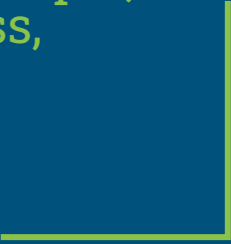




Common Health Issues in Infants and Toddlers

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Respiratory Syncytial Virus (RSV)

- RSV is a virus that causes respiratory illness in children
 - Resembles the common cold
 - Sometimes it can infect the lungs and cause breathing problems in younger children
- Sometimes RSV can cause
 - Wheezing
 - Bronchiolitis or pneumonia (especially in infants <1 year old)
- Treatment typically involves home care with plenty of fluids or offering fluids in smaller amounts more often



When to see a Doctor for RSV

RSV PREVENTION TIPS

6 Ways to Keep Your Baby Healthy



Wash your hands often.

Avoid contact with sick people.

Stay home if you are sick.

Sanitize hard surfaces.

Cover your mouth when sneezing/coughing.

Get your flu/COVID vaccines.

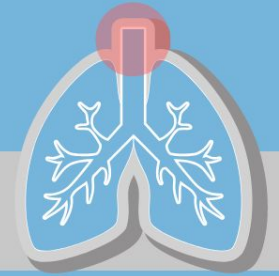
 CenExel

- Call your child's pediatrician if your child:
 - Develop a fever after having a cold or has a high fever
 - 100.4°F in children less than 3 months
 - 102.2°F in children 3 months or older
 - Has a cough or worsening in symptoms
 - Is wheezing
 - Has labored or rapid breathing
 - Shows signs of dehydration, such as fewer wet diapers than usual
 - Your infant refuses to breastfeed or bottle-feed
- Get Medical Help Right Away if your child:
 - Is struggling to catch their breath
 - Is very drowsy (not waking up from their naps to feed)
 - Has lips or fingernails that look blue

Croup

- Croup is caused by a virus that makes your child's airways swell
- Telltale signs of Croup include:
 - A "barking" cough
 - Raspy voice
 - High-pitched, squeaking noise when they breathe
- Often worse at night and when a child is upset or crying
- Treatment
 - Use a cool-mist humidifier or run a hot shower to create a steam-filled bathroom, sit with your child for 10 minutes
 - In cooler weather, take your child outside for a few minutes to breathe in the cool air

Signs and symptoms of CROUP



1 Barking cough

2 Noisy sound when breathing in

3 Fast and laboured breathing

+ Cold symptoms (mild fevers, runny nose)

When to see a Doctor for Croup



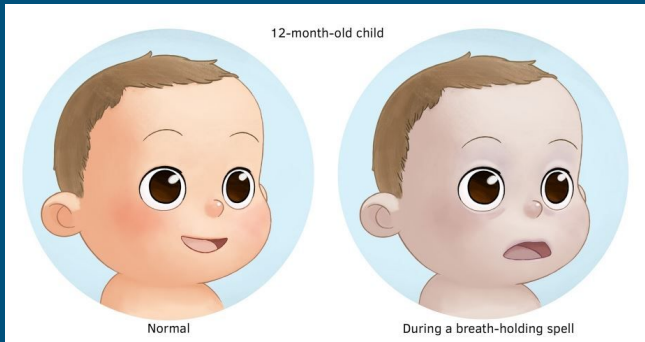
- Call your doctor or get medical care right away if your child:
 - Has trouble breathing, including very fast or labored breathing
 - Is too out of breath to walk or talk
 - Has pulling in the neck and chest muscles when breathing
 - Has stridor (squeaking noise when breathing in) that is getting worse
 - Is pale or bluish around the mouth
 - Is drooling or having trouble swallowing
 - Is very tired or sleepy or hard to awaken (especially during feeding times)
 - Is dehydrated (Dry mouth, few or no tears when crying, less wet diapers than usual)

