



Familiesfirst

SUMMER 2023

NICU
CELEBRATES
50

PLUS
SOOTHING NEWBORNS
HEART SCREENINGS FOR YOUNG ATHLETES
DEMYSTIFYING HYDRATION

WakeMed 
Children's

A young boy with short dark hair, wearing a white hospital gown with a blue pattern, is smiling warmly at a doctor. The doctor, an older woman with short grey hair, is wearing a white lab coat and has her hand on the boy's shoulder. The background is a bright, out-of-focus hospital room.

HOORAY FOR WAKEMED CHILDREN'S!

Congratulations to the entire WakeMed Children's team for being named to The Leapfrog Group's list of Best Hospitals for Pediatrics.

This special honor places WakeMed Children's in rare company, as one of only 25 hospitals nationwide to be named to the list.



Welcome to the summer issue of Families First! We hope you take time to read over this issue and find the contents to be educational and informative. From health, wellness and safety education to nutrition and recreation, we strive to bring you a variety of topics that fit into your everyday lives.

This summer, we celebrate several milestones for WakeMed Children’s, including the 50th anniversary of our Neonatal Intensive Care Unit, along with being one of only 25 hospitals nationwide named to The Leapfrog Group’s list of Best Hospitals for Pediatrics. This distinction recognizes that WakeMed Children’s Hospital consistently delivers the safest, highest quality care for pediatric patients along with an excellent hospital experience. These are incredible achievements for WakeMed Children’s, and it reaffirms our commitment to the community and families we serve.

Since opening the new WakeMed Children’s Hospital in 2010, we have consistently added to the number of different pediatric specialties we offer as well as the number of highly skilled doctors, nurses and many others who make caring for children their entire focus. This means your child can receive the quality care they need and deserve, close to home. Our commitment to quality, safety and access is unwavering, and our exceptional team of caregivers across the community work tirelessly to provide a consistent experience for children and families.

As we strive to continually improve access, services and quality care, we’d like your input. After all, patients and families are the reason for everything we do, and we value your feedback to help us improve.



The WakeMed Patient & Family Advisory Council is a group of WakeMed patients and family members who share their time, suggestions and ideas to help us improve the care experience at WakeMed. If you are a current or past patient, or the family member of a current or past patient, we invite you to consider joining the council. **Scan the code for more information.**

If you have ideas, questions or topics you would like to see covered in future issues of Families First, we welcome you to reach out and share with us at FamiliesFirst@wakemed.org.

On behalf of everyone at WakeMed Children’s, we wish you and your family a healthy and relaxing summer!



Yours in health,
Karen Chilton, MD



NICU 50

Raleigh Campus NICU Turns 50

Five Decades of Caring for Our Tiniest Patients

The first intensive care nursery at WakeMed opened in July 1973, two years before the American Board of Pediatrics created the first subspecialty board exam for Neonatal-Perinatal Medicine. The two-room unit, which had space for just 14 isolettes, was made possible by funds from hospital volunteers alongside a negative pressure respirator donated by the March of Dimes. It was staffed by a small team of nurses, one physician – Dr. Archie Johnson – and pediatric residents from UNC.

Today, the WakeMed Neonatology team includes eight neonatologists and 38 advanced practice providers who care for babies within the 48-bed Level IV Regional NICU at Raleigh Campus, the eight-bed NICU at Cary Hospital and the six-bed Special Care Nursery at North Hospital. Rounding out the care team are the incredibly committed pediatric specialists and subspecialists, nurses, nurse aides, respiratory therapists, lab techs, and other clinical and support staff.

The field of Neonatology has undergone tremendous change, innovation and growth in the past 50 years, and these advancements have made all the difference for millions of babies. According to the journal *Nature*, a 1-kg infant born in 1960 had a mortality risk of 95%; by 2000, a baby of that size had a 95% probability of survival.

Our WakeMed program has also achieved numerous milestones that have helped advance the practice of neonatology and improve outcomes for our tiniest patients and their families, including:

- Becoming the fourth NICU in the world to earn Newborn Individualized Developmental Care and Assessment Program (NIDCAP) certification, as well as being home to the Carolina NIDCAP Training Center – a designation first earned in 1989.
- The creation of the NEOFAX (originally Neodex) neonatal drug manual, by WakeMed neonatologist Tom Young, MD, and Barry Mangum, PharmD, which quickly became the leading manual of its kind and has been translated into several languages.

- Becoming the first hospital in Wake County to incorporate single-patient rooms in a NICU setting, which offers more privacy and quiet time for babies and families.
- Establishment of North Carolina's first HMBANA-accredited human milk bank, which today is based at Cary Hospital and provides safe, pasteurized donor milk to babies in NICUs along the East Coast.

"Developmentally supportive care has always been the focus at WakeMed," explains James Perciaccante, MD, director of Neonatology. "We do our best to individualize care to promote healthy brain development by allowing the baby to rest when asleep and clustering care during the times they are awake. It is important to not disrupt the neuronal connections that are happening." If follow-up care is needed after a NICU stay, babies are transitioned into the Special Infant Care Program, where comprehensive care continues for up to three years.

Family support is equally important, and WakeMed offers several resources, including the Ronald McDonald Family Room and Ronald McDonald House rooms (both at Raleigh Campus), family respite rooms and real-time, 24/7 secure video access to NICU patients through the NicView™ streaming system. For the last several years WakeMed has also had a dedicated family navigator, who helps advocate and support families throughout their NICU journey. Many of these services and other enhancements to NICU care have been supported by the WakeMed Foundation.

Looking to the future, Dr. Perciaccante explains that despite the many technological advancements of the past several years, neonatology is currently shifting toward less-invasive care. While the technology is important to have when needed for life-saving care, he says, there is more emphasis today on using natural interventions and encouraging babies to spend time with their parents, which is truly the best thing to support healthy development.

SOOTHING NEWBORNS

Crying is how babies communicate, and in the beginning they cry a lot. Sometimes, you can easily determine what a baby needs, and it's often simply time to feed them, or change their diaper. At other times, the crying can be more puzzling to parents. The baby might be uncomfortable, too hot, cold, or experiencing some type of pain such as gas or acid reflux.

Elizabeth Cleland-Roberts, MD, FAAP, medical director, WakeMed Children's – Pediatric Primary Care, says that babies really are in charge in the early days and months of their life, and frequent crying is normal. The main thing parents can do to soothe them is to make sure the baby's basic needs are met and that they feel comforted and cared for in this important developmental time.

If crying doesn't subside with feeding or a dry, clean diaper, take a closer look at how they seem. Check their hands, feet, lips, breathing and body temperature to make sure nothing seems abnormal. If all seems ok, but they continue to cry, Dr. Cleland-Roberts says there are several soothing steps you can take to help calm babies.

“Shushing and swishing and swaying can all help recreate that feeling of the womb.” DR. ELIZABETH CLELAND-ROBERTS

“A lot of us are taught not to spoil kids, but you can't spoil a neonate or infant, and it's important to respond to their needs, which include being held and comforted,” said Dr. Cleland-Roberts. “Babies need lots of attention and close personal connections.” To help soothe babies, she recommends trying the 5 S's, which were pioneered by Harvey Karp, MD.

- **Swaddling** helps infants feel snug and stops the flailing of limbs, which is caused by the Moro reflex. Swaddle nice and tight but allow room for legs and hips to move freely.
- **Side/Stomach** positioning (ONLY while awake) can provide some relief from gas pain. You can place your baby's tummy against your arm with their head in your hand or crook of your arm.
- **Shushing** sounds that go past the ear (not in or directly at it) can help calm babies. Try making a shush that passes by the baby's ear approximately 2 to 4 inches away from their head. As the baby begins to calm, soften the shush sound. Some babies may sleep better with a soft but continual shushing, which can be created with a white noise machine.



- **Swinging** or other rhythmic movements such as rocking, dancing and pats on the back can be helpful. Start with slightly faster movement (but never ever shake a baby) and ease into slower, calmer movement as the baby begins to settle down. Some babies will also find comfort in a baby carrier that allows them to be close as a parent takes care of things around the house. Car rides and stroller walks are also comforting to many babies. Baby swings and bouncers can be both fun and calming, but they should always be supervised.
- **Sucking** is extremely soothing to babies, and many have been sucking since in the womb so it's a natural transition for them to enjoy sucking on bottle nipples, breasts, fingers and pacifiers.

Soothing & Sleep

Newborns and infants need to eat and have their diaper changed frequently so they aren't going to sleep for long periods of time.

Typically a newborn is going to sleep for 20 to 50 minutes and will want to eat every couple of hours, which means parent sleep schedules won't be the same for a while either. "In the early months, families should try to remain flexible and let go of less important tasks so they can grab rest when possible and do their best to care for the baby," said Dr. Cleland-Roberts. "The crying and sleepless nights don't last forever, and you'll eventually figure out your family's new routine so try to embrace the together time and get to know your baby."

As newborns grow and develop, your pediatrician can provide guidance regarding the amount and frequency of sleeping and feeding to expect. Keep in mind that the development and needs of premature and neonate babies can vary greatly.

