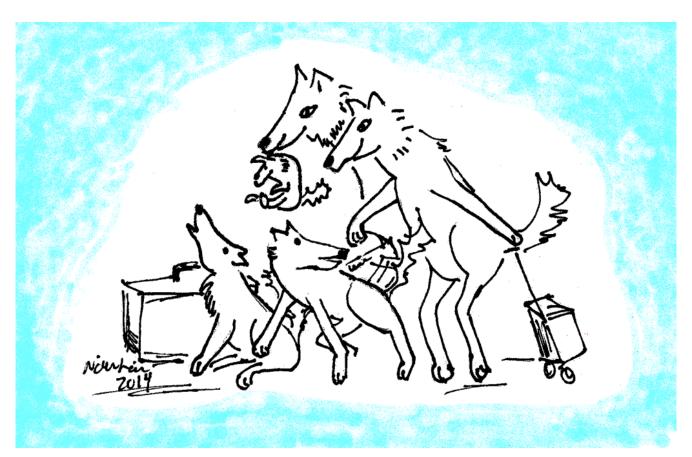
#### Traveling with Young Children



In spite of long TSA lines, rental car challenges and all the howling, the wolf family went to grandmother's house every year for the holidays.

You don't appreciate how much your baby has grown until you attempt a diaper change on a plane. For families with young children, any holiday can become stressful when travel is involved. Often families travel great distances to be together and attend parties that run later than children's usual bedtime. Fancy food and fancy dress are common. Well-meaning relatives who see your children once a year can be too quick to hug and kiss, sending even not-so-shy kids running. Here are some tips for safer and smoother holiday travel:

#### If you are flying:

• Do not offer Benadryl (diphenhydramine) as a way of "insuring" sleep during a flight. Kids can have

- paradoxical reactions and become hyper instead of sleepy, and even if they do become sleepy, the added stimulation of flying can combine to produce an ornery, sleepy, tantrum-prone kid. Usually the drone of the plane is enough to sooth kids into a slumber.
- Not all kids develop ear pain on planes as they descendsome sleep right through landing. However, if needed you can offer pacifiers, bottles, drinks, or healthy snacks during take-off and landing because swallowing may help prevent pressure buildup and thus discomfort in the ears. And yes, it is okay to fly with an ear infection.

#### General tips for visiting:

- Traveling 400 miles away from home to spend a few days with close family and/or friends is not the time to solve your child's chronic problems. Let's say you have a child who is a poor sleeper and tries to climb into your bed every night at home. Knowing that even the best of sleepers often have difficulty sleeping in a new environment, just take your "bad sleeper" into your bed at bedtime and avoid your usual home routine of waking up every hour to walk her back into her room. Similarly, if you have a picky eater, pack her favorite portable meal as a backup for fancy dinners. One exception is when you are trying to say bye-bye to the binkie or pacifier.
- Supervise your child's eating and do not allow your child to overeat while you catch up with a distant relative or friend. Ginger-bread house vomit is DISGUSTING, as Dr. Kardos found out first-hand when one of her children ate too much of the beautiful and very generously-sized ginger bread house for dessert.
- Speaking of food, a good idea is to give your children a wholesome, healthy meal at home, or at your "home base," before going to a holiday party that will be filled with food that will be foreign to your children. Hunger fuels

- tantrums so make sure his appetite needs are met. Then, you also won't feel guilty letting him eat sweets at a party because he already ate healthy foods earlier in the day.
- If you have a young baby, be careful not to put yourself in a situation where you lose control of your ability to protect the baby from germs. Well-meaning family members love passing infants from person to person, smothering them with kisses along the way. Unfortunately, nose-to-nose kisses may spread cold and flu viruses along with holiday cheer.
- On the flip side, there are some family events, such as having your 95-year-old great-grandfather meet your baby for the first time, that are once-in-a-lifetime. So while you should be cautious on behalf of your child, ultimately, heed your heart. At six weeks old, Dr. Lai's baby traveled several hours to see her grandfather in a hospital after he had a heart attack. Dr. Lai likes to think it made her father in law's recovery go more smoothly.
- If you have a shy child, try to arrive early to the family gathering. This avoids the situation of walking into a house full of unfamiliar relatives or friends who can overwhelm him with their enthusiasm. Together, you and your shy child can explore the house, locate the toys, find the bathrooms, and become familiar with the party hosts. Then your child can become a greeter, or can simply play alone first before you introduce him to guests as they arrive. If possible, spend time in the days before the gathering sharing family photos and stories to familiarize your child with relatives or friends he may not see often.
- Sometimes you have to remember that once you have children, their needs come before yours. Although you eagerly anticipated a holiday reunion, your child may be too young to appreciate it for more than a couple of hours . An ill, overtired child makes everyone

miserable. If your child has an illness, is tired, won't use the unfamiliar bathroom, has eaten too many cookies and has a belly ache, or is in general crying, clingy, and miserable, despite your best efforts, just leave the party. You can console yourself that when your child is older his actions at that gathering will be the impetus for family legends, or at least will make for a funny story.

• Enjoy your CHILD's perspective of holidays: enjoy his pride in learning new customs, his enthusiasm for opening gifts, his joy in playing with cousins he seldom sees, his excitement in reading holiday books, and his happiness as he spends extra time with you, his parents.

We wish you all the best this new year!

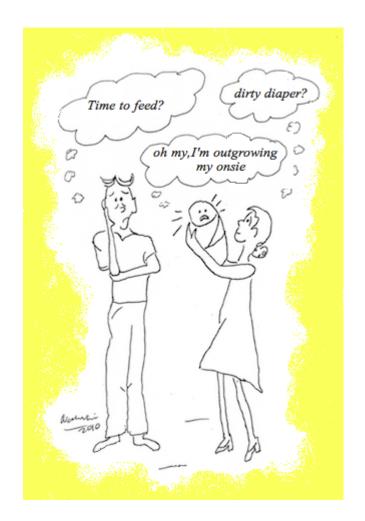
Julie Kardos, MD and Naline Lai, MD

©2014, 2015 Two Peds in a Pod® Updated from our 2009 articles on these topics

# Cry baby: why is my baby crying?

Why do babies cry? In short, newborns cry to communicate. Remember, newborns cannot talk. They can't even smile back at you until around six weeks of age.

