"Ya Gotta Have Heart!" Heart Murmurs Explained



Conversation hearts murmuring

When the Tin Man was a child in Oz, I'm sure his pediatrician never told his parents, "Has anyone ever said your child has a heart murmur? I hear one today."

I know that when I tell parents about a heart murmur in their child, their hearts skip and jump. But not all heart murmurs are bad.

What is a heart murmur?

A heart murmur is an extra sound that we pediatricians hear

when we listen to a child's heart with a stethoscope. A normal heart beat sounds like this: "lub, dub. lub, dub. lub, dub." A heart murmur adds a whooshing sound. So what we hear instead is "lub, whoosh, dub" or "lub, dub, whoosh."

The "whoosh" is usually caused by blood flowing through a relatively narrow opening somewhere in or around the heart. Think of your blood vessels and heart like a garden hose. If you run the water (blood) very hard, or put a kink or cut a hole in the hose, the whoosh of the water grows louder in those locations.

Heart murmurs signal different issues at different ages.

In a newborn, some types of heart murmurs are expected. Normal newborn hearts contain extra holes that close up after the first hours or days of birth. One type of murmur occurs as the infant draws in his first breath and holes in the heart, present inside the womb, begin to seal. As the holes get narrower, we sometimes hear the "whoosh" of blood as it flows through the narrowing opening. Then these holes close completely and the murmur goes away.

However, some murmurs in infancy signal "extra holes" in the heart. As pediatricians, we experience our own heart palpitations when moms want to leave the hospital early with their infants who are less than 48 hours old. We worry because many infants who have abnormal hearts may not develop their abnormal heart murmurs and other signs of heart failure until the day or two after birth.

Preschool and early school-age children often develop "innocent" heart murmurs. "Innocent" implies that extra blood flows through their hearts, but the hearts are structurally normal. These murmurs are fairly common and can run in families. However, there are some significant heart problems which do not surface until this age. For this reason, remember

to schedule those yearly well child checkups.

For teens, during the pre-participation sports physical, pediatricians listen carefully for a murmur that may indicate that an over grown heart muscle has developed.

What else can cause a heart murmur?

Holes are not the only culprit behind a murmur. The whoosh sound can also arise when a person is anemic and blood flows faster than normal. In anemic kids, the blood flows faster because it lacks enough oxygen-carrying red blood cells and the heart needs to move blood faster in order to supply oxygen to the body. The most common cause for anemia is a lack of eating enough iron-containing foods. Subsequently, we hear these flow murmurs in children whose diets lack iron, in teenagers who grow rapidly and quickly use up their iron stores, and in girls who bleed too much at each period. Replenishing the iron level makes a heart murmur from anemia go away.

Even a simple fever can cause a heart murmur on physical exam. The murmur goes away when the fever goes away.

Pediatric health care providers can often distinguish between "innocent" heart murmurs and not-so- innocent heart murmurs by the sound of the murmur itself (not all "whooshes" sound alike). If any question exists, your child will be referred for more testing, which could include a chest x-ray, an EKG (electrocardiogram), an ECHO (echocardiogram, or ultrasound of the heart), or evaluation by a pediatric cardiologist.

If your child's pediatrician tells you that your child has a heart murmur, "take heart."

Many times a murmur comes and goes or just becomes part of your child's baseline physical exam. Even if your child has a serious heart problem, most cases respond well to medication, surgery, or both. While not all heart problems cause heart

murmurs, and while not all murmurs signal heart problems, the presence of a heart murmur in a child can signal that your child needs further testing.

Unless, of course, your child is the Tin Man. In this case, extra sounds indicate that your child needs more oil!

Julie Kardos, MD and Naline Lai, MD ©2010, 2018 Two Peds in a Pod®

Raising emotionally healthy boys



photo by Lexi Logan,
www.lexilogan.com

The recent Parkland shooting in Florida is causing many to wonder how to support the emotional health of boys in their families and communities. We welcome therapist Dina Ricciardo's words of wisdom— Drs. Kardos and Lai

Your son is crying. A mad dash across the playground has led to a spectacular trip and fall, complete with a bloody knee and hands full of dirt. Part of you wants to hold him on your lap and console him until he stops crying. The other part of you wants to firmly wipe away his tears and tell him to be brave. Which part of you is right?

In a world where there is a great deal of emphasis placed on the emotional health of girls, our boys are frequently overlooked. While girls are typically encouraged to develop and express a broad range of emotions, boys are socialized from a young age to suppress their feelings. As a result, many boys and men struggle to express fear or sadness and are unable to ask for help. It is time for us adults to stop perpetuating stereotypes and myths about manhood, and help each other raise emotionally healthy boys. Here are five ways for us to do so:

Make his living environment a safe space to express emotions. Give your son permission to express all of his feelings. Boys typically do not have the freedom to show the full range of their emotions in school and out in the world, so it is essential that they have that freedom at home. Nothing should be off limits, as long as feelings are expressed in a manner that is not destructive.

