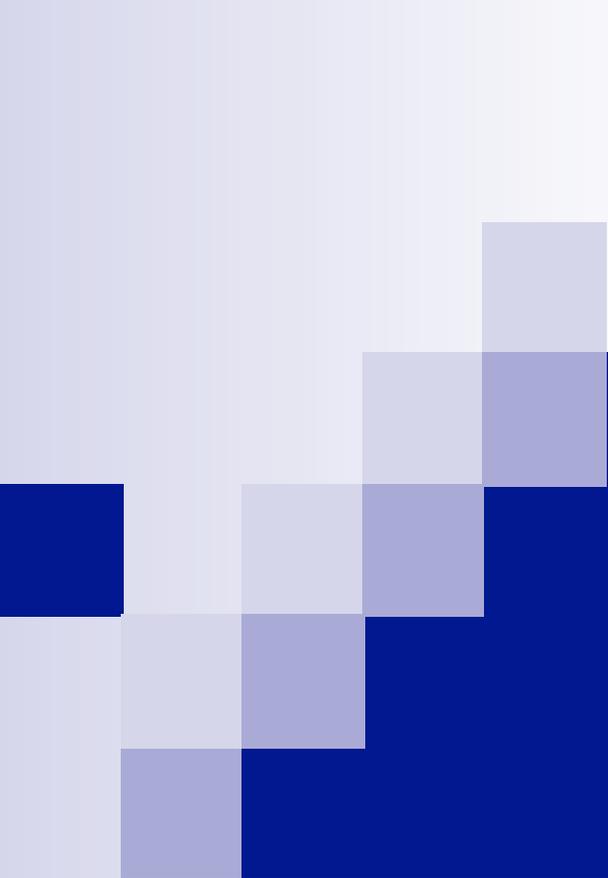




# Pediatric Rashes

## 10 things to remember

Wingfield Rehmus, MD MPH  
BC Children's Hospital  
UBC Department of Pediatrics  
November 9, 2011



There are many types  
of rashes and causes  
of rashes in kids

Infections



Viruses



Allergic reactions



Genetics



Bacteria



Immune reaction

Fungus



Drug reactions



Sometimes you'll just  
never know

# Non-specific exanthems





# Non-specific viral exanthem

- Most common exanthem in children
- No characteristic features that help identify cause
- Blanchable erythematous macules and papules
- Over trunk and extremities, less on face
- Associated with low-grade fever, myalgias, head-ache, respiratory symptoms, GI complaints
- Most common causes:
  - Summer – non-polio enteroviruses
  - Winter – respiratory viruses (adeno, parainfluenza, RSV, influenza)
- Self-limited
- Resolve over about a week

# Drug Reaction

- More common with viral infection at same time
- Usually 7-14 days after start of medication
- Can occur even after medication stopped
- Most common medications: antibiotics, anticonvulsants
- Usually begins on trunk and then spreads
- Mouth is usually spared
- Palms and soles often involved
- Eosinophil counts elevated on blood tests

# Non-specific exanthems





Don't forget the mouth

# Hand Foot and Mouth

- Several viruses, coxsackievirus
- Transmission is fecal-oral
- Grey-white blisters on palms, soles, buttocks
- Erosions in mouth
- Painful and lead to difficulty eating
- Feed cold foods, give tylenol for pain



# Herpes Simplex

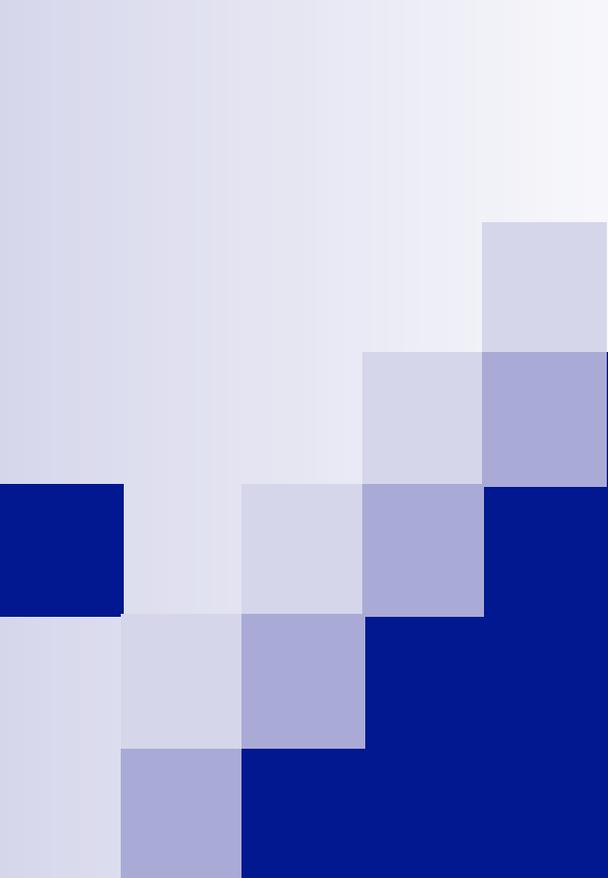
- HSV1 or HSV2 virus
- First outbreak is worst
- Recurs in same location
- Can spread widely





