# Rash or Redness - Widespread

Schmitt-Thompson
Clinical Content

After Hours Telehealth Triage Guidelines | Pediatric | 2022

#### **DEFINITION**

- Rash over large areas or most of the body (widespread or generalized)
- Occasionally just on hands, feet and buttocks but symmetrical
- Cause of rash is unknown
- Red or pink rash
- Smooth (macular) or slightly bumpy (papular)
- Small spots, large spots or solid red (erythroderma)

#### **INITIAL ASSESSMENT QUESTIONS**

- 1. APPEARANCE of RASH: "What does the rash look like?" " What color is the rash?" (Caution: This assessment is difficult in dark-skinned patients. When this situation occurs, simply ask the caller to describe what they see.)
- 2. PETECHIAE SUSPECTED: For purple or deep red rashes, assess: "Does the rash blanch?"
- 3. SIZE: For spots, ask, "What's the size of most of the spots?" (Inches or centimeters)
- 4. LOCATION: "Where is the rash located?"
- 5. ONSET: "How long has the rash been present?"
- 6. ITCHING: "Does the rash itch?" If so, ask: "How bad is the itch?"
- 7. CHILD'S APPEARANCE: "How does your child look?" "What is he doing right now?"
- 8. CAUSE: "What do you think is causing the rash?"
- 9. RECENT IMMUNIZATIONS: "Has your child received a MMR vaccine within the last 2 weeks?" (Normally given at 12 months and again at 4-6 years)
- Author's note: IAQ's are intended for training purposes and not meant to be required on every call.

#### TRIAGE ASSESSMENT QUESTIONS

#### Call EMS 911 Now

[1] Sudden onset of rash (within last 2 hours) AND [2] difficulty with breathing or swallowing

R/O: anaphylaxis CA: 50, 22, 23, 5

Has fainted or too weak to stand

R/O: toxic shock syndrome or septic shock

CA: 50. 5

[1] Purple or blood-colored spots or dots AND [2] fever within last 24 hours

R/O: meningococcemia, Rocky Mountain spotted fever

CA: 50, 5

Difficult to awaken or to keep awake (Exception: child needs normal sleep)

CA: 50, 5

# Sounds like a life-threatening emergency to the triager

CA: 50, 5

# See More Appropriate Guideline

Taking a prescription medicine now or within last 3 days (Exception: allergy or asthma medicine, eyedrops, eardrops, nosedrops, cream or ointment)

Go to Guideline: Rash - Widespread on Drugs (Pediatric)

[1] Using cream or ointment AND [2] causes itchy rash where applied

Go to Guideline: Rash or Redness - Localized (Pediatric)

[1] Hives from allergic food AND [2] previously diagnosed by HCP or allergist

Go to Guideline: Food Allergy - Diagnosed (Pediatric)

Food reaction suspected but never diagnosed by HCP

Go to Guideline: Food Reactions - General (Pediatric)

Hives suspected

Go to Guideline: Hives (Pediatric)

Eczema has been diagnosed in past and eczema flare-up suspected

Go to Guideline: Eczema Follow-Up Call (Pediatric)

Sunburn suspected

Go to Guideline: Sunburn (Pediatric)

Measles suspected

Go to Guideline: Measles - Diagnosed or Suspected (Pediatric)

Roseola suspected (fine pink rash following 3 to 5 days of fever)

Go to Guideline: Roseola (Pediatric)

Received MMR vaccine 6 - 12 days ago and mild pink rash mainly on the trunk

Go to Guideline: Immunization Reactions (Pediatric)

#### Hot tub dermatitis suspected

Go to Guideline: Hot Tub Dermatitis (Pediatric)

#### Chickenpox suspected

Go to Guideline: Chickenpox - Diagnosed or Suspected (Pediatric)

#### Swimmer's itch suspected

Go to Guideline: Swimmer's Itch - Lakes and Ocean (Pediatric)

#### Mosquito bites suspected

Go to Guideline: Mosquito Bite (Pediatric)

# Insect bites suspected

Go to Guideline: Insect Bite (Pediatric)

Small red spots or water blisters on the palms, soles, fingers and toes

Go to Guideline: Hand-Foot-Mouth Disease (Pediatric)

Bright red cheeks AND pink, lace-like rash of upper arms or legs

Go to Guideline: Fifth Disease (Pediatric)

## Go to ED Now

[1] Age < 12 weeks AND [2] fever 100.4 F (38.0 C) or higher rectally

R/O: sepsis

CA: 51, 27, 5

# Go to ED Now (or PCP triage)

[1] Purple or blood-colored spots or dots AND [2] no fever within last 24 hours

R/O: petechiae or purpura

CA: 52, 5

[1] Bright red, sunburn-like skin AND [2] wound infection, recent surgery or nasal packing

R/O: Staph or Strep exotoxin rash

CA: 52, 5

[1] Female who is menstruating AND [2] using tampons now AND [3] bright red, sunburn-like skin

R/O: staph or strep exotoxin rash

CA: 52, 24, 5

[1] Bright red, sunburn-like skin AND [2] widespread AND [3] fever

R/O: Staph or Strep toxin rash

CA: 52, 3, 5

[1] Monkeypox rash suspected (unexplained rash often starting on the face or genital area, then spreading quickly to the arms and legs) AND [2] known monkeypox exposure in last 21 days (Note: exposure means close contact with person who has a confirmed diagnosis of monkeypox)

CA: 52, 5

Not alert when awake ("out of it")

R/O: altered mental status

CA: 52, 5

[1] Fever AND [2] > 105 F (40.6 C) by any route OR axillary > 104 F (40 C)

R/O: serious bacterial infection

CA: 52, 18, 5

[1] Fever AND [2] weak immune system (sickle cell disease, HIV, splenectomy, chemotherapy, organ transplant, chronic oral steroids, etc)

R/O: serious bacterial infection. Note: if available, refer to established specialist.

CA: 52, 5

Child sounds very sick or weak to the triager

Reason: severe acute illness or serious complication suspected

CA: 52

# See HCP (or PCP Triage) Within 4 Hours

[1] Fever AND [2] severe headache

R/O: serious rash
CA: 53, 3, 19, 5

[1] Bright red skin AND [2] extremely painful or peels off in sheets

R/O: staph scalded skin syndrome

CA: 53, 19, 5

[1] Bloody crusts on lips AND [2] bad-looking rash

R/O: Stevens-Johnson syndrome

CA: 53, 19, 5

Widespread large blisters on skin

R/O: Stevens-Johnson syndrome

CA: 53, 19, 5

[1] Fever AND [2] present > 5 days

R/O: Kawasaki disease, serious cause

CA: 53, 3, 19, 5

#### **Call PCP Now**

COVID-19 Multisystem Inflammatory Syndrome (MIS-C) suspected (Fever AND 2 or more of the following: widespread red rash, red eyes, red lips, red palms/soles, swollen hands/feet, abdominal pain, vomiting, diarrhea)

Note: very rare complication of COVID-19

CA: 59, 3, 19, 5

## See PCP Within 24 Hours

[1] Female who is menstruating AND [2] using tampons now AND [3] mild rash

R/O: early toxic shock syndrome

CA: 54, 24, 32, 25, 5

Fever (Exception: rash onset 6-12 days after measles vaccine OR fever now resolved)

R/O: scarlet fever, measles, early RMSF

CA: 54, 3, 14, 16, 13, 32, 28, 5

Sore throat

R/O: scarlet fever

CA: 54, 20, 21, 32, 28, 5

[1] SEVERE widespread itching (interferes with sleep, normal activities or school) AND [2] not improved after 24 hours of steroid cream/oral Benadryl

CA: 54, 14, 15, 16, 33, 19, 5

#### **Call PCP Within 24 Hours**

[1] Monkeypox rash suspected by triager (unexplained rash often starting on the face or genital area, then spreading quickly to the arms and legs) AND [2] no known monkeypox exposure in last 21 days (Exception: classic hand-foot-mouth disease, hives, insect bites, etc.)

CA: 60, 34, 35, 36, 19, 5

#### See PCP Within 3 Days

[1] Mother is pregnant AND [2] cause of child's rash is unknown

R/O: Rubella or Fifth Disease

CA: 55, 29, 11, 12, 16, 26, 32, 19, 5

[1] Rash not covered by clothing AND [2] child attends child care or school

Reason: may need PCP clearance to return to school

CA: 55, 11, 12, 14, 15, 16, 32, 17, 5

Rash not typical for viral rash (Viral rashes usually have symmetrical pink spots on trunk- See Home Care)

CA: 55, 14, 15, 16, 26, 32, 19, 5

[1] Widespread peeling skin AND [2] cause unknown

R/O: missed scarlet fever rash 1 week earlier

CA: 55, 30, 32, 31, 5

#### Rash present > 3 days

R/O: viral exanthem, pityriasis rosea, eczema

CA: 55, 11, 12, 14, 15, 16, 32, 19, 5

#### **Home Care**

[1] Fine pink rash AND [2] 6-12 days after measles vaccine

Reason: probably measles vaccine rash

CA: 58, 1, 2, 3, 4, 5

[1] Age 6 months - 3 years AND [2] fine pink rash AND [3] follows 3 to 5 days of fever

Reason: probably Roseola rash

CA: 58, 6, 7, 8, 9, 5

[1] Mild widespread rash AND [2] present < 3 days AND [3] no fever

Reason: probably nonspecific viral exanthem

CA: 58, 11, 12, 14, 15, 16, 26, 10, 17, 5

# **CARE ADVICE (CA) -**

#### 1. Reassurance and Education:

- 5% of children develop a pink rash mainly on the trunk 6-12 days after a measles vaccine.
- A fever occurs in most of these children.

#### 2. No Treatment Needed:

- The rash is harmless and not contagious.
- No treatment necessary.
- Creams or medicines are not needed.

#### 3. Fever Medicine and Treatment:

- For fever above 102 F (39 C), you may use acetaminophen OR ibuprofen (See Dosage table).
- For fevers 100-102 F (37.8 to 39 C), fever medicines are not needed. Reason: Fever turns on your body's immune system. Fever helps fight the infection.
- Exception: If your child also has definite pain, treat it.
- **Fluids.** Encourage cool fluids in unlimited amounts. Reason: prevent dehydration. Age younger than 6 months, only give formula or breastmilk.
- Clothing. For all children, dress in 1 layer of clothing, unless shivering. For shivering, use a blanket until it stops.
- Caution: if a baby under 1 year has a fever, do not overdress or bundle up. Reason: Babies can get over-heated more easily than older children.

#### Call Back If

- Rash changes to purple spots or dots
- Rash or fever lasts over 3 days
- Your child becomes worse
- 5. Care Advice given per Rash or Redness Widespread (Pediatric) guideline.

#### 6. Reassurance and Education:

- Most children get Roseola between 6 months and 3 years of age.
- By the time the rash appears, the fever is usually gone. The child usually feels fine.

#### 7. No Treatment Needed:

- The rash is harmless.
- Creams or medicines are not needed.

# 8. Contagiousness/Return to School:

- Children under 3 years of age and exposed to your child may come down with Roseola in about 9 to 10 days.
- Once the fever is gone for 24 hours, the disease is no longer contagious. (AAP)
- Even if rash still present, your child can return to child care or school.
- Children exposed to your child earlier may come down with Roseola in 9-10 days.
- Expected Course: The rash lasts 1-3 days.

#### 9. Call Back If

- Rash changes to purple spots or dots
- Rash lasts over 4 days
- Fever recurs or your child becomes worse

# 10. Expected Course:

• Most viral rashes disappear within 3 days.

# 11. Reassurance and Education:

- Most widespread pink rashes are part of a viral illness (non-specific viral exanthems).
- This is especially likely if the child also has a cold, cough, or diarrhea.

#### 12. No Treatment Needed:

- These viral rashes are harmless.
- No treatment is necessary unless the rash is itchy. Exception: If it might be a heat rash, use cool baths.

# 13. Contagiousness of Rash With Fever:

- Avoid contact with other children and pregnant women outside the family until the fever is gone.
- Most viral rashes are contagious if a fever is present.
- Your PCP will tell you when your child can return to day care or school.

# 14. Cool Baths for Itching:

- For flare-ups of itching, give your child a cool bath without soap for 10 minutes. (Caution: avoid any chill.)
- Optional: can add baking soda, 2 ounces (60 ml) per tub.

# 15. **Hydrocortisone Cream for Itching**:

• For relief of itching, apply 1% hydrocortisone cream OTC 3 times per day.

# 16. Allergy Medicine for Itching:

- Give Benadryl (OTC) for itching (See Dosage table). Age limit: 1 and older.
- If you only have another antihistamine at home (but not Benadryl), use that.
- For children who will be seen immediately, avoid allergy medicine so we can see the full-blown rash. (Reason: seeing the rash helps with accurate diagnosis).
- For a child who won't be seen until the next day, start an antihistamine.
- Restriction: don't give any Benadryl during the 6 hours before the child is seen (Reason: so child's doctor can make accurate diagnosis).
- Do not use Benadryl longer than a few days.
- If needed longer than a few days, switch to a long-acting antihistamine, such as Zyrtec, Allegra or Claritin. Age limit: 2 and older. Follow package dosing directions.

#### 17. Call Back If:

- Rash becomes purple or blood-colored
- Rash persists over 3 days or fever occurs
- Your child becomes worse

# 18. Fever Medicine:

• For fever give acetaminophen every 4 hours **Or** ibuprofen every 6 hours (See Dosage table).

#### 19. Call Back If:

Your child becomes worse

#### 20. Sore Throat Pain Relief:

- Children over 1 year old can sip warm chicken broth or apple juice. Some children prefer cold foods such as popsicles or ice cream.
- Children over 6 years old can suck on hard candy or lollipops.
- Children over 8 years old can also gargle warm water with a little table salt or liquid antacid added.

# 21. Pain Or Fever Medicine:

• For pain relief or fever above 102 F (39 C), give acetaminophen (e.g., Tylenol) every 4 hours **Or** ibuprofen (e.g., Advil) every 6 hours as needed. (See Dosage table.)

