# HOME SAFETY TRAINING MANUAL







# Introduction

The U.S. Department of Housing and Urban Development and the National SAFE KIDS Campaign welcome you to use this *Home Safety Training Manual*. This manual will provide you with an in-depth review of the problem of unintentional childhood injury in the home. It offers effective, science-based solutions that couple education with environmental modification strategies, such as the use of common household safety devices.

Unintentional injury is the leading cause of death among children ages 14 and under. One out of every four children, or more than 14 million, sustain injuries serious enough to require medical attention each year. These injuries have enormous financial, emotional and social impact not only on the child and the family, but also on the community and society as a whole.

Half of all childhood injuries and injury-related deaths occur in and around the home. Most home injury deaths are caused by fire and burns, drowning, airway obstructions, firearms, poisons and falls. Younger children are especially at risk of being injured in the home because it is where they spend the majority of their time. Nearly two-thirds of injuries requiring emergency department visits among children under age 3 occur in the home. Children from low-income families are often at greater risk for injuries in the home, due in part to living in more hazardous environments, having less supervision, and facing financial barriers to obtaining appropriate safety devices.

The National SAFE KIDS Campaign's *Home Safety Training Manual* is intended to empower injury professionals, home visiting professionals and others who work at the community level with the proper tools for training and conducting home safety checks. The manual is structured as follows:

- Part I provides an overview of childhood injury prevention.
- Part II reviews specific injury risk areas. Sections 2 through 8 lay out a major cause of injury, the related hazards children may be exposed to in the home, and tips for preventing associated injuries. The tips provided are to be shared with parents and caregivers when conducting home safety checks.
- Part III describes the protocol for conducting home visits and how to use the home safety checklist during home visits.
- The appendices provide additional information on safety devices and other community resources.

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# Section 1 Childhood Injury: Its Origins and Strategies for Prevention

# I. Injury Defined

An injury occurs when the body is exposed to energy greater than its ability to absorb it. Energy comes in many forms, including mechanical, thermal, electrical and chemical.

## **Mechanical Energy**

Mechanical energy, also called kinetic energy, is associated with motion. It is found in "large" motion, a vehicle moving at 60 mph, as well as "small" motion, a lid closing. Mechanical energy is the form most commonly associated with injury and is the form associated with the largest variety of injury types, including falls, traffic crashes and airway obstructions.

## **Thermal Energy**

Thermal energy is associated with temperature, both hot and cold. It includes open flames, surfaces and liquids. Fire and flames are the leading cause of thermal injuries; burns are the most common injuries associated with thermal energy. Contact with flames; hot objects, such as touching a hot iron or stove; and hot liquids, such as immersion in a bathtub of scalding water, can result in death and some of the most painful and devastating injuries a human being can sustain and survive.

## **Electrical Energy**

Electrical energy is associated with electricity, such as outlets and wiring. Common hazards include overloading circuits, using frayed cords, and running cords under rugs where they are subject to damage, such as under heavy-traffic areas. These dangers can lead to electric shock and burns.

## **Chemical Energy**

Chemical energy is found in chemical substances in their liquid, solid or gaseous states. It includes medicines, household

cleaners, caustics and acids, and heavy metals (such as lead, pesticides and other toxic chemicals). The most common injury from chemical energy is poisoning by ingesting a chemical substance. Poisoning can be acute (immediate) as in a one-time drug overdose, or chronic (long-term) as in inhalation of lead by ingesting dust from lead-paint items over a long period of time. Other injuries include chemical burns from contact with battery acid and respiratory injuries caused by inhaling chlorine gas.

## **Hazards of Energy**

Energy, in any form, can become hazardous. A hazard describes a potential risk for injury. For example, boiling water presents a scald hazard, unguarded windows present a fall hazard, and gasoline presents a fire hazard. Products used in and around the home can present a hazard for more than one type of injury. For example, a toaster can present a contact burn hazard if the surface is hot as well as an electric shock hazard if its cord is frayed or is used in an overloaded outlet.

## **Injury Severity**

The severity of an injury resulting from exposure to a hazard can be minor, moderate, critical or fatal. Three factors determine injury severity:

- the amount of energy;
- the distribution of energy in time and space; and
- the body part affected.

Following are examples of how these factors affect severity:

**Example 1: Poisoning.** Consuming one tablet of aspirin each day for one month compared to taking 30 aspirin at the same time.

Many adults take aspirin, one tablet a day, as preventive medication incurring no harm. However, taking 30 aspirin at the same time can result in an overdose and poisoning. The distribution of chemical energy over time and space has been greatly concentrated resulting in injury.

**Example 2: Struck by an object.** Being hit by a baseball on the thigh compared to the eye.

A baseball hitting a person's thigh may cause a minor to moderate bruise, tenderness and swelling which most likely will heal in a reasonable amount of time. However, that same baseball hitting a person's eye has the potential to cause far more damage and possibly permanent injury. The eye is a much more vulnerable body part and the resulting injury will be much more severe.

# II. Children's Greater Susceptibility to Injury

Children are not miniature versions of adults: they are smaller in size and differ in development, experience and behavior. In all these areas, children are still learning and growing. As a result, they are at greater risk of injury than adults.

Injury risk factors for children ages 4 and under include:

- inability to understand and recognize dangers;
- still-developing coordination;
- tendency to imitate adult behavior; and
- limited ability to react promptly and properly.

Injury risk factors for **children ages 5 to 14** include:

- increasing experience taking on adult tasks;
- interest and intrigue with danger;
- increasing interest in taking risks;
- tendency to dare each other to engage in dangerous behaviors; and
- more free time without adult supervision.

## A. Small Size

#### Greater access to hazards

Because children are smaller in size, their bodies fit into places adults cannot, such as inside toy chests or discarded appliances like refrigerators. Access to small holes, slots and spaces can result in entrapment and suffocation as well as exposure to hazards such as moving parts and hot components.

#### Higher center of gravity

The center of gravity refers to the mid-point of human bodyweight. Children have a higher center of gravity than adults because their heads are disproportionately larger and heavier than their bodies, resulting in a center of gravity high in their chests. In comparison, adults have a center of gravity closer to their waists. Children are therefore more top-heavy than adults and more likely to fall or tip over. This is why infants and toddlers, in particular, are at greater risk of falling into toilets and buckets and down stairs. Additionally, once children fall into something, it is more difficult for them to extricate themselves.

#### Greater surface area exposure

Given exposure to the same hazard, an adult and a child face very different levels of risk. For example, a spilled cup of hot coffee can do significantly more damage to a child than an adult. The same volume of liquid spilled on an adult covers a smaller surface area than when spilled on a child. This increased exposure means that the resulting injury can be more severe in children.

#### Lower tolerance

The severity of an injury depends on the body's ability to absorb energy. A small child is less able to absorb or tolerate the energy exposure than an adult is. For a child, smaller size means the energy must be absorbed into a smaller area. The resulting injury is more intense and therefore more severe. For example, children will have more adverse reactions to much smaller amounts of toxins than adults will.

## **B.** Natural Levels of Childhood Development

#### Limited natural protection

Biological systems are still growing and developing during childhood: the skin is thin and delicate, internal organs (lungs, heart, kidneys, etc.) are still immature, the skull is soft and cranial plates are not fully closed. The body's normal protective barriers provide fewer defenses to children than adults. As a result, children's brains are more susceptible to injury from falls; their skin is more susceptible to injury from burns, cuts and bruises; and their internal organs are more vulnerable to damage when stressed by toxins.

#### Limited ability to escape hazardous situations

Motor skills take time to develop. Most of a newborn's actions are simply reflexes. It takes a baby about five months to sit up, a year to stand or walk, and several years to develop fine motor skills (such as manual dexterity). These developmental stages affect the ability of young children to escape a hazardous situation. For example, infants who roll between a bed and the adjacent wall can suffocate because they cannot lift themselves back up onto the bed surface; top heavy toddlers who fall head first into buckets can drown because they cannot leverage themselves upright; children can remain trapped in latched compartments because they cannot figure out how a lock works.

#### Limited ability to recognize hazards

Children do not begin to recognize causal relationships until the age of five or older. Thus, infants and toddlers may enter a space they cannot escape, such as ladder rings, toy chests or even scalding water, not understanding the hazard. Lack of experience and developing mental skills also affect children's ability to recognize hazards or predict the type of associated injury. For these reasons, children may touch hot surfaces, put wiring in their mouths or climb on bureaus.

#### **Increased attraction to potential hazards**

Built-in sensory preferences combined with inexperience place children at risk of injury. As an example, young children are attracted to sweet tastes and bright colors. Unable to discern items as hazards, children are naturally attracted to brightcolored, seemingly sweet-tasting products like antifreeze and flavored vitamins or medicines.

#### **Adult modeling**

Children learn social and mechanical skills by watching adults. To a child, every adult action, whether positive or negative, is a learning experience. In an effort to imitate, children may try to operate lighters, shave, turn on stoves or shoot guns.

#### C. Lack of Experience

#### Smaller knowledge base

Learning occurs by experiencing. Infants and children are at an immediate disadvantage simply because, in their limited years, they have limited experience. Completely preventing bad or harmful experiences is one way to protect children from injury. However, there is a delicate balance between protecting children and allowing them to experience potentially harmful situations while minimizing the risks of injury. Without experience or adult guidance, children are at increased risk for all types of injury.

#### Lack of fear

Due to a lack of experience and the inability to understand consequences associated with risky behavior, children are willing to try anything. This attitude can have injurious effects that range from falling from a window in an attempt to fly to darting into the middle of a street to chase a ball.

## **D.** Behavioral Development

## Natural and strong desire to explore

Children are endlessly curious and intrigued by sounds and sights in their environment. They are eager to explore and learn through all their senses. When exploring unsupervised in an adult environment, they can be at risk for injury.

## Tendency to explore by mouthing

Children, especially those under age 3, explore by putting things into their mouths. This natural tendency places them at increased risk for choking, poisoning, electric shock and thermal burns.

# **III. Injury Prevention**

Measures taken to prevent injury are called interventions. Injury prevention interventions can be implemented at any point along the "continuum of care" – from preventing the injury (primary prevention) to reducing the severity of the injury (secondary prevention) to medically treating the injury (tertiary prevention).

## • Primary Prevention: preventing injury

By removing the hazard or making it inaccessible, the injury never occurs.

Examples: eliminate small parts in toddlers' toys; lock up poisons and store them high out of children's reach.

## • Secondary Prevention: reducing injury severity

The injury experience occurs. However, reducing or eliminating the hazard potential reduces the severity.

Examples: fire-retardant sleepwear limits flame spread, the use of bicycle helmets and safety belts reduces injury severity in traffic crashes.

#### • Tertiary Prevention: improving injury outcome

The injury occurs. However, effective medical treatment improves the outcome.

Example: an injured child is treated on-site with immediate first aid, then receives appropriate medical attention and rehabilitation.

#### **Multifaceted Interventions**

#### **Incorporating the E's**

Given the complex nature of injury, preventing injuries among children requires a multifaceted approach. Intervening successfully may involve the education of the general public or a targeted group, changes in the design of products or safety devices, modifications of the physical environment, efforts to alter specific injury-related behaviors, and/or the passage and enforcement of new legislation.

Addressing a variety of factors will help ensure the success of any injury prevention efforts. Therefore, interventions should be multifaceted in nature and incorporate the various E's of injury prevention and control:

**Evaluation** – Research, data collection and surveillance, as well as evaluation of program and product effectiveness.

**Education** – Efforts to reach children, caregivers, the general public, practitioners, media, policy-makers and other target groups to change knowledge, attitudes and behavior.

**Engineering and Environmental Modifications** – Changes in the physical environment; the design, development and manufacture of safety products; and influencing the socioeconomic environment of communities through the distribution of safety products. **Enactment and Enforcement** – Pass, strengthen and enforce laws; issue and enforce of regulations; and develop voluntary standards and guidelines.

**Empowerment** – Activism at the grassroots level, the formation of injury prevention coalitions or partnerships at the national, state and local level; and the education and skills-building of children, parents and caregivers

#### **Effective Interventions – Address Multiple E's**

Addressing more than one of the E's will improve the effectiveness of the intervention. For example, a toxic household product could have a federally required child-resistant closure (an environmental modification, federally regulated and enforced) as well as first aid instructions (education and empowerment of parents and caregivers).

Interventions that rely on education alone to modify behavior are the least effective. For example, simply telling parents and children to wear bike helmets whenever they ride a bike will not guarantee a change in behavior. Rather, educational messages need to be supplemented with helmet distribution as well as passage and enforcement of mandatory helmet laws.

Generally, built-in or passive interventions that "take care of themselves," are likely to be more effective than those which rely on human action or active interventions. For example, a self-closing, self-latching gate and four-sided isolation fencing around a swimming pool are much more likely to keep a child from drowning in the pool than supervision or a gate that requires a person to lock it every time it is used.

# Section 2 Fire

# I. Fire Injury

Each year in the United States, fire departments respond to nearly half a million residential fires—one every 71 seconds. These fires account for a small percentage of all reported fire incidents, yet they cause 80 percent of all fire-related deaths and nearly 75 percent of injuries.

Fires and burns are the third leading cause of unintentional injury-related death among children ages 14 and under. The majority of fatal home fires occur at night when people are asleep. Death caused by severe burns is only one of the fatal consequences of fire. An estimated one-fourth of home-fire victims die from burns, while the rest die from inhaling poisonous gases from smoke or from lack of oxygen.

Fires produce several life-threatening products of combustion: smoke, toxic gases, heat and flames. Smoke obscures vision and hampers an individual's ability to exit safely. Toxic gases are released that include carbon monoxide, hydrogen cyanide, hydrogen chloride and carbon dioxide. Flaming combustion produces temperatures that can exceed 1000 degrees F, causing severe respiratory injuries and burns.

The majority of home fires are preventable. By supervising children, recognizing fire hazards, and practicing fire prevention activities, home fires and resulting death and injury can be substantially reduced.

# II. Fire Hazards in the Home

## Smoking

Residential fires caused by smoking materials are the leading cause of fire-related death in the United States. Cigarette fires occur from smoking in bed, but also from being dropped in upholstered furniture or carelessly discarded in the trash. Many times alcohol and medication use plays a role. Often the smoker falls asleep, the cigarette falls on a sofa or chair cushion then smolders for hours before it breaks into flames.

## **Prevention Tips**

- Keep children away from cigarettes, cigars, pipes and other smoking products.
- Smoke outside, if possible. If this is not feasible, use extreme caution when smoking inside the home.
- Use only deep, wide ashtrays for cigarettes. Immerse the butts in water before throwing them in the trash.
- Check couches and chair cushions for smoldering cigarettes before going to bed or leaving the house.
- Never smoke in bed.

## Matches and Lighters

Playing with fire is the leading cause of fire-related death among children age 9 and under. Three-fourths of these fires start with matches or lighters. Young children do not understand the dangers of fire, and they are naturally curious and fascinated by fire and flames. Home fires frequently begin in the bedroom or living room where children are often left alone to play.

- Use child-resistant lighters but store them out of children's reach, preferably in a locked cabinet.
- Teach young children that matches and lighters are tools for adults, not toys.
- Tell children that they should never touch matches or lighters. If they find matches or lighters, teach them to tell a grown-up.

## Candles

As home candle use grows, so does the risk of home fires.

## **Prevention Tips**

- Use candles only in rooms where there is adult supervision and make sure they are not near flammable objects, such as lighters, nail polish or cleaning products.
- Keep candles out of children's reach.
- Burn candles in appropriate receptacles only, such as candlesticks and lamps with globe covers that offer protection from surrounding objects and curious little hands.
- Keep flashlights and batteries on hand to use during a power outage instead of candles.

## **Fireplaces and Wood Stoves**

The major risks associated with using fireplaces and wood stoves are improper installation, operation and maintenance. Many fires are caused by a creosote build-up that coats the inside of the chimney flue. Additionally, all fuel-burning appliances, including fireplaces and woodstoves, produce carbon monoxide (see Section 6: Poisoning.)

- Use metal screens or heat tempered glass doors to contain hot ashes and prevent sparks from burning rugs, carpets and other items.
- Keep combustible items at least three feet away from fireplaces and wood stoves.
- Have the chimney professionally checked once a year and cleaned and repaired as necessary.
- Install a chimney cap to prevent roof fires, to minimize down drafts, and to prevent rain, leaves, animals and birds from getting into the chimney.
- Assure that the wood stove bears the seal of an independent testing laboratory. All built-in fireplaces and wood burning stoves should be checked by a professional contractor or by officials in the local jurisdiction (building inspector, codes official) to ensure they are properly installed and vented.

- Use only seasoned hardwoods such as oak, ash and elm in fireplaces or wood stoves.
- Leave a window slightly cracked open to ensure proper ventilation.
- Allow ashes to cool before disposing of them.
- Put ashes into metal containers and dispose of them outside away from flammable items.

#### **Electric Space Heaters**

Portable space heaters start many fires when the heater is placed too close to furniture, curtains or other items that can ignite easily. Space heaters should never be used to provide heat during the night when people are sleeping.

## **Prevention Tips**

- Purchase and use only heaters that bear the label of an independent testing laboratory, such as underwriter's laboratory (UL). Read the instructions before using the heater.
- Keep space heaters at least 3 feet (1 meter) away from anything flammable.
- Never leave children unattended around a space heater.
- Plug the heater directly into the wall outlet. Do not use extension cords with space heaters.
- Turn off and unplug the heater when going to bed or leaving the home.
- Make sure the heater has a safety shut-off valve in case the heater is knocked over.
- Maintain and inspect the heater on a regular basis.

## **Kerosene Space Heaters**

Kerosene heaters share many of the same fire problems as electric space heaters, such as igniting combustible materials that are nearby. Using kerosene heaters while sleeping is especially dangerous. Always turn off kerosene heaters when leaving the home. It is important to remember that kerosene heaters, as with all fuel burning appliances, produce carbon monoxide when burned.

## **Prevention Tips**

- Check with local authorities to find out if kerosene heaters are allowed in the community. Some areas do not allow them in certain types of homes.
- Never use gasoline in kerosene heaters, only use K-1 clear kerosene for fuel.
- Never refuel a kerosene heater in the home. Refuel a kerosene heater outside after it has cooled.
- Read the instructions before using the kerosene heater. Look for the seal of an independent testing laboratory.
- Keep the kerosene heater a minimum of three feet (1 meter) away from combustible items.
- Use a heater appropriate to the size of room being heated.
- Use the heater in a well-ventilated area.
- Keep the heater out of the traffic pattern and do not place it where it blocks exits.
- Consider using a guard to provide a barrier between children and the heater.
- Make sure there is a safety shut-off valve in case the heater is knocked over.
- Maintain and inspect the heater on a regular basis.
- Store kerosene outside, clearly labeled in an approved container.

## Stoves, Ovens and Microwaves

More than one-fifth of all home fires are cooking-related. Grease and other food residues left on stoves, as well as cooking food left unattended, can increase the chances of a fire. The potential for a kitchen fire is reduced if an adult is in the kitchen at all times when cooking is taking place.

- Keep young children out of the kitchen while cooking.
- Older children helping out in the kitchen should never be left unattended.
- Keep all appliances clean and free of grease build-up.
- Wear short, close-fitting or tightly rolled-up sleeves when cooking.

- Store flammable items away from the stovetop.
- Use timers when cooking.
- Keep a fire extinguisher nearby.
- Know how to respond to grease and oven fires.

