

# Assessing Rashes

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## ANYTIME After Hours

### Assessing Rashes

The goal of the triage nurse is NOT to figure out what may be causing the rash but to ensure the rash is not dangerous.

The only rashes that are considered dangerous are petechiae, purpura, severe urticaria, and Stevens-Johnson Syndrome. Patients with these rashes should be seen in the ER.

1. Petechiae: caused by broken capillaries leaking into the skin.
  - Pinpoint size (1-3mm)
  - Flat
  - Blood-red, or deep red in color
  - Non-blanching.
  - Widespread petechiae often have a serious cause especially if associated with a fever (R/O meningococemia, Rocky Mountain Spotted Fever-RMSF).
  - Widespread petechiae without fever are often from Low-Platelet Count (Immune Thrombocytopenia, Leukemia) or Platelet dysfunction with Normal Platelet count (viral infection, aspirin).
  - Localized petechiae are less worrisome and are usually caused by injury or friction BUT if associated with a fever then they require prompt treatment.
  - Severe vomiting and severe coughing can cause localized petechiae to the face or neck. However, follow the protocol exactly as some of these patients will require treatment as well.



2. Purpura: caused by leaking vessels into the skin.

- 4mm-1cm in size
- Flat or raised
- Purple, deep-red in color
- Non-blanching
- Larger purpura (greater than 1cm are ecchymoses/bruises) can be located all over the body and in areas that are unlikely to be injured and bruised.
- Flat purpura is the most common and seen in thrombocytopenia, RMSF, and meningococemia.
- Palpable purpura is most often associated with vasculitis such as Henoch-Schönlein purpura (HSP) and septic emboli (SBE)



\*\*\*It's important to distinguish petechiae and purpura from other rashes.

- Most normal rashes are pink, NOT deep red. Normal rashes are never maroon or purple. Any child with deep red or blood-colored "freckles", dots, or spots needs to be triaged as if they have petechiae or purpura.

3. Urticaria (Hives): slightly raised pink areas, start out looking like mosquito bites that can cluster together to become large, asymmetrical areas that are itchy.

- Frequently associated with allergic reactions, but are most commonly caused by viruses
- Parents will often refer to hives as "welts"
- Most hives are not dangerous but if combined with vomiting, difficulty breathing or swallowing, or swelling of the lips or tongue they are part of an anaphylactic reactions and patients should be seen immediately.



4. Stevens-Johnson Syndrome: rare but life threatening, early intervention is key!

- Starts as widespread red patches or target lesions, progress to blisters and rupture
- Often starts with fever and malaise and days later other symptoms appear including painful red or purple skin that looks burned and peels off in sheets
- Key to diagnosis: Ulcers(sores) of 2 or more mucosal surfaces (mouth, vagina, anus, eyes, urethral opening).
- Most common are blisters of the mouth. The caller will often report bloody, crusted lips.
- SJS is not a telephone diagnosis
- Most common complication is dehydration
- Over 90% of cases are precipitated by drugs: sulfa, seizure medications, and ibuprofen.
- FYI: any patient that has a rash while taking Sulfa needs to at least be seen in 24 hours.



#### Other Common Rashes:

5. Fifth Disease or Erythema Infectiosum: viral rash, mild to moderately contagious among school-age children, particularly in the winter and spring.

- Bright red cheeks for 1-3 days, "slapped" appearance
- Followed by a pink "lace" rash mainly to thighs and upper extremities
- Rash isn't painful or itchy
- No fever or at times low grade fever (< 102)
- Symptoms: stomach upset, headache, runny nose, sore, low grade fever,
- Caused by parvovirus B19
- Spread by respiratory secretions

- When rash appears, children are no longer contagious and may attend school.



6. Hand-Foot-Mouth Disease (HFMD) or Caxsackie Disease: viral infection that causes mouth sores and tiny blisters or red spots on the hands and feet.

- Diagnosis cannot be made without red spots or blisters to hands and feet
- Low grade fever less than 102
- Usually in children 6 months to 4 years but can be in children under 10
- Ulcers in mouth, mainly on tongue, sides of mouth and back of throat that usually precedes the rash on hands by a day or so
- Rash may also appear on arms, legs, face, and/or buttocks
- Painful blisters
- Being aware of an exposure within the past 7 days is helpful
- Most often home care advice to ease the symptoms while it runs its course



7. Rash following Measles Vaccine: typically harmless, requires no treatment, not contagious

- Occurs in 5% or less of patients after receiving Measles vaccine
- Looks like the Measles themselves
- Pink rash mainly on the trunk, lasts 2-3 days
- Delayed reaction that typically starts 6-12 days after Measles immunization
- Fever may also occur, usually lasts 2-3 days and is between 101F-103F

\*Addressed under Immunization Protocol > Home Care > Measles Reaction





8. Rash on Amoxicillin: rash that occurs while taking Amoxicillin or Augmentin or within 3 days of stopping it, harmless side effect of the drug

- Widespread pink spots in a symmetrical pattern
- Small spots (<math>< \frac{1}{2}</math> inch) and flat
- Usually appears on day 5-7 from the start of Amoxicillin
- Always on the trunk
- Can be on face and extremities
- Doesn't look like hives
- Doesn't move around like hives
- Rash is non-itchy or mildly itchy
- No new onset of fever
- Can continue antibiotic

\*Be sure to follow your protocol questions thoroughly to rule out hives, purple spots, etc\*