# **Emergency Incident Rehab**



## What is Rehab?

 Rehabilitation is the process of providing rest, rehydration, nourishment, and medical evaluation to responders involved in extended or extreme incident scene operations.



# Why Do We Need Rehab?

Strenuous work in potentially extreme temperatures

Fatigue
Overexertion
Heat/Cold
Existing Health Condition

Reduced Situational Awareness

Slips/Trips/Falls

Heat Related Illness
Cardiac Emergencies
Stroke

- Majority of Firefighter injuries in the US are related to overexertion / strain
- Majority of firefighter line of duty deaths are attributed to sudden cardiac arrest

# Purpose of Rehab?

Improve performance

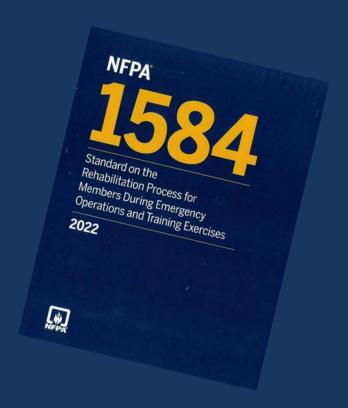
Decrease likelihood of on scene injury or death

 Ensures that physical and mental condition does not deteriorate to that point that affects the safety of each member or jeopardizes the safety and integrity of the operation

### **NFPA 1584**

Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises.

- Rehab <u>shall</u> commence when fire/emergency operations and/or training exercises pose a health and safety risk.
- Rehab <u>shall</u> be established for largescale incidents, long-duration and/or physically demanding incidents, and extreme temperatures.



### **NFPA 1584**

Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises.

- The IC <u>shall</u> establish rehab according to the circumstances of the indent. The rehab process shall include the following:
  - Rest
  - Hydration
  - Cooling / warming
  - Medical monitoring
  - Emergency medical care as required
  - Relief from extreme climatic conditions
  - Calorie and electrolyte replacement
  - Accountability
  - Relief

### **NFPA 1584**

Standard on the Rehabilitation Process for Members During Emergency Operations and Training Exercises.

- All members shall be sent to rehab following the use of:
  - (2) 30 minute or 45 minute SCBA
  - (1) 60 minute SCBA
  - Shorter times might be considered during extreme environmental conditions

- Incident Commander
  - Include rehab in the incident/event size-up
  - Establish rehab to reduce adverse physical effects on firefighters while operating during fire/emergencies, training exercise, and extreme weather conditions.
  - Ensure sufficient resources are assigned to rehabilitation

#### Company Officer

- Be familiar with the signs and symptoms of heat stress and cold stress
  - Monitor their company members
- Provide access to rehabilitation for company members as needed
- Notify IC when stressed members require relief, rotation, or reassignment according to conditions.

#### Rehab Manager

- Designate responder rehabilitation location(s).
- Provide the required resources for rehabilitation:
  - Water
  - Sports drinks (Operating >1 hour)
  - Active cooling
  - Medical monitoring equipment
  - Food where required and means to wash or clean hands and face
  - Blankets and warm, dry clothing for winter months
  - Washroom facilities where required
- Time personnel in rehab to ensure they receive at least 10 to 20 minutes to rest
- Documentation
- Inform the IC and EMS personnel if a member requires transport to and treatment at a medical facility

#### Responders

- Be familiar with the signs and symptoms of heat stress and cold stress
  - Maintain awareness of themselves and company members
- Notify Company Officer when members require relief, rotation, or reassignment according to conditions.

# Pennsylvania BLS Protocol 150

- Guideline
- Outlines:
  - Rehab Process
  - Safety
  - Equipment
  - Vital Sign Guideline

# 2023 Draft Update:

"Personnel with continued abnormal vital signs after 20 minutes in Rehab should be <u>considered a patient</u> and treated per applicable protocol which may include transport to the Emergency Department."

"Appropriate disposition for such patients should include transportation to a hospital and/or documented consultation with Medical Command for alternative disposition should the patient not be treated or transported to the hospital"

### **Heat Stress**

Heat Cramps / Muscle Spasms

#### Heat Exhaustion

- Heavy sweating / loss of body fluid
- Increased blood flow to skin / decreased blood flow to vital organs.