Ear Infections

- Ear infections happen when viruses or bacteria get into the middle ear
- When your child has an ear infection, the middle ear fills with pus, pushing on the eardrum and causing pain
- Signs and Symptoms
 - Fever
 - Tugging of the ear
 - Increased irritability
 - Older Children complain of pain in the ear
- Treatment
 - Ear infections typically resolve on their own within 2-3 days
 - Your child's pediatrician may consider a course of antibiotics depending on the severity, length of the infection, child's age, and how many ear infections your child has had in the past



Breath-Holding Spells



- A breath holding spell is when a child holds their breath, usually after being angry, frustrated, startled, or in pain
 - Sometimes the breath holding leads to passing out
 - Most common in children ages 6-18 months, but can occur up to 6 years of age
- They can be frightening to watch, but they are not harmful and typically last less than a minute
- There are two types:
 - Cyanotic: The child cries very hard and then has a breath holding spell where the face turns blue. Usually caused by anger or frustration
 - Pallid: The child may cry a little bit or not at all before the spell. The child's face turns white during the spell, and typically this occurs when the child is startled or in pain

Rashes



Eczema (Atopic Dermatitis)

- Irregular, red, itchy patches of skin
- Common in folds of elbows and top of hands
- Common in kids with a family history of eczema or asthma
- First line treatment is topical emollients (ex. Eucerin, Aquaphor, Vaseline)
- If not sufficient, topical steroids can be used



Irritants (Contact Dermatitis)

- Well-defined, red, dry, scaling
- Risks: recent detergent changes, new soaps, new lotions
- Treatment with wet dressings with saline, moisturizers, and topical corticosteroids




Diaper Rash

- Causes: Irritation, Allergic, or **Yeast (Candida)**
- Scaly, erythematous, deep red plaques and satellite papules
- Caused by moist environment in the diaper area
- Topical antifungals

If your child develops concerning symptoms like fever, nausea/vomiting, or increased sleepiness, contact their pediatrician or go to the nearest Emergency Department

Allergies

- Common allergens:
 - Milk, Eggs, Peanuts, Treenuts, Fish, Shellfish, Wheat, Soy
- Start introducing the most common allergens into babies diet **early**
 - When starting to introduce solid food can include peanut butter, eggs, etc.
 - Introduce one new food at a time
 - Monitor for reactions when introducing new foods— especially looking for skin rashes, wheezing. If any signs of allergy, go to emergency department.
- Anaphylaxis
 - Symptoms: hives, wheezing, swelling of lips / eyes, difficulty breathing
 - If epipen is available, use it as demonstrated →
 - Go to emergency department!

- 1** Form fist around **EpiPen®** and **PULL OFF BLUE SAFETY CAP.**
- 2** **POSITION ORANGE END** about 10cm away from outer mid-thigh*.
* Either clothed, or unclothed, avoiding seams and pocket areas.
- 3** **SWING AND JAB ORANGE TIP** into thigh at 90° angle and hold in place for 10 seconds.
- 4** **REMOVE EpiPen®**
Massage injection site for 10 seconds*.
*After use the orange needle cover automatically extends to cover the injection needle.

Fever

- <3 months old, contact your doctor for any fever
- 3-6 months old and has a temperature up to 102 F (38.9 C) contact your doctor
- Rectal temperature is most reliable!
- Call 911 if:
 - Not moving
 - Can't wake up
 - Severe trouble breathing (struggling for each breath; can barely speak or cry)
 - Purple or blood-colored spots or dots on skin
 - You think your child has a life-threatening emergency

Acetaminophen Dosage Table for Fever & Pain: Birth to 3 Years of Age:

How to give the right amount of ACETAMINOPHEN (also known as Tylenol) is different depending on which medicine you plan to give.

Dose: Give every 4 to 6 hours as needed for fever or pain. **DO NOT GIVE MORE THAN 4 DOSES IN 24 HOURS.** Do NOT use with any other medicine containing acetaminophen.



