Policy

“Field implementation of the knowledge gained through research.”

Chief C. A. Haigh
Hanover Park Fire Department & Illinois Fire Service Institute
Goal of Fire Service Research

Enhanced Knowledge

Training

Changed Behavior
The Process of Research Implementation

Enhanced Knowledge

Cultural Change

- Internal Policy Development
- Support of Labor
- Acceptance by standard setting/review organizations (NFPA, State Fire Marshal, OSHA, UL, NIOSH, etc.)

Training

- Support of local organizations (County Fire Associations, MABAS, etc.)
- Acceptance & buy in of Elected Officials and their willingness and ability to pay.
- Chiefs & Command Staff
- Acceptance & buy in of City/County/District Administration

Changed Behavior

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Hanover Park Fire Department & Illinois Fire Service Institute

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Limitations of Local Departments to Implement Research Driven Change

1. Lack of visionary leadership.
2. Lack of strong labor / management relations.
3. Failure to maintain priorities:
   1. Service to community
   2. Limit line-of-duty deaths and injuries
4. Lack of fire service support by elected officials and community.
5. Lack of financial resources.
The Fire Service in general does a poor job of looking beyond the walls of our organizations to find workable solutions to complex problems. To successfully implement change that is driven by today’s research, departments must think globally and be willing to change tradition in order to address current concerns.
Example

Research driven change utilizing non-traditional solutions.
Between 1995–2008:

- 649 Firefighters died due to Cardiac or Cerebrovascular Related Events.
- Cardiac or Cerebrovascular events account for 40%-50% of all annual line of duty deaths.
- An additional 700-1000 annual cardiac or cerebrovascular events occur that do not result in a LODD.
Line-of-Duty Death and Illness

Decreased number of fires, yet firefighter fatalities and illnesses due to cardiovascular/cerebrovascular incidents remain relatively constant.

Bottom line:
WE HAVE PROBLEM
Heat Stress - Contributing Factor

Heat stress coupled with:
- Work performed
- Protective Equipment
- Thermal Environment
- Health Status
- Fitness Level
- Hydration Level
The Role of Rehab

Rehab when implemented properly can reduce the detrimental effects of heat stress and lessen the potential for a cardiovascular/cerebrovascular incident.

The Question: How to do this with limited human and financial resources?
Partnership Opportunities

- Utilize CERT to develop a volunteer response team (Fire Corps) trained and equipped to provide on-scene rehab services.
Fire Corps

❖ 5-year study:
  ◆ HPFD -- $770,000
  ◆ $127,000 -- Average annual insurance loss

❖ Team Costs
  ◆ $20,000 (mostly grant funded)
  ◆ Since teams inception: $326,000 reduction in total insurance loss
Fire Corps

- Consists of 17 volunteers
- Pager alerted
- Respond on the initial alarm to all reported structure fires
- The team operates a decommissioned ambulance outfitted with rehab equipment and supplies.

Training
- Basic CERT
- Specialized training on how to provide rehab conducted through IFSI.

On-scene partnered with paramedics who conduct medical assessments while Fire Corps members provide hydration, cooling and nourishment.
Research / Fire Service Partnership

- Fire Service Change needs to be driven by research.
- Research needs to be driven based on Fire Service concerns.
- It takes courage to change the status quo and find solutions to difficult problems with limited human and financial resources.