Ah, but what are they trying to tell us? Babies cry when they...



- Are tired.
- Are hungry.
- Feel too cold.
- Feel too hot.
- Need to be changed —I never really believed this reason before I had my twins. My firstborn couldn't have cared less if he was wet and could nap right through a really poopy diaper. Then I had my twins. I was amazed that their crying stopped if I changed the tiniest bit of poop or a wet diaper. Go figure.
- Are bored. Perhaps she is tired of the Mozart you play and prefers some good hard rock music instead. Maybe she wants a car ride or a change of scenery. Try moving her to another room in the house.
- Feel pain. Search for a piece of hair wrapped around a finger or toe and make sure she isn't out-growing the elastic wrist or ankle band on her clothing.
- Need to be swaddled. Remember a fetus spends the last

trimester squished inside of her mom. Discovering her own randomly flailing arms and legs can be disconcerting to a newborn.

- Need to be UN-swaddled. Hey, some like the freedom to flail.
- Need to be rocked/moved. Dr. Lai's firstborn spent hours tightly wrapped and held by her dad in a nearly upside down position nicknamed "upside-down-hotdog" while he paced all around the living room.
- Need to burp. Lay her down for a minute and bring her up again to see if you can elicit a burp.
- Are gassy. Bicycle his legs while he is on his back. Position him over your shoulder so that his belly presses against you. You'd be gassy too if you couldn't move very well. The gassy baby is a topic for this entire post— talk to your doctor for other ideas.
- Are sick. Watch for fever, inability to feed normally, labored breathing, diarrhea or vomiting. Check and see if anything is swollen or not moving. Listen to his cry. Is it thin, whimper-like (sick) or is it loud and strong (not so sick)? Do not hesitate to check with your pediatrician. Fever in a baby younger than eight weeks old is considered 100.4 degrees F or higher measured rectally. A feverish newborn needs immediate medical attention.

What if you're certain that the temperature in the room is moderate, you recently changed his diaper, and he ate less than an hour ago?

- Walk outside with your baby— this can be a magic "crying be gone" trick. Fresh air seems to improve a newborn's mood.
- Offer a pacifier. Try many different shapes of pacifiers. Marinade a pacifier in breast milk or formula to increase the chance your baby will accept it.

Pick him up, dance with him, or walk around the house with him. You can't spoil a newborn.

- Vacuum your house. Weird, but it can work like a charm. Place him in a baby frontal backpack or in a sling while cleaning.
- Try another feeding, maybe he's having a growth spurt.
- When all else fails, **try putting him down** in his crib in a darkened room. Crying can result from overstimulation. Wait a minute or two. He may self-settle and go to sleep. If not, go get him. The act of rescuing him may stop the wailing.
- If mommy or daddy is crying at this point, call your own mom or dad or call a close friend. Your baby knows your voice and maybe hearing you speak calmly to another adult will lull him into contentment.
- Call your child's health care provider and review signs of illness.

If you feel anger and resentment toward your crying baby, just put him down, walk outside and count to ten. It is impossible to think rationally when you are angry and you may hurt your child in order to stop your frustration. Seek counseling if these feelings continue.

Now for the light at the end of the newborn parenting tunnel: the peak age when babies cry is six weeks old. At that point, infants can cry for up to THREE HOURS per day. Babies with colic cry MORE than three hours per day. (Can you believe people actually studied this? I am amused that Dr. Lai won a prize in medical school for a paper on the history of colic). By three months of age crying time drops dramatically.

While most crying babies are healthy babies and just need to find the perfect upside-down-hot-dog position, an inability to soothe your baby can be a sign that she is sick. Never hesitate to call your baby's doctor if your baby is inconsolable, and don't listen to the people who say, "Why do babies cry?...They just do."

Julie Kardos, MD and Naline Lai, MD ©2015, 2010 Two Peds in a Pod®

# Should I bring my sick kid to a holiday party?



photo by Lexi Logan

The guidelines for school are straight forward. If your child is sick, the school nurse will tell you exactly what criteria

your child needs to meet before she returns to school. The list generally looks like this: no fever of 101 degrees or higher for over 24 hours, no constant running to the bathroom, no vomiting for 24 hours, etc. However, Grandpa's house is not school. A friend's home is not school. The guidelines to attending holiday gatherings are not as straightforward.

First and foremost: If you are invited to a social gathering and you have an ill child, tell your family and friends who will be there that you have an ill child. You never know if there will be people present who are particularly vulnerable to illness. Some of you have an Uncle Harry who has been too embarrassed to tell you that he is undergoing chemotherapy for prostate cancer or a sister Sarah just found out she is pregnant. Young babies and the elderly are more likely to develop complications if they are ill. On the other hand, if family members or friends all have intact immune systems and have no special risk factors for illness complications, they may be more forgiving and will want to see their ill nephew/cousin/friend who they just flew 400 miles to see. The key is communication.

Babies under two months old, because of their age and unimmunized status, are vulnerable to life threatening infections. Remember that a nagging cough in a toddler can be a life threatening cough for an infant. So you might reconsider bringing your coughing toddler to a gathering where there will be very young infants.

Don't get lulled into believing that germs are killed by Tylenol (acetaminophen) or Motrin (ibuprofen). Even if you have hidden your child's fever with a fever reducing medicine, she is contagious as long as something is spewing from any orifice (nose, eyes, mouth, or bottom).

So if you are going to a family gathering, and your child is mildly ill, here's how to minimize spread of germs:

- 1. Handwashing wash your ill child's hands often to prevent spread of their germs. Also you should wash your healthy children's hands to prevent illness.
- 2. Handwashing (again!) -wash hands before eating and after bathroom use
- 3. Handwashing (again!!) wash your own hands after you have helped your child do the above suggestions.
- 4. When all the children are piled in a heap watching The Grinch, take time to separate your ill child from the batch. Daycares put two feet between sleeping cots in order to minimize spread of germs. Protect airspaces.
- 5. Elderly people will be happy to observe your runny-nosed children frolicking about from the distance. No need to force your five year old with the runny nose to kiss great- grandma's face.
- 6. Teach kids to cough into crook of elbow, to use tissues…and then wash hands.

