FIRE & BURN PREVENTION TIPS

Avera

Avera.org

CONTENTS

HOW SAFE IS YOUR KITCHEN?
Burn prevention in the kitchen 3

MICROWAVE BURN PREVENTION
Using the microwave oven safely 6

HOW HOT IS THE WATER IN YOUR HOME?
Preventing scald burns 9

A MATCH IS A TOOL
A tool has a specific purpose and should be used only for that purpose 11

GASOLINE IS MADE TO BURN
Gasoline has one purpose — to fuel an engine 14

SURVIVING A FIRE IN YOUR HOME
Knowing what to do can save your life 16

HOW FLAMMABLE IS YOUR TENT?
Burn prevention while camping 22

EMERGENCY TREATMENT OF BURNS
First aid for burn victims 25

HOW SAFE IS YOUR KITCHEN?

MOST BURN INJURIES AT HOME OCCUR IN THE KITCHEN.

Children are at risk...

- Enjoy your coffee break, but keep children at a safe distance from all hot liquids. A child's quick movements can knock a cup over or out of your hand, causing a burn.

- When toddlers are in the home, avoid using a tablecloth. If a child tries to pull himself up by the tablecloth, a heavy object, hot liquid or other hazards on the table could fall on the child.

- Keep all hot items near the center of the table, at least 12 inches from the edge, to prevent a young child from reaching them.

- While cooking, keep young children at a safe distance from hot surfaces, hot liquids and other kitchen hazards.

- Use extra caution if you use deep fat (oil) cookers/fryers when young children are present. The fat or oil may reach temperatures over 400 degrees F. and can cause severe burns. Be sure electrical cord is out of reach.

- Keep all appliance cords away from the edge of counters, and keep them unplugged and disconnected when not in use. A dangling cord is dangerous because it can be caught in a cabinet door or pulled on by a curious child.

- Always use potholders to remove pots and pans from the stove.

Anyone who is responsible for a child's safety — including parents, grandparents, baby-sitters and older siblings, must have a basic understanding of fire and burn risks in the kitchen.

- Store cookies and other attractive foods away from the stove area so no one will be tempted to get too near a hot burner. Store linen, paper towels, cooking oils and other flammable items at a safe distance from the stove.
- Establish a "SAFE AREA" in the kitchen where a child can be placed — away from risk, but under continuous supervision. Also, consider establishing a "NO ZONE" directly in front of the stove. Teach your child to avoid this area. You can mark the zone with yellow tape, a piece of bright carpet or other material.
- In homes where young children are present, consider using "tamper-proof" or child-proof electrical outlets or covers.
- Limit your use of extension cords.
- Make sure all cords are in good condition, not cracked, frayed or taped.

ADULTS ARE AT RISK, TOO...

- Turn the pot handle toward the rear of the stove to reduce the risk of burns for all age groups.

- Keep clothing from coming into contact with a flame or heating element.

  - Reaching over the stove could cause garments to catch fire, especially the sleeves of robes, dresses, housecoats, etc.

  - Wear snug-fitting or short-sleeved clothing or use an elastic band to hold long or loose sleeves out of the way. Slide the sleeve cuff up to the elbow. Turn off the heat or gas before reaching over the stove.

  - If your sleeve should catch on fire, immediately cover the burning material with a potholder, mitt or towel, go to the sink and run cold water to put out the fire and cool the burn.

  - If other parts of your clothing are on fire, immediately STOP, DROP and ROLL to put out the fire. Cool the burn with water.

Burn injuries common to children are often seen in adults as well, especially older adults. While the injuries are similar, the cause may differ.

CHEMICALS IN THE KITCHEN...

- Store all detergents, cleaning agents, bleach and other chemicals out of children's reach or in a locked cabinet.

- Before purchasing any household chemicals, read the contents label and the "caution" statement on the package. Whenever possible, purchase household chemicals that contain less dangerous substances.

MICROWAVE BURN PREVENTION

Properly used, the microwave oven is safe and convenient for heating a variety of foods in a short time, but the microwave can cause burns if it is used improperly or unsafely.

Foods Unevenly Heated...

- The jelly in a jelly-filled pastry may be scalding while the pastry is only warm.
- Frozen foods may be cold or only warm in one spot and scalding in another.

