

DEFINITION

- Rash on one small part of the body (localized or clustered)
- Red or pink rash
- Small spots, large spots or solid red area
- Includes localized areas of redness or skin irritation
- **Also Included:** pimples, nickel allergy, jewelry reaction, peeling skin

TRIAGE ASSESSMENT QUESTIONS

Call EMS 911 Now

Localized purple or blood-colored spots or dots with fever within the last 24 hours

R/O: early meningococemia

Sounds like a life-threatening emergency to the triager

See More Appropriate Protocol

Age < 2 years and in the diaper area

Go to Protocol: Diaper Rash (Pediatric)

Rash begins in the first week of life

Go to Protocol: Newborn Rashes and Birthmarks (Pediatric)

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

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

Fifth Disease suspected (red cheeks on both sides and no fever now)

Go to Protocol: Fifth Disease (Pediatric)

Boil suspected

Go to Protocol: Boil (Skin Abscess) (Pediatric)

Between the toes and itchy

Go to Protocol: Athlete's Foot (Pediatric)

Insect bite suspected

Go to Protocol: Insect Bite (Pediatric)

Poison ivy, oak or sumac contact

Go to Protocol: Poison Ivy - Oak - Sumac (Pediatric)

Chickenpox vaccine within last 3 weeks and 5 or less scattered small water blisters or bumps

Go to Protocol: Immunization Reactions (Pediatric)

Ringworm suspected (round pink patch, slowly increasing in size)

Go to Protocol: Ringworm (Pediatric)

Impetigo suspected (superficial small sores covered by soft yellow scabs)

Go to Protocol: Impetigo (Infected Sore) (Pediatric)

Rash around mouth after eating suspected food (such as tomatoes or citrus fruits). (Note: usually occurs age 6 months to 2 years)

Go to Protocol: Food Reactions - General (Pediatric)

Go to Office Now

Localized purple or blood-colored spots or dots without fever that are not from injury or friction

R/O: bleeding disorder

Bright red area

R/O: cellulitis

Spreading red streaks

R/O: lymphangitis

Rash area is very painful to touch

R/O: cellulitis, spider bite, necrotizing fasciitis

Newborn (< 1 month old) with tiny water blisters (like chickenpox) (Exception: If it looks like erythema toxicum: 1-inch red blotches with a tiny white lump in the center that look like insect bites, continue with triage)

R/O: herpes simplex, staph folliculitis, neonatal varicella

Discuss With PCP and Callback by Nurse Within 1 Hour

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

Reason: PCP to determine the most appropriate site to be seen.

See in Office Today

Fever is present

Severe itching

R/O: severe poison ivy, contact dermatitis

Teenager with genital area rash

R/O: sexually transmitted disease, jock itch, herpes simplex

Looks like a boil, infected sore, or deep ulcer

R/O: abscess, impetigo

Lyme disease suspected (bull's eye rash, tick bite or exposure)

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

See in Office Today or Tomorrow

Blisters unexplained (Exception: Poison Ivy)

R/O: herpes zoster, bullous impetigo

Rash grouped in a stripe or band

R/O: herpes zoster (shingles)

Skin reaction suspected to a prescription cream or ointment

See in Office Within 3 Days

Pimples

Note: Apply antibiotic ointment (OTC) until seen

Rash or peeling skin present > 7 days

R/O: ringworm, contact dermatitis, nummular eczema

Triager thinks child needs to be seen for non-urgent problem

Caller wants child seen for non-urgent problem

Home Care

Mild localized rash

Localized peeling skin

Friction rash of the face (such as from cap, headband or mask)

HOME CARE ADVICE

Localized Rash or Redness Treatment

- 1. Reassurance and Education - Localized Rash or Redness:**
 - New localized rashes are usually due to skin contact with an irritating substance.
- 2. Avoid the Cause:**
 - Try to find the cause. (Review list of causes of contact dermatitis in Background Information).
 - Consider irritants like a plant (e.g., poison ivy), chemicals (e.g., solvents or insecticides), fiberglass, detergents, a new cosmetic, or new jewelry (e.g., nickel).
 - A pet may be the intermediary (e.g., with poison ivy or oak) or your child may react directly to pet saliva.
- 3. Avoid Soap:**
 - Wash the area once thoroughly with soap to remove any remaining irritants.
 - Thereafter, avoid soaps to this area.
 - Cleanse the area when needed with warm water.
- 4. Cold Soaks for Itching:**
 - Apply a cold wet washcloth or soak in cold water for 20 minutes every 3 to 4 hours to reduce itching or pain.
- 5. Steroid Cream for Itching:**
 - If the itch is more than mild, apply 1% hydrocortisone cream (no prescription needed) 4 times per day. (Exception: suspected ringworm or impetigo)