Weight →	6 to 11 pounds (3 to 5 kilograms)	12 to 17 pounds (5 to 7 kilograms)	18 to 23 pounds (8 to 10 kilograms)	24 to 35 pounds (11 to 15 kilograms)
Age →	0 to 3 months	4 to 11 months	12 to 23 months	2 to 3 years
Infant's Acetaminophen (160 mg / 5 mL)	1.25 mL 	2.5 mL 	3.75 mL 	—
Children's Acetaminophen (160 mg / 5 mL)	—	—	—	5 mL
Children's Acetaminophen Chewables (160 mg)	—	—	—	1 tablet

Rectal Temp: Can range from 96.8° F (36° C) in the morning to 100.3° F (37.9° C) late in the day

Acetaminophen Dosage Table for Fever & Pain: Age 4 Years and Older:

How to give the right amount of ACETAMINOPHEN (also known as Tylenol) is different depending on which medicine you plan to give.

Dose: Give every 4 to 6 hours as needed for fever or pain. **DO NOT GIVE MORE THAN 4 DOSES IN 24 HOURS.** Do NOT use with any other medicine containing acetaminophen.



Weight →	36 to 47 pounds (16 to 21 kilograms)	48 to 59 pounds (22 to 26 kilograms)	60 to 71 pounds (27 to 32 kilograms)	72 to 95 pounds (33 to 43 kilograms)	96 pounds or more (44 kilograms or more)
Age →	4 to 5 years	6 to 8 years	9 to 10 years	11 years	12 years or older
Infant's Acetaminophen (160 mg / 5 mL)	—	—	—	—	—
Children's Acetaminophen (160 mg / 5 mL)	7.5 mL 	10 mL 	12.5 mL 	15 mL 	10 mL + 10 mL = 20 mL
Children's Acetaminophen Chewables (160 mg)	1 ½ tablets 	2 tablets 	2 ½ tablets 	3 tablets 	4 tablets
Children's Acetaminophen Dissolvable Packets (160 mg / powder pack)	—	2 packets 	2 packets 	3 packets 	—
Adult's Acetaminophen Tablets (325 mg)	—	1 tablet 	1 tablet 	1 ½ tablets 	2 tablets
Adult's Acetaminophen Tablets (500 mg)	—	—	—	1 tablet 	1 tablet

Vaccinations

Pediatric Vaccine Schedule

RegisteredNurseRN.com

<u>Birth:</u>	<u>4 months:</u>	<u>12-18 months:</u>	<u>4-6 years old:</u>
✓ Hepatitis B	✓ DTaP	✓ DTaP	✓ DTaP
	✓ Hib	✓ Hib	✓ Polio (IPV)
<u>2 months:</u>	✓ Polio (IPV)	✓ PCV13	✓ MMR
✓ Hepatitis B	✓ PCV13	✓ MMR	✓ Varicella
✓ DTaP	✓ RV	✓ Varicella	✓ *Influenza (yr.)
✓ Hib		✓ *Hepatitis A	
✓ Polio (IPV)	<u>6 months:</u>	✓ Influenza (yr.)	
✓ PCV13	✓ SAME as 2 months		
✓ RV	✓ Influenza (yr.)		

★ TIP: The same vaccines are given at 2 and 6 months. Four months has the same vaccines as 2 and 6 months **BUT Hepatitis B is NOT given at 4 months.**

*Hep A: two doses are given (one dose: 12 months & second dose: 18 months...6 months apart)



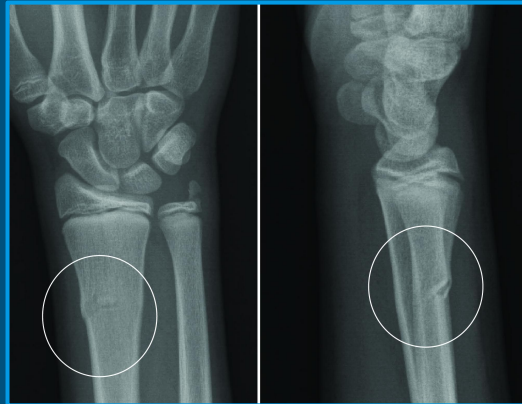
Recommended Vaccines by Age | CDC, CDC.gov

