# MICHIGAN STATE UNIVERSITY EXTENSION

## Fire Extinguisher Selection, Location and Use<sup>1</sup>

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Armed with the right type of fire extinguisher, a property owner can often extinguish or contain a fire before it becomes a major blaze. But to effectively fight a fire, an individual must be prepared with the right type of extinguisher, have it readily available, and know how to use it properly. Failure to be properly prepared to extinguish a fire not only reduces the chances of containing the blaze, but may also place the individual in a extremely hazardous situation.

If you lack the tools or the skills to fight a fire, no matter how small, get out of the building, call your local fire department and wait for them to arrive.

#### FIRE EXTINGUISHERS

There are several types of fire extinguishers available, but the best type for home and farm use is a multipurpose "ABC" type extinguisher. ABC type extinguishers generally use ammonium phosphate as the active chemical to extinguish a fire and are capable of putting out most common fires.

Extinguishers are rated for the type of fire they are made to extinguish.

A - Ordinary combustible materials such as wood, paper, hay, etc.

B - Flammable liquids such as gas, oil, grease and other petroleum products.

As this listing shows, an ABC type extinguisher is capable of extinguishing most fires.

Multipurpose extinguishers are available in  $2\frac{1}{2}$ , 5 and 10 pound sizes. The larger the extinguisher the longer it takes to completely discharge. Because the discharge time for these sizes ranges from 8 to 25 seconds, a five-pound extinguisher is the minimum size that should be purchased.

When purchasing an extinguisher, make sure it is U.L. (Underwriters Laboratories) or F.M. (Factory Mutual Laboratories) approved. Extinguishers with these labels are manufactured to meet recognized safety and performance standards. Contact your local fire department for additional information about purchasing an extinguisher to meet your specific needs.

## PURPOSES AND LOCATIONS FOR FIRE EXTINGUISHERS

The main reasons for having fire extinguishers readily available are to:

- 1. Suppress a fire along an escape route so trapped persons can exit a burning structure.
- 2. To extinguish or contain a fire from the time it is discovered until the arrival of fire department personnel.

C - Electrical fires.

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## HOME PROTECTION

A homeowner can determine where extinguishers should be located by looking at statistical data of the most common times for home fires.

Historically, most home fires occur between 8 p.m. and 8 a.m., a time when most individuals are either relaxing or sleeping. Extinguishers stored in the bedroom or bedroom closet will be readily available. Extinguishers should be placed along all escape routes from the house. Areas that are prone to fires, such as the kitchen, furnace area, garage and workshop, should also have a fire extinguisher readily available. The best policy is to have several fire extinguishers located throughout the home where they are readily available.

Since many home fires occur during the night or in out of the way areas such as a furnace room or garage, smoke detectors are essential to alerting the family of a fire. Smoke detectors should be placed on all levels of the house and should be tested frequently. Batteries should be replaced at least once a year. A standard practice is to replace the batteries in the fall, when clocks are adjusted for daylight savings time.

#### FARM BUILDINGS

Farm buildings and farm equipment should also be equipped with fire extinguishers.

The farm shop is a particularly fire prone area due to the types of equipment used. Welders and cutting torches can quickly ignite any combustionable material not properly stored. At least one 10-pound ABC extinguisher should be wall mounted in the shop for easy accessibility.

It is a good practice to have at least one ABC type extinguisher in all farm buildings and in other areas where there is a risk of a fire, such as around grain drying and processing equipment.

## TRACTORS, COMBINES AND OTHER MACHINES

Fire extinguishers should also be mounted on tractors, combines, trucks and other equipment. Because most fires associated with these types of equipment are from petroleum products or electrical fires, a five-pound ABC or a BC type extinguisher will be adequate. To cut down the cost of purchasing several extinguishers, mounting brackets can be attached to equipment and the extinguisher can be transferred from seasonal equipment when it is to be stored for several months.

## FIRE EXTINGUISHER OPERATING PROCEDURES

- 1. When a fire occurs, follow these general rules:
- 2. Make sure everyone gets out of the building.
- 3. Call the fire department immediately. Fires can spread quickly -- if you are unsuccessful in putting out a fire, the time you spent trying to extinguish a blaze may allow it to spread to other buildings. If your farm is difficult to find or off a main road, keep a complete set of directions posted by the telephone to instruct fire department personnel to your location. Precious seconds can be lost if you are required to stop and think about the quickest route to the farm. Most individuals can be easily confused during a stressful situation.
- 4. After calling the fire department, if the fire is still small, decide if you or someone else should risk trying to control the fire. Smoke and gases released from a fire can be toxic, so never attempt to put out a fire if you have any doubts about your ability to extinguish it. Wait for fire department personnel who have the proper equipment and are trained in fire fighting procedures. If you elect to put out a fire and it grows too large to control, back out of the building. Never turn your back on a fire. Close the door behind you to limit oxygen in the building and wait until help arrives.

#### To Operate a Fire Extinguisher:

- 1. Take extinguisher from mounting bracket.
- 2. Remove locking pin, ring, clip, level, etc. Get into a crouching position on the upwind side of the fire.
- 3. Point extinguisher nozzle at base of fire and squeeze the lever or handle.
- 4. Discharge using a sweeping motion from side to side at the base of the fire.

## SAFETY TIPS AND PRECAUTIONS

Purchase only U.L. or F.M. approved fire extinguishers and maintain them according to manufacturer's instructions. Contact your fire

department to request any fire safety information, including training in fire extinguisher operation.

Families, especially those with young children, should have a fire escape routine and practice it regularly. Make sure everyone has planned escape routes out of the building and knows to meet in a defined meeting area such as a tree, fence corner, etc. Never reenter a burning house.

Having fire extinguishers in your home and on the farm does not relieve you and family members from the responsibilities of taking precautions to prevent fires, nor do fire extinguishers take the place of trained fire department personnel.

A fire extinguisher is designed to reduce the chances of injury and death to you and family members during the time it takes to leave the structure and for trained help to arrive in the event of an accidental fire.

Smoke detectors are essential to early detection of a fire. Install and maintain them according to manufacturer's instructions.