#### 22. First Aid for Anaphylaxis - Epinephrine (pending EMS arrival):

- Anaphylaxis is a life-threatening allergic reaction.
- If you have epinephrine (such as Epi-pen), give it now.
- Give epi first. Then call 911. Call 911 even if all symptoms resolve after giving epinephrine (AAP policy).
- Give the shot into the upper outer thigh in the leg.
- Can be given through clothing if needed.
- A second (repeat) injection should be given if there is no improvement in 10 15 minutes.
- Over 66 pounds (30 kg): Give 0.3 mg. Epi-Pen or Auvi-Q (Allerject in Canada).
- 22-66 pounds (10-30 kg): Give 0.15 mg. Epi-Pen Jr. or Auvi-Q.
- Less than 22 pounds (10 kg): Give dose advised by your doctor.
- Auvi-Q also has a 0.1 mg epinephrine auto-injector for toddlers 16-33 pounds (7.5 15 kg).
- Benadryl: After giving the epi and calling 911, give Benadryl or other short-acting antihistamine by mouth. Do this if your child is able to swallow. Liquid or chewable Benadryl gives faster results than pills.
- RN Recheck: For severe symptoms that require epinephrine, call back in 10 minutes. Reason: confirm that 911 was called after epi was given.

#### 23. Give Benadryl:

• Give 1 dose of Benadryl if available (See Dosage table). Teenager: 50 mg.

## 24. Remove Tampon:

• If your daughter is using a tampon, remove it and switch to a pad until seen.

#### 25. Call Back If:

- · Weakness or fainting occurs
- Rash becomes bright red or sunburn-like
- Your child becomes worse

# 26. Contagiousness of Rash Without Fever:

- Most rashes are no longer contagious once the fever is gone.
- Your child can return to day care or school if the rash is mild and covered by clothing (or gone).
- If the rash is more pronounced, you will need your PCP to examine your child and determine if it's safe to return with the rash.

#### 27. Fever Under 3 Months Old - Don't Give Fever Medicine:

- Don't give any acetaminophen before being seen.
- Need accurate documentation of temperature in medical setting to decide if fever is really present. (Reason: may require septic work-up.)

#### 28. Call Back If

- Rash changes to purple spots or dots
- Your child becomes worse

# 29. Precautions While Pregnant:

- If your child develops a widespread rash while you are pregnant, seeing your child's doctor to determine the type of rash generally is a good idea.
- Usually it will unburden you of any worries.

# 30. Moisturizing Cream for Dry Skin:

- Buy a non-allergenic, fragrance-free hand cream.
- Apply it 3 times per day.

#### 31. Call Back If:

- Fever occurs
- Your child becomes worse

#### 32. Photo of Rash:

- Take a photo of the rash once a day.
- Take the images with you to your doctor's appointment.
- Reason: How the rash changes can help with diagnosis.
- Some doctors and nurses may be willing to look at the rash on their computer.

# 33. Avoid Scratching:

- Encourage the child not to scratch.
- Cut the fingernails short. (Reason: prevent secondary bacterial infection.)

# 34. Reassurance and Education - Monkeypox in Children:

- Monkeypox is extremely rare in children.
- Of all cases in the US, only 1 per 1000 has occurred under age 17 years. Even less common in younger children.
- Children mainly get monkeypox if someone in their home has monkeypox.
- Most worries about children catching monkeypox are not warranted.

# 35. Monkeypox Rash Appearance:

- Initial symptoms are fever, headache, muscle ache and swollen lymph nodes. These symptoms last 1 to 5 days. Small sores may appear in the mouth.
- A rash appears about 1 to 3 days after the start of the fever. Sometimes people get the rash first and afterwards other symptoms.
- The rash usually starts on the face, sometimes on the genital area. It spreads quickly within 24 hours to the arms and legs, even the palms and soles.
- Each monkeypox sore is about 0.5 cm to 1 cm wide. Each sore progresses through the following stages: small red spot (macule), small red bump (papule), small water blister (vesicle), small cloudy blister (pustule). Then, the sore crusts over and the scab falls off. The entire process takes about 2 weeks.
- The rash is usually the same size and at the same stage on different areas of the body, unlike chickenpox.

# 36. Monkeypox Disease - Basics:

- Monkeypox is a rare disease caused by the monkeypox virus.
- **Diagnosis:** Suspected by appearance of rash and monkeypox contact. Diagnosis confirmed by lab test on fluid from monkeypox sore. Most testing done through public health department.
- **Incubation period:** Symptoms usually start between 1 to 2 weeks after exposure. Range is from 4 to 21 days.
- Contagious period: A person can spread monkeypox from the time symptoms start until all the monkeypox sores have crusted over and fallen off (usually 7 to 14 days).
- **Spread:** Monkeypox spreads from person-to-person by direct skin contact. For example, spread can occur during intimate contact and sex. Most current cases occur in adult men who have sex with other men.
- **Isolation is Needed:** To protect others, stay at home (isolate) until all of the scabs have fallen off the monkeypox spots and the skin is healing. Avoid close contact with others in your home.
- **Treatment:** Symptoms are treated with home remedies and OTC meds. Prescription medicines are not needed for most healthy people.
- Outcome: Most healthy people do not develop any complications.

#### 50. Call EMS 911 Now:

- Your child needs immediate medical attention. You need to hang up and call 911 (or an ambulance).
- Triager Discretion: I'll call you back in a few minutes to be sure you were able to reach them.

