

## Near Miss Due To Overloaded Circuits

We are finding overloaded circuits in our schools, presenting a very real risk of fire. Overloading of an electrical circuit occurs by plugging in too many electrical items, or items when combined, draw more electricity through the system than it was designed to carry. Overloading can generate excessive heat leading to melting of PVC insulation on cables and plastic plugs. This can create overheating and result in fire. If fuses frequently blow or circuits frequently trip, this is a sign the system is overloaded.

The pictures below were taken from a classroom here at SD61 this last week:

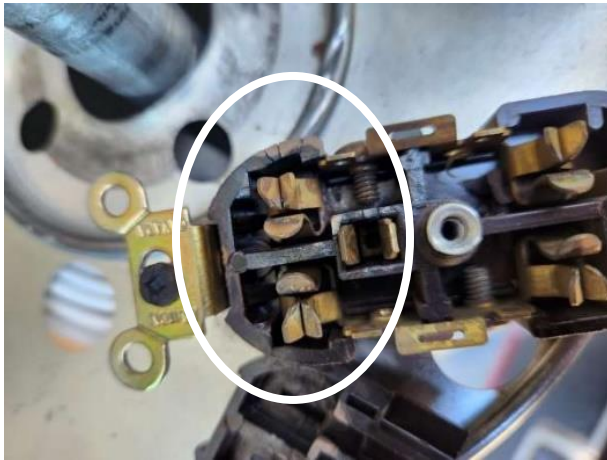


Figure 1 left

Note the heat damage to the two prongs on the left.



Figure 2 right

Note the exterior housing of the outlet is charred and burnt.

According to the National Fire Protection Association (U.S.), there is an average of 3230 structural school fires in the US each year. With 31% caused by cooking equipment and 10% by heating equipment. Overall, it is estimated 25% of all fires are caused by electrical sources.

[NFPA Fires in Schools](#)

### ACTIONS TO TAKE:

- Do not plug more than one item into one outlet (Do not use outlet multipliers)
- Do not use extension cords with multiple outlets
- Inspect for and never use damaged cords or plugs
- Do not plug high wattage appliances in the classroom (Heat elements, Microwaves etc.)
- Immediately report any smoke, heat or arcing at an outlet to Maintenance

Awareness and removal of these hazards will greatly reduce the risk of fire in our schools.