Expose him to positive male role models. Boys need to be exposed to positive male figures who can to indoctrinate them into their culture and teach them how to be men. It is an important rite of passage in a boy's development. Take a look

around your social ecosystem and ask yourself, "Who would be good for my son?" Other parents, coaches, teachers, and pastors are examples of individuals who can play a positive role in his life.

Understand your unique role. Each parent plays a unique role in the development of a son, and that role changes over time. A mother is a son's first teacher about love and what it looks like, and this dynamic can breed a particular kind of closeness. As a boy grows and begins to develop his sexuality, however, it is natural for him to pull away a bit from his mother and turn more towards his father for guidance. While this distance can be unsettling for mom, it marks a new phase in a son's relationship with his father, who typically provides a sense of security and authority in a family as well as support for a boy's developing identity. Mothers still play an important role, but that role may look different. As parents, it is important to re-evaluate what our sons need from us at each stage of their development.

Look at the world with a critical eye. Our culture not only glorifies violence, it equates vulnerability in males with weakness and attempts to crush it. That does not mean we have to accept this paradigm. Talk honestly with your son about how and when to be gentle and compassionate, educate him on how the world view softness in men, and never tolerate anyone shaming him when he exhibits these traits. There is no shame in showing vulnerability, it is actually an act of courage.

Take a look in the mirror. Whether you are a mother or a father (or both), be honest with yourself: what are your beliefs about manhood? Do you feel safe expressing all of your feelings, or are some of them off-limits? If you are perpetuating negative stereotypes about men or are not comfortable with a full range of emotions, then your son will follow in your footsteps. Regardless of our own gender, we cannot expect our children to be comfortable with their feelings if we are not comfortable with our own.

There are times when insuring the emotional health of your son will feel like an uphill battle. Keep the conversation open, and do not be afraid to talk with others about the dilemmas of boyhood and manhood. And if you are looking for an answer to the playground dilemma, then I will tell you that both parts of you are right. Sometimes our sons need loving compassion, and sometimes they need a firm nudge over the hump. You know your child better than anyone else, so it is up to you to decide which approach to use and when.

Dina Ricciardi, LSW, ACSW

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When a pet dies



Photo by Lexi Logan

We welcome Bereavement Counselor Amy Keiper-Shaw who shares with us how to discuss the death of a pet with your child.

-Drs. Lai and Kardos

When I first graduated from college I worked as a nanny. One day the mom shared with me that their family goldfish recently died. As this was her daughter's first experience with death, we schemed for nearly 20 minutes to find the best way to talk to her child. The mom and I thought it could be an excellent teaching moment.

We pulled the girl away from her playing to explain that the fish had died. We told the girl we'd help her have a funeral if she wanted, and we would find a box (casket) to bury the fish so she could say her goodbyes. We explained what a casket was and what a funeral was in minute detail. After our monologue we stopped, we asked if she had any questions.

After a slight pause she asked, "Can't we just flush it?"

The lesson I learned from that experience, and still use to this day, is to keep things simple, and know my audience. Sometimes as parents we overcompensate for our own fears and make situations more challenging than they need to be.

Here are some tips on how to talk to your children about pet loss:

Tell your child about the death, and then pause. Ask her what she thinks death means before moving on with further explanations. This will help you know if she has questions or if she has enough information for the moment. Children often need a small amount of information initially and will later come back to you several times later to ask more questions after they process the information.

Remember to express your own grief, and reassure your child that many different feelings are ok. Be sure to allow children to express their feelings. If your child is too young to express herself verbally, give her crayons and paper or modeling clay too help express grief.

Avoid using clichés such as: Fluffy "went to sleep." Children may develop fears of going to bed and waking up. The phrase "God has taken" the pet could create conflicts in a child and she may become angry at a higher power for making the pet sick, die, or for "taking" the pet from them.

Be honest. Hiding a death from a child can cause increased anxiety. Children are intuitive and can sense is something is wrong. When the death isn't explained they make up their own explanation of the truth, and this is often much worse than the reality of what occurred.

Children are capable of understanding that life must end for

all living things. Support their grief by acknowledging their pain. The death of a pet can be an opportunity for a child to learn that adult caretakers can be relied upon to extend comfort and reassurance through honest communication.

Developmental Understanding of Death

Two and three-year-olds

Often consider death as sleeping, therefore tell them the pet has **died** and will not return.

Reassure children that the pet's failure to return is unrelated to anything the child may have said or done (magical thinking).