Food can heat unevenly in a microwave oven, which can cause serious mouth burns.

- When heating foods for young children, stir well and check the temperature by sampling the food before allowing the child to eat it.

BABIES ARE ALSO AT RISK...

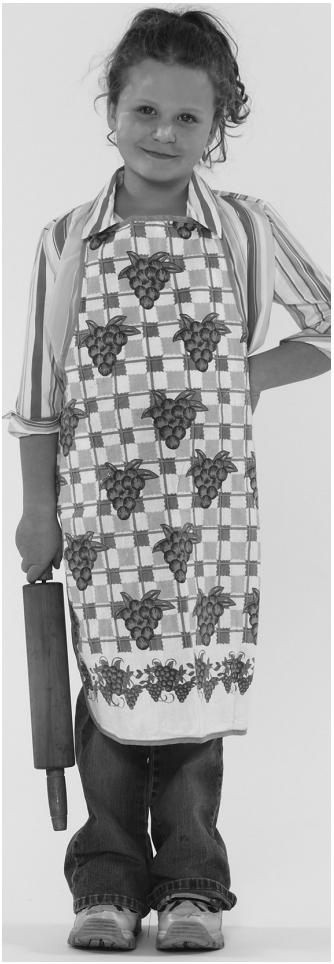
One of the riskier practices is using the microwave to heat formula or milk in the baby bottle. Most reported injuries have involved bottles with disposable plastic liners, which may burst when the bottle is shaken or while the baby is being fed. There can also be a problem with uneven heating that could result in mouth burns.

- Using a baby bottle warmer provides a safer method of heating baby bottles. Be sure to read and follow the directions very carefully.

MICROWAVE BURN PREVENTION TIPS...

- Read and follow the product/manufacturer directions.
- Be sure everyone in the home is aware of the risks associated with microwave use.
- Determine the safe amount of time for heating any food or liquid. The **amount** of food or liquid, the **starting temperature** (refrigerator or room temperature) and the specific **energy setting** will all influence the final temperature of the food or liquid.
- Be careful when removing coverings or lids from microwaved foods. Puncture plastic wrap before heating foods in the microwave.
- When heating liquids in the microwave, the containers may not feel as hot as the liquids inside.
- Keep all hot liquids out of children's reach, and keep children away from the microwave and other heating appliances when removing hot foods.
- Use caution and follow directions when popping popcorn in the microwave. The vapor produced in the bag may exceed 180 degrees F.
- Cooking **eggs** in the microwave can result in scald burns unless certain precautions are taken. Check the microwave oven manual for specific cooking instructions.

WHO SHOULD USE THE MICROWAVE OVEN?



- Generally, children under the age of seven may be at risk, unless they are closely supervised. Even children who can read the directions must be supervised until you are confident in their ability to operate the microwave safely.
- The child's height is important to consider. Children should be tall enough that their face is not directly in front of the microwave heating chamber when the door is open.
- Baby-sitters, grandparents and other caregivers should be properly instructed in using your microwave oven before they prepare food or drinks for young children.

As a general rule, only those who have read and understand the directions should use the microwave oven.

HOW HOT IS THE WATER IN YOUR HOME?

TAP WATER SCALD BURNS...

- Always know where your children are and what they are doing. Continuous and adequate supervision of young children is critically important.

- Put a small slide-bolt latch on the upper half of the outside of the bathroom door. This will prevent young children from entering the bathroom without supervision, and will also help control other risks, such as drowning, chemical burns, etc.

Each year, several thousand children and adults are burned by tap water because the water is too hot. These burns can be prevented.

IN THE BATH...

- Generally the water in a child's bath should not be warmer than 100 degrees F.

- Adjust water temperature at the faucet before collecting bath water. This will prevent a scald burn if the child should fall into the tub while it is being filled.

- Before placing a child into the bathtub, check the temperature of the water by moving your hand through the water for a few seconds. If the water feels hot, it is too hot for the child. You can call the Avera McKennan Family Life Education Office at 605-322-3662 for a Bath Water Testing Thermometer.

- Face the child away from the faucets and keep the child closer to the other end of the tub (away from the faucets).

A LOOK AT WATER HEATER SAFETY

- Lower the thermostat setting of the water heater. A temperature of 120 degrees F. should provide plenty of hot water for normal household activities. The maximum temperature should not be higher than 125 degrees F.

NOTE: At 130 degrees, a serious burn can occur in 30 seconds. At 140 degrees, a serious burn can occur in five seconds. The higher the water temperature, the fewer seconds it takes to produce a scald burn.

- Gas water heaters can be adjusted easily. Electric water heaters require disconnecting (shutting off) the electricity to the water heater and removing the cover plates to adjust the thermostat. Check with your utility company for directions to adjust an electric water heater.

- After the thermostat is turned down, check the temperature 24 hours later by running the hot water to make sure the temperature is low enough to be safe.

- Consider purchasing thermostatically controlled mixing or regulating valves. These valves can be attached to the bathtub fixtures, installed in the wall at the bathtub, or connected at the water heater. These temperature-controlling regulators and valves vary in cost and installation requirements. They can be purchased at some hardware stores or through plumbers. The resulting safety is worth the cost.

A MATCH IS A TOOL

- A tool has a specific purpose and should be used only for that purpose.

Children must be taught the proper function and safe use of matches and fire.

- For young children, keep matches out of reach. This includes cigarette lighters and related items. The wooden "strike anywhere" kitchen match should NOT be used or kept in homes where young children are present.

- Teach your children that the match is a tool and should only be used for lighting candles, starting a campfire or lighting a fire in a fireplace.

- In general, the average age to begin the "Match is a Tool" education is about 5. However, parents should determine when their individual child is ready.

- For older children, parents should agree to let their children strike matches and use fire when appropriate, *but only in the presence of a parent or responsible adult and under safe conditions.*

- Make certain children don't have access to matches or lighters without adult supervision. Parents may agree to allow the older child to use matches when appropriate.

Fire has an important and necessary role in our lives. The earlier a person learns the proper and safe use of fire, the less likely there will be a desire to "play" with matches and fire.

The statement "Don't play with matches" does not explain the safe use of matches. A child's curiosity generally causes him to be fascinated. This curiosity must be guided by the parents demonstrating the proper and safe use of matches and by letting the older child strike matches under supervision. Establish the child-parent agreement to allow the older child to strike matches in the future, but ONLY under the adult's supervision.

The proper use of fire includes teaching the safe way to light matches. The following teaching sequence is suggested.

1. Open package and remove match. (Use only the paper match.)
2. Close package.
3. Turn package over to the side with the striking surface.
4. Hold match in proper position and strike AWAY from the body.

Most children, at one time or another, express an interest in fire. Some children simply watch, but others may try to experiment. This interest is normal and healthy, but it must be carefully guided in order to prevent a tragedy.

5. Hold match in horizontal position (after ignited) for 2-3 seconds.
6. Blow out flame and wait until match is cool to touch (5-10 seconds).

- Set a good example in your use of fire. If you follow safe practices, your children will learn how to do so as well.

CIGARETTE LIGHTERS...

Young children (under 5) should be instructed to leave matches and lighters alone. If they should find matches or a lighter, they should tell a parent or other caregiver, rather than bring the matches or lighter to the adult (especially for children under 5).

- Parents must avoid using a cigarette lighter as a "toy" to pacify a child who is crying or causing a disturbance. This causes the "tool" to become a "toy" in the child's eyes, and could result in fire or injury. Matches and lighters are tools for adults.

GASOLINE IS MADE TO BURN

Gasoline has only one function: to fuel an engine. Any other use of gasoline is dangerous and carries the risk of severe burns. Thousands of people are injured each year when they misuse gasoline.

Unsafe or inappropriate use of gasoline has caused injuries and death to people of all ages, and access to gasoline by children has led to serious burns and death. Gasoline is often used unsafely for a variety of purposes. The chart lists safer products to use for these purposes.

