

Bacterial skin infections

Staphylococcus aureus ("Staph") and *Streptococcus pyogenes* ("Strep") are the bacteria that cause most skin infections. Examples discussed here include:

- » **Impetigo**
- » **Folliculitis and furuncles**
- » **Abscesses**
- » **Cellulitis**

There are many kinds of skin infections, some common, some uncommon or even rare. Skin infections can be caused by bacteria, viruses, fungi, or parasites. This handout will cover skin infections caused by bacteria.

WHAT DO BACTERIAL INFECTIONS LOOK LIKE ON THE SKIN?

Bacterial infections look different on the skin depending on how deep they are:

IMPETIGO

Impetigo is a superficial skin infection that is common in children. It may occur on any part of the body but is usually in areas that are not covered by clothes (face, neck, arms, hands, and legs). It starts as small, red bumps or pus-filled bumps. These break open and a yellow liquid dries on the skin and forms a "honey-colored" crust. Sometimes thin blisters form and leave behind round painful sores.

FOLLICULITIS AND FURUNCLES

Folliculitis is a bacterial infection of the hair follicles. It usually is on skin covered by clothes such as the buttocks, thighs, and back. Folliculitis looks like small pimples or pus bumps on the hair follicles. When the bumps go away, small dark spots may be left behind. These fade over time. If the infection gets deeper in the hair follicle, painful red boils may form, and these are called **furuncles**.

ABSCESSSES

An **abscess** is a painful, pus-filled lump under the skin. Abscesses can be anywhere on the body. They look like red boils, similar to furuncles, but larger. They can also be more painful. Pus may drain from the center. An abscess can make you sick with a fever.

CELLULITIS

Cellulitis is a bacterial infection that is deeper in the skin. It usually occurs on the legs but can be anywhere including the face. The skin is red, warm, swollen, and painful. In more severe infections, pus-filled bumps or blisters can form on top. Red streaks near cellulitis may mean that the infection is spreading through the lymphatic system. Fevers and chills often occur.

HOW DO I KNOW IF I HAVE A BACTERIAL SKIN INFECTION?

- » Red painful skin, sometimes around a cut, scrape or other skin injury
- » Pus or fluid leaking out of the skin
- » A painful, red, warm lump under the skin
- » Crusts or blisters with redness on the skin

WHAT ARE THE WARNING SIGNS OF A SERIOUS SKIN INFECTION?

- » Redness, swelling and pain getting worse or larger
- » Red streaks spreading out from the infected area
- » Fever, feeling unwell

WHAT IS MRSA?

MRSA stands for **Methicillin-Resistant Staph Aureus**. Methicillin and other antibiotics usually used to treat Staph infections do not work on this type of Staph, so other antibiotics must be used. MRSA can cause any of the infections listed above (impetigo, folliculitis, furuncles, abscesses, and cellulitis). Furuncles or abscesses caused by MRSA are sometimes wrongly thought to be spider bites.

HOW ARE BACTERIAL SKIN INFECTIONS SPREAD?

- » Most bacterial skin infections are contagious and can be spread by skin contact with someone who has the infection.
- » Hot tubs or heated swimming pools that are not well treated may have bacteria that can cause "hot tub folliculitis."
- » Bacteria can get into the skin through small injuries caused by scratching, cuts and scrapes, insect bites, eczema, and shaving.
- » While it is normal to have some bacteria in your nose, sometimes Staph bacteria lives there. This is called being "colonized." This often causes no symptoms in the nose but can cause skin infections.

HOW ARE BACTERIAL SKIN INFECTIONS DIAGNOSED?

Healthcare professionals can usually diagnose bacterial skin infections by how they look. Often a culture is taken by rubbing a swab on the crust, scab, liquid, or pus. The culture will show which type of bacteria is causing the infection, so that the right antibiotic can be prescribed.

HOW ARE BACTERIAL SKIN INFECTIONS TREATED?

Bacterial infections are treated with antibiotics. Which antibiotic is used depends on the type of bacterial skin infection.

- » Impetigo on a small area of skin can usually be treated with antibiotic ointment.
- » Impetigo that has spread or involves more areas of the skin is treated with oral antibiotics.
- » Folliculitis can be treated with antibacterial cleansers or lotions. Oral antibiotics are sometimes needed if it is widespread.
- » Furuncles and abscesses often need to be drained by a healthcare professional. Oral antibiotics and warm compresses may also be used.
- » Cellulitis is treated with oral antibiotics. If the cellulitis does not improve or is more severe, intravenous antibiotics may be needed.
- » If a skin infection does not get better with common antibiotics, it may be a MRSA infection or the lesion may require drainage and/or skin culture.

HOW TO PREVENT BACTERIAL SKIN INFECTIONS

- Keep hands clean by washing with soap and water.
- Hands may also be cleaned using hand sanitizer. Rub hands together until they are dry.
- Avoid sharing personal items, such as razors, loofahs, washcloths, and towels.
- Make sure that the temperature and chlorine in hot tubs and heated pools is checked frequently.
- Remove swimsuits and shower after swimming.
- Shower after sports.
- Clean surfaces in the house that are touched a lot, like door knobs and counters.
- Check pets for skin infections and treat them.

WHAT CAN BE DONE ABOUT RECURRENT SKIN INFECTIONS?

Your healthcare professional may recommend:

- Dilute bleach baths to decrease Staph bacteria on your skin. This is often used for children with eczema as they have more Staph bacteria on their skin than people without eczema.
- Other antibacterial washes that have chlorhexidine or sodium hypochlorite may be recommended instead of bleach baths.
- Antibiotic ointment applied inside the nose of the person who is getting infections.
- Family members or close contacts may also carry Staph bacteria inside the nose even without a history of infections. They need to be treated too.



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