

This is the list of the 5 electricity and the 18 electrical fire notifiable accidents reported to Energy Safety for which the investigation was completed between July and September 2009



Electricity notifiable accidents

Event ID:	090527-02
Event summary	A person received an electric shock from a toaster while moving the toaster.
Event date	27/05/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Gills; Toasters; Roaster (Portable cooking)
Event	Electrical Shock
Casualty	Injury
Injury	Shock
Property damage level	No property damage
Outcome of investigation	The toaster was plugged in and switched on at the power socket. The plunger switch, on the toaster, was not depressed. On investigation it was found one of the double pole switch contacts was closed even when the switch was not depressed. As this pair of switches was connected to the phase the elements of the toaster were live. While moving the toaster the person made contact with the toaster elements with the fingers and received an electric shock. The toaster supplier was contacted and this model of toasters were recalled.
Event ID:	090617-02
Event summary	The low voltage overhead mains came down onto a metal fence. Several cows were killed as a result of earth potential rise.
Event date	28/05/2009
Site	Commercial
Environment	Outside (Above Ground)
Voltage	400
Equipment	Mains
Event	Electrical Shock
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the direct vicinity of the equipment
Outcome of investigation	The farm owner was not aware that he owned the overhead mains and hence did not carry out any maintenance. The farm owner was made aware of his responsibility and he attended to the defect and upgraded the mains.
Event ID:	090708-01
Event summary	A member of the public was switching off stadium lights when there was a flash over.
Event date	07/07/2009
Site	Commercial
Environment	Outside (Above Ground)
Voltage	400
Equipment	Switch
Event	Burns
Casualty	Injury
Injury	Shock, Burn
Property damage level	Restricted to the direct vicinity of the equipment
Outcome of investigation	On investigation it was found that the switch was not suitable for the load. All switches (3 Phase) were replaced and the circuit modified to include a contactor.

Event ID:	090805-02
Event summary	Home owner received an electric shock from metal meter box.
Event date	04/08/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Switch/distribution board
Event	Electrical Shock
Casualty	Injury
Injury	Shock
Property damage level	No property damage
Outcome of investigation	The sub board neutral and earth connections were connected under the neutral stud but there was no link between the neutral and earth bar. A soil heater developed a fault to earth causing the metal box of the sub board to become live causing the electric shock. The sub board mains cable had been recently re connected to a new switchboard as the old house had been re built. The electrical contractors had not checked the sub board prior to livening. Referred to the Electrical Workers Licensing Group.

Event ID:	090827-03
Event summary	While working in a telephone compartment of a lift the worker received an electric shock from a live wire.
Event date	27/08/2009
Site	Commercial
Environment	Building
Voltage	230
Equipment	Flexible Cable
Event	Electrical Shock
Casualty	Injury
Injury	Shock
Property damage level	No property damage
Outcome of investigation	Vandals had removed the telephone and the live wires to a light switch were left exposed. The installation was made safe.

Electrical fire notifiable accidents

Event ID:	090702-01
Event summary	Fire in metal meter box caused minimal damage to surround, fire damage to wooden back plate.
Event date	10/09/2008
Site	Domestic
Environment	Building
Voltage	230
Equipment	Metering
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the direct vicinity of the equipment
Outcome of investigation	Fire in metal meter box was caused by loose terminal in base of main fuse. The fire was contained with the metal box and caused some minor damage to the surrounding brick work. The meter and wooden backing board in the box were destroyed during the fire.

Event ID:	090518-10
Event summary	A fire severely damaged a hotel complex which was caused by an electrical fault.
Event date	11/05/2009
Site	Commercial
Environment	Building
Voltage	230
Equipment	Other
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Extended to multiple rooms
Outcome of investigation	An investigation found that the fire has initiated from damaged high voltage cables used to supply electricity to a neon sign. Its apparent that the cable has arced and in turn ignited the internal timber structure of a column within the complex. The cables appear to have been damaged at the time of installation. A number of other quality of work issues were identified during the investigation. These competency related issues have been referred to the Electrical Workers Licensing Group.

Event ID:	090522-01
Event summary	An oil column heater in a bedroom apparently leaked oil and the oil caught fire causing fire damage to the room.
Event date	20/05/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Room Heaters; Fan heaters; Radiant Heaters; Oil Fin
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the room containing the equipment
Outcome of investigation	The cause of the fire could not be determined and may have been caused by oil leaking or a garment left on the heater.

Event ID:	090601-02
Event summary	A house fire reported to have been caused by dehumidifier.
Event date	01/06/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Heat pumps; air-conditioners; dehumidifiers
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Extended to the site
Outcome of investigation	The house was extensively damaged. The cause of the fire was put down to a dehumidifier which was approximately 7 years old. Following a number of fires involving dehumidifiers Energy Safety published a safety alert on the importance of safe use and regular maintenance of dehumidifiers. The safety alert was placed on Energy Safety's website.

Event ID:	090604-01
Event summary	A report was received concerning a fire with a waste disposal unit.
Event date	04/06/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Equipment under 60204 classification
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the direct vicinity of the equipment
Outcome of investigation	A report was received about a fire with a waste disposal unit. The damage was confined to the cupboard with the unit. The cause of the fire was not established.

