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help for personal problems. (SU19)

Under the Rainbow is published by UH Rainbow Babies & Children's Hospital. Articles in this publication are written by professional journalists or physicians who strive to present reliable, up-to-date information. But no publication can replace the care and advice of medical professionals, and readers are cautioned to seek such



Ranked one of America's Best Children's Hospitals in eight pediatric specialties by U.S. News & World Report, including neonatology, orthopedics, pulmonology and cancer.

Learn more at UHRainbow.org/USNews.





STORIES FROM OUR FACEBOOK COMMUNITY

Meet Jacob

Last September, Jacob, 13, was in a terrible dirt bike crash. While riding in Perry, Ohio, Jacob came upon a hidden ravine that flipped his bike, leaving him pinned underneath. Thankfully, Jacob's cellphone was in his pocket. He was able to FaceTime his dad, which led his parents to the scene of the crash. They drove him to the nearest hospital, where medical professionals quickly determined that his serious injuries needed to be treated at a trauma center. Jacob was transferred via helicopter to UH Rainbow's Level I Pediatric Trauma Center.

Jacob was in surgery almost immediately. He had life-threatening injuries, including a lacerated liver that caused near-fatal internal bleeding and collapsed lungs. After successful trauma surgery, Jacob was sedated in the pediatric intensive care unit for seven days and remained hospitalized for nearly a month. His full recovery is nothing short of a miracle.

Today, Jacob is in D.C. with his parents to advocate for greater access to trauma centers at TCAA — Trauma Center Association of America — 2019 Lobby Day. Hours after his crash, Jacob was in surgery at Northern Ohio's only Level I Pediatric Trauma Center. Joining Jacob in D.C. is Michael Dingeldein, MD, Medical Director of the pediatric trauma center at UH Rainbow and one of Jacob's surgeons.

UH Rainbow's Level I Pediatric Trauma Center has been caring for critically injured children and youth for more than 25 years. It complements UH's coordinated regional adult trauma network that includes UH Cleveland Medical Center's Adult Level I Trauma Center and four Level III Trauma Centers, at UH Geauga, UH St. John and UH Portage medical centers, as well as Southwest General Health Center in Middleburg Heights. To learn more about trauma care at UH, visit our website: bit.ly/JacobTrauma. #TCAALobbyDay #ThisIsRainbow



Top: Joseph Kerniskey, Jacob's dad, comforts Jacob as UH flight paramedic Dorothy Battles works to stabilize his condition. Bottom: Traveling to Washington, D.C. to advocate on behalf of pediatric trauma centers were (L to R): Heidi Gartland, University Hospitals VP for Government & Community Relations; Jacob's parents, Joseph Kerniskey and Amy McElroy; U.S. Senator Rob Portman; Jacob; Michael Dingeldein, MD, Medical Director of the UH Rainbow Level I Pediatric Trauma Center and J. Kevin Croston, MD, trauma surgeon and CEO of North Memorial Health Center in Minnesota.





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Download the UH Now app (available for iPhone and Android) for easy access to finding a doctor, scheduling appointments and viewing your personal health record

Is it safe to vape during pregnancy?

It is well known that smoking and pregnancy don't mix. The nicotine and other chemicals contained in cigarette smoke can increase the risk for:

- Premature birth
- Birth defects
- Low birth weight
- Sudden infant death syndrome (SIDS)
- Stillbirth or miscarriage

Some may believe that e-cigarettes, a popular smoking substitute, may be OK for pregnant women to use. In fact, according to a survey of a little more than 300 pregnant women published in the Journal of Addiction Medicine, 43% thought that smoking an e-cigarette, known as vaping, was less harmful to unborn babies than smoking traditional cigarettes.

E-cigarettes contain liquid nicotine that gets inhaled as a mist (vapor). When you vape, the nicotine passes through the placenta and into your baby's bloodstream, just as when you smoke a regular cigarette.

