Civilian and Military Surgical Collaboration

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American College of Surgeons
Inspiring Quality:
Highest Standards, Better Outcomes
100+years

The Committee on Trauma

NHTSA
National Highway Traffic Safety Administration

NIH

ACS/Civilian/Military Collaboration

- Civil War – Samuel Gross
- WWI – Franklin Martin
- WWII – Churchill, DeBakey, and many others
- V.A. hospital system – Major General Hawley

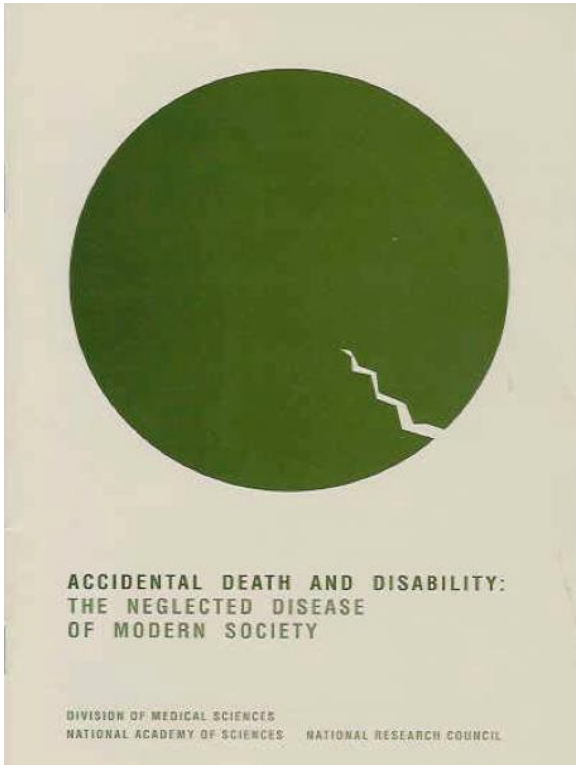
World War I

- 1918 - Cannon
  - "The injection of a fluid that will increase blood pressure has dangers in itself. Hemorrhage may not have occurred to a marked degree because the blood pressure has been too low to overcome the obstacle offered by a clot.“
- **“Pop the Clot”**

“with this method of blood transfusion, I know that at this hospital we have saved lives by its use which would otherwise have been lost….
Lieutenant A. M. Hansen to Dr. Cannon 1918

World War II

- 1943 - Churchill- Harvard
  - **“Plasma not a blood substitute”**
- Described over zealous shock resuscitation
- Pushed for blood with great personal political risk



1966

National Research Council. 1966. *Accidental Death and Disability: The Neglected Disease of Modern Society*. Washington, DC: The National Academies Press.

"**Research in trauma has suffered** from the lack of recognition of trauma as a major public health problem."

