



BFFA'S FIRE OPS 101

INTERIOR FIRE FIGHTING OPERATIONS

Fire attack is a highly coordinated effort between all fire companies arriving on scene. This is especially true of the first arriving Engine (pumper) and first arriving Truck (ladder) companies. The initial Engine Company stretches a fire hose called the “attack line” to the appropriate entrance of the structure in preparation to make an attack on the fire. The truck company has many jobs, but the most important is ventilation of the structure. This must occur fast and in coordination with the entry of the fire attack crew. However ventilation is achieved, its fast completion is vital for many reasons:

1. Decreases the smoke, heat, and superheated (flammable and toxic) gasses in a structure,
2. Increases the visibility of the search & rescue and fire attack crews,
3. Increases the chances of survivability for victims trapped inside a structure,
4. Slows the spread of fire by strategically pulling the fire to a certain point,
5. Reduces the possibility of a flashover (*simultaneous explosion/ignition of all combustible material in a room. This is the point when fire spread becomes quite fast*) or backdraft (*a very powerful explosion caused by the ignition of superheated flammable gasses*).

Fire Attack is usually performed by the first arriving engine company. The goal of fire attack is a rapid tactical assault on the fire inside the structure. To stay alive and perform this task effectively, crews must keep many factors in mind, including:

1. Two in two out – There must be 2 firefighters outside before fire crews can make an interior attack, this is an OSHA regulation written in response to firefighter fatalities,
2. Orientation – Fire crews use many different methods of keeping their orientation in a structure during “black out” situations,
3. Fire Spread – Crews must be aware of what type of structure they are operating in. Depending on building construction, fire can spread through walls, floors, ceilings and other hidden spaces. Fire can flank attack crews and place them in grave danger.
4. Flashover – A dangerous and common fire phenomenon that occurs when all combustibles in a room are heated to ignition temperature and simultaneously ignite. This usually occurs between 4 and 10 minutes of ignition. After flashover, fire spread increases exponentially and the chance of saving lives drops significantly.

Every fire is different, but a similarity across the board is that every fire utilizes all of the initially dispatched companies. In fact, many times the Incident Commander will request additional companies to respond due to lack of personnel. Fighting fires is a labor intensive and dangerous job. Personnel go through hundreds of hours of training so that they may understand building construction, fire chemistry and the dynamics of fire and smoke spread – which are some vital elements that go in to a vast, ever-expanding knowledge bank that help to keep firefighters safe (as one can be) and effective in these high stress/risk situations.