Nicotine in any form is toxic to unborn babies and can impair your baby's brain and lung development. Vaping smoke may also contain some of the other harmful chemicals that are found in regular cigarettes.

Does your child have a snoring problem?

You may be interested in the Pediatric Adenotonsillectomy Trial for Snoring (PATS). The study will help us learn the best treatment for mild sleep-disordered breathing, a condition in which children have snoring and minimal breathing problems during sleep, but do not have apnea (stopping breathing during sleep).

Who may participate?

- Children between ages 3 and 12 who snore during sleep
- Children who have not been diagnosed with obstructive sleep apnea
- Children who have not had their tonsils and adenoids removed

Join our study

Parents and participants will be paid for their time, effort and study-related expenses. For more information, call Heather Rogers, Research Coordinator at UH Rainbow Babies & Children's Hospital, at **216-368-0475**. Please leave a voice message that includes your name and phone number.





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How to spot eye trouble in your child



ealthy eyes give your child more than the ability to see clearly – they help your child understand and respond to the world around them.

A child with untreated eye problems is at risk for impaired learning and development, so it is imperative that any signs or symptoms of eye trouble are addressed immediately. The earlier your child's eye problem is detected, the more likely it'll be successfully treated.

Regular vision tests can help uncover many eye conditions. Signs of trouble could include:

- Inability to make steady eye contact when older than 3 months of age
- Crooked or crossed eyes
- Drooping eyelids
- Squinting or eye rubbing
- Difficulty reading
- White or grayish-white color in the pupil
- Eyes that flutter quickly from side to side or up and down
- Redness that doesn't go away in a few days
- Complaints of headaches, eye strain or "seeing double"

ZOOM IN ON THE CAUSE

Your child's eye doctor will probably use an eye test to determine the cause of any problems. The most common vision disorders among children are refractive errors, which cause blurred vision. Refractive errors are more commonly known as:

- Nearsightedness: when objects far away appear blurry
- **Farsightedness:** when objects nearby appear blurry
- **Astigmatism:** when objects at any distance appear blurry

If untreated, refractive errors may lead to a serious eye condition called amblyopia, or lazy

eye, which can result in blindness. Treatment is most successful if given before the age of 7.

SCREENINGS ARE VITAL

"Your child's eyes should be checked regularly by an ophthalmologist or optometrist and should be given the same level of attention as other standard medical care," advises Adam J. Peiffer, OD, MS, a pediatric optometrist with UH Rainbow Center for Women & Children. "Pediatricians do an excellent job screening for eye problems; however, screenings do not replace the need for regular comprehensive eye exams. Often, children do not complain about their vision because they do not know what 'normal' vision looks like."

Whether or not your child has experienced eye trouble, Dr. Peiffer recommends making sure they get an eye exam at the following ages:

- 6 months to 1 year
- About 3 years
- About 5 years

Dr. Peiffer adds, "If your child begins showing signs or symptoms of eye problems, let their pediatrician or eye doctor know. Even if no problems were detected at the last eye exam, your child may need another one. Visual needs change as your child grows." •

Did you know?

More than 20% of school-age children in the U.S. have vision problems. That means their ability to play on sports teams, excel in class and keep up with their peers may be significantly impaired. One recent study found that students who received proper vision screenings, exams and corrective eyeglasses were more likely to score better on comprehensive achievement tests.



>> High-quality vision care and optical services are available at the UH Rainbow Center for Women & Children in Midtown Cleveland.

The services are kid-friendly and include comprehensive and medical eye exams, glasses, fittings and adjustments. The vision care center, which accepts Medicaid and most other insurance, also features access to one of the largest selections of quality prescription eyewear for children. Call **216-508-7660** for an appointment.



hether your child runs to win races, to train for another sport or just for the joy of it, running can be tough on the body. Running may cause stress fractures, Achilles tendinitis, shin splints, and just plain sore feet and knees.