If you realize that you will be dragging a medicine cabinet with you to a party, reconsider going. One mom says she cringes whenever she sees her sister show up to parties carting along a medication nebulization machine for her child. Consider what is best for your child. No matter how much your child, and you, have anticipated the holiday gathering, home is always the most comfortable place for a child to recover from illness.

Thinking hard about whether or not you should attend a holiday gathering? Then you are thinking too hard. Just stay home. Besides, you haven't been a real parent until you've missed at least one party because of a child's illness.

Julie Kardos, MD and Naline Lai, MD

©2015 Two Peds in a Pod®, revised from our 2009 post

#### Thankful for Foster Parents



A foster mom brought a new child into the office the other day and I smiled picturing her with her last foster child. This thanksgiving, Two Peds in a Pod is grateful for the foster parents who open their homes for dinner today and everyday. Dr. Heather Forkey, Clinical Director of Foster Children Evaluation Service at UMass Children's Medical Center, provides a post on becoming a foster parent. —Dr. Lai with Dr. Kardos

There are approximately 400,000 children in the US foster care system, with 225,000 entering each year. Most of these children spend time with foster families who open their homes

and lives to kids that need a safe nurturing environment while their own parents take the time to address issues which put the child at risk. All types of people make great foster parents, but it is not for everyone. Foster parents must be able to meet the physical, emotional and developmental needs of a child or teen in partnership with community agencies, social workers, schools, and counselors.

If you are considering foster parenting, consider whether you can:

- Provide 24-hour care and supervision on a daily basis
- Be able to care for yourself financially without the child's stipend
- Be flexible, patient and understanding
- Have a sense of humor
- Recognize the impact of trauma
- Have a home free of fire and safety hazards
- Complete a criminal/protective services background check
- Have the ability to work as a member of a team

If interested, you need to become licensed or approved by your state or county, and that process is different in each locality. One should start by doing an internet search for "becoming a foster parent in (your state or county)". The child welfare agency for your state (Department of Children and Family Services or Department of Social Services) will also have information about how to start the process.

Children come to foster care often after adverse experiences which we know have health, emotional and developmental consequences. Foster parents who can look at the child's health and behavior from a perspective of "what happened to the child" rather than "what is wrong with the child", and observe a child's behavior through the trauma lens (and help foster and child welfare personnel to do the same) allow the child in their care to view their health and emotions as normal adaptations to unhealthy situations, rather than

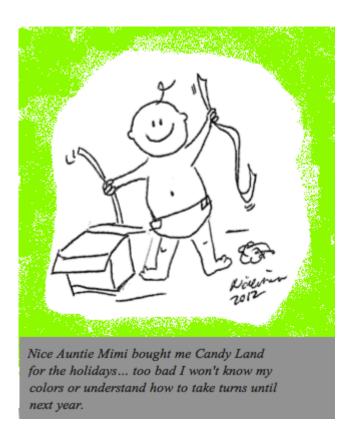
evidence of illness. This allows the child to go forward with a better understanding of their experience, their own responses and, ultimately, foster health.

Heather C. Forkey, M.D.

Dr. Heather Forkey serves as the Clinical Director, Foster Children Evaluation Service (FaCES) and the Chief of the Child Protection Program at Mass Children's Medical Center

2015 Two Peds in a Pod®

# Holiday gift ideas for children of all ages and stages



For those of you who plan It's ahead: gift-giving season! We love pop culture, if v o u are tired of but GameStop gift cards or feeling a bit overwhelmed by *Frozen*, Wars and Minecraft marketing, here's another list of ideas arranged by ages and developmental stages.

**0-3 months:** Babies this age have perfect hearing and enjoy looking at faces and objects with contrasting colors. Music, mobiles, and bright posters are some age appropriate gift ideas. Infants self-soothe themselves through sucking- if you can figure out what your nephew's favorite type of binkie is, wrap up a bunch-they are expensive and often mysteriously disappear.

**3-6 months:** Babies start to reach and grab at objects. They enjoy things big enough to hold onto and safe enough to put in their mouths- try bright colored teething rings and large plastic "keys." New cloth and vinyl books will likewise be appreciated; gnawed books don't make great hand-me-downs.

**6-12 months:** Around six months, babies begin to sit alone or sit propped. Intellectually, they begin to understand "cause and effect." Good choices of gifts include toys with large buttons that make things happen with light pressure. Toys which make sounds, play music, or cause Elmo to pop up will be a hit. For a nine-month-old old just starting to pull herself up to a standing position, a water or sand table will provide hours of entertainment in the upcoming year. Right now you can

bring winter inside if you fill the water table with a mound of snow. Buy some inexpensive measuring cups and later in the summer your toddler will enjoy standing outside splashing in the water.

12-18 months: This is the age kids learn to stand and walk. They enjoy things they can push while walking such as shopping carts or plastic lawn mowers. Include gifts which promote joint attention. Joint attention is the kind of attention a child shares with you during moments of mutual discovery. Joint attention starts at two months of age when you smile at your baby and your baby smiles back. Later, around 18 months, if you point at a dog in a book, she will look at the dog then look back at you and smile. Your child not only shows interest in the same object, but she acknowledges that you are both interested. Joint attention is thought to be important for social and emotional growth.

At 12 months your baby no longer needs to suck from a bottle or the breast for hydration. Although we don't believe mastery of a <u>sippy cups</u> is a necessary developmental milestone, Dr. Lai does admire the WOW cup because your child can drink from it like she does from a regular cup. Alternatively, you can give fun, colored actual traditional plastic cups, which difficult to break and encourage drinking from a real cup.

18-24 months: Although kids this age cannot pedal yet, they enjoy riding on toys such as "big wheels" "Fred Flintstone" style. Dexterous enough to drink out of a cup and use a spoon and fork, toddlers can always use another place setting. Toddlers are also able to manipulate shape sorters and toys where they put a plastic ball into the top and the ball goes down a short maze/slide. They also love containers to collect things, dump out, then collect again.