Vaccination Contraindications

- All Vaccines
 - Anaphylaxis to previous vaccine administration
- Rotavirus vaccine
 - History of intussusception
- Live vaccines (MMR, Varicella)
 - Severe immune compromise (SCID, chemotherapy, immune suppressive therapy, etc)
- DTap
 - Encephalopathy within 7 days of administration

Wrist/Forearm Fractures

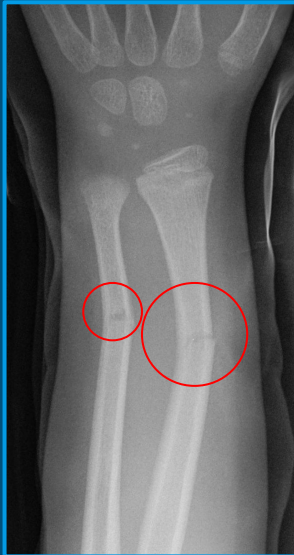
- About half of all broken bones in children are wrist or forearm fractures
- Common injury resulting from a child falling onto an outstretched hand for support
 - Torus/Buckle fracture: incomplete fracture causing one side of the bone to bend
 - Typically heals in 1 month with wrist bracing



Torus fractures are most common in children ages **5-10 years old** due to the flexibility of their developing bones

Wrist/Forearm Fractures

- Greenstick fracture: bone breaks on one side only
 - Can occur in only one or both forearm bones, the radius and ulna
 - More likely with **vitamin D deficiency**
- Treated with immobilization in a cast or splint for 4-6 weeks



Greenstick fractures also occur in children **younger than 10 years old**, because of differences in growing bones and adult bones

Ankle Sprains

- Caused by a sudden movement or twist of the foot at the ankle, like when the foot rolls over
 - E.g. changing directions while playing running sports, like basketball or football
- Signs of a sprained ankle:
 - Swelling of the ankle in **minutes-to-hours**
 - Pain around the outside of the ankle joint
 - Bruising around the ankle in **two-to-three days**



Ankle Sprains

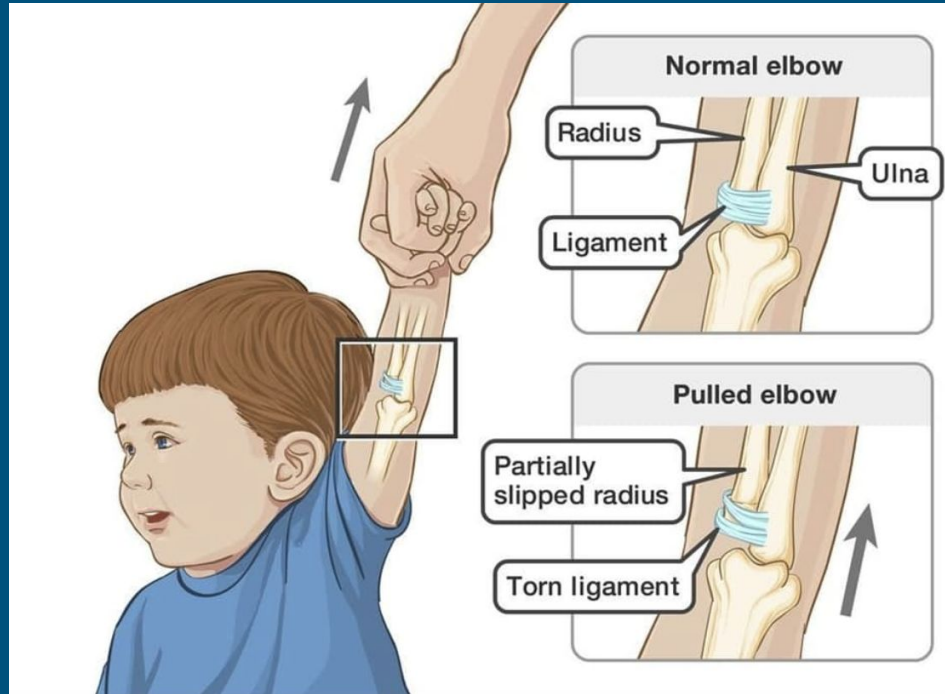
- Treatment: **RICE** method!
 - **R**est injured area and avoid physical activities that cause pain
 - **I**ce should be applied to the area for **10-15 minutes every 2-4 hours**. **Wrap ice in a towel or pillow case** to avoid burning the skin.
 - **C**ompression of the joint with a firm bandage that is not too tight, i.e. does not cause additional pain or impaired blood circulation. Wrap should start just above the ankle and extend down to the foot, leaving **toes uncovered**.
 - **E**levate the ankle whenever possible to reduce swelling. Children can rest their foot on some pillows while watching TV, reading, or resting.



