

Smoking

<https://my.clevelandclinic.org/health/articles/17488-smoking>

Smoking is the practice of inhaling smoke from burning plant material. Nicotine works on your brain to create a relaxing, pleasurable feeling that makes it tough to quit. But smoking tobacco puts you at risk for cancer, stroke, heart attack, lung disease and other health issues. Nicotine replacements and lifestyle changes may help you quit.

What is Smoking?

Smoking is when you inhale and exhale smoke from burning plant material that's rolled into a wrapper (cigarette). You light the end of the cigarette and pull smoke into your mouth through the other end. It travels down your airways, into your lungs and through your bloodstream to your brain and other organs.

This article focuses on **tobacco cigarettes**, but people also smoke **cigars, pipes, marijuana, or herbal cigarettes**.

Anatomy of a Cigarette

A typical cigarette consists of:

- **Tobacco leaves** (*Nicotiana tabacum*).
 - **Rolling paper wrapper**.
 - **Filter (butt)**: Traps some particles but not harmful chemicals.
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Why Do People Smoke?

People smoke for:

- **Pleasure**: Nicotine releases brain chemicals (dopamine, serotonin) that cause:
 - Relaxation
 - Buzz or energy

- Improved focus
 - **Routine:** Often linked with coffee, social situations, breaks, or stress relief.
 - **Addiction:** Nicotine cravings cause discomfort when unmet.
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What Does Smoking Do to Your Body?

➤ Skin, Nails, and Mouth

- Tar stains nails and teeth.
- Smoke dries skin, causes wrinkles.
- Reduces sense of smell and taste.

➤ Throat and Airways

- Tar damages throat, vocal cords.
- Hydrogen cyanide paralyzes cilia (lung cleaners).
- Cilia damage increases infections.

➤ Lungs and Bloodstream

- Smoke reaches alveoli → leads to **emphysema** (COPD).
- **Carbon monoxide** blocks oxygen in blood.
- Nicotine damages blood vessels → higher **heart attack** and **stroke** risk.
- Men: **Erectile dysfunction** due to poor circulation.

➤ Systemic Damage

- **Bones:** Brittle due to calcium absorption issues.

- **Eyes:** Cataracts, macular degeneration.
 - **Immune system:** Weakened defense.
 - **Hormones:** Fertility issues.
 - **DNA:** Damage → higher cancer risk.
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Brain & Addiction

Nicotine activates receptors in the brain to release:

- **Dopamine**
- **Adrenaline**
- **Endorphins**
- **Serotonin**

After smoking:

- Nicotine is metabolized by the **liver** and exits via urine.
 - **Withdrawal** symptoms include: anxiety, insomnia, irritability.
 - Leads to **dependence** as tolerance builds.
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Pregnancy Risks

- Nicotine restricts **placenta/umbilical blood flow**.
 - Causes **low birth weight**, miscarriage, birth defects, developmental issues.
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Health Effects of Smoking

Causes or increases risk of:

- **Cancer:** lung, oral, throat, esophagus, stomach, liver, pancreas, bladder, kidney, cervix, colorectal, leukemia.
- **Lung disease:** COPD, asthma, tuberculosis.
- **Heart disease:** High BP, stroke, heart failure.
- **Eye disease:** Blindness, cataracts.
- **Autoimmune diseases:** Rheumatoid arthritis, lupus.
- **Erectile dysfunction.**
- **Diabetes (Type 2).**
- **Infertility and miscarriage.**
- **Premature aging.**

Secondhand smoke also causes serious health risks.

Can Lungs Heal After Quitting?

Yes, healing begins quickly:

- **Weeks:** Inflammation reduces.
- **Months:** Cilia regrow.
- **Years:** Risk of disease (like cancer) decreases and may return to non-smoker levels.

Note: Some damage (like COPD) is **irreversible**.

How to Quit Smoking

You may need to try several methods:

- **Cold turkey:** Quit abruptly, no aids.
 - **Nicotine replacement:** Patches, gum, lozenges, nasal sprays.
 - **Medications:** Bupropion or varenicline.
 - **Lifestyle changes:** Exercise, counseling, therapy (CBT).
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Self-Care While Quitting

- **Eat well**, drink **water**, and **exercise**.
 - Consider **lung cancer screenings** with your provider.
 - Track progress, ask for **support from friends and family**.
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Quitting smoking is a journey. Knowing the health risks may not make quitting easier — addiction is powerful. But being informed, kind to yourself, and open to support can make all the difference.

Benefits of quitting:

- Better breathing
- Improved taste and smell
- Protect your loved ones
- Save money
- Longer, healthier life