If a grease fire starts in a pan on the stove:

- Cover it with a lid, larger pan or cookie sheet to smother the fire.
- Turn the burner off and let the pan cool.
- Do not attempt to pick up the pan. Carrying the pan increases the chances of spreading the fire and getting burn injuries.
- Do not throw water on the fire. Throwing water on a grease fire creates a splattering of hot grease spreading the fire and causing burns.
- If the fire does not go out in 30 seconds put fire escape plan into action (see page 22).
- Fire can spread into the walls or pipe chase. As a precautionary measure, call the fire department or 911 to notify.

If a fire starts in the oven:

- Close the oven door and turn off the oven.
- If the fire does not go out in 30 seconds put fire escape plan into action (see page 22).
- Fire can spread into the walls or pipe chase. As a precautionary measure, call the fire department or 911 to notify.

If a fire starts in the microwave oven:

- Push the stop button or unplug the microwave and leave the door closed until the fire goes out.
- If the fire does not go out in 30 seconds put fire escape plan into action (see page 22).
- Fire can spread into the walls or pipe chase. As a precautionary measure, call the fire department or 911 to notify.

## Furnaces

Fires involving the central heating system of the home occur when the unit is not well maintained or when nearby flammable liquids ignite. Gasoline vapors can travel to the pilot light and quickly catch fire or cause an explosion.

## **Prevention Tips**

- Have the furnace installed according to all local codes and cleaned once a year before the heating season begins to be sure there is adequate intake air and the exhaust system is working properly.
- Store flammable liquids, such as gasoline, outside and never near a furnace or hot water heater.
- Keep materials that could burn at least 3 feet (1 meter) away from the furnace.

## **Electrical Systems and Appliances**

Electrical equipment can cause fires by overheating and setting off sparks. Warning signs often precede electrical fires. Malfunctions with the electrical system or an appliance; burning odors coming from appliances; or excessive heat and sparks are signs of a fire. Circuit breakers and fuses, which are safety features built in to disconnect power from an electrical circuit if there is an overload, also provide warnings.

- Read the safety manuals and instructions thoroughly before using any new appliance.
- Keep all home electrical equipment, including kitchen appliances, clean and in good working order.
- Check appliances for the label of an independent testing laboratory.
- Beware of hazards associated with lamps. Lampshades that are too close to the bulbs and lamps that can be easily knocked over are fire hazards.
- Have equipment installed, serviced and repaired by qualified specialists.

- Use wall outlets appropriately. Most wall outlets have two sockets. Plug-in only one heat-producing appliance at a time, such as a toaster, coffee maker or iron.
- Do not place heat-producing appliances under wood cabinets.
- Unplug appliances when they are not in use. Wind up the cords and keep them out of children's reach.
- Use the correct plug circuitry for special equipment, such as air conditioners and large space heaters, which should be plugged into a separate, heavy-duty electrical circuit designed to draw large amounts of current.
- Have an electrician check fuses and circuit breakers regularly, especially when an overload occurs. Upgrade the circuits if needed.
- Use the correct bulb wattage in lamps. Using a higher wattage can cause a fire. If the correct wattage is unknown, use a bulb no greater than 60 watts.
- Make sure there is sufficient ventilation around heatproducing appliances, such as televisions, VCRs, stereos and computers, to prevent overheating.

## Halogen Lamps

Halogen torchiere floor lamps are free-standing lamps with shallow bowl-shaped light fixtures mounted on top of 6-foot poles and illuminated by tubular halogen bulbs. The tubular halogen bulbs operate at temperatures much hotter than regular bulbs, and can pose a fire risk if curtains, clothing or other flammable materials contact the bulb. In February 1997, UL adopted a revised performance standard for halogen torchiere floor lamps offering an improved level of safety. If possible, torchiere-style halogen lamps should not be used in the home.

- If possible, use alternative lighting sources in the home.
- Never place a halogen torchiere floor lamp near curtains, other cloth window treatments or any bedding.
- Never drape clothes over a halogen lamp.
- Never leave a halogen lamp on when leaving a room or the home.

- Keep children and pets away from the halogen lamp.
- Only use a halogen bulb of 300 watts or less in a lamp.

## **Electric Cords**

Damaged electrical cords that may be cracked, broken or frayed pose fire hazards. Cords running under carpets can also be damaged and cause a fire. If the cord is warm to the touch, it is a signal that the cord is overheating.

## **Prevention Tips**

- Do not put cords under furniture and rugs or carpeting.
- Attach cords to walls or baseboards using tape, rather than staples or nails.
- Examine cords to make sure they are in good condition.
- Check extension cords to ensure they are carrying their proper load, as indicted by the ratings labeled on the cord and the appliance. Plug in only one appliance at a time into an extension cord. The need to use extension cords may indicate that the home may have inadequate wiring. Remedy this problem by having circuits or outlets added.
- If a cord is warm to the touch, unplug it immediately and repair or replace it.
- If outlets and switches are unusually warm or hot to the touch, unplug cords from outlets and don't use the switches. Have an electrician check the wiring immediately.

## Flammable and Combustible Liquids

Improperly using and storing flammable and combustible liquids is a major factor in many home fires. As previously mentioned, gasoline gives off invisible vapors that can travel to a pilot light, to electrical outlets and switches, or to any other heat source and cause a fire or explosion.

- Never smoke around gasoline or any flammable or combustible liquids such as lacquers and paint thinners.
- Never smoke while using hair spray. The heated smoke and the aerosol can combine to cause serious fire and burn injuries.

- Properly store and dispose of oily rags, such as those used when painting or working on vehicles. They can give off flammable vapors and catch fire easily.
- Do not use gasoline as a cleaning product.
- Store flammable liquids in sealed, unbreakable and properly labeled containers away from sparks, heat, flame and children.
- Store rags that have been used to wipe up flammable liquids in a tightly sealed metal container and then discard them.
- Keep flammable vapors away from pilot lights or the flame in a gas water heater and other appliances that can easily ignite invisible flammable vapors.
- Store gasoline and other flammable liquids tightly sealed in the container specifically designed for them.
- Store gasoline containers in a well-ventilated area, away from any source of ignition, and locked out of children's reach.
- Never store gasoline in the basement.
- Store only a minimal amount of gasoline.

## Children's Sleepwear

Each year, an estimated 90 children are burned while wearing sleepwear. Another 200 are injured while wearing other types of clothing for sleeping, usually loose-fitting cotton or cottonblend garments. The best protection for children is to have them sleep in snug fitting, flame-resistant garments. These garments are more difficult to ignite than untreated clothes.

## **Prevention Tips**

- Children should wear flame-resistant sleepwear.
- Children should never wear over-sized cotton or cottonblend t-shirts for sleeping.

# **III.** Fire Injury Prevention

#### Supervision

Supervising children is crucial in preventing potential home fires. Children should never be left unattended. Children must be kept from and not allowed to play around cigarettes, candles, matches and lighters, fireplaces and wood stoves, stoves and ovens, electric and kerosene heaters, furnaces, and electrical appliances and cords.

Even diligent supervision is not 100 percent effective. Fire protection systems, such as smoke alarms and automatic residential fire sprinkler systems, must be used in every home to detect a fire if one starts. Fire protection systems are not designed to replace supervision, but to mitigate damage and prevent death and injury should a fire occur. The two must work together to effectively prevent death and injury.

## **Smoke Alarms**

Smoke alarms are extremely effective at preventing fire-related death and injury. The chances of dying in a residential fire are cut in half when a smoke alarm is present. Smoke alarms are also available for people with hearing impairments. These types of smoke alarms flash a strobe-like light in addition to sounding a sonic alarm.

Conventional battery-operated smoke alarms offer the advantage of easy installation, however, alarms must be tested monthly, the batteries replaced at least once a year and the alarms replaced every 10 years.

Many fire codes require smoke alarms, usually in new construction, to be 110-volt hard-wired units. These smoke alarms may sound a local alarm or send an alarm signal to a central station that will then notify the fire department as well as sound a local alarm.

There are two different types of smoke alarms: ionization and photoelectric. Ionization smoke alarms provide a faster response to open-flame fires. Photoelectric smoke alarms respond faster to the smoke generated by smoldering fires. Regardless of the principle for detection, all smoke alarms must pass the same test at testing laboratories in order to receive a UL listing. Both types of alarms will detect most fires. While there will be some variation in the alarm response time, the differences are negligible. Numerous field tests have shown that either type of alarm, when correctly installed and maintained, will provide adequate warning for escape.

Smoke alarm use:

- Install smoke alarms on every level (including the basement) and in all sleeping areas.
- Test smoke alarms once a month with smoke or an aerosol product specifically designed for this purpose. Some alarms have a test button that only checks the alarm's horn circuit.
- Replace the batteries at least once a year or when they "chirp," which signals a low battery, unless the batteries are designed for longer life.
- Install the specific battery recommended by the manufacturer. A wrong battery may not respond even though the test button will function.
- Make sure everyone in the home, especially children, can hear and recognize the sound of the alarm and knows how to respond.
- Check with the local authorities to determine if law or ordinance requires smoke alarms.
- Replace smoke alarms every ten years.
- Sleep with bedroom doors closed. This helps slow the spread of smoke and fumes if a fire occurs.

#### **Residential Fire Sprinklers**

The chances of dying in a residential fire are reduced by as much as 59 percent when automatic sprinkler systems are in place. Some jurisdictions now require residential fire sprinkler systems in new construction. Qualified technicians should maintain and service residential sprinkler systems.

#### **Fire Escape Plans**

Many times, children are found under beds or in closets after fires because they did not know what to do. Children should be taught what to do during a fire. Children should also be taught what a firefighter looks like in full protective clothing. Whether living in a house, an apartment or a manufactured home, families should have an escape plan and practice it at least twice a year, alternating between using "primary" (door) and "secondary" (window) exits.

An escape plan should include the following:

- a floor plan showing every room in the home;
- two marked exits (a door and a window) for every room;
- working smoke alarms on every level;
- an outside meeting place in the front of the home such as a tree, telephone pole or neighbor's home;
- a path drawn from each room to the meeting place;
- the local fire department's emergency phone number; and
- escape ladders for upper levels as necessary.

When a smoke alarm sounds:

- take it seriously and put the home fire escape plan into action;
- don't take time to stop to gather valuables or animals;
- check the door and doorknob with the back of your hand before opening any door. If they are hot, use the secondary means of escape to exit;
- close all doors when leaving, to help delay smoke and flames from spreading;
- crawl low under smoke where the air is cleaner;
- once out of the home, stay out; and,
- call the fire department or 911 from a neighbor's home.

## **House Numbers**

House numbers (address) should be at least five inches high. The color should be different from the background so it can be easily seen from the street during the day and the night. Check with municipal or local fire department personnel on specific code or ordinance requirements.

## **Emergency Telephone Numbers**

Keep an updated list of emergency telephone numbers posted near every phone in the home. Keep at least one telephone in a low place. This will allow children, the disabled and anyone who is injured to reach easily the phone and call for help. When there is an emergency, always call the emergency number before calling a relative, friend, neighbor or doctor. If there is a fire in the home, call 911 from a neighbor's home. *Never* reenter the home. *Never* stay inside to call for help.

#### Stop, Drop and Roll

Children should be taught to stop, drop and roll if their clothing catches fire.

- **1.** Stop.
- 2. Drop to the ground or floor.
- 3. Cover face to protect it from the fire.
- 4. Roll over and over to smother the fire.

If someone else's clothing catches fire:

- make sure the person does not run;
- tell the person to drop and roll back and forth or over and over to smother the flames; and
- use a coat, blanket, rugs, towel or something similar to smother the flames.

## **Fire Extinguishers**

Fire extinguishers are portable devices containing water or chemicals that can be sprayed on fire to put it out. However, fire extinguishers have limitations. They cannot extinguish a large or spreading fire. They have a short range (6 to 10 feet or 2-3 meters) and discharge completely in a very short time (8 to 10 seconds). They are recommended only if the operator has received training in its use. The operator must have the right type of extinguisher, know how to use it and be able to lift it. Fire extinguishers should be mounted on walls in plain sight and near exits. Since most home fires happen in the kitchen, installing one in the kitchen is strongly recommended.

Fire extinguisher use:

- Use a fire extinguisher only after calling the fire department
- Know how to use the device correctly.

• If the fire is not extinguished or contained immediately, evacuate the home and call 911 or the fire department.

# Home Safety Checklist Highlights Fire

#### **Family Room**

- □ There is a properly placed and maintained smoke alarm.
- □ Several fire escape routes from each room and the home are planned and practiced.
- □ Electrical cords are in good condition and positioned appropriately (e.g., against walls, out of children's reach).
- □ Electrical outlets are not overloaded and are protected with outlet covers when not in use.
- □ There is a barrier around the fireplace or any other heating source.
- □ Space heaters are stable, with protective coverings, located out of children's reach and at least 3 feet from curtains, papers, furniture and other flammable materials.
- □ Matches and lighters are kept out of children's reach. All ashtrays are properly emptied immediately after use.

## Kitchen

- □ Electrical and telephone cords are in good condition, placed against walls and out of the flow of traffic.
- □ Electrical appliances are kept unplugged, away from the sink and stove and out of children's reach.
- □ Electrical outlets are not overloaded and are protected with outlet covers when not in use.
- □ There is an easily accessible, working fire extinguisher.
- □ Potholders and other flammable materials are stored away from burners.

## **Bedrooms – Adult and Child**

- □ There is a properly placed and maintained smoke alarm.
- □ All emergency egress windows can be easily opened.
- □ There is an emergency escape ladder near upper-story windows.
- □ Electrical cords are in good condition and are positioned appropriately (e.g., against walls, out of children's reach).

- □ Electrical outlets are not overloaded and are protected with outlet covers when not in use.
- □ Space heaters are stable, with protective coverings, located out of children's reach and at least 3 feet from curtains, papers, furniture and other flammable materials.
- □ Matches and lighters are kept out of children's reach. All ashtrays are properly emptied immediately after use.

#### Nursery

- □ There is a properly placed and maintained smoke alarm.
- □ Electrical outlets are not overloaded and are protected with outlet covers when not in use.
- □ All furniture, especially the crib, playpen, changing table and chairs, is placed away from an outside wall, windows and draperies, heating sources, electrical cords and curtain cords.
- □ Space heaters are stable, with protective coverings, located out of children's reach and at least 3 feet from curtains, papers, furniture and other flammable materials.

## Bathroom

- Electrical appliances, including hair dryers, curling irons and space heaters, are used away from the sink, shower, tub and toilet and are stored unplugged and out of children's reach when not in use.
- Electrical appliance cords are in good condition and are kept out of children's reach.
- □ Electrical outlets are protected with Ground Fault Circuit Interrupters.
- □ Electrical outlets are not overloaded and are protected with outlet covers when not in use.

## Basement

- □ There is a properly placed and maintained smoke alarm.
- □ Containers of flammable liquids such as paint and cleaning solvents are stored tightly capped in their original containers, locked out of children's reach and away from ignition sources, such as furnaces and water heaters.

# Garage

□ All poisonous and flammable products are stored in their original containers, away from heat sources and out of children's reach.

# I. Burn Injury: Scald, Contact, Electrical, Chemical

Burn injuries continue to be one of the leading causes of childhood death and disfigurement in the United States. They have long been recognized as among the most painful and devastating of injuries human beings can sustain and survive. Burns often require long periods of rehabilitation, multiple skin grafts and painful physical therapy. In addition, burns cause residual disfigurement, and survivors must often live with lifelong physical and psychological trauma.

Children ages 4 and under are at the greatest risk from burnrelated death and injury. Younger children have thinner skin than that of older children and adults. Their skin therefore burns at lower temperatures and more deeply. A child exposed to hot tap water at 140 degrees F for three seconds will sustain a third degree burn, an injury requiring hospitalization and skin grafts. Furthermore, children, especially ages 4 and under, may not perceive danger, have less control of their environment, may lack the ability to escape a life-threatening burn situation, and may not be able to tolerate the physical stress of a postburn injury. For example, a child in hot water will scream, but may not withdraw from the water.

Most burn injuries happen to children at home. Scald burns (caused by hot liquids or steam) and thermal burns (caused by direct contact with fire/flames and by touching hot objects) are the most common types of burns-related injury among children. Major sources of scald burns include heated foods and beverages, hot tap water and microwave oven use. Thermal burns, and especially flame burns, are more common among older children. Children are also at risk from electrical and chemical burn injuries in the home.

## II. Burn Hazards in the Home

#### Hot Liquids and Foods - Scald Burns

The majority of scald burns to children, especially among children ages 6 months to 2 years, are caused by hot foods and liquids. Hot liquid and food burns often occur when children upset cups of hot liquid, such as coffee; grab dangling appliance cords; grab pots off the stove; or pull hanging tablecloths or placemats.

Scald burns account for the majority (95 percent) of microwave oven burns among children. These burns typically occur when hot liquid or food is spilled as it is removed from the microwave.

## **Prevention Tips**

- Keep hot foods and liquids, appliances and appliance cords out of children's reach, away from table and counter edges.
- Use back burners, and turn pot handles in or to the back of the stove when cooking. Install stove guards (plastic shields).
- Do not use tablecloths or placemats that children can tug on, bringing down hot foods and liquids from tables.
- Keep all hot items near the center of uncovered tables, out of children's reach.
- Never nurse, carry or hold children and hot foods and/or liquids at the same time.
- Securely strap children in a high chair or place them in a playpen when cooking or handling hot liquids.
- Keep children a safe distance from the microwave oven.
- Never use the microwave to heat baby formula or milk in bottles.

## Hot Water - Scald Burns

Hot tap water accounts for nearly one-fourth of all scald burns among children and causes more fatalities and hospitalizations than other hot liquid burns. Tap water scald burns most often occur in the bathroom, and tend to be more severe and cover a larger portion of the body. These burns commonly occur when children are left unattended in the bathtub; are placed in water that is too hot; are in the bathtub when another child turns on the hot water; or fall into the bathtub.

## **Prevention Tips**

- Set the temperature of the water heater to 120 degrees F or lower.
- Install anti-scald plumbing valves in all home faucets, bathtubs and showers.
- Always supervise children in bathrooms. Never leave children unattended, even for a second.
- Make sure children's bath water temperature is no hotter than 100 degrees F.
- Use an unbreakable bath thermometer to check bathtub water temperature. If one is not available, test the temperature by immersing an entire hand in the water, spreading the fingers and moving the hand throughout the length of the tub, making sure there are no hot spots.
- Teach young children never to touch the bathtub faucet. Face children away from bathtub fixtures, because they are less likely to manipulate faucets that are out of sight.

## Hot Appliances and Items -- Contact Burns

Curling irons, room heaters, ovens and ranges, irons and fireworks are common causes of product-related contact burn injuries among children. Twenty percent of children ages 4 and under who are hospitalized for burn-related injuries sustain contact burns.

- Do not use baby walkers that allow young children to move near and reach for pans or dangling cords.
- Keep goodies that attract children away from the stove and out of children's reach so they will not be tempted to reach for them.
- Install covers on stove knobs.
- Keep appliance cords out of children's reach.
- Keep electrical appliances out of children's reach.

• Turn off and unplug all heat producing items such as irons and coffee makers immediately after use. Never allow children near these items when in use.