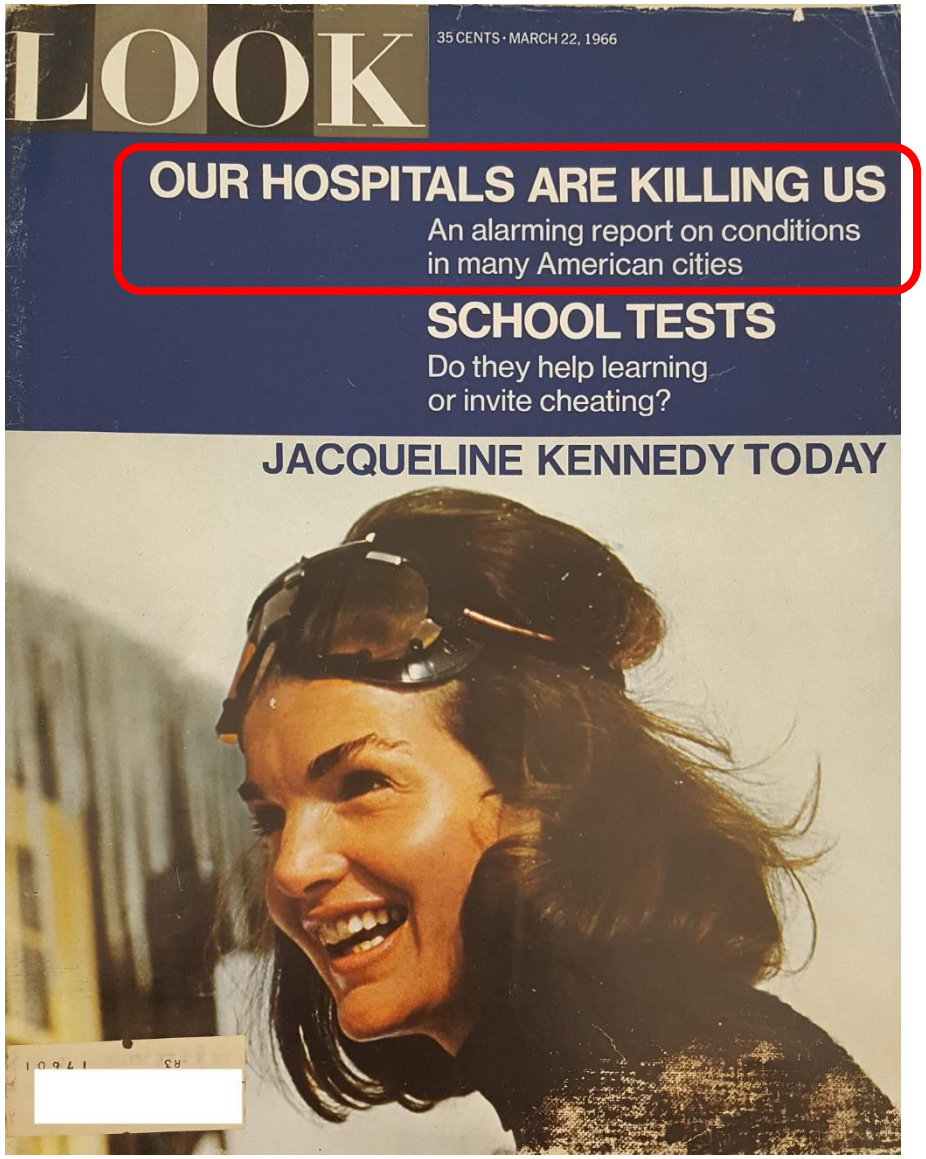
"The most significant obstacle at present [to trauma research efforts] is the lack of long-term funding."

Recommendations:

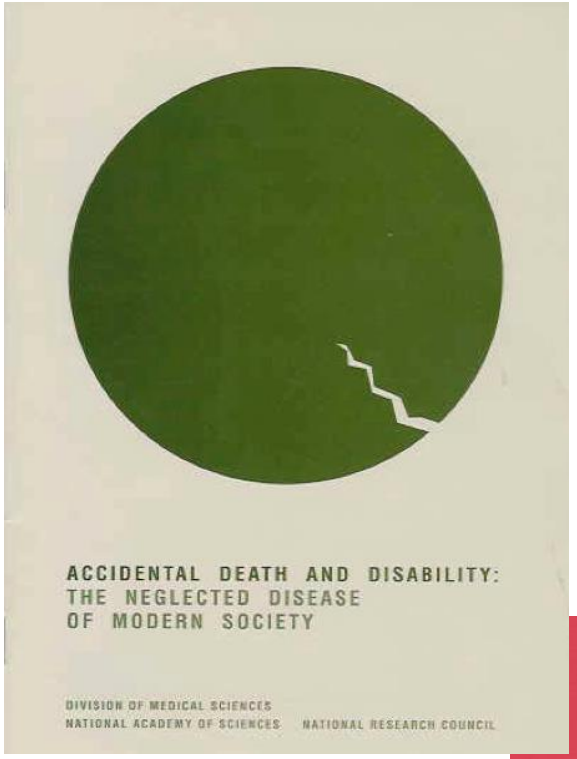
"Increased federal and voluntary financial support of basic and applied research in trauma."

