Most common causes of house fires…
…and some more unusual

**Cooking Equipment**

When a pot or pan overheats or splatters greases, it can take seconds to cause a fire. Stay in the kitchen when cooking, especially if using oil or high temperatures; most kitchen fires occur because people get distracted and leave their cooking unattended. Keep combustibles (e.g. oven mitts, dish towels, paper towels) away from heat sources. Consider having a fire blanket or suitable fire extinguisher available nearby to use in the event of a fire.

**Heating Equipment**

Have appliances inspected regularly and chimney cleaned and inspected annually. Keep portable heaters at least one metre away from anything that can burn (including curtains, furniture, and you), and don’t use your heaters to dry shoes or clothes. Carbon monoxide alarms should be used to alert you to deadly carbon monoxide gas.

**Careless Smoking**

Wherever possible make sure the home is off limits for smoking, and especially bedrooms. Take care to supervise smokers who may become drowsy (i.e. on medication, drinking) or forget to extinguish their cigarette. Use large, deep ashtrays; never place an ashtray on or near anything that will burn; and check furniture for fallen cigarettes/embers. Do not discard cigarette butts on floors and always use a non-combustible receptacle as an ashtray. When discarding ashtrays in to waste bins ensure cigarettes butts are fully extinguished (butt can smoulder for hours before causing combustible waste to burst into flames)

**Electrical Equipment**

Ensure the following:

1) Your electrical appliances don’t have loose or frayed cords/plugs

2) Your outlets aren’t overloaded with plugs

3) You’re not running electrical wires under rugs or heavy furniture

4) You’re not overusing an extension cord or adaptor.

**Candles**

Keep candles in a sturdy holder on a level surface, away from combustible materials and out of the reach of children or pets. Blow them out before leaving the room.
Children Playing with Fire

Children cause fires out of curiosity (what happens when something burns) or mischief (they’re angry, upset or destructive, and fire is a major taboo to break). Kids may be involved in fire play if you find matches or lighters in their room/possession, smell sulphur in their room, and/or find toys or other personal effects that appear melted/singed.

Inadequate Wiring

Older homes and apartments can have inadequate wiring – a fire and an electrical hazard.

Some warning signs:

1) You have to disconnect one appliance to plug in another
2) You have to use extension cords or “octopus” outlets extensively
3) Fuses blow or circuit breakers trip frequently
4) Lights dim when you use another appliance.

If residents have any concerns about their electrical installation, they should not attempt to fix the problem themselves but should seek the advice of a certified electrician contractor, approved by the National Inspection Council for Electrical Installation Contracting (NICEIC), or similar

Flammable Liquids

Vapours from flammable liquids – fuels, solvents, cleaning agents, thinners, adhesives, paints, and other raw materials – can ignite or explode if used or stored improperly. The vapours can easily ignite from even just high temperatures or weak ignition sources (one spark of static electricity). Vapours being heavier than air, may travel some distance to an ignition source and then flash back. Don’t store flammable liquids near a heating source but, ideally, outside the home in a cool ventilated area, in approved flammable liquid containers.

Christmas Trees/Decorations

Keep the tree in a stand that will hold 2-3 litres of water, and top it up daily. Keep the tree away from all heat sources, including radiators, furnace ducts, television sets, and fireplaces. Check decorative lights before placing them on the tree, and discard any frayed or damaged lights/cords. Never place candles on or near the Christmas tree.

Barbecues

As part of regular maintenance, clean removable parts (inside and out) with soapy water. Spray the gas bottle connections with soapy water to check for potential leaks; watch if bubbles form when you open the gas. Use barbecues away from your home, deck rails, tablecloths, and tree limbs. Use barbecues outdoors, never indoors (including garages).
Would you believe it? - A Jar of Nutella

This huge inferno, which destroyed the roof and seriously damaged the first floor of a house was started when low winter sunlight shone through a chocolate spread container on a window sill.

The London fire brigade have confirmed that sunrays have caused 125 fires in the last 5 years.

Smoke and Mirrors

A quick-thinking householder saved her property from going up in flames after direct sunlight reflecting off a mirror set a duvet alight. The duvet in the spare room was found smouldering.

Batteries can start fires

Lithium ion batteries used in phones, tablets and laptops have a high energy density. Electronic circuitry in chargers in theory should prevent overcharging. However electronics can fail and batteries can overheat and catch fire. So unplug these devices when unattended. Don't leave laptops on a combustible surface overnight, e.g. a sofa.

Remote Controls

There have been stories of remote controls overheating and catching fire due to the buttons being permanently pressed down when the control gets stuck down the side of a cushion. It might be an urban legend but don't test whether or not it is true.

Batteries

AA or similar type batteries can potentially start fires if left in pockets of clothing along with keys or other metal items which can cause a short circuit. The same goes for leaving them in drawers or boxes where they can inadvertently make contact with conductive items. Store them side by side, ideally in a plastic container so that there is little chance of this happening.

Lithium is a highly reactive metal, which is easily ignitable if it comes into contact with moisture, and burns at a very high temperature (1500 - 2000C). Lithium batteries can explode if they become damaged or subjected to excessive heat.
De-fluff tumble dryers
A build-up of lint in a drier is a potential fire hazard. Lint blocks filters and eventually even the outlet / hose. This can cause a drier to overheat as air is prevented from circulating through the machine. Eventually the whole thing can ignite. This is another reason why high power appliances shouldn’t be left unattended for long periods.

Aerosol cans
Don’t leave aerosol cans on window sills or in the sun where they could potentially explode and start a fire.

Arson
Arson is the most significant cause of fire and accounts for a large proportion of all fire damage. The risk to homes should be reduced by denying arsonists easy access into the building and to materials that may be used to fuel a fire – Waste bins, skips and any combustible items such as sofa and mattresses which have to be stored should be located well away from homes. Bins should be lidded and locked. Where items of waste furniture and the like are discarded near homes residents should contact the council or appropriate authority to remove these items as quickly as possible.

Bonfires
Bonfires are often lit out of tradition a certain times of the year or simply used to dispose of waste but sometime the radiant heat and embers given off can ignite a fire elsewhere therefore, ensure the bonfire is located as far away from combustible structures as possible. Ensure fires are set well away from your home, shed and washing lines, and check there are no thatched roofs in the area or even power lines above – always have a supply of water available to extinguish the flames if they gets out of control.

Modern Methods of Construction
Modern homes and apartment blocks are increasing constructed of combustible construction materials including timber frames, polystyrene insulation, and polystyrene and timber cladding systems. Residents should be made aware of any type of combustible material present in the structure of their home and given guidance on the potential cause of fire which can range from simple DIY improvements to smoking and barbeques etc.

Notes