6. **Avoid Scratching:**
 - Encourage your child not to scratch.
 - Cut the fingernails short.
7. **Contagiousness:**
 - Children with localized rashes do not need to miss any day care or school.
8. **Expected Course:**
 - Most of these rashes pass in 2 to 3 days.
9. **Call Back If:**
 - Rash spreads or becomes worse
 - Rash lasts over 1 week
 - Your child becomes worse

Localized Peeling Skin Treatment

1. **Reassurance and Education - Localized Peeling Skin:**
 - Unexplained localized flaking or peeling of the skin is usually due to contact with an irritating substance (e.g., a harsh chemical).
 - If it's just on the fingers, it's usually due to a soap, hand cream or rubber gloves.
 - It's also common for peeling to occur in places where there was a previous rash.
2. **Avoid the Cause:**
 - Try to find the cause and avoid it.
3. **Avoid Soap:**
 - Wash the area once thoroughly with soap to remove any remaining irritants.
 - Thereafter, avoid soaps to this area.
 - Cleanse the area when needed with warm water.
4. **Moisturizing Cream for Dry Skin:**
 - Buy a non-allergenic, fragrance-free hand cream. Apply it 3 times per day.
5. **Steroid Cream for Itching:**
 - If the itch is more than mild, apply 1% hydrocortisone cream (no prescription needed) 4 times per day until it feels better. (Exception: suspected ringworm or impetigo)
6. **Expected Course:**
 - Areas of dry, peeling skin usually clear up in 5 days if the irritant is avoided.
7. **Call Back If:**
 - Peeling spreads or becomes worse
 - Peeling lasts over 1 week

Friction Rash of the Face

1. **Reassurance and Education: Friction Rashes**
 - Friction rashes occur in areas of clothing rubbing against skin.
 - Friction rashes of the forehead can be from caps or headbands.
 - These local rashes look like heat rashes, tiny red bumps or redness. They can occur when it is not hot.
 - Wet clothing, often from sweating, makes friction rashes more likely.
 - Dirty clothing or dirty skin contains irritants and makes friction rashes worse.
2. **Prevention of Friction Rashes of the Face and Other Sites:**
 - Wash your cap, headband or mask more frequently
 - Have clean dry skin before putting it on.

- If sweating, take it off more often and dry the skin.
- Don't wear it for long periods of time.
- Wear synthetic fabrics when possible. Reason: they breathe and release sweat.
- Avoid cotton when possible. Reason: cotton retains sweat and keeps the skin wet.

3. **Call Back If:**

- Rash spreads or becomes worse
- Rash lasts over 1 week
- Your child becomes worse

FIRST AID

N/A

BACKGROUND INFORMATION

Matching Pediatric Care Advice (PCA) Handouts for Callers

Detailed home care advice instructions have been written for this protocol. 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 are intended for use with this protocol:

- Acne
- Cellulitis
- Contact Allergic Dermatitis
- Irritant Dermatitis
- Rash Localized - Cause Unknown
- Shingles (Zoster)
- Tinea Versicolor

Causes of Localized Rash or Redness

- **Irritants.** A rash in just one spot is usually caused by skin contact with an irritant.
- **Plants.** Many plants cause skin reactions. Sap from evergreens can cause a red area.
- **Pollen.** Playing in the grass can cause a pink rash on exposed skin.
- **Pet Saliva.** Some people get a rash where a dog or cat has licked them.
- **Food.** Some children get a rash if a food is rubbed on the skin. An example could be a fresh fruit. Some babies get hives around the mouth from drooling while eating a new food.
- **Chemicals.** Many of the products used in the home can be irritating to the skin.
- **Insect Bite.** Local redness and swelling is a reaction to the insect's saliva. Can be very large without being an allergy. Kids often get mosquito bites without anyone noticing it.
- **Bee Sting.** Local redness and swelling is a reaction to the bee's venom. Can be very large without being an allergy.
- **Cellulitis.** This is a bacterial infection of the skin. The main symptom is a red area that keeps spreading. Starts from a break in the skin (such as a scratched insect bite). The red area is painful to the touch.
- **Other Common Causes.** Look at the "See Other Protocol" section. Several rashes that you may be able to recognize are listed there. If you suspect one of them, go there. If not, use this protocol.

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.

Contact Dermatitis

Contact dermatitis is a common cause of persistent localized rashes. Contact dermatitis usually presents as localized raised red spots. Occasionally it progresses to localized blisters (e.g., poison ivy). The rash is very itchy. Contact dermatitis is an allergic skin reaction that occurs after repeated contacts with the allergic substance. Once sensitized to a substance, however, reactions occur 12 to 24 hours after exposure. The location of the rash may suggest the cause:

- Poison ivy or oak: exposed areas (eg hands)
- Nickel (metal): neck from necklaces, earlobe from earrings, belly button from metal snaps inside pants, wrist from wrist watch.
- Tanning agents in leather: tops of the feet from shoes or hands after wearing leather gloves
- Preservatives in creams, lotions, sunscreens, shampoos: site of application
- Neomycin in antibiotic ointment: site of application

Allergic Contact Dermatitis From Creams or Ointments

Any one of the following can cause a localized itchy rash where the substance is applied to the skin:

- Antibiotic ointments or creams (e.g., Neomycin)
- Anesthetic ointments or creams (e.g., benzocaine)
- Sunscreens
- Insect repellents
- Cosmetics (e.g., deodorants)
- Preservatives or fragrances found in any ointment, cream or lotion (e.g., moisturizing creams)

Allergic Contact Dermatitis and Neomycin Ointment

- Neomycin as found in Neosporin ointment has a 10% prevalence of contact dermatitis in adults.
- For that reason, whenever examples of OTC antibiotic ointments or creams are listed, I always suggest Polysporin (or Bacitracin)
- However, Neosporin (or other brands of the same) is the most popular antibiotic ointment sold in our country. Many families already have it in their homes.
- Therefore, I decided long ago to not bother callers with this minor detail, unless they are calling about an itchy rash at the site where an antibiotic ointment is being applied.
- It was a practical decision.

Nickel Contact Dermatitis

- Definition: Over 10% of adults have an allergy to nickel-containing metals. Some children develop it. Nickel is often present in less expensive jewelry.
- Symptoms: People with nickel allergy can get an itchy rash where the metal touches their skin: finger (rings), ear lobes (ear rings), neck (neck chains), mid-abdomen (metal fasteners on jeans or belt

buckle), wrist (bracelets and wrist watches), face (eyeglass frames).

- **Diagnosis:** See doctor if diagnosis is uncertain.
- **Treatment:** Apply a small amount of hydrocortisone cream 3 times a day to the red-itchy area. Use it for 7 days.
- **Expected Course:** Once the person stops wearing the nickel-containing jewelry, the redness and itching should go away in 7-14 days.
- **Prevention:** Avoid nickel-containing jewelry.
- **Avoid:** Nickel is present in white gold, yellow gold (12-Karat or less), most stainless steel (12% nickel), silver-colored, and “fashion or costume” jewelry.
- **Safe:** Nickel is absent in 18-Karat (or higher) yellow gold, nickel-free 14-Karat yellow gold, sterling silver, copper, titanium or platinum jewelry. Nickel-free stainless steel is also available.

Monkeypox Disease: Basics

- Monkeypox is a rare disease caused by the monkeypox virus.
- Monkeypox remains an extremely rare disease in pediatrics (less than 1% of total cases). Usually these children have household exposure to someone that has it.
- **Diagnosis:** Suspected by appearance of rash and monkeypox contact. Diagnosis confirmed by lab test on fluid from monkeypox sore.
- **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.
- **Vaccine:** There is a vaccine available to help prevent monkeypox in people who are exposed as well as those that are at high-risk.

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.

Necrotizing Fasciitis (NF)

- **Definition.** very serious infection of muscle fascia and deep skin tissue. Death rate of 10% in children.
- **Symptoms:** Initial recognition by symptoms is difficult. Starts as a very painful localized swelling, often without a rash. Progresses to blisters and dusky skin. Late finding: black necrotic skin.

- Triage question in protocol that best detects early NF is "very painful to touch".
- Location: Involved sites of NF are helpful to detect. Often a complication of skin trauma, surgery, eczema, or chickenpox. In newborns, NF has been reported as a complication at sites of circumcisions or omphalitis.
- Onset: 2 to 4 days after trauma or surgery.
- Cause: Group A Strep infection of muscle fascia.
- Incidence: NF is very rare in children, 1 case per million per year in the US.
- Reference: Noor, *Pediatr Rev* 2021; 42(10): 573

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