"*Expansion within the U.S. Public Health Service* of research in shock, trauma, and emergency medical conditions, with the goal of establishing a National Institute of Trauma."

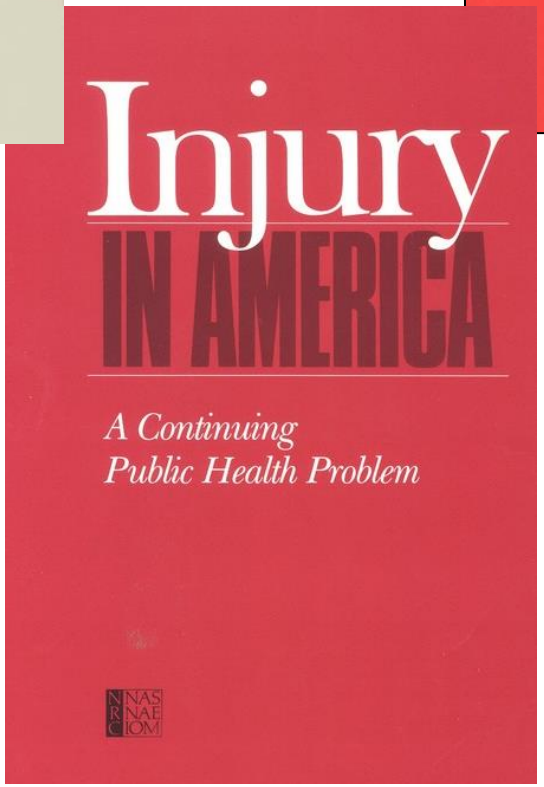
1966


LOOK
35 CENTS · MARCH 22, 1966
OUR HOSPITALS ARE KILLING US
An alarming report on conditions in many American cities
SCHOOL TESTS
Do they help learning or invite cheating?
JACQUELINE KENNEDY TODAY

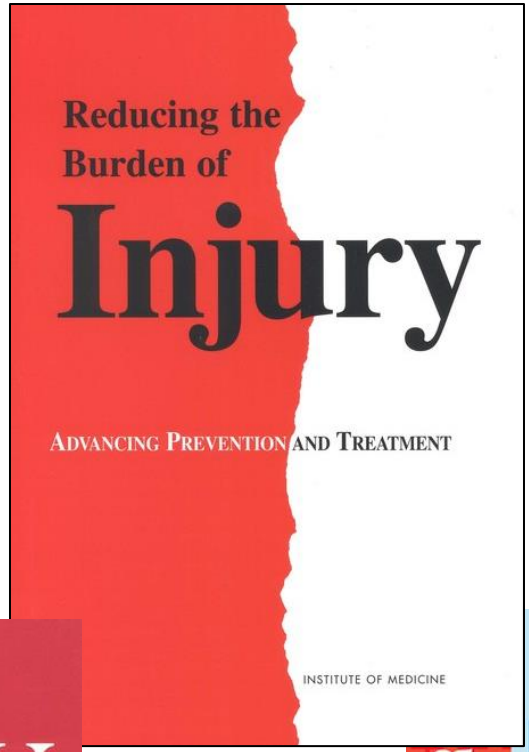

Don't let the low price scare you off.
$1574.*
That's the price of a new Volkswagen.
But some people won't buy one: They feel they deserve something costlier. That's the price we pay for the price we charge.
And some people are afraid to buy one: They don't see how we can turn out a cheap car without having it turn out cheap.
This is how:
Since the factory doesn't change the bug's shape every year, we don't have to change the factory every year.
What we don't spend on looks, we spend on improvements to make more people buy the car.
Mass production cuts costs. And VWs have been produced in a greater mass (over 10 million to date) than any car model in history.
Our air-cooled rear engine cuts costs, too, by eliminating the need for a radiator, water pump, and drive shaft.
There are no fancy gadgets, run by push buttons. (The only push buttons are on the doors. And those gadgets are run by you.)
When you buy a Volkswagen, you get what you pay for. What you don't get is frills.
And you don't pay for what you don't get.