Substance	Flash Point	Intended Use	Safety
Gasoline	-45 F.	Fueling an engine	Not safe for any other use
Turpentine	+95 F.	Paint thinner, paint remover, brush cleaner	Safer than gasoline
"Gunk"	+100 F.	Auto parts grease removal	Safer than gasoline or turpentine
Stoddard Solvent	+100 F.	General parts cleaner, grease removal	Safer than gasoline or turpentine
Mineral Spirits	+104 F.	Paint thinner, brush cleaner	Safer than gasoline or turpentine, gunk or solvent
"D&L Hand Cleaner"	+104 F.	Hand cleaner for tar, grease, wax, etc.	Safer than gasoline or turpentine, gunk or solvent
"De-Solv'It"	+160 F.	Multi-purpose remover/solvent (tar, grease, wax, adhesives, etc.)	Safest of these products

The **flash point** *is the temperature at which the substance will produce a vapor that can ignite.*

- The lower the flashpoint the more likely the product could cause a fire. However, when using any flammable substance, read and follow the directions.
- Use the safest product available for the intended job - **NOT gasoline.**

ADDITIONAL PRECAUTIONS...

- When filling a gasoline container, leave about two inches of space at the top of the can for vapor expansion. Remember, gasoline may be cold when it comes from a service station fuel tank, and it may expand considerably as it warms up. This could result in pressure buildup and spillage.
- Always fuel power mowers and other equipment outside where there is adequate ventilation to disperse the vapors. Use a funnel to prevent spilling or splashing.
- Fuel engines only when they are cool. The heat of the engine can ignite the gasoline vapors. When you run out of fuel, let the engine cool before refilling. *Cool it before you fuel it.*
- When fueling a boat, allow gasoline vapors to dissipate before starting the engine. Accumulated vapors in low places (such as below the deck of a boat) can cause explosions and fires when the boat engines are started.

STORING GASOLINE...

If you must store gasoline, follow these precautions:

- Store gasoline and other flammable liquids only in U.L. approved metal containers, preferably metal safety cans. The cans should have self sealing, spring-loaded caps; rounded, less tip-able construction, no vents and the fewest possible seams.
- The containers should be kept tightly closed.
- Gasoline should be stored in a well-ventilated area, away from any source of heat, flame, or spark. Be sure to pay attention to the location of any pilot lights and keep gasoline containers more than 12 feet away.
- Keep the container locked to prevent access by children.
- Do not store gasoline in your basement.
- Store only a minimal amount of gasoline.

SURVIVING A FIRE IN YOUR HOME

Knowing what to do before a fire occurs can save your life. Develop an escape plan for your family today. The entire family should meet to develop a HOME FIRE ESCAPE PLAN, which should include the following:

1. Having working smoke detectors can be the first step to surviving a fire in your home.
2. Draw a FLOOR PLAN and find TWO exits from each room. Windows can serve as emergency exits.
3. Designate a MEETING PLACE at a safe distance outside the home.
4. PRACTICE getting out of the house through the various exits.

Giving your children responsibilities in home fire safety will encourage a feeling of confidence about dealing with fire and will discourage misuse of fire and matches.

IF A FIRE OCCURS AND THE ROOM DOOR IS CLOSED...

1. Crawl or roll out of bed to get down to the floor. Keep LOW.

2. CRAWL to the door.

3. FEEL the door. Use the back of your hand to feel the door to be sure it is NOT HOT.

4. If the door is HOT - DO NOT OPEN. Use an alternate escape route like a window.

5. If the door is **NOT HOT, STAY LOW,** brace yourself against the door and open it very slowly. Toxic gases or fire may be on the other side.

   CAUTION: Some doors may not get hot or may feel only warm due to their construction, so be very careful when opening any door when there is a fire. If SMOKE or HOT GASES rush into the room when you open the door, quickly close it and seek another method of escape.

6. If it is safe to leave the room, **COVER** your nose and mouth with a cloth (moist if possible).

7. Get **BELOW** the smoke and **GET OUT** by the quickest and safest route.

IF A FIRE OCCURS AND THE ROOM DOOR IS OPEN...

1. ROLL out of bed to the floor. Keep LOW.

2. CHECK for smoke and fire.

3. If it is safe to leave, COVER your nose and mouth with a cloth (moist if possible). GET LOW and GET OUT quickly.

4. If the SMOKE or FIRE is nearby, immediately CLOSE THE DOOR and use an alternate escape route, like a window.

ALTERNATE ESCAPE ROUTES...

- Windows can serve as emergency exits.

- You can use an escape ladder, a knotted rope, or an existing fire escape.

- You may be able to climb out a window onto the roof and drop to the ground. If that is not possible, stay on the roof and wait for help.