A child at this age will readily accept another pet in the place of a loved one that died.

Four, five, and six-year-olds

These children have some understanding of death but also a hope for continued living (a pet may continue to eat, play & breathe although deceased).

They can feel that any anger that they had towards the pet may make them responsible for the pet's death ("I hated feeding him everyday").

Some children may fear that death is contagious and could begin to fear their own death or worry about the safety of their parents.

Parents may see temporary changes in their child's bladder/bowels, eating, and sleeping.

Several brief discussions about the death are more productive than one or two prolonged discussions.

Seven, eight, and nine-year-olds

These children have an understanding that death is real and irreversible.

Although, to a lesser degree than a four, five, or six-yearold, these children may still possibly fear their own death or the death of their parents.

May ask about death and its implications (Will we be able to get another pet?).

Expressions of grief may include: somatic concerns, learning challenges, aggression, and antisocial behavior. Expression may take place weeks or months after the loss.

Adolescents

Reactions are similar to an adult's reaction.

May experience denial which can take the form of lack of emotional display so they could be experiencing the grief without outwards manifestations.

Resources:

Petloss.com— a gentle and compassionate website for pet lovers who are grieving the death or an illness of a pet- they have a Pet Loss Candle Ceremony every week

Your local veterinarian- often your veterinarian has or knows of a local pet loss group

Handsholdinghearts.org— our group of counselors offer grief support to children, teens, and their families centered in Bucks County Pennsylvania.

Books on pet loss for children:

Badger's Parting Gifts (children) by Susan Varley
Lifetimes by Brian Mellonie & Robert Ingpen
The Tenth Good Thing About Barney (children) by Judith Viorst

Amy Keiper-Shaw, LCSW, QCSW, GC-C ©2013, 2018 Two Peds in a Pod®

Amy Keiper-Shaw is a licensed grief counselor who holds a Masters Degree in clinical social work from the University of

Pennsylvania. For over a decade she has served as a bereavement counselor to a hospice program and facilitates a bereavement camp for children. She directs Handsholdinghearts, a resource for children who have experienced a significant death in their lives.

Home remedies for dry, chapped hands



Raw hands- recognize your kid?

Even when it isn't flu season, we pediatricians wash our hands about sixty times a day, maybe more. This frequent washing, in combination with cold winter air, leads to dry, chapped hands. Here are the hands of a patient. Do your children's hands look like these?

To prevent dry, chapped hands:

- **Don't stop washing your hands**, but do use a moisturizer afterwards. Also use warm but not hot water. Hot water removes protective oils from skin.
- According to the American Academy of Dermatology, hand sanitizer can prevent the drying that accompanies frequent hand washing. However, we can tell you from experience that once your hands are already chapped and cracked, the alcohol content in the sanitizers stings sensitive skin. So if your child's hands are already chapped, stick with water and soap.
- Wear gloves or mittens as much as possible outside even if the temperature is above freezing. Remember chemistry class—cold air holds less moisture than warm air and therefore is unkind to skin. Gloves will prevent some moisture loss. Having difficulty convincing your child to wear gloves? Point out that refrigerators are kept around 40 degrees Fahrenheit or below. Tell your kids that if they wouldn't sit inside a refrigerator without layers, then it would be wise to wear gloves.
- Before exposure to any possible irritants such as the chlorine in a swimming pool, protect the hands by layering heavy lotion (e.g. Eucerin cream) or petroleum based product (e.g. Vaseline or Aquaphor) over the skin.

To rescue dry, chapped hands:

- Prior to bedtime, smother hands in 1% hydrocortisone ointment. Avoid the cream formulation. Creams tend to sting if there are any open cracks. Take old socks, cut out thumb holes and have your child sleep at night with the sock on his hands. Repeat nightly for up to a week. Alternatively, for mildly chapped hands, use a petroleum oil based product such as Vaseline or Aquaphor in place of the hydrocortisone.
- If your child has underlying eczema, prevent your child from scratching his hands. An antihistamine taken orally such as diphenhydramine (Benadryl) or cetirizine (Zyrtec) will take the edge off the itch. Keep his nails trimmed to avoid further damage from scratching.

• For extremely raw hands, your child's doctor may prescribe a stronger cream and if there are signs of a bacterial skin infection, your child's doctor may prescribe an antibiotic.

Happy moisturizing. Remember smearing glue on your hands and then peeling off the dried glue? It's not so fun when your skin really is peeling.

Naline Lai, MD and Julie Kardos, MD © 2009, updated 2019, Two Peds in a Pod®

How to explain scary news to children



In light of the recent school shooting in Parkland, Florida, you may be left wondering if, and how, to explain this or other tragedies to your children.

