Boil/Abscess/Cellulitis

What are boils, abscesses, and cellulitis?

These are bacterial infections of the skin that usually begin from a scratch or bug bite and may progress to a red nodule that fills with pus. *Boils* are superficial infections with a thin layer of skin over fluid. *Abscesses* are generally larger and deeper with redness and painful swelling over an area filled with pus. *Cellulitis* is an infection within the skin and the area just beneath it; the skin is red and tender to touch. The area of cellulitis can spread quickly.

What are the signs or symptoms?

Abscesses and boils tend to be softer in the middle over the fluid or pus than at the edges. They may drain when the skin over the infected area opens and lets the fluid or pus out. Signs of cellulitis include areas of redness and skin tenderness. The skin over these infections is usually warmer than the surrounding normal areas of skin because of the body's reaction to the infection.

What are the incubation and contagious periods?

The incubation period is unknown. Common skin bacteria (staphylococcus and streptococcus) are usually the cause of boils/abscesses/cellulitis. These bacteria are present on the skin of most children and usually do not cause a problem. However, skin bacteria may cause infection when there is a break in the skin or the bacterial infection overpowers normal defenses against infection. Having a methicillin-resistant Staphylococcus aureus (MRSA) skin infection is no more serious than other staphylococcal skin infections (see also Staphylococcus aureus [Methicillin-Resistant (MRSA) and Methicillin-Sensitive (MSSA)] Quick Reference Sheet). Regardless of the bacteria, these skin infections are contagious when the infected area is open and draining. People who carry the bacteria in their noses and throats and on their skin may pass the bacteria on to others. However, for a skin infection to occur, the bacteria must get through a break in the skin.

How is it spread?

Person-to-person contact with pus and skin bacteria and, to a lesser extent, contaminated environmental surfaces and objects

How do you control it?

- Use good hand-hygiene technique at all the times listed in Chapter 2.
- Any skin condition that may cause skin breaks, such as eczema, is a risk factor for having a skin infection and passing this on to others. Educators with eczema on their hands should practice good eczema control. They should ask their health professional how to prevent dry or cracked skin while continuing to perform required frequent hand hygiene. Also, they should ask whether they need to wear gloves during activities that involve touching the skin of the children. For children who have eczema, use a care plan that involves the child's family and pediatric health professional to control this skin condition.
- Cover lesions if they are draining.
- Culturing children who do not have infections to determine if they harbor MRSA in their noses or throats or on their skin is not indicated.
- Infected children may need antibiotic treatment for tissue infections. Small abscesses may be surgically drained without antibiotics. If antibiotics are prescribed, they should be given according to the pediatric health professional's instructions on the prescription label.
- If more than one child in the program experiences skin infections that require surgical drainage or antibiotics, contact the Child Care Health Consultant or local health department.

What are the roles of the educator and the family?

- Use good hand hygiene technique at all the times listed in Chapter 2.
- Also practice good hand hygiene after changing bandages or dressings. Practice Standard Precautions.

Exclude from educational setting?

No, unless

- The child is unable to participate and staff members determine they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.
- The child meets other exclusion criteria (see Conditions Requiring Temporary Exclusion in Chapter 4).

• A draining lesion cannot be covered, or the covering cannot be maintained because the drainage comes through the covering to contaminate other surfaces.

Readmit to educational setting?

Yes, when all the following criteria are met:

When exclusion criteria are resolved, the child is able to participate, and staff members determine they can care for the child without compromising their ability to care for the health and safety of the other children in the group

Comments

- Having a MRSA infection, or harboring MRSA bacteria (carrier), is not a reason for exclusion.
- Occasionally, multiple people within a family or ECE setting may become recurrently infected with boils/ abscesses. This may be due to *S aureus* (MRSA or other types).
- Using nasal antibiotic ointment and special cleansers (chlorhexidine or bleach in bathwater) may reduce repeated staphylococcal infections within families. However, reexposure can occur in the community because staphylococcus commonly lives on the skin and in the noses of noninfected (colonized) individuals. This treatment should only be done under the guidance of a health professional.

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