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The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. The shapes are primarily triangles and polygons, creating a dynamic, layered effect. The central area is white, providing a clean space for the text.

# **Bugaboo Bugs:** when to send and when to keep

**Chris Kjolhede, MD, MPH**

# Bugaboo Bugs:

- ▶ No conflict of interest
- ▶ Nothing to disclose

# Bugaboo Bugs:

## Pre-test

- 1) Bilateral conjunctivitis is an infectious condition that should result in the student being excluded from school: T or F or Maybe
- 2) Nits, more than just a couple in an adolescent, are an indication for exclusion from school: T or F or Maybe
- 3) Pharyngitis, rapid Strep test negative, in a sexually active teen should result in exclusion from school: T or F or Maybe

# Bugaboo Bugs

- ▶ General
- ▶ Recognizing the sick child
- ▶ Temperature tips
- ▶ Conditions that do NOT require exclusion
- ▶ Conditions that DO require exclusion
- ▶ NOT discussed are Emergencies and Disasters

# Bugaboo Bugs:

## General

- ▶ Child and adolescent populations are a great reservoir for infectious agents
- ▶ School-aged children WILL get sick from time to time and spread illnesses
- ▶ Know the school's policies and who is your back-up, your "medical director"
- ▶ Offer the AAP's "Managing Infectious Diseases in Child Care and Schools" 6<sup>th</sup> edition as a reference

# Bugaboo Bugs:

## Recognizing the sick child

- ▶ Changes in behavior or appearance
- ▶ Runny nose, cough or breathing trouble
- ▶ New skin rashes or itchy skin or scalp
- ▶ New bumps or bruises
- ▶ Open sores or weeping skin rashes
- ▶ Signs of fever (flushed or shivering)
- ▶ Increased irritability
- ▶ Vomiting, diarrhea or stomachache
- ▶ Irritation or drainage from eye(s)



# Bugaboo Bugs:

## Temperature Tips

- ▶ Fever > 38.3° C (101° F); do not adjust the reading based on the site
- ▶ Do not use mercury thermometers
- ▶ Higher temps do NOT always mean a more severe infection
- ▶ Hot environments should lead to more attention
- ▶ Oral temps are not reliable for children younger than 4 years
- ▶ Axillary temps are accurate as long as the thermometer remains put
- ▶ Any device used outside of recommendations may give inaccurate readings

# Bugaboo Bugs:

## No exclusion required

- ▶ Common colds and runny noses (regardless of the color) and coughs
- ▶ Yellow, white or watery eye discharge without fever or eye pain
- ▶ Pinkeye without fever or behavior changes, irrespective of eye drainage
- ▶ Fever (temperature > 101° F [38.3° C] by any method) without any other symptom
- ▶ Rash without fever and without behavioral changes (\*)
- ▶ Hand-foot-and-mouth disease
- ▶ Thrush
- ▶ Molluscum contagiosum (need not be covered)

# Bugaboo Bugs:

## Common colds: comments after 30 years of practice

- ▶ Common colds are ‘common’
- ▶ Common colds typically last 10-14 days from beginning to end
- ▶ Epidemiologic studies show that the number of infections among infants in child care are 10-12 per year and among older children 4 infections per year
- ▶ Do the math: a) 10 days X 10 episodes = 100 ‘sick days’, b) the ‘respiratory season’ is typically defined as Oct 1 to Mar 31, half a year, c) so,  $365 \div 2 = 182$  days in the ‘season’. And thus, d) kids seem to be constantly ‘sick’
- ▶ First born, stay at home kids have fewer episodes until they go to school
- ▶ Subsequent siblings usually get every ‘bug’ that the school-aged sib has but have fewer once they go to school
- ▶ Darker or greener nasal discharge does NOT mean the need for antibiotics
- ▶ Common colds are typically viral in etiology; treat the symptoms

# Bugaboo Bugs:

## No exclusion required

- ▶ Impetigo: treatment may be delayed until the end of the day
- ▶ Lice or nits: treatment may be delayed until the end of the day
- ▶ Ringworm: treatment may be delayed until the end of the day
- ▶ Scabies: treatment may be delayed until the end of the day
- ▶ Fifth disease
- ▶ Cytomegalovirus infection
- ▶ Chronic hepatitis B infection
- ▶ HIV infections

# Bugaboo Bugs:

## Exclusion required

- ▶ Illness that prevents participation comfortably
- ▶ Results in more care than staff can provide
- ▶ Poses a significant risk of spread of disease
- ▶ Severely ill appearing, e.g. lethargy or lack responsiveness, irritability, persistent crying, difficulty breathing or quickly spreading rash
- ▶ Fever with behavior change
- ▶ Diarrhea causing “accidents”
- ▶ Vomiting 2 or more times in the previous 24 hours
- ▶ Abdominal pain for more than 2 hours or intermittently with fever or other symptoms

# Bugaboo Bugs:

## Exclusion required

- ▶ Mouth sores with uncontrolled drooling
- ▶ Rash with fever or behavioral changes
- ▶ Skin sores that are weeping fluid and cannot be covered
- ▶ *Strep* pharyngitis until having received appropriate antibiotics for 12 hours

# Bugaboo Bugs:

## Exclusion required\*

- ▶ Chickenpox until all lesions have dried or crusted (about 6 days from onset)
  - ▶ Rubella for 7 days after the rash appears
  - ▶ Pertussis until after 5 days of appropriate antibiotic treatment
  - ▶ Mumps until 5 days after onset of parotid gland swelling
  - ▶ Measles until 4 days after onset of rash
  - ▶ Hepatitis A virus infection for 1 week after onset of illness or jaundice (DoH)
- 
- ▶ \* (why should this even be an issue; extra credit on Post Test!)