- Once you're out, STAY OUT. Go to the *designated meeting place*. When you are safely out of the building, go to a neighbor's house or use a cellular phone to call the fire department - 911. Escape First, Then Call!

TRAPPED IN A BURNING BUILDING. . .

- Use stairs to get from upper floors to ground level. NEVER use elevators.
- Keep doors closed to keep out smoke and fire. Block off the smoke with moist towels, throw rugs or other fabrics. You can also use wide duct tape to seal openings between the door and door frame.

If you should find yourself trapped in a building during a fire, there are several steps you can take to protect your safety.

- Close as many doors as possible between yourself and the fire. Stay by the window and watch for the fire department.
- If possible place a moist cloth over your nose and mouth to make it easier to breathe. You can get water from a faucet, an ice bucket in a hotel room, a fish tank, a vase of fresh flowers, or a bottle of soft drink to moisten the cloth.
- Be very careful when opening windows. Open them only enough to let in some fresh air or to attract attention to your location. Opening a window will change the air pressure in the room letting smoke enter the room from the inside or the outside of the building.
- If smoke starts to enter the room through the open window, from around the closed door, or through vents, immediately CLOSE the window.
- Breaking the window may be very risky. Once the window is broken, there may be no way to keep smoke, hot gases and fire from entering the room.

- If there is a telephone in the room, call for help. If not, yell out the window and make noise to attract attention.

- If it is safe to have the window open, wave a sheet, a large piece of cloth or another bright object outside the window to attract attention. If possible, hang some bright cloth or a sheet out the window and close the window to signal your location.

- Wait for rescue.

AWAY FROM HOME...

1. When you enter an unfamiliar building, look for at least two ways to exit from where you are.

2. Especially when staying overnight in hotels or other buildings, always look for the location of exits. Check to make sure that fire doors are kept closed, that they are easy to open, and that you can get to them easily.

3. Remember to use the stairs to get to safety. NEVER use the elevator.

SMOKE DETECTORS ARE LIFE PROTECTORS...

Most fatal fires occur at night, when people are sleeping. It is very important to have at least one smoke detector near the bedroom area, **safer yet, an additional one in every bedroom to wake you in case of a fire.** In homes with more than one level, put at least one smoke detector on each level.

SOME GOOD IDEAS FOR SMOKE DETECTOR LOCATIONS...

The best protection is to have working smoke detectors. Placement should include one on each level, outside sleeping areas and in every bedroom.

1. Having a smoke detector in the hall outside the bedroom is important, but if the doors are closed, a fire in the bedroom may not be detected quickly by the smoke detector in the hall. So additional detectors should be placed in each bedroom.
2. Mount detectors on ceilings or on an interior wall no lower than 12" down from this ceiling. Avoid placement in corners.
3. Detectors are not recommended in the kitchen, due to false alarms.

- Test smoke detectors every month to make sure they are working properly.
- Change the batteries in your smoke detectors at least once a year. A good way to remind yourself to change the batteries is to choose a particular date, such as a holiday, when the clocks are set back in the fall, or on your birthday. Change the batteries every year on this date.
- Never allow batteries to be removed to run games or other appliances.

HOW FLAMMABLE IS YOUR TENT?

Most tents, even those that are labeled flame resistant, will burn, so keep all sources of heat or flames at a safe distance. To prevent a serious fire or burn, follow these suggestions:

1. Read the labels before purchasing a tent. Buy only a flame resistant tent.

2. Pitch your tent at least 15 feet upwind from grills and fireplaces.

3. Have an escape plan, and be prepared to cut your way out of the tent if a fire occurs.

4. Use only battery-operated lights in or near tents and campers (no oil lanterns).

5. Keep a fire extinguisher or container of water available at all times near the tent door.

6. Maintain at least a three-foot clear area, free of leaves, dry grass, pine needles, etc., around grills, fireplaces and tents.

7. Thoroughly extinguish all fires and turn off fuel lanterns and stoves before leaving the campsite or going to bed.

CAMPFIRES AND GRILLS...

- **Supervise** children at all times when fires are burning or grills are in use.
- Wear shoes when near campfires and grills. Clothing should be snug fitting, tightly woven, short-sleeved and as flame resistant as possible.
- Make sure everyone knows how to put out a clothing fire — STOP, DROP AND ROLL.