# 51. Go To ED Now: Your child needs to be seen in the Emergency Department immediately. Go to the ED at \_\_\_\_\_\_\_ Hospital. Leave now. Drive carefully. 52. Go To ED Now (or PCP Triage): If No PCP (Primary Care Provider) Second-Level Triage: Your child needs to be seen within the next hour. Go to the ED/UCC at \_\_\_\_\_\_ Hospital. Leave as soon as you can. If PCP Second-Level Triage Required: Your child may need to be seen. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the on-call provider now. If you haven't heard from the provider (or me) within 30 minutes, go

directly to the ED/UCC at Hospital.

# 53. See HCP Within 4 Hours (or PCP triage):

- If Office Will Be Open: Your child needs to be seen within the next 3 or 4 hours. Call your doctor's (or NP/PA) office as soon as it opens.
- If Office Will Be Closed and No PCP (Primary Care Provider) Second-Level Triage: Your child needs to be seen within the next 3 or 4 hours. A nearby Urgent Care Center (UCC) is often a good source of care. Another choice is to go to the ED. Go sooner if your child becomes worse.
- If Office Will Be Closed and PCP Second-Level Triage Required: Your child may need to be seen. Your doctor (or NP/PA) will want to talk with you to decide what's best. I'll page the on-call provider now. If you haven't heard from the provider (or me) within 30 minutes, call again. **Note:** If on-call provider can't be reached, send to UCC or ED.

# Note to Triager:

- Use nurse judgment to select the most appropriate source of care.
- Consider both the urgency of the patient's symptoms AND what resources may be needed to evaluate and manage the patient.

#### Sources of Care:

- **ED:** Patients who may need surgery or hospital admission need to be sent to an ED. So do most patients with serious symptoms or complex medical problems.
- **UCC:** Some UCCs can manage patients who are stable and have less serious symptoms (e.g., minor illnesses and injuries). The triager must know the UCC capabilities before sending a patient there. If unsure, call ahead.
- **OFFICE:** If patient sounds stable and not seriously ill, consult PCP (or follow your office policy) to see if patient can be seen NOW in office.

# 54. See PCP Within 24 Hours:

- If Office Will Be Open: Your child needs to be examined within the next 24 hours. Call your child's doctor (or NP/PA) when the office opens and make an appointment.
- If Office Will Be Closed: Your child needs to be examined within the next 24 hours. A clinic or an urgent care center is often a good source of care if your doctor's office is closed or you can't get an appointment.
- If Patient Has No PCP: Refer patient to a clinic or urgent care center. Also try to help caller find a PCP (medical home) for future care.

#### Note to Triager:

- Use nurse judgment to select the most appropriate source of care.
- Consider both the urgency of the patient's symptoms AND what resources may be needed to evaluate and manage the patient.

#### 55. See PCP Within 3 Days:

- Your child needs to be examined within 2 or 3 days.
- **PCP Visit:** Call your doctor (or NP/PA) during regular office hours and make an appointment. A clinic or urgent care center are good places to go for care if your doctor's office is closed or you can't get an appointment. **Note:** If office will be open tomorrow, tell caller to call then, not in 3 days.
- If Patient Has No PCP (Primary Care Provider): Try to help caller find a PCP for future care (e.g., use a physician referral line). Having a PCP or "medical home" means better long-term care.

#### 56. See PCP Within 2 Weeks:

- Your child needs an evaluation for this ongoing problem within the next 2 weeks.
- PCP Visit: Call your child's doctor (or NP/PA) during regular office hours and make an appointment.
- If Patient Has No PCP (Primary Care Provider): A primary care clinic is where you need to be seen for chronic health problems. **Note:** Try to help caller find a PCP (e.g., use a physician referral line). Having a PCP or 'medical home' means better long-term care.

#### 58. Home Care:

• You should be able to treat this at home.

#### 59. Call PCP Now:

- You need to discuss this with your child's doctor (or NP/PA).
- I'll page the on-call provider now. If you haven't heard from the provider (or me) within 30 minutes, call again.

#### 60. Call PCP Within 24 Hours:

- You need to discuss this with your child's doctor (or NP/PA) within the next 24 hours.
- If Office Will Be Open: Call the office when it opens tomorrow morning.
- If Office Will Be Closed: I'll page the on-call provider now. Exception: From 9 pm to 9 am. Since this isn't urgent, we'll hold the page until morning.

# 61. Call PCP When Office Is Open:

- You need to discuss this with your child's doctor (or NP/PA) within the next few days.
- Call the office when it is open.

# **FIRST AID**



# First Aid for Anaphylaxis - Epinephrine (pending EMS arrival):

- Anaphylaxis is a life-threatening allergic reaction.
- If you have epinephrine (such as Epi-pen), give it now.
- Give epi first. Then call 911. Call 911 even if all symptoms resolve after giving epinephrine (AAP policy)
- Give the shot into the upper outer thigh in the leg.
- Can be given through clothing if needed.
- A second (repeat) injection should be given if there is no improvement in 10 15 minutes.
- Over 66 pounds (30 kg): Give 0.3 mg. Epi-Pen or Auvi-Q (Allerject in Canada).
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- Benadryl: After giving the epi and calling 911, give Benadryl or other short-acting antihistamine by mouth. Do this if your child is able to swallow. Liquid or chewable Benadryl gives faster results than pills.
- RN Recheck: For severe symptoms that require epinephrine, call back in 10 minutes. Reason: confirm that 911 was called after epi was given.

