

Health Hazard Evaluation

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HHE

→ Evaluation of possible health hazards at a workplace.

company should be conducting a health hazard evaluation (HHE) to determine whether a violation has occurred.



Field investigations are done for

- the highest priority concerns
 - serious health effects that could be related to the workplace,
 - new or emerging issues



Health Hazards

- Physical agents such as heat and noise
- Biological agents such as mold
- Infectious diseases such as tuberculosis and influenza
- Chemicals such as solvents, metals, and particulates
- Psychosocial issues such as work stress



Benefit of HHE

- You will learn whether exposures or conditions in the workplace may harm employees' health.
- You will learn how to reduce or eliminate workplace hazards and prevent work-related illnesses and injuries.
- You may see an increase in employee productivity and a decrease in workers' compensation costs and medical expenses if you improve workplace health and safety programs.



During an On-Site Evaluation

- Observing work processes and practices
- Meeting with employee and employer representatives
- Talking privately with employees about their health
- Reviewing reports of exposure, injury, and illness
- Measuring exposures
- Surveying employees about their health
- Carrying out medical testing



After Evaluation

- HHE Program protects personal information it gets from records, forms, or interviews.
- Health and safety experts will review information about exposures, illness, and injury.
- They will recommend ways to reduce employees' exposures and prevent work-related health problems.



Health Hazard Evaluations (HHEs) and Health Risk Assessments (HRAs)

- **HHE** is a tool for classifying a voluntary recall by a firm.
- **HRA** is a tool for predicting possible harm that can come from a defective or malfunctioning device.



Example:

HHE in Structural Firefighter Training

Potential Impact: Heat-Related Illness and Rhabdomyolysis

- Muscle tissue breakdown
- Releases electrolytes and proteins into the bloodstream
- Can cause heart and kidney damage, permanent disability, and death
- Often mistaken for heat-related illness (HRI), such as heat stroke
- Can be diagnosed only through blood test for creatine kinase (CK)



In a 4-day evaluation of cadet training, measured:



Symptoms
of rhabdo &
HRI



CK levels
in blood



Heart
rate



Change
in body
weight



Core body
temperature
(CBT)



Found:

- 1 cadet had rhabdo; 16 others had elevated CK levels
- 1 cadet had CBT of 107.2°F during a live fire exercise
- Most cadets had excessive heat strain according to their CBT, heart rate, and body weight loss



Recommendations

- Schedule training and physically demanding activities during cooler months and cooler parts of the day
- Educate firefighters about signs, symptoms, and dangers of rhabdo



*Thank
You*