Understand that kids sense your emotions even if you don't tell them. Not telling them about an event may make them

concerned that they are the cause for your worried hushed conversations. Break away from your discussion with adults to say, "Do you know what we are talking about? We are not talking about you."

Even though an event may be far away, media makes it seem as if it happened next door, and sooner or later your children will see or hear about it. Tell the facts in a straight forward, age appropriate manner. Answer questions and don't be afraid to answer with an "I don't know." Preschoolers are concrete in their thinking—dragons are real and live under their bed, so don't put any there that do not exist. For a preschooler a simple "Mom is sad because a lot of people got hurt," will suffice. Young school age kids will want to know more details. And be prepared to grapple with more high level questions from teens.

Look for the helpers. Mr. Rogers who hosted Mister Roger's Neighborhood for 30 years, tells this story about seeing scary things on the news: "My mother would say to me, 'Look for the helpers. You will always find people who are helping.' To this day, especially in times of 'disaster,' I remember my mother's words, and I am always comforted by realizing that there are still so many helpers-so many caring people in this world."

What if the kids ask, "Will that happen here?" or "Why did that happen?" Again, reassure in a simple straight forward manner. For instance you can say, "Many people are working hard to prevent something like that here." Consider answering the question with a question. Asking "What do you think?" will give you an idea of exactly what your child fears. You can also reach out to other family supports for help with answers. Say to your child, "I wonder what our minister or school counselor has to say about this, let's ask."

Routine is reassuring to children, so turn off the background 24 hour television and internet coverage and make dinner, take them to sports activities, and get the homework done.

Give your kids something tangible to do to be helpful. Help them set up a coin donation jar at school or put aside part of their allowance for a donation.

If your child seems overly anxious and fearful, and her worries are interfering with her ability to conduct her daily activities, such as performing at school, sleeping, eating, and maintaining strong relationships with family and friends, then seek professional help.

For more advice on this topic, please see this American Academy of Pediatrics recommendation for parents. Also, the following is a firearms safety message for parents, from the AAP:

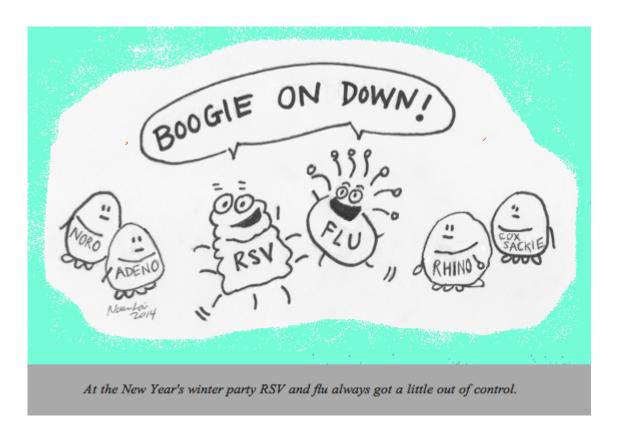
- Young children are curious. They are often unable to remember or follow safety rules. Teens are impulsive, and naturally tend to be moody. When combined with access to firearms, the consequences can be **tragic and permanent**.
- Many homes have guns which is why **you have to ask about guns when your child visits another home.** Depending on location, 18 percent to 64 percent of U.S. homes have firearms.
- If there is a gun in the home, there's a good chance a child living there will know where it is. In a recent study, 39 percent of parents erroneously believed their children did not know where their gun is stored, and 22 percent wrongly believed their child never handled a gun.
- The safest home for children and teens is one without guns. If you do have a gun, you can greatly reduce the risk of a child being injured or killed by storing the gun unloaded and locked, with the ammunition locked in a separate place.

Parent your children so they feel secure in themselves and secure in the world around them. You may not hold the answers to why a tragedy strikes, but you do hold the ability to

comfort and reassure your children.

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What to do with the flu, and what about elderberry?



So you just read our post "Does my child have the flu or a cold" and you've decided that your child likely has the flu (short for influenza). Now what do you do? When do you call the pediatrician? Does your child need medication?

First take a deep breath. Then, make sure your child is breathing easily. She may be coughing a lot but as long as her breathing is unlabored, and you see no retractions (see 6 second video in our coughing post), her lungs are most likely

OK. Kids who are short of breath can become agitated or lethargic. A little tiredness from illness is normal, but extreme lethargy is not.

Think about it. Is your child's mental state OK? Is she thinking clearly, walking well, talking normally, and consolable? She may be more sleepy than usual but when awake she should be rational and easily engaged.

Hydrate! A high fever and cough increases a child's hydration needs. Make up for lost fluids by aiming to give her at least one and one-half times the amount she usually drinks in a day. For example, if she typically drinks 24 ounces of water or milk per day, try to give at least 36 ounces of fluid per day. Offer your child ANYTHING she wants to drink, including soup, juice, lemonade, electrolyte replenishers (e.g. Gatorade or Pedialyte), decaffeinated tea or a little flat decaffeinated soda.