# Bugaboo Bugs:

## Exclusion required

- ▶ Influenza
- ▶ Measles
- ▶ Meningitis
- ▶ Mumps
- ▶ Norovirus
- ▶ Rotavirus
- ▶ Rubella
- ▶ Salmonella
- ▶ Shigella
- ▶ Strep Throat (*Streptococcal* Pharyngitis)
- ▶ Tuberculosis (TB)
- ▶ Whooping Cough (Pertussis)



# Bugaboo Bugs:

## Influenza

- ▶ **What?** Influenza viruses
- ▶ **What are the signs or symptoms?** Sudden onset of fever, headache, chills, muscle aches, sore throat, cough
- ▶ **Incubation and contagious periods?** 1-4 days; from day before signs and symptoms until 7 days after onset of flu
- ▶ **How spread?** Respiratory droplet and contaminated objects
- ▶ **How controlled?** Annual immunization; use good hand-hygiene; teach respiratory etiquette; antiviral meds most helpful in first 48 hours
- ▶ **Exclude from school?** Yes
- ▶ **Readmit to school?** Yes, when fever absent for 24 hours (no antipyretics)

# Bugaboo Bugs:

## Measles

- ▶ **What?** Highly contagious and acute viral disease; outbreaks among unimmunized populations
- ▶ **What are the signs or symptoms?** Fever, cough, runny nose, red and watery eyes; Koplik spots; complications may be serious: diarrhea, pneumonia, ear infection
- ▶ **Incubation and contagious periods?** 8 to 12 days from exposure; 1-2 days before the rash until 4 days after the rash
- ▶ **How spread?** Airborne (+) route; highly contagious
- ▶ **How controlled?** Vaccine; exclude ill until 4 days after rash; exclude exposed students and staff not immunized; a single case in the US is considered an outbreak
- ▶ **Exclude from school?** Yes; also, unimmunized contacts should be excluded
- ▶ **Readmit to school?** Four days after the start of the rash and otherwise well

# Bugaboo Bugs:

## Meningitis

- ▶ **What?** Swelling or inflammation of the covering of the brain and spinal cord. While some bacteria *N. meningitides*, *S. pneumonia*, *H. influenza* (type B), these are now rare; most illness is caused by viruses (summer and fall)
- ▶ **What are the signs or symptoms?** Fever, headache (severe), nausea, loss of appetite and stiff neck
- ▶ **Incubation and contagious periods?** 1- 10 days for viral causes; viral shedding for several weeks; bacterial shedding for 24 hours after antibiotics
- ▶ **How spread?** Respiratory secretions or contact; fecal-oral route for enterovirus
- ▶ **How controlled?** Vaccines; for bacterial, antibiotics for close contacts, for viral, good hand-hygiene
- ▶ **Exclude from school?** Yes
- ▶ **Readmit to school?** Yes, when cleared to return

# Bugaboo Bugs:

## Mumps

- ▶ **What?** Viral illness with swelling of salivary glands
- ▶ **What are the signs or symptoms?** Swollen 'glands', fever, headache, earache
- ▶ **Incubation and contagious periods?** 16 to 18 days, sometimes longer; from several days before to 5 days after onset of swollen glands
- ▶ **How spread?** Respiratory route; contact with large droplets; surface contact
- ▶ **How controlled?** Vaccine; vaccinating nonimmune contacts may help stop an outbreak
- ▶ **Exclude from school?** Yes; exclusion of unimmunized if DoH recommends
- ▶ **Readmit to school?** Yes, 5 days after onset of swelling

# Bugaboo Bugs:

## Norovirus

- ▶ **What?** A virus that causes diarrhea and vomiting, more common in cooler months. Also, common cruise ship outbreaks.
- ▶ **What are the signs or symptoms?** Fever, watery diarrhea, nausea, muscle aches, headache, lasts 1 to 5 days.
- ▶ **Incubation and contagious periods?** 12 to 48 hours; from onset to 4 weeks
- ▶ **How spread?** Fecal-oral route
- ▶ **How controlled?** Good hand-hygiene; soap and water is better than sanitizer
- ▶ **Exclude from school?** Yes, if DoH deems it necessary for control; if accidents cannot be contained.
- ▶ **Readmit to school?** Once stool frequency is no more than 2 more than normal.