Yes, older toddlers are also dexterous enough to swipe an ipad, but be aware, electronics can be a double edged sword— the same device which plays karaoke music for your daddy-toddler sing-along can be transformed into a substitute parent. The other day, a toddler was frighted of my stethoscope in the office. Instead of smiling and demonstrating to her toddler how a stethoscope does not hurt, the

mother repeatedly tried to give her toddler her phone and told the child to watch a video. Fast forward a few years, and the mother will wonder why her kid fixates on her phone and does not look up at the family at the dinner table. Don't train an addiction.

- 2-3 years: To encourage motor skills, offer tricycles, balls, bubbles, and boxes to crawl into and out of. Choose crayons over markers because crayons require a child to exert pressure and therefore develop hand strength. Dolls, cars, and sand boxes all foster imagination. Don't forget those indestructible board books so kids can "read" to themselves. By now, the plastic squirting fish bath toys you bought your nephew when he was one are probably squirting out black specks of mold instead of water- get him a new set. Looking ahead, in the spring a three- year-old may start participating in team sports (although they often go the wrong way down the field) or in other classes such as dance or swimming lessons. Give your relatives the gift of a shin guards and soccer ball with a shirt. Offer to pay for swim lessons and package a gift certificate with a pair of goggles.
- **3-4 years:** Now kids engage in elaborate imaginary play. They enjoy "dress up" clothes to create characters- super heroes, dancers, wizards, princesses, kings, queens, animals. Kids also enjoy props for their pretend play, such as plastic kitchen gadgets, magic wands, and building blocks. They become adept at pedaling tricycles or even riding small training-wheeled bikes. Other gift ideas include crayons, paint, markers, Play-doh®, or side-walk chalk. Children this age understand rules and turn-taking and can be taught simple card games such as "go fish," "war," and "matching." Three-year-olds recognize colors but can't read- so they can finally play the classic board game *Candyland*, and they can rote count in order to play the sequential numbers game *Chutes and Ladders*. Preschool kids now understand and execute the process of washing their hands independently... one problem... they can't reach the faucets on the sink. A personalized, sturdy step stool will be appreciated for years.

**5-year-olds:** Since 5-year-olds can hop on one foot, games like Twister® will be fun. Kids this age start to understand time. In our

world of digital clocks, get your nephew an analog clock with numbers and a minute hand... they are hard to come by. Five-year-olds also begin to understand charts— a calendar will also cause delight. They can also work jigsaw puzzles with somewhat large pieces.

**8-year-olds:** Kids at this point should be able to perform self help skills such as teeth brushing. Help them out with stocking stuffers such as toothbrushes with timers. They also start to understand the value of money (here is one way to teach kids about money). The kids will appreciate gifts such as a real wallet or piggy bank. Eight-year-olds engage in rough and tumble play and can play outdoor games with rules. Think balls, balls, balls- soccer balls, kickballs, baseballs, tennis balls, footballs. Basic sports equipment of any sort will be a hit. Label makers will also appeal to this age group since they start to have a greater sense of ownership.

10-year-olds: Fine motor skills are quite developed and intricate arts and crafts such as weaving kits can be manipulated. Give a "cake making set" (no, not the plastic oven with a light bulb) with tubes of frosting and cake mix to bake over the winter break. Kids at this age love doodling on the long rolls of paper on our exam table. Get your kid a few rolls of banner paper to duplicate the fun. Buy two plastic recorders, one for you and one for your child, to play duets. The instrument is simple enough for ten-year-olds or forty-year-olds to learn on their own. Ten-year-olds value organization in their world and want to be more independent. Therefore, a watch makes a good gift at this age. And don't forget about books: reading skills are more advanced at this age. They can read chapter books or books about subjects of interest to them. In particular, kids at this age love a good joke or riddle book.

**Tweens:** Your child now has a longer attention span (30-40 minutes) so building projects such as K'nex models will be of interest to her. She can now also understand directions for performing magic tricks or making animal balloons. This is a time when group identity becomes more important. Sleepovers and scouting trips are common at this age so sleeping bags and camping tents make great gifts. Tweens value their privacy — consider a present of a journal with a lock or a

doorbell for her room.

**Teens:** If you look at factors which build a teen into a resilient adult, you will see that adult involvement in a child's life is important.

http://www.search-institute.org/research/developmental-assets

We know parents who jokingly say they renamed their teens "Door 1" and "Door 2," since they spend more time talking to their kids' bedroom doors than their kids. Create opportunities for one-on-one interaction by giving gifts such as a day of shopping with her aunt, tickets to a show with her uncle, or two hours at the rock climbing gym with dad.

Encourage physical activity. Sports equipment is always pricey for a teen to purchase- give the fancy sports bag he's been eying or give a gym membership. Cool techy trackers like Fitbit will always appreciated or treat your teen to moisture wicking work-out clothes.

Sleep! Who doesn't need it, and <u>teens often short change</u> themselves on sleep and fall into poor sleep habits. Help a teen enjoy a comfortable night of rest and buy luxurious high thread count pillow cases, foam memory pillows, or even a new mattress. After all, it been nearly 20 years since you bought your teen a mattress and he probably wasn't old enough at the time to tell you if he was comfortable. Since a teen often goes to bed later than you do, a remote light control will be appreciated by all.

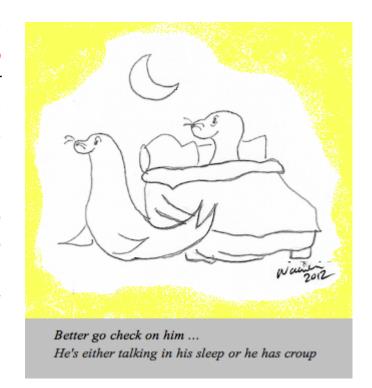
Adolescence is the age of abstract thinking and self awareness— Google "wall decals" and find a plethora of inexpensive ways to jazz up his or her room with inspiring quotes.

Enjoy your holiday shopping.

Naline Lai, MD and Julie Kardos, MD ©2012, 2014, 2015 Two Peds in a Pod®

#### Croup's cropping up

We can tell from this past week at the office that croup season has started. DON'T PANIC! Read on to learn what to look for. Please also listen to our podcast on this same subject. Dr. Lai heard one mom say that she listened to the podcast three times in one night...nights with croup can be very long indeed.



You wake up in the middle of the night to the sound of a seal barking...inside your house. More specifically, from inside a crib or toddler bed. Unless you actually have a pet seal, that sound is likely the sound of your child with croup.

"Croup" is the lay term for any viral illness causing swelling of the voice box (larynx) which produces a seal-like cough. The actual medical term is "laryngotracheobronchitis." In adults, the same viruses may cause laryngitis and hoarseness, but minimal cough. In children the narrowest part of a child's airway is his voice box. So not only does the child with croup sound hoarse when he talks and cries, but since he breathes through a much narrower opening, when he forces air out with a cough, he will sound like a barking seal. When a kid with croup breathes in, he may produce a weird guttural noise, called "stridor."

Many viruses cause croup, including flu (influenza) viruses.

Therefore, a flu vaccine can protect against croup. While no antibiotic or other medicine can kill the croup causing viruses, here are some ways to help your child feel better.

#### What to do when your child has croup:

Stay calm. The noisy breathing and barky cough frighten children and their parents alike. It's easier for the child to breathe when he is calm rather than anxious and crying. So, even if you are scared, try to act calmly since children take their cues from their parents.

Try steam. Run the shower high and hot, close the bathroom door and sit down on the bathroom rug with your child and sing a song or read a book or just rock him gently. The steam in the bathroom can help shrink the swelling in your child's voice box and calm his breathing.

Go outside. For some reason, cool air also helps croup. The more misty the better. In fact, many a parent in the middle of the night has herded their barking, noisy breathing child outside and into the cold car (with windows slightly cracked open) to drive to the hospital. Once in the emergency room, the parents are surprised to find a happily sleeping, or wide awake, chatty child, "cured" by the cold night ride.

Run a humidifier. A cool-mist humidifier running in your child's room will also help. Make her room feel like a rain forest, or the weather on a really bad hair day, and often the croupy cough will subside. Cool-mist humidifiers in the child's room are safer than hot air vaporizers because vaporizers pose a burn risk. It's the mist that helps, not the temperature of the mist.

Offer ibuprofen or acetaminophen. Your child may cough, and then cry, because her throat is sore. Pain relief will make her more comfortable and allow her to get back to sleep.

#### Who needs further treatment?

Most kids, more than 95%, who come down with croup, get better

on their own at home. Typically, croup causes up to three nights of misery punctuated by trips into the cold night air or steam treatments. During the day, kids can seem quite well, with perhaps a slightly hoarse voice as the only reminder of the night's tribulations. Why croup is worse at night and much better during the daytime hours remains a medical mystery. One theory is, just like ankles swell after one is upright all day, swelling in the voice box increases when people lie down. After the three nights, your child usually just exhibits typical cold symptoms with runny nose, a regular sounding cough, watery eyes, and a possible ear infection at the end. Then brace yourself for next time—kids predisposed to croup tend to get croup the next time a croup causing virus blows into town. But take heart, most kids outgrow the disposition for croup around six years of age.

Some kids do develop severe breathing difficulties. If your child shows any of these symptoms, get emergency medical care:

Turns pale or blue with coughing. Turning red in the face with coughing is not as dangerous.

Seems unable to swallow/unable to stop drooling.

**Breathing fails to improve** after steam, cool air, humidity, or **breathing seems labored**— nostrils flare with every breath or chest heaves with every breath—pull up their night shirts to check for this. See <u>this link</u> for an example of labored breathing.

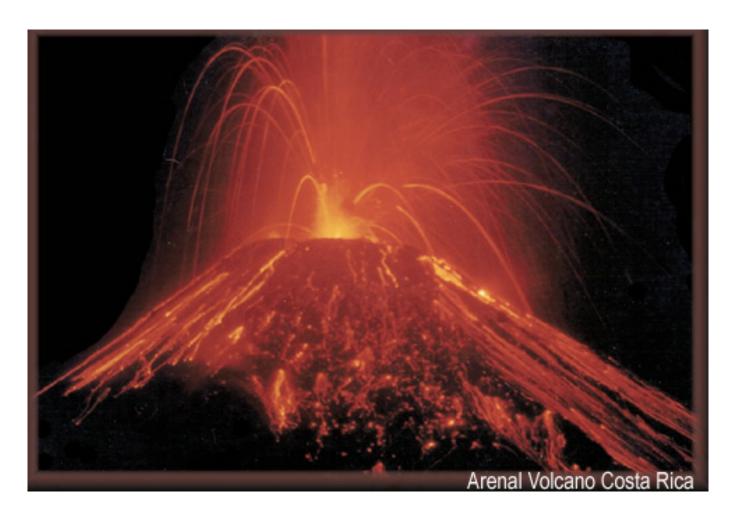
Mental state is altered: your child does not recognize you or becomes inconsolable.

Child is unimmunized and has a high fever and drooling along with his croup symptoms: he may not have croup but rather epiglottitis, most commonly caused by a vaccine-preventable bacteria. This is a different, more severe illness that can be fatal and requires airway management as well as antibiotics in a hospital.

We searched the internet for a good example of what the "seal bark" cough of croup. The best imitation we found is actually the sound of a sea lion. We will have to ask a veterinarian sometime if seals and sea lions get croup. If so, what do they sound like?

Julie Kardos, MD and Naline Lai, MD ©2012, 2015 Two Peds in a Pod®

## How to treat your vomiting child



#### "Mommy, I throwed up."

Few words are more dreadful for parents to hear, especially at 2:00am (my children's usual time to start with a stomach bug). In my house, I am the parent who, after the vomiting, comforts, changes pajamas and sheets, washes hands and face, and sprays the disinfectant. My husband scrubs (and scrubs, and scrubs) the rug. Little kids never throw up neatly into a toilet or into the garbage can. Sometimes even big kids can't seem to manage to throw up conveniently.

### What should you do when you have a vomiting child?

After you finish cleaning your child and her immediate environment, I suggest that you CHANGE YOUR OWN CLOTHES AND WASH YOUR HANDS! The most common cause of vomiting in kids is a stomach virus, and there are so many strains, we do not develop immunity to all of them. And trust me,

stomach viruses are extremely contagious and often spread through entire households in a matter of hours. Rotavirus, a particularly nasty strain of stomach virus, is preventable by vaccine, but only young babies can get the vaccine. The rest of us are left to fend for ourselves.

Stomach viruses usually cause several episodes of vomiting and conclude within 6-8 hours. Concurrently or very soon thereafter, the virus makes an exit out the other end in the form of diarrhea, which can last a week or so.

A hint to get through a long night: If your kid is too young to vomit into the nearest trash can, make a nice nest for her with many towels on the bathroom floor. For the older kids, put layers of towels on the pillow.

### The biggest problem children face when vomiting is dehydration.

Kids need to replace fluids lost from vomiting. Pedialyte® or other oral rehydration solutions (ORS) such as Kaolectrolyte® or CeraLyte® are useful and well tolerated beverages for rehydrating kids. They contain salt, sugar, electrolytes and water, all substances that kids need when they throw up and have diarrhea.

For babies however, try to "feed through" with breast milk or formula unless otherwise directed by your child's doctor.

Most oral rehydration guidelines are based on diarrheal illnesses such as cholera, so you will find slight variations on how to rehydrate. Basically, they all say to offer small frequent amounts of liquid. I council parents to wait until no throwing up occurs for 45 minutes to an hour and then start offering very small amounts of an ORS (we're talking spoonfuls rather than ounces) until it seems that the vomiting has subsided.

In her house, Dr. Lai uses the two vomit rule: her kids go back to bed after the first vomit and she hopes it

doesn't occur again. If vomiting occurs a second time, she starts to rehydrate.

Continue to offer more fluids until your child urinatesthis is a sign that her body is not dangerously dehydrated. Refusing to drink? Children of all ages do better with straws, and you'd be surprised how much you can get in with a medicine syringe (available at pharmacies).

#### Can't immediately get out to the store?

The World Health Organization has recommended home based oral rehydration solutions for years in third world countries. Also, while the oral rehydration solutions are ideal, any fluid is better than none for the first hours of a stomach bug. You can give older kids watered down clear juices, broth or flat ginger-ale with lots of ice. Now, some kids hate the taste of Pedialyte®. Plain, unflavored Pedialyte® splashed with juice often goes down better than the flavored varieties. For some reason, plain water tends to increase nausea in sick kids and copious amounts of plain water can lower the salt in a child's bloodstream. So, offer a fluid other than plain water while your child is vomiting.

Even if your child drinks the Pedialyte®, once the stomach symptoms have subsided, don't forget that Pedialyte®, while excellent at "filling the tank," has no nutrition. The gut needs nutrition to overcome illness. Start to offer small amounts of food at this point. Easy-to-digest foods include complex carbohydrates such as rice, noodles, toast with jelly, dry cereal, crackers, and pretzels. Additionally, give protein such as bits of turkey or baked chicken or tofu.

Thicker fluids such as milk and orange juice do not sit as well in upset bellies, nor do large quantities of anything, food or drink. So offer small bits of nutrition

fairly frequently and let kids eat as their appetite dictates. Warning- just when everything blows over, toddlers in particular may go a day without vomiting, then vomit one more time as a last hurrah.

### Vomiting from stomach viruses typically does not cause severe pain.

A child curled up whimpering (or yelling) on the floor with belly pain might have something more serious such as appendicitis, kidney stones, or a urinary tract infection. Call your child's doctor about your child's vomiting if you see any of the following:

- Blood in vomit or in stools
- Severe pain accompanying vomiting (belly pain, headache pain, back pain, etc.)
- No urine in more than 6 hours from the time the vomiting started (dehydration)
- Change in mental state of your child- not responding to you appropriately or inconsolable
- Vomit is yellow/green
- More fluid is going out than going in
- Illness not showing signs of letting up
- Lips and mouth are dry or eyes sunken in
- Your own gut tells you that something more is wrong with your child

Of course, when in doubt, call your child's doctor .

Hope this post wasn't too much to stomach!

Julie Kardos, MD and Naline Lai, MD ©2013, 2015 Two Peds in a Pod®

# Getting back to basics: How do vaccines work?



Recent comments by politicians have brought vaccines back into the public eye. In this post, we get down to basics.

Did you ever wonder how a vaccine works?

To understand how vaccines work, I will give you a brief lesson on the immune system. Trust me, it is interesting. Let me give you an example of me. When I was eight, I had chicken pox. It was a miserable week. I started out with fever and headache, then suffered days of intense body itching from blister-like spots, and ultimately, because I scratched off some scabs, ended up with scars. During this time, my immune system cells worked to battle off the chicken pox virus. Immune cells called memory cells also formed. These cells have the unique job of remembering (hence the name "memory cells")

what the chicken pox virus looks like. Then, if ever in my life I was to contact chicken pox again, my memory cells could multiply and fight off the virus WITHOUT MY HAVING TO GET SICK AGAIN WITH CHICKEN POX. So after I recovered, I was able to play with my neighbor even while he suffered with chicken pox. I returned to school where other children in my class had chicken pox, but I did not catch chicken pox again. Even now, as a pediatrician, I don't fear for my own safety when I diagnose a child with chicken pox, because I know I am immune

This is an amazing feat, when you think about it.

to the disease.

So enter vaccines. A vaccine contains some material that really closely resembles the actual disease you will protect yourself against. Today's chicken pox vaccine contains an altered form of chicken pox that is close to but not actually the real thing. However, it is so similar to the real thing that your body's immune system believes it is, in fact, real chicken pox. Just as in the real disease, your body mounts an immune response, and makes memory cells that will remember what the disease looks like. So, if you are exposed to another person with chicken pox, your body will kill off the virus but YOU DON'T GET SICK WITH THE CHICKEN POX. What a beautiful system! Rather than thinking about a vaccine as a foreign substance, think of it as a substance that is able to strengthen your body's natural immune system.

Before chicken pox vaccine, about 100 children per year in the US died from complications of chicken pox disease. Many thousands were hospitalized with pneumonia, skin infections, and even brain damage (encephalitis) from chicken pox disease. Now a small injection into the arm can prevent a disease by creating the same kind of immunity that you would have generated from having the disease, only now you have one second of pain from the injection instead of a week of misery and possible permanent disability or death. I call that a Great Deal!