## **Electrical Cords -- Electrical Burns**

Oral contact with electrical cords in the home, usually by sucking or chewing on them, causes the majority of electrical burn injuries among young children. Older children tend to suffer electrical burn injuries during outdoor, risk-taking behaviors from higher voltage sources when climbing trees or power or telephone poles.

## **Prevention Tips**

- Make sure all outlets have cover plates and no exposed wiring.
- Check extension cords for worn or exposed wiring.
- Install plug or outlet protectors in all unused outlets.

## **Chemicals and Cleaning Supplies – Chemical Burns**

Skin contact with strong acids or alkalis can produce burns as damaging as those caused by heat. Sources of strong acids and alkalis include batteries and various chemicals (i.e., cleaning products and pesticides) which must be stored out of children's reach.

## Prevention Tips

- Store drain cleaners and other acid/alkali chemicals out of children's reach.
- Use the kind and type of battery recommended by the manufacturer.
- Install batteries according to the polarity markings. Improperly installed batteries can charge each other and cause leakage.
- Check batteries often for leakage and remove batteries when not in use.
- Replace all batteries at once, not just the ones that are low.

# **III. Burn Injury Prevention**

#### Water Heater Temperature

Lowering the thermostat setting on a water heater helps prevent scald burns. The lower the temperature, the lower the risk of sustaining scald burn-related injuries. The water heater thermostat should be set to 120 degrees F or below. Gas water heaters can be adjusted easily. Electric water heaters require disconnecting the electricity to the water heater and removing the cover plates to adjust the thermostat. Utility companies can offer detailed directions for adjusting an electric water heater.

#### **Anti-Scald Devices**

Anti-scald devices in bathtub faucets and showerheads also help protect against scald burns. Some devices reduce water flow to a trickle if the temperature exceeds 120 degrees F. Other devices, such as pressure balancing/thermostatically controlled shower/bathtub valves, reduce the water temperature to  $115^{\circ}$  F or less. These valves can be attached to bathtub fixtures, installed in walls of bathtubs or connected at water heaters. Devices vary in cost and installation requirements, and can be purchased at hardware or plumbing supply stores.

## **Bath Water Temperature**

Children's bath water temperature should not be hotter than 100 degrees F. When filling the bathtub, run cold water first, then adjust the temperature with hot water. Turn off hot water first, then turn off the cold water. Use an unbreakable bath thermometer to check the water temperature. If one is not available, test the temperature by immersing an entire hand in the water, spreading the fingers and moving the hand throughout the length of the tub, making sure there are no hot spots.

#### **Ground Fault Circuit Interrupters**

Installing Ground Fault Circuit Interrupter (GFCI) receptacles near sinks and other wet areas helps protect against electrical shock. A GFCI receptacle monitors the flow of current through the circuit and immediately cuts off the flow of electricity if there is an imbalance. It also shortens the duration of any shock. The outlets respond faster than fuses and circuit breakers and can be installed by a certified electrician.
### **Outlet Covers**

Outlet covers prevent children from playing with electrical outlets and placing objects into the electrical socket. Outlet covers should be placed on all unused outlets in homes with toddlers.

## Home Safety Checklist Highlights Burns

### **Family Room**

- □ Electrical cords are in good condition and positioned appropriately (e.g., against walls, out of children's reach).
- □ Electrical outlets are not overloaded and are protected with outlet covers when not in use.
- □ There is a barrier around the fireplace or any other heating source.
- □ Space heaters are stable, with protective coverings, located out of children's reach and at least 3 feet from curtains, papers, furniture and other flammable materials.
- □ Matches and lighters are kept out of children's reach. All ashtrays are properly emptied immediately after use.

### Kitchen

- □ Electrical and telephone cords are in good condition, placed against walls and out of the flow of traffic.
- □ Electrical appliances are kept unplugged, away from the sink and stove and out of children's reach.
- □ Electrical outlets are not overloaded and are protected with outlet covers when not in use.
- □ Stove guards or stove knob covers are installed.
- □ Children are kept out of the kitchen while cooking and away from microwaves and other heating sources.
- □ Back burners are used and pot handles are turned in or to the back of the stove when cooking.
- □ Hot foods and liquids are always placed away from the edges of counters and tables, out of children's reach, and never on tablecloths or placemats.

### **Bedrooms – Adult and Child**

- □ Electrical cords are in good condition and are positioned appropriately (e.g., against walls, out of children's reach).
- □ Electrical outlets are not overloaded and are protected with outlet covers when not in use.
- □ Space heaters are stable, with protective coverings, located out of children's reach and at least 3 feet from curtains, papers, furniture and other flammable materials.
- □ Matches and lighters are kept out of children's reach. All ashtrays are properly emptied immediately after use.

## Nursery

- □ Electrical cords are in good condition and are positioned appropriately (e.g., against walls, out of children's reach).
- □ Electrical outlets are not overloaded and are protected with outlet covers when not in use.
- □ Space heaters are stable, with protective coverings, located out of children's reach and at least 3 feet from curtains, papers, furniture and other flammable materials.

## Bathroom

- □ Young children are never left alone in the bathroom, even for a few seconds, and are closely supervised by an adult when bathing.
- Electrical appliances, including hair dryers, curling irons and space heaters, are used away from the sink, shower, tub and toilet and are stored unplugged and out of children's reach when not in use.
- Electrical appliance cords are in good condition and are kept out of children's reach.
- □ Electrical outlets are not overloaded and are protected with outlet covers when not in use.
- $\Box$  The water heater thermostat is set to 120 degrees F or less.
- □ Bath water temperature is tested before children enter water.

### Basement

□ Latches are installed on doors to the furnace room, laundry room and other rooms where dangerous equipment or supplies are kept.

□ Containers of flammable liquids such as paint and cleaning solvents are stored tightly capped in their original containers, locked out of children's reach and away from ignition sources, such as furnaces and water heaters.

## Garage

□ All poisonous and flammable products are stored in their original containers, away from heat sources and out of children's reach.

# Section 4 Drowning

## I. Drowning

Drowning is the leading cause of unintentional death among children ages 1 to 4 years. Children ages 4 and under have a drowning death rate two to three times greater than other age groups and account for nearly 60 percent of home drownings. Most drownings occur in residential swimming pools; however, young children can drown in as little as one inch of water and are at risk of drowning in bathtubs, toilets, buckets, wading pools, spas and hot tubs.

Drowning usually occurs quickly and silently. It can happen in a matter of minutes and typically occurs when a child is left unattended or during a brief lapse in supervision. Two minutes following submersion, a child will lose consciousness. Irreversible brain damage occurs after four to six minutes. As a result, near-drowning carries a risk of severe neurological injury. Nearly all who require cardiopulmonary resuscitation (CPR) die or are left with severe brain injury and permanent disabilities.

## II. Drowning Hazards in the Home

## Bathtubs

Approximately 10 percent of childhood drownings occur in bathtubs. Children are at risk of drowning in bathtubs when they are unsupervised, even briefly. This may occur, for example, when caregivers are distracted by a phone call, knock at the door or the needs of other children. Infants left in bath rings are not protected from drowning. Infants can slide out of bath rings or bath rings can come unattached. Bath rings are meant to be used with constant supervision and should never be used as a replacement for adult vigilance. Caregivers must remain with bathing children at all times.

## Toilets

An open toilet lid can be very intriguing to curious toddlers. Young children can easily tumble into an open toilet because of their high center of gravity. They are unable to leverage themselves into an upright position so they remain helpless with their heads in the toilet bowl water, and they drown.

## Prevention Tips

- Never leave children unattended in the bathroom, even for a second.
- Keep bathroom doors closed and secured with latches on the outside of the doors.
- Bath rings are only bathing aids, not personal flotation devices. They are not intended to prevent drownings or act as substitutes for supervision.
- Keep toilet lids down.
- Install safety toilet latches to prevent toddlers from opening toilet lids.

## Buckets

Since 1984, nearly 300 children, mostly between the ages of 7 and 15 months and 24 to 31 inches tall, have drowned in buckets containing water or other liquids used for mopping floors and other household chores. Buckets and diaper pails, when left uncovered and not emptied immediately after use place young children at risk of drowning. Five-gallon buckets tend to be quite stable when full and can remain upright, even when a toddler falls inside.

## Prevention Tip

• Empty buckets and containers immediately after use and store upside down out of children's reach.

## **Swimming Pools**

Swimming pools are inviting to children and can be extremely dangerous. Some children are confident that they can swim alone without adult supervision. Others may go after a toy that has fallen into the water or fall in after seeing their reflection in the water. Older children have the mental capacity to learn about water safety, but they also are subject to peer pressure, dare games and high-risk play behavior. They are more likely to drown as a result of a head or neck injury from diving into shallow water, which renders them paralyzed or unconscious. They may also be trapped under water by suction.

## **Prevention Tips**

- Never leave a child unsupervised in or around water, including swimming pools, spas, hot tubs and wading pools, even for a moment.
- Install four-sided isolation fencing, at least five-feet high, equipped with self-closing and self-latching gates, that completely surrounds swimming pool or spas.
- Keep rescue equipment, a telephone and emergency numbers by pools, spas and hot tubs.
- Empty wading pools immediately after use and store upside down out of children's reach.
- Enroll children in swimming lessons taught by qualified instructors when they are ready, usually after age 3.
- Do not assume children are "drown-proof." Even though children may have taken lessons and learned to swim, they still need constant supervision.
- Never rely on personal flotation devices or swimming lessons to protect children.
- Do not allow children to dive into shallow (less than 9 feet) or unfamiliar waters.
- Enroll family members, adults and children over age 13, in infant and child CPR classes.

## **III. Drowning Prevention**

## Supervision

Never leave children unsupervised in or around water. Adults and caregivers must remain with children at all times when near any form of water: bathtubs, toilets, buckets, and swimming pools. In the home, especially, supervise children in the bathroom and when they are bathing.

### **Toilet Locks**

Toilet locks or potty latches prevent children from opening toilet lids, falling into toilets and drowning. Toilet latches should be installed on all toilets in homes with toddlers.

### Fencing

Four-sided isolation fencing, at least five-feet high, equipped with self-closing and self-latching gates, should be installed completely surrounding all swimming pools and spas. Door alarms, pool alarms and automatic pool covers, when used correctly, can add an extra level of protection. However, these devices, including fencing, are not a substitute for constant supervision.,

## **CPR and First Aid**

Adults and caregivers should be trained in emergency response, CPR and first aid. Enroll adults, caregivers and children over age 13, in infant and child CPR classes.

## Home Safety Checklist Highlights Drowning

## Bathroom

- □ Young children are never left alone in the bathroom, even for a few seconds, and are closely supervised by an adult when bathing.
- □ The bathroom door is kept shut at all times and has a lock that can be opened from the outside.
- □ Safety locks are used on all toilet lids if there is a toddler in the home.

# Section 5 Falls

## I. Falls Injury

Falls are the leading cause of unintentional injury for children ages 14 and under. More than 80 percent of fall-related injuries among children ages 4 and under occur in the home. Children fall down stairs, out of beds, out of windows, off furniture, off balconies or porches, off indoor climbing equipment and off riding toys. They fall from changing tables, from infant carriers placed on countertops, and from other high surfaces, such as washing machines, dryers and kitchen tables. They trip over toys, rugs, thresholds and other uneven surfaces. Because falls are associated with a child's curiosity and development of motor skills, children ages 10 and under are at the greatest risk from fall-related death and injury.

Factors that affect the injury outcome of a fall include the height from which the fall occurs and the landing surface. If a surface does not "give," most of the energy of the fall is absorbed upon impact by the body. A body accelerates during a fall at the rate of 32 feet per second squared. The longer the distance of the fall, the greater the speed at impact. Associated energy, or the source of the injury, increases relative to the square of the speed. This factor explains why high-speed impacts cause such severe injury when there is no absorption mechanism other than the body.

Because children's skull bones are not yet fully developed and their center of gravity is higher, they are at a greater risk for falling, hitting their heads and suffering brain injury. Head injuries are associated with the majority of deaths and severe injuries resulting from falls. Infants who fall even relatively short distances, such as off someone's lap or to the floor when the handle on an infant carrying device breaks, can suffer concussions, skull fractures, and subdural hematomas (bleeding inside the skull and brain).

## II. Fall Hazards in the Home

## Windows

Children are at risk of falling out of open windows. Children are more likely to die or be severely injured from windowrelated falls than falls associated with any other product. When children fall out of widows, they can strike other structures as they free-fall, and land on hard surfaces, such as asphalt, concrete, rock and other unyielding materials. Windows should be kept locked at all times, or devices should be placed on windows, which prevent them from opening more than 4 inches wide.

## Prevention Tips

- Move chairs, cribs and other furniture away from windows.
- Screens are meant to keep bugs out, and will not keep children inside.
- Install window guards or devices to prevent windows from opening more than 4 inches wide.

## **Stairways and Hallways**

Accessible stairways invite children to practice climbing skills, follow parents or siblings, or simply explore new areas.

## Prevention Tips

- Make sure that all stairways are well lighted.
- Carpets on stairways should be tightly secured or installed and edges should not be frayed.
- Stairways should be free from objects and clutter at all times.
- A handrail should be installed on at least one side of the stairway and extend continuously from the bottom to the top of the stairs
- Install baby gates at the top and bottom of stairways.
- Baby gates at the top of stairways must be bolted to walls.

## **Baby Walkers**

Baby walkers account for more injuries than any other nursery product among young children. Each year, more than 16,000

children are treated in hospital emergency rooms for babywalker related injuries. The majority of these injuries occur when children fall downstairs while in their walkers. Walkers can also tip over on uneven surfaces, like door thresholds and bumpy carpeting.

## **Prevention Tips**

- Never use baby walkers with wheels.
- Stationary activity centers without wheels are an alternative.

### Furniture

Children fall off furniture, out of beds and out of high chairs.

### **Prevention Tips**

- Never let children play on furniture, beds or appliances.
- Always use safety straps, with crotch straps, on high chairs.

### **Bunk Beds**

Bunk beds are popular with children. They provide an imaginative climbing, jumping and playing area. However, bunk beds can be hazardous. Children can fall from the top bunk to the floor or can become trapped between or fall through bunk bed railings that are too wide.

## **Prevention Tips**

- Do not allow children to play or jump on bunk beds.
- Do not allow children under age 6 on the top bunk.
- Discourage unsupervised playing in bedrooms, particularly on bunk beds.
- Make sure the top bunk has side railings less than 3<sup>1</sup>/<sub>2</sub> inches from the frame.

## **Infant Carrying Devices**

Parents sometimes place infants in carrying devices on elevated surfaces, such as changing tables, countertops, tables and dryers for more accessible feeding or to keep them in view. Babies in carrying devices can easily slide off these smooth surfaces.

## **Prevention Tips**

- Never place infant carriers on elevated surfaces or smooth, slippery surfaces, such as tables, countertops, washers or dryers.
- Remember that infant carriers are for hand-transport and should be placed on the floor when not being carried.
- Always keep infants strapped in when they are in a carrier. The safety strap should have a crotch strap.
- Keep one hand on the baby at all times when using a carrier.

## Trip, Slip or Fall Hazards

Clutter in hallways and stairways, loose rugs and carpeting, wet surfaces and uneven flooring can cause children to trip and fall. Toys, shoes and other objects left in the middle of floors are also tripping hazards.

## Prevention Tips

- Place non-slip liners under rugs (or remove the rugs altogether) and assure that carpeting is taut.
- Keep passageways and stairways clear.
- Teach children to put away toys after play.
- Use non-slip bathmats and rugs.
- Install grab bars in bathtubs and showers.
- Immediately clean up any spills on floors. Wipe the bathroom floor after bathing or showering.
- Install corner cushions and hearth guards to protect children from hard or sharp surfaces.

## **Balconies, Porches and Decks**

Spaces wider than 3<sup>1</sup>/<sub>2</sub> inches between balcony, deck or porch railings are a fall hazard to children.

## Prevention Tips

- Make certain all balcony, deck and porch railing slots are secure and no more than 3<sup>1</sup>/<sub>2</sub> inches apart.
- Attach plastic or mesh barriers or additional slats to any spaces greater than 3½ inches.

### **Indoor Play Equipment**

Indoor climbing equipment, such as slides, playhouses or forts can be as high as 30 inches from the ground. Depending on the surface under the equipment, the impact of the fall and the injury can be severe.

## **Prevention Tips**

- Install guardrails on play equipment to protect children from falling.
- Make sure that the surface under play equipment is energy absorbing. Carpeting is not protective and is often installed over concrete or other hard surfaces.
- Do not allow children to use indoor play equipment without first ensuring proper fall protection.
- Always supervise children when playing on play equipment.

## Playgrounds

Nearly 80 percent of playground-related injuries involve falls to the surface or falls onto equipment. Falls account for the most severe playground-related injuries (mostly head injuries and fractures). Head trauma occurs in 75 percent of all fallrelated deaths associated with playground equipment.

## **Prevention Tips**

- Avoid asphalt, concrete, grass and soil surfaces under playground equipment. Acceptable loose-fill materials include hardwood fiber mulch or chips, pea gravel, fine sand and shredded rubber.
- Surfacing should be maintained at a depth of 12 inches and should extend a minimum of 6 feet in all directions around stationary equipment. Rubber mats, synthetic turf and other artificial materials also are safe surfaces and require less maintenance.

• Always supervise children when using playground equipment. Maintain visual and auditory contact. Prevent unsafe behaviors like pushing, shoving, crowding and inappropriate use of equipment.

## **III. Falls Injury Prevention**

### Window Guards

Children are at risk of falling out of windows opened as little as 4 inches wide. Window guards (or other protective device) should be installed on all windows not designated as emergency exits. The American Society for Testing and Materials (ASTM) is currently developing a standard for window falls prevention devices for non-emergency escape and rescue windows. Always check local codes concerning window guards. Some jurisdictions mandate their use.

### **Baby Gates**

Baby gates block doorways and stairways to prevent children from accessing dangerous areas. Gates can be pressure mounted or permanently mounted. However, when used at the top of stairs, baby gates must be bolted to walls. In all situations, baby gates should be installed level across the top and fit securely in the entryways they are protecting.

### **Bathmats and Decals**

Children are at risk of slipping and falling in bathtubs and showers. Non-skid bathmats or decals should be used in all bathtubs and showers.

#### **Safe Surfacing**

Safe surfacing under playground equipment is critical for preventing or reducing the severity of any injury. Acceptable surfaces include loose-fill materials, such as hardwood fiber mulch or chips, pea gravel, fine sand and shredded rubber. Rubber mats, synthetic turf and other artificial materials also are safe surfaces. Asphalt, concrete, grass and soil are unacceptable surfaces.

## Home Safety Checklist Highlights Falls

## **Family Room**

□ On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.

### Kitchen

□ The highchair or hook-on chair is sturdy and has a seat belt with a crotch strap.

### Hallways/Stairs

- □ Hallways and stairways are adequately lit.
- □ Slats on balconies and stairways are no more than 3½ inches apart.
- □ A sturdy handrail is fastened securely on at least one side of the stairway and runs continuously for the full length of the stairs.
- □ Safety gates are securely installed at the top and bottom of stairs. Gates at the top of the stairs are bolted to the wall.
- □ Stairways and landings are kept clear of clutter.
- □ Rugs or runners are tacked down or slip resistant.