Following these training tips from Laura Goldberg, MD, Director of Westside Sports Medicine, UH Rainbow Babies & Children's Hospital, can help your child keep many injuries at bay:

- Choose your child's running shoes carefully. Make sure they provide good shock absorption and strong support. A shoe with a stiff heel counter (the part at the back of the heel above the sole) offers more rear foot control, which can help keep the foot and ankle from rolling. Your child should never run a race in new shoes and should always make sure their laces are tied tightly.
- **Replace worn shoes.** Your child needs new ones after 500 miles of use; that's about every eight months if they run 2 miles or more a day.
- Run on a track or other soft surface. This will help decrease the pounding to the feet and legs. Avoid running on a slanted surface.
- Warm up before and cool down afterward. Your child should stretch both before and after a run. The stretching routine should include stretches for the calves, thighs and hamstrings.
- Begin running sessions with a slow walk. Progress to a slow jog before picking up speed.

- Use proper technique. Avoid overstriding or taking too wide a stride by having the feet land beneath the hips. Keep the shoulders back and the hands lightly cupped. Avoid clenching the fists. Maintain the elbows at a 90-degree angle, close to the body.
- Increase running time, distance and intensity gradually. It's best for your child to take off one or two days a week. Doing so will allow their body time to recover.

Despite doing everything right, your child still might come down with an injury. These tips may aid in recovery:

- Apply ice to areas with swelling. Use heat if there is minimal swelling over an area that needs increased circulation.
- Switch to non-weight-bearing exercises.
 Swimming and bike riding are good alternatives.
- Perform stretching and strengthening exercises. A physical therapist or sports medicine specialist can provide an appropriate regimen, depending on your child's injury.

If your child develops any recurring leg, knee or foot pain from running, consult your child's doctor for treatment options. •

>> Schedule an appointment today with a UH Rainbow sports medicine expert at 216-508-7642 or UHRainbow.org. Learn more at Rainbow.org/ SportsMedicine.



MEET OUR DOC LAURA GOLDBERG, MD Director, Westside Sports Medicine, UH Rainbow Babies & Children's Hospital Clinical Assistant Professor, Case Western Reserve University School of Medicine



Why they're extra meaningful for teens

s you start to prepare your child for a new school year, a physical exam or checkup might be on the to-do list. And for good reason. Adolescence is a vital time for regular health care visits.

Teens and tweens are forming habits that may affect their health for the rest of their lives. Many risk factors and behaviors that can lead to adult diseases begin in the teen years. What's more, some young people are being drawn toward risky behaviors that could endanger them now or in the future. The right care approach can help detect and prevent problems.

Home sweet 'medical home'

No matter the catalyst for your teen's checkup – whether it be a sports physical or precollege physical – make sure your child continues to see a pediatrician throughout their teenage years for any comprehensive physical exam. Why? Think of your child's pediatric practice as their medical home – an environment where their medical history is best known and you're both building a trusting, collaborative relationship with a pediatric team. Your child's medical home will help support the long-term goal of quality medical care as your child grows into adulthood.

Why your child's **pediatrician** is the best choice for his or her well-child exam:

1. They understand teens best.

Pediatricians focus on health issues and concerns unique to teens and young adults.

"We are experts in providing teens with age-appropriate care – from administering regular screenings and vaccines to discussing developmental and mental health," says

Brian Zack, MD, general pediatrician with Pediatricenter – Bainbridge.

2. They can help address sensitive issues that are unique to teens.

According to Dr. Zack, here are a few examples of what pediatricians are trained to manage:

- Offering advice to reduce risky behaviors, such as substance abuse and high-risk sexual activity
- Checking for problems related to social, mental or emotional health, such as depression, anxiety, eating disorders or safety needs
- Addressing issues related to puberty and/or sexual or reproductive health

3. They're well qualified to check everything else.

Pediatricians can also provide the basic, routine health care checks that come with a comprehensive physical exam, including:

- Screening for diseases and disorders such as cardiac abnormalities, diabetes, sickle cell trait, concussions, musculoskeletal abnormalities, and rare, potentially serious conditions or physical health issues
- Providing preventive care, ensuring health screenings and vaccines are up to date
- Advice related to eating, exercise and sleep habits

Dr. Zack adds, "Be sure to give your child some private time during the appointment to talk to the doctor in confidence. And remember, both you and your teen should feel comfortable with your doctor to cover sensitive issues. Most important, pediatricians help your child develop the autonomy and maturity they will need to make independent medical decisions as an adult."



