



## ACNE TREATMENTS

### The Issue

Acne is a common skin condition and there are many ways to treat it. However, some treatments should be used with caution.

### Background

Acne is common in young adults, teens and pre-teens and may cause emotional and self-esteem problems. In severe cases, medical treatment may be needed. There are many over-the-counter products that can help treat acne.

Acne is caused by inflammation of the oily glands in the skin – they are called sebaceous glands – that contain a fatty material called sebum. When the duct of the gland becomes blocked either by layers of skin, fatty secretions or dirt, a mini-cyst or pimple forms. The cyst can become infected with acne bacteria.

### Treatment of Acne

Just as acne can range from mild to severe, acne treatments also vary, depending on how serious the problem is. The basic treatment is to remove what is plugging the duct of the gland and, if necessary, kill the acne bacteria. This is done either by applying a product to the skin or by taking medication internally. A treatment applied to the skin is called a topical medication; treatment taken internally is called systemic medication.

### Topical medications

The simplest treatment for acne is the daily use of ordinary soap and water. Many topical medications are available over the counter without a prescription. They include:

- medicated soaps;

- salicylic acid ointments and washes; and
- benzoyl peroxide.

Topical prescription products may contain antibiotic ingredients such as erythromycin that help control inflammation associated with acne. Topical prescription products may also contain ingredients derived from vitamin A. These products are designed to clean the area, dry up the oiliness, peel the skin and eliminate the acne bacteria present.

### Systemic medications

Systemic medications are available only with a prescription from a doctor. They can include:

- antibiotics (such as tetracycline and erythromycin) that attack the acne bacteria;
- vitamin A products called retinoids; or
- hormonal agents, including some oral contraceptives such as Alesse® and Tri-Cyclen®.

### The Health Risks of Acne Treatments

#### Systemic products containing isotretinoin

Some of the most serious health effects come from isotretinoin products, such as Accutane® or Clarus® that are derived from vitamin A. These products are prescribed to treat severe cases of acne that are difficult to treat any other way.

If taken by pregnant women, isotretinoin products can cause severely deformed babies or result in miscarriages, even if it is only used for a short time. Even one dose can affect a developing fetus.



Women should not breastfeed if they are taking isotretinoin products, since doing so may harm the child.

When doctors are prescribing this drug to women of childbearing age, they must use the manufacturer's risk management program. This program includes:

- comprehensive information about the potential risks of this drug;
- a signed statement that the patient has been informed about the risks;
- a checklist for criteria that must be met prior to prescribing this drug to female patients of child-bearing age;
- detailed information on birth control options;
- patient consent; and
- monthly pregnancy reminders for physicians to use at each patient visit during the treatment period.

Although there is no direct evidence, these products have also been linked to depression, even suicide in some people. They can also increase your chances of developing diabetes, liver disease or heart disease if you have a family history of these diseases.

Isotretinoin products may also increase your skin's sensitivity to the sun and cause reduced night vision, which can come on suddenly.

## Hormonal Agents

Where there is medical evidence of a hormonal imbalance in women, hormonal agents may be used to treat severe acne. Diane-35®, which is a combination of two types of hormones - estrogen and progestogen - has been approved by Health Canada for the treatment of severe

acne that does not respond to oral antibiotics or other treatments.

This type of medication can also cause birth defects if taken while you are pregnant. Cigarette smoking increases the risk of serious adverse effects on the heart and blood vessels from use of these hormonal agents.

## Oral Contraceptives

Alesse® and Tri-Cyclen® are two oral contraceptive pills that are also approved for the treatment of moderate acne. This class of medications should not be taken if you are pregnant or if pregnancy is suspected. Cigarette smoking also increases the risk of serious adverse effects on the heart and blood vessels from oral contraceptive use.

## Topical Products

Vitamin A acid, also known as tretinoin, is a prescription medication applied to the skin that acts as a peeling agent. It can cause redness and peeling, so should not be used near the eyes, mouth or nose. These products can cause birth defects if used while you are pregnant or trying to become pregnant.

Benzoyl peroxide is a common peeling agent that has been used for years to treat acne. In Canada, the benzoyl peroxide used in over-the-counter acne treatments must be in concentrations of five per cent or less. Benzoyl peroxide can make your skin more sensitive to the sun.

## Minimizing Your Risk

- Women who are considering using an isotretinoin product such as Accutane® or Clarus® should be enrolled by their doctors in the appropriate risk management program as recommended by Health Canada. This program strongly

recommends that women who have been prescribed an isotretinoin product should use two effective birth control methods at the same time for at least one month before beginning treatment, during treatment, and for at least one month after treatment stops. Discuss with your doctor the most effective birth control measures for you.

- If while taking an isotretinoin product you begin to feel extremely sad, hopeless or helpless, or have thoughts of suicide, see your doctor immediately. These are the symptoms of severe depression and must be treated promptly.
- If you are thinking about using an isotretinoin product and you or members of your family have diabetes, liver disease, heart disease or depression, be sure to tell your doctor.
- Never share a prescription for an isotretinoin product with someone else, particularly with a woman who may be pregnant.
- Do not take an isotretinoin product if you are breastfeeding.
- If you are taking an isotretinoin product, do not drive at night as impaired night vision can come on suddenly.
- Never purchase an isotretinoin product over the Internet. It is a product that needs monitoring by a doctor.
- If you use an isotretinoin product or a product containing benzoyl peroxide, do not stay in the sun too long and make sure you apply a sunblock lotion.
- If you are pregnant or planning to become pregnant, you should also avoid hormonal agents and oral contraceptives.



- Diane-35 should be discontinued three to four cycles after signs have completely resolved.
- After the age of 35 years, hormonal agent and oral contraceptives should be considered only in exceptional circumstances and when the risks and benefits has been carefully weighed by both the patient and the physician.

For additional articles on health and safety issues go to the It's Your Health Web site at: [www.healthcanada.gc.ca/iyh](http://www.healthcanada.gc.ca/iyh)  
You can also call toll free at 1-866-225-0709 or TTY at 1-800-267-1245\*

## Need More Info?

If you have questions about which acne treatment is right for you, talk to your family doctor, your university or college health centre, or your high school's health office for advice.

To learn more about the process for drug approvals in Canada go to: [http://www.hc-sc.gc.ca/hpfb-dgpsa/tpd-dpt/fact\\_drug\\_e.html](http://www.hc-sc.gc.ca/hpfb-dgpsa/tpd-dpt/fact_drug_e.html)

For more youth specific information go to Health Canada's youth section at: [http://www.hc-sc.gc.ca/jfy-spv/youth-jeunes\\_e.html](http://www.hc-sc.gc.ca/jfy-spv/youth-jeunes_e.html)

You can contact the Canadian Dermatology Association at 1-800-267-3376 or [www.dermatology.ca](http://www.dermatology.ca)

For more information on acne and treatments go to the American Academy of Dermatology's Acne Net Web site at: <http://www.skincarephysicians.com/acnet/>

For more information on acne and teens go to the following websites: College of Family Physicians of Canada: <http://www.cfpc.ca/English/cfpc/programs/patient%20education/acne/default.asp?s=1>

Kidsworld, Battling Blackheads and Acne <http://www.kidsworld.com/site/p3348.htm>