# Erythema multiforme

- Most common association is with HSV
- Immune reaction
- Target shaped sores on hands and feet
- Can spread elsewhere
- Can make all of mouth sore, eyes



Remember to check  
on exposures

# Exposures

- Family members
- Tick bites
- Recent illness
- Medications
- Anything unusual





# Scabies

- Mite
- Need to treat whole household





Some rashes just  
don't look “natural”.

# “Outside job”



From: [www.dermatlas.com](http://www.dermatlas.com)

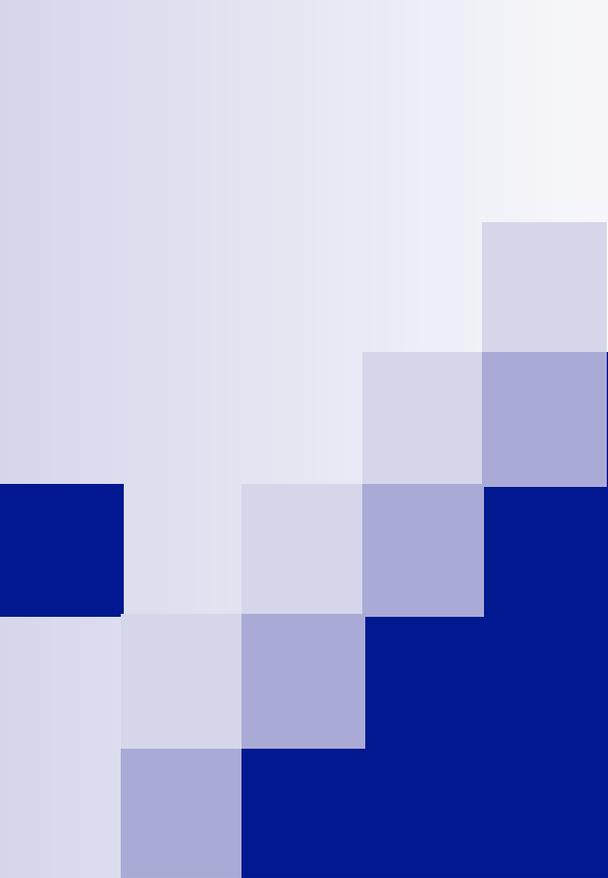


- Contact dermatitis: nickel, rhus (poison ivy, poison oak, poison sumac, mango), dyes, rubber, adhesives

# Phytophoto dermatitis

- Lime, lemon, celery, ragweed
- Plus UV exposure





Time will often tell

# Urticaria



- Each lasts several hours
- Rash lasts up to 6 weeks
- Viral infection, food allergy, medication, unknown
- Chronic hives - last over 6 weeks

