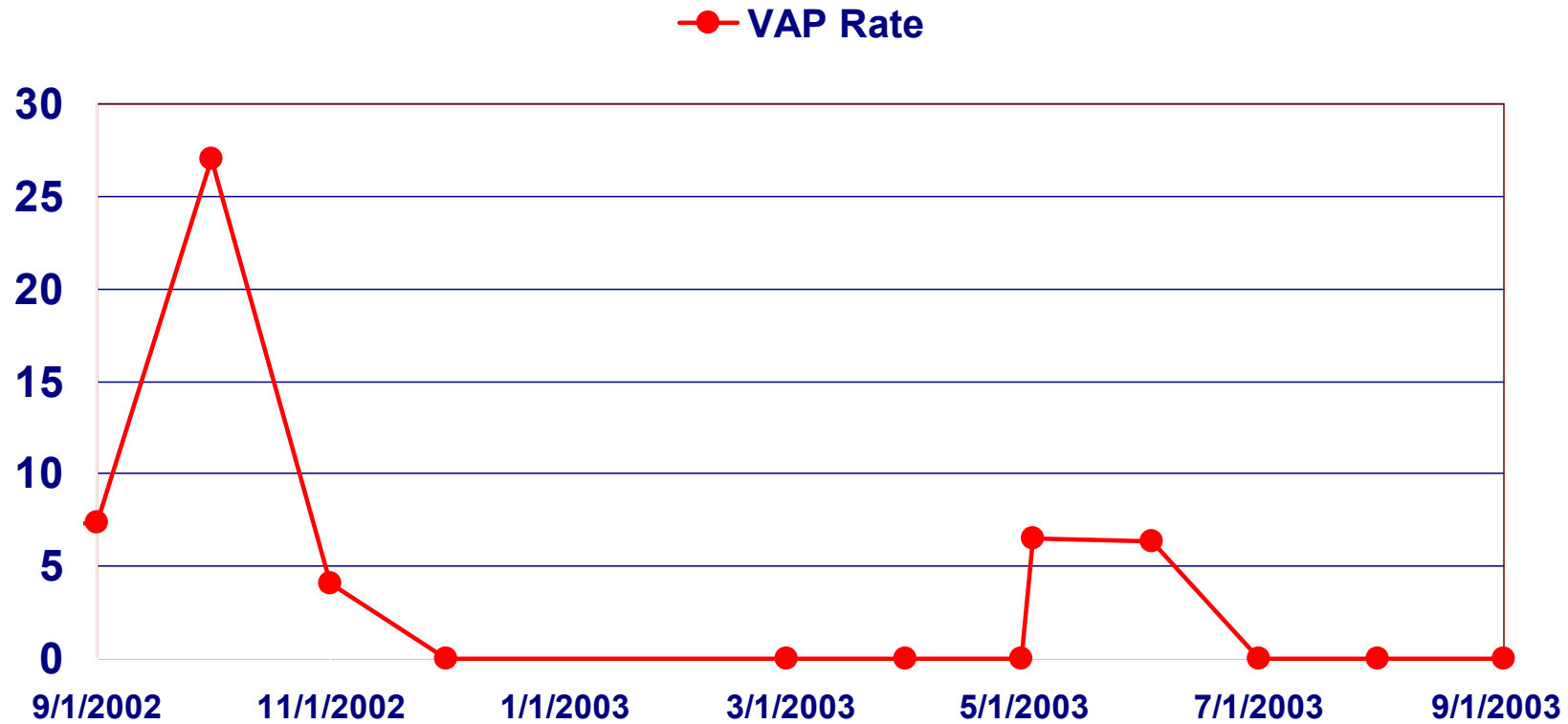
Getting to zero

The “Ventilator Bundle”:

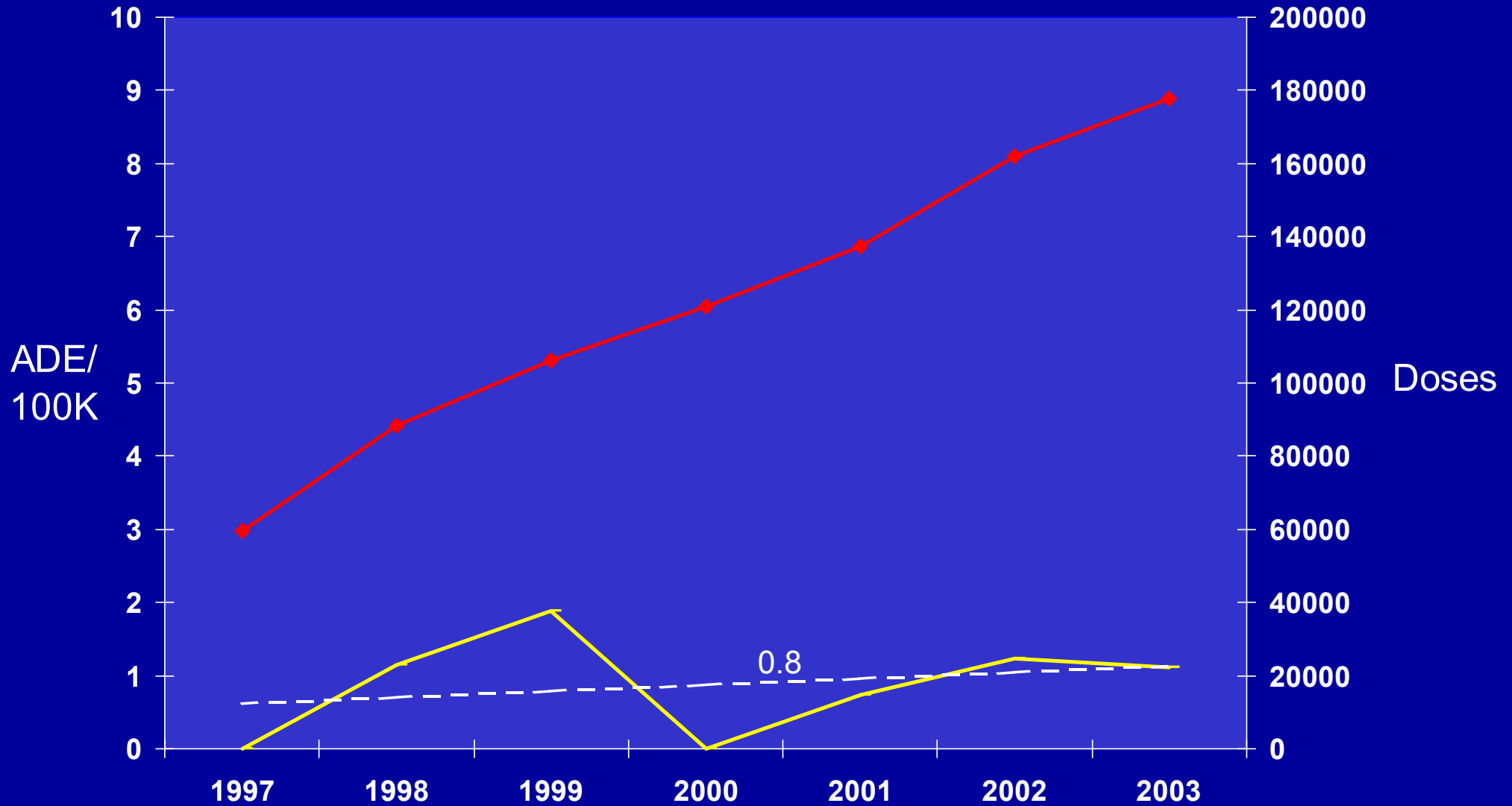
- Head of Bed Elevated 30 Degrees
- PUD Prophylaxis
- DVT Prophylaxis
- Mouth Care every 2 hours
- Sedation Vacation every 24 hours
- Aggressive Weaning



VAP Rate in ICU



Medication Safety at DFCI



What is needed to create a culture of safety?

3. Overcome physician skepticism

The systems approach has significant implications for physicians



Implications for Physicians

Major changes in how we think about our work

- It's both performance and systems
- Talk about our mistakes
- Rethink meaning of autonomy
- Make safety priority #1



Implications for Physicians

Major changes in how we do our work

- Implement and follow best practices
- Give up personal preferences that have nothing to do with safety
- Become a team player
- Participate in investigations of adverse events
- Look for “accidents waiting to happen”
- Be a “champion” – take the lead in changing systems



What is needed to create a culture of safety?

3. Overcome physician skepticism

- Understand where they are coming from
- Provide data
- Change the rules



Understand where they are coming from

1. Don't believe the numbers
2. Don't accept the transforming concept
3. Fear



Understand where they are coming from

1. Don't believe the numbers

- Don't want to believe them
- Don't square with personal experience
 - Most mistakes are not recognized

Autopsy studies:

Major unsuspected dx 20-40%

Probable cause of death 10-20%

- “Tyranny of small numbers”



Preventable Deaths

	/1000	Total
• United States	3	98,000
• Australia	3	8,400
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Preventable Deaths

	<u>/1000</u>	<u>Total</u>	<u>MDs</u>	<u>Ratio</u>
• United States	3	98,000	700,000	7
• Australia	3	8,400	50,000	6
• UK Pilot Study	4	34,000	110,000	3
• New Zealand	2	1,300	8,600	7
• Denmark	3	3,080	11,000	4
• Canada	7	16,650	66,000	4



The Power of Numbers

Prescriptions	=	3,500,000,000
X 8% error rate	=	280,000,000
X 20% are serious	=	56,000,000
X 20% cause ADE	=	11,200,000
X ? 1% are fatal	=	112,000



The Power of Numbers

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X ? 1% are fatal	=	112,000



Understand where they are coming from

2. The transforming concept is hard to accept

- Vague and complicated
- Goes against everything we were taught
- Smacks of irresponsibility
- Offends our sense of free agency
- Offends our sense of equilibrium



Understand where they are coming from

1. Don't believe the numbers
2. The transforming concept is hard to accept
3. Fear
 - Shame and guilt
 - Loss of reputation
 - Punishment



3. Overcome physician skepticism

- Understand where they are coming from
- Provide data



Provide Data (The rational change model)

Two kinds of data:

1. Extent and nature of problem

- Their own data are best:

Each physician reviews 10 deaths

Ask: “How was care sub optimal?”

2. Evidence that better systems result in fewer injuries

- CPOE
- Pharmacist presence
- Warfarin clinics
- VAP protocols



3. Overcome physician skepticism

- Understand where they are coming from
- Provide data
- Change the rules



Changing the Culture

New Rules



Behavior



Attitudes



Culture



Change the Rules: The Management Imperative

1. Declare that safety is not optional

- Following safe practices is a condition of appointment
- Violations will not be tolerated
(Hand hygiene example)



The Management Imperative

2. Issue and enforce new policies

- Non-punitive approach to errors and reporting
- Mutual respect
- Accountability – for implementing safe practices, and for following them
- Transparency and honesty with patients



The Management Imperative

3. Involve all physicians

- Implementing new safe practices (JCAHO, etc.)
- Train in teamwork
- Participate in RCA of serious events



