



# off-campus

by tim knisely (CCFS)

## Cooking 101:

**F**ood on the stove and grease fires are common responses for fire departments in off-campus housing communities. Like most fires and the associated responses, many could be prevented with a simple awareness to cooking basics - or Cooking 101.

ing fire. Late night cooking often goes bad when the chef is distracted or falls asleep allowing the food to cook unattended or the heat source to remain on. Another hazard is when these fires occur and are extinguished by the occupant, never notifying the fire department. The smoke alarm may be disabled to silence the noise and the occupants



FROM THE FRYING PAN TO THE FIRE

### The Fire Problem:

Cooking fires are a leading cause of fires in any household, but several factors increase the frequency of off-campus cooking incidents; including inexperience with the appliance and alcohol impairment. Once the student moves out of the residence hall there is no limit as to the type of appliances available. This could be a gas or electric range, microwave, frying pan or deep fryer, charcoal or gas fired grill, turkey fryer and many others. This is also where the introduction of alcohol and the late night munchies can increase the chances for a cook-

think everything is okay and go back to sleep. When these fires are not extinguished completely, it spreads unknowingly to nearby combustibles or to the cupboards above the stove. Since the smoke alarms may be disabled the next notification of this fire might not be until the smoke reaches the corridor, or hopefully the sprinkler in the kitchen will activate.

In addition to the item being cooked beginning to burn; items stored on or near the stove top are also

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easily ignited. This could include potholders, wooden utensils, pizza boxes, paper and anything else that can burn. Many times countertops are covered with paper or foil to protect the surfaces from the grease buildup adding another fuel awaiting a fire.

Outdoor cooking appliances typically don't usually pose a risk when used properly. However, using a propane or charcoal grill on a combustible deck, under a roof or a few inches from the vinyl siding create an exposure problem. Turkey fryers can be dangerous at any time and the use should be discouraged by the property owner.

### Raising the Awareness:

As with many other hazards that come with living off-

extinguish a stove top fire should also be provided to the occupants, such as using a lid or baking soda. It is especially important to teach the proper way to handle a grease fire. Burn injuries are often received while trying to carry the pan outside and the burning grease splashes out or someone puts water on the burning grease. Not everyone knows that you can't put water on a grease fire.

Make sure occupants are instructed to call 9-1-1 and begin evacuation before attempting to use the extinguisher. If someone is in doubt if the extinguisher will be effective then get out and close the door on the way. Always make sure they have a clear path to the exit. Also, once the extinguisher is discharged the visibility will be quickly diminished making it more



Shawn Kauffman, State College Live Burn



campus, property owners should provide guidance to the new occupants about the appliances in the house or apartment. This could include how to properly use the appliances, how to maintain the kitchen in a clean and safe manner and how to report any deficiencies. This seems really basic and redundant, but experience tells us that this knowledge is lacking.

If not required by local codes, a fire extinguisher should be installed in each kitchen. Occupants need to be taught the proper use of the extinguisher as well as determining when to use it and when not to. The extinguisher needs to be displayed in a visible location, not in a cupboard or closet. Other methods to

difficult to locate the exit.

Occupants should

also be instructed that if a fire occurs inside a microwave or oven, turn off the power and keep the door closed until the fire is out. Never reuse an appliance following a fire until it has been evaluated by the property manager.

### Detection and Suppression Systems:

Automatic sprinkler and suppression systems are the best type of protection available for kitchen fires and for cooking equipment. These systems operate auto-



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matically in the event of a fire and can be connected to the building fire alarm system. While this type of protection is very effective, don't expect owners to retrofit these in existing buildings due to the cost. However, there are some other effective options. There is a fire extinguisher that mounts under the range hood or the microwave/hood combination. These units are held in place by a magnet and are activated by a fusible link. Detection systems such as smoke alarms, heat detectors or fire alarm systems will activate from smoke or heat. These systems will alert the occupants of the condition and some are connected to a central station alarm service. Newer types of systems available include a smoke detector that installs inside a microwave oven and disconnects the power when the alarm detects smoke inside. Another type of device utilizes an extension cord that is connected to a smoke alarm. When the smoke alarm sounds the power to the cord is terminated and anything plugged into the cord will be deenergized.

Inspectors frequently find smoke alarms closest to the kitchen with the batteries removed. Occupants report that the smoke alarm sounds while cooking, causing them to remove the batteries. Others in an apartment building may choose to ignore the building fire alarm because it always sounds during the dinner hour or late at night. To address this, the first step may be to move the smoke alarm as far as possible from the kitchen. This may not always be possible if a bedroom is located near the kitchen. Consider the installation of a photo electric smoke alarm in this instance that is less likely to activate from steam from cooking. Newer smoke alarms feature a "hush" button that will silence the alarm when accidentally activated. If the smoke condition remains for a period of time, or gets worse, the alarm will again activate.

### **More Information:**

There are a number of training programs and videos available for fire extinguisher training and the technology is constantly changing. One such program ([http://www.campusfiresafety.org/data-cfs/fire\\_academy/PFEtraining.ppt](http://www.campusfiresafety.org/data-cfs/fire_academy/PFEtraining.ppt)) is on the CCFS web

site, provided courtesy of the Virginia Tech Environmental Health & Safety Services, Occupational Safety Division. If you have a unique training program that you'd be willing to share with others, please contact me.

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