# Roseola

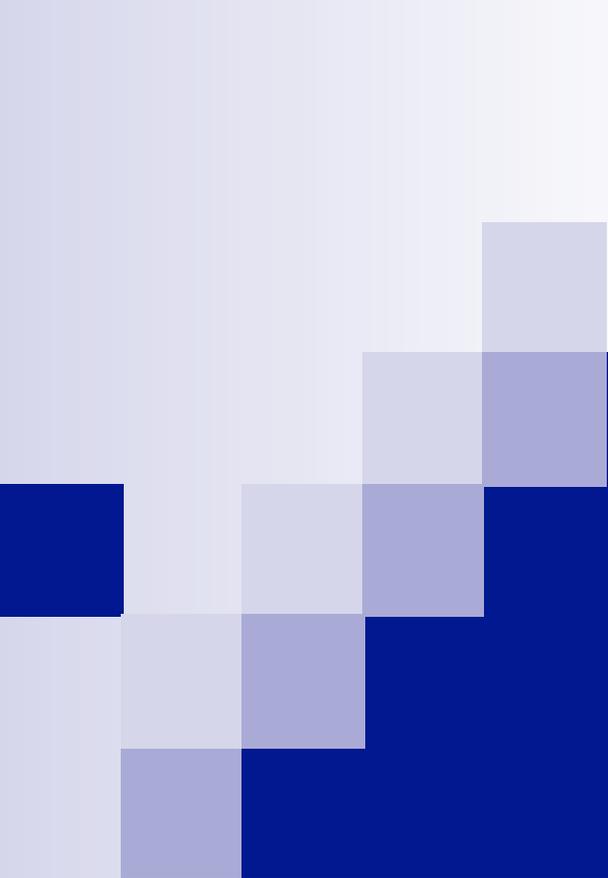
- Human herpes viruses 6 and 7
- Saliva transmission
- Children under 3
- High fever (101-106°F) for 3-5 days
- Otherwise well child
- Fever drops and rash appears
  - Trunk first then spreads



# Bacteria: Scarlet Fever

- Group A Strep
  - Children ages 1-10
  - Fever, throat pain, headache, chills
  - Tongue may be coated then coating peels off
  - Fine, sand-paper like rash
  - On trunk and extremities
  - Lightening of the skin around the mouth
  - Heals with peeling
- Diagnosis: Throat swab for strep
- Treatment Penicillin

From: <http://www.dermatlas.com>



Sometimes you  
need to worry

# Acute urticaria with anaphylaxis

- Urticaria
- Angioedema
- Shortness of breath
- Difficulty talking/  
hoarseness
- Nausea/vomiting
- Diarrhea



# Non-blanchable rashes

- “Petechia”
- When you press on the rash, the color doesn’t go back to normal
- Purple appearance
  
- Vasculitis
- Meningococccemia
- Rocky Mountain Spotted Fever
- Henoch-Schonlein purpura
- Component of normal viral exanthem

# Rash after a tick-bite

- Lyme disease - deer tick
  - Borellia
  - Circles of redness
  - Often at site of the bite
  - Headache, fever, fatigue
  - Later joint pains
- Rocky Mountain Spotted Fever
  - Rickettsia
  - Fever, headache, rash
  - Palms and soles, petechial

# Associated fever that lasts 5 days

- Kawasaki's Disease
- Fever for 5 days
  - High and doesn't respond to medication
- Swollen hands, feet and genitals
- Peeling skin
- Heart problems - coronary artery aneurysm



# Child seems very ill

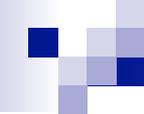
- Long lasting fevers
- Joint pains
- Severe fatigue
  
- Lupus, dermatomyositis, leukemias, lymphomas



Some rashes are  
contagious, but many are  
not

# Wet and crusty - impetigo





# Associated with typical illness symptoms

- Measles - cough
- Chicken pox - fever
- Hand foot and mouth - fever
- Meningococcus - fever and headache
- Enteroviruses - cold symptoms

# Not all rashes are contagious



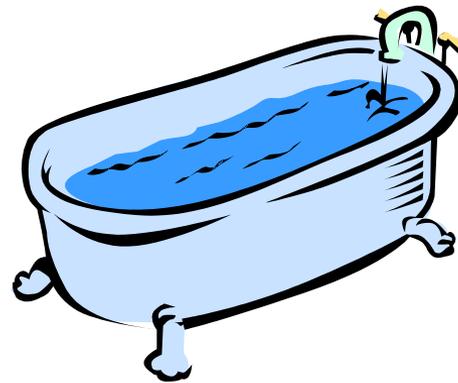
- Atopic dermatitis
- Psoriasis
  
- Response of health providers is important



Kids can't stop  
“itching”

# Controlling the itch

- Antihistamines
- Cool baths/  
compresses
- Corticosteroids





All rashes can be infected

Can be associated with kidney problems





# Pediatric Rashes

- There are many types of rashes
- Some rashes don't look “natural” – outside job
- Don't forget the mouth
- Remember to check exposures
  
- Time will often tell but sometimes you'll never know
- Sometimes you need to worry
  
- Kids can't stop “itching”
- Control itch and prevent infection



■ wrehmus@cw.bc.ca