

Electrical Safety

February 23, 2022

Presented by: Connie Biggs, Oregon Office of State Fire Marshal

Fire Safety Webinar Series



Upcoming Events

- Next Webinar – March 9, 2022

- Topic: Fire Safety Children's Books

<https://www.eventbrite.com/e/osfm-webinar-fire-safety-childrens-books-tickets-269948121097>

- NFPA 1035: Youth Fire Intervention Specialist Training –
March 15 & 16 2022

<https://www.eventbrite.com/e/nfpa-1035-youth-fire-intervention-specialist-tickets-261177387597>

- National Electrical Safety Month – May, 2022

- Raising awareness of how to avoid electrical hazards

<https://www.esfi.org/program/national-electrical-safety-month/>



Electrical Safety – More Than Fire Prevention

Approximately 1,000 people die from electrical injuries in the United States each year.

Another 30,000 are hospitalized with non-fatal electrical injuries.



Oregon Fire Statistics

- 2,884 Residential Structure Fires:
 - 206 – Electrical Malfunction / Distribution
- Most Frequent Known Fire Causes:
 - Cooking – 20%
 - Heating – 17%
 - Intentional – 7%
 - Smoking – 4%

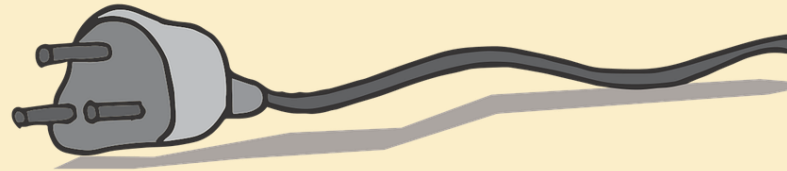
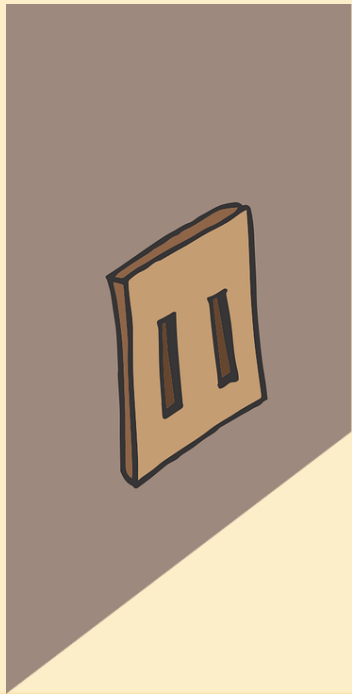


What are the problems?

- Overloaded electrical outlets and sockets!

- Grounded plugs are modified to fit non-grounded receptacles.

- Using a higher rated bulb in a lower rated lamp causes excess heat and too much power for the lamp wiring.



What are the problems?

- Misuse of extension cords and power strips!
 - High capacity appliances should always be plugged into the wall.
 - Extension cords and power strips can be overloaded.
 - Extension cords should never be connected together.
 - Extension cords are rated for indoor and/or outdoor use.



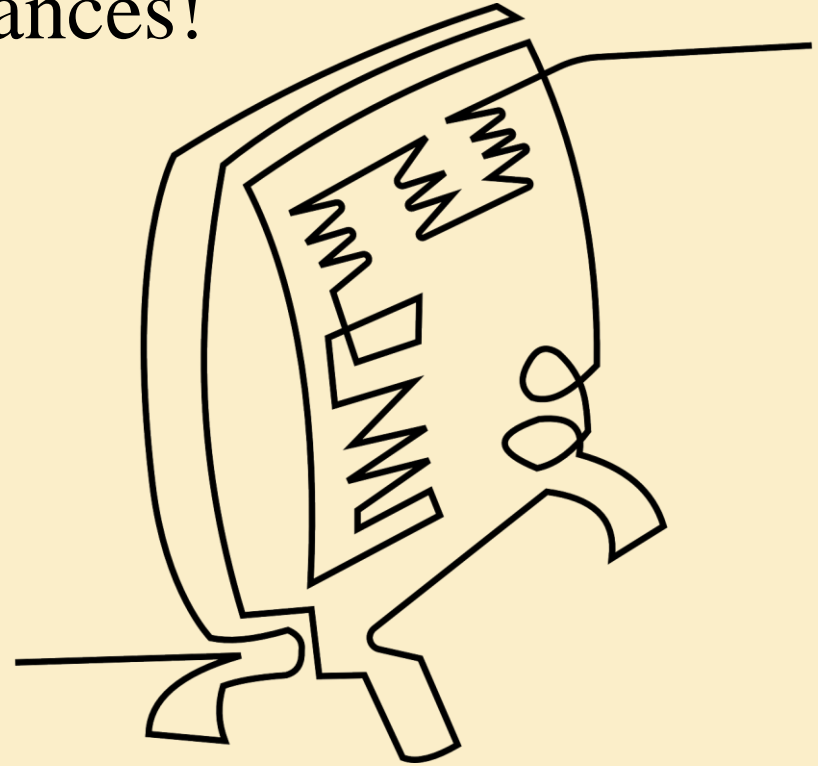
What are the problems?

