CONDITION

# Boils

Learn what causes boils, how they are treated, how to care for one safely, and when a painful skin lump needs prompt medical attention.

**WHAT IT IS**
Painful pus-filled hair follicle infection

**BODY SYSTEM**
Skin

**MAIN SYMPTOMS**
Painful tender bump, skin redness or darkening, swelling and warmth, pus drainage

**WHAT CAUSES IT**
Bacterial infection, usually Staphylococcus aureus

**HOW IT IS DIAGNOSED**
Skin examination, sometimes ultrasound or drainage culture

**MAIN TREATMENT**
Wound care and professional drainage

**CAN IT BE CURED?**
Yes, most heal without lasting problems

**IS IT AN EMERGENCY?**
Sometimes, with confusion or difficulty breathing

**LONG-TERM OUTLOOK**
Usually heals without lasting problems, with occasional scarring or serious spread

## Overview

A boil is a painful, pus-filled infection that develops around a hair follicle or oil gland. The medical name for a boil is a furuncle . It often begins as a firm, red or darker-colored bump and then becomes softer as pus collects under the skin.

Several connected boils may form a deeper cluster called a carbuncle . Carbuncles are more likely than single boils to cause fever, scarring, or a more extensive infection.

Most boils are caused by Staphylococcus aureus , a type of bacteria commonly found on the skin or in the nose. Some are caused by methicillin-resistant Staphylococcus aureus ( MRSA ). MRSA resists several commonly used antibiotics like amoxicillin or doxycycline , but the appearance of a skin infection alone cannot show whether MRSA is present.

Small boils sometimes open and heal with warm compresses and basic wound care. Larger or deeper boils may need to be drained by a healthcare professional. Antibiotics are useful in certain situations, but they do not replace drainage when there is a pocket of pus.

Safe care matters because squeezing or piercing a boil can push bacteria into nearby tissue, spread drainage to other people, or delay proper treatment.

## Symptoms

A boil can develop anywhere hair grows, but common locations include the face, neck, armpits, buttocks, groin, and thighs. Areas exposed to friction, pressure, shaving, or sweating may be especially affected.

Typical changes include:

Some people also develop fever, chills, tiredness, or swollen lymph nodes. These symptoms may mean the infection is affecting a larger area or causing a whole-body response.

Not every painful lump is a boil. Acne cysts, inflamed insect bites, infected skin cysts, and hidradenitis suppurativa can look similar. Hidradenitis suppurativa is a long-term condition that causes repeated painful lumps, tunnels, and scars, usually in the armpits, groin, buttocks, or under the breasts.

Seek prompt medical advice if a suspected boil is on the face, especially near the eye or nose; is rapidly enlarging; is extremely painful; or is surrounded by spreading redness. Fever, worsening swelling, red streaks, or repeated boils also deserve timely assessment.

Call emergency services for confusion, fainting, severe weakness, difficulty breathing, or other signs of serious illness.

- A firm, tender bump that becomes increasingly painful
- Red, purple, or darker skin around the bump, depending on skin tone
- Swelling and warmth
- A white or yellow center as pus moves toward the surface
- Drainage of pus or blood-tinged fluid
- A crust that forms after the boil drains
- More than one connected pocket of infection in a carbuncle

## Causes and risk factors

Boils usually begin when bacteria enter a hair follicle through a small break in the skin. The break may be too small to see. Shaving, rubbing, scratching, eczema, and minor cuts can weaken the skin barrier.

Staphylococcus aureus can live on healthy skin without causing symptoms. A person may carry the bacteria in the nose, armpits, groin, or other areas and develop an infection only when the bacteria reach damaged skin.

Boils can spread through direct contact with infected skin or drainage. Bacteria may also get onto towels, razors, bedding, athletic equipment, or other shared items. A boil is not always acquired from another person, however. It may be caused by bacteria already living on the affected person's skin.

Factors that may raise the chance of boils or make them harder to heal include:

Having a boil does not mean a person has poor hygiene. Although handwashing and wound care reduce spread, these infections can occur even with careful hygiene.

Repeated boils may have more than one explanation. A clinician may look for bacterial carriage, diabetes, an ongoing source of exposure, or another skin condition. A recurring lump in the same place can sometimes be related to a cyst, foreign material under the skin, or hidradenitis suppurativa.

- Close skin-to-skin contact with someone who has an active infection
- Sharing towels, razors, clothing, or sports equipment
- Contact sports or crowded living conditions
- Frequent shaving, friction, or heavy sweating
- Eczema or another condition that damages the skin barrier
- Diabetes, particularly when blood sugar is not well controlled
- Reduced immune defenses because of illness or immune-suppressing treatment
- Poor circulation or chronic swelling
- A history of boils or MRSA infection
- Regular exposure to S. aureus in a household or care setting

## Diagnosis

A healthcare professional can often identify a boil by examining the skin and asking how the lump developed. The examination may assess its size, depth, location, tenderness, drainage,

and the amount of surrounding redness.