#### Heat Stroke

- Body temperature over 105.8 degrees + weakness, confusion, altered, hot/dry/red skin, headache, dizziness.
   Can experience seizures.
- Brain damage and may result in death

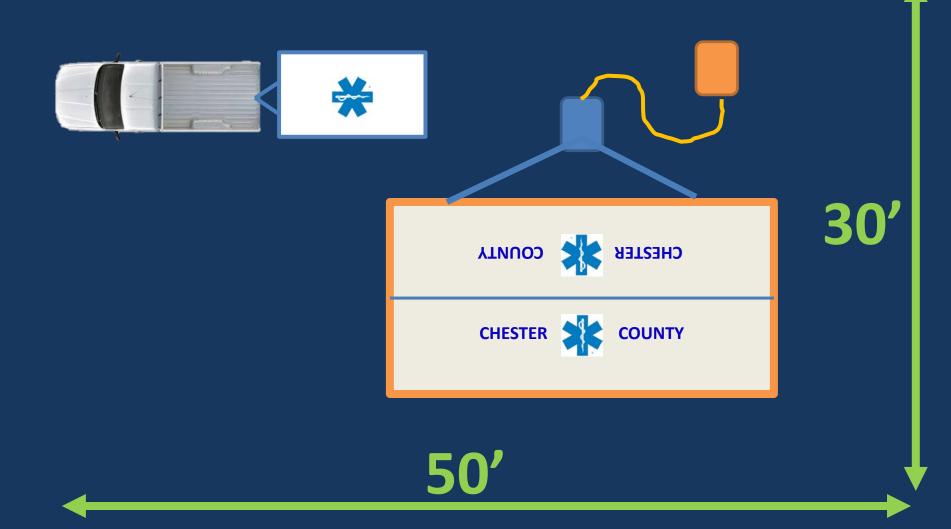
### **Rehab Location**

- Protected from elements & incident
  - Exhaust, smoke, toxins
- Large enough to accommodate multiple crews
- Located near ambulance(s) for transport

- Multiple locations?
  - Large incident
  - Access issues



# **Rehab Location**



# **Rehab Process**

Enter Remove PPE 10-20 Minute Rest Vital Signs Evaluated Hydrate

Medical Monitoring /
Treatment
Hydrate



### Rehab Process

- First responders need to rest in rehab area for <u>at least</u>
   10-20 minutes.
  - Should be sitting / hydrating
  - Cooling:

#### **Passive Cooling**

- Remove PPE
- Shaded area
- Cool fluids

#### **Active Cooling**

- Wet towels on head/neck
- Misting Fans
- Submerge hands/arms in cool water

### Assessment

- Mental status oriented?
- Signs of heat stress?
- Signs of a cardiac event / medical condition?

- Signs of a medical issue? Notify rehab manager immediately.
  - "I don't feel good"
  - Needs immediate medical evaluation
  - ALS assessment

# Supplies & Equipment

- One cooler of water + Two refill cases
- One cooler of sports drinks + Two refill cases
- Snacks granola bars, cereal bars
- Over the counter medications Advil, Tylenol, antacids
- Basic life support supplies
- Carboxyhemoglobin monitoring equipment
- Misting fans
- Pop-up tents
- Chairs



# **Supplies & Equipment**

- Inflatable shelter
  - 10' x 20'
  - \*Deployed at the discretion of the rehab manager
- Portable heating & air conditioning system
- Generator



### Documentation

- Log sheets No complaints / routine rehab
  - One PCR created for overall rehab Attach log sheets

- Illness / Injury
  - Refusal form competed or transported to emergency department

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# **Things to Consider – Rehab 55**

- Request rehab as early as possible
  - Rehab 55 averages 15 minutes from dispatch to response
  - On scene set up takes 15-20 minutes

- Who's responsible?
  - Incident Commanders, Company Officers or Agency Supervisors are responsible to ensure Emergency Responders go through the rehab process.

# What NOT to Expect - Rehab 55

- Canteen services (coffee, meals etc.)
- EMS treatment/transport
  - Local EMS should be handling
- Rehab area staffing
  - The local EMS agency is responsible for assessing and treating Emergency Responders during the rehab process with guidance and support from Good Fellowship's personnel

# Rehab 55 Support

**Direct Funding/Supply Support:** 







**Grant/Equipment Support:** 





Questions?

Thank You!