#### **Bedrooms – Adult and Child**

- □ There is an emergency escape ladder near upper-story windows.
- □ On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.
- **□** Rugs or runners are tacked down or slip resistant.
- □ Bunk beds meet safety standards, are securely constructed and are not used by children under age 6.

#### Nursery

- □ The crib meets JPMA safety standards and is properly constructed and maintained.
- □ All furniture, especially the crib, playpen, changing table and chairs, is placed away from an outside wall, windows and draperies, heating sources, electrical cords and curtain cords.
- □ On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.
- □ Mobile baby walkers are not used.

#### Bathroom

- □ There is a non-skid rug on the floor or any rugs are secured with non-slip backing.
- □ There is a non-skid mat or decals in the bathtub and/or shower.
- □ On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.

#### Basement

□ The door to the basement stairs is kept locked.

#### Garage

□ On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.

# Section 6 Poisoning

## I. Poisoning

Children are unintentionally poisoned primarily by medicines and household products, lead and carbon monoxide. More than 1.1 million unintentional poisonings among children ages five and under are reported to U.S. Poison Control Centers each year. The majority of these exposures occur in the home. The exposure risk to a child is associated with a product's toxicity, packaging, accessibility, availability and formulation.

Children are at significantly greater risk from poisoning death and exposure than adults because they are smaller, have faster metabolic rates, and are less able to physically handle toxic chemicals. In addition, their natural curiosity and desire to put everything in their mouths increase their poisoning risk

For consumer protection, there are many agencies that supervise and regulate products that may be poison hazards. The U.S. Consumer Product Safety Commission, for instance, regulates lead in paint and surface coatings and also regulates child-resistant packaging. The Food and Drug Administration regulates the labeling of iron-containing drugs and supplements. The Environmental Protection Agency regulates pesticides.

In addition, a network of Poison Control Centers (PCC) throughout the country is effective in handling poison exposures. Approximately 75 percent of the poisoning exposure cases reported to PCC are managed in non-healthcare facilities (such as where the exposure happened, often at home).

## **II.** Poisoning Hazards in the Home

#### **Medications and Health Supplements**

Each year, more than 40 children die from unintentional exposures to medicines and household products; deaths that could easily have been prevented. Millions of people purchase and use prescription drugs, over-the-counter medicines, vitamins, and other health supplements daily. Most of these medications come with child-resistant packaging. However, because they can be difficult to open, people may either leave the container lid loose or transfer the contents to a more convenient container. This defeats the purpose of the child-resistant closures and increases children's risk of poisoning. Additionally, if a child ingests a substance from an unmarked container, treatment would be delayed until the substance could be properly identified.

### **Prevention Tips**

- Prescription medicines, vitamins and health supplements should always be stored in their original containers with child-resistant closures, locked up and out of children's reach.
- When giving medicines to children, use only ageappropriate medications and give dosages according to weight, if indicated on the medicine label.

### **Household Chemicals**

Most households have several different types of solid or liquid household cleaners, bleaches, pesticides (insect sprays, rat poison, etc.) and other types of cleaning products. These chemicals tend to be stored under kitchen or bathroom sinks or in laundry areas. Such storage areas present easy access to children and are potential poisoning hazards.

Household chemicals should be stored in their original containers, clearly labeled and with child-resistant closures when ever possible. Never "create" a new cleaning solution by mixing two or more products. This can produce a product that is more toxic than either of the original ones, or it may produce a product in which the toxicity is unknown and for which no easy first aid solution is available. A common and dangerous mix is ammonia and bleach, which creates a highly poisonous chlorine gas.

## Prevention Tips

- Keep household cleaners and chemicals up high, locked out of children's reach.
- Always keep substances in their original packaging, preferably with child resistant closures.
- Never mix household cleaners or chemicals. Always read product labels completely and follow instructions for use.

## Tips for acute poisonings:

- Post Poison Control Center and emergency numbers by every phone in the home.
- Have the container on hand when calling the Poison Control Center or the doctor.
- Keep an over-the-counter poison "antidote" on hand, such as activated charcoal or ipecac syrup. Never use either of these products unless recommended by a Poison Control Center or physician.
- Call 911, then the Poison Control Center, then the doctor before administering any treatment.

## **Household Plants**

Many houseplants are poisonous, and curious children may eat leaves, petals or other plant parts. Protecting children from dangerous household plants requires keeping them out of children's reach as well as close adult supervision.

## Prevention Tips

- Keep household plants out of children's reach.
- Supervise children if they are in a room with plants that cannot be moved.
- Teach children that they should not eat anything unless a parent or caregiver gives it to them.

## List of Poisonous Household Plants:

#### **Toxic House / Indoor Plants**

- ✤ Amaryllis amaryllis
- ✤ Arrowhead sagitta
- ✤ Caladium caladium
- Candelabra Cactus euphorbia
- Cyclamen cyclamen persicum
- Dumbcane dieffenbachia
- Eucalyptus eucalyptus
- Jerusalem Cherry solanum
- Lily of Peace spathiphyllum
- Pencil Cactus euphorbia
- Philodendron philodendrum
- Devil's Ivy epipremnum aureum
- Rosary Pearls senecio

#### **Toxic Outdoor Plants**

- Azalea rhododendrum
- Boxwood buxus
- ✤ Caladium caladium
- Castor Bean ricinus communis
- Chinaberry melia azedarach
- Daffodil narcissus
- English Ivy hedera
- Foxglove digitalis
- ✤ Giant Elephant Ear colocasia
- Gladiola gladiolus
- ✤ Holly ilex
- Hyacinth hyacinthus
- Hydrangea hydrangea
- ✤ Iris iris
- Jimson Weed datura inoxia
- ✤ Juniper- juniperus
- ✤ Larkspur delphinium
- ✤ Lantana lantana camara
- ✤ Ligustrum ligustrum
- Lily of the Valley convallaria majalis
- Mistletoe phoradendrum
- Monkshood aconitum
- ✤ Morning Glory ipomoea
- Nightshade/ Deadly Nightshade atropa belladonna
- Oleander nerium
- Poison Ivy rhus
- Pokeweed phytolacca americana

### Lead Poison

In addition to acute poisoning incidents, children can experience chronic poisoning. This occurs with exposure to lead and other heavy metals consumed in small amounts over long periods of time. These heavy metals accumulate in the body and can cause physical and mental illnesses and learning disabilities. Sources of these hazards include lead-based paints, ceramics, leaded water pipes and even dirt. Ingesting dust from deteriorating, flaking lead-based paint is the most common cause of lead poisoning among children.

The Centers for Disease Control and Prevention estimates that 890,000 children per year have elevated blood lead levels. Most of these children come from low-income families living in homes built before 1978, the year lead-based paint was banned. Children can be exposed to lead from lead dust, by eating paint chips, chewing on windowsills and other surfaces coated in lead-based paint, and during home renovation or repainting.

Since the mid-80s, voluntary standards prohibit using lead and other heavy metals in toys. However, older toys and homemade toys may contain lead. Some artists' paints contain lead and other heavy metals. Skin contact, inhalation and ingestion of these paints are dangerous. Federal law requires that paints have warning labels. Children's art products (crayons, etc.) should not contain hazardous levels of lead or heavy metals.

Additionally, some ceramic glazes contain lead and are therefore unsafe as food containers or servers. When acidic food comes in contact with leaded surfaces, it causes the lead to leach out into the food. Ceramic items can be tested to determine if they contain lead.

### **Prevention Tips**

• Homes built before 1978 should be checked for lead-based paint hazards. Lead paint should be covered with a sealant or removed by a professional lead abatement company.

Cleanup and dust testing should be done after lead paint is disturbed. Call 1-800-424-LEAD for more information.

- Have children tested for lead poisoning if there's a chance of exposure.
- Frequently wash children's hands and faces, toys and especially pacifiers to reduce the risk of ingesting lead-contaminated dust.
- Items bought in non-traditional toy stores may not conform to voluntary standards. Consumers should ask about the type of paint used before buying a product.
- Do not use decorative ceramics for serving or storing food and when purchasing container-type ceramics, check the item label or ask whether or not they can be used for food.
- Read the labels on all art materials and buy only those products clearly labeled to comply with the safety standard ASTM D4236.

## **Carbon Monoxide (CO)**

Besides solids and liquids, many gases, especially carbon monoxide, are a source of poison. Carbon monoxide is an odorless, colorless, tasteless by-product of burning fuel. It is emitted from fireplaces, kerosene and gas heaters, gas appliances and charcoal fires. Unvented or improper venting of gas/fuel heaters, gas dryers, wood stoves and gas/fuel furnaces is a common source of CO. The use of charcoal grills indoors produces an accumulation of harmful levels of CO. Proper ventilation prevents the build-up of harmful amounts of CO.

If CO accumulates in the home, it can cause acute or chronic poisoning which can be fatal. The signs of CO poisoning include flu-like symptoms of headaches, dizziness, and weakness, general illness symptoms of sleepiness, nausea, vomiting, confusion and disorientation. Carbon monoxide detectors alert families to the presence of the gas and are available for use in homes. When noticing symptoms of CO poisoning or CO accumulates to a dangerous level, get out of the home immediately. Once out of the home, stay out, and, call the fire department or 911 from a neighbor's home.

## **Prevention Tips**

- Have qualified persons install gas/fuel systems to ensure proper ventilation.
- Have qualified persons check or service gas/fuel systems on an annual basis.
- Never use a charcoal grill indoors.
- Never use cooking appliances as sources of heat.
- Install carbon monoxide detectors on every level of the home to monitor indoor levels of CO.
- Never leave a vehicle running inside a garage or carport.

## **III.** Poisoning Prevention

## **Child-Resistant Packaging**

Child-resistant packaging is effective at preventing poisoning among children. However, child-resistant does not mean that children cannot get into the container. In fact, test protocol for child-resistant packaging allows for 15 to 20 percent of children ages 4 years 3 months and under tested to be able to open the packaging within a given period of time. Therefore, all poisonous products should always be stored in their original containers, locked out of children's reach.

## **Cabinet and Drawer Latches**

Latches should be placed on all cabinets and drawers accessible to children containing any poisonous or dangerous products.

## **Carbon Monoxide Detectors**

CO detectors continuously monitor the air for the presence of the poisonous gas and should be installed on every level of the home. The alarm will sound when the amount of CO reaches a dangerous level. Make sure everyone in the home, especially children, can hear and recognize the sound of the alarm and knows how to respond. Leave the home immediately when the alarm sounds. Once out of the home, stay out, and, call the fire department or 911 from a neighbor's home. Check with local authorities to determine if law or ordinance requires CO alarm use. Some jurisdictions require CO detector use by law.

#### **Emergency Telephone Numbers**

Keep an updated list of emergency telephone numbers with the local Poison Control Center number posted near every phone in the home. There may be a statewide or area-wide number as well as a local number. Keep at least one telephone in a low place. This will allow children, the disabled and anyone who is injured to reach easily the phone and call for help. When there is a poisoning exposure, always call the 911 or the Poison Control Center first.

## Home Safety Checklist Highlights Poisoning

#### **Family Room**

- □ If built before 1978, the home has been tested for lead-based paint. Any lead paint has been covered with sealant or abated.
- Painted surfaces are intact and free from loose, chipping or peeling paint.
- □ There is a properly placed and maintained carbon monoxide detector.
- □ Matches and lighters are kept out of children's reach. All ashtrays are properly emptied immediately after use.
- □ Houseplants are kept out of children's reach.
- Poison Control Center and emergency numbers are posted near the telephone.

#### Kitchen

- □ Poison Control Center and emergency numbers are posted near the telephone.
- □ All household products, cleaning supplies, pet supplies, alcoholic beverages, medicines and vitamins are stored in their original containers and in latched cabinets out of children's reach.
- □ Houseplants are kept out of children's reach.

### **Bedrooms – Adult and Child**

- □ There is a properly placed and maintained carbon monoxide detector.
- Painted surfaces are intact and free from loose, chipping or peeling paint.
- □ There is a telephone, list of emergency numbers and flashlight near the bed.
- □ All prescription drugs, toiletries, coins, poisonous substances and small objects are out of children's reach.
- □ Houseplants are kept out of children's reach.

## Nursery

- □ There is a properly placed and maintained carbon monoxide detector.
- Painted surfaces are intact and free from loose, chipping or peeling paint.
- □ All baby supplies, diapers and toiletries are kept within reach yet out of children's reach.
- □ Children's faces, hands and toys are washed frequently to avoid ingestion of lead contaminated dust.

## Bathroom

- □ Young children are never left alone in the bathroom, even for a few seconds, and are closely supervised by an adult when bathing.
- □ The bathroom door is kept shut at all times and has a lock that can be opened from the outside.
- □ All medicines and vitamins are stored in their original containers, in child-resistant packaging and locked out of children's reach.
- □ First aid supplies are kept in a locked medicine cabinet.
- □ Ipecac syrup is on hand for use only on the advice of a Poison Control Center or physician.

## Basement

- □ There is a properly placed and maintained carbon monoxide detector.
- Painted surfaces are intact and free from loose, chipping or peeling paint.

- □ Latches are installed on doors to the furnace room, laundry room and other rooms where dangerous equipment or supplies are kept.
- □ Containers of flammable liquids such as paint and cleaning solvents are stored tightly capped in their original containers, locked out of children's reach and away from ignition sources, such as furnaces and water heaters.

### Garage

- □ All poisonous and flammable products are stored in their original containers, away from heat sources and out of children's reach.
- Painted surfaces are intact and free from loose, chipping or peeling paint.

# Section 7 Airway Obstruction Injury

## I. Airway Obstruction Injury

These injuries occur when children are unable to breathe normally because their internal airways are blocked by food or objects (choking); materials block or cover their external airways (suffocation); or items become wrapped around their necks and interfere with breathing (strangulation).

Children, especially those under age 3, are particularly vulnerable to airway obstruction death and injury due to the small size of their upper airways, their relative inexperience with chewing, and their natural tendency to put objects in their mouths. Additionally, among infants, the inability to lift their heads or extricate themselves from tight places puts them at greater risk.

## II. Airway Obstruction Hazards in the Home

## Choking

Choking is an obstruction of any part of the airway, which includes the pharynx (back of the mouth/throat), larynx (opening to the trachea), or trachea (large air passageway to the lungs). Food or non-food items that lodge in these areas can block the flow of air to the lungs. Some foods, such as peanuts, and non-food items are small enough to make it past these airway areas to lodge in a part of the lung. Items that pass to the lungs are still considered a hazard, but do not always present immediate breathing difficulties or respiratory distress symptoms. These symptoms can occur later.

The normal functions and activities of children place them at greater risk for choking situations:

- Children have a natural tendency to place things in their mouths.
- Children have smaller and fewer teeth than adults.
- Children have smaller upper airways (areas of the mouth and back of the throat and the beginning of the tracheaair pipe and the esophagus-food pipe.)
- Infants and young children are inexperienced in distinguishing food from non-food items.
- Children are inexperienced in chewing and eating different types of food and in coordinating swallowing efforts with chewing.
- Children's molars have not yet developed and without them, they cannot properly chew foods.
- Children have a tendency to stuff their mouths or swallow things whole.
- Children will often try to talk and eat at the same time. Talking while eating increases the chances that food will enter the trachea instead of the esophagus or "go down the wrong tube." The trachea is directly in front of the esophagus, and swallowing causes a little flap of tissue (the epiglottis) at the base of the tongue to cover the trachea, so that food goes into the esophagus. Laughing or talking keeps the airway open; if there is food in the mouth at that time, it could be aspirated or sucked into the airway.

## **Choking Hazards**

## Food

Food is the most common cause of choking among children under age 5. Problem foods for children under age 5 include round hard foods, odd-shaped foods and hard to chew or swallow foods. Slippery or rounded foods, such as grapes or hot dogs, are particularly hard for children to handle and can cause them to choke. Other equally hazardous foods include hard candy, popcorn, nuts and peanut butter.

## **Prevention** Tips

• Do not give children under age 5 any round, hard foods like grapes, popcorn, raw carrots, hard candies, nuts and raisins.

- Cut round food, such as hot dogs, into small non-round pieces. Peel and cut into small non-rounded shapes such slippery fruit as grapes and tomatoes.
- Teach children to eat with their mouths closed and while seated. This practice will help prevent children from trying to talk and eat at the same time.

## Toys

Small toys, small parts in toys, small balls, marbles and balloons are common causes of childhood choking. Children under age 3 are at the greatest risk for choking on small parts in toys; children under age 5 are at the greatest risk for choking on small balls and marbles; children under age 8 are at the greatest risk of choking on balloons. By law, any toy for a child under age 3 cannot include a small part, which is defined as a part which fits completely within the small parts tester. The Child Safety Protection Act requires choking hazard-warning labels on packaging for small balls, balloons, marbles, toys, and games with small parts that are not intended for younger children.

## **Prevention Tips**

- Learn how to use a small parts tester or "choke tube."
- Read toy labels and warnings that recommend ageappropriate toys based on safety and explicitly warn about choking hazards.
- Read balloon package warnings, which explicitly warn about the hazards to children under age 8 who may blow up balloons or mouth broken balloons.
- Use Mylar balloons in place of latex balloons around children.
- Keep younger children's toys separate from older children's toys.
- Examine toys periodically for damage and broken parts.

## **Small Household Objects**

Household items like buttons, nails, tacks, pins, pen caps and other small objects can also cause choking. These items must be removed from children's environments and young children must be supervised constantly.

## **Prevention Tips**

- Learn how to use a small parts tester or "choke tube."
- Keep small objects such as safety pins, coins, buttons and tacks out of children's reach.

## Suffocation and Entrapment

Suffocation is the partial or full covering of the nose and/or mouth that results in insufficient air access. It includes face down suffocation in pillows or other soft materials and face-up and to-the-side suffocation caused by direct coverings of nearby materials.

Infants less than one year of age are at greatest risk for suffocation because their lack of strength and limited motor and cognitive skills make it almost impossible for them to escape a hazardous situation. Infants cannot push away items that fall across or cover their noses and mouths and if they roll between the bed and wall, they cannot lift themselves back up onto the surface of the bed. Infants may also roll off beds into nearby wastebaskets, boxes, crates, etc. or onto nearby plastic bags, and suffocate.

Entrapment occurs when children are trapped inside a nonpermeable (airtight) enclosure, such as a refrigerator, in which case the child eventually uses up all the oxygen and has none left to breathe. Entrapment also occurs when children become wedged between two objects, for example the bed and the wall, in which case there can be a combination of pressure on the chest or neck, as well as a reduction of air available to breathe. In general, older, more mobile children are at risk of entrapment in enclosures; infants and younger children are at risk of becoming wedged between two objects.

## Suffocation and Entrapment Hazards

## **Sleeping Position**

Only recently has the recommendation been widely publicized to put babies to sleep on their backs. Previous generations put babies to sleep on their stomachs. When sleeping on their stomachs, infants are at greater risk of SIDS and suffocation.

Babies can suffocate by having their faces pressed down into soft surfaces such as soft mattresses and bedding. They are also at risk of suffocation when nearby soft items like bedding, quilts, blankets, and pillows create pockets that trap air. When air is trapped in a pocket, babies breathe the same air they exhale. The air eventually consists of more carbon dioxide than oxygen, and the babies suffocate.

Infants under 6 months old are at the greatest risk for suffocation because they have limited motor skills and are unable to lift their heads or roll over away from hazards.

### **Prevention Tips**

- Put babies to sleep on their backs, on firm mattresses, and without soft bedding nearby. Do not place babies on waterbeds, sheepskins, fleece comforters, fluffy quilts or any other soft surfaces. Remove all stuffed animals and pillows from cribs.
- Clothe babies in sleepers for warmth, rather than using blankets.
- Discard pellet-filled, body-conforming infant cushions. Infant cushions were banned in the early 1990's because of their association with suffocation.
- Do not leave infants sleeping in their carriers. Sometimes babies fall asleep in their carriers and parents do not want to disturb them. In itself, that is not a problem; but, if the carrier is placed on a bed or a soft surface, the carrier could overturn. Babies can be trapped underneath, pressing their faces against the soft surface, resulting in suffocation.
- Carriers should be placed on the floor when they are not being used to carry infants.
- The safest place for babies to sleep is on a firm crib mattress, in a crib that complies with national safety

standards – look for a JPMA certification label. Parents should never share a bed with infants.

## Cribs

Older or used cribs may pose many hazards. Widely spaced or missing slats allow infants' legs and lower torsos to pass through, but not their heads (given that the size of their heads is larger than their bodies). Cribs with failed hardware, poorly fitting mattresses and cutouts in the end panels also pose entrapment hazards. Failed hardware can create spaces where there previously were none, for example, between a side and end panel. Failed hardware can also cause mattress supports to sag, creating a space between the support and crib frame. Mattresses that do not fit snugly and leave more than one inch on any side are hazardous. Infants can become entrapped in these spaces and suffocate.

## Prevention Tips

- Cribs must carry a JPMA certification label.
- Check slats to make sure they are securely attached, none are missing and they are no more than 2 3/8 inches apart.
- Make sure the crib is sturdy and free of loose hardware, cracks or broken slats, cut out designs and sharp points or edges.
- Make sure the crib mattress is firm and fits snugly (no more than two fingers' width of space.)
- Do not use old hand-me-down cribs; be especially careful if buying cribs at yard sales and second hand stores. Make sure the crib meets all the criteria of the federal safety regulations.
- If the crib has been used by a previous child, check all the hardware and supports for integrity. When replacing a mattress, get the same size that is recommended by the manufacturer and make sure it fits snugly without any gaps.

## Cradles

Cradles and bassinets are often used for babies. If they collapse or come to rest at a slanted position, babies may roll to

one end. Babies who come to rest in a facedown or on-theirside position can suffocate.

## **Prevention Tips**

- Make sure cradles are stable and will rest in a level position.
- Make sure that bassinet legs are fully locked.
- Do not push bassinets over uneven surfaces, such as thresholds, which may cause the legs to collapse.

## Beds

Sometimes parents place babies in an adult bed for a nap or for the night. Placing babies to sleep in adult beds puts them at risk of suffocation or strangulation. A bed placed again a wall creates a space in which the baby can become entrapped. In addition, the space between the mattress and the bed headboard or footboard can be an entrapment hazard.

Adults should not sleep with babies or put babies down to sleep in adult beds. However, some families choose to share beds with their babies. This practice poses two potential problems: parents can roll over onto babies and babies can suffocate on pillows and bedding. This suffocation pattern is more typical among infants age 3 months or younger, and can occur in beds, on couches or chairs. Stages of deep sleep or use of drugs and alcohol are potential contributing factors in which adults unintentionally suffocate infants who are sleeping with them.

## Prevention Tips

- Adults should not sleep with infants.
- If parents choose to share their beds with infants, they must take special precautions, including removing all soft bedding and avoiding the use of alcohol and drugs.

## **Bunk Beds**

Older children sleeping in the upper bunk of bunk beds can become entrapped when their bodies, but not their heads, pass between guardrails or between the guardrail and the mattress. Additionally, children playing under beds or bunk beds can dislodge mattresses from the frames and cause the mattresses to fall down on them, resulting in compression injuries and death.

## **Prevention Tips**

- Check that there is no space greater than 3½ inches between any parts of the frame and mattress of a bed or bunk bed.
- Never allow children under age 6 on the top bunk.
- Check the integrity of the hardware and frame on all beds and bunk beds.
- Do not let children play on, jump on or play under beds.

## Playpens

Mesh sided playpens can create an entrapment hazard when a side is left down and the mesh forms a loose pocket. Babies can roll into the pocket and suffocate. Warning labels on these products instruct the user to keep the sides up and locked. Newer models are made so that even if a side is left down, no loose pocket is formed.

## **Prevention Tips**

- Check mesh playpens to ensure they have warning labels.
- Check to make sure the playpen has not been recalled.
- Replace older playpens with a newer model.

## **Strollers and Carriages**

Strollers or carriages with adjustable leg rests can be hazardous. If leg rests are down and strollers have large leg openings, babies can slide feet first out of strollers, with their heads trapped in leg openings. Raising leg rests to the horizontal position if babies fall asleep in strollers or carriages eliminates this danger.

Infants "slump" because they do not have much muscle strength or control. They can slide down into the "V" in carriers, strollers and other products that use V-shaped safety straps and asphyxiate because their "slumped" position does not allow air to enter their airway.

## Prevention Tips

• Adjust safety straps correctly and securely.

• Keep constant watch over infants whenever they are in carriers and strollers.

### **High Chairs**

Children may try to get out of high chairs by sliding under high chair trays. They can become trapped between trays and chairs or get entangled in safety straps.

## **Prevention Tips**

- Never leave a child alone in a high chair.
- Adjust and lock the tray close to the child.
- Always use safety straps with a crotch strap.

## Furniture

Recliner chairs with moveable foot rests in the open or reclined position provide an inviting hiding space for small children who may become entrapped when the footrest suddenly closes on them. Children can unzip closures and climb into soft, stuffed chairs where they can inhale stuffing materials in the enclosed space. The closeness of the space, the lack of fresh air, and the hazard of breathing fumes or stuffing materials can cause suffocation.

## **Prevention Tips**

- Do not allow children to play on recliner chairs.
- Examine chairs for zippers and hiding places that attract small children and ensure that the filled area is not accessible or large enough for children to climb into.

## Large Appliances

Large appliances (refrigerators, dryers, etc.) and other unvented, closed spaces are inviting hiding places that can pose suffocation hazards to children who climb inside.

## Prevention Tips

- When discarding old appliances, remove the doors.
- Instruct children that they must not play in or around and appliances.
- Install safety latches on all large appliances in use.

### **Toy Chests**

Toy chests with lids that do not have safety hinges can close suddenly on top of children who are reaching in or who have climbed inside. Younger children may not able to free themselves if caught on the lid or trapped inside by a closed lid.

## **Prevention Tips**

- Use toy chests without lids or remove lids.
- Use toy chests with lids equipped with safety hinges that prevent lids from dropping to the fully closed position.

## Plastic

Plastic, such as plastic bags and dry cleaning bags, can be deadly near children. Many plastic bags carry an infantsuffocation warning. Plastic bags can cover a young child's nose and mouth, preventing breathing. Older children can put plastic bags over their heads and suffocate quickly. Plastic bags filled with clothes or plastic bags used as wastebasket liners are also hazardous when placed near infants. Infants may roll off beds or other sleeping surfaces and land face down on the plastic clothes bag or in the plastic-lined container and be unable to breathe.

## Prevention Tips

- Keep plastic bags away from infants and children.
- Keep plastic bags away from sleeping areas.

## Strangulation

Strangulation occurs when children's airways are blocked externally and they are unable to breathe. External airway blockage occurs from noose-type loops such as cords on window blinds or drawstrings on clothing. Strangulation also results when something tightens against or becomes entangled around children's necks, for example, the string from a pull toy or tie from a crib bumper. Older infants, usually 10 months and up, toddlers, and children up to about age 8 are at risk for strangulation. Children are unable to free themselves from strangulation situations without help.

### **Strangulation Hazards**

### **Strings and Cords**

Any strings or ties worn around the neck, including necklaces, create strangulation hazards because they can get caught on furniture posts and other household protrusions. Especially when children climb, they are likely to catch the items around their necks on protrusions, such as door and drawer knobs and handles, bedposts, backs of chairs, and play equipment.

Some parents tie cords on pacifiers to keep from losing them or having them fall to the ground. Federal regulations prohibit selling any pacifiers on cords and the labeling on pacifier packages provides warnings against tying cords to them.

Another common strangulation hazard is drawstrings on children's clothing. A current voluntary standard prohibits the use of drawstrings at the neckline or hood of children's outerwear from sizes 2T to 12.

### **Prevention Tips**

- Do not put necklaces on infants or toddlers.
- Do not tie pacifiers on cords. Instead use pacifier leashes (short tethers that attach to clothing), which are sold specifically for pacifiers.
- Do not put clothing with ties at the neck (hooded sweatshirts, bibs, nightwear, hats, etc.) on children.
- Never allow children to play on playgrounds wearing necklaces, purses, ropes or clothing with drawstrings.

### Window Blind Cords

Window blind cords, can be within easy reach of children. Children under age 3 are at the greatest risk for entanglement and strangulation in blind cords.

### **Prevention Tips**

• Position cribs, beds, playpens and all furniture away from windows.
• Cut cords on all blinds that form loops so that there are two short hanging pieces and attach break-away tassels. Or, secure blind cord ends with wind-up devices or cleats.

#### **Crib Gyms and Toys**

It is tempting to suspend toys or decorative items in cribs using ribbons, strings or other cords. Never hang anything on or above cribs with string or ribbon longer than 7 inches. Children can get entangled or hung in dangling strings and loops. Infants older than 5 months are at the greatest risk of injury because they are just beginning to gain mobility, yet they do not have good muscle control. Crib gyms must carry a warning label about this hazard.

#### **Prevention Tip**

• When infants are able to pull up to hands and knees, or when they reach 5 months of age, remove all hanging items from cribs.

#### **Crib Corner Posts**

Tall, decorative, crib corner posts (also called finials) provide a catch-point and strangulation hazard among older infants and toddlers. When children stand in or climb out of cribs, they can catch their clothing on finials, which can hang the child. Newer cribs (manufactured since 1990) are not allowed to have such corner post extensions. In addition, infants can get their heads and necks entrapped in decorative cutouts that are put in the head and footboards of cribs.

#### **Prevention Tip**

• Remove any corner posts that extend more than 1/16 inch above the upper edge of a crib side or crib head/foot board.

### **III.** Airway Obstruction Injury Prevention

#### Window Blind Cord Wind-ups/Cleats

Blind cord wind-ups and cleats prevent children from accessing and strangling on blind cords. Cut cords on all blinds that form loops so that there are two separate hanging pieces. Secure blind cord ends with wind-up devices or cleats.

#### **Appliance Latches**

Appliance latches or straps prevent children from opening and gaining access to large appliances, including refrigerators, freezers, washing machines and dryers.

#### **Small Parts Testers**

A certified small parts tester ("choke tube") determine if a small object or small toy or toy part presents a choking hazard. If an object completely fits in the small parts tester, it is considered a choking hazard to young children.

#### **CPR and First Aid**

Adults and caregivers should be trained in emergency response, CPR and first aid, including the Heimlich maneuver. Enroll adults, caregivers and children over age 13, in infant and child CPR classes.

## Home Safety Checklist Highlights Airway Obstruction Injury

#### **Family Room**

- □ All window blind and drapery cords are tied up, wind up devices or cleats are used or the ends are cut and retrofitted with safety tassels.
- □ Small parts and sharp objects such as safety pins, paper clips, coins, scissors and needles are kept out of children's reach, preferably in latched drawers and cupboards.

#### Kitchen

- □ All window blind and drapery cords are tied up, wind up devices or cleats are used or the ends are cut and retrofitted with safety tassels.
- □ The highchair or hook-on chair is sturdy and has a seat belt with a crotch strap.
- □ Round, hard foods like grapes, popcorn, raw carrots, hard candies, nuts and raisins are kept away from young children.
- □ Small objects such as safety pins, coins, buttons and tacks are kept out of children's reach.

#### Hallways/Stairs

□ Slats on balconies and stairways are no more than 3<sup>1</sup>/<sub>2</sub> inches apart.

#### **Bedrooms – Adult and Child**

- □ All window blind and drapery cords are tied up, wind up devices or cleats are used or ends are cut and retrofitted with safety tassels.
- □ Children never sleep with adults in beds.
- □ Bunk beds meet safety standards, are securely constructed and are not used by children under age 6.

#### Nursery

- □ The crib meets JPMA safety standards and is properly constructed and maintained.
- □ All pillows, quilts, plastic materials, toys and stuffed animals have been removed from the crib.
- □ All bumper pads, hanging mobiles and decorations have been removed from the crib when the infant is able to pull up to hands and knees.
- □ The sides of mesh playpens and portable cribs are always kept up in the locked position.
- □ Infants are placed on their backs to sleep.
- □ All furniture, especially the crib, playpen, changing table and chairs, is placed away from an outside wall, windows and draperies, heating sources, electrical cords and curtain cords.
- □ All window blind and drapery cords are tied up, wind up devices or cleats are used or the ends are cut and retrofitted with safety tassels.
- □ Any strings on infant products, including pacifiers and rattles, have been removed.
- □ The floor is kept uncluttered by toys and other objects, especially small objects such as coins and safety pins.
- □ Children play with age-appropriate and well-maintained toys.
- □ Toy chests have removable lids or spring-loaded supports.
- □ There is a certified small parts tester and it is always used to determine if a small toy or toy part presents a choking hazard.

#### Bathroom

□ All medicines and vitamins are stored in their original containers, in child-resistant packaging and locked out of children's reach.

## Section 8 Cutting/Piercing and Other Wounds

## I. Cutting/Piercing, Other Wounds

Cuts and bruises are common childhood injuries. Children are at risk for injuries because they actively move, run, jump, trip and bump into things. Further, children are at risk for injury from adult products because they do not recognize the injury potential and because they are constantly exploring and imitating adult behavior.

### II. Wounds Hazards in the Home

#### **Sharp Objects and Corners**

Knives, razors, scissors, graters and other cutting utensils commonly found in homes are hazardous for children. Children can grab these items not recognizing the injury potential. Additionally, moving parts or blades in appliances, such as in food processors and meat grinders, can cause amputation injuries when children reach in while the blades are still turning. They may be attracted to the food, want to help or are imitating an adult whom they have seen putting food into the processor.

Corners of coffee tables, especially those made of glass and with sharp edges, other pieces of furniture and structural features are common injury points that can cause laceration injuries and bruises when children trip or fall into them.

#### **Prevention Tips**

- Keep knives, razors, scissors, graters and other cutting utensils locked out of children's reach.
- Do not use sharp products when near children.
- Do not allow young children to use appliances with accessible moving blades or parts.
- Use child-resistant interlocks that come with power tools.

- Unplug appliances and tools when not in use and store them locked out of children's reach.
- Attach corner or cushion guards to furniture corners, fireplace hearths and other sharp structural features in the home.

#### **Items with Folding Mechanisms**

Folding items, for example card tables and beach chairs, especially those that have a scissor-action folding mechanism, can crush or amputate children's fingers. Weight-bearing items, for example chairs and strollers, pose the greatest risk for injury. If children's hands are in or near the area where the item folds and it is not fully locked, it will collapse from the children's weight, trapping their fingers. The additional force of children's body weight will add to the compression injury.

#### **Prevention Tips**

- Securely lock into place any folding items used for children, such as folding tables, chairs, and strollers to prevent crushing and amputation injuries.
- Make sure children keep their hands and fingers away from any folding mechanisms.

#### **Furniture Tipovers**

Some tables and storage compartments in the home are unstable by design (e.g., pedestal tables), by installation (e.g., unsecured bookcases), or by use (e.g., bureaus with top drawers filled with heavier items than bottom drawers). When children pull on or try to climb on these items, they can tip over and fall, trapping the children underneath. Also, anything stored on top of these items (e.g., fish tanks, TVs) can fall off onto children. Serious compression, blunt trauma and internal injuries can occur when children explore, climb on and play around heavy furniture and storage units.

#### **Prevention Tips**

- Secure bookcases, shelving and heavy furniture to walls.
- Use appropriate broad-based carts for TVs, microwaves and other appliances.

- When storing items, put heavier things on bottom shelves or in bottom drawers rather than the top ones.
- Avoid using pedestal tables in homes with young children.

#### **Garage Doors**

Children may play a "race" game with a closing garage door, trying to get through it before it closes, and become trapped under the door.

#### **Prevention Tips**

- Ensure that garage door openers have an automatic reverse feature.
- Instruct children that they must not play with garage doors or door openers; that garage doors are not toys.

#### Firearms

Exposure to guns and access to a loaded firearm increases the risk of unintentional firearm-related death and injury to children. Unrealistic perceptions of children's capabilities and behavioral tendencies with regard to guns are common, including misunderstanding a child's ability to gain access to and fire a gun; distinguish between real and toy guns; make good judgments about handling a gun and consistently follow rules about gun safety.

Most childhood unintentional shooting deaths involve guns that have been kept loaded and accessible to children and occur when children play with loaded guns. Children can find guns hidden or placed in bed stands, closets and other storage areas. They are familiar with guns because they see them on TV and may have played with toy guns. Children do not understand the concepts or consequences of being shot or of shooting another person, whether intentionally or unintentionally.

#### **Prevention Tips**

• All families, regardless of gun ownership, should understand the risks associated with child access to guns and be advised of firearm safety measures.

- Emphasize to children the dangers of guns and the fact that they are not toys.
- Gun owners should always store firearms unloaded and locked up, with ammunition locked in a separate location, out of reach of children.
- Gun owners should use gun locks, lock boxes and/or gun safes.
- Keep gun storage keys and combinations hidden in a separate location.
- All parents should teach children never to touch a gun and to tell an adult if they find a gun or see another child with a gun.

### **II. Other Wounds Prevention**

#### **Cabinet and Drawer Latches**

Latches should be placed on all cabinets and drawers accessible to children containing any dangerous products, such as knives, scissors and sharp tools and utensils.

#### Secure, Stable Furniture

Heavy furniture, including bookcases and filing cabinets, can tip over and crush children. Furniture straps stabilize and secure furniture to walls to prevent furniture from tipping over and children from pulling furniture down on them.

#### Safe Storage

Important steps in preventing unintentional firearm injury is safe storage of all firearms in the home and reducing the availability and accessibility of guns to children. Guns should be stored unloaded and locked up, with ammunition locked in a separate location, out of children's reach. Gun locks are one method for preventing child access to guns. When correctly installed and secured on firearms, gun locks block the firing mechanism and prevent firearms from being discharged.

## Home Safety Checklist Highlights Cutting/Piercing and Other Wounds

#### **Family Room**

- □ Filing cabinets, bookcases and other tall or heavy furniture are stable or secured to walls.
- □ Small parts and sharp objects such as safety pins, paper clips, coins, scissors and needles are kept out of children's reach, preferably in latched drawers and cupboards.

#### Kitchen

□ Knives and other sharp utensils are stored in drawers or cabinets secured with safety latches.

#### **Bedrooms – Adult and Child**

□ All firearms are stored unloaded and locked up, with ammunition locked in a separate location, out of children's reach.

#### Bathroom

- □ The bathroom door is kept shut at all times and has a lock that can be opened from the outside.
- □ Sharp objects, such as razors and scissors, are stored locked out of children's reach and properly disposed of.

#### Garage

- □ All tools and dangerous objects are kept locked out of children's reach.
- ❑ An automatic garage door opener with an approved fail-safe mechanism to prevent the door from closing on children has been installed.