"While parents can help soothe babies to sleep, they shouldn't have expectations for any type of sleep schedule before 4 to 6 months, and it's important to understand that newborn babies aren't able to start soothing themselves back to sleep until around 6 months," said Dr. Cleland-Roberts. "Everything inside of newborn babies is immature so they can't control reflex movements, and that is why swaddles and sleep sacks can help them relax and sleep better."

Some babies might fight the swaddle because they want to suck on their hand, and some sleep sacks are designed to keep a hand out for that reason.



Tummy Time

Since everything is so new, it can take a while for babies' systems to get used to processing food, and that leads to uncomfortable gas. "Early on, simply holding them tummy down on your arm is helpful, and you can start doing some supervised, awake tummy time on the floor around 1-month-old."

Remember, babies should always be placed on their back to sleep in a safe crib on a flat mattress that is free of blankets, bumpers, toys and other items.

Your newborn baby is the boss so don't start or try to keep any set schedule until at least after the first 12 weeks.

Crying Concerns

Sometimes you've tried everything, and the baby will not stop crying. "As long as you know they are safe and not sick, it is ok and sometimes even helpful to take a break by putting them in their crib and stepping away for a little while," said Dr. Cleland-Roberts. "Babies can sense your anxiety, and patience and understanding is important so take a deep breath and know that it's ok to ask for help if you're exhausted or feeling stressed out."

Call your pediatrician's nurse line to share your concerns and tell them how you're feeling. Also ask family members and friends if they can come help so you can take more breaks.

Seek Medical Help

If you've met a baby's basic needs, but they are still crying and any of the following occurs, it's time to see a doctor:

- > The baby is sick, especially if they have a fever of more than 100.4 F
- > Crying constantly for more than three hours
- > Cry sounds different, or they appear to be in pain
- > Feeding is difficult or noticeably reduced
- > Baby is vomiting or having diarrhea
- > You cannot soothe the baby
- > You are scared, tired, angry or feel like you might hurt the baby

Never shake a baby. Most parents think this is something you'd never do, but it does happen at times so remember not to hold a baby when you are frustrated or angry. New parents are usually lacking sleep and juggling a lot.

ASK FOR HELP!

Childhelp 24/7 Hotline
1-800-4-A-Child
childhelpline.org

SAFEchild
910.898.2139 or safecildnc.org



SportFit Heart: An EKG Screening Event

Thursday, August 17 • 5 to 8 pm

WakeMed Apex Healthplex
120 Healthplex Way, Apex

A cardiac arrest can happen quickly and without warning and not just to older adults. In fact, it is reported that a young competitive athlete dies suddenly every three days in the United States. And for young athletes the risk is twice that of non-athletes.

A simple, non-invasive test called an EKG can help to identify potential life-threatening conditions. This free screening event is open to athletes in all disciplines between 11 and 18 years of age. All athletes under the age of 18 must be accompanied by a parent or legal guardian. Preliminary results will be made available to participants and parents on the day of the event.

Register at events.wakemed.org



Heart Screenings for Young Athletes

Q&A with Dr. Jason Ho, Pediatric Cardiologist



SportFit Heart:
An EKG Screening Event
Thursday, August 17 • 5 to 8 pm

Who can and should participate in this screening?

Any youth athlete between the ages of 11 and 18 years of age can sign up for the free screening offered by WakeMed, and it is wise to get youth screened regardless of whether they participate in a team sport or other individual athletic activities such as cycling, running, rock climbing, kayaking or dance. There is no universal agreement on the best ages for screening, but I think that in a perfect world every child should be screened before participating in athletics.

Why is the screening specifically for athletes?

The risk of sudden cardiac arrest for young athletes is twice that of non-athletes.

“Through this community outreach service, we are potentially able to catch unknown heart health concerns in athletes and guide them to additional testing, treatment and possibly life-saving procedures,” said Dr. Jason Ho, WakeMed Pediatric Cardiologist.

What will happen at the screening?

It's pretty quick and easy. There is no blood draw or radiation. Parents receive a questionnaire to complete, and then we provide an EKG screening for their child. If we find anything of concern, we can do some additional testing and provide a physician referral for the child.

What is an EKG?

An electrocardiogram (EKG) is a simple, painless and non-invasive test that records heart rate and rhythm. It's basically an electronic snapshot of the heart's activity.

What would you like parents and youth to know before the screening?

They do not need to do anything to prepare for the screening. It does not take much time, and there is no reason to be overly worried.

