Many young children ride tricycles. Between January 2012 and January 2014, the US Consumer Product Safety Commission collected data that showed an estimated 9340 trike riders were injured seriously enough to come to a hospital’s Emergency Department. Fifty-two percent of these injured children were between 1 and 2 years of age.

The number of children with tricycle injuries peaked at 2 years of age. Somewhat fewer children who were 3 years of age were injured. For 4 year olds, the number dropped to slightly more than half the number for 3 year olds. Thereafter, the numbers of children with trike injuries declined sharply. Most of the injured children were treated and released from the Emergency Department.

Lacerations (cuts) were the most frequent type of injury. The face was cut more often than other body parts. Internal organ damage was a common injury for 3 year olds and 5 year olds. The brain was the most commonly injured internal organ. For 7-year-old children, 70% of the injuries were bruises of the face and head. Elbows were the most commonly broken bone.

A study conducted by The Children’s Hospital of Philadelphia found that most tricycle injuries were due to falls. These are thought to occur when the rider falls with a sudden turn of the front wheel that makes the rider lose balance and tip the trike over.

Injury prevention experts recommend the following changes to trikes to reduce the risks for riders:
- Decrease the handlebar’s turning radius.
- Install a built-in device in the wheels that limits the maximum speed of the trike.
- Provide a foot rest other than the pedals for children who are just learning to ride.
- Make sure that trike riders wear elbow pads and helmets to protect the most commonly injured body parts. This may make helmet-wearing a habit that carries over to bicycle riding. New Mexico has a law that requires trike users to wear a helmet.
- Do not allow trike riding on surfaces that lead to streets or sources of water.
- Always provide close adult supervision of trike riders.


Dental Decay in Young Children - Preventive Strategies -

The Centers for Disease Control and Prevention (CDC) estimates that 44% of young children less than 5 years of age have already had tooth decay. Tooth decay causes eating, speaking, learning and behavior problems for young children. Yearly, children in the United States miss over 51 million hours of school due to dental pain.

Here are some practical strategies to prevent dental disease:
- Have toddlers and preschool children do “Classroom Circle Brushing” after meals: With the children seated as a group at a table, supervise them brushing their teeth with toothpaste for 2 minutes. No rinsing of the mouth is needed.

(continued on page 2)
Teachers can demonstrate for the group how to clean all tooth surfaces while brushing their own teeth or while helping a different child do good tooth brushing each day.

All children should brush with fluoride toothpaste. Use only a rice grain-sized “smear” for children less than 3 years of age, and a “pea-sized” amount for children older than 3. With such a tiny amount of toothpaste, children can safely swallow it.

Staff can ask their own dentists to donate sample toothpaste and tooth brushes. Ask community service organizations, e.g. the Rotary Club or Kiwanis to donate the cost of supplies.


Use the following method for tooth brushing in the program:
- Choose toothbrushes with soft, rounded, polished nylon bristles and handles that fit the storage rack. Put the child’s name on the handle with permanent marker.
- Rinse toothbrushes with water after each use, then store them upright to air dry. Space them so they don’t touch or drip on each other. Use a commercial rack or a well washed and sanitized Styrofoam egg carton, closed and placed flat-side down. Write children’s names on the egg-shaped protuberances after making holes in the protuberances for the toothbrush handles.
- Replace toothbrushes every 3-4 months - sooner if the bristles are worn or splayed.
- Give each child toothpaste on a square of wax paper or on the edge of a paper cup. Children can scoop up the toothpaste with their tooth brush.

Limit juice to no more than once a day. Give juice only when children are sitting down at a meal. Offer no more than a total of four to six ounces per day, combining amounts the child drinks at home and in school.

- Use only 100% juice or don’t serve juice in school at all
- Give children a regular cup to drink from (not a sippy cup) - just start with a few ounces in case the cup spills
- Offer only water between meals; make water freely available. Ideally use tap water with fluoride.

Share information with parents about preventing dental disease. Urge them to take their children to the dentist within 6 months of the first tooth, or by 1 year of age at the latest.

- Starting at a year of age, children should get fluoride varnish applied to their teeth in the dentist’s or their primary health care provider’s office, every 3 to 4 months.
- Emphasize these reminders:
  - 1st dentist visit by 1st Birthday!
  - 1st tooth, 1st toothbrush!
  - 2 X 2 or “two times two” – Brush twice a day for two minutes!
  - Children need adult help with brushing twice a day for two minutes until they are 7-8 years old.

ECELS hosted an Oral Health Webinar in October 2015 with the PA AAP’s Healthy Teeth, Healthy Children program and the PA Head Start Association’s Healthy Smiles initiative. Access the ECELS website for the audio recording of the webinar, the presentation slides and the evaluation form. Submit the completed evaluation form to claim PA Key and Act 48 credit. Go to [www.ecels-healthychildcarepa.org](http://www.ecels-healthychildcarepa.org). Select the Professional Development tab, then Webinars, and then scroll down the alphabetical listings to “Oral Health.”