National Research Council. 1966. *Accidental Death and Disability: The Neglected Disease of Modern Society*. Washington, DC: The National Academies Press.



Institute of Medicine and National Research Council. 1985. *Injury in America: A Continuing Public Health Problem*. Washington, DC: The National Academies Press.



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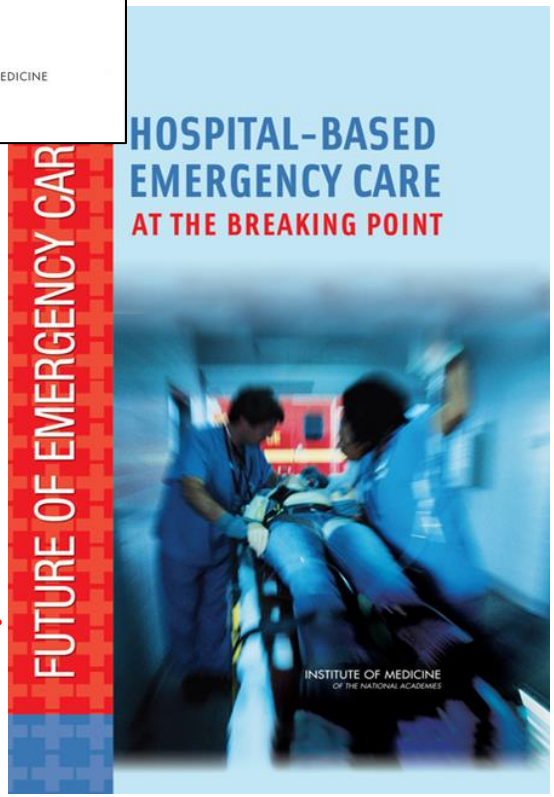
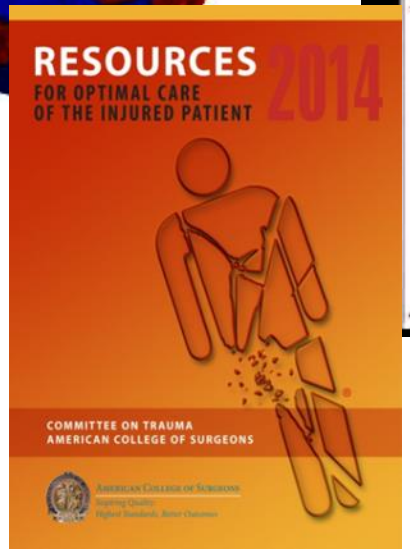


Institute of Medicine. 2007. *Hospital-Based Emergency Care: At the Breaking Point*. Washington, DC: The National Academies Press.

ACS: Trauma Systems Model

1. **Standards**
2. **Build Infrastructure**
3. **Measure performance – data**
4. **Verification- public assurance**

ATLS®



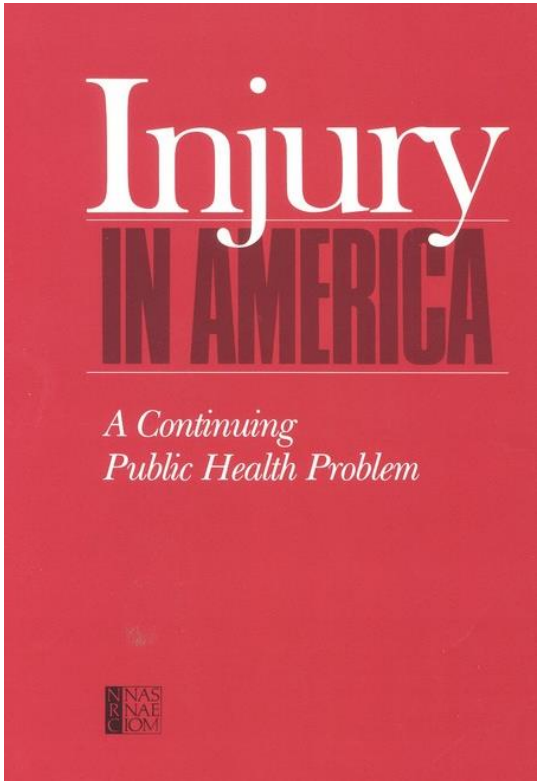
- Paramedic Training
- Regional EMS systems
- 911 - Access
- ATLS – Evidence based
- Trauma Care standards
- Verification
- National Trauma Data Bank