Fortunately the results for most kids are normal, and the screening gives families a little extra peace of mind. However, the screenings can potentially catch previously unknown heart health concerns before a life-threatening situation occurs for a young athlete. Frequently, there are no symptoms despite the existence of a heart health condition that needs to be addressed, so these screenings can help prevent serious cardiac events and save lives.

Why should young athletes get a heart health screening? A cardiac arrest can happen quickly and without warning, and it doesn't just happen with older adults. A young competitive athlete dies suddenly every three days in the United States.

Aside from the free screening, what else should parents and youth athletes know about regarding their heart health?

Anyone with symptoms of chest pain, fatigue, fainting, seizures or trouble keeping up with others during exercise should seek medical attention. And any young athlete who was born with a congenital heart disease or who has a family history of sudden death should definitely get their heart health checked before participating in athletic activities.

What heart health conditions are typically found during a screening?

Fortunately most screenings are normal. An EKG can detect concerns such as Long QT syndrome or Wolff-Parkinson-White, both of which can be life threatening. The biggest concern would be looking for any EKG changes suggestive of hypertrophic cardiomyopathy, which is the number one cause of sudden death in young athletes by far.

Can a youth athlete come to the screening alone?

A parent or legal guardian must accompany all athletes under the age of 18.

What should families expect regarding screening results?

EKG results will be made available to participants and parents on the day of the event. Most will be normal, but we can potentially find abnormalities that require further evaluation and may lead to a procedure, treatment or activity restrictions. Although it is not a common occurrence, a screening could find a serious concern that means a child should not play sports, but that finding is also likely to help prevent a life-altering incident or death.

While no youth athlete wants to be taken out of the game, the screening can help save lives and provide life-changing medical insight for a child's overall health and future.

What proactive steps can be taken to prevent sudden cardiac death?

Regular well-child visits and sports physicals are an important step. Be sure to gather the heart health history of your relatives and share it with your child's doctor and other health care professionals during check-ups and sports physicals.

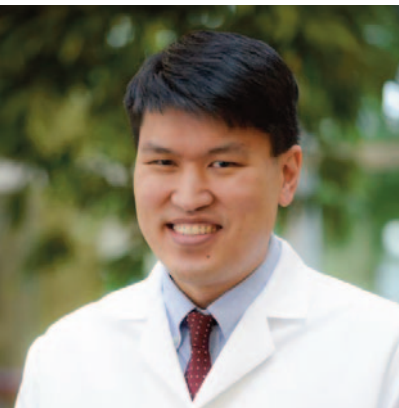
HEART HEALTHY TIPS

Kids should be encouraged to remain active unless good reason exists to slow things down a bit. Follow these mindful tips to help keep athletes and the whole family healthy and in the game.

- Swap out screen time for fun, outdoor adventures.
- Stay hydrated by drinking water throughout the day.
- Stock up on healthy snacks, help kids make healthy food choices, and offer well-balanced meals.
- Stress the importance of steadily building endurance and strength versus overtraining.

Even though they are active, youth athletes can be overweight. Some think that bigger is better. They should be reminded that they can be strong, sturdy and competitive without being overweight. Wise food choices can help prevent future cardiovascular problems, diabetes, sleep apnea and more.

Contact a doctor if a child reports chest pain or shortness of breath. A child with pain at rest is less concerning than pain while exercising. It is not normal to have chest pain when you are being active.



Meet the Expert

Jason Ho, MD, is a pediatric cardiologist with WakeMed Children's – Pediatric Cardiology. He is a graduate of the Brody School of Medicine in Greenville, NC, where he remained to complete his residency in pediatrics, followed by a fellowship at Indiana University as well as a senior fellowship in pediatric electrophysiology at Vanderbilt. Dr. Ho brings a unique perspective to pediatric cardiology as his oldest child was born with a congenital heart defect and underwent surgery at 5 months of age. This experience allows Dr. Ho to relate to patients and their families on both a professional and personal level.

YOU HEAR IT A LOT – STAY HYDRATED! What does this mean for your energetic kids? Do you need to worry about their electrolytes?

First and foremost, good old-fashioned H₂O is the ticket to staying hydrated.

Approximately 75 percent of a person's water intake comes from drinking water and other beverages, and the rest comes from food. You may have heard that adults need at least eight cups of water each day, but the amount is based on body size, temperatures, activities and other factors. Since children are smaller, they need less water than the average adult. Ask your child's doctor for quantity recommendations.

Sports drinks and juices may be popular with kids and parents, but they aren't really necessary unless a child is exposed to high temperatures for a prolonged time or is participating in an hour or more of intense activity. Even then, water is a great solution followed by foods that can replenish lost nutrients.



