



# Acne and Adolescents

## What causes acne?

Acne usually starts in adolescence because of hormonal changes that happen as youth mature. The body begins to produce hormones called androgens, which are male hormones, but are found in both men and women. These hormones cause excess oil build up in the pores. When the oil clogs the pores, it leads to whiteheads and blackheads or comedones.

When pores become clogged with oil and dead skin cells, bacteria called *p. acnes* that are already in the pores begin to increase. This leads to pimples and cysts. There are four classifications of acne. Some people may have more than one type.

## Blackheads

The mildest form of acne is blackheads or open comedones. While oil and bacteria are found in blackheads, it is the skin pigment keratin, not dirt, that caused the dark appearance. These comedones may be flat or slightly raised and as large as 5 mm in diameter. Because blackheads have an open pore, inflammation rarely occurs.

## Whiteheads

With whiteheads or closed comedones, the trapped oil can rupture the hair follicle. Bacteria normally residing there may weaken the follicle wall. This same bacteria may produce special enzymes that make the oil more irritating to the skin once it escapes from the follicle.

## Papules

The result of such inflammation may be papules. These raised, red, tender pimples can be as large as the blackheads. Unlike whiteheads or blackheads, pimples contain a small amount of pus. This pus is a byproduct of the body's attempt to ward off the infection responsible for the pimple in the first place.

## Pustules, Nodules, and Cysts

Similar to papules, pustules contain more pus. Solid raised lesions, nodules are often bigger than half a centimeter in diameter. Unlike pustules, nodules are rooted deeper in the dermis layer of the skin. Movable, sometimes painful, pus-filled nodules are the hallmark of severe cystic acne. This type of acne is most likely to leave scars if not treated properly.

**What qualifies as acne? Any of the above.**

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# How To Help

## What warrants treatment?

Comedones, whiteheads and blackheads, may be treated at home. Cystic acne generally warrants medical intervention.

Acne has a big effect on body image for teenagers. For some, this self-consciousness can turn into an obsessive preoccupation with their skin. Treatment will vary from person to person, depending on the severity of the acne and the psychological effect.

## What treatments are available?

Unfortunately, there is no current cure for acne. Treatment is based on controlling those factors (oil and bacteria) that cause acne.

For some, mild acne may be controlled with over the counter preparations containing benzoyl peroxide, sulfur or salicylic acid. These kill the inflammation inducing bacteria, which prevents new pimples from forming. They may also act as a drying agent to help control the oil, or as an exfoliating agent, allowing old skin to come off and open the pores.

These agents come in different concentrations and forms. Each form and concentration may affect individuals differently. Higher concentrations are not necessarily better, since these can also inflame the skin. A pharmacist can discuss possible side effects.

With any treatment, four to six weeks is generally needed for any improvement. It takes four to six weeks for the average pimple to develop and since most treatment is aimed at stopping development, it will take at least that long to see results. It may take up to three months for acne to clear significantly.

## For further help:

### See your primary health care provider.

- If acne is getting worse or is leaving scars, professional assistance is needed.
- If topical treatment is not enough or if the acne covers a large area of the body, a physician may use oral antibiotics.
- In some women, acne flares are associated with their periods. See your primary health care provider for assistance in reducing these flares.

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