MSU-ES Dawg Tracks

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Safety Tips: Portable Heater

Space heaters and other types of portable heaters are widely used in homes, offices and other areas to supplement the system installed in that area. Throughout our university system, on and off campus, you will see them used extensively.

According to many sources, these devices aren't highly efficient and have significant fire and safety hazards associated with their use. Space heaters carry a much greater risk of causing a fire than central heating, such as furnaces. Space heaters present a much greater risk for potential human error, such as: leaving them too close to combustible materials, failing to install, fuel or operate them correctly.

The U.S. Consumer Product Safety Commission estimates that:

- ✓ More than 25,000 residential fires every year are associated with the use of space heaters, causing more than 300 deaths.
- ✓ An estimated 6,000 persons receive hospital emergency room care for burn injuries associated with contacting hot surfaces of room heaters, mostly in non-fire situations.
- ✓ Room gas heaters, portable kerosene heaters (illegal in many states), and portable electric heaters have the highest risk of death and injuries, including non-fire related deaths due to carbon monoxide.

Although, to my knowledge, the university has no formal policy for the use of portable heaters, certain safety rules should be followed to insure the safety of personnel, buildings and equipment.

Following are some tips to help you insure the safe use of these portable heaters:

- Be totally familiar with the regulations in the manufacturer's instruction manual.
- Regardless of whether or not the heater is wood or gas-fueled or electric, it should be inspected annually in the fall prior to winter use. Our use is predominantly electric types.
- There must be 36 inches of clearance in front of the heater and 18 inches on each side and at the rear of the heater.
- The recommended type of heater is one that has the front totally enclosed and should have no external surfaces that reach temperatures capable of igniting, such as an oil-fueled radiant heater.
- The unit must have thermostatic controls and automatic "tip over" devices.
- The heater, if electric, must be plugged directly into an outlet.
- Do not use an extension cord or power strip for the space heater.
- Run the power cord along the floor to keep it from becoming a trip hazard.
- Turn off the heater when you leave the room; unplug it every night before leaving work.
- If a space heater is placed in a bedroom, it must be protected with an arc-fault circuit interrupter.
- If outlets or switches feel warm, shut off the circuit and have them checked by an electrician.
- Do not place electric heaters in bathrooms or in other wet or moist areas.
- Do not place heaters under desks or in enclosed areas.
- Do not locate or place a heater in exit ways, walkways or other paths of travel.
- Open coil heaters should not be used in any buildings.
- Space heaters of any type should not be used in laboratories.
- Heaters with broken or damaged parts should be repaired or replaced and not put into service without them being in acceptable condition.

The National Fire Protection Association in a paper stated that in 2001, there were (estimated) 54,900 home heating fires which killed 220 people. This survey also revealed 1,120 injuries with $502 million in property damage.

The five most widely used types of portable or fixed space heaters are room gas heaters, portable kerosene heaters, portable electric heaters, wood stoves or fireplaces with built in inserts or other fixed electric heaters. Of these, the first three have the highest risk of deaths and injuries, including non-fire deaths from carbon monoxide. Portable kerosene heaters have the highest risk of death by most measures, and are illegal in most states.

We realize that in many of our buildings without proper insulation, undersized heating equipment and the fact that different folks have varied body temperature standards, portable heaters are needed. If we practice the tips listed above, we can greatly reduce the risk of possible deaths and injuries and loss of property.

Ted Gordon-Risk Mgmt. / Loss Control Mgr.
MAFES / MSU-ES (662-566-2201)
Excerpts: www.nfpa.org / http://publicsafety.tufts.edu