



## **INTRODUCTION**

The high cost of heating oil and natural gas combined with the efforts to save energy, raises the potential for increased use of alternative heating sources. Space heaters and other supplemental heating devices may be employed where cold complaints are made or staff, students and faculty will in some cases bring them in themselves. Space heaters are not highly efficient and have significant fire and safety hazards associated with their use.

## **BACKGROUND**

Space heaters carry a much greater risk of causing a fire than central heating, such as furnaces. Space heaters present a greater potential for human error such as leaving them too close to combustible materials or failing to install, fuel, operate and maintain them properly.

Safety must be a top consideration when using space heaters. 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.<sup>i</sup>

Room gas heaters, portable kerosene heaters (illegal in many states - including MA<sup>ii</sup>) and portable electric heaters have the highest risk of death and injuries, including non-fire related deaths due to carbon monoxide. Heating equipment is leading causes of home fires during the months of December, January and February and trails only cooking equipment in home fires year round.<sup>iii</sup>

**Due to the risks associated with space heaters – most facilities at Harvard prohibit their use.**

If you have a problem with the heating/ventilation in your office space or residence – contact your building manager for assistance.

## **SAFETY PRECAUTIONS**

If you must use a space heater: The following steps and safety precautions must be observed:

- You must have approval from your Building Manager prior to purchasing or using a space heater.
- The space heater selected must be tested by an independent testing laboratory such as Underwriter's Laboratories (UL).
- The preferred style of space heaters are fully enclosed by design and have no external surfaces that reach temperatures capable of igniting, such as an oil filled radiant heater.
- **Keep the space heater accessible – do not storage anything within three feet of the unit. The leading cause of space heater fires was combustibles too close to the heater.**
- The unit must have thermostatic controls and automatic shutoff features.
- **The space heater must be plugged directly into an outlet.** Do not use a light-duty extension cord or a multi outlet strip/surge protector; it can start a fire with a high-wattage appliance. The unit must be grounded with a three-pronged plug.



Example of an oil filled space heater



- Do not use an extension cord or strip plug.
- Run the power cord so that no one steps on or trips over it.
- Turn off the heater when you leave the room - **unplug** the heater when you leave for the day.

## **BUILDING MANAGERS**

### **The 2005 National Electric Code requires:**

1. The rating of an individual branch circuit shall not be less than the marked rating of the appliance.
  2. If a protective device rating is marked on an appliance, the branch-circuit overcurrent device rating shall not exceed the protective device rating marked on the appliance.
  3. The rating of a receptacle shall not be less than the rating of any appliance connected thereto.
  4. If a space heater is installed in a bedroom, the electrical outlet must be protected with an arc-fault circuit-interrupter (AFCI).
- If outlets or switches feel warm, shut off the circuit and have them checked by an electrician.
  - DO NOT place electric heaters in bathrooms.
  - Read and follow manufacturer's instructions

## **ADDITIONAL INFORMATION & RESOURCES:**

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<sup>i</sup> U.S. Department of Energy – Energy Efficiency and Renewable Energy – A Consumer's Guide to Energy Efficiency and Renewable Energy – Portable Heaters  
[http://www.eere.energy.gov/consumer/your\\_home/space\\_heating\\_cooling/index.cfm/mytopic=12600](http://www.eere.energy.gov/consumer/your_home/space_heating_cooling/index.cfm/mytopic=12600)

<sup>ii</sup> Massachusetts General Law (M.G.L.)  
Chapter 148 Section 25A, 25B  
[www.mass.gov/legis/laws/mgl/gl-148-toc.htm](http://www.mass.gov/legis/laws/mgl/gl-148-toc.htm)

<sup>iii</sup> National Fire Protection Association (NFPA)  
Fact Sheet – Home Safety – Heating  
<http://www.nfpa.org/newsReleaseDetails.asp?categoryId=488&itemId=21864>

What You Should Know About Space Heaters  
U.S. Consumer Product Safety Commission, Washington, DC  
February 2001  
[www.cpsc.gov/cpscpub/pubs/463.html](http://www.cpsc.gov/cpscpub/pubs/463.html)