NTDB™
NATIONAL TRAUMA DATA BANK

Population Disease Management Model ➡ Payer Blind

Vietnam War

- Vietnam – Resuscitation, transfusions, rapid transport, ARDS, systems, burns, coagulopathy



1985

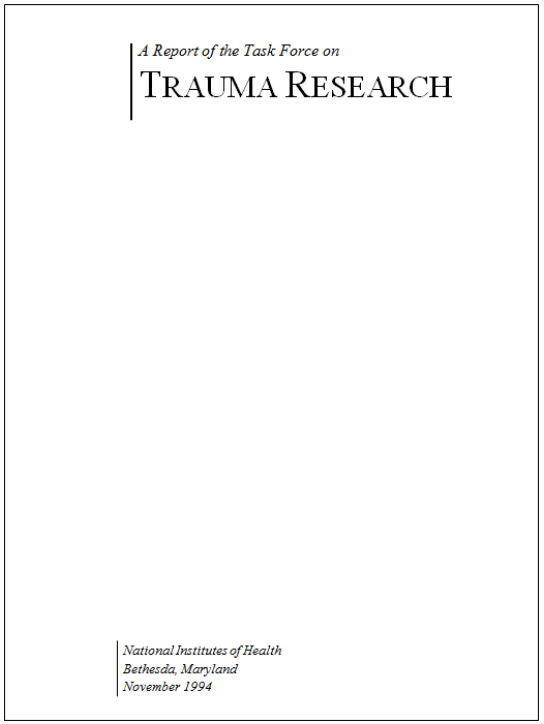
National Research Council. 1985. *Injury in America: A Continuing Public Health Problem*. Washington, DC: The National Academies Press.

"Injuries constitute one of our most expensive health problems, costing $75-$100 billion a year directly and indirectly, but research on injury receives less than 2 cents out of every federal dollar for research on health problems."

"**Funding for injury control is disproportionately low and discontinuous**, in comparison with that for cancer, heart disease, and other major health problems."

Recommendation:

"The committee recommends that funding for research on injury be commensurate with the importance of injury as the largest cause of death and disability of children and young adults in the United States."



1994

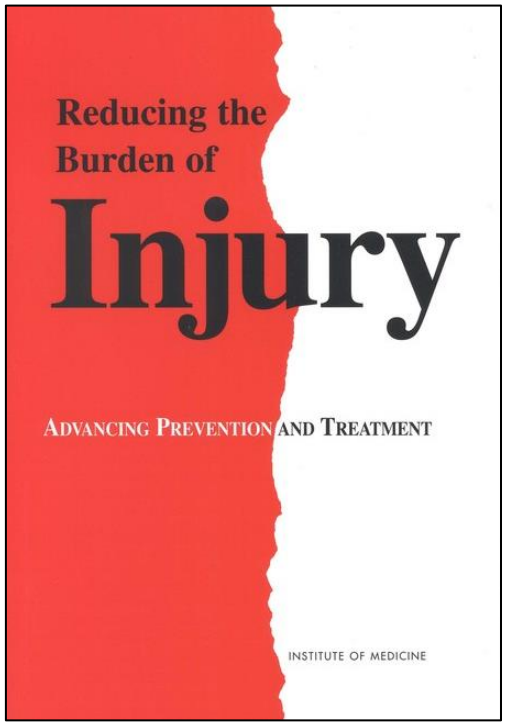
A Report of the Task Force on Trauma Research. Bethesda, MD: NIH, 1994.