If your child is not eating, avoid hydrating solely with plain water. Kids need salt to keep their blood pressure up and sugar to keep their energy levels up. And yes, milk is **great** to offer. **If milk doesn't cause your child to make more mucus when she is healthy, then it won't affect her nose or lungs when she is sick.** Even chocolate milk is fine! For infants, give breastmilk or formula—no need to switch. The goal is to produce PEE. Well hydrated kids pee at least every 6-8 hours. Other signs of dehydration include dark urine, dry mouths/lips, the inability to produce tears, sunken eyes, and sunken soft spot (in an infant).

Offer food as well. My grandmother used to say, "Feed a cold, starve a fever." I loved my grandmother, but she was incorrect about this advice. Food = nutrition = improved germ fighting ability. However, don't argue with your sick kid about eating if she is not hungry. Just know that drinking extra is a MUST.

Placate pain. She may have muscle aches, a headache, or a sore

throat. Relieve her discomfort with ibuprofen (Motrin, Advil) or acetaminophen (Tylenol). Offer some ice pops and a movie on the couch. If she is in severe pain, is unable to move normally, or is inconsolable, call your child's doctor. Unable to move or inconsolable = very bad.

It's OK to play and move about. Your child with flu might spend a large portion of her day on the couch or in bed but it's fine to let her play and have some activity. Some walking around and playtime helps her exercise her lungs. "Moving" her lungs with a cough actually prevents pneumonia by preventing germy mucus from lodging in the lungs. Also, seeing that your child can walk around, despite her aches and discomfort, will reassure you that she is handing her illness.

Does every kid with flu need to see a doctor? No. Some kids have medical problems that predispose them to complications of illness and doctors will want to see those kids more often. Most otherwise healthy kids get through the flu, as long as they drink enough and can be kept comfortable. The fever from flu usually lasts from 4-7 days and can go quite high, but you know from reading our fever post that the number alone is not what you fear. What matters is how your child is acting.

Some reasons your child should see a doctor:

- -difficulty breathing
- -change in mental state or you cannot console her
- -your child is dehydrated
- -a new symptom that concerns you
- -the fever goes away for a day or two and then returns with a vengeance
- -fever goes on more than 4-7 days, but you can certainly call the doctor to check in by day 3-5
- -a rash appears during the flu illness (this can be a sign of overwhelming bacterial infection, not the flu)
- -new pain (eg. ear pain from an ear infection) or severe pain
- -your gut instinct tells you that your child needs to see a doctor

What about Tamiflu (brand name for oseltamivir)? Some areas of the United States are experiencing a shortage of this antiflu medicine. Oseltamivir can lesson the severity of flu symptoms and perhaps shorten how long the flu lasts by about a day. Since most people recover in about the same amount of time without the medication, the CDC (Centers for Disease Control) and the AAP (American Academy of Pediatrics) issued treatment guidelines. Kids with certain lung, heart, neurologic, or immune system diseases, kids with diabetes, and kids under the age of two years may be medication candidates. You can check the exhaustive list here. The other two medications that cover the two main types of flu are not available in oral form.

Better than Tamiflu is the flu vaccine. Remember the saying, "An ounce of prevention is worth a pound of cure?" A 2017 study showed that the flu vaccine prevented kids from dying of the flu. Vaccinated kids who do end up with the flu tend to have less severe illness. The vaccine prevents several types of the flu, so even if your child gets flu and did not receive the flu shot this season, it's not too late. Take her to get it after her fever is gone. Also put in a reminder to yourself to schedule a flu vaccine appointment for your child next September, in advance of next winter's flu season.

Over-the-counter flu medications do not treat the flu, but they can give side effects. In fact, cough and cold medicines should not be given to children younger than four years, according to the American Academy of Pediatrics. Instead, try these natural remedies:

- -If older than one year, you can give honey for her cough and to soothe her throat.
- -Run a cool mist humidifier in her bedroom, use saline nose spray or washes, have her take a soothing, steamy shower, and teach her how to blow her nose.
- -For infants, help them blow their noses by using a bulb suction. However, be careful, over-zealous suctioning can lead

to a torn-up nose and an overlying bacterial infection. Use a bulb suction only a few times a day.

What about black elderberry (sambucus)? Articles abound on social media about the benefits of black elderberry in fighting flu symptoms. However, if you read a credible source such as the National Institute of Health information site about complementary and alternative medicine, you will find, "Although some preliminary research indicates that elderberry may relieve flu symptoms, the evidence is not strong enough to support its use for this purpose." The research was not conducted with kids, so unfortunately we cannot recommend this unproven treatment for flu.