MEET OUR DOC BRIAN ZACK, MD General Pediatrician, Pediatricenter – Bainbridge Clinical Instructor, Case Western Reserve University School of Medicine

>> When was your child's last checkup?

Your pediatrician's office is your child's medical home — where he/she is known best and holistic care can be provided to optimize their physical, emotional and developmental needs. Annual well child exams are recommended to maintain your teen's well-being. Find more about our pediatric care at UHRainbow.org/Pediatrics.

KEEP AN EYE ON YOUR TEEN'S HEALTH

Teenagers may think they're invincible, but it's still important for them to have regular well-child checkups. These visits can help catch health problems early, and they're an important opportunity to help address sensitive issues that are unique to teens.

Here are some important aspects of teen checkups:

Preventing substance abuse

There's a substance abuse threat that's exploding in popularity among middle and high school students. "Juuling" (or vaping) has been around since 2015 when the JUUL brand of e-cigarettes was introduced.

These products look like a USB flash drive. Inside is a cartridge with liquid that comes in various fruit and dessert-inspired flavors – a big part of their appeal. Each cartridge holds about the same amount of nicotine you'd find in a pack of cigarettes.

A study published in the journal Pediatrics found that use of e-cigarettes makes youth more likely to say they planned to smoke cigarettes in the future. E-cigarette use has also been associated with future marijuana use.

As professionals with whom children have a trusting, lasting relationship, pediatricians play a critical role in preventing substance abuse and helping teens navigate risky behaviors.



Depression and mental health





Hearing and vision checks



Dental check



Acne and skin care discussion



Vaccines, including human papillomavirus (HPV) vaccine



Body mass index check





Nutrition and exercise counseling



Body safety discussions (safe driving, gun safety, abuse awareness, etc.)





Sexually transmitted infections education and screening





Substance abuse counseling

Looking for a pediatrician for your teen? Visit UHRainbow.org/Pediatrics to find one.



n her pink superhero cape embellished with a blue A, 5-year-old Ava Loveland is bursting with energy. Watching her play, you would never guess she has faced health challenges.

Yet, up until last summer, Ava's natural exuberance was dimmed a bit. Since birth, she had been plagued by the discomfort of chronic constipation. "Her tummy was distended, and she wasn't gaining much weight," recalls her mother, Alexis Loveland, an emergency medical technician.

Worried, Alexis had taken her daughter to see other doctors before coming to UH Rainbow Babies & Children's Hospital. But none had been able to find a cause for Ava's persistent constipation or a treatment that relieved it.

After four years of frustration, Alexis decided it was time to seek another opinion. So, she brought Ava to see Ramy Sabe, MD, a pediatric gastroenterologist with UH Rainbow Babies & Children's Hospital at the Canfield, Ohio, office. Right away, Alexis knew they had come to the right place. "Dr. Sabe actually listened to what I had to say," she says.

AT LAST, TREATMENT SUCCESS

"About 15% of kids have constipation," says Dr. Sabe. "In most cases, it's due to a lifestyle issue, such as change in routine, toilet training, pain with bowel movements, not staying hydrated, not eating enough fiber or being distracted while sitting on the toilet – kids have a lot more fun things to do than pooping! But in about 5% of kids with chronic constipation, it's caused by an underlying disorder."

Doctors had tried various oral medications to treat Ava's constipation, but they hadn't solved the problem. So, Dr. Sabe ordered several tests. They revealed that Ava had colonic dysmotility, a disorder in which the colon (large bowel) doesn't move properly.