HANDLE FLAMMABLE LIQUIDS WITH CARE...

- Store flammable liquids only in U.L. approved containers, preferably metal safety cans. See information in gasoline storage, see page 15.
- Store all flammable liquids at a safe distance from your tent, camper trailer or any source of heat or open flame.
- Use flammable liquids only for their intended purpose - NOT to start a fire.
- Fill lanterns and stoves outside and a safe distance downwind from fireplaces, grills and other sources of heat or open flames.
- Use a funnel when pouring flammable liquids, and clean up any spills immediately.
- Carry only minimal amount of flammable liquids, and make sure all caps are tight.
- Handle tanks of compressed flammable gas with caution. Follow the precautions indicated on the tank.
- Use only the recommended fuel for lanterns, stoves, etc., DO NOT use gasoline. (For more information about the dangers of gasoline, see page 14.)
- Consider purchasing a lantern or cooking fuel at or near your destination, to reduce the risk of fire while traveling.

CAMPING TRAILERS...

- Use only electrically or battery operated lights in trailers. No oil lanterns.
- Routinely check all cords and plugs for operable condition, especially after periods of storage.
- Keep cooking and heating equipment in safe condition.
- Check and maintain gas connections and fume vents.

In case of an actual or suspected fire, get everyone to safety before calling for help or attempting to extinguish the flames. Fire spreads very fast!

- Keep combustibles (paper products, linens, etc.) away from cooking and heating equipment.
- Keep an "ABC" fire extinguisher available at all times, especially when cooking. Keep it by the camper/trailer exit door.
- Develop a fire escape plan with your family.
- Before going to bed extinguish all smoking material and campfires using water or dirt.

EMERGENCY TREATMENT OF BURNS

TYPES OF BURN INJURIES...

Thermal Burns

Thermal burns are caused by contact with open flames, hot liquids, hot surfaces and other sources of high heat.

1. Stop the burning. Remove the victim from the heat source.
2. Check breathing. Check responsiveness. Start CPR if needed. Call 911 if victim is unresponsive.
3. If the victim is responsive: cool the burn with cool water.
4. Cover the burn with a clean cloth, sterile if available.
5. Keep the victim warm and take to the nearest medical facility.

- Sunburn may also be cooled with water. If the sunburn is severe or is very extensive, seek medical attention.

NOTE: DO NOT apply oils, sprays or ointments to a serious burn.

Electrical Burns

1. Pull the plug at the wall or shut off the current. Do not touch the victim while they are in contact with electricity.
2. Follow steps two, four and five for thermal burns (above).
3. **Because electricity passing through a body does damage to nerves, muscles and other tissues that can't be seen on the outside, all people with electrical burns should receive medical attention.**

Chemical Burns

1. Flush skin with water for at least 20 minutes.

2. Remove contaminated clothing, but avoid spreading the chemical to unaffected areas. PROTECT YOURSELF FROM FURTHER CONTAMINATION.

3. If the victim's eyes are involved, flush the eyes continuously with water until medical help is obtained Remove contact lenses.

4. Follow steps two, four and five for thermal burns (check breathing, check responsiveness, call 911 or cover burn, maintain body temperature and transport to medical facility.) If possible, bring package of the chemical involved to the medical facility.

NOTE: In cases involving some powdered or dry chemicals, it may not be appropriate to flush with water. If a dry chemical is involved, carefully brush the chemical off the skin and check the package or package insert for emergency information.

GENERAL CONSIDERATIONS...

- Remove rings, belts, shoes and tight clothing before swelling occurs.

- If clothing is stuck to the burn, DO NOT REMOVE IT. Carefully cut around the stuck fabric to remove loose fabric.

- Burns on the face, hands and feet should always be considered serious and should receive emergency medical attention.

NOTES...

A special thanks to the Sioux Falls Fire Rescue, Fire Prevention Division for their contributions and commitment to this booklet.

NOTES...

A special thanks to the Sioux Falls Fire Rescue, Fire Prevention Division for their contributions and commitment to this booklet.

Avera

FOR MORE INFORMATION
PLEASE CALL 605-322-3660

15-AVHE-2882 REV040419