I used the example of chicken pox because the vaccine was invented during my own lifetime. However, I could have used the example of polio, which, prior to its vaccine development in 1955, paralyzed 10,000 children per year in the United States, or measles, which infected 4 million children per year and killed 3000 per year in the United States before doctors began to give children a vaccine against measles in 1963.

All vaccines operate by this principle: create a safe environment for your immune system to make memory cells against a potentially deadly disease. Then when you are exposed to someone who actually has the disease, you will not "catch" it. Your body will fight the germs, but you do not become sick. If everyone in the world were vaccinated, then the disease itself would eventually be completely eradicated. Even if MOST people were vaccinated, this disease eradication can occur, because the majority of immunized people protect the few who are too young or too ill to receive vaccines themselves. This happened with small pox, a disease that killed 50 percent of infected people. There is no longer small pox because nearly everyone on earth received the small pox vaccine. Now we do not need to give small pox vaccine because the disease no longer exists. This is a huge vaccine success story.

Friedrich Nietzsche said "What doesn't kill us makes us stronger." We pediatricians feel this is unacceptable risk for children. We would rather see your child vaccinated against a disease in order to become immune rather than risking the actual disease in order to become immune. The vaccines that we give children protect against diseases that can cause serious, lifelong disability or death.

Hopefully this blog post answers your questions about how vaccines work. For more details or more in-depth explanations, I refer you to the AAP (American Academy of Pediatrics) website <a href="www.aap.org">www.aap.org</a>, the Immunization Action Coalition, Children's Hospital of Philadelphia's Vaccine

Education Center, and the book *Vaccines: What You Should Know*, by pediatricians Dr. Paul Offit and Dr. Louis Bell.

Julie Kardos, MD and Naline Lai, MD

© 2009, 2015 Two Peds In a Pod®, updated 9/2015

For more information about vaccines, please see our prior posts: Should I vaccinate my child?, Closure: there is no link between the MMR vaccine and autism, Fact or Fiction: a flu vaccine quiz for all teachers, babysitters, parents, and anyone else who breathes on children, Do vaccines cause autism?, Measles outbreak: would you recognize measles in your child?, A vaccine parable , and Are my teen's vaccines up to date?

# Does my baby have GERD or spit-up?



Baby spew doesn't always require reflux medications

In our office, two-month-old Max smiles ear to ear, naked except for a diaper and a bib. His worried mom asks me about the large amounts of spit up Max spews forth daily. "He spits up after every feeding. It seems like everything he eats just comes back up. It even comes out of his nose!" she says. Max gained the expected amount of weight, an average of one ounce per day, since his one-month check-up. He breastfeeds well and accepts an occasional bottle from his dad. Even after spitting up and drenching everything around him, he remains comfortable and cheerful. He is well hydrated, urinates often, and poops normally.

In short, Max is a "happy spitter" Other than creating piles of laundry, he acts like any healthy baby.

Contrast this to two-month-old "Mona." She also spits up frequently. Sometimes it's right after a feed and sometimes an hour later. She seems hungry, yet she'll cry, arch her back, and pull off the nipple while feeding. She cries before and after spitting up. Her weight gain is not so good— she averaged one-half ounce of gain per day since her one-month visit. She seems more comfortable when upright and more cranky lying down.

Mona is **not** a "happy spitter."

Last story and then the lesson:

"Chloe" is a two-month-old baby who cries. Often. Loudly. Although most of the wailing occurs in the late afternoon and early evening, she also cries other times. She eats great and in fact, seems very happy while she feeds. She smiles at her parents mainly in the morning. She also smiles at her ceiling fan and the desk lamp. Movement calms her and her parents worry that she spends excessive time rocking in their arms or in her swing. Her cries pierce through walls and make her parents feel helpless. She often spits up during crying jags, and erupts with gas. She gained weight well since her last visit.

Here's the lesson:

All babies cry. All babies pee and poop. All babies sleep (at times). AND: all babies spit up. The muscle in the lower esophagus that keeps our food and drink down in our stomachs and prevents it from sloshing upwards, called the "lower esophageal sphincter," is loose in all babies. The muscle naturally tightens up and becomes more effective over the first year of life, which is why younger babies tend to spit up more than older babies.

Max has **GER** (gastroesophageal reflux), Chloe has **GER**/ **colic** and Mona has **GERD** (gastroesophageal reflux disease). Max and Chloe have physiologic, or normal, reflux. Mona has reflux that interferes with her mood, her feedings, and her growth.

GER, GERD and colic (excessive crying in an otherwise healthy baby) improve by three to four months of age. If your baby cries often (enough to make you cry as well) then you should see your baby's pediatrician to help determine the cause. It helps, before your visit, to think about when the crying occurs (with feedings? At certain times of the day?), what soothes the crying (feeding? walking/rocking?) and other symptoms that accompany the crying such as spitting up, fever, or coughing. Keeping a three day diary for trends can help pinpoint a diagnosis. We worry a lot when the babies are not "spitting up" but are actually "vomiting." Spit blobs onto the ground. Vomit shoots to the ground. Vomit which is yellow, is accompanied by a hard stomach, is painful, is forceful (think Exorcist), or enough to cause dehydration, all may be signs of blockage in the belly such as pyloric stenosis or vovulus. Seek medical attention immediately.

The treatment for Max, the happy spitter with GER? Lots of bibs for baby and extra shirts for his parents.

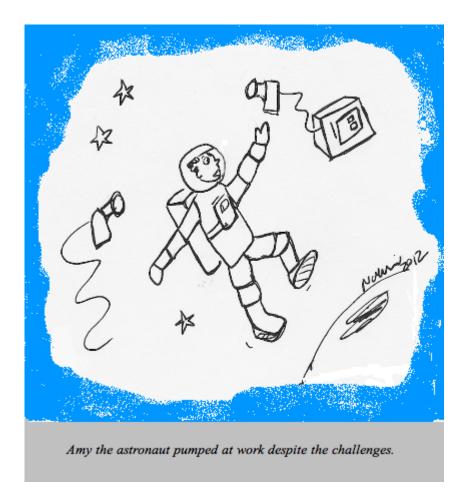
Treatment for Chloe, the crier? Patience and tincture of time. You can't spoil a young baby, so hold, rock and sway with her to keep her calm. Enlist a baby sitter or grandparents to help.

