

# Paediatric Handbook

Discover common childhood conditions and when to seek medical help for your little ones.



### Hand, Foot and Mouth Disease (HFMD)



Hand, foot and mouth disease (HFMD) is an infectious illness caused by a group of viruses known as enteroviruses. HFMD can affect people of all ages but is especially common in children below 5 years old.



Children with HFMD may have symptoms that last for 7 – 10 days.

- · Fever
- Sore throat
- Rash or small blisters on palms of hands, inner thighs, soles of feet, and buttocks
- Mouth or throat ulcers
- · Poor appetite
- Lethargy



- · Refusal to drink
- Signs of dehydration such as poor urine output, dry lips or tongue, or sunken eyes
- Drowsiness or increased lethargy
- · Hard or fast breathing
- · Seizures or fits

How to prevent HFMD?  $\rightarrow$ 



### How to prevent HFMD?

HFMD is very contagious and spreads through contact with infected droplets. If you know of anyone who has HFMD, try to avoid close contact with them.

### You can lower your child's risk of infection by:

- Teaching them not to put their hands or objects in their mouths
- Teaching them the proper way of handwashing and remind them to wash their hands before and after eating, after using the restroom, after touching pets, after sneezing or coughing, and after spending time outdoors
- Disinfecting your home regularly, especially the areas where your child frequents

- Providing personal feeding utensils and cups.
  Avoid sharing feeding utensils, glasses, cups and toothbrushes in school
- Sanitising touched surfaces frequently.
  This includes your child's toys, feeding utensils and learning supplies

(<del>†</del>)

Note: To avoid spreading the virus, please keep your child at home if they exhibit symptoms such as blisters, rashes, fever or sore throat.

### Influenza



Influenza (flu) is a common and very contagious viral infection that affects the air passages of the lungs. Most children are ill with the flu for less than a week, but some children have a more serious illness including lung infection or brain infection.



## Symptoms to look out for

- · Fever
- · Body aches
- · Headache
- Sore throat
- · Cough
- · Tiredness
- · Runny or stuffy nose
- Nausea
- Vomiting
- · Diarrhoea
- Neck swelling (cervical lymphadenopathy)



## When to seek medical attention

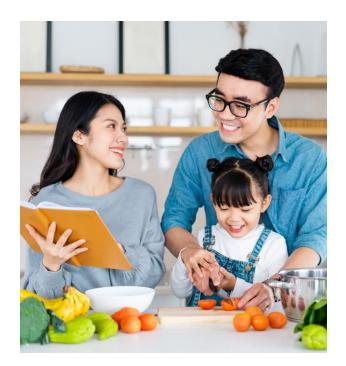
- Persistent fever
- Difficulty breathing or is breathing fast
- Poor appetite
- Lethargic or is not responding as usual
- Refuses to drink fluids, or is dehydrated (with symptoms such as crankiness and infrequent urination)
- Skin rash

How to prevent influenza?  $\longrightarrow$ 



### How to prevent influenza?

- Optimise your child's general health through good nutrition, regular exercise and adequate sleep and rest
- Vaccinate once your child is old enough (6 months or older)
- Limit your child's contact with infected people
- · Have your child wash their hands often
- Have your child wear a medical mask when in contact with many others or in large groups of people



### How to prevent your child spreading the flu to others?

- Teach them to cover their nose and mouth when coughing or sneezing.
  Use a tissue or cough or sneeze in to the crook of their arm
- Wash your hands before and after caring for your child
- Clean surfaces in the home that others may touch





Gastroenteritis is an infection that leads to the inflammation of the stomach or the intestine.



## Symptoms to look out for

- · Fever
- · Nausea
- Vomiting
- · Watery diarrhoea
- $\cdot$  Stomach pain and cramps
- Severe dehydration may occur in rare cases



## When to seek medical attention

- Green vomit
- Blood in vomit or stools
- · Fever of more than 38°C
- Diarrhoea beyond 2 weeks
- · Drowsiness or increased lethargy
- Severe or prolonged episodes of abdominal pain
- A sunken fontanelle (the soft spot on top of the skull)
- Continuous vomiting and inability to keep down any fluids
- Large amounts of watery diarrhoea more than 8-10 times a day
- Signs of dehydration such as poor urine output, dry lips or tongue, sunken eyes

How to prevent gastroenteritis? ightarrow



### How to prevent gastroenteritis?

Gastroenteritis is not fully preventable, though vaccinations are available for some of the viruses that cause it. For example, the rotavirus vaccine can be given to infants between 6-16 weeks (1st dose) and 10-24 weeks (2nd dose) to prevent severe cases of rotavirus gastroenteritis.

### Besides vaccination, you can prevent gastroenteritis by:

- Avoiding raw or undercooked food
- Avoiding physical contact with someone who has gastroenteritis
- Maintaining good hygiene practices such as regular hand-washing
- Sanitising surfaces, such as your kitchen counter or work desk, regularly
- Washing your hands before cooking or handling food

- Keeping raw foods separate from ready-to-eat foods
- Refrigerating and freezing perishable food promptly
- Not sharing cups or utensils





A fever is an increased body temperature of 38°C or above. Fever is the body's protective mechanism to help the immune system fight off infections. It can also be a sign of inflammation in the body.