## Section 9 Community-Based Programs: Home Visits

## I. Home Visitation

Home visitation is an effective method for reaching parents and caregivers in the home with life-saving messages and delivering safety devices to families in need. Home visits can improve the health and safety outcomes of children.

Visiting a family in their home enables safety educators to advise families on hazards specific to that particular household and provides a means for direct distribution and installation of safety devices. Home visiting also allows for an accurate determination of the current home hazards through direct observation or measurement.

Home visitors often incorporate additional community resources into their educational programs to give residents support to continue healthy and safe behaviors after the visiting program has ended. See Appendix B: Resources for additional information.

## II. Before a Home Visit

#### **Finding Families**

Identifying families with young children that will be interested in having a Home Safety Check is different in each community. Following are suggestions for finding interested, appropriate families:

- Ask the local public health or social service agency to help. They will often know the families who are most in need.
- Try to get the names of public/private agency representatives likely to help you and contact them directly.

- Anticipate confidentiality issues. Agencies will probably be hesitant to give personal information about families directly to those who do not work for them.
- Ask the agency to contact the families directly or have agency employees on your check team that would be able to assist with family identification and contact.
- Ask management at the local HUD housing development if they can identify families. They may want to keep a sign-up list with dates and times of your availability.
- Present the program at a local community or church meeting or event. If possible, have people sign up at that time.
- Piggyback a presentation into an already existing meeting (such as a Head Start meeting) where the target population is known to attend. It can be difficult to get people to come to a special meeting just about your program. If you have a special meeting, offer an incentive for people to come, such as food.
- If there is a child care center in an apartment complex, ask the director to help identify families.
- Ask the maternity unit or maternity clinic of the local hospital to help. Hospitals are often asked to identify infants and children at risk.
- There may be other resources, both public and private, that work with the target population, such as WIC (Women, Infants & Children, a nutrition program). Find out what other resources exist and contact them.
- Set up a display table or exhibit at a local event or business.

#### Arranging a Home Visit

It is important to plan ahead for home visits. Often, lowincome families do not have telephones and contacting them may be difficult. Attempt to get as much contact information as possible during the first interaction with the family. The following information will help to arrange a successful visit:

• Contact the family to introduce yourself and explain the project (this may need to be done by letter if the family does not have a phone.)

- Be very clear who you are, who you represent and your objective for doing a Home Safety Check. Refer to yourself as a "Home Safety Checker." Avoid use of the term "inspector" or "inspection," which can denote a regulatory role. Stress that this visit is educational in nature.
- Keep messages simple. Use short sentences and avoid large or technical words.
- Set a date with the family to conduct the Home Safety Check. As a matter of courtesy, always make an appointment for the visit and avoid drop-in or unscheduled visits.
- Tell the family that it will take approximately two hours to complete the visit, depending on issues such as size of the home, language barriers, etc. Visits should not go beyond two hours unless absolutely necessary.
- Let the family know who will be conducting the check (three checkers should be at each visit) and that they should ask for identification when letting checkers into their home.
- Give the family your telephone phone number and program information in case they have questions or must cancel the appointment. If they cancel, thank them for being considerate and immediately reschedule the home visit.
- Call the family the day before the visit or before you leave your home/office to confirm the appointment. If the family does not have a telephone, make sure you have a neighbor's or relative's telephone number who would give them a message if necessary.
- If an appointment is broken, slip a message under the door (not on the door) and suggest a time when they can reach you to reschedule.
- If English is the family's second language, communicate in their native language whenever possible. Use their language in telephone calls, letters, educational materials as well as during the home visit. Ideally, have interpreters available if no member of the Home Safety Check Team speaks the family's native language.
- Plan for extra time if a language barrier exists.

- Limit your visits to two a day. You will be fresher and less likely to confuse visits.
- Schedule adequate travel time between visits and allow for extra time in case the first visit lasts longer than expected.

### III. During a Home Visit

#### **Conducting a Home Visit**

The following information will help you manage the visit and achieve the best outcome:

- In most situations, three people will conduct the home visit. One person should be responsible for talking with the resident and completing the Home Safety Checklist. The other two should install devices and assist with the identifying hazards in the home.
- Find out if the housing development manager or maintenance engineer can accompany you on the visit.
- Introduce yourself and establish your professional identity with the resident.
- Be respectful and polite. You are a guest in their home.
- Allow time in the beginning of the visit for social interaction and to establish rapport.
- Sit down and review the objective of the visit with the resident. Explain what you will be doing and how long you will stay. Complete the waiver at this time. Ask the resident if they have any safety concerns about their home.
- Ask permission to use the phone or to enter another part of the residence. Ask to visit each room (i.e., "Could you show us your bathroom at this time?")
- Accompanied by the resident, proceed with the Home Safety Checklist.
- Install devices when necessary and with permission of the resident. Explain the purpose of and how to use each device.
- At the end of the visit, summarize your findings and what you did.

- Provide the resident with appropriate materials, brochures and referrals.
- Explain that you will be returning in three months to do a follow-up check and the procedure for arranging that visit.
- Leave your phone number and encourage the resident to contact you with any questions, information or stories of injuries prevented.
- Thank them for allowing you into their home.

#### **Presenting Yourself**

When conducting a home visit, remember to do the following:

- Dress professionally for a home visit, but do not "over dress." Business causal is the best style to follow.
- Use praise and encouragement. It is just as important to focus on the things the family is doing right as well as pointing out the problem areas.
- Be a good listener. Pay attention and think about what the resident is telling you.
- Avoid jargon and technical language. Give messages that are clear, simple and easily understood. Ask the resident to repeat it back to you in his or her own words.
- Avoid being judgmental of the family's lifestyle.
- Be sensitive to cultural and religious customs.
- Be aware of nonverbal behavior, yours and the resident's.
- Remember to smile. Smiling conveys acceptance and friendliness.
- Discuss difficult cases or situations with your supervisor or designated person.

#### **Socioeconomic Factors and Culture**

Socioeconomic factors and culture contribute significantly to understanding perceptions of health and safety among groups at risk. When a family's first objective is to put food on the table or a roof over their heads, health and safety issues may not be a priority.

Sensitivity to cultural differences will greatly enhance your effectiveness with Home Safety Checks. Become familiar with variations among cultural groups in each community and research each contact family's culture prior to any visits.

Cultural issues, as well as language, can pose communication challenges to the Checker. If there is a language barrier, try to use a trained interpreter. An untrained interpreter may inadvertently distort communications through inaccurate interpretation.

The following suggestions offer some guidelines when assisting families:

- If an unsafe situation exists, the Checker must point it out and offer solutions to correct the situation. If the reason is based in culture, the Checker must be respectful and offer further explanation. For example, a Checker may find a rosary placed in a crib because the family believes it will protect the child. The Checker will need to tactfully explain that the rosary could present a strangulation hazard and offer alternatives for the rosary's storage.
- The Checker must be realistic in the solutions that are offered for change. Often, families will need extra help to incorporate any changes, especially if they are in crisis.
- Be aware that verbal and nonverbal patterns of communication vary across cultures. If the Checker does not understand the resident's cultural communication rules, the success of the home visit and safety check may be jeopardized.
- In general, moderate eye contact works the best. Staring is intimidating and a lack of eye contact can show disinterest.
- If a young child wants to sit in your lap, ask the adult for permission.

People take pride in their furnishings even if they may present a hazard. Replacing furniture might be an unrealistic option for low-income families. If you identify a broken spring in a chair, for example, offer alternative solutions to replacement such as use of a pillow. Explain the hazard and options to fix it, but don't get into an argument about furnishings.

## IV. Safety During a Home Visit

Personal safety is important to consider and plan for when visiting a home. An important rule is to trust your instincts. Do not enter a home or neighborhood if you suspect an unsafe situation exists. The following steps offer suggestions to minimize the personal safety hazards that you may encounter:

- If possible, confirm your appointment with the family the morning of your scheduled visit.
- Ask the family to watch for you.
- Ask for specific directions. Consult a map before leaving your home/office.
- Leave the visit itinerary with your place of employment or a friend. Call into the office at scheduled times.
- Arrange visits early in the day to avoid loiterers and unsafe neighborhoods after dark.
- Always travel with another member of your team.
- Carry a minimal amount of cash, but have change for a pay phone.
- Carry a cell phone, if possible.
- Don't carry a purse or wallet. Lock your purse or wallet in the trunk of the car before leaving for the visit or secure your valuables at your office. Never leave valuables in sight in the car.
- Wear shoes that allow you to run or kick off easily.
- Wear clothes that allow you to move quickly.
- Avoid wearing expensive jewelry or any accessory that could put you at risk for robbery.
- Carry a noise-making device such as a whistle.

#### **Car Safety**

- Keep the car in good repair. Have a resource for help if the car breaks down.
- Drive with your car doors locked and windows up.
- Always lock your car. Be sure the tank is full of gas.
- Always carry your keys in your hand when going to and from your car. Keep your car keys separate from your house key.
- Choose a parking space that is in the open, near a light source, and offers the safest walking route to the home.
- Park on the street rather than in a driveway to avoid being blocked.
- Park in the direction you want to go when leaving the visit.
- Make sure no visible items are inside your car.
- Do not open the trunk before going into the home to avoid tempting onlookers by its contents.
- Know where the apartment manager's office is located, especially if you must park a long distance from an apartment you are visiting.
- Try not to carry many packages or items at once, as doing so makes you an easy target for snatch-and-run robbery.
- If someone approaches your car, honk your horn repeatedly. It can help scare someone off and let others know that you need help.
- When approaching your car to leave, look under and around it. Before getting in your car look in the back seat. Get into your car quickly and lock the doors.

#### Know the Neighborhood

- Look for places to go in case of an emergency such as a police station, fire station, library or gas station.
- Be aware of the environment around you. Look for fences, bushes or similar places that can hide attackers.
- Observe activity near the location of your home visit. Avoid approaching groups of people who may be loitering, drinking, fighting, etc.
- Be alert for signs such as No Trespassing, Beware of Dog, etc., which may indicate the resident's attitude toward strangers.
- Be alert for animals that may pose a threat to your safety. Ask the owner to hold or remove the animal during the visit.

#### **Approaching the Residence**

- Walk purposely and look confident. Assertive body language can help prevent an attack.
- As you walk, observe those around you. Notice if there are strangers sitting in parked cars or standing in your pathway. If so, choose an alternative route and avoid them.
- If you see someone tampering with your vehicle, do not try to stop them. Call the police as quickly as you can from a safe distance.
- Stay away from isolated or poorly lit areas. Keep to the middle of the sidewalk to avoid bars, alleys and loiterers.
- If a car approaches you while you are walking and you are harassed by the occupants, go in the opposite direction.
- If you feel you are being followed, walk or run to a lighted store or to where crowds of people can offer help if needed.
- If a group is blocking the doorway to the dwelling, look for another entrance. If there isn't another one and the group seems hostile, walk away and reschedule the visit.
- If you are verbally confronted, maintain a professional manner. Do not answer verbal challenges.
- Use caution when using stairways. Notice if people or objects are on the stairs or landings. When walking in dimly

lit hallways or stairwells, walk quickly and be especially alert.

- Be careful when using an elevator. If possible, use an empty elevator. If there is something suspicious about a person waiting to get on the elevator with you, step aside and wait. Once on the elevator, stand next to the door and by the control panel. If you have a problem, push all the buttons to give yourself a greater chance to escape. If a suspicious person gets on, get off as soon as possible.
- Request that the person meet you in the lobby or at the front door whenever possible.
- Pause at the door before knocking and listen. If you hear quarreling, sounds of fighting, or some other disturbance, leave immediately.
- Knock at the door, identify yourself, and use the person's name you are visiting.
- Stand at the side of the door until there is a response.
- Do not enter a home unless there is an adult present. If a child answers the door, tell the child to get their parent or caregiver. If no adult is home, leave the premises. Notify child welfare if necessary.

#### Personal Safety in the Home

- Use social etiquette. Remember you are a guest in the family's home.
- State your name clearly, the name of the agency you represent, and why you are there. Give your business card and be prepared to show official identification.
- When offered a seat, sit close to the door with your back to a solid wall, if possible.
- Do not go into a dark room, basement or attic first. Have the resident go first and turn on the light. Follow the resident into the room. Never lead, even if you have been to the home before.
- If weapons are visible in the home, evaluate the situation's potential for danger. Leaving the home may be your best option.

- If an animal is in the home, ask the owner to restrain or remove it.
- If you feel unsafe, leave the home. Be alert to signs of violence or sexual advances. Be aware of other people in the residence and traffic in an out of the home that may pose danger to you.

## Section 10 Home Safety Checklist

### I. The Home Safety Checklist

The Home Safety Checklist is designed to help you identify and correct hazards in the home. It is to be completed **with** the parent or caregiver while conducting a visual walk-through of the home.

The cover page of the Checklist gathers resident contact information. A waiver of liability is on the second page and must be read, signed and dated by the resident prior to the commencement of the Home Check.

The next section of the Checklist, to be completed with the resident, consists of questions concerning the dwelling and demographics, attitudes and beliefs of the resident. Some of the information requested such as the resident's race, ethnicity and level of education attained may be considered very sensitive by some and are therefore not required. Please make your best effort to answer all of these questions with the resident so that we can more accurately determine the population being served by the Home Safety Checks.

The remainder of the Checklist consists of a series of statements about safe environments and/or behaviors. These items are organized by room. Floor plans may vary from home to home. Therefore, you are encouraged to complete the check of the rooms in the order that is logical for that particular dwelling. **Items in bold** print are those considered essential to check in each room, even under time constraints.

For each item on the Checklist, check the box for yes (Y) if the item is true. This indicates that the structure or behavior is safe. Check the box for no (N) if the item is not true. This indicates that changes in the environment or in the resident's behavior are warranted to improve the safety of the home.

Please check the box for not applicable (N/A) if the object or situation in the Checklist item does not exist in this residence. For example, if there are no houseplants in the children's bedroom, check the N/A box for item #69, "Houseplants are kept out of children's reach."

Any changes made to the resident's home, installation of safety devices or advice offered to the resident should be noted in the "Comments" column (i.e., "advised to purchase wall-mounted baby gate.")

#### II. How to Use the Home Safety Checklist

Each Home Safety Checker will develop his or her own personal style of conducting home visits. However, the following protocol is suggested to make the Home Safety Check as efficient and effective as possible:

- Familiarize yourself with the hazards covered by the Checklist items and their accompanying educational messages *before* embarking on any Home Safety Checks. This will enable you to minimally reference the checklist itself during the actual home Check.
- Upon arrival to the home, sit and aquaint yourself with the family (children's ages, etc.) and their safety concerns while you complete the baseline survey questions.
- When moving from room to room in the home, quickly visually inspect each room for any hazards that stand out. *It is not necessary to read each item from the Checklist aloud while completing the Check.* Doing so will quickly disinterest the parent or caregiver accompanying you on the Safety Check. You may wish to complete the Checklist form from memory after the visit is over. This process will become more intuitive and faster as you gain experience in conducting Home Safety Checks.
- Engage the parent throughout the Home Safety Check. Explain why you are checking for particular items and asking questions regarding specific behaviors. Be sure to

praise any safe behaviors or environmental modifications that are already in place.

- Educate the residents about the potential for injury created by any existing hazards in the home. Much of the Checklist is repetitive. It is only necessary to provide complete educational messaging the first time you encounter a hazard. In later rooms, be sure to briefly mention these hazards again and quickly reinforce your earlier suggestions (i.e., "Here there are some coins on the floor in this room as well. Remember these are a choking hazard and should be stored out of children's reach").
- Offer the parent solutions by installing devices, suggesting safe behaviors or pointing them in the right direction to correct the hazard themselves. Offer injury prevention tips, resources and contacts where appropriate. Answer any questions posed by the resident to the best of your ability as they come up.

The last page of the Checklist is a summary of the safety devices present in the home, given to the resident or installed during the Check. Please also note any referral information for other organizations or services given to the resident on this page.

Finally, solicit some feedback from the resident using the questions provided on the last page of the Checklist. Be sure to answer any final home safety questions they may have. You may want to leave them with a short list of your safety recommendations, a home safety brochure or other educational information as well as your contact information for their reference.

Following is a room-by-room listing of each item on the Checklist with some key educational messages to assist you in familiarizing yourself with the Home Safety Check.

## **Home Safety Checklist**

#### **The Family Room**

- 1. There is a properly placed and maintained smoke alarm.
  - A smoke alarm should be installed on every level of the home and in all sleeping areas.
  - Test any alarms already in the home and install alarms where appropriate.
  - Alarms should be mounted on ceilings. However, if installation on a ceiling is not feasible, then place the top of the alarm on a wall at least 4 to 12 inches from the ceiling.
  - Don't install a smoke alarm near a window, door, forced-air register or fireplace where drafts could detour smoke away from the alarm.
  - All smoke alarms should be tested once a month and batteries replaced at least once a year.
  - Make sure alarms are regularly maintained, i.e., vacuum, dust.
  - Replace smoke alarms every ten years.
  - If the smoke alarm is hard-wired and there is a battery back up, make sure the battery is present and it works.
  - If an alarm sounds, the family should initiate their fire escape plan.
- 2. Several fire escape routes from each room and the home are planned and practiced.
  - Advise the family to plan two exit routes from each room and the home.
  - Residents should identify an outside meeting place.
  - Escape plans should be practiced every six months.

- 3. If built before 1978, the home has been tested for leadbased paint. Any lead paint has been covered with sealant or abated.
  - Elevated blood levels in children affect intelligence and development.
  - Advise parents to have children tested for lead poisoning if there is a chance of exposure.
- 4. Painted surfaces are intact and free from loose, chipping or peeling paint.
  - Check the walls in homes, especially those built before 1978, for damaged paint.
  - Children can be exposed to lead from lead dust and by eating paint chips.

# 5. There is a properly placed and maintained carbon monoxide detector.

- CO is an odorless, colorless, tasteless gas that produces flu-like symptoms.
- A CO detector should be located on every level of the home.
- Test any detectors already in the home and install detectors where appropriate.
- If a detector sounds, instruct residents to open all windows to vent the home to outside air; evacuate the home immediately and call the fire department or 911 from a neighbor's home.
- 6. Electrical cords are in good condition and positioned appropriately (e.g., against the walls, out of children's reach).
  - Be sure that electrical cords are not run under carpeting, which can cause significant cord damage.
  - Inspect electrical cords for frays or other signs of damage. Damaged cords are a fire hazard.
  - Roll up any unused or extra lengths of cord and secure with nylon ties to prevent children from pulling on them.

- 7. Electrical outlets are not overloaded and are protected with outlet covers when not in use.
  - Examine wall outlets for overloads that can be a fire hazard. Make sure only one heat-producing appliance, such as a heater or iron, is plugged in at a time.
  - Install outlet covers on any used outlets that are unobstructed by furniture. Children can suffer electrical burns by inserting fingers or other objects into uncovered outlets.
- 8. There is a barrier around the fireplace or any other heating source.
  - Children are at risk for contact burns from heating sources.
  - If there is no physical barrier around a fireplace, instruct parents to be sure that children are kept away from fireplaces and supervised closely when they are in use.
- 9. Space heaters are stable, with protective coverings, located out of the reach of children and at least 3 feet from curtains, papers, furniture and other flammable materials.
  - Space heaters should never be used to provide heat at night when people are sleeping.
  - Check that the heater has a protective grill over the fan and is plugged directly into the wall and not an extension cord.
- 10. Matches and lighters are kept out of children's reach. All ashtrays are properly emptied immediately after use.
  - Parents should use child-resistant lighters but store them out of children's reach, preferably in a locked cabinet.
  - Encourage parents to teach young children that matches and lighters are tools for adults, not toys.
  - Ashtrays should be deep and wide. Cigarette butts should be immersed in water prior to disposal.