Take heart. While the groundhog predicted 6 more weeks of winter this year, history shows that the groundhog is usually wrong.

Julie Kardos, MD and Naline Lai, MD ©2018 Two Peds in a Pod®

My kid has a terrible cough: Is he ok?



photo by Lexi Logan

We are seeing a lot of coughing kids in the office these days. In general we like coughs. Coughs keep nasty germs from lodging in the lungs. It is hard for parents to tell if a cough is from a cold, an asthma flare, pneumonia, allergies, or something else. Regardless of what is causing your child to cough, even if you think your child has a simple cold, it's important to recognize when your child is having difficulty breathing. Share this information with all of your child's caretakers, including teachers. Too often we get a child in our office with labored breathing which started during school hours but was not recognized until parent pick-up time.

Signs of difficulty breathing:

- Your child is breathing faster than normal.
- Your child's nostrils flare with each breath in an effort to extract more oxygen from the air.
- Your child's chest or her belly move dramatically while breathing—lift up her shirt to appreciate this.
- Your child's ribs stick out with every breath she takes because she is using extra muscles to help her

breathe—again, lift up her shirt to appreciate this. We call these movements "retractions."

- You hear a grunting sound (a slight pause followed by a forced grunt/whimper) or a wheeze sound at the end of each exhalation.
- A baby may refuse to breast feed or bottle feed because the effort required to breathe inhibits her ability to eat.
- An older child might experience difficulty talking.
- Your child may appear anxious as she becomes "air hungry" or alternatively she might seem very tired, exhausted from the effort to breathe.
- Your child is pale or blue at the lips.

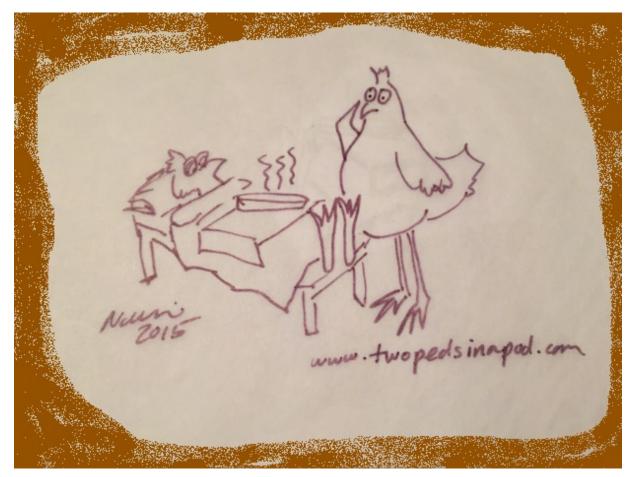
In this video, the child uses extra chest muscles in order to breathe. He tries so hard to pull air into his lungs that his ribs stick out with each inhalation. Try inhaling so that your own ribs stick out with every breath- you will notice it takes a lot of effort.

https://www.twopedsinapod.org/wp-content/uploads/2016/0 1/retractions.m4v

For those whose children have sensitive asthma lungs, review our earlier asthma posts. <u>Understanding Asthma Part I</u> explains asthma and lists common symptoms of asthma, including cough, and <u>Asthma Medicine Made Simple</u> tells how to treat asthma, summarizes commonly used asthma medicine, and offers environmental changes to help control asthma symptoms.

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Does my child have a cold or the flu?



"Now what kind of soup did the doctor recommend? Was that tomato soup? Mushroom Barley?"

Headlines remind us daily that the US is officially in the midst of flu season. We are also in the midst of a really yucky cold season. We have seen numerous kids in our offices with bad colds and others with flu.

Parents ask us every day how they can tell if their child has a cold or the flu. While no method is fool proof, here are some typical differences:

The flu, caused by influenza virus, comes on suddenly and makes you feel as if you've been hit by a truck.

Flu almost always causes fever of 101°F or higher and some respiratory symptoms such as runny nose, cough, or sore throat

(many times, all three). Children, more often than adults, sometimes will vomit and have diarrhea along with their respiratory symptoms, but contrary to popular belief, there is no such thing as "stomach flu." In addition to the usual respiratory symptoms, the flu causes body aches, headaches, and often the sensation of your eyes burning. The fever usually lasts 5-7 days. All symptoms come on at once; there is nothing gradual about coming down with the flu.

Colds, even really yucky ones, start out gradually.

Think back to your last cold: first your throat felt scratchy or sore, then the next day your nose got stuffy or then started running profusely, then you developed a cough. Sometimes during a cold you get a fever for a few days. Sometimes you get hoarse and lose your voice. The same gradual progression of symptoms occurs in kids. In addition, kids often feel tired because of interrupted sleep from cough or nasal congestion. This tiredness leads to extra crankiness.