Ear and forehead thermometer readings are not reliable in children less than 6 months old. For that reason, rectal, oral or axillary temperature should be measured in young infants less than 6 months old. In children older than 6 months old, a tympanic thermometer may be used instead.



Use a thermometer to assess your child's temperature.

- Irritability
- Lethargy
- · Febrile fits
- Reduced appetite for food and drinks

Symptoms also help identify the source of infection (e.g. cough, runny nose, vomiting, diarrhoea etc.)



When to seek medical attention  $\longrightarrow$ 



### When to seek medical attention

- Young infants below 3 months old with a temperature of 38°C or more
- Child of any age with temperature close to or exceeding 41°C
- Fever that lasts more than 24 hours without any other symptoms
- If your child looks ill or is unusually drowsy / irritable

- If your child has any of the following symptoms:
  - Difficulty breathing
  - Repeated vomiting or diarrhoea
  - Severe pain over any part of the body
  - Rashes
  - Seizures
  - Poor intake of fluids and solids

### Tips on caring for a child with fever

- Keep your child home from school to allow adequate rest at home
- 2 Ensure adequate hydration
- Dress your child in **light and**comfortable clothing. Avoid
  overdressing your child
  or wrapping your baby in
  multiple layers. Cover with
  one light blanket if needed



- Control the fever with fever medications and sponging their body with lukewarm water. You may use a wet towel to sponge their neck, armpits and groin. Avoid cold showers as this will cause shivering which may raise their body temperature further
- Keep the room cool and well-ventilated
- Monitor your child's temperature regularly, particularly 1-2 hours after administering fever medications

## Atopic Dermatitis / Eczema



Eczema is a chronic (long-lasting) condition that causes dry, itchy and inflamed skin. The condition is not contagious. Many patients have a personal or family history of other atopic conditions like asthma, allergic rhinitis or allergic conjunctivitis. It is common for the severity of a child's eczema to fluctuate. Most children with eczema improve as they get older. Moisturising regularly can relieve itching and prevent flares / outbreaks. Other treatment modalities include non-soap based wash and medicated creams or ointments.



## Symptoms to look out for

- · Dry skin
- · Itch
- · Rash which may appear as
  - Small, raised bumps
  - Blisters
  - Red and scaly rashes
- · Thickened skin
- Raw and weepy broken skin from scratching



## Areas most commonly affected by eczema

- · Infants
  - Cheeks, forehead and scalp
  - Body
  - Arms and legs
- · Older children
  - Flexures including neck, front of the elbows, back of the knees and ankles
  - Eyelids

It is important to avoid scratching affected areas excessively as it may lead to infections. Infected areas will appear red and oozy, feel warm to touch, be painful and may have pus or yellow discharge.

When to seek medical attention  $\rightarrow$ 



#### When to seek medical attention

- · The eczema affects your child's sleep and daily activities
- · Your child's eczema does not get better with regular moisturising
- · Your child's skin shows signs of infection
- · Your child develops a fever with worsening eczema symptoms

### What are some triggers of eczema?

1 Dry skin

**Irritants** 

- Chemical in soaps, fragrances and detergents
  - Environmental allergens such as dust, pollen, pet dander
  - Synthetic fabrics such as acrylic, wool
  - · Sweat
- 3 Stress
- Infections such as upper respiratory tract infections

- Certain temperature and climate: dry or colder environment
- 6 Food allergies





Bronchitis and bronchiolitis are common viral infections in young children caused by viruses that affect the small air passages in the lungs. They are transmitted via infected droplets in the air or through contact with contaminated objects.

The infection can make breathing difficult due to inflammation, mucous accumulation and narrowing of your child's airways.



### Symptoms to look out for

In the initial few days, your child may show common flu-like symptoms like fever, blocked nose, runny nose and cough.

The illness tends to peak around the 3rd to 5th day of the illness. Your child's symptoms may worsen during this time and this can cause breathlessness that interferes with feeding and sleep.

From the 6th day onwards, your child should gradually recover over the next 3 days. However, the cough may persist for 2-3 weeks.



When to seek medical attention  $\longrightarrow$ 



#### When to seek medical attention

Bronchitis and bronchiolitis are usually mild and treatment is mainly supportive with rest, adequate intake and symptomatic medications such as fever medication, cough and runny nose medication. However, your child may require admission to the hospital for further treatment if he / she:

- · Has difficulty breathing
- Is breathing hard or fast with recessions in the ribcage region, flaring of the nostrils or head bobbing
- · Appears lethargic

- · Is irritable and inconsolable
- · Refuses to eat or drink
- · Has lesser urine output or dry lips
- · Has pale or greyish skin color

### How to prevent bronchiolitis?

- Avoid close contact with anyone who is unwell
- Vaccinate your child from influenza every year once they are 6 months or older.
  This protects your child from more contagious flu strains
- Ensure that your home is a smoke-free environment.

  Infants exposed to cigarette smoke are at increased risk of bronchiolitis





Asthma is a chronic respiratory disease which causes inflammation and swelling of the airways. During an asthma attack, the airways narrow, causing breathing difficulties.