- 11. All window blind and drapery cords are tied up, wind up devices or cleats are used or the ends are cut and retrofitted with safety tassels.
  - Drapery and blind cords are a strangulation hazard for children.
  - Cut any continuous loops on these cords.
  - Use cleats or roll-up devices to secure any drapery cords, especially those cords that are long or hang near any type of furniture.
- 12. On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.
  - A child can fall from a window that is open more than 4 inches. Screens are not strong enough to function as barriers.
  - Use a window disc or tape measure to demonstrate to parents how much a window can be safely opened.
  - L-shaped braces or screw-in devices can be installed to prevent windows from opening more than 4 inches. Another option for double-hung windows is to open the window from the top.
- 13. Filing cabinets, bookcases and other tall or heavy furniture are stable and secured to walls.
  - When children pull or climb upon unstable furniture they can be crushed by falling furniture or items stored on top of the furniture.
  - Advise parents to bolt any unsteady furniture to walls.
  - Broad-based stands should be used for heavy appliances such as TVs.
  - Encourage parents to store heavier items in bottom shelves or drawers to stabilize the furniture base.
- 14. Small parts and objects such as safety pins, paper clips, coins, scissors and needles are kept out of children's reach, preferably in latched drawers and cupboards.
  - Small parts and objects are a choking hazard for young children.

- Sharps, such as scissors and needles, are cut and puncture hazards.
- Check the floor and other areas accessible to children for these loose items. Store such items in appropriate and inaccessible containers.
- Encourage parents to periodically examine the house for these items.
- 15. Houseplants are kept out of children's reach.
  - Many houseplants are toxic to children, even if only a small amount is ingested.
  - Help parents to move any accessible houseplants out of children's reach.
  - Encourage parents to itemize the types of plants they have in the home (both inside and outside), in case they need to tell a physician or Poison Control Center exactly what type a child has ingested.

# 16. Poison Control Center and emergency numbers are posted near the telephone.

- Local police, fire, EMS, Poison Control Center and physician numbers should be posted near each phone for easy reference by the resident as well as a babysitter who may be in the home at the time of an emergency.
- Work with the parent to develop a list of local numbers and put the list in an obvious location near the phone.
- Encourage parents to teach their children how to dial 911, or other emergency number, in the event of an emergency.

#### <u>The Kitchen</u>

- 17. Poison Control Center and emergency numbers are posted near the telephone.
  - Local police, fire, EMS, Poison Control Center and physician numbers should be posted near each phone

for easy reference by the resident as well as a babysitter who may be in the home at the time of an emergency.

- Work with the parent to develop a list of local numbers and put the list in an obvious location near the phone.
- Encourage parents to teach their children how to dial 911, or other emergency number, in the event of an emergency.

## 18. Electrical and telephone cords are in good condition, placed against walls and out of the flow of traffic.

- Inspect electrical cords for frays or other signs of damage. Damaged cords are a fire hazard.
- Roll up any unused or extra lengths of cord and secure with nylon ties to prevent children from pulling on them.

# 19. Electrical appliances are kept unplugged, away from the sink and stove and out of children's reach.

- Move small kitchen appliances away from the sink and stove. Do not place heat-producing appliances under wooden cabinets.
- Position appliances away from the edges of the counters to prevent children from pulling appliances down upon them.
- Advise residents to keep appliances unplugged with the cords rolled up and away from counter edges when not in use.
- 20. Electrical outlets are not overloaded and are protected with outlet covers when not in use.
  - Examine wall outlets for overloads that can be a fire hazard. Make sure that only one heat-producing appliance, such as a heater or iron, is plugged in at a time.
  - Install outlet covers on any used outlets that are unobstructed by furniture. Children can suffer

electrical burns by inserting fingers or other objects into uncovered outlets.

- 21. There is an easily accessible, working fire extinguisher.
  - Be sure that the resident knows where the nearest fire extinguisher is located.
  - Instruct the resident that a fire extinguisher should be used only on very small fires (such as a kitchen fire) or to clear a path to exit the home during a fire.
  - Encourage residents to report all fires, even very small fires, to their local fire department.
- 22. On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.
  - A child can fall from a window that is open more than 4 inches. Screens are not strong enough to function as barriers.
  - Use a window disc or tape measure to demonstrate to parents how much a window can be safely opened.
  - L-shaped braces or screw-in devices can be installed to prevent windows from opening more than 4 inches. Another option for double-hung windows is to open the window from the top.

- 23. All window blind and drapery cords are tied up, wind up devices or cleats are used or the ends are cut and retrofitted with safety tassels.
  - Drapery and blind cords are a strangulation hazard for children.
  - Cut any continuous loops on these cords.
  - Use cleats or roll-up devices to secure any drapery cords, especially those cords which are long or hanging near any type of furniture.
- 24. Stove guards or stove knob covers are installed.
  - Stove guards prevent children from reaching hot burners and grabbing pots and pans from stovetops, pulling hot foods and liquids down on top of them. They also prevent hot foods and liquids from splashing on and scalding children.
  - Stove knob covers prevent children from turning on stove elements that may cause a fire.
- 25. Potholders and other flammable materials are stored away from burners.
  - Move all combustibles away from the heating elements of the stove.
  - Encourage residents to remain in the kitchen whenever the stove is being used.
- 26. Children are kept out of the kitchen while cooking and away from microwaves and other heating sources.
  - Children are at risk from contact burns from hot elements and scald burns from hot foods and liquids.
  - Encourage parents to keep children in a supervised area separate from the kitchen while they are cooking.

- 27. Back burners are used and pot handles are turned in or to the back of the stove when cooking.
  - Encourage parents to use back burners to keep scalding hot foods and liquids from splashing out onto children.
  - While cooking, pot handles should be turned in so children cannot pull cookware containing scalding hot foods and liquids upon them.
- 28. The highchair or hook-on chair is sturdy and has a seat belt with a crotch strap.
  - Children can be strangled by waist straps if they slide out of the highchair seat.
  - Unsupervised children can also fall trying to climb out of highchairs.
  - Examine the condition of the straps on highchairs. Move highchairs away from walls that children could use to push away from, toppling the chairs.
  - Encourage parents to use restraining straps every time the child is placed in the highchair
  - Closely supervise children at all times when in highchairs.
- 29. Round, hard foods like grapes, popcorn, raw carrots, hard candies, nuts and raisins are kept away from young children.
  - These types of food are choking hazards for young children.
  - Encourage parents to provide meals and snacks only while children are seated and always supervise young children while eating.
- **30.** Hot foods and liquids are always placed away from the edges of counters and tables, out of children's reach and never on tablecloths or place mats.
  - Instruct parents about the dangers of scalding from hot food and liquids.
  - If there are table cloths in the house, encourage parents to remove them or at least remove them

whenever food is being served on tables, so that children cannot pull containers of scalding hot foods or liquids down upon them.

- 31. All household products, cleaning supplies, pet supplies, alcoholic beverages, medicines and vitamins are stored in their original child-resistant containers and in latched cabinets out of children's reach.
  - These items can be toxic to children even in very small doses.
  - Ensure that residents realize that child-resistant does not mean childproof.
  - Install cabinet or drawer latches as appropriate.
  - Combine above hazardous items into one (or just a few) high latched cabinet(s) if necessary.

## 32. Knives and other sharp utensils are stored in drawers or cabinets secured with safety latches.

- These items are cutting and piercing hazards for children.
- Install drawer latches where appropriate. Combine all sharps into one latched drawer if necessary.
- 33. Small parts and objects such as safety pins, paper clips, coins, scissors and needles are kept out of children's reach, preferably in latched drawers and cupboards.
  - Small parts and objects are a choking hazard for young children.
  - Sharps, such as scissors and needles, are cut and puncture hazards.
  - Check the floor and other areas accessible to children for these loose items. Store such items in appropriate and inaccessible containers.
  - Encourage parents to periodically examine the house for these items.
- 34. Houseplants are kept out of children's reach.
  - Many houseplants are toxic to children, even if only a small amount is ingested.
- Help parents to move any accessible houseplants out of children's reach.
- Encourage parents to itemize the types of plants they have in the home (both inside and outside), in case they need to tell a physician or Poison Control Center exactly what type a child has ingested.

#### Hallways/Stairs

- 35. Hallways and stairways are adequately lit.
  - Adequate lighting can prevent stair falls.
  - Check stairway lighting. Suggest using light bulbs of maximum allowable wattage in stairwells.
  - If possible, light switches should be located at both the top and bottom of stairs.
- 36. Slats on balconies and stairways are no more than  $3\frac{1}{2}$  inches apart.
  - Slats of greater width pose a head entrapment or fall risk for young children.
  - Measure between stairway/balcony slats. If slats are greater than 3<sup>1</sup>/<sub>2</sub> inches in width, encourage the parents to gate off stairs or install stair guards (large sheets of clear rigid plastic that form a barrier between the child and the open spaces).
- 37. A sturdy handrail is fastened securely on at least one side of the stairway and runs continuously for the full length of the stairs.
  - Using handrails can help prevent falls.
  - Test handrails. Tighten screws on any wobbly handrails.
  - Handrails should not exceed 2<sup>1</sup>/<sub>2</sub> inches in crosssection, so children may easily grasp them.
- 38. Safety gates are securely installed at the top and bottom of stairs. Gates at the top of the stairs are bolted to the wall.
  - Safety gates prevent stair falls.

- Gates at the top of the stairs should be wall-mounted, as pressure-mount gates are not strong enough to withstand gravity and the weight of a child.
- Install safety gates if there are toddlers in the home.
- Test the integrity of safety gates if any are already present.
- 39. Stairways and landings are kept clear of clutter.
  - Items on the floor can be tripping hazards.
  - Advise parents to never use stairwells as storage areas, even temporarily.
  - Encourage parents to teach children to put their toys in a designated location after use.
- 40. Rugs or runners are tacked down or slip resistant.
  - Unsecured rugs can be fall hazards.
  - Secure any loose carpeting with double-sided carpet tape.

#### **Bedroom – Adult**

# 41. There is a properly placed and maintained smoke alarm.

- A smoke alarm should be installed on every level of the home and in all sleeping areas.
- Test any alarms already in the home and install alarms where appropriate.
- Alarms should be mounted on ceilings. However, if installation on a ceiling is not feasible, then place the top of the alarm on a wall at least 4 to 12 inches from the ceiling.
- Don't install a smoke alarm near a window, door, forced-air register or fireplace where drafts could detour smoke away from the alarm.
- All smoke alarms should be tested once a month and batteries replaced at least once a year.
- Make sure alarms are regularly maintained, i.e., vacuum, dust.
- Replace smoke alarms every ten years.

- If the smoke alarm is hard-wired and there is a battery back up, make sure the battery is present and it works.
- If an alarm sounds, the family should initiate their fire escape plan.

#### 42. All emergency egress windows can be easily opened.

- Windows provide additional exits from the home in the case of a fire or other emergency.
- Check that all residents (including children) can open any windows designated for escape. These windows should remain unguarded and should never be opened more than 4 inches to prevent falls.
- Remind parents to do the same for any windows that are part of a fire escape plan (if one does not already exist).

#### 43. There is an emergency escape ladder near upperstory windows.

- Escape ladders are used to facilitate exit through upper story windows in the absence of a fire escape.
- Advise parents to purchase a lightweight, sturdy escape ladder to be positioned near upper-story emergency egress windows.

# 44. There is a properly placed and maintained carbon monoxide detector.

- CO is an odorless, colorless, tasteless gas that produces flu-like symptoms.
- A CO detector should be located on every level of the home.
- Test any detectors already in the home and install detectors where appropriate.
- If a detector sounds, instruct residents to open all windows to vent the home to outside air; evacuate the home immediately and call the fire department or 911 from a neighbor's home.

- 45. There is a telephone, list of emergency numbers and flashlight near the bed.
  - Local police, fire, EMS, Poison Control Center and physician numbers posted near the phone for easy reference by the resident as well as a babysitter who may be in the home at the time of an emergency.
  - Encourage parents to teach their children how to dial 911 in the event of an emergency.
- 46. Electrical cords are in good condition and positioned appropriately (e.g., against the walls, out of children's reach).
  - Be sure that electrical cords are not run under carpeting, which can cause significant cord damage.
  - Inspect electrical cords for frays or other signs of damage. Damaged cords are a fire hazard.
  - Roll up any unused or extra lengths of cord and secure with nylon ties to prevent children from pulling on them.
- 47. Electrical outlets are not overloaded and are protected with outlet covers when not in use.
  - Examine wall outlets for overloads that can be a fire hazard. Make sure that only one heat-producing appliance, such as a heater or iron, is plugged in at a time.
  - Install outlet covers on any used outlets that are unobstructed by furniture. Children can suffer electrical burns by inserting fingers or other objects into uncovered outlets.

- 48. Space heaters are stable, with protective coverings, located out of the reach of children and at least 3 feet from curtains, papers, furniture and other flammable materials.
  - Space heaters should never be used to provide heat at night when people are sleeping.
  - Check that the heater has a protective grill over the fan and is plugged directly into the wall and not an extension cord.
- 49. Matches and lighters are kept out of children's reach. All ashtrays are properly emptied immediately after use.
  - Parents should use child-resistant lighters but store them out of children's reach, preferably in a locked cabinet.
  - Encourage parents to teach young children that matches and lighters are tools for adults, not toys.
  - Ashtrays should be deep and wide. Cigarette butts should be immersed in water prior to disposal.
- 50. Adults should not sleep with infants.
  - Placing infants to sleep in adult beds creates a risk of suffocation (when the infant becomes wedged between mattress and furniture or smothered by a sleeping adult's body, soft bedding or mattress) or strangulation (through head entrapment).
  - Advise parents of these serious risks and emphasize that the only safe place for an infant is JPMA certified crib with a tight fitting mattress.
  - If parents still choose to share their beds with infants, they must take special precautions, including removing all soft bedding and avoiding the use of alcohol and drugs.

- 51. All window blind and drapery cords are tied up, wind up devices are used or ends are cut and retrofitted with safety tassels.
  - Drapery and blind cords are a strangulation hazard for children.
  - Cut any continuous loops on these cords.
  - Use cleats or roll-up devices to secure any drapery cords, especially those cords which are long or hanging near any type of furniture.
- 52. On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.
  - A child can fall from a window that is open more than 4 inches. Screens are not strong enough to function as barriers.
  - Use a window disc or tape measure to demonstrate to parents how much a window can be safely opened.
  - L-shaped braces or screw-in devices can be installed to prevent windows from opening more than 4 inches. Another option for double-hung windows is to open the window from the top.
- 53. Rugs or runners are tacked down or slip-resistant.
  - Unsecured rugs can be fall hazards.
  - Secure any loose carpeting with double-sided carpet tape.
- 54. All prescription drugs, toiletries, coins, poisonous substances and small objects are out of children's reach.
  - Small parts and objects are a choking hazard for young children.
  - Check the floor and other areas accessible to children for these loose items. Remove such items to appropriate and inaccessible containers.
  - Medicines, vitamins, toiletries and cosmetics can be toxic to children even in very small doses.

- Install cabinet or drawer latches as appropriate. Combine poisonous substances into one (or just a few) high latched cabinet(s) if necessary.
- Encourage parents to periodically examine the house for these items.
- 55. Houseplants are kept out of children's reach.
  - Many houseplants are toxic to children, even if only a small amount is ingested.
  - Help parents to move any accessible houseplants out of children's reach.
  - Encourage parents to itemize the types of plants they have in the home (both inside and outside), in case they need to tell a physician or Poison Control Center exactly what type a child has ingested.
- 56. All firearms are stored unloaded and locked up, with ammunition locked in a separate location, out of children's reach.
  - It is not necessary to ask residents if there is a gun in the home.
  - Convey to parents the importance of keeping all guns in the home stored unloaded and locked up out of children's reach, with ammunition locked in a separate location.
  - Advise parents to teach children that guns are not toys and if a child should find a gun they should not touch it and tell an adult immediately.
  - Offer the resident a gun lock, if available.

#### **Bedroom – Child**

- 57. There is a properly placed and maintained smoke alarm.
  - A smoke alarm should be installed on every level of the home and in all sleeping areas.
  - Test any alarms already in the home and install alarms where appropriate.

- Alarms should be mounted on ceilings. However, if installation on a ceiling is not feasible, then place the top of the alarm on a wall at least 4 to 12 inches from the ceiling.
- Don't install a smoke alarm near a window, door, forced-air register or fireplace where drafts could detour smoke away from the alarm.
- All smoke alarms should be tested once a month and batteries replaced at least once a year.
- Make sure alarms are regularly maintained, i.e., vacuum, dust.
- Replace smoke alarms every ten years.
- If the smoke alarm is hard-wired and there is a battery back up, make sure the battery is present and it works.
- If an alarm sounds, the family should initiate their fire escape plan.

#### 58. All emergency egress windows can be easily opened.

- Windows can provide additional exits from the home in the case of a fire or other emergency.
- Check that all residents (including children) can open any windows designated for escape. These windows should remain unguarded and should never be opened more than 4 inches to prevent falls.
- Remind parents to do the same for any windows that are part of a fire escape plan (if one does not already exist).

#### 59. There is an emergency escape ladder near upperstory windows.

- Escape ladders are used to facilitate exit through upper story windows in the absence of a fire escape.
- Advise parents to purchase a lightweight, sturdy escape ladder to be positioned near upper-story emergency egress windows.
- 60. There is a properly placed and maintained carbon monoxide detector.

- CO is an odorless, colorless, tasteless gas that produces flu-like symptoms.
- A CO detector should be located on every level of the home.
- Test any detectors already in the home and install detectors where appropriate.
- If a detector sounds, instruct residents to open all windows to vent the home to outside air; evacuate the home immediately and call the fire department or 911 from a neighbor's home.
- 61. Painted surfaces are intact and free from loose, chipping or peeling paint.
  - Check the walls in homes, especially those built before 1978, for damaged paint.
  - Children can be exposed to lead from lead dust and by eating paint chips.
- 62. Electrical cords are in good condition and positioned appropriately (e.g., against the walls, out of children's reach).
  - Be sure that electrical cords are not run under carpeting, which can cause significant cord damage.
  - Inspect electrical cords for frays or other signs of damage. Damaged cords are a fire hazard.
  - Roll up any unused or extra lengths of cord and secure with nylon ties to prevent children from pulling on them.
- 63. Electrical outlets are not overloaded and are protected with outlet covers when not in use.
  - Examine wall outlets for overloads that can be a fire hazard. Make sure that only one heat-producing appliance, such as a heater or iron, is plugged in at a time.
  - Install outlet covers on any used outlets that are unobstructed by furniture. Children can suffer electrical burns by inserting fingers or other objects into uncovered outlets.

