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MARCH NEWSLETTER- ADVANCING THE INITIAL ATTACK HOSELINE

Firefighters who advance the initial attack hoseline are some of the toughest and most hard-working, courageous, and dedicated members of a fire department. They often are the youngest and strongest, too. They are the unsung heroes of every successful firefighting operation. For example, after a fire is extinguished, the fire chief is interviewed by television reporters, and the firefighters who operated outside the burning building are photographed and will have their pictures appear in the next morning's newspapers; but the firefighters who put out the fire are in a small group by their pumper nursing their wounds: scalded necks, blistered knees, and scorched wrists. Firefighters who advance attack hose lines suffer the most serious burns and most frequently are burned at a fire. These firefighters are burned because they work in extremely close proximity to raging flames and intense, heated gas and smoke. They come

face to face with fire. Their work environment is hellish. They crawl over a bed of red-hot ashes or beneath falling burning embers, dragging a hundred pounds of hose, whipping around a high-pressure nozzle, throwing tons of water around a flaming hallway or room.

The water from this hose stream immediately turns to steam and scalding rain, which pours down-along with heated chunks of collapsing ceiling plaster and melted paint around their helmets and shoulders. Into this environment they crawl steadily forward, blindly, stopping only when the heat appears to lessen, signaling the extinguishment of the fire. Firefighters operating an attack hoseline suffer more than twice the number of burn injuries as firefighters performing other duties. Scientific tests show a second degree burn happens to a firefighter when subjected to: 160 degree temperature for 60 seconds; or to 180 degrees for 30 seconds; or to 212 degrees for 15 seconds. Also test show temperatures of 280 F to 320 F cause intense pain and damage to exposed skin. And inhaling superheated smoke or gas at a temperature of 300 degrees for several seconds will kill a firefighter. The temperatures in a burning room are much hotter than these. Flames at ceiling level of a burning room are I,000 deg. F. Steam created by the vaporization of the hose stream is 500 deg. F.

Three areas of a firefighter's body often are burned and blistered during an attack hoseline advance: knees, wrists, and the neck and ear area. The skin on these body areas suffer first-, second-, and third-degree burns: (first-degree = redness,) (second-degree = blistering), (third-degree = charring). The fireground first-aid treatment for all types of skin burns is to immerse the burned area in cold water from a hose stream for two to five minutes and cover the area with a dry, sterile dressing. Cold water then is applied to the dressing. If the burn is third degree and covers a large area, the firefighter is treated for shock.

Firefighters can protect themselves from these types of burns by wearing fire gear that covers the legs, wrists, and neck. Chief officers should ensure firefighters wear protective clothing when responding and operating at fires. Bunker pants are superior to pull-up boots; they cover the upper leg and thigh better. Protective hoods can be worn to protect the neck and ears; and well-designed and properly fitted gloves and coat wristlets must cover the wrist area

completely when the arms are fully extended, the position used when moving a nozzle from side to side. In addition to wearing protective clothing, the chief and company officers should train firefighters in the following safe operating practices to help reduce burn injuries:

1. Wear your turnout coat fully buttoned and with the collar pulled up. Pull down the earflaps of your helmet and wear a hood.
2. Crouch down low when advancing an attack hoseline. Stay below the thermal balance of superheated gases at ceiling level.
3. Do not stretch an uncharged hoseline into the room containing the fire and then hit the fire when water is received at the nozzle. You will be trapped in the room with the expanding steam and the blowback of heated gases. Get water in the hoseline outside the room and hit the fire from the doorway first. Use the reach of the stream to cool down the room first, then move in.
4. Coordinate venting with hoseline advance. Vent the room windows when the line advances. Open all doors, windows, and skylights to the room to reduce heat flame and expanding steam.
5. To avoid plunging a leg through a burned-out floor deck and suffering upper thigh burns before pulling your leg out, use a crawling technique: Place one outstretched leg in front of you when advancing the attack hoseline. Support your body weight with your back leg tucked beneath you. The outstretched leg can "feel" the stability of the floor deck, the presence of holes, or weakened flooring.
6. Never pass fire that threatens to cut off your retreat.
7. When wind is blowing through a window into the path of the attack hose team's advance, notify the officer in command of the fire, and request that another attack hoseline be advanced with the wind from a fire escape or ladder. When ready, back out the initial attack line, close the door, and protect exposures while the second line advances from the opposite direction with the wind

8. When the fire commander orders that an outside master stream be used and that the initial attack hoseline back out, comply with the order to withdraw the hoseline and back out to a safe position. Do not continue to attempt to advance the hoseline.
9. Do not bunch up and overcrowd the hallway or stairs behind the attack hose team firefighters. Allow them room for a temporary retreat if flames, heat, and steam blow back to them. You may not feel the same degree of heat as firefighters who are two or three feet ahead of you.

Lessons learned

Advancing the initial attack hoseline is a basic firefighting service provided by every fire company in America. Firefighters advancing the first attack hose save more lives than any other single firefighting action. It is also the tactic that produces a high number of injuries, the most significant of which are burns.

True or false

1. Firefighting, protective clothing is designed for proximity protection (working around a fire) not entry protection (entering a burning room of 1000 degrees. F)

Answer_____

2. Firefighters who advance hose line suffer the most serious and frequent burn injuries.

Answer_____

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Questions

3. Which one of the following is an incorrect answer?

   A. Temperatures of 280 to 320 degrees F. can create intense pain to skin

   B. Temperatures at ceiling level of a burning room can be 1000, degrees F.

   C. The temperature of vaporized steam can reach 500 degrees F.

   D. Protective clothing can protect firefighters from the above temperatures

Answer_____

4. Match the following

Skin damage	Type of burn
A. Redness	_____first degree
B. Charring	_____second degree
C. Blisters	_____third degree

5. Which one of the following is the most correct statement regarding advancing an attack hose line into a burning room?

   A. Operate the hose stream from the doorway first before entering the burning room

   B. Wear protective clothing including hoods with ear flaps down

   C. Stay low

   D. All of the above are true statement

Answer_____

Answers

1. True; 2. True; 3. D; 4. A,C,B. 5. D.

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5. Use questions to test firefighters.