## Symptoms to look out for

- · Frequent or persistent coughing
- · Wheezing
- · Shortness of breath
- · Chest tightness





## When to seek medical attention

- Breathless despite reliever medications
- Unable to feed or take in fluids well
- Unable to speak in complete sentences
- Drowsy, lethargic or unresponsive
- · Irritable and difficult to calm
- · Pale or greyish skin color

What are some triggers of asthma?  $\longrightarrow$ 

### What are some triggers of asthma?

- · Infections common cold or flu
- Allergens house dust mites, pollen, mould, animal dander
- Air pollutants cigarette smoke, smoke from open fires, haze
- Sudden changes in temperature and humidity
- Physical exertion depending on how well the asthma is managed, exercise or rigorous play may trigger attacks

### How can I manage my child's asthma?

- Identify your child's asthma triggers and minimise exposure to them
- Ensure your child takes all long-term control medications (e.g. inhaled corticosteroids) as prescribed by the doctor
- Always have your child's quickrelief medications (e.g. Ventolin inhalers) on hand and use them as directed
- Inform your child's caregivers and teachers of their condition and how to assist your child during an asthma attack

- Teach older children to recognise their symptoms and know what to do
- Once your child's asthma is properly controlled, encourage them to exercise and play sports.

  Regular physical activity helps improve lung function and overall health.
- Help your child maintain a healthy weight, as being overweight can worsen asthma symptoms

Finally, as your child's condition can change over time, do follow up with medical appointments regularly so that the doctor can adjust treatment accordingly.

If you suspect your child might have asthma, consult a paediatrician for an accurate diagnosis and suitable treatment plan.



A UTI is usually caused by germs that have gone into the urethra (passage from which the urine passes out from the bladder). Constipation, urine with-holding habits and inadequate fluid intake can put your child at risk of UTI. In some children, an underlying problem with the urinary tract may predispose them to UTI.



### Symptoms to look out for

In **young children**, symptoms of UTI tend to be non-specific. Fever tends to be the only consistent symptom. Other symptoms include:

- · Poor feeding
- · Increased irritability
- · Vomiting
- · Cloudy or foul smelling urine

In **older children**, the symptoms are more specific to the urinary tract. These symptoms include:

- · Blood in the urine
- Pain or burning sensation on urination
- · Increased frequency of urination
- Having the urge to urine even when the bladder is empty
- Lower abdominal pain or lower back pain
- · Incontinence

How to prevent UTIs? ightarrow



### How to prevent UTIs?

- · Good perineal hygiene
- Avoid constipation
- · Ensure adequate fluid intake
- · Regular emptying of the bladder





#### When to seek medical attention

UTIs are fairly common in children and require prompt recognition and treatment.

Seek medical attention:

- If your child displays symptoms of UTI
- If treatment has been prescribed, seek medical attention if
  - Their symptoms persist despite being on the appropriate treatment (e.g. antibiotics) for 2 days
  - Poor feeding
  - Lethargy or drowsiness
  - Decreased urine output







Ear infection is common in young children, especially those under 5 years old as they have shorter eustachian tubes.

The infection occurs when a virus or bacteria infects the space behind the child's eardrum. It may involve the outer ear (otitis externa) or middle ear (otitis media).



- · Ear pain or discharge
- · Tugging or pulling on ears
- · Fever
- Upper respiratory tract symptoms such as cough, runny nose, nasal congestion, sore throat
- · Vomiting
- · Headache
- Dizziness
- Increased irritability
- · Hearing impairment



## When to seek medical attention

- · Persistent fever
- · Poor feeding or repeated vomiting
- · Younger than 6 months old
- Has redness and swelling behind the ear
- · Very sleepy or irritable
- · Skin rash
- Bloody or pus-like ear discharge
- Hearing impairment
- Persistent pain despite at least one dose of analgesia

How to prevent ear infection?  $\rightarrow$ 



### How to prevent ear infection?

- Vaccination against common causal organisms (e.g. Strep pneumoniae, H. influenzae, influenza virus)
- · Treat allergies if they are present
- Wash your child's hands and your own often to keep germs away
- Breastfeed your baby if possible as breast milk has antibodies that help fight infections
- Avoid bottle-feeding your baby when they are lying down. Never put your baby to bed with a bottle
- Avoid smoking, and keep your child away from any second-hand smoke. Smoke causes inflammation of the eustachian tube, making ear infections more likely

- If your child has had many ear infections, try reducing the use of pacifiers (soothers). Using a pacifier may increase the risk of repeated ear infections
- Dry ears after swimming (for otitis externa)



### Paediatric Urgent Care Centre

Our centre is dedicated to addressing the urgent medical needs of children and adolescents up to age 14.



#### **Operating Hours:**

8am - 11pm

Patients will be directed to our hospital's 24-hour Urgent Care Centre during non-operational hours.



#### Address:

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#### Website:

www.parkwayeast.com.sg/ paediatric

### Parkway East Paediatric Clinic

We offer comprehensive quality care from diagnosis through to treatment and rehabilitation for children, from newborns through their teen years.



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