

**Preventing Injuries and Deaths of Fire Fighters
due to Structural Collapse****WARNING!**

Fire fighters are frequently injured or killed when burning structures collapse without warning.

Fire departments should take the following steps to minimize the risk of injury and death to fire fighters during structural fire fighting:

- Implement and review occupational safety programs and standard operating procedures.
- Ensure that the incident commander conducts an initial size-up and risk assessment of the incident scene before beginning interior fire fighting.
- Ensure that the incident commander always maintains accountability for all personnel at a fire scene—both by location and function.
- Establish rapid intervention crews (RICs)—often called rapid intervention teams—and make sure they are positioned to respond immediately to emergencies.
- Ensure that at least four fire fighters are on the scene before beginning interior fire fighting at a structural fire (two fire fighters inside the structure and two outside).
- Equip fire fighters who enter hazardous areas (such as burning or suspected unsafe structures) to maintain two-way communications with the incident commander.
- Ensure that standard operating procedures and equipment are adequate and sufficient to support radio traffic at multiple-responder fire scenes.
- Provide all fire fighters with personal alert safety system (PASS) devices and make sure that they wear and activate them when they are involved in fire fighting, rescue, or other hazardous duties.
- Conduct prefire planning and inspections that cover all building materials and components of a structure.
- Transmit an audible tone or alert immediately when conditions become unsafe for fire fighters.
- Establish a collapse zone around buildings with parapet walls.



For additional information, see ***NIOSH Alert: Preventing Injuries and Deaths of Fire Fighters due to Structural Collapse*** (DHHS [NIOSH] Publication No. 99-146). Single copies of the Alert are available free from the following:

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