Event ID:	090608-01
Event summary	A home owner notified Energy Safety when an oil column heater, which had recently been purchased, emitted oil vapour within an infant's bedroom. The fire service and ambulance attended the incident there was no fire damage to the bedroom this was contained within the heater. However an infant sleeping in the room was treated for smoke inhalation which resulted in the infant being admitted to hospital for observation and latter released with no complications.
Event date	08/06/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Room Heaters; Fan heaters; Radiant Heaters; Oil Fin
Event	Fire
Casualty	Injury
Injury	Asphyxiation
Property damage level	No property damage
Outcome of investigation	The heater was sent to a test laboratory for analysis. They established the fault to be a breakdown of wiring insulation due to the temperature of the heater exceeding the operating temperature limit of the wiring insulation held in contact with it. An electrical flashover occurred between the live conductor and the metal end cover causing small holes to be punctured in the metal panel resulting in leakage of oil and fumes. This does not comply with the applicable electrical safety standard for heaters and therefore a recall notice was published by the supplier in all the major papers throughout the country.

Event ID:	090623-01
Event summary	Fire in external switchboard of house, may involve smart meter. The meter box and contents were destroyed.
Event date	19/06/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Control panel
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the direct vicinity of the equipment and caused damage to outside wall of house.

Outcome of investigation The mains cable appears to have been damaged where it entered the meter box and over time the insulation failed causing the cable to arc and set fire to the wooden backing plate in the meter box. The network company is auditing other installations of this type.

Event ID:	090626-01
Event summary	Main cable faulted where it entered building causing small fire on outside of building.
Event date	26/06/2009
Site	Commercial
Environment	Building
Voltage	400
Equipment	Armoured Cable
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the direct vicinity of the equipment
Outcome of investigation	Fire in main cable where it entered building, it appears that the cable may have been damaged when it was installed a number of years ago and water may have entered the sheath causing it to track across phases.

Event ID:	090630-01
Event summary	Fire in wall of old house. Fire service attended and located small fire in wall above light switch.
Event date	27/06/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Other
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the direct vicinity of the equipment
Outcome of investigation	Fire was caused by failure of old VIR cable circa 1940 in capping and casing in wall of old house.

Event ID:	090701-01
Event summary	Fatal house fire involving heater
Event date	30/06/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Appliances
Event	Fire
Casualty	Fatality
Injury	Burn
Property damage level	Restricted to the room containing the equipment
Outcome of investigation	It appears that there was clothing close to the heater which caught fire causing a sofa to also contribute to the fire resulting in the loss of life. There were no faults with the installation found during the investigation.

Event ID:	090703-01
Event summary	Fire in lounge possibly caused by heater or extension lead, sofa on fire at time.
Event date	30/06/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Appliances
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the room containing the equipment
Outcome of investigation	Fire may have been caused by heater or extension lead, sofa was reported to have been on fire when fire service attended, the fire service were not sure where fire started and the scene was not investigated as there was little evidence left at the scene.

Event ID:	090705-01
Event summary	Electric blanket caused some scorching in bed no other damage.
Event date	05/07/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Blankets; Pads
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the direct vicinity of the equipment
Outcome of investigation	Fire service were called to electric blanket fire, the blanket caused a sheet on a bed to smolder. The electric blanket was very old with no visible markings that could identify the maker.

Event ID:	090717-01
Event summary	Fire in kitchen of hotel unit, occupant evacuated when smoke alarm went off.
Event date	17/07/2009
Site	Commercial
Environment	Building
Voltage	230
Equipment	Appliances
Event	Fire
Casualty	Injury
Injury	Asphyxiation
Property damage level	Restricted to the room containing the equipment
Outcome of investigation	The fire was located inside the fridge in the area of the thermostat. The fridge was 29 years old.

Event ID:	090723-01
Event summary	NZFS reported fire in switchboard which caused damage to rooms in the dwelling.
Event date	23/07/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Switch/distribution board
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Extended to the room and structure containing the equipment
Outcome of investigation	Fire in switchboard caused by water leaking above switchboard causing short circuit fault and damage to circuit protection.

Event ID:	090730-03
Event summary	Light fitting caught fire in store room.
Event date	30/07/2009
Site	Commercial
Environment	Building
Voltage	230
Equipment	Floodlights
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the direct vicinity of the equipment
Outcome of investigation	The light fitting had been contaminated with water due to a leak in the roof over several months causing a breakdown of the insulation in the fitting.

Event ID:	090805-05
Event summary	The Fire Service notified Energy Safety of a fire involving a dehumidifier.
Event date	05/08/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Appliances
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the room containing the equipment
Outcome of investigation	The occupants of the house were out at the time of the incident. A dehumidifier had been left operating in a bedroom with the door closed. The dehumidifier was completely destroyed and due to the closed door the fire had self extinguished. The damage was contained within the bedroom and was mainly smoke damage. Due to the damage caused to the dehumidifier the cause of this failure was unable to be determined. The occupant was questioned around the operation of the dehumidifier and disclosed that they were unaware of the air filter within the unit and the manufacturer's requirement for cleaning the filter. If the filter had been blocked this could have contributed to the unit over heating.

Event ID:	090812-02
Event summary	Fire in office of house containing computer equipment.
Event date	12/08/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	transformers for switch-modes power suppliers
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the room containing the equipment
Outcome of investigation	Fire was possibly caused by backup power supply or multi box. Fire service could not determine the area of origin.

Event ID:	090826-04
Event summary	A house occupier returned home to find smouldering in the house. The Fire Service were called and they suppressed the fire which extended to an area of about one square metre in the ceiling. Damage occurred as a result of the fire and fire suppression activities.
Event date	26/08/2009
Site	Domestic
Environment	Building
Voltage	230
Equipment	Flexible Cable
Event	Fire
Casualty	No casualty
Injury	No injury
Property damage level	Restricted to the room containing the equipment
Outcome of investigation	According to investigating electrical engineer, older vulcanised insulation rubber wiring had deteriorated leading to a fault condition causing fire. A recommendation for replacement of the wiring was passed on to the house owner.