Webinars from ECELS - Get Credit for Using Live or Recorded Versions

ECELS offers many live and recorded webinars available to use for PA Key and Act 48 credit. The recordings are on the ECELS website a week or so after the live webinar. “Managing Challenging Behaviors” is the first ECELS webinar for 2016. Its live presentation date is January 14, 2016.

Most of these webinars offer 1½ hours of credit. The exception is the two-part series for Medication Administration that offers 3 hours of credit. After listening, complete and submit the evaluation form to ECELS. This form accompanies the description and PowerPoint handout on the ECELS website. After receipt of the completed evaluation form, ECELS provides instructions about how to register for PA Key Professional Development credit.

The currently posted webinars are:

- **Active Play** – Reducing Risk and Promoting Health
- **Asthma**: Reduce the Wheeze Please!
- **Infants & Toddlers: Nutrition & Physical Activity Best Practices**
- **Early Brain & Child Development - Reducing Toxic Stress**
- **Flu: What to Do**
- **Health and Safety Resources** for All Early Education & Child Care Programs
- **Infant Safe Sleep**
- **Managing Challenging Behaviors** (recording to be posted in late January)
- **Medication** (Part One and Part Two)
- **Model Child Care Health Policies**
- **Motivating Early Educators to Adopt Health and Safety Practices**
- **Obesity Prevention**
- **Oral Health**
- **Safe Sleep is More than Just Back to Sleep**

The ECELS website lists webinars alphabetically. Go to [www.ecels-healthychildcarepa.org](http://www.ecels-healthychildcarepa.org). Select the Professional Development Tab, then the Webinar section, and then scroll down the alphabetized listing of webinars.

Currently, ECELS does not charge a fee to process credit for live or recorded webinars.

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**Fruit and Vegetable Quiz**

*Question:* What determines whether a food is a fruit or a vegetable?

*Answer:* Fruits are the part of a plant that has seeds. Vegetables are the edible portion of a plant such as roots (carrots), leaves (lettuce), stems (celery) or flowers (broccoli). They are usually from a plant with a soft (not woody) stem.

Tomatoes, squash, peppers and eggplants are fruits that are generally considered vegetables. Botanically, they are fruits. Peas are seeds of the plant and are considered vegetables too.

*Source:* Vegetable Research and Information Center, University of California, Davis
Infant-Toddler Quality Improvement Project – Preliminary Report

In August of 2013, ECELS received a 3-year federal quality improvement grant. The purpose of the grant is to show how to improve the care of infants and toddlers in child care centers. ECELS staff and expert consultants developed an observation tool. The tool measures 13 selected standards in Caring for Our Children: National Health and Safety Performance Standards, 3rd edition (CFOC3). CFOC3 defines best practices for early care and education programs. Many national quality improvement activities use CFOC3. ECELS staff recruited 32 Pennsylvania STAR 2 and STAR 3 centers to participate in the grant-funded program.

The ECELS staff randomly assigned the 32 centers to one of two groups. Independent observers assessed both groups. They visited the centers to use the observation tool when the center entered the project and one year later. ECELS linked half of the centers with a child care health consultant (CCHC) right after completing the assessment. The other half of the centers, the contrast group, had a one-year delay before ECELS linked them with a CCHC.


What is clear so far is that staff need ongoing education and well-written policies about appropriate health and safety practices. The concerns highlighted by the initial assessments of the 32 centers are:

- Staff do not take infants and toddlers outside as recommended in the CFOC3 standards. State regulations, Environment Rating Scale criteria and the Pennsylvania Position Statements each have different requirements. These differences are confusing. None of them is entirely consistent with the standards in CFOC3.
- Many staff and families do not receive education about safe sleep practices. Centers lack policies about safe sleep practices.
- No formal training requirement exists in Pennsylvania child care regulations for staff who administer medication.
- Infants, who rely on their teachers/caregivers to wash their hands, did not have their hands washed at times designated in CFOC3.
- Only one of 66 infants and toddlers that the center staff identified as having a special need had all the necessary information on a Care Plan signed by a health care professional.
- An audit of the infants’ and toddlers’ immunization records showed that, on average, only 23% of the infants and 42% of toddlers had up to date immunization records on file at the centers.

The study is continuing. The follow-up assessments will measure specific performance changes in both the immediate-linked and delayed-linked centers. Meanwhile, directors and lead teachers in centers that are not involved with the study should consider which of the topic areas need to be targets for improvement in their centers. Pay special attention to the concerns highlighted by the initial assessments of the centers. Stay tuned for more findings from this project.