The treatment for Mona, the baby with GERD? Small, frequent feedings to prevent overload of her stomach, adding cereal any bottle feeds to help thicken the milk and weigh down the liquid, thus preventing some of the spit up (ask your doctor if this is appropriate for your baby), and holding her upright after feeds for 15-20 minutes. Physicians no longer advocate inclining the crib. To prevent Sudden Infant death Syndrome, she should still be placed on her back to sleep on a flat, firm surface. Sometimes, pediatricians prescribe medication that decreases the acid content of the stomach to help relieve the pain of stomach contents refluxing into the esophagus.

Treatment for parents? Knowing that someday your baby will grow up, no longer need a bib, and probably have a baby who spits up too.

Julie Kardos, MD with Naline Lai, MD ©2015, 2012 Two Peds in a Pod® updated 2019

## Breast feeding and returning to work



Picture this: you are going back to work after a too-short maternity leave. Briefcase? Check. Lunch? Check. Breast pump? Check. Photo of your baby to put on your pump for inspiration? Check.

Many moms ask how to continue breastfeeding when they return to work. Because babies should receive breast milk or formula for at least their first year, here is how you can incorporate breastfeeding into your work routine:

Offer bottles by four weeks of age. Bottles can contain breast milk or formula, but you need to give your baby practice taking milk from a bottle by four weeks old. If you wait much longer, your baby will likely refuse the bottle. Have someone other than yourself give at least one bottle per day or every other day. In this way, your baby learns to accept nutrition from someone else.

Store breast milk using the simple and conservative "rule of twos." Leave breast milk in a bottle at room temperature for no more than two hours, store breast milk in the refrigerator for no more than two days, and store in the freezer for no more than two months. If your baby has already sucked out of a breast milk bottle, that milk is only good for up to two

hours. Remember to write the date on your milk storage bags and use the oldest ones first.

Now select from the following breast feeding menu, understanding that you might start with an earlier option and then change to a later one. The best option is the one that works best for you and your baby.

**Option 1: Continue to breast feed at work.** This option works for moms who work from home, moms who have child care in their work setting, and moms close enough to dash home to breast feed during the day or who have caregivers willing to drive babies over to work for feedings.

Advantage: no pumping, no buying formula, no bottle washing. **Disadvantage**: may require some creative scheduling.

Option 2: Breast feed when home and pump and store breast milk at work. The baby gets breast milk in bottles during the work day. This method allows moms to provide exclusively breast milk to their babies. Start pumping after the first morning feeding (or any other feeding that you feel you produce a bit more than your baby needs for that particular feeding) beginning when your baby is around four weeks old. Also pump if your baby happens to sleep through a feeding. Store this milk in two or three ounce amounts in your freezer. You can obtain breast milk freezer bags from lactation consultants and baby stores, or you can store milk in zip lock bags. As you continue to pump after the same feeding each day, your body will produce more milk at that feeding.

Pumping should not take longer than 15 minutes if you're pumping both breasts at the same time and can take as short as 7-10 minutes. Remember to wash your hands before pumping.

What kind of breast pump should you buy/rent? If you are in it for the long haul, we recommend the higher-end electric double pumps with adjustable suction. Ask the hospital nurses, your midwife, or your obstetrician for names of people who rent or

sell pumps in your area.

Once you have some breast milk stored and you are a few days out from returning to work, try pumping during the feedings you will miss while at work. Have someone else feed your baby breast milk bottles for these feedings. Finally, when you return to work, continue to pump at the same schedule and leave the stored breast milk for your child's caregivers. Consider leaving some formula in case caregivers run out of breast milk. Remind them never to microwave the milk (this kills the antibodies in breast milk as well as creates a potential burn hazard) but rather to thaw the milk by placing in a hot water bath.

This method becomes easier as babies get older. Once babies start solid foods, they breast feed fewer times per day. Somewhere between six to nine months, your baby eats three solid food meals per day and breastfeeds four or five times per 24 hours. Thus, the number of times you need to pump decreases dramatically.

Advantage to this option: breast milk with its germ-fighting antibodies given through the first year and no expense of formula. Disadvantage: having to pump at work.

Option 3: Breast feed before and after work and give your baby formula while you are at work. If you do not pump while at work, your body will not produce milk at these times. If you work full time, then on weekends you might find it easiest on your body to continue your "work time" feeding schedule. If you choose this method, wean your baby from daytime breast feeding over that last week or so before returning to work. Suddenly going a long time without draining your breasts can lead to engorgement, subsequent plugged ducts, and mastitis.

**Advantage**: baby continues to receive breast milk. No need to pump at work. **Disadvantage**: you still have to wash bottles and have the added cost of formula.

**Option 4: Breast feed until you return to work, then formula feed**. Wean over the last week you are home with your baby to avoid engorgement and leaking while at work. Your baby still benefits from even a few weeks of breast milk.

Advantage: No need to incorporate pumping into your work schedule. Baby still gets adequate nutrition. **Disadvantage**: babies who are in childcare and exposed to many germs miss out on receiving extra antibodies in breast milk. However, weaning your baby off breast milk will not cause illness. Do what works for your family. Another disadvantage: more expensive to buy formula and time-consuming to wash bottles.

Finally, remember that the calorie count and nutritional content of breast milk and formula are the same. So do NOT feel guilty if pumping does not pan out and you and end up giving some formula. Your baby is almost always going to be more efficient than a breast pump and some breasts just don't produce milk well during pumping sessions. In contrast, some of my patients never got the hang of breast feeding and their moms pumped breast milk and bottle fed them for the entire first year. Dr. Lai and I have each had patients who refused to take a bottle at childcare but just waited patiently for their moms to arrive. These babies got the nutrition they needed by nursing throughout the night. The babies didn't mind what time of day they ate. Just like many aspects of parenting, sometimes with breast feeding and returning to work, you just have to "go with the flow."

Julie Kardos, MD with Naline Lai, MD 2015 Two Peds in a Pod®, reposted from 2010