Usually kids still feel well enough to play and attend school with colds.

The average length of a cold is 7-10 days although sometimes it takes two weeks or more for all coughing and nasal congestion to resolve.

Important news flash about mucus:

The mucus from a cold can be thick, thin, clear, yellow, green, or white, and can change from one to the other, all in the same cold. The color of mucus does NOT tell you if your child needs an antibiotic and will not help you differentiate between a cold and the flu. Here's a post on sinus infections vs. a cold.

Remember: colds = gradual and annoying. Flu = sudden and miserable.

If your child has a runny nose and cough, but is drinking well, playing well, sleeping well and does not have a fever and the symptoms have been around for a few days, the illness is unlikely to "turn into the flu."

Fortunately, a vaccine against the flu is available for all kids over 6 months old

This flu vaccine can prevent the misery of the flu. In addition, vaccines against influenza save lives by preventing flu-related complications such as pneumonia, encephalitis (brain infection), and severe dehydration. Even though we are starting to see a lot of flu, it is not too late to get the flu vaccine for your child. Please schedule a flu vaccine ASAP if your child has not yet received one for this season. Parents and caregivers should also immunize themselves. We all know how well a household functions when Mom or Dad have the flu... not very well! Sadly there have been 20 children so far this flu season who died from the flu. In past years many flu deaths were in kids who did not receive the flu vaccine, so please vaccinate your children against the flu if you have not already. Unfortunately, the vaccine isn't effective in babies younger than 6 months, so it is important to vaccinate everyone who lives or cares for a baby this young.

Be sure to read our article on ways to prevent colds and flu. As pediatricians, we remind you to WASH HANDS, make sure your child eats healthy, gets enough sleep, and avoid crowds, when possible. As moms, we add that you might want to cook up a pot of good old-fashioned chicken soup to have on hand in case illness strikes your family.

Julie Kardos, MD and Naline Lai, MD ©2018 Two Peds in a Pod®

Understand and prevent ear infections



We wonder: do elephants get big ear infections?

"An ear infection," we often hear parents say, "how can that be? I am so careful not to get water into her ear."

Let us reassure you: parents do not cause ear infections. Germs cause infections. So please: no parent guilt!

When we doctors say "ear infections," we usually refer to middle ear infections. Where exactly is the middle ear? When we look into the ear we peer down a tunnel called the ear canal. This part of the ear is considered the outer ear. At the end of the tunnel is a sealed door called the "ear drum"

The medical term for ear drum is "tympanic membrane." We'll stick with "ear drum." Behind the ear drum is the middle ear. As long as the ear drum (the door) leading into the middle ear is closed, water cannot enter the middle ear. Only if a child has ear tubes, or if the ear drum is ruptured, can water from a pool or bath enter the middle ear.

Now picture yourself opening the door and walking through to the middle ear. When you stand in the middle ear you will see tiny bones which help with hearing. The middle ear is the space that fills with fluid and gives you the uncomfortable sensation of pressure when you have a cold. It is the same space that gives you discomfort when you are descending in an airplane.

In the floor you will see a drain. This drain, called the Eustachian tube, helps drain fluid out of the middle ear. "Popping" your ears by swallowing opens this drain when you are descending on a flight. If fluid (usually from congestion from a cold or from allergies) sits long enough in the middle ear, it can become infected and the resulting pus causes pressure and pain. Sometimes the pressure becomes so great that it causes the ear drum to rupture and the painful infection will then drain out of the ear. Parents are often surprised to learn that this rupturing can occur both in untreated AND treated ear infections.

Beyond the middle ear is the **inner ear**, which houses nerves needed for hearing. Because children do not tend to get infections here, you may never *hear* about this part of the ear from your pediatrician (pun absolutely intended).

So, why do people talk about preventing ear infections by preventing water from getting into the ear? There is a type of ear infection called "swimmer's ear," formally known as "otitis externa," which occurs in the outer ear. Swimmer's ear usually results from a bacteria which grows in a damp environment. The water that causes this damp environment

typically comes from a swimming pool, but can also come from lake, ocean, or even bath water. Swimmer's ear can also be a result of anything that causes ear canal irritation such as eczema, hearing aids, or even beach sand. You can read more about this malady and it's treatment and prevention here.

To summarize:

Ear infection = middle ear infection
Swimmer's ear = outer ear infection
Cause of ear infections = germs

So, are you to blame for either type of ear infection? No, but there are associated factors which you can modify.

Wash hands to decrease spread of cold viruses.

Limit exposure to second hand smoke.

Give all vaccines on time — pneumococcal bacteria and the flu virus can cause ear infections—we have vaccines against these germs.