Contributed by Rosemary Johnston, RN, BSN, MSN, T/TA Coordinator and Beth DeiConte, MD, FAAP, ECELS Pediatric Advisor
Hand Hygiene: When and How to Do It

Correct hand hygiene is important in all seasons. Use information on the Centers for Disease Control (CDC) website to remind everyone about how and when to do it.

Use the CDC posters and the information from the CDC website to make your own posters with photos of the children, drawings or magazine clippings. Here is some wording adapted from the CDC website to use on posters in child care programs:

- The flu virus can live on surfaces such as door knobs and tabletops for up to 24 hours. Routine cleaning of surfaces and proper hand hygiene may reduce the spread of flu.
- Washing hands with soap and water is the best way to reduce the number of germs (microbes) on them in most situations.
- If soap and water are not available, adults and children older than 24 months of age who are closely supervised by adults can use an alcohol-based hand sanitizer that contains at least 60% alcohol. Alcohol-based hand sanitizers can quickly reduce the number of germs on hands in some situations, but sanitizers do not eliminate all types of germs. Hand sanitizers may not be as effective when hands are visibly dirty or greasy.1

**WHEN** to perform hand hygiene:
- Before, during, and after preparing food
- Before eating food
- Before and after caring for someone who is sick
- Before and after treating a cut or wound
- After using the toilet
- After changing diapers, soiled pull-ups or underwear, or cleaning up a child who has used the toilet (Before changing diapers too, if hands touched body fluids before the change)
- After blowing your nose, coughing, or sneezing
- After touching an animal, animal feed, or animal waste
- After handling pet food or pet treats
- After touching garbage

**HOW** to perform hand hygiene:2 Washing hands with soap and water is the best way to reduce the number of germs in most situations. If soap and water are not available, use hand sanitizer with at least 60% alcohol. Hand sanitizers do not eliminate all types of germs.

- **Wet** your hands with clean, running water (warm or cold), and apply liquid soap. (Let the water run if you can’t turn it off without touching the faucet with soiled hands.)
- **Lather** your hands by rubbing them together with the soap. Be sure to lather the backs of your hands, between your fingers, and under your nails.
- **Scrub** your hands for at least 20 seconds or as close to 20 seconds as possible. Need a timer? Hum or sing “Happy Birthday” or “Row, Row, Row Your Boat” from beginning to end twice. Make up words to sing about hand washing with these familiar song tunes.
- **Rinse** your hands well under clean, running water.
- **Dry** your hands using a clean towel or air dry them. Use a paper towel to turn off the water if the taps do not shut off automatically.

1 [http://www.cdc.gov/handwashing/show-me-the-science-hand-sanitizer.html](http://www.cdc.gov/handwashing/show-me-the-science-hand-sanitizer.html)

2 [http://www.cdc.gov/handwashing/when-how-handwashing.html](http://www.cdc.gov/handwashing/when-how-handwashing.html)
Health Education Matters in Preschool

Some children as young as 3 years of age have conditions that can cause heart and blood vessel problems early in adult life. Cardiovascular disease is the leading cause of death in the United States. High blood levels of certain fats and sugar, being overweight and high blood pressure occur in preschoolers. Life-style choices associated with having these conditions begin in early childhood.

Early education programs are a good place for young children and their families to learn to make healthy life-style choices. Most published studies focus on promotion of healthy weight through diet and exercise. These measures are effective while practiced. Health education has long been thought to be more effective when learning by doing is coupled with teaching how and why children and families should make healthful choices.

Researchers in Madrid, Spain studied the impact of a special early health education curriculum (SII) owned by the Foundation for Science, Health and Education, the SHE Foundation (http://www.fundacionshe.org/). The curriculum uses materials from Sesame Workshop. The SII curriculum focuses on how the body/heart works, how to manage emotions as well as diet and physical activity. Over 2,000 preschool children from all the schools in Madrid that had more than 50 children in each age group participated in the study. The researchers randomly assigned 12 schools where preschool teachers taught a special health education curriculum and 12 schools where preschool teachers taught their usual curriculum. The study lasted three years.

An article in the September 2015 Journal of the American College of Cardiology describes what happened. The researchers collected the data at the start of the study, and annually thereafter.

The researchers measured the children’s knowledge, attitudes and habits related to diet, physical activity and body/heart function as well as their physical characteristics related to body fat and being overweight.

Children left the study when they reached 6 years of age. So children who started the program at 3 years of age had 3 years of the curriculum. Those who entered the study at 4 years of age had it for 2 years. The children who entered at 5 years of age only had the curriculum for one year. Those who had the curriculum for 3 year had the largest improvement in preventive health knowledge, attitudes and habits. Less exposure to the curriculum resulted in some, but less gains in these measured outcomes.

The results of this study strongly support using well-designed health education curricula in early education programs as a way to prevent diseases that cause so much suffering in later life.