Children Left in Vehicles

Leaving a child unattended in a car is both dangerous and illegal in the state of PA. Despite the known risks, adults continue to leave children in cars, vans or trucks. In one poll, nearly 25% of parents admitted to leaving their children alone in a vehicle.

Often, adults step away to do something, leaving one or more children in their seat restraints. Some parents leave a sleeping child in a vehicle to run a quick errand or to allow the child to finish a restful nap. Researchers studied how much and how fast vehicles heat up. They found that opening all the windows 1.5 inches did not help. From the starting temperature, a rise of 40 degree F. occurs in the first hour. In the first 15-30 minutes, 80% of that temperature rise has already happened. Even in cool weather, vehicles heat up inside. (McLaren et al. Pediatrics. 116:e109-e112, 2005).

Infants and children have less ability to regulate their body temperature than adults. They have a larger surface area relative to their body size. Their core body temperatures can rise 3-5 times faster. They are very susceptible to heat illnesses. These include hyperthermia, heat stroke, brain/organ damage, and heat-related death.

Well-intended parents and early education program staff transporting one or more children have “forgotten” a child in a vehicle. Children have put themselves at risk by getting into a parked car. Vehicles pose many dangers to children in addition to heat-related illness. Push buttons, keyless starting mechanisms, electrical outlets, lighters, power windows, and seat-release latches are among the many features that can harm a curious child. Be sure everyone knows and follows these simple rules:

- Never leave children unattended in or near a vehicle, even for a minute.
- While a vehicle is parked, always set the parking brake and lock the doors.
- Keep keys and remote door openers out of children’s reach.
- Have an adult leave something in the rear seat of the vehicle, out of a child reach. It should be an object that makes the adult check the back before leaving the vehicle, like a wallet or purse.
- Contact families right away if a child who is expected does not arrive. This will shorten the time before someone alerts a driver or family member to look for a child who might have been left in a vehicle. Always check the whole vehicle, including the trunk.
- If you see a child unattended in a vehicle, don’t walk away. Immediately notify authorities and call for help. You may be able to prevent the 1 death that occurs nearly every 10 days from heat-illness in a vehicle.

For more information, see www.kidsandcars.org.

Contributed by Neha Mehta, MD, FAAP

First Aid Corner

If a child is choking, the first thing to do is shout for help and get someone to call 911. If you are alone, shout for help, start rescue efforts, and then call 911.

If a child is unresponsive, the new sequence for first aid for choking/CPR is C-A-B. First, do C = 30 chest compressions at a rate of 100/minute; then A = open the airway with the head tilt, chin lift method; and then B = give 2 rescue breaths. The approach for infants less than 1 year of age differs somewhat from what you do for older children. See the article on page 2 for details.
New Choking & CPR Guidelines for Children

The American Heart Association released new cardio-pulmonary resuscitation (CPR) guidelines in the spring of 2011. The significant change is the sequence to use for CPR when a child is unresponsive. The details for children less than a year of age differ from what you do for children 1-8 years of age. CPR for children older than 1 year of age uses the same sequence as the new recommendation for adults. You do chest compressions first, then open the airway and give 2 rescue breaths: Chest Compressions, open the Airway, and then give Breaths = C-A-B. Circumstances in which a child would need CPR are very rare. Choking is much more likely to occur. First aid for choking is necessary if a child cannot breathe at all, cannot cough, cry or talk, looks blue or is unconscious/unresponsive. If the child is able to breathe, cough, cry or talk, the child’s body handles the choking situation best without intervention. The two new sets of Choking/CPR instructions are listed below. The first set is for infants; the second set is for older children.

For infants (children less than a year of age) who are choking and cannot breathe, cough or cry:
- Have someone call 911
- Lay the infant face down, and head down along your forearm with the child’s hips closest to your body. Give 5 blows (slaps) to the child’s back with your hand
- Next, turn the infant over on your arm and give 5 chest compressions using your 3rd and 4th (middle and ring) fingers over the infant’s breast bone. Place your fingers just below the nipple line, and push down about 1½ inches.
- Alternate back blows with chest compressions until the object causing the choking comes out or the infant becomes unconscious/unresponsive.
- If an infant is unconscious/unresponsive, or has stopped breathing, place the infant on a flat hard surface. Perform 30 chest compressions at a rate of 100 per minute.
- Next, open the infant’s airway by tilting the child’s head back with your hand on the infant’s forehead, and lifting the child’s chin with your other hand. If you see an object, sweep it out with your finger. (DO NOT do blind finger sweeps. You might push the object farther down.)
- Take a normal breath. Cover the infant’s mouth and nose with your mouth, and then give 2 breaths, each taking about 1 second. Try to make the child’s chest rise.
- Continue cycles of 30 compressions to 2 breaths.
- After 5 cycles of compressions and breaths (about 2 minutes) call 911 if no one else has already called.

For children 1-8 years of age who are choking and cannot breathe, cough, cry or speak:
- Have someone call 911.
- Perform the Heimlich maneuver: Put your body against the child’s back. Place one hand over your other fist, and just above the child’s belly-button, and well below the tip of the breastbone. Thrust inward and upward. Repeat until the child starts coughing or the object comes out.
- If the child is unconscious/unresponsive, or has stopped breathing, place the child on a flat hard surface. Start chest compressions with the heel of 1 or 2 hands over the lower half of the breast bone. Press down about 2 inches, 30 times at a rate of 100 per minute.
- Open the child’s airway tilting the head back with your hand on the child’s forehead while lifting the child’s chin with the other hand. Remove any foreign body you can see with a finger sweep. (DO NOT do blind finger sweeps. You might push an object farther down.)
- Take a normal breath; pinch the child’s nose closed and cover the child’s mouth with your mouth, then give 2 breaths, each for 1 second. Try to make the child’s chest rise.
- Continue cycles of 30 chest compressions to 2 breaths until any object is expelled.
- After 5 cycles of compressions and breaths (about 2 minutes) call 911 if no one else has called.

The American Academy of Pediatrics (AAP) has a revised First Aid Chart that illustrates these new instructions. The opposite side of the chart outlines first aid to use for many urgent or emergency injury and illness situations. You can order copies of the 2011 AAP First Aid Chart from the AAP Bookstore at www.aap.org or by phone at 888/227-1770.
Sun Protection—Use the UV Index

For each zip code, the National Weather Service calculates the predicted ultraviolet risk. This “UV Index” describes the risk from sun exposure from 1 (low) to 11+ (extremely high). The Environmental Protection Agency (EPA) posts the values by mid-afternoon, Eastern Time for the next day. In addition, they issue a “UV Alert” when the risk of overexposure is very high. For the UV Index by zip code, and to sign up to receive an e-mail if there is a UV Alert for your area, go to http://www.epa.gov/sunwise/uvindex.html.

The EPA cautions everyone to protect against excess sun exposure. It doesn’t matter how easily you tan or if your skin is a dark tone. When the UV index is at or above the moderate level (3-5), everyone should wear a hat and sun glasses as well as using sunscreen or sun block outside.

The skin needs protection against both ultra violet radiation B (UVB) and ultraviolet radiation A (UVA). UVB causes sunburn and UVA causes skin cancer and early aging. A sunscreen or sun block should have a Sun Protection Factor (SPF) of 15 or more and protect against UVA as well as UVB rays. Sun blocks absorb or scatter UV radiation before it reaches the skin. Sunscreens keep the rays from penetrating to the deeper layers of the skin. You must apply most sunscreens 15 minutes or more before sun exposure, and then reapply the product at least every 2 hours. All sun-protection skin products become less effective when they are wet. Follow the instructions on the product labels about how often to reapply it.

New Food and Drug Administration labeling rules will go into effect in June 2012. These will help consumers find and use effective sun-protection products. Look for labels that say “Broad Spectrum” as well as SPF 15 or more. The FDA points out that there is no evidence that products with an SPF greater than 50 give more protection.

