Risk Assessment for When to Use a Fire Extinguisher

Portable fire extinguishers have two functions: to control or extinguish small or incipient stage fires and to protect evacuation routes that a fire may block directly or indirectly with smoke or burning/smoldering materials.

To extinguish a fire with a portable extinguisher, a person must have immediate access to the extinguisher, know how to actuate the unit, and know how to apply the agent effectively. Attempting to extinguish even a small fire carries some risk. Fires can increase in size and intensity in seconds, blocking the exit path of the fire fighter and creating a hazardous atmosphere. In addition, portable fire extinguishers contain a limited amount of extinguishing agent and can be discharged in a matter of seconds. Therefore, individuals should attempt to fight only very small or incipient stage fires.

Prior to fighting any fire with a portable fire extinguisher you must perform a risk assessment that evaluates the fire size, the fire fighters evacuation path, and the atmosphere in the vicinity of the fire.

Risk Assessment Question	Characteristics of incipient stage fires or fires that can be extinguished with portable fire extinguishers	Characteristics of fires that SHOULD NOT be fought with a portable fire extinguisher (beyond incipient stage) - evacuate immediately
Is the fire too big?	The fire is limited to the original material ignited, it is contained (such as in a waste basket) and has not spread to other materials. The flames are no higher than the firefighter's head.	The fire involves flammable solvents, has spread over more than 60 square feet, is partially hidden behind a wall or ceiling, or can not be reached from a standing position.
Is the air safe to breathe?	The fire has not depleted the oxygen in the room and is producing only small quantities of toxic gases. No respiratory protection equipment is required.	Due to smoke and products of combustion, the fire can not be fought without respiratory protection.
Is the environment too hot or smoky?	Heat is being generated, but the room temperature is only slightly increased. Smoke may be accumulating on the ceiling, but visibility is good. No special personal protective equipment is required.	The radiated heat is easily felt on exposed skin making it difficult to approach within 10-15 feet of the fire (or the effective range of the extinguisher). One must crawl on the floor due to heat or smoke. Smoke is quickly filling the room, decreasing visibility.
Is there a safe evacuation path?	There is a clear evacuation path that is behind you as you fight the fire.	The fire is not contained, and fire, heat, or smoke may block the evacuation path.