

43—Fire Protection

companies, fire departments, and safety councils have films, posters, and cutaway displays useful in explaining the construction, maintenance, and operation of portable extinguishers. NFPA Standards No 10 and 10A, on portable fire extinguishers, afford particularly valuable information for the training of employees in practices related to portable fire extinguishers.

The education of employees should be continued with demonstrations, practice drills, and lectures at yearly intervals, or more often if there is a special fire hazard. It may be advisable to put printed instructions regarding the use of fire extinguishers into the hands of the employee. Mimeographed or printed sheets, leaflets, or cards can give both general and detailed instructions regarding the use of the extinguishers.

In addition, instructions in how to use extinguishers should be permanently posted near or on the extinguishers themselves (Fig 43-26).

Fire extinguisher training is intended to teach men and women how to stop small fires from spreading out of control. Underwriters' Laboratories, Inc., lists fire extinguishers at only 40 percent of their firefighting capacity when used by an inexperienced operator because 90 out of 100 people have never used a fire extinguisher. This shows the critical importance of training and means that any fire extinguisher in the hands of a trained operator has 2½ times the fire-fighting capacity it has when used by a novice.

An organized fire brigade is a step ahead of even the best system of teaching individuals how to use portable fire extinguishers.

Maintenance and inspection

One person in the plant should be assigned responsibility for the maintenance and inspection of fire extinguishing equipment. In larger plants, this person may be the fire chief or the safety professional. He may have one or more assistants to make routine inspections weekly or monthly and to do testing and repair work in accordance with procedures recited in NFPA Standard No 10. There should be a record system and an organized plan for checking and repairing various types of extinguishers.

The inspection and maintenance records



FIG 43-26 —Instructions should be permanently posted on and near extinguishers.

should at least consist of durable tags fastened to the extinguishers showing dates of inspection (at least monthly), and examination for recharge and other maintenance work (at least annually).

A duplicate record should also be kept in a file in the office. Other records may be kept listing extinguishers by type, by location, and by recharge periods. The office record system should give the history of each extinguisher, the type and quantity of refills on hand, and other pertinent information.

Efficient in-plant maintenance requires that supplies of spare parts and refills be kept on hand. In larger plants, specially trained personnel can test and refill extinguishers on a full-time basis. In other plants, the maintenance service can be under contract with a reliable service organization or the manufacturer's representative.

Generally, it is desirable to seal hand extinguishers or to install them in cabinets to discourage tampering and to facilitate inspection. *However, extinguishers should not be locked in cabinets nor stored in any way that would prevent immediate use in an emergency.*