

# Acne

Acne is a very common skin condition, affecting 80% of teenagers. Topical (placed on the skin) medications, such as benzoyl peroxide or tretinoin (Retin-A), can treat and control acne in most patients. Other medications, such as oral antibiotics, certain birth control pills for girls, or oral isotretinoin (Acutane), may be used for more severe cases.

## What is acne?

Acne refers to various types of pimples or blemishes. They occur because of blockage of the *sebaceous glands*. These glands produce an oil-like substance called sebum, which comes to the skin surface through hair follicles (pores). This blockage causes different types of pimples, depending on how much inflammation occurs. Certain bacteria that are normally found at the sebaceous glands are also involved in producing inflammation.

All kinds of acne start with a very small (cannot be seen) *comedone*—a blocked pore without inflammation. Acne generally occurs around puberty because the increase in sex hormones affects the sebaceous glands in a way that promotes blockage. There are a few types of acne, depending on where in the pore the blockage occurs and how much inflammation occurs. Medications used to treat acne are meant to unblock or prevent blockage of these pores and to control the inflammation.

Even when mild, acne can be very embarrassing for children and teens. Basic treatments can help them feel and look better. Treatment can also reduce the chances of scarring.

## What does it look like?

There are a few kinds of pimples:

- Open or closed comedones (“blackheads” or “whiteheads”)—very small bumps without redness or inflammation. As the names suggest, they have “whiteheads” (closed comedones) or “blackheads,” with black specks in the center (open comedones).
- Reddened bumps (papules).
- Pimples filled with pus (pustules).
- Deeper nodules or cysts, which may occur if inflammation occurs deeper in the skin. This is the most severe type of acne and the most likely to cause scarring.

Pimples most commonly appear on the central part of the face, but they may also occur on the chest, upper back, or shoulder area.

Boys are more likely to have acne on the chest, where hair is developing.

As pimples heal, they may leave some redness and increased skin color, which take some months to go away. In more severe acne, scarring may occur.

## What puts you at risk for acne?

- Around 80% of young people develop some amount of acne during puberty or the teen years.
- Anything that blocks the pores can make acne worse. This includes greasy ointments or creams, as well as hair products.
- Blockage of the pores causing pimples can occur under sweat bands worn during sports or exercise.
- Trying to “pop” pimples is likely to cause increased inflammation.
- Acne is not caused or made worse by eating particular foods.
- Emotional stress and fatigue may make acne worse.
- Acne may be less severe during the summer months (because of exposure to sunlight and subsequent peeling) and more severe in the winter.
- Acne may also be caused by certain medications, such as topical steroids, and by certain hormonal conditions.

## What are some possible complications of acne?

- Scarring may occur in severe acne.
- Even if relatively mild, acne can have a significant emotional impact on teens.

## How is acne treated?

There are a number of different medications to treat acne, and the doctor will decide which is best for you. If acne is severe or doesn't respond to treatment, we may recommend a visit to a dermatologist (a doctor specializing in skin diseases).

*Basic treatments* can keep acne under control until it goes away on its own:

- Cleaning with mild soap and water helps the skin look less oily but won't prevent pimples. Avoid repetitive cleaning, because it may cause the skin to become irritated and chapped.
- Products that contain alcohol or other substances that kill surface bacteria won't help prevent new acne pimples. In fact, they may make the skin more irritated.

*Topical medications*, or medications applied to the skin, can control most cases of acne that are not too severe. Often, more than one type of medication is used to get

the best results. Typically, it takes 4 to 8 weeks to see any improvement. Many of these medications can make the skin dry or irritated. If this is a problem, a “non-comedogenic” moisturizer can be used.

- Benzoyl peroxide is a commonly used and effective medication that is available over the counter (in products such as Clearasil). It comes in different strengths and is used once a day. Benzoyl peroxide is often used along with other drugs, such as Retin-A. However, it can be irritating to the skin, especially if too much is used. The water-based gel products are best.
- Tretinoin (Retin-A) is a form of vitamin A. It is very effective in preventing and treating blockage of the pores, which is how all acne starts. Tretinoin comes in different strengths and is used once a day. It can be very irritating to the skin, so it’s best to start slow—for example, use every other day at first. This medication may also make your skin more sensitive to sunlight. For best results, apply 30 minutes after washing.
- Topical antibiotics can help control bacteria involved in causing acne and are often used in combination with other medications. They include topical erythromycin and clindamycin. These drugs are also available in combination with benzoyl peroxide in one product, such as Benzamycin or BenzaClin.
- Other topical medications are available, including azelaic acid (Azelex) and salicylic acid.

*Oral antibiotics* are often used if topical medications don’t work or if acne is more severe. They are frequently used along with topical medications. Commonly used antibiotics include tetracycline, doxycycline, minocycline, and trimethoprim-sulfamethoxazole (Bactrim). These drugs have

various side effects. Reactions to sunlight are especially common with doxycycline and tetracycline.

- Oral isotretinoin (Acutane) is used for nodular or cystic acne, or for severe acne that doesn’t respond to other treatments. It is very effective, and its positive effects last for a long time—in about 30% of patients, the problem never comes back. Isotretinoin has many side effects. Most important, it is a “teratogen”—that means it will cause birth defects if taken during pregnancy. That is why all girls who are taking this drug are required to be on effective birth control. Other side effects include cracked lips, very dry skin, and increased levels of cholesterol and triglycerides in the blood. If needed, this medication is usually prescribed by a dermatologist.
- Birth control pills can be helpful for girls whose acne is difficult to control. They work by decreasing the amount of certain sex hormones.
- Some newer treatments are now available—for example, laser treatment for patients who have trouble taking the medications listed earlier or for whom they are not working well.

*After you start treatment*, your doctor may have you come back every few months to check on your acne. You may need a change in medications because of side effects or if your treatment is not working well.

### **When should I call your office?**

Call our office if:

- Acne becomes a noticeable or socially embarrassing problem.
- Acne doesn’t get better with recommended treatment.

