Viral exanthems by Dr Andrew Lock, Dermatology registrar, January 2015

Measles

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- Paramyxovirus
- Patients are infectious (airborne spread) 2 days prior to symptoms, until 5 days after rash has commenced
- Incubation period: 7-14 days
- Prodrome: fever, malaise, anorexia, conjunctivitis, cough/coryza
- Child looks unwell
- After 2-3 days: Koplik spots in mouth (grey white papules on buccal mucosa, pathognomic, but only last 48 hours)
- Day 4-5: Red maculopapular exanthem appears (1st on forehead/hairline, behind ears, then to trunk and limbs in a cephalocaudal direction). Rash last 5-7 days.
- PHE recommended period of quarantine from school/nursery: 4 days from onset of rash

Pictures: http://www.pcds.org.uk/clinical-guidance/viral-exanthems#images (figures 2-7)

Chickenpox

- Varicella Zoster Virus
- Infectious (airborne spread or contact with open sores) from 2 days prior to rash until all lesions have crusted over
- Most cases in children <10
- Incubation period 10-20 days
- Itchy red papules, which progress to vesicles, first on stomach/back/face then spreads to other areas of the body. Some get vesicles inside the mouth.

- Intermediate lesions described as "dew drop on a rose petal"
- Lesions are pleomorphic (many lesions at different stages)
- Some children experience fever, headache and coryzal symptoms
- lesions may leave scars, especially if scratched
- PHE recommended period of quarantine from school/nursery: until all vesicles have crusted

Pictures: http://www.dermnetnz.org/viral/varicella-imgs.html

Roseola infantum

- HHV6
- Incubation 7-10 days, saliva or respiratory spread
- Symptoms: High fever for 3-5 days with runny nose, coryzal symptoms and fatigue
- Rash may appear as fever subsides (rash not always present)
- small red papules appear, which blanch on pressure.
- Rash starts on trunk/face and spreads outwards
- Rash can fade within hours or last 2-3 days
- Child is usually well, but fever can trigger febrile seizures in 10 %
- PHE recommended period of quarantine from school/nursery: none

Pictures: http://www.pcds.org.uk/clinical-guidance/viral-exanthems#images (figures 18-19)

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Pityriasis rosea

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- viral, possibly HHV 6/7
- Starts with a "herald patch"- plaque that appears days before rest of rash. Oval pink, several
 cm in diameter, collarette of scale inside the outer edge. Usually located on trunk

- Oval pink dry plaques then appear on trunk +/- proximal limbs (not usually on the face or sacral areas)
- Lasts 6-12 weeks
- The plaques usually follow skin tension lines on the trunk, to give a "christmas tree" pattern.
- Child will be well. The rash may be itchy
- PHE recommended period of quarantine from school/nursery: not listed but see HHV6 none

Pictures: http://www.dermnetnz.org/viral/pityriasis-rosea-imgs.html

Erythema infectiosum

- Parvovirus B19
- Incubation 7-14 days
- Commences with hot, red cheeks ("slapped cheeks")- fades over several days
- Several days later, a lacy red rash appears on the limbs and trunk, which may be itchy. It lasts for 7-10 days but can recur intermittently for 1-2 months

- Child is well, and complications are rare
- PHE recommended period of quarantine from school/nursery: none

Pictures: http://dermnetnz.org/viral/fifth-imgs.html

Hand Foot and Mouth

- Cocksackie A virus
- Majority of affected children are <5 years
- Blisters on hands and feet, and in the mouth
- very infectious (may be outbreaks at schools or in families)
- Incubation 3-5 days
- Sore throat, fever and anorexia +/- lymphadenopathy and diarrhoea
- Pink macules appear on both sides of the hands and sides of fingers which are followed by grey blisters, which dry and resolve over 5-7 days
- May be small vesicles/ulcers in the mouth which can be painful and reduce oral intake
- May also have an erythematous exanthem on the buttocks.
- Blisters are infective until they dry up. The stool remains infective for 1 month.
- PHE recommended period of quarantine from school/nursery: none

Pictures: http://dermnetnz.org/viral/hfm-imgs.html

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German measles (Rubella)

RNA virus

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- Respiratory/droplet spread with incubation period of 14-18 days
- Mild prodrome: fever, headache, coryzal symptoms
- Several days later: erythematous macules/papules appear on the face, and spread cephalocaudally. Red petechiae may appear on the soft palate (Forcheimers spots)
- +/- painful lymphadenopathy in the head and neck region
- Rash fades over a few days
- PHE recommended period of quarantine from school/nursery: 4 days from onset of rash

Pictures: http://www.pcds.org.uk/clinical-guidance/viral-exanthems#images (figures 10-11)

Gianotti Crosti

- Affects children at a mean age of 2 years (6 months 12 years)
- Commonly occurs in spring and summer time
- Cutaneous response to various viral infections EBV is thought to be most common, also Hep B virus
- Often prodrome of respiratory symptoms and malaise
- Monomorphic pink and red oedematous papules occur on the face, buttocks and extensor surfaces. The trunk is usually spared, and lesions can sometimes be found on the face only

- Lesions may sometimes be purpuric or vesicular
- +/- fever and lymphadenopathy, which may persist for months
- Rash fades over 2-8 weeks with mild scaling
- PHE recommended period of quarantine from school/nursery: not listed

Pictures: http://dermnetnz.org/viral/gcs-imgs.html

Unilateral laterothoracic exanthem

- Toddlers and preschool children
- Aetiology unknown, most likely viral cause
- Rash, which is morbilliform/eczematous/itchy, starts in a unilateral location, usually the axillary or inguinal region. Tends to spread to contralateral areas but remains predominantly unilateral
- May be preceded by systemic viral (respiratory or GI) symptoms +/- lymphadenopathy
- Rash lasts 3-6 weeks then resolves
- PHE recommended period of quarantine from school/nursery: not listed

Pictures: http://www.dermnetnz.org/viral/apec.html

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