Limit direct sun exposure between 10 a.m. and 4 p.m. when the sun’s rays are strongest. During those midday hours, seek shade.

When the UV index is high (6-7), in addition to proper use of sunscreen, wear a wide-brimmed hat, a long-sleeved shirt and long pants. Be especially cautious about sun exposure when near sand, water or snow. These surfaces reflect the sun rays and increase the risk of skin damage.

You can view three very short videos at www.fda.gov/sunscreen that explain the new sunscreen labeling rules and the reasons for them. Note that the new FDA rule bans the use of the terms “waterproof” and “sweat proof.” The new allowable term is “water resistant.” The time the resistance lasts must be on the label too.

For professional development on sun safety, use the ECELS Self-Learning Module Online. It helps educators develop a Sun Safety Policy and provide reading materials to teach young children and parents the importance of skin protection. Go to www.ecels-healthychildcarepa.org. Select the section on Child Care Provider Training. In the subsection called “Self-Learning Modules” scroll down to SLM Online—Sun Safety. The module earns 2 hours of state-authorized training credit and meets the Keystone STARS Level 2 Performance Standard for health and safety.

Caring For Our Children, 3rd edition

Caring For Our Children (CFOC) is the source for reliable health and safety performance standards for early care and education. The long-awaited 3rd edition of this publication is available online at http://nrckids.org and in hard copy from the bookstores of the American Academy of Pediatrics and the American Public Health Association. ECELS organized an audio conference on June 23, 2011 to discuss some of the significant changes in the 3rd edition as well as new tools to implement some of the standards. To access the MP3 audio conference recording, slides and other handouts, go to www.ecels-healthychildcarepa.org. Select the section on Publications and Media, then roll your cursor over the section heading and click on “Let’s Talk - ECELS Audio Conferences” from the section’s drop down menu. Select “Let’s Talk - Audio Conference 3rd Edition of Caring for Our Children & Other New Tools.”
Nutrition: MyPlate Replaces MyPyramid

The United States Department of Agriculture (USDA) has a new visual image and set of key messages to reflect the updated food patterns of the 2010 Dietary Guidelines for Americans. The divided plate shows portion sizes and food types for healthful eating. Go to the MyPlate website at http://choosemyplate.gov. This website has many tips and tools. For example, select the option “Get a Personalized Plan” then enter the age, gender, weight, height and physical activity for yourself or someone else to get a helpful guide. Since June 2011, the URL for MyPyramid automatically takes the user to the MyPlate website.

Some key messages from the website include:

- Enjoy your food, but eat less
- Avoid oversized portions
- Make half your plate fruits and vegetables
- Make at least half your grains whole grains
- Switch to fat-free or low fat (1%) milk
- Compare sodium in foods like soup, bread, and frozen meals — and choose the foods with lower numbers.
- Drink water instead of sugary drinks.

Look for the tips about shopping, storing, cooking and serving. Some tips from the website about encouraging children to eat vegetables are:

- Set a good example for children by eating vegetables with meals and as snacks.
- Let children decide on the dinner vegetables or what goes into salads.
- Depending on their age, children can help shop for, clean, peel, or cut up vegetables.
- Allow children to pick a new vegetable to try while shopping.
- Use cut-up vegetables as part of afternoon snacks. Children often prefer foods served separately. So, rather than serving a casserole or mixed vegetables, try serving two vegetables separately.

Another feature of this new website is The Ten Tips Nutrition Education Series. These high quality, easy-to-follow tips are in a printable format, perfect for posting or as handouts. Surf the site now. Then put a reminder on your calendar to return to view additional materials that the USDA plans to put up on the website for preschool-age children.

Food-borne Illness

In June 2011, The Centers for Disease Control and Prevention (CDC) reported high levels of food-borne illness. One in every 6 people get food poisoning annually. Children less than 5 years of age have the highest incidence of illness caused by contaminated food. The CDC recommends the food safety practices, posters and handouts on these websites:

- [http://www.foodsafety.gov](http://www.foodsafety.gov). This website offers features such as “Ask the expert,” current food recall information, and how to select, store, prepare and serve specific foods. The focus is on 4 steps.

  - Clean: Wash hands and surfaces often
  - Separate: Don’t cross-contaminate
  - Cook: Cook to proper temperature
  - Chill: Refrigerate promptly

- [http://www.fightbac.org](http://www.fightbac.org). This consumer-friendly site is packed with easy-to-use guides, attractive e-cards with nuggets of good information about food safety, fliers to print out for staff and families, and much more.
Using ONLINE Professional Development

You will enjoy and learn more by using new, interactive, media-rich materials for Professional Development. Often they have embedded video, case-studies, thought-provoking questions, and attractive graphics. For the best performance of online Professional Development, go to the Adobe website at http://www.adobe.com to install two free, safe-to-use tools. If you already have these tools, use the Adobe website to update earlier versions you might have installed on your computer. The two key tools are:

- Adobe Reader
- Adobe Flash Player

Some people have a problem downloading or running online professional development programs. Most of these programs have large files that can take a long time to download. If you have a problem, it could be because you have an older, slower computer or you do not have a high speed Internet service such as Verizon FIOS, Cable Internet, or DSL. Try these suggestions: 1) Plug your laptop or PC directly into the Internet router instead of using a wireless (WiFi) connection. 2) Take a laptop that has WiFi to a place where high speed access to the Internet is free. Public libraries and some eating places offer this service. See if there is much of a difference. 3) If the problem seems to be that your computer is too slow, try using a computer at a public library. Usually these are fast enough and work well with the library’s broad-band connection. Library personnel may be able to help you if you are not sure what to do. If none of these options work for you, e-mail ECELS (ecels@paaap.org) to ask for help. Early learning practitioners who work in Pennsylvania may ask ECELS to send the module on a CD.

To use an ECELS Self-Learning Module ONLINE:
- Download all the files in an ECELS Self-Learning Module to your computer. You do not need to print them out. You can read and use them from your computer screen.
- Copy and paste the pages you need to fill out into an MSWord file on your computer. Follow the instructions in the module. Complete the Registration Form and Implementation Activities. Then submit the required documents to ECELS by e-mail or fax. ECELS staff will review your work for state-authorized credit. If your answers indicate that you need help to complete the module successfully, the ECELS reviewer will contact you to give you the help you need. Remember to send a check to pay for the review by surface mail.

Head Bumps Matter—Protecting Young Brains

ECELS has a new ONLINE, media-rich, interactive, Self-Learning Module about brain injuries that might happen to children enrolled in early learning programs. The PA Department of Health funded the project.

This new module discusses how to reduce the risk of head injuries to young children. It explains how to recognize and respond to the signs of brain injury as well as how to accommodate those children who have suffered a brain injury. Go to www.ecels-healthychildcarepa.org. Select the section called “Child Care Provider Training,” then roll your cursor over the section heading to find and click on the subsection called “Self-Learning Modules.” Scroll down to “SLM Online—Head Bumps Matter.” Successful completion of the module earns 2 hours of state-authorized training credit and meets Keystone STARS Level 2 Performance Standard for health and safety.

Insect Bites & Stings: 2011 Advice

Preventing insect bites and stings depends on where you find the insects, and the types of insects involved. The most common concerns are about mosquitoes and ticks. Bandaged stinging insects, e.g. wasps, hornets and bees, are a common problem too, particularly where there is food or where insects are nesting. In the southern areas of the United States, fire ants pose a serious problem. A single ant can bite multiple times, leaving long-lasting painful, itchy and blistering sores. Fire ants are marching north, but are not yet a problem in Pennsylvania.

When someone gets stung or bitten, the reaction can range from a little skin irritation to a life-threatening reaction. Teachers/caregivers must be ready to provide first aid for any insect bites or stings.

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Swimming & Water Safety

Swimming and wading are great summer fun. They can be risky too. The facts about drowning, pool inspection results and skin damage from exposure to sun make following risk reduction guidelines very important. Here are the facts, and 10 risk reduction guidelines.

**Drowning:**
Drowning is the 2nd leading cause of all unintentional injury deaths in children aged 1-14 years. In 2007, among children 1 to 4 years old who died from an unintentional injury, almost 30% died from drowning. Among 0-4 year olds, 69% of drownings where the location was known occurred in swimming pools. Most young children who drowned in pools were last seen inside the home. They had been out of sight less than five minutes, and were in the care of one or both parents at the time. Drowning kills some, and maims others. Nonfatal drowning can cause brain damage, leading to long-term disabilities such as memory problems, learning disabilities, and permanent vegetative state.

**Pool inspection results:** Over 12% of 111,487 pool inspections conducted during 2008 required immediate closure until violations could be corrected. Contaminated pool water is a common cause of gastroenteritis (diarrhea and vomiting). The leading cause of gastroenteritis outbreaks associated with swimming pools is a germ called *Cryptosporidium* (Crypto). It is resistant to chlorine. Reported Crypto cases increased 208% from 2004 to 2008.

**Sun exposure damages skin:** Outdoor water play requires extra protection from direct and reflected UVA and UVB radiation. Sun rays damage skin even when the skin does not appear burned. See the related article “Sun Protection-Use the UV Index” on page 3.

**10 Risk Reduction Guidelines for Center and Home-based Child Care Settings**

**Supervision:** Assign an adult as a designated Water Watcher. Identify this person with a visible Water Watcher tag. The Water Watcher’s only job should be watching for problems. She/he should not be directly interacting with the children who are in the water. If the Water Watcher must do something else, then she/he must give the responsibility and tag to another adult.

**Buddy System:** Every child in the water should have a buddy. Each infant and toddler needs an adult buddy. Select swimming sites with lifeguards whenever possible.

**Learn to Swim:** Formal swimming lessons can protect young children from drowning. Children must be developmentally ready for such lessons. Even when children have had formal swimming lessons, they require constant and careful supervision when near water.

**Learn CPR:** Someone with CPR skills can save a life.

**Use Life Jackets:** Authentic personal flotation devices (life jackets) help keep children safe when they are near pools or other bodies of water. Do not use air-filled or foam toys, such as "water wings", "noodles", or inner-tubes instead. These toys do not keep swimmers safe.

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Fence off and lock access to water: Use pool fencing to prevent unsupervised access. The fence should entirely enclose the body of water. People should not be able to enter the enclosure from a building without going through the fence gate. The fence should be at least 4 feet high. It should have self-closing and self-latching gates that open outward and are out of reach of children. Consider additional barriers such as automatic door locks to prevent children from entering unsupervised areas. Alarms that indicate someone opened a door or that the water surface was disturbed may help if not ignored. These are especially important in home-based child care settings. Containers of water are hazards too. Never leave toddlers with access to a toilet, in a tub, or near a bucket of water, even for a moment. They can drown quickly in only a few inches of water.

Germ control: Test and treat pool water using methods approved by the local department of health. Diarrhea is the most commonly reported recreational water illness. Skin, ear, and respiratory infections are problems too. Germs get into pool water from animal droppings, fecal material released by people who use the water, and from surfaces of pool users’ bodies. Even with adequate levels of germ-controlling chemicals, resistant pathogens such as Crypto and Giardia, may cause illness.

Educate Children: Teach “Try to keep the water out of your mouth.” “Pool water has germs that can make you sick.”

Use Sunscreen, Shade and Protective Clothing: At least every 2 hours, be sure to apply water-resistant sunscreen liberally to skin exposed to the sun. Cover all the other exposed body parts with sun-protective clothing. Water reflects and intensifies skin damage from the sun’s rays.

Use Resources: For videos from the Consumer Product Safety Commission, tip sheets and a water watcher tag, go to www.safekids.org. Select “Safety Basics,” then “Safety Resources by Risk Area,” and then “Drowning.” Also see www.cdc.gov. Search for “swimming” and “drowning.”

For minor irritation, cold compresses may be all that is required. Some children may need an antihistamine. Others with more serious reactions will require an epinephrine injection right away using a device like an Epipen Jr ®. Always call 911 for serious reactions such as swelling of lips, tongue, throat or nose, difficulty breathing, dizziness, fainting, vomiting or seeming very ill. Call 911 even if you have and are able to give medicine for the reaction.

Insect repellents are available in the form of liquids, lotions, creams, gels, oils, sprays to put on the skin, and chemicals to put on clothing. Some liquid repellents are available in wipes as well. Remove whatever seems to be attracting the insects. Get rid of standing water to reduce mosquito breeding habitat. Keep covers on refuse cans to take away access to food that attracts stinging insects.

DEET is the most widely available, commonly used and effective insect repellent. It repels a wide variety of insects, including mosquitoes and ticks. It may be toxic if ingested or applied too often. One advantage of DEET is that if it is put on clothing, it works for weeks afterward.

Permethrin is another repellent to apply to clothing, but it should not be put on skin. It is not particularly toxic and lasts through five washings.

Picaridin is the newest insect repellent. It is more effective and less toxic to humans than DEET and permethrin. It is applied to skin and lasts 8-10 hours. Do not use Picaridin for children under 2 years of age.

Other products have limited or no effectiveness. Citronella and lemon eucalyptus oil repel insects for only 20-30 minutes. Insect repellents combined with sunscreen should not be used since sunscreen must be reapplied every 2 hours. This would be too much exposure to the insect repellent component.

Sources:
Cohen, B and Hebert A. “Assault of the arthropods” in AAP News, April 2011, p.15..

New Seat Restraint Recommendations

The National Highway Transportation Safety Administration (NHTSA) has replaced their guidance for child passenger safety with age-based recommendations. Now, they give instructions for birth to 12 months, 1 to 3 years of age, 4 to 7 years of age and 8 to 12 years of age. The American Academy of Pediatrics released similar new guidelines in April 2011. These emphasize that children under two years of age should ride in a rearward facing car seat until they are two years of age or until their weight and length exceed the manufacturer’s limits for the rearward-facing seat.

The Traffic Injury Prevention Project (TIPP) of the PA Chapter of the American Academy of Pediatrics recently updated the program’s website, at www.pakidstravelsafe.org/ TIPP offers information about the new seat restraint requirements as well as a car seat fitting station locator. TIPP offers bike, pedestrian, school bus and other transportation-related safety information too.

Child passenger safety experts advise that a REAR-FACING CAR SEAT is the best seat for a young child. It has a harness to hold the child in the seat. In a crash, a rear-facing car seat cradles and moves with the child to reduce the stress to the child’s fragile neck and spinal cord.

When a child’s weight or height exceeds the limits for the car seat specified by the manufacturer, it is time to move the child to a FORWARD-FACING CAR SEAT that has a harness and tether. This is usually between 1 and 3 years of age. The harness and tether of the forward-facing car seat limit the child’s movement toward the front of the car.

When the child exceeds the weight and height limits of the forward-facing car seat, it is time to switch to a BOOSTER SEAT. This is usually at 4 to 7 years of age. The booster seat positions the seat belt so that it fits properly over the stronger parts of the child’s body.

A child is ready for a SEAT BELT when the lap portion of the belt lies across the upper thighs, not across the child’s abdomen. The chest portion of the seat belt must fit snuggly across the shoulder and chest. It should not rest on the child’s neck or face. This is usually when the child reaches a height of 4 feet 9 inches and is between 8 and 12 years of age.

Nearly three-fourths of car seats are improperly installed. It’s best to have a certified technician at a car seat fitting or inspection station check that a specific car seat has been properly installed in the car where the child will use it. The back seat is a safer place for anyone to ride. No child should ride in the front seat before reaching 13 years of age.

To learn more about preventing all types of transportation-related injuries, visit the website of the National Highway Transportation Safety Administration at http://www.nhtsa.gov. Anyone can visit the TIPP website at www.pakidstravelsafe.org/ or, in Pennsylvania, call PA TIPP at 1-800-CAR-BELT for advice and information.