If your child suffers from allergies, talk to your child's doctor about decreasing triggers in the environment and/or taking medications which might prevent middle ear fluid build-up from allergies.

Some kids who contract a lot of ear infection need help to stop further infections. Ear tubes, or "myringotomy" tubes, promote middle ear fluid drainage before an infection occurs. Ear, nose, throat doctors (also known as ENTs or otolaryngologists) poke a hole in the ear drum leading to the middle ear and place a small tube in the hole. Through the myringotomy tubes, or "ear tubes," fluid runs from the middle ear out into the outer ear canal before the fluid becomes infected. This drainage prevents middle ear infections from occurring.

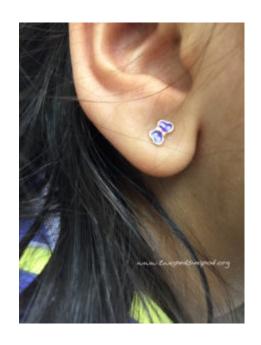
To prevent swimmer's ear, dry your children's ears with a towel or blow gently with a hairdryer on cool setting after they are done swimming for the day.

We wrote this post because of the many questions we often hear about ear infections and ear anatomy. Hope the information wasn't too eerie. Or is that EARie?

Naline Lai, MD and Julie Kardos, MD ©2018 Two Peds in a Pod®, updated from 2013

When can I get my child's ears pierced?

"When can I have her ears pierced?" is a question I hear fairly often in the office. Usually, I hear this question from parents of young girls, so for this post the operative pronoun will be "she."



There really isn't one correct medical answer to this question. I have heard pediatricians tell patients to wait until after their babies receive their first tetanus vaccine (at two months of age) but I have never heard of a case of tetanus from ear piercing, at least not in the United States. But, I wouldn't take a younger-than-two-month-old to the mall where strangers could infect her with germs.

And yes, the mall is where I send my patients for ear piercing. If I pierced 100 ears per day, than I would feel

comfortable performing this procedure. If I pierce a set of ears once a month, I am hardly an expert. Just as I would refer your child to an Ear, Nose and Throat specialist for too many ear infections for further evaluation, I refer all ear piercing families to the mall where the experts use sterile technique many times daily and are in fact qualified experts.

That said, some pediatricians do pierce ears and pride themselves on delivering the art, as well as the science, of medicine. If your pediatrician likes to perform ear piercing in the office, then consider it a convenience as well as a safe practice.

So when is the best time to pierce ears? I suggest to parents that they may wish to wait until their daughter is old enough to decide for herself if she wants her ears pierced. Some parents want to pierce earlier. Either way, here are some tips and points to consider:

- Piercing hurts. Take it from this pediatrician who was twenty-three (in medical school, after a really difficult neuroanatomy exam) when she had her ears pierced. It is fine to pre-medicate with ibuprofen (brand names Advil, Motrin) or acetaminophen (Tylenol). She will still feel the sting of piercing but the pain medicine may help prevent some of the throbbing which occurs afterwards.
- Some of the same techniques used to help ameliorate the sting of vaccines can also help ameliorate the sting of ear piercing. Keep in mind, after the pain of piercing with the first ear, your child may balk at piercing the second.
- Follow the instructions for ear cleaning. It takes around 6 weeks for the wounds to heal completely.
- Avoid dangling earrings. They can get caught on clothing or bedding and also are a choking hazard because babies/toddlers can more easily pull out

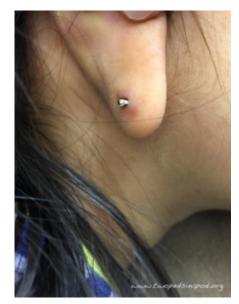
the earrings and then put them into their mouths. At recess a hoop earring can snag as a child runs.

- Some kids are allergic to gold as well as nickel. If you notice the skin around the hole becoming red, itchy, or scaly, or swollen, your child is probably having an allergic reaction to metal. The only cure is to remove the earrings.
- Avoid piercing the cartilage of an ear. Infections occurring in the cartilage tend to be more serious than in the lobe of the ear.

Warning: Pediatricians remove embedded earring backs on an all too frequent basis. Even years after a piercing, the skin on the back of an ear may overgrow. This malady tends to occur in kids around eight years old or older when parents are no longer taking earrings out for their children. Check your child's ears frequently to make sure the holes are clean and the earring parts are where they should be: in the hole in the ear, not embedded in an earlobe. Watch out, an earring can look fine from the front and you may even be able to twirl it around, but the earring back may be burying itself into the skin.

Ear piercing for some families is cultural; for others, cosmetic. Piercing your child's ears as a baby may lead to some interesting debates later about piercing other body parts. But that's a topic for another post.

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Earring embedded in the back of an earlobe.