# Quit tobacco







**Regional Office for South-East Asia** 

#### **Developed by**

WHO Collaborating Centre for Capacity Building and Research in Community-based Noncommunicable Disease Prevention and Control Centre for Community Medicine, All India Institute of Medical Sciences (AIIMS), New Delhi, India

# Harmful chemicals in cigarettes



## **Toxins and carcinogens in tobacco**

Types of tobacco use:

- Smoked tobacco (in cigarettes, cigars, pipes and water pipes)
- Smokeless tobacco (in chewing tobacco, snuff, dentifrice and tobacco water)
- All tobacco products contain the addictive substance nicotine that is absorbed into the bloodstream when a tobacco product is used.
- Cigarettes are harmful because they contain a lot of carcinogens and toxic substances.
- Tobacco smoke has more than 7000 chemical compