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2. Minoxidil

# Minoxidil

**Pronunciation:** *mi-NOX-i-dil*

**Brand names:** Gainextra, [Rogaine](#), Rogaine Extra Strength, [Rogaine Men's Extra Strength](#), Ronoxidil, [Rogaine Women's](#)

**Dosage form:** Mens topical foam (5%), Womens topical foam (5%), Mens topical solution (5%), Womens topical solution (2%)

**Drug class:** [Miscellaneous topical agents](#)

Medically reviewed by [Melisa Puckey, BPharm](#). Last updated on Jul 22, 2024.

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## What is minoxidil topical?

Minoxidil is a treatment for [hair loss](#) that helps regrow hair and prevent future hair loss in men and women with certain types of hair loss. When used regularly, new hair growth may be seen as early as 2 to 4 months.

Minoxidil for women is used to help regrow hair if you have gradually thinning hair or gradual hair loss on the top of the head, which may only become noticeable after years of gradual loss. Minoxidil for women works best when it is used at the earlier stages of female pattern hair loss. Minoxidil for women foam is applied once daily to the affected scalp area, and the solution is applied twice daily.

Minoxidil for men is used to improve hair growth if you have inherited gradually thinning hair or gradual hair loss on the vertex at the top of the scalp. It is not intended for frontal baldness or a receding hairline. This medicine works best at the earlier stages of hair loss or thinning and is less effective when there is a larger area of hair loss. Minoxidil for men is available as a foam and solution and is applied twice daily to the affected scalp area.

The foam is easier to apply to larger areas, dries faster, and is less likely to drip, while the solution is better for applying to smaller areas or when the hair is longer. Minoxidil is available as a solution and foam with specific packaging for women or men.

Minoxidil topical is available as the Rogaine brand (Women's Rogaine, Men's Rogaine) and generic products are also available.

## What is minoxidil used for?

### Minoxidil for women

Minoxidil for women is FDA-approved to treat women 18 years and older with female-pattern hair loss, with gradual thinning hair or gradual hair loss on the top of the head, and a family history of this kind of hair loss.

### Minoxidil for men

Minoxidil for men is FDA-approved for the treatment of hereditary hair loss in men 18 years and older to help reverse the progression of hair loss on the scalp. Hereditary hair loss is when men experience gradually thinning hair or gradual hair loss on the top of the scalp in the vertex area, which has affected other men in their family. It is not intended for frontal baldness or a receding hairline.

## **Minoxidil for beards and other hair loss issues**

Minoxidil has been used for beards, eyebrows, and also for alopecia areata (AA), scarring alopecia, and hair shaft disorders to improve hair growth; however, these uses are all off-label.

## **How long does it take for minoxidil to work?**

Minoxidil starts working in the first 2 to 4 months, with new soft, colorless hairs growing. From 4 to 6 months, new, thicker hair growth may become visible. To maintain hair regrowth, it is important to continue using minoxidil regularly. In the first 1 to 3 weeks of using minoxidil, you may have increased hair shedding.

## **How does minoxidil work?**

Minoxidil works by increasing the length of time the hair follicle is in its growth (anagen) phase, which helps increase hair length and thickness. It also shortens the length of time in the shedding (telogen) phase, which means the follicles move more quickly into the growth phase.

Minoxidil's mechanism of action for hair loss is not fully understood, it is thought to work by activating both extracellular signal-regulated kinase (ERK) and Akt and by preventing cell death by increasing the ratio of a protein called BCL-2/Bax.

## **Minoxidil topical side effects**

### **Common minoxidil side effects**

Common minoxidil side effects may include changes in the color or texture of your hair.

### **Serious minoxidil side effects**

Get emergency medical help if you have any of these signs of an allergic reaction: hives, difficulty breathing, swelling of your face, lips, tongue, or throat.

Although the risk of serious side effects is low when minoxidil foam and solution is applied to the skin, side effects can occur if the medicine is absorbed into your bloodstream.

Minoxidil topical may cause serious side effects. Call your doctor at once if you have:

- severe scalp irritation;
- unwanted growth of facial hair;
- chest pain, fast heartbeats;
- swelling in your hands or feet, rapid weight gain;
- a light-headed feeling, like you might pass out;
- [headache](#), dizziness, confusion; or

- flushing (warmth, redness, or tingly feeling).

This is not a complete list of side effects and others may occur. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

 [Minoxidil topical side effects](#) (more detail)

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## Warnings

Do not use this medicine if the skin on your scalp is red, swollen, irritated, or infected.

## Before taking this medicine

Do not use this medicine if the skin on your scalp is red, swollen, irritated, or infected. This may allow more of the medication to be absorbed by your body, which could be dangerous.

Check the medicine label carefully to make sure this medicine will treat your specific type of [hair loss](#).

Use only the minoxidil foam or solution that is made for your gender. Women should not use minoxidil topical products that are made specifically for men.

Ask a doctor or pharmacist if it is safe for you to use this medicine if you have other medical conditions, especially [heart disease](#).

Do not use this medicine on anyone under 18 years old.

## Pregnancy

Do not use this medicine if you are pregnant.

## Breastfeeding

Do not use this medicine if you are breast-feeding a baby.

 [Minoxidil topical pregnancy and breastfeeding warnings](#) (more detail)

## How should I use minoxidil foam or solution?

Dry your hair and scalp before applying minoxidil solution or foam.

Apply the recommended amount to the affected areas of the scalp.

Minoxidil 5% for men is usually applied twice daily, in the morning and at night.

Minoxidil for women foam (5%) is applied once daily. Minoxidil for women solution (2%) is applied twice daily.

Apply this medication only on your scalp. Do not use it on any other part of your body.

Wash your hands after applying minoxidil topical.

It may take up to 4 months or longer before you notice new hair growth. New hair may be soft, colorless, and barely visible. With further treatment, the hair should start to have the same color and thickness as your existing hair.

Talk to your doctor if you do not see any hair growth after 4 months of treatment.

Use exactly as directed on the label or as your doctor prescribes. Do not use in larger or smaller amounts or for longer

than recommended.

Using more of this medicine than recommended will not speed up hair growth and may cause dangerous side effects.

This medicine comes with patient instructions for safe and effective use. Follow these directions carefully. Ask your doctor or pharmacist if you have any questions.

Store at room temperature, away from moisture and heat.

Keep the topical foam canister away from open flames or high heat, such as in a car on a hot day. If it gets too hot, the canister may explode. Do not puncture or burn an empty canister.

## **Minoxidil dosing information (foam and solution)**

### **Usual Adult Men's Dose - Solution (5%)**

Apply 1 mL with the dropper twice daily to the affected hair loss area on the scalp.

### **Usual Adult Men's Dose - Foam (5%)**

Apply half a capful twice a day.

Rinsed fingers in cold water and dry them to prevent foam from melting on warm hands.

Hold the can straight upside down to ensure the foam dispenses properly.

Press the nozzle to dispense half a capful of foam onto a cold surface such as cold hands or a dish.

Part your hair to expose the hair loss area and massage foam into the scalp (not the hair).

Replace the cap and wash hands and any surface thoroughly after use.

### **Usual Adult Women's Dose - Solution (2%)**

Apply 1 mL with the dropper twice a day directly onto the scalp in the hair loss area on the scalp.

### **Usual Adult Women's Dose - Foam (5%)**

Apply half a capful once a day.

Rinsed fingers in cold water and dry them to prevent foam from melting on warm hands.

Hold the can straight upside down to ensure the foam dispenses properly.

Press the nozzle to dispense half a capful of foam onto a cold surface such as cold hands or a dish.

Part your hair to expose the hair loss area and massage foam into the scalp (not the hair).

Replace the cap and wash hands and any surface thoroughly after use.

#### **Comments:**

-Evidence of hair growth may take 2 months or more of twice daily applications.

-If hair regrowth occurs, use must be continued for continued hair growth; re-grown hair may disappear within 3 to 4 months of stopping and the balding process will continue.

- If you do not see any results after 4 months, speak with your doctor.

 [Detailed Minoxidil topical dosage information](#)

## **What happens if I miss a dose?**

Apply the missed dose as soon as you remember. Skip the missed dose if it is almost time for your next dose. Do not use

extra medicine to make up the missed dose.

## What happens if I overdose?

An overdose of minoxidil topical is not expected to be dangerous. Seek emergency medical attention or call the Poison Help line at 1-800-222-1222 if anyone has accidentally swallowed the medication.

## What should I avoid while using minoxidil foam or solution?

Avoid getting the foam or solution in the eyes, nose, or mouth. If this occurs, rinse the area with water.

Avoid using other skin products on the areas you treat with this medication unless your doctor tells you to.

## What other drugs will affect minoxidil topical?

It is not likely that other drugs you take orally or inject will have an effect on topically applied minoxidil. But many drugs can interact with each other. Tell each of your health care providers about all medicines you use, including prescription and over-the-counter medicines, [vitamins](#), and [herbal products](#).

 [Minoxidil topical drug interactions](#) (more detail)

## Does minoxidil topical interact with my other drugs?

Enter medications to view a detailed interaction report using our [Drug Interaction Checker](#).

minoxidil topical

+

Enter a drug name

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### References

1. [Minoxidil use in dermatology, side effects and recent patents](#)
2. [FDA Label Rogaine \(For women\) Solution](#)
3. [FDA Label Rogaine \(For Men\) Solution](#)
4. [FDA Label Women's Rogaine Foam](#)
5. [FDA Label Men's Rogaine Foam](#)
6. [National Institutes of Health National Library of Medicine. Minoxidil](#)

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- [Reviews \(165\)](#)
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## Patient resources

- [Minoxidil \(Topical\) advanced reading](#)
- [Minoxidil Topical Foam](#)
- [Minoxidil Topical Solution](#)

## Other brands

[Rogaine](#), [Rogaine Women's](#), [Rogaine Men's Extra Strength](#)

## Professional resources

- [Minoxidil \(Topical\) monograph](#)

## Other brands

[Hair Regrowth Treatment for Women](#), [Hair Regrowth Treatment for Men](#), [Rogaine Women's](#)

## Related treatment guides


- [Alopecia](#)
- [Androgenetic Alopecia](#)


## Further information

Always consult your healthcare provider to ensure the information displayed on this page applies to your personal circumstances.

[Medical Disclaimer](#)

### DRUG STATUS

**Availability**  
 Rx and/or OTC

**Pregnancy & Lactation**  
 Risk data available

**CSA Schedule\***  
**N/A** Not a controlled drug





## Approval History



Drug history at FDA



## User Reviews & Ratings

5.0 / 10

[165 Reviews](#)

## Images

[Men's Rogaine \(minoxidil\) 5% topical aerosol foam](#)

Men

Men

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