



## FPST 1213 Fire and Safety Hazard Recognition

Terminology, Acronyms and Initialisms

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## Terminology



- Abbreviation
  - a shortened form of a word or phrase
    - Dr.
    - Mrs.
- Acronym
  - an abbreviation formed from the initial letters of other words and pronounced as a word
    - NASA
    - OSHA
- Initialism
  - an abbreviation consisting of initial letters pronounced separately
    - EPA
    - NRC

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## Terminology



- Flammable
  - A combustible that is capable of easily being ignited and rapidly consumed by fire.
- Combustible
  - Capable of undergoing combustion.
- Combustion
  - A chemical process of oxidation that occurs at a rate that is fast enough to produce heat and usually light, in the form of either a glow or flames.
- Oxidation
  - Reaction with oxygen either in the form of the element or in the form of one of its compounds.

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## Terminology



- **Flammable Liquid**
  - Any liquid that has a closed-cup flash point that is below 100°F
- **Combustible Liquid**
  - Any liquid that has a closed-cup flash point at or above 100°F
- **Flash Point**
  - The minimum temperature of a liquid at which sufficient vapor is given off to form an ignitable mixture with the air, near the surface of the liquid or within the vessel used
- **Fire Point**
  - The lowest temperature at which a liquid will ignite to achieve sustained burning

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## Terminology



- **Lower Flammable (Explosive) Level**
  - That concentration of a combustible material in air below which ignition will not occur.
- **Upper Flammable (Explosive) Level**
  - That concentration of a combustible material in air above which ignition will not occur.

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## Terminology



- **Deflagration**
  - Propagation of a combustion zone at a velocity that is less than the speed of sound in the unreacted medium.
- **Detonation**
  - Propagation of a combustion zone at a velocity greater than the speed of sound in the unreacted medium
- **Explosion**
  - The bursting or rupture of an enclosure or a container due to the development of internal pressure from a deflagration.

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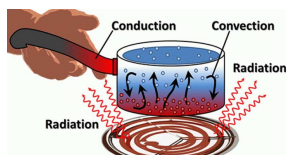
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## Terminology



- Conduction
  - Heat transfer to another body or within a body by direct contact.
- Convection
  - Heat transfer by circulation within a medium such as a gas or a liquid.



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## Terminology



- Flashover
  - A stage in the development of a contained fire in which all exposed surfaces reach ignition temperature more or less simultaneously and fire spreads rapidly throughout the space.
- Backdraft
  - A deflagration resulting from the sudden introduction of air into a confined space containing oxygen-deficient products of incomplete combustion.
- BTU
  - The quantity of heat required to raise the temperature of one pound of water 1F at the pressure of 1 atmosphere and temperature of 60F

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## Terminology



- Accident
  - That occurrence in a sequence of events which usually produces unintended injury, death, or property damage.
- Near Miss
  - An unplanned event that did not result in injury, illness, or damage – but had the potential to do so.

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## Terminology



- Prevention
  - Developing ways to eliminate the occurrence of the unplanned event.
- Examples
  - National Electrical Code (NFPA 70)
  - Traffic laws
  - OSHA regulations

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## Terminology



- Mitigation
  - Developing methodologies that reduce the damage caused by the event.
- Examples
  - Construction codes in earthquake zones
  - Emergency response plans

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## Terminology



- Safety
  - An ever-changing condition in which one attempts to minimize the risk of injury, illness, or property damage from the hazards to which one may be exposed.
- Safe
  - Free from the risk of harm. (Webster's)

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## Terminology



- Injury
  - Any kind of damage to the body resulting from a single exposure to some type of energy or force
- Example
  - physical trauma suffered in an automobile accident
  - Laceration from a knife

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## Terminology



- Illness
  - Damage to the body resulting from repeated exposures to some type of energy or force
- Examples
  - Cancer
  - Hearing loss
  - Carpal tunnel syndrome

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## Terminology



- Hazard
  - A condition or set of conditions that have the potential to produce injury, illness, and/or property damage.
  - Requires exposure and a sequence of events or stimuli before damage can occur.

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## Terminology



- Risk
  - Risk refers to the probability that a hazard will be activated and produce injury or property damage
- Two components
  - Probability or likelihood of the hazard being activated
  - Severity of the resultant accident

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