

Basement Fires

Discussion

Basement fires are one of the most hazardous types of operations that a firefighter responds to. Entry into the fire area requires the crew to be positioned at the top of the stairway which is often the hottest area of the structure. A line should be kept in place at the top of the entry point to protect the integrity of the stairway at all times. A key to fighting basement fires is to ventilate as soon as possible, releasing the heat and smoke making access and attack easier for the firefighting team. Identification of the fire location in the basement is an important action during size-up as is the identification of alternate entrance and exit points. Always consider the potential for extension of the fire into the support structure of the floor you are operating on. Lightweight construction adds to the danger of this operation. Crews must move quickly from the entry point to the lower levels where conditions might be more tenable. Risk/benefit must always be considered in these and all fire responses. In open stairway structures, fire spread will be rapid involving the first floor quickly. Review department SOG's on size-up and strategy and tactics for basement fires.

Basement Fire Tactics

- Conduct risk/benefit analysis; is it worth making entry
- Try to find an alternate entrance from the outside
- Ventilate prior to entry
- Protect the stairway
- Consider weakened structural components
- Move quickly down the stairs, stay on bearing wall if possible
- Use solid streams when available, fog will produce too much steam
- Thermal Imaging must monitor the atmospheres above ff's at all times
- Back-up lines are a must
- Identification of alternate exits is a must, consider the possibility of block exterior walls or the lack of windows/doors. You do not want to be limited to 1 stairway egress path.
- Report conditions and findings to IC as soon as possible



NIOSH Incident Fatality Review Findings—Recommendations to Prevent Future Injuries/Fatalities

- Ensure that Incident Command conducts an initial size-up of the incident before initiating fire fighting efforts and continually evaluates the risk versus gain during operations at an incident
- Ensure that fire fighters from the ventilation crew and the attack crew coordinate their efforts
- Ensure that fire fighters report conditions and hazards encountered to their team leader or Incident Commander
- Ensure fire fighters are trained to recognize the danger of operating above a fire



Use caution when operating cellar nozzles as you are operating directly above the fire area!