First Aid Advice for Shock: Lie down with the feet elevated.

# **BACKGROUND INFORMATION**

#### **Causes of Widespread Rash or Redness**

- Viral Rash. Most rashes are part of a viral illness. Viral rashes usually have small pink spots. They occur on both sides of the chest, stomach and back. Your child may also have a fever with some diarrhea or cold symptoms. They last 2 or 3 days. More common in the summer.
- Roseola. This is the most common viral rash in the first 3 years of life. (See details below).
- Chickenpox. A viral rash with a distinctive pattern. (See that guideline)
- Hand-Foot and-Mouth Disease. A viral rash with a distinctive pattern. (See that guideline)
- Scarlet Fever. Scarlet Fever is a speckled, red rash all over. Caused by the Strep bacteria. Starts on upper chest and quickly spreads to lower chest and stomach. No more serious than a Strep throat infection without a rash. (See that guideline)
- **Drug Rash.** Most rashes that start while taking an antibiotic are viral rashes. Only 10% turn out to be drug rashes. (See details below and see that guideline)
- **Hives.** Raised pink bumps with pale centers. Hives look like mosquito bites. Rashes that are bumpy and itchy are often hives. Most cases of hives are caused by a virus. Hives can also be an allergic reaction. (See that guideline for details)
- **Heat Rash.** A fine pink rash caused by overheating. Mainly involves neck, chest and upper back. (See that guideline)
- Insect Bites. Insect bites cause small red bumps. Flying insects can cause many bumps on exposed skin. Non-flying insects are more likely to cause localized bumps. (See that guideline)
- Hot Tub Rash. Causes small red bumps that are painful and itchy. Mainly occurs on skin covered by a bathing suit. Rash starts 12-48 hours after being in hot tub. Caused by overgrowth of bacteria in hot tubs. See Hot Tub Dermatitis guideline.
- Petechiae Rash (Serious). Petechiae are tiny (2 mm) purple or dark red colored dots. They come from bleeding into the skin. Scattered petechiae with a fever are caused by Meningococcemia until proven otherwise. This is a life-threatening bacterial infection of the bloodstream. Peak age is 3 to 6 months old. Unlike most pink rashes, petechiae don't fade when pressed on.
- Purpura Rash (Serious). Purpura are purple or dark red colored spots (look like bruises). They come from bleeding into the skin. Widespread purpura is always an emergency. It can be caused by a bacterial bloodstream infection. Rocky Mountain Spotted Fever is an example. Unlike most pink rashes, purpura rashes don't fade when pressed on.
- Blister Rash (Serious). Widespread blisters on the skin are a serious sign. It can be caused by infections or drugs. Stevens Johnson Syndrome is an example.
- **Caution.** All widespread rashes with fever need to be seen. They need to be diagnosed. Reason: There are some serious infections that can cause this type of rash.
- 5 rashes that parents may be able to recognize are: chickenpox, Fifth disease, hand-foot-and-mouth disease, hives, and sunburn. If present, go to that guideline. If not, use this guideline.

#### Monkeypox Rash Appearance

- Initial symptoms are fever, headache, muscle ache and swollen lymph nodes. These symptoms last 1 to 5 days. Small sores may appear in the mouth.
- A rash appears about 1 to 3 days after the start of the fever. Sometimes people get the rash first and afterwards other symptoms.
- The rash usually starts on the face, sometimes on the genital area. It spreads quickly within 24 hours to the arms and legs, even the palms and soles.
- Each monkeypox sore is about 0.5 cm to 1 cm wide. Each sore progresses through the following stages: small red spot (macule), small red bump (papule), small water blister (vesicle), small cloudy blister (pustule). Then, the sore crusts over and the scab falls off. The entire process takes about 2 weeks.
- The rash is usually the same size and at the same stage on different areas of the body, unlike chickenpox.

Monkeypox Disease: Basics

- Monkeypox is a rare disease caused by the monkeypox virus.
- **Diagnosis:** Suspected by appearance of rash and monkeypox contact. Diagnosis confirmed by lab test on fluid from monkeypox sore. Most testing done through public health department.
- **Incubation period:** Symptoms usually start between 1 to 2 weeks after exposure. Range is from 4 to 21 days.
- **Contagious period:** A person can spread monkeypox from the time symptoms start until all the monkeypox sores have crusted over and fallen off (usually 7 to 14 days).
- Spread: Monkeypox spreads from person-to-person by direct skin contact. For example, spread can occur during intimate contact and sex. Most current cases occur in adult men who have sex with other men
- **Isolation is Needed:** To protect others, stay at home (isolate) until all of the scabs have fallen off the monkeypox spots and the skin is healing. Avoid close contact with others in your home.
- **Treatment:** Symptoms are treated with home remedies and OTC meds. Prescription medicines are not needed for most healthy people.
- Outcome: Most healthy people do not develop any complications. Death rate is less than 1 percent.