- 64. Space heaters are stable, with protective coverings, located out of the reach of children and at least 3 feet from curtains, papers, furniture and other flammable materials.
  - Space heaters should never be used to provide heat at night when people are sleeping.
  - Check that the heater has a protective grill over the fan and is plugged directly into the wall and not an extension cord.
- 65. All window blind and drapery cords are tied up, wind up devices are used or ends are cut and retrofitted with safety tassels.
  - Drapery and blind cords are a strangulation hazard for children.
  - Cut any continuous loops on these cords.
  - Use cleats or roll-up devices to secure any drapery cords, especially those cords which are long or hanging near any type of furniture.
- 66. On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.
  - A child can fall from a window that is open more than 4 inches. Screens are not strong enough to function as barriers.
  - Use a window disc or tape measure to demonstrate to parents how much a window can be safely opened.
  - L-shaped braces or screw-in devices can be installed to prevent windows from opening more than 4 inches. Another option for double-hung windows is to open the window from the top.
- 67. Rugs or runners are tacked down or slip-resistant.
  - Unsecured rugs can be fall hazards.
  - Secure any loose carpeting with double-sided carpet tape.

- 68. All prescription drugs, toiletries, coins, poisonous substances and small objects are out of children's reach.
  - Small parts and objects are a choking hazard for young children.
  - Check the floor and other areas accessible to children for these loose items. Remove such items to appropriate and inaccessible containers.
  - Medicines, vitamins, toiletries and cosmetics can be toxic to children even in very small doses.
  - Install cabinet or drawer latches as appropriate. Combine poisonous substances into one (or just a few) high cabinet(s) if necessary.
  - Encourage parents to periodically examine the house for these items.
- 69. Houseplants are kept out of children's reach.
  - Many houseplants are toxic to children, even if only a small amount is ingested.
  - Help parents to move any accessible houseplants out of children's reach.
  - Encourage parents to itemize the types of plants they have in the home (both inside and outside), in case they need to tell a physician or Poison Control Center exactly what type a child has ingested.
- 70. Bunk beds meet safety standards, are securely constructed, and are not used by children under age 6.

#### **Nursery**

- 71. There is a properly placed and maintained smoke alarm.
  - A smoke alarm should be installed on every level of the home and in all sleeping areas.
  - Test any alarms already in the home and install alarms where appropriate.
  - Alarms should be mounted on ceilings. However, if installation on a ceiling is not feasible, then place the top of the alarm on a wall at least 4 to 12 inches from the ceiling.
  - Don't install a smoke alarm near a window, door, forced-air register or fireplace where drafts could detour smoke away from the alarm.
  - All smoke alarms should be tested once a month and batteries replaced at least once a year.
  - Make sure alarms are regularly maintained, i.e., vacuum, dust.
  - Replace smoke alarms every ten years.
  - If the smoke alarm is hard-wired and there is a battery back up, make sure the battery is present and it works.
  - If an alarm sounds, the family should initiate their fire escape plan.

# 72. There is a properly placed and maintained carbon monoxide detector.

- CO is an odorless, colorless, tasteless gas that produces flu-like symptoms.
- A CO detector should be located on every level of the home.
- Test any detectors already in the home and install detectors where appropriate.
- If a detector sounds, instruct residents to open all windows to vent the home to outside air; evacuate the home immediately and call the fire department or 911 from a neighbor's home.

- 73. Painted surfaces are intact and free from loose, chipping or peeling paint.
  - Check the walls in homes, especially those built before 1978, for damaged paint.
  - Children can be exposed to lead from lead dust and by eating paint chips.
- 74. The crib meets JPMA safety standards and is properly constructed and maintained.
  - Look for the JPMA certification label on the crib.
  - Examine the crib for missing any screws, bolts or hardware.
  - Make sure the crib is sturdy and free from cracked or broken slats, cut-out designs and sharp points or edges.
  - Measure the space between slats or spindles of the crib. They should be no more than 2 3/8 inches apart.
  - Measure crib corner post extensions and protrusions. They should be less than 1/16 inch.
  - Test that the crib mattress is firm and fits snugly, without any gaps (no more than two fingers-width between the mattress and the side of the crib).
- 75. All pillows, quilts, plastic materials, toys and stuffed animals have been removed from the crib.
  - Soft bedding, plush toys and plastic materials in the crib are suffocation hazards and have been implicated in many infant deaths previously diagnosed as SIDS.
  - Encourage parents to place infants to sleep on their backs on a firm mattress with only a sleeper for warmth or a very thin blanket tucked in around the infants mid-section.

- 76. All bumper pads, hanging mobiles and decorations have been removed from the crib when the infant is able to pull up to hands and knees.
  - Hanging mobiles or crib decorations are strangulation hazards for infants. It is best not to use these items at all; but, if used, they should be removed when the child begins to pull up to hands and knees (usually around 5 months of age).
  - Bumper pads should be removed at this time as well as children can use them to climb up and out of the crib.
- 77. The sides of mesh playpens and portable cribs are always kept up in the locked position.
  - Collapsed v-shaped sides of mesh playpens and cribs can create a strangulation hazard.
  - Sides kept in the locked position may also prevent falls from mesh playpens or portable cribs.

#### 78. Infants are placed on their backs to sleep.

- Placing infants to sleep on their back helps to reduce the risk of suffocation and SIDS.
- There is no evidence that sleeping on the back causes choking.
- Advise parents of infants with health problems to consult their physician about what sleeping position is best for their children.

# 79. All baby supplies, diapers and toiletries are kept within reach yet out of children's reach.

- Some baby supplies and toiletries can be toxic to children.
- Work with parents to find a storage area that is out of children's reach but easily accessible so that it is not necessary to leave infants unattended while changing.
- Remind parents that one hand should remain on infants at all times while changing diapers.
- 80. All furniture, especially the crib, playpen, changing table and chairs, is placed away from an outside wall,

windows and draperies, heating sources, electrical cords and curtain cords.

- Safe placement of furniture can help reduce the risk of falls, strangulation, suffocation and burns.
- With the resident's consent, move any furniture to positions more suitable for reducing hazards.
- 81. On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.
  - A child can fall from a window that is open more than 4 inches. Screens are not strong enough to function as barriers.
  - Use a window disc or tape measure to demonstrate to parents how much a window can be safely opened.
  - L-shaped braces or screw-in devices can be installed to prevent windows from opening more than 4 inches. Another option for double-hung windows is to open the window from the top.
- 82. All window blind and drapery cords are tied up, wind up devices or cleats are used or the ends are cut and retrofitted with safety tassels.
  - Drapery and blind cords are a strangulation hazard for children.
  - Cut any continuous loops on these cords.
  - Use cleats or roll-up devices to secure any drapery cords, especially those cords which are long or hanging near any type of furniture.

### 83. Any strings on infant products, including pacifiers and rattles, have been removed.

- Strings on infant products are strangulation hazards.
- Advise parents that items should never be hung around children's necks with string or ribbon.
- If necessary, remove any strings on infant products.
- Pacifiers can be attached to a short (less than 7 inches) unlooped length of string or ribbon and <u>clipped</u> to a child's clothing.

- 84. Electrical cords are in good condition and positioned appropriately (e.g., against the walls, out of children's reach).
  - Be sure that electrical cords are not run under carpeting, which can cause significant cord damage.
  - Inspect electrical cords for frays or other signs of damage. Damaged cords are a fire hazard.
  - Roll up any unused or extra lengths of cord and secure with nylon ties to prevent children from pulling on them.
- 85. Electrical outlets are not overloaded and are protected with outlet covers when not in use.
  - Examine wall outlets for overloads that can be a fire hazard. Make sure that only one heat-producing appliance, such as a heater or iron, is plugged in at a time.
  - Install outlet covers on any used outlets that are unobstructed by furniture. Children can suffer electrical burns by inserting fingers or other objects into uncovered outlets.
- 86. Space heaters are stable, with protective coverings, located out of the reach of children and at least 3 feet from curtains, papers, furniture and other flammable materials.
  - Space heaters should never be used to provide heat at night when people are sleeping.
  - Check that the heater has protective grill over the fan and is plugged directly into the wall and not an extension cord.
- 87. The floor is kept uncluttered by toys and other objects, especially small objects such as coins, safety pins, etc.
  - Small parts and objects are a choking hazard for young children.

- Check the floor and other areas accessible to children for these loose items. Remove such items to appropriate and inaccessible containers.
- Encourage parents to periodically examine the house for these items
- Items on the floor can be tripping hazards.
- Encourage parents to teach children to put their toys in a designated location after use.
- 88. Children play with age-appropriate and wellmaintained toys.
  - Advise parents to buy age-appropriate toys according to safety labels.
  - Encourage parents to store toys intended for younger children separately from those for older children.
  - Check that eyes, buttons and other parts are securely sewn on stuffed animals.
  - Advise parents to periodically examine both new and old toys for signs of wear or damage.
- 89. Toy chests have removable or spring-loaded supports.
  - Strangulation or head trauma can occur when a toy chest lids falls on a child's head or neck.
  - Children can also suffocate if they crawl inside unventilated toy chests. Suggest that parents drill holes in the sides of any unventilated toy chests.
  - Check that a hinged toy chest lid will remain open in any position. If the toy chest has a heavy lid without safety hinges, advise the parent to remove the lid or install hinge supports.

- 90. Children's faces, hands and toys are washed frequently to avoid ingestion of lead contaminated dust.
  - Ingestion of lead contaminated dust is the most frequent cause of lead poisoning in young children.
  - If residence was built before 1978, encourage parents to wash children's faces, hands and toys, as well as dusting surfaces with a moist cloth frequently.
- 91. There is a certified small parts tester and it is always used to determine whether a small toy or toy part presents a choking hazard.
  - Small parts and objects are a choking hazard for young children.
  - Provide the parent with a small parts tester.
  - If an item fits entirely within the small parts tester, it is considered a choking hazard.
  - Encourage parents to use the tester to determine if small toys or detachable small parts are hazardous.

### 92. Mobile baby walkers are not used.

- Baby walkers account for more injuries than any other nursery product, due to falls down stairs, tip-overs, suffocation, burns and drowning.
- Advise parents to never use baby walkers on wheels.
- With the parent's permission, destroy any mobile baby walkers in the home. If feasible, replace with a stationary activity center.

### <u>Bathroom</u>

- 93. Young children are never left alone in the bathroom, even for a few seconds, and are closely supervised by and adult when bathing.
  - The bathroom contains serious burn, shock, cut, drowning and falling hazards.
  - Stress that young children should never be left unsupervised in the bathroom, even for a moment to get a towel or answer the door or a ringing phone.

- Remind parents that bath rings are only intended to provide additional support for children. They must still stay with the child at all times while bathing.
- 94. The bathroom door is kept shut at all times and has a lock that can be opened from the outside.
  - Advise parents to keep bathroom doors shut at all times to prevent children from accessing bathroom hazards. Encourage parents to install latches out of children's reach on bathroom doors and use them consistently to prevent access.
  - Check that door locks used on bathroom doors can be opened from the outside to allow entry into the bathroom if a child locks him- or herself in the room.
- 95. Electrical appliances, including hair dryers, curling irons and space heaters, are used away from the sink, shower, tub and toilet and are stored unplugged and out of children's reach when not in use.
  - Move small bathroom appliances away from water sources to prevent electrocution.
  - Encourage parents to keep heat-producing appliances out of children's reach to avoid contact burns.
- 96. Electrical cords are in good condition and positioned appropriately (e.g., against the walls, out of children's reach).
  - Be sure that electrical cords are not run under carpeting, which can cause significant cord damage.
  - Inspect electrical cords for frays or other signs of damage. Damaged cords are a fire hazard.
  - Roll up any unused or extra lengths of cord and secure with nylon ties to prevent children from pulling on them.

- 97. Electrical outlets are protected with Ground Fault Circuit Interrupters.
  - Ground Fault Circuit Interrupters (GFCI) are installed on outlets near water sources to prevent electrical shock.
  - GFCIs monitor the flow of current through the circuit and immediately cut off power when a imbalance is detected.
  - If available, install GFCIs on outlets near the sink, shower or bathtub.
- 98. Electrical outlets are not overloaded and are protected with outlet covers when not in use.
  - Examine wall outlets for overloads that can be a fire hazard. Make sure that only one heat-producing appliance, such as a heater or iron, is plugged in at a time.
  - Install outlet covers on any used outlets that are unobstructed by furniture. Children can suffer electrical burns by inserting fingers or other objects into uncovered outlets.
- 99. All medicines and vitamins are stored in their original containers, in child-resistant packaging and locked out of children's reach.
  - These items can be toxic to children even in very small doses.
  - Stress to residents that child-resistant does not mean childproof.
  - Install cabinet or drawer latches as appropriate. Combine above item into one (or just a few) high latched cabinet(s) if necessary.
  - Advise parents to keep these potentially hazardous substances in their original containers to avoid unintentional ingestion and for easy reference if a Poison Control Center needs to be contacted.

# 100. First aid supplies are kept in a locked medicine cabinet.

- A basic first aid kit should be kept on hand to treat minor cuts and bruises.
- Provide the family with a first aid kit.
- Encourage residents to keep first aid supplies out of children's reach in a medicine cabinet.

# 101. Ipecac syrup is on hand for use only on the advice of a Poison Control Center or physician.

- Keep an over-the-counter poison "antidote" on hand, such as activated charcoal or ipecac syrup. Never use either of these products unless recommended by a Poison Control Center or physician.
- Call 911, then the Poison Control Center, then the doctor before administering any treatment.
- Have the container of the ingested product on hand when calling the Poison Control Center or the doctor.

# 102. Sharp objects, such as razors and scissors, are stored locked out of children's reach and are wrapped and properly disposed of.

- Sharp objects are cut and puncture hazards.
- Install cabinet and drawer latches where appropriate. Combine all sharps into one drawer if necessary.
- Sharps should be wrapped up carefully and disposed of in an inaccessible waste container.
- 103. Safety locks are used on all toilet lids if there is a toddler in the home.
  - Young children can easily tumble into a open toilet and drown because of their high center of gravity (most of the body weight is in the head).
  - Install safety locks on toilets in homes with toddlers.
  - If you are unable to install toilet locks, advise parents to keep the toilet lids shut at all times when not in use.
- 104. The water heater thermostat is set to 120 degrees F or less.
  - The bathtub is a common site for tap water scald burns to children.

- Measure the temperature of the water from the resident's tap with a thermometer. Let the water to run for 2-3 minutes before testing to allow water to stabilize at its hottest temperature.
- If feasible, set the resident's hot water heater thermostat to no more 120 degrees F.
- 120 degrees F is hot enough to clean and sanitize dishes and clothing.

# 105. Bath water temperature is tested before children enter the water.

- Bath water for a child should be no more than 100 degrees F. Water that is tolerable to an adult's skin may burn a child's thinner skin.
- Provide the parent with a bath thermometer card.
- Encourage parents to additionally test water for "hot spots" by swishing their inner wrist all throughout the tub water.
- 106. There is a non-skid rug on the floor or any rugs are secured with non-slip backing.
  - Unsecured rugs can be fall hazards.
  - Secure any loose mats or rugs with double-sided carpet tape.
- 107. There is a non-skid mat or decals in the bathtub and/or shower.
  - Non-skid mats and decals can prevent falls in bathtubs and showers.
  - Provide residents with a non-skid bath mat or decals, if necessary.

- 108. On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.
  - A child can fall from a window that is open more than 4 inches. Screens are not strong enough to function as barriers.
  - Use a window disc or tape measure to demonstrate to parents how much a window can be safely opened.
  - L-shaped braces or screw-in devices can be installed to prevent windows from opening more than 4 inches. Another option for double-hung windows is to open the window from the top.

### <u>Basement</u>

- 109. There is a properly placed and maintained smoke alarm.
  - A smoke alarm should be installed on every level of the home and in all sleeping areas.
  - Test any alarms already in the home and install alarms where appropriate.
  - Alarms should be mounted on ceilings. However, if installation on a ceiling is not feasible, then place the top of the alarm on a wall at least 4 to 12 inches from the ceiling.
  - Install basement smoke alarms close to the bottom of stairs because of trapped dead air spaces that form at the top of stairwells.
  - Don't install a smoke alarm near a window, door, forced-air register or fireplace where drafts could detour smoke away from the alarm.
  - All smoke alarms should be tested once a month and batteries replaced at least once a year.
  - Make sure alarms are regularly maintained, i.e., vacuum, dust.
  - Replace smoke alarms every ten years.
  - If the smoke alarm is hard-wired and there is a battery back-up, make sure the battery is present and it works.

• If an alarm sounds, the family should initiate their fire escape plan.

# 110. There is a properly placed and maintained carbon monoxide detector.

- CO is an odorless, colorless, tasteless gas that produces flu-like symptoms.
- A CO detector should be located on every level of the home.
- Test any detectors already in the home and install detectors where appropriate.
- If a detector sounds, instruct residents to open all windows to vent the home to outside air; evacuate the home immediately and call the fire department or 911 from a neighbor's home.
- 111. Painted surfaces are intact and free from loose, chipping or peeling paint.
  - Check the walls in homes, especially those built before 1978, for damaged paint.
  - Children can be exposed to lead from lead dust and by eating paint chips.
- 112. Latches are installed on doors to the furnace room, laundry room and other rooms where dangerous equipment or supplies are kept.
  - Items in these rooms can present burn, poisoning and laceration hazards for children.
  - Encourage parents to install latches out of children's reach on these doors and use them consistently to prevent access to these areas.

- 113. Containers of flammable liquids such as paint and cleaning solvents are stored tightly capped in their original containers, locked out of children's reach and away from ignition sources, such as furnaces and water heaters.
  - Flammable liquids are both poisoning and fire hazards.
  - Work with the parent to find a suitable location for these materials that is both out of children's reach and away from heat and ignition sources.
  - Install cabinet latches where appropriate.
- 114. The door to the basement stairs is kept locked.
  - Advise parents to keep the door to the basement or basement stairs locked to prevent access to burn, poisoning, and falling hazards.

### <u>Garage</u>

- 115. All poisonous and flammable products are stored in their original containers, away from heat sources and out of children's reach.
  - Work with the parent to find a location for poisonous or flammable items that is both out of children's reach and away from heat and ignition sources.
  - Install cabinet latches where appropriate.
  - Advise parents to keep theses substances in their original containers to avoid unintentional ingestion and for easy reference if a Poison Control Center needs to be contacted.
- 116. All tools and dangerous objects are kept locked out of children's reach.
  - Tools pose serious cut and puncture hazards to children and other inexperienced operators.
  - Recommend that tools be kept in one locked location out of children's reach.
  - Install cabinet or drawer latches where appropriate.

- 117. An automatic garage door opener with an approved failsafe mechanism to prevent the door from closing on children has been installed.
  - Garage doors without auto-reverse mechanisms can easily crush children who may try to run or crawl beneath them while they are closing.
  - Advise residents to use only automatic garage doors with an approved fail-safe mechanism.
  - Encourage parents to teach children not to approach or play near a garage door while it is closing.
- 118. Painted surfaces are intact and free from loose, chipping or peeling paint.
  - Check the walls in homes, especially those built before 1978, for damaged paint.
  - Children can be exposed to lead from lead dust and by eating paint chips.
- 119. On all windows not designated as emergency exits, window guards are installed or other devices are used to prevent windows from opening more than 4 inches wide.
  - A child can fall from a window that is open more than 4 inches. Screens are not strong enough to function as barriers.
  - Use a window disc or tape measure to demonstrate to parents how much a window can be safely opened.
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