What is acne?
Acne is a common skin condition that occurs when oil and dead skin cells clog the skin's pores. Acne primarily affects teens; more than 85% experience at least a mild form of this condition. It most commonly occurs on the face, chest, back, shoulders, and neck. Acne affects young men and young women about equally, but there are differences. Men are more likely than women to have more severe, longer lasting forms of acne. In contrast, women are more likely to have intermittent acne due to hormonal changes associated with their menstrual cycle and acne caused by cosmetics. While most people outgrow their acne by their 20's, some, especially women, have acne well into adulthood.

Types of acne lesions
- **Whiteheads**: these pimples stay under the skin's surface
- **Blackheads**: these rise to the surface of the skin; Although these pimples are black, the color is not from dirt.
- **Papules**: tender, small pink bumps
- **Pustules**: these pimples have pus on the top and are red on the bottom of the lesion
- **Nodules**: hard, large, painful pimples that are deep in the skin
- **Cysts**: pus-filled, deep, painful pimples that result in scars

What causes acne?
Rising hormone levels during puberty may cause acne. In addition, acne is often inherited. Other causes of acne may include the following:
- Hormone level changes during the menstrual cycle in women
- Certain drugs (such as corticosteroids, lithium, and barbiturates)
- Oil and grease from the scalp, mineral or cooking oil, and certain cosmetics may worsen acne
- Bacteria inside pimples

How is acne treated?
The goal of treatment is to reduce or eliminate outbreaks and to prevent scarring. Your clinician will base your treatment on the severity of your condition. Initially acne may worsen with new treatment; however, you should use a treatment for a minimum of two to three months before deciding if the treatment is effective.

Topical medications (applied to the skin)
- **Benzoyl peroxide** kills bacteria and is available by prescription and over the counter. It is usually applied once or twice a day to work best against pustules. It can be irritating if used around the eyes and mouth. If used excessively, benzoyl peroxide can cause drying and redness.
- **Salicylic acid** is effective in treating non-inflammatory acne lesions, and is available over the counter. Salicylic acid helps correct the abnormal shedding of skin cells and unclogs pores to resolve and prevent lesions. It may be irritating to the skin.
- **Retinoids**, such as Retin A, Differin work best against blackheads and reduce papules and non-inflammatory pimples. Retinoids can make skin more sun sensitive. (Using sunscreen is recommended and may cause skin dryness or irritation).
- **Topical antibiotics** help reduce the amount of bacteria on the surface of the skin. They are to be applied to the skin twice a day.

Oral medications
- **Oral antibiotics** are used for mild-to-moderate and moderate-to-severe acne. They work to reduce bacteria thereby reducing inflammation. A typical course of treatment can be three months or longer. Doxycycline, Erythromycin, and Minocycline are commonly used antibiotics. These medications should not be taken with milk, milk products, or antacids because it decreases absorption. Other side effects, including vaginal yeast infections, sun sensitivity and stomach upset. It is very important for women to avoid pregnancy when using these antibiotics.
- **Oral contraceptives** have been shown to effectively clear acne in many women by decreasing circulating male hormones called androgens, thereby decreasing sebum (oil) production.
- **Accutane® (isotretinoin)** is a potent oral medication that is used for cystic, refractory acne that does not respond to any of the other medication. Used over about a six month period, it works to decrease inflammation as well as formation of comedones. Because of some potentially serious side-effects, Accutane® is usually prescribed and monitored by a dermatologist.

Managing acne
- Wash your face no more than twice daily using a gentle non-soap facial cleanser (eg, Cetaphil®). Avoid vigorous washing or scrubbing which can worsen acne and damage the skin's surface.
- **Do not pick or squeeze pimples** because this may worsen acne and cause skin swelling and scarring. It can also cause lesions to become infected.

Directions for topical retinoids:
1. Use the medication every other night for the first two weeks. If after two weeks there is no redness or irritation, increase application to every night.
2. Apply a “pea-sized” amount of medication to your index finger.
3. Gently rub a quarter of the medication into each quadrant of your face.
4. The medication should disappear into your skin quickly. If the medication doesn’t easily disappear, you may be using too much medication.
• Use a moisturizer to minimize dryness and skin peeling, which are common side effects of some acne treatments. Moisturizers that are labeled as “non-comedogenic” are less likely to block skin pores.

• Keep your hair clean and off your face. Also avoid resting your hands or objects on your face. We recommend washing your sheets at least once a week because sweat, dirt, and oils contribute to acne development.

• Use products labeled “water-based” or “noncomedogenic”.

• Avoid sun exposure (or use protective clothing and sunscreen) when using these medications as many acne treatments (creams and oral medications) increase sensitivity to sunlight.

**Acne and pregnancy**

Many acne treatments are not safe for use during pregnancy. Women who are pregnant or intending to become pregnant should consider stopping all acne treatments before becoming pregnant. If acne therapy becomes necessary, discuss the options with your healthcare provider.

**SOURCES:**

Information in this handout was adapted from Ohio State University and “Up-to-Date”