Nursemaid's Elbow (Slipper Elbow)

- Common condition in children younger than 4 years old
- Occurs with sudden pulling or traction on the hand or forearm - most commonly when a parent or caregiver reaches out and grabs a child about to fall or walk into the street
- Other common causes
 - When an infant rolls on their own
 - Fall
 - Pulling or swinging a young child by the hand
- Symptoms:
 - Immediate pain in the arm
 - Refusal and/or inability to move the arm
 - Anxiety
- A doctor can diagnosis nursemaids elbow by a physical examination (usually no imaging required)
- Treatment: your doctor will perform a reduction by pronating the arm to quickly and effectively realign the joint
- Long term complications:
 - Children typically recover quickly with no long term consequences
 - They are more likely to have a recurrence
 - Most children outgrow this tendency by the age of 5

Nursemaid's Elbow (Slipper Elbow)



Choking/Swallow Hazards

Children under the age of 4 are at high risk of choking while eating

Young children are also at higher risk of swallowing small household items that are not edible

Foods

- Small round foods such as grapes, cherries, cherry tomatoes, melon balls
- Gum
- Large chunks of meat


Non-Food Hazards

- Button batteries*
- Coins
- Marbles
- Magnets*
- Orbeez


It is important to keep small items out of reach of young children and cut their food properly to reduce the risk of choking or internal organ damage

Cut Round Foods Into Smaller Pieces


Small round foods such as grapes, cherries, cherry tomatoes, and melon balls are common causes of choking.



Slice these items in half lengthwise.

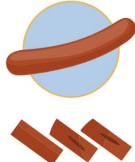


Then slice into smaller pieces (no larger than 1/2 inch) when serving them to young children.




Cut Tube-shaped Foods Into Smaller Pieces

Cut tube-shaped foods, such as baby carrots, string cheese, hot dogs, etc., into short strips rather than round pieces.



In addition to the foods listed, **avoid serving foods that are as wide around as a nickel**, which is about the size of a young child's throat.



Poison Control

Common Causes of Poisoning:

- Iron supplement overdose - these look like candy!
 - Symptoms: abdominal pain, vomiting with or without blood, diarrhea, blood in stool, sleepy
 - Symptom onset: 30 minutes to 6 hours after ingestion
- Prescription medications
 - Various side effects - look out for change in behavior, bloody vomiting, diarrhea, excessive sleepiness, unresponsiveness
- Prevention: Store in cabinets with child-proof locks or areas that are out of reach from children. Store separately from children's vitamins and medications.

