

2. Risk Assessment (RA) Studies and Reports

2.1. Defining the problem

- 2.1.1.** The purpose of conducting the FRA should be identified and documented. The purpose might be to identify the level of risk present in an existing building or facility, to identify methods of lowering the risk in an existing building or facility, or to identify methods of providing a level of risk deemed acceptable in a new or renovated building or facility.
- 2.1.2.** The objectives of the FRA might be associated with the risk to life (occupants or fire fighters), the risk to property, the risk to operations (e.g., cost of business interruption), the risk to the environment, or the risk of loss of cultural resources.

Did You Know?

4 Simple questions can lead you to assess fire risks (Conduct RA) around you.

1. Is source of Ignition and Fuel present?
2. Will People, Business and Property be affected?
3. How to reduce chances of fire accident and impact?
4. Is everyone around you aware of these questions and their answers?

2.2. Elements of Risk

- 2.2.1.** The elements at risk should be identified. these elements could be any or all of the following.
- 2.2.1.1.** People (occupants, employees, general public, emergency responders).
- 2.2.1.2.** Property (structures, systems, components of the built environment)
- 2.2.1.3.** Environment (national parks, monuments, hazardous materials)
- 2.2.1.3.** Mission (heritage, business continuity, information/ communication)

2.3. Guidelines for conducting Risk Assessment

- 2.3.1.** Risk analysis should be based on various hazard assessment methods. The RA documentation should include a brief description of these methods of solution, numerical computations (including identification of units used), and identification of the source or derivation of all equations that are not in common usage.
- 2.3.2.** Methods may include a variety of elements based on the problem definition. These elements may be qualitative or quantitative and may involve deterministic or probabilistic models.
- 2.3.3.** As a general guideline, **Table 17.1.** should be followed for Risk Assessment methods.
- 2.3.4.** **NFPA 550, NFPA 551, NFPA Handbooks** have been referred for this chapter. Consultants and House of Expertise shall refer to these documents for further details and RA methodology.