# Bugaboo Bugs:

## Rotavirus

- ▶ **What?** Virus that causes diarrhea and vomiting; cooler months; usually < 3 yo
- ▶ **What are the signs or symptoms?** Fever, diarrhea, nausea, vomiting, 3-7 d
- ▶ **Incubation and contagious periods?** 1-3 days, from several days before to a week after the illness
- ▶ **How spread?** Fecal-oral route, surface spread
- ▶ **How controlled?** Vaccine preventable, good hand-hygiene, good surface cleaning
- ▶ **Exclude from school?** If DoH requires for an outbreak, blood or mucus or black stools
- ▶ **Readmit to school?** When to child can participate, < 2 stools over normal

# Bugaboo Bugs:

## Rubella

- ▶ **What?** Mild viral infection lasting 3 days; rare in the US
- ▶ **What are the signs or symptoms?** Often, no signs or symptoms; rash, swollen nodes, slight fever
- ▶ **Incubation and contagious periods?** 14 to 21 days; may be spread 7 days before to 14 days post rash
- ▶ **How spread?** Respiratory droplet, large
- ▶ **How controlled?** Vaccine; unimmunized should be excluded during an outbreak
- ▶ **Exclude from school?** Yes
- ▶ **Readmit to school?** Yes, 7 days after onset of rash

# Bugaboo Bugs:

## Salmonella

- ▶ **What?** Bacteria; typhoid fever is a specific type of *Salmonella*
- ▶ **What are the signs or symptoms?** Diarrhea, fever, cramps, nausea and vomiting
- ▶ **Incubation and contagious periods?** 6-48 hours; contagious sometimes > 12 weeks
- ▶ **How spread?** Fecal-oral route, contaminated foods
- ▶ **How controlled?** Use good hand-hygiene technique; surface disinfection; eliminate certain animals from the classroom
- ▶ **Exclude from school?** Yes, if DoH determines so; stool not contained in diaper or “accidents”, blood in the stool
- ▶ **Readmit to school?** Most forms do not require negative testing



# Bugaboo Bugs:

## Shigella

- ▶ **What?** Bacteria that can cause an intestinal infection.
- ▶ **What are the signs or symptoms?** Loose, watery stools with blood or mucus.
- ▶ **Incubation and contagious periods?** 1 to 7 days, contagious up to 4 weeks
- ▶ **How spread?** Fecal-oral route, surface contact, very few organisms required.
- ▶ **How controlled?** Good hand-hygiene, proper surface disinfection, call PHD
- ▶ **Exclude from school?** Yes, if DoH deems; blood or mucus or black stools
- ▶ **Readmit to school?** Once treatment is complete and at least one stool is culture negative

# Bugaboo Bugs:

## Strep Throat (Streptococcal Pharyngitis)

- ▶ **What?** Sore throat caused by group A *Streptococcus*
- ▶ **What are the signs or symptoms?** Sore throat, fever, stomachache, headache, swollen lymph nodes (negative association with runny nose, cough), rarely a sore throat < 3 yo.
- ▶ **Incubation and contagious periods?** 2 to 5 days
- ▶ **How spread?** Respiratory droplets, contact with respiratory secretions
- ▶ **How controlled?** Good hand hygiene
- ▶ **Exclude from school?** Yes, at least first 12 hours after antibiotics
- ▶ **Readmit to school?** After antibiotics and feeling well

# Bugaboo Bugs: Tuberculosis (TB)

- ▶ **What?** *Mycobacterium tuberculosis*, usually involving the lungs
- ▶ **What are the signs or symptoms?** Chronic cough, weight loss, fever, growth delay, night sweats, chills
- ▶ **Incubation and contagious periods?** 2-10 weeks after the initial infection
- ▶ **How spread?** Close contact with an adult with TB, airborne route
- ▶ **How controlled?** Testing of those at risk
- ▶ **Exclude from school?** Yes, if there is active disease
- ▶ **Readmit to school?** When effective therapy started and adherence is documented, and/or approved to return by local health officials

# Bugaboo Bugs:

## Whooping Cough (Pertussis)

- ▶ **What?** Contagious bacterial infection causing a range of illnesses (mild to severe)
- ▶ **What are the signs or symptoms?** Begins with cold-like signs and symptoms; coughing may become sudden and severe with vomiting, loss of breath, 'whooping', cyanosis, which may persist for weeks; fever is minimal or absent
- ▶ **Incubation and contagious periods?** 5-21 days; contagious from symptom onset until 3 weeks after cough begins
- ▶ **How spread?** Droplet route, less than 3 feet from the source
- ▶ **How controlled?** Vaccination
- ▶ **Exclude from school?** Yes
- ▶ **Readmit to school?** After 5 days of antibiotics or 21 days after onset of cough

# Bugaboo Bugs:

## Post-test

- 1) Bilateral conjunctivitis is an infectious condition that should result in the student being excluded from school: T or F or Maybe
- 2) Nits, more than just a couple in an adolescent, are an indication for exclusion from school: T or F or Maybe
- 3) Pharyngitis, rapid *Strep* test negative, in a sexually active teen should result in exclusion from school: T or F or Maybe