# **Matching Pediatric Handouts for Callers**

Printed home care advice instructions for patients have been written for this guideline. If your software contains them, they can be sent to the caller at the end of your call. Here are the names of the pediatric handouts that relate to this topic:

- Rash Widespread Cause Unknown
- Roseola
- Viral Rash
- Pityriasis Rosea

# **Bumpy Red Rashes versus Flat Red Rashes**

- Have the caller feel the rash and tell you if it is flat (smooth) or bumpy (raised).
- This will often help you eliminate certain causes. The best example is hives, which are always bumpy.
- Bumpy rashes: hives, insect bites, heat rash, chickenpox
- Flat rashes: roseola, nonspecific viral rashes, measles, Fifth disease, nonallergic amoxicillin rash
- Scarlet fever is flat but it feels rough and sandpapery

# **Localized Versus Widespread Rash Defined**

- The causes of widespread, symmetrical rashes usually are blood-borne (e.g., viremia, bacteremia, toxins, food or drug allergies)
- The causes of localized rashes are usually something that has contact with the skin (e.g., chemical, allergen, insect bite, ringworm fungus, bacteria, irritants)
- Therefore, it's important to make this distinction.
- Localized means the rash occurs on one small part of the body. Usually, the rash is asymmetrical (e.g., occurring on 1 foot). Exceptions: Athlete's foot can occur on both feet. Insect bites can be scattered.
- Widespread means the rash occurs on larger areas (e.g., both legs or the entire back) or most of the body surface. They are always symmetrical (occur on matching sides of the body).
- Many viral exanthems occur on the chest, abdomen and back.
- Viral rashes like Fifth Disease that start on both cheeks can be difficult to categorize initially.

# **Return To School**

- Most viral rashes are no longer contagious once the fever is gone.
- For minor rashes, your child can return to day care or school after the FEVER is gone.

• For major rashes, your child can return to day care or school after the RASH is gone or your doctor says it's safe to return with the rash.

# **Erythroderma - With Fever**

- Erythroderma refers to a diffuse, confluent skin erythema (red, sunburn-like skin rather than red spots).
- A recent study on 56 children with erythroderma AND fever found that 45% developed shock (Byer 2006). Staph or Strep Toxic Shock Syndrome (TSS) was the most common etiology.
- All patients with these 2 findings need to be referred immediately. Most require hospitalization.
- Other clues to a diagnosis of TSS are focal infections (e.g., wound infection, post-surgical status, skin abscess, sinusitis, etc.) that contains the Staph or Strep toxin-producing bacteria.
- Menstrual TSS has been associated with prolonged tampon use.

#### **Numbered Rashes**

By 1910, the 6 most distinctive exanthems had been numbered:

- First disease: Measles (Rubeola)
- Second disease: Strep Scarlet Fever
- Third disease: German Measles (Rubella)
- Fourth disease: Staph Scarlet Fever
- Fifth disease: Erythema infectiosum (Parvovirus B19)
- Sixth disease: Roseola infantum (HHV6)

#### Roseola - Classic Rash

- Pink, small, flat (non-bumpy) symmetrical spots on trunk, then spreading to face and extremities
- Classic feature: Rash is preceded by 3 to 5 days of high fever without any other symptoms
- Onset of rash is 12 to 24 hours after fever resolves
- Rash persists 1 to 3 days
- Common physical finding: Enlarged sub-occipital lymph nodes
- Cause: Human herpes virus 6 (HHV6)
- Age of onset: 6 months to 3 years
- Complication: Febrile seizures, HHV6 accounts for 25% of all febrile seizures

# Hand-Foot-Mouth Disease: Classic Rash

Hand-foot-mouth disease due to Coxsackie viruses is the most common cause of multiple ulcers in the mouth. The painful ulcers are mainly on the tongue and sides of the mouth. Because it's very contagious, over 90% of children acquire this infection between 1 and 5 years of age. Only 70% of children develop the classic vesicles on the palms, soles, fingers and toes. About 30% also get a rash on the buttocks.

# Signs of Rocky Mountain Spotted Fever

- Early diagnosis of this tick-borne rickettsia disease reduces morbidity and mortality
- It is treatable with the antibiotic doxycycline
- The 4 most common symptoms are:
- Fever 98%
- Rash (widespread) 97%
- Vomiting 73%
- Headache 61%
- Recent tick bite 49%

#### **REFERENCES**

- 1. Aber C, Connelly E, and Schachner L. Fever and rash in a child: when to worry? Pediatr Ann. 2007;36:30-38.
- American Academy of Pediatrics: Committee on Infectious Diseases. Rocky Mountain spotted fever. In Pickering L, ed. 2021 Red Book. 32 ed. Elk Grove Village, IL: 2021.
- 3. American Academy of Pediatrics: Committee on Infectious Diseases. Meningococcal Infection. In Pickering L, ed. 2021 Red Book. 32 ed. Elk Grove Village, IL: 2021.
- 4. Bass PF. When rash and fever become an emergency. Contemp Peds.2015;32:27-33.
- 5. Berk DR, Bayliss SJ: MRSA, Staphylococcal scalded skin syndrome, and other cutaneous bacterial emergencies. Pediatr Ann 2010;39:627-633.
- 6. Bialecki C, Feder HM Jr, Grant-Kels JM. The six classic childhood exanthems: A review and update. J Am Acad Dermatol. 1989;21:891-903.
- Buckingham SC, Marshal GS, Schutze GE, et al. Clinical and laboratory features, hospital course, and outcome of Rocky Mountain Spotted Fever in children. J Pediatr. 2007;150:180-184.
- 8. Byer R, Bachur R. Clinical deterioration among patients with fever and erythroderma. Pediatrics. 2006;118(6):2450-2460.
- 9. Cohen BA. Hot tub folliculitis. Contemp Pediatr. 2002;19(7):40.
- 10. Darmstadt GL. Scarlet fever and its relatives. Contemp Pediatr. 1998;15(2):44-63.
- 11. Diaz L, Nguyen BA. Staphylococcal scalded-skin syndrome. Cont Pediatr. 2012; Feb: 27-28.
- 12. Drutz JE. Rubella. Pediatr Rev 2010;31:129-130.
- 13. Dyer JA. Childhood viral exanthems. Pediatr Ann. 2007;36(1):21-29.
- 14. Eshtiaghi P, Weinstein M. Where in the world did you get that rash? Pediatr Rev. 2020 Apr;41(4):184-195.
- 15. Freels LK, Elliott SP. Rat bite fever: three case reports and a literature review. Clin Pediatr (Phila). 2004 Apr;43(3):291-5.
- 16. Hall CB. Herpesvirus 6: New light on an old childhood exanthem. Contemp Pediatr. 1996;13(1): 45-57.
- 17. Hartley AH. Pityriasis Rosea. Pediatr Rev. 1999;20:266-270.
- 18. Herbert AA and Goller MM. Papulosquamous disorders in the pediatric patient. Contemp Pediatr. 1996;13(2):69-88.
- 19. Pollack S Staphylococcal scalded skin syndrome. Pediatr Rev. 1996;17:18.
- 20. Reid-Adam, J. Henoch-schönlein purpura. Pediatr Rev. 2014 Oct;35(10):447-449.
- 21. Rowley AH. Kawasaki disease: genetics, pathology and a need for earlier diagnosis and treatment. Cont Pediatr. 2012;Dec:18-24.
- 22. Sicherer SH, Simons FE, AAP Section on Allergy and Immunology. Self-injectable epinephrine for first-aid management of anaphylaxis. Pediatrics 2007;119 (3):638-646.

- 23. Slavin KA, Frieden IJ. Hand-foot-mouth disease. Arch Pediatr Adolesc Med. 1998;152: 505-506.
- 24. Son MBF, Newburger JW. Kawasaki disease. Pediatr Rev. 2013 Apr;34(4):151-162.
- 25. Son MBF, Newburger JW. Kawasaki disease. Pediatr Rev 2017;39(2):78-90.
- 26. Weston WL. What is erythema multiforme? Pediatr Ann. 1996; 25:106-109.
- 27. Woods CR. Rocky mountain spotted fever in children. Pediatr Clin North Am. 2013 Apr;60(2):455-470.

#### **SEARCH WORDS**

ALLERGIC REACTION

**BLOOD COLORED RASH** 

**BRIGHT RED RASH** 

**BUMPS** 

**BUMPY RASH** 

**ERYTHEMA** 

**GENERALIZED RASH** 

HENOCH-SCHONLEIN PURPURA

**HSP** 

**ITCHING** 

**ITCHY RASH** 

KAWASAKI

LARGE RASH

MIS-C

**MONKEYPOX** 

NONSPECIFIC VIRAL EXANTHEM

OTC

PAPULAR RASH

PINK RASH

**PURPLE RASH** 

RAISED PINK BUMPS

RAISED RASH

**RASH** 

**RASH - WIDESPREAD** 

**RASH WIDESPREAD** 

**RASHES** 

**RED RASH** 

**RED SKIN** 

REDDENED SKIN

**REDNESS** 

**ROSEOLA** 

**RUBELLA** 

**SHOCK** 

SKIN

SKIN IRRITATIONS

**SMOOTH RASH** 

**SPOTS** 

**SUNBURN** 

TOXIC SHOCK SYNDROME

VIRAL EXANTHEM

VIRAL RASH

WIDESPREAD RASH

WIDESPREAD SPOTS

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Content Set: After Hours Telehealth Triage Guidelines | Pediatric

Version Year: 2022

**Last Revised:** 8/10/2022 **Last Reviewed:** 8/10/2022