- Using frayed or broken cords!
 - Exposed wires may cause arching that will start a fire.
 - Cords get damaged when they run under rugs or carpets.
 - Pinched or coiled wires may cause excessive heat.
 - Electrical tape is not always a safe fix.



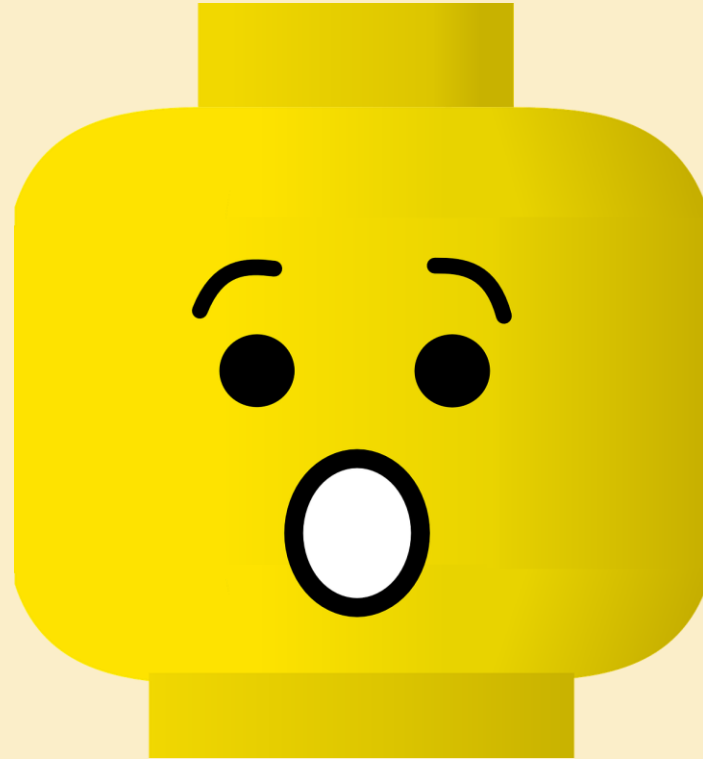
What are the problems?

- Unattended or unmaintained appliances!
 - Follow manufacturer's recommendations for storage and cleaning of all appliances.
 - Appliances are used for an off-label application.
 - Older heaters have exposed elements and no auto shut-off feature.
 - Heaters are rated for indoor and/or outdoor use.



What are the problems?

- Accessible to children!
 - Kids are curious!
 - Caregivers aren't aware of the danger.
 - Caregivers aren't aware of child-proofing options.



What are the problems?

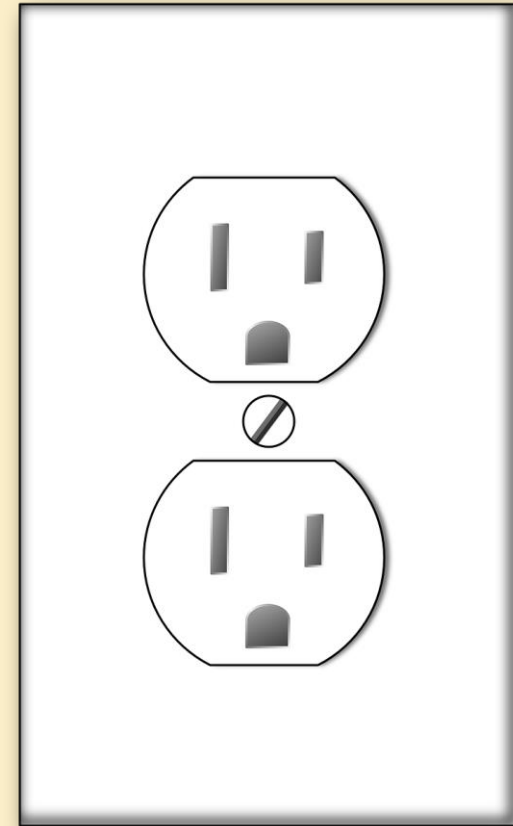
- Smart Homes and DIY

- Smart Homes require an electrician, while smart applications do not.
- Interconnectedness causes a cascade effect if something does go wrong.
- Homes today have more electricity running 24/7 than was anticipated.
- YouTube does not take the place of years of electrical training.



Safety Messages

- Use an appropriate electrical outlet or light bulb receptacle.
- Plug appliances directly into the wall, and do not overload extension cords and power strips. Unplug appliances that are not in use.
- Check cords for fraying or cracking – replace as needed.
- Learn an extension cord capacity by checking the tag – no tag? It's time to replace.
- ALWAYS keep a 3-foot clearance around a heat source.
- Childproof electrical receptacles.
- Consult with a licensed electrical contractor for any household upgrades.



Why focus on electrical safety?

To avoid electrically related fires, fatalities, injuries,
and property loss.



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