Poison Control

Common Causes of Poisoning:

- Pain Medication (Tylenol/acetaminophen, Motrin/ibuprofen)
 - Symptoms: liver injury, kidney injury
- Antihistamines (Benadryl, Zyrtec, cough & cold medicine)
 - Symptoms: dry mouth, excessive sleepiness; if large dose, hallucinations and blood pressure elevation

Prevention: Communicate clearly with other adults caring for the child when pain/fever medication is given to reduce risk of giving an accidental overdose. Keep in safe storage with child safety caps/cabinet locks. Follow age and dosing guidelines as specified on the medication instructions.

Poison Control

Common Causes of Poisoning:

- **Cleaning substances (oven and drain cleaners, all-purpose sprays, WIndex, bleach, etc.)**
 - Symptoms: Depends on severity of exposure - nausea, vomiting, blood in vomit, coughing, choking, inhalation injury, death
 - Prevention: Keep in areas out of reach from children, use child-safety locks on cabinets and door handles, turn on safety locks for nozzles, do not leave them within reach of child while cleaning
- **Foreign objects - Batteries, magnets, absorbent foam/gel/beads**
 - Symptoms: Batteries may cause chemical reactions that burn a hole in the throat/stomach within 2 hours after ingesting. Magnets can connect to each other through the lining of our GI tract and cause obstruction or perforation. Absorbent or expandable toys may also cause obstruction and perforation.
 - Prevent: do not allow young children to play with small items that may pose choking hazards, or with magnets and batteries. Make sure child play is supervised.

Poison Control - Lead Poisoning

- A household hazard, especially in homes built before 1978
- Sources: peeling/chipped paint, lead pipes, lead dust, soil with high lead content, traditional medicines such as azarcon and greta, some candy wrappers, jewelry, ammunition/gunpowder
- Prevention: 1) If lead exposure is an occupational hazard in the family, change shoes and clothes before entering the home after work, and shower before handling children. 2) Removal of lead items (paint, pipes, construction work from before 1978). 3) Lead blood tests as recommended by your child's PCP!

Poison Control - Lead Poisoning

Exposure to lead can seriously harm a child's health.



Damage to the brain
and nervous system



Slowed growth
and development



Learning and
behavior problems



Hearing and
speech problems

This can cause:

- Lower IQ
- Decreased ability to pay attention
- Underperformance at school



General Safety



- **Return to the doctor** for injuries that *do not improve after 6 weeks* or injuries that *worsen over time*
- Always use **helmets** for high-risk activities, like biking, scootering, or playing rough sports like football
 - Helmets are an effective way to prevent serious brain injuries in active kids
- Use the **buddy system**
 - Having your child stick to their playmate reduces the dangers of playing outside. Know the safe areas of your neighborhood, and monitor your child if possible (e.g. location apps for children with cell phones)
- All children should use sunblock for outdoor activities **year-round**
 - Choose broad-spectrum sunscreens with an SPF of at least 30, and re-apply every 2 hours
- Stay **hydrated!**
 - Encourage children to drink **8oz of water** before a sports game or have them carry a refillable bottle
 - A few sips **every 20 minutes** can prevent dehydration
 - **Warning signs:** no tears when crying, dry mouth, dizziness, fatigue, headache, yellow urine

Sudden Infant Death Syndrome

SIDS is the sudden and unexplained death of a baby younger than 1 year old, and the leading cause of death among infants 1 month- 1 year old

Sleep:

- Place baby on their back to sleep
- Avoid Co-sleeping
- Remove soft bedding/toys from crib (only firm crib mattress with fitted sheet)
- Dress infant in light, comfortable clothes or a sleep sack for sleeping to avoid overheating

Lifestyle:

- Avoid second-hand smoke exposure
- Breastfeeding can lower the risk of SIDS by as much as 50%
- Put baby to sleep with a pacifier
- Avoid honey before 1 year of age
- Immunize baby! (Babies immunized in accordance with CDC guidelines have a 50% lower incidence of SIDS)