DEMYSTIFYING HYDRATION



Electrolytes = Sodium and Potassium

A well-balanced diet typically provides plenty of sodium and potassium. Make sure children eat healthy, regularly scheduled meals, and you aren't likely to have concerns. If there will be a lot of time between intense physical activities and the next meal, plan ahead and pack a mini-meal like a peanut butter or turkey sandwich that will give a burst of carbohydrates plus protein.

Keep a stash of bananas and nuts around to grab on-the-go and skip the fast food restaurant stops on the way home from activities. Most of all, avoid foods and beverages that are high in simple carbohydrates such as soda, candy, sugar-filled cereals, cakes and cookies. And keep in mind that milk will go a long way as a recovery drink.

Sugary Sweet

The big problem with a lot of sports drinks is that they are packed with sugar, and overconsumption can lead to weight gain and other health problems such as diabetes. Many families are misled by the fruit colors and flavors. These drinks typically are full of added sugar because a lot of people don't like the flavor of the electrolyte replenishment ingredients. It's not uncommon for a sports beverage to have as much sugar as a can of soda. Other pitfalls for excessive sugar intake include sodas, sweet tea, juice and sugary, powdered drink mixes.

How You Can Help

Ongoing support for the growing health care needs of the patients at WakeMed Children's is made possible through the generous donations of readers like you to the WakeMed Foundation.

To learn how you can support the expansion of WakeMed Children's services, please visit the WakeMed Foundation at www.wakemedfoundation.org or call 919-350-7656.



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CARS & HEATSTROKE

Heatstroke is the leading cause of non-crash, vehicle-related deaths for children. On average, every 10 days a child dies from heatstroke in a vehicle.

Remember to ACT

- > **A: Avoid heatstroke-related injury** and death by never leaving a child alone in a car, not even for a minute. And make sure to keep your car locked when you're not inside so kids don't get in on their own.
- > **C: Create reminders.** Keep a stuffed animal or other memento in your child's car seat when it's empty, and move it to the front seat as a visual reminder when your child is in the back seat. Or place and secure your phone, briefcase or purse in the backseat when traveling with your child.
- > **T: Take action.** If you see a child alone in a car, call 911. Emergency personnel want you to call. They are trained to respond to these situations. One call could save a life.

Source: safekids.org

When to Worry

If your child shows signs of dehydration (see list below) after specific activities, it is okay to supplement their water intake with a low-calorie sports drink. Just don't make it an automatic habit and check for the amount of sugar if they are exercising intensely or seem to need something regularly.

Signs of Dehydration

- > Tired
- > Thirsty
- > Confused
- > Headache
- > Dry Mouth
- > Muscle Weakness



Warning: Dehydration can lead to heatstroke. If electrolytes are really imbalanced, there can be confusion, altered behaviors, muscle twitches, nausea and vomiting. If your child shows these symptoms, hydrate and seek immediate medical attention.

Avoid Energy Drinks

Energy drinks can be very dangerous because high levels of caffeine can cause big problems for children. Since many beverages are labeled as nutritional supplements they are not regulated by the FDA; therefore, they are not required to specifically list the amount of caffeine.

There can be as much as three to 10 times the level of caffeine in an energy drink as there is in a regular soda. Caffeine intoxication is a real and dangerous concern related to energy drinks.

Advisory Panel for Families First

Jerry Bernstein, MD, Raleigh Pediatric Associates, PA
Karen Chilton, MD, Chief Medical Officer, WakeMed Children's & Senior Vice President & Chief Quality Officer
Bridget Donell, MD, Medical Director, WakeMed Physician Practices – Pediatric Critical Care and Hospital Medicine
Amy Griffin, MD, Wake Emergency Physicians, PA
Andy Jakubowicz, MD, Medical Director, WakeMed Children's Emergency Department
Jeff Langdon, Executive Director, WakeMed Women's & Children's

Bill Lagarde, MD, Executive Medical Director, Subspecialty Medicine, WakeMed Children's
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WakeMed
Children's

Pack your picnics and get ready to sing and dance this summer with the Koka Kids Concert Series, presented by WakeMed Children's.

This special series is crafted for children and presented at a time that fits your busy family schedule. Each show is followed by Picnic & Play, featuring a variety of onsite activities from arts and crafts to obstacle course fun. A portion of each ticket sale is donated to the WakeMed Foundation to benefit WakeMed Children's.

Gates 9:30 am

Showtime 11 am - noon

Picnic & Play noon - 2 pm

Scan the code for ticket information and to learn more out the amazing artists scheduled to perform.