"The vast personal, societal, and fiscal consequences of injury demand a much greater commitment to research into prevention, treatment, and rehabilitation – injury control in its broadest sense – than is in place today."

Recommendations:

"Creation of an Office of Trauma Research at NIH reporting to the Director of NIH and, in addition, to Congress and the President on an annual basis. The purpose of the Office would be to update the national plan for trauma research and to ensure that this agenda is being addressed and funded."

"If the goals and research priorities outlined here are not being substantially addressed … then the establishment of a National Institute of Trauma Research should be pursued."



1999

Institute of Medicine. 1999. *Reducing the Burden of Injury: Advancing Prevention and Treatment*. Washington, DC: The National Academies Press.

"The nation's current investment in injury research is not commensurate with the magnitude of the problem."

Recommendations:

"The committee supports a greater focus on trauma research and training at NIH and recommends that the National Institute of General Medical Sciences elevate its existing trauma and burn program to the level of a division."

"Trauma research should receive a higher share (compared with current allocations) of increases in the NIH budget, and funding outside NIH for extramural research in all aspects of injury prevention and treatment should be increased."

2003
NIH Trauma Working Group
ROC: Resuscitation Outcomes Consortium

- Expand Basic, Translational, and Applied Focused Research
- **Trauma Working Group - July 14th -15th,2003**
- **NHLBI, NIGMS, NINDS, NICHD**
  - **Cosponsored by ACS COT, DOD, CDC, FDA, AAST**
- Scope:
  - 70 scientists and clinicians
  - Gaps/frontiers in basic science of injury
  - Areas ready for translational research

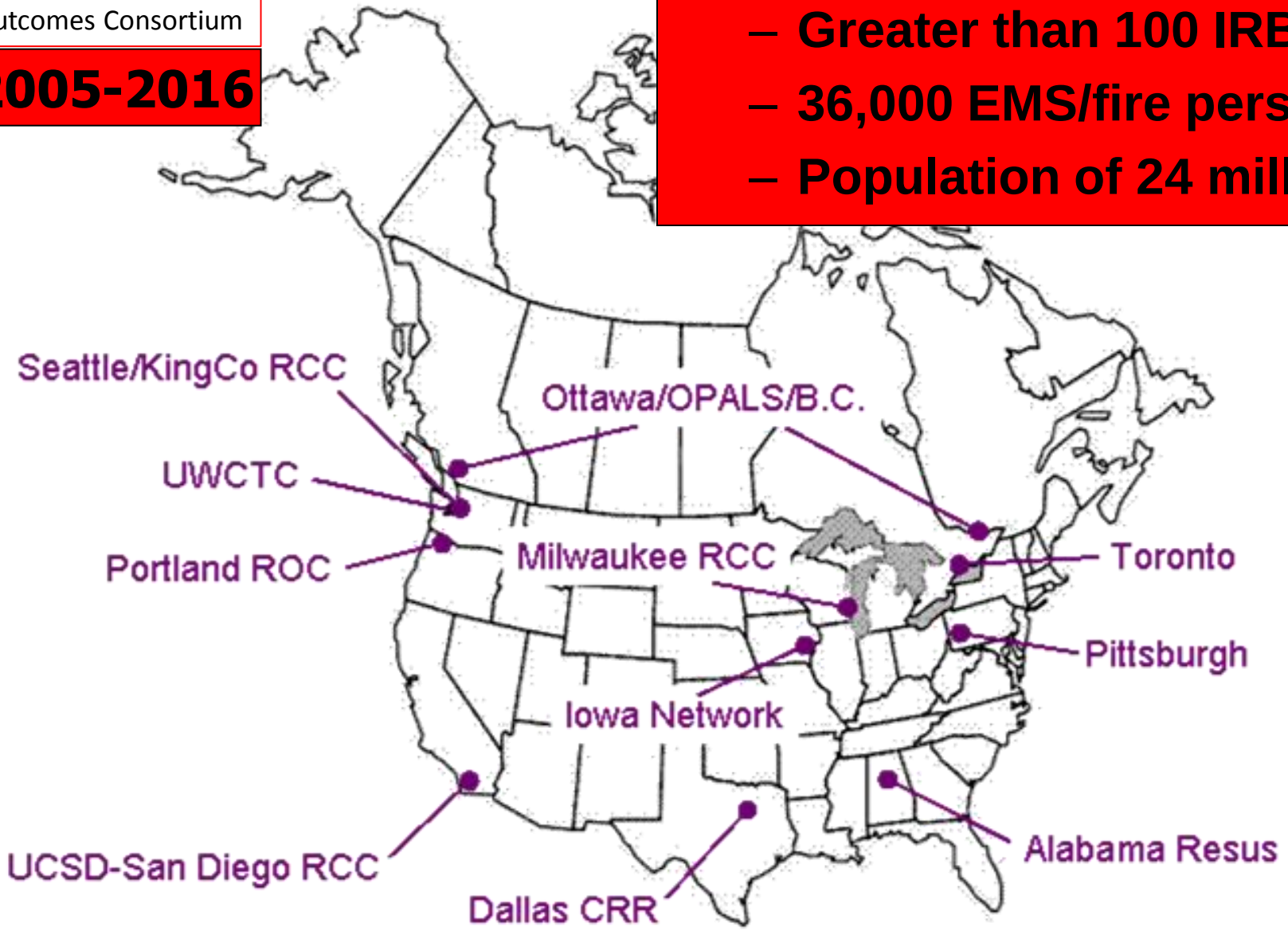
Goals: 1)National Center for Resuscitation Research
2)Build a multicenter network for clinical trials

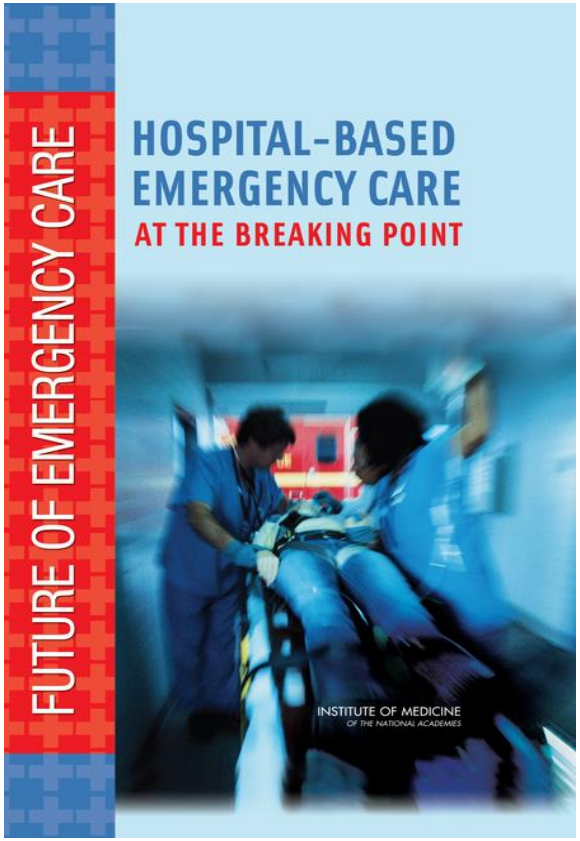
ROC

Resuscitation Outcomes Consortium

2005-2016

- **264 EMS/fire agencies**
- **194 hospitals**
- **Greater than 100 IRBs**
- **36,000 EMS/fire personnel**
- **Population of 24 million**





2006

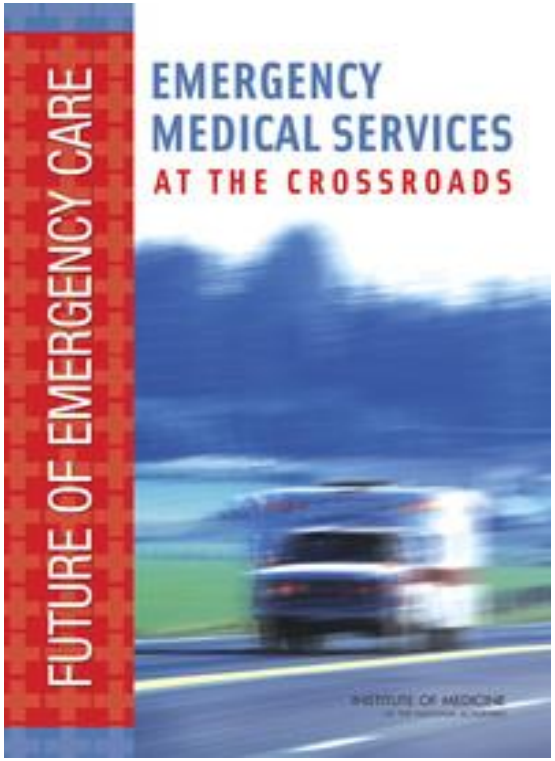
Institute of Medicine. 2006. *Hospital-Based Emergency Care: At the Breaking Point*. Washington, DC: The National Academies Press.

"[There is] a widening gap between the quality of emergency care Americans expect and the quality they actually receive."

"The current **uncoordinated approach to organizing and funding emergency and trauma care has been inadequate**. There are well-defined emergency and trauma care research questions that would benefit from a coordinated and well-funded research strategy."

Recommendation:

"The Secretary of HHS [should] conduct a study to examine the gaps and opportunities in emergency and trauma care research, and recommend a strategy for the optimal organization and funding of the research effort. This study should include…improved research coordination through a dedicated center or institute."



2006

Institute of Medicine. 2006. *Emergency Medical Services: At the Crossroads*. Washington, DC: The National Academies Press.

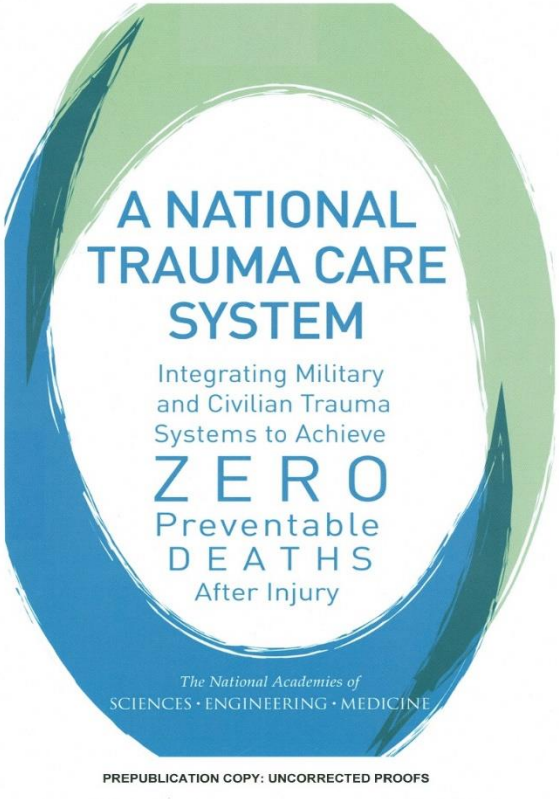
"**A small share of available research dollars is directed to emergency and trauma care**, and even less to prehospital care in particular."

"A host of critical clinical questions remain unanswered because of limited federal research support."

Recommendation:

"The committee recommends that federal agencies that fund emergency and trauma care research target additional funding at prehospital emergency medical services research, with an emphasis on systems and outcomes research."

2003 - Present



- Iraq Conflict started 2003
- Discussion with Norm Rich & COT
- Discussion with Dr. Woodson / Dr. Elster
- MOU written – strategic partnership
- IOM, NAM – Commissioned
- Report released August 2016