To treat the disorder, Ava needed a cecostomy, a surgical procedure in which a tube is inserted through the lower right abdomen into the first part of the large bowel.

Thereafter, fluid containing medications can be delivered straight to the bowel through the tube. This flushes out the bowel, preventing constipation. When not in use, the outer opening of the tube can be tightly sealed with a cap.

Ava's surgery was performed last August by Edward Barksdale Jr., MD, Surgeon-in-Chief and Chief of Pediatric Surgery at UH Rainbow Babies & Children's Hospital. "Dr. Barksdale did an amazing job," says Alexis. "Ava had her surgery on a Thursday and was home by Saturday night. She had one dose of pain medication directly after surgery and then she was up, running around and playing."

MEET OUR DOC RAMY SABE, MD Pediatric Gastroenterologist, UH Rainbow Babies & Children's Hospital Assistant Professor, Case Western Reserve University School of Medicine

LIFE WITH A CECOSTOMY TUBE

Today, thanks to nightly bowel flushes through her cecostomy tube, Ava is thriving. "She gained 7 pounds in the first two months after surgery because she was eating more," says Alexis. "She's also happier and playing more now."

Dr. Sabe notes, "Constipation is a common cause of abdominal pain in children. If it continues over time, it can lead to worsening symptoms and sometimes bowel accidents. Some kids also begin to fear having a bowel movement because it's usually large and painful when they do. Getting their chronic constipation under control can greatly improve these kids' quality of life."

Ava, who likes to wear her superhero cape when she visits Dr. Sabe, is a shining example. She's a bundle of enthusiasms, from My Little Pony to playground slides. She can even go swimming with the cecostomy tube in place. Now there's nothing holding this super-kid back from enjoying all the things she loves. •

"Getting their chronic constipation under control can greatly improve these kids' quality of life."

- Dr. Sabe

>>> Experts in kids' digestive health

The pediatric gastroenterology team at UH Rainbow Babies & Children's Hospital offers state-of-the-art diagnostic testing. The team also provides a wide range of treatment and management options, including medications, endoscopic procedures, anorectal biofeedback, pelvic floor strengthening, nutrition evaluation, counseling and surgery. Learn more at UHRainbow.org/DigestiveHealth.



Pregnant? Know the warning signs of preeclampsia



MEET OUR DOC
MELISSA MARCH, MD
Maternal Fetal Medicine
Specialist, UH MacDonald
Women's Hospital
Assistant Professor, Case
Western Reserve University
School of Medicine

eveloping high blood pressure during late pregnancy may signal preeclampsia. Untreated, this condition may threaten both mother and child. Fortunately, preeclampsia is usually easily detected during prenatal care visits, and close monitoring can help women who develop it stay healthy and deliver healthy babies.

Take this quiz to test your knowledge of

preeclampsia. Melissa March, MD, maternal fetal medicine specialist at UH MacDonald Women's Hospital, provides the answers.

- 1. In preeclampsia, the fetus may receive less oxygen than normal.
- O True O False
- 2. Having high blood pressure during pregnancy means you have preeclampsia. O True O False
- 3. A woman's age affects her risk for preeclampsia.
- O True O False
- 4. Women at risk for preeclampsia can take steps to help prevent this disease.
- O True O False
- 5. A toxin, called "toxemia," causes preeclampsia.
- O True O False
- 6. Doctors may recommend delivering the baby early to treat preeclampsia.
- O True O False

ANSWERS

- **1. True.** Preeclampsia is a disorder in which the mother's high blood pressure may limit blood supply to the placenta and fetus. This may result in the fetus receiving less oxygen and fewer nutrients. This can cause poor growth, low amniotic fluid and more serious complications.
- **2. False.** High blood pressure during pregnancy, called gestational hypertension, doesn't necessarily mean you have preeclampsia. It's only one symptom of preeclampsia. Pregnant women who notice any of the following possible warning signs should talk with their doctors:
- Swelling that doesn't disappear after resting (especially in the face and hands)
- Gaining more than 5 pounds a week
- Severe headaches, dizziness, nausea or vomiting
- Double or blurred vision
- Abdominal pain
- **3. True.** Being younger than age 20 or older than age 35 boosts the risk. Other risk factors include:
- Developing either gestational hypertension or preeclampsia during an earlier pregnancy, or having a history of high blood pressure
- Having medical conditions such as diabetes, lupus and kidney disease
- Carrying more than one baby at a time
- Being obese
- First pregnancy
- Having a family history of preeclampsia
- **4. True.** Experts advise women with a high risk for preeclampsia to take low-dose aspirin daily starting at the beginning of the second trimester, which reduces their risk. Talk with your doctor about your risk. Exercise during pregnancy may help prevent preeclampsia, as well as other complications, such as gestational diabetes.
- **5. False.** While people did previously believe that this disorder was caused by a toxin, health care providers now know this is not true.
- **6. True.** If you have preeclampsia and your pregnancy is at 37 weeks or later, the doctor will usually opt to deliver the baby to avoid further complications. If your pregnancy is at less than 37 weeks, the doctor may consider the following options:
- Wait to deliver and monitor as an outpatient (if preeclampsia is mild)
- Admit to the hospital for close observation until delivery
- Treat blood pressure with oral medications
- Deliver at 34 weeks gestation (or earlier) if preeclampsia is severe •

UH MacDonald Women's Hospital provides exceptional prenatal care for women with high-risk pregnancies. Find out more at **UHhospitals.org/Pregnancy**.



hen your baby is howling from a sharp little incisor that's just itching to break through the gumline, you understandably want to do whatever you can to stop the pain. But if your go-to has been homeopathic teething tablets and gels, you'll want to switch up your strategy – the U.S. Food and Drug Administration (FDA) recently announced that these may pose a risk to children and infants.

The FDA warns caretakers to be on the lookout for the following symptoms after using a homeopathic teething aid:

- Seizures
- Difficulty breathing
- Excessive sleepiness
- Muscle weakness
- Flushed skin
- Constipation
- Trouble urinating
- Agitation

If you observe any of these symptoms, contact your pediatrician immediately.



6 simple solutions

"The good news is that teething pain can be managed without medications of any kind, whether prescribed or over the counter," says Bo Espinosa-Setchko, MD, MPP, a general pediatrician at UH Rainbow Babies & Children's. "In fact, many pain relievers contain benzocaine, which can pose a safety risk leading to methemoglobinemia, a blood disorder that causes a reduction in blood oxygen and can be fatal." Benzocaine is sold under brands like Anbesol, Baby Orajel, Cepacol, Chloraseptic, Hurricaine, Orabase, Orajel and Topex, along with generic and store brands advertised as relieving oral pain. Dr. Espinosa-Setchko advises trying these allnatural items instead, to help make your baby a little more comfortable:

- **A wet washcloth.** Place it in the freezer for 15 to 30 minutes first and then let your child gnaw on it.
- A frozen banana or berries. These are an option once you've introduced solids.
- **Solid teething rings.** Chill these in the freezer beforehand but not to the point at which they're rock solid. Skip the liquid-filled rings, as there's a chance that sharp teeth could puncture these and release the liquid, which may contain bacteria.
- A sippy cup of cool water. This is a good choice once your baby is older than 6 to 9 months.
- **Chewy toys.** Try ones made of silicone or latex instead of plastic, which may contain potentially harmful chemicals.
- **Your finger.** This works best before your tiny tot has sprouted any teeth, of course. Just be sure to wash your hands first! •



MEET OUR DOC BO ESPINOSA-SETCHKO, MD, MPP General Pediatrician, UH Rainbow Chardon Pediatrics

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A guide for your

child's first years



Kids on Horses

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- 9 a.m. check-in
- Lunch included/served after the program

To register or for more information, contact Michele Rothstein: 216-286-6553 Michele.Rothstein@uhhospitals.org