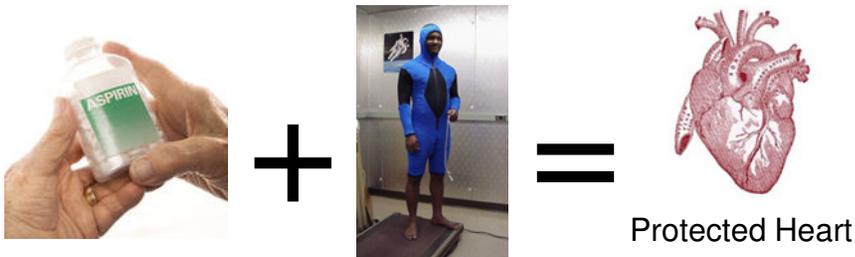


Cardiovascular event intervention in firefighters using wearable personal cooling systems and/or utilizing prophylactic aspirin therapy.

FY15 (939011T)

Objective

1. To determine if aspirin alone, cooling alone, or a combination of aspirin/cooling reduces platelet aggregation in human subjects wearing firefighter ensembles and exposed to heat stress
2. To apply the aspirin/cooling strategy to firefighters actively engaged in live fire training to determine efficacy of the strategy



Applicable standards

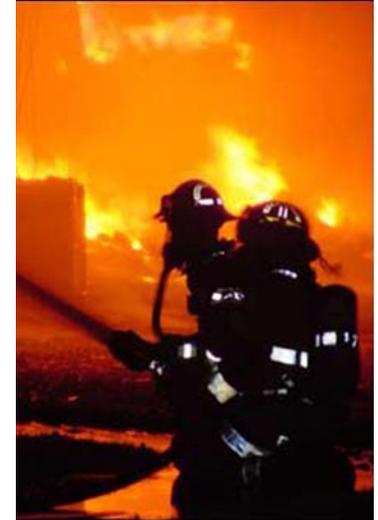
- None

Key Partners

- Skidmore College
- University of Pittsburgh
- University of Cincinnati

Stakeholders

- Firefighters, EMS, HAZMAT
- IAFF
- Medical community



Project Scope (all years)

- Develop physiological test protocol and conduct ergonomic and physiological testing to assess the efficacy of the aspirin/cooling strategy to reduce blood platelet aggregation in subjects wearing firefighter ensembles and exposed to environmental heat.
- To test the aspirin/cooling strategy in firefighters conducting live fire training.

FY15 Milestones

- Q1-Q2: Complete test protocol development
- Q3: OD and peer review of protocol
- Q4: HSRB approval of protocol

Outputs (completed and/or planned)

- Manuscripts published in peer-reviewed journals
- Guidance documents for Fire Service, IAFF

Outcomes (completed and/or planned)

- Incorporation of aspirin and/or cooling prophylactically to block blood platelet aggregation and reduce potential for cardiovascular events on the fireground.
- Potentially reduce firefighter morbidity and mortality due to cardiovascular events by 15% in next 5 years.

Updated: 25 Feb 2015