A boil that feels soft or fluid-filled may contain an abscess , which is a walled-off pocket of pus. An ultrasound is occasionally used if it is unclear whether pus is present or how deep the infection extends.

If drainage is available, a sample may be sent for a culture . This laboratory test identifies the bacteria and may show which antibiotics are likely to work. Culture is especially helpful for severe, unusual, or recurring infections and when an infection has not responded as expected.

Blood tests are not routinely needed for a small, uncomplicated boil. They may be considered when a person has fever, appears significantly unwell, has important underlying health conditions, or may have a deeper infection. Recurrent infections may also lead to testing for conditions such as diabetes when appropriate.

## Treatment and management

Treatment depends on the boil's size, location, symptoms, and whether infection is spreading. A healthcare professional can advise whether home care is reasonable or whether drainage or other treatment is needed.

For a small boil without concerning symptoms, a warm, moist compress may help it drain naturally. Apply the compress gently for about 10 to 15 minutes several times a day. Use a clean cloth each time, and avoid water hot enough to burn the skin.

Do not squeeze, lance, or pierce the boil. Home drainage can push infection deeper, injure nearby tissue, and contaminate hands or surfaces. Boils on the face require particular caution.

If a boil opens on its own:

Over-the-counter pain medicine may help with discomfort. Follow the product label and ask a pharmacist or clinician whether a medicine is appropriate if you have ongoing medical conditions, take other medicines, are pregnant, or are treating a child.

A larger, deeper, or very painful boil may need incision and drainage . During this procedure, a clinician numbs the area, makes a small opening, and allows the pus to drain. The wound may be left open so it can continue draining while it heals. Follow the wound-care instructions provided after the procedure.

Antibiotics are not needed for every drained boil. A clinician may consider them when there is spreading skin infection, fever or other whole-body symptoms, multiple lesions, reduced immune defenses, treatment failure, or another factor that increases risk. The choice of antibiotic depends on likely bacteria, local resistance patterns, allergies, culture results, and

the person's health. Take a prescribed antibiotic exactly as directed and do not use leftover or shared antibiotics.

For repeated S. aureus infections, a clinician may sometimes recommend a short decolonization plan intended to reduce bacteria carried on the body. This can involve prescription nasal ointment, antiseptic skin washing, and cleaning frequently used personal items. Decolonization is not appropriate for everyone and should be discussed with a healthcare professional rather than started independently.

- Wash your hands before and after touching the area.
- Let it drain without squeezing.
- Gently clean the surrounding skin with soap and water.
- Cover the area with clean, dry gauze or a suitable bandage.
- Replace the covering when it becomes wet or dirty.
- Place used dressings in a closed trash bag.
- Launder towels, washcloths, bedding, and clothing after contact with drainage.
- Do not share personal items such as towels, razors, or athletic gear.

## Complications

Most boils heal without lasting problems, but complications can occur. A boil may leave temporary discoloration or a permanent scar, especially if it is large, deep, repeatedly squeezed, or slow to heal.

The infection can spread into the surrounding skin and cause cellulitis . This may appear as expanding redness or discoloration, warmth, swelling, and tenderness. Cellulitis usually needs medical assessment and may require antibiotics.

Less commonly, bacteria can enter the bloodstream or spread to deeper tissues, bones, joints, or organs. Serious spread is more likely in people who are significantly unwell, have reduced immune defenses, or delay care for a worsening infection.

A boil near the eye may lead to swelling around the eye and requires prompt assessment. Repeated boils can also affect sleep, work, exercise, and emotional well-being. When lesions repeatedly occur in skin folds or leave tunnels and scars, evaluation for hidradenitis suppurativa may help identify a more specific treatment approach.

## Follow up

Arrange routine follow-up if the boil is not improving after several days of careful home treatment, has not healed within about two weeks, or keeps returning. A clinician should also review ongoing drainage, a wound that will not close, or a lump that repeatedly develops in the same location.

Seek same-day or prompt medical care if:

Emergency care is appropriate for confusion, fainting, trouble breathing, severe weakness, rapidly worsening illness, or signs of shock.

After professional drainage, attend any recommended wound checks. Contact the treating clinician if the dressing becomes soaked repeatedly, bleeding does not stop with gentle pressure, pain becomes much worse, or new fever develops.

To lower the chance of spread or recurrence, keep healing wounds covered, wash hands regularly, clean shared equipment, avoid sharing personal items, and shower after close-contact sports. Household members with painful or draining skin lesions should seek their own medical advice rather than sharing medicines.

- The boil is on the face, near an eye, or inside or near the nose.
- Pain, swelling, or redness is rapidly worsening.
- Redness is spreading away from the boil.
- Fever, chills, red streaks, or swollen lymph nodes develop.
- There are several boils or a large carbuncle.
- The person has diabetes, poor circulation, or reduced immune defenses.
- A young infant has a boil or other suspected skin infection.
- Symptoms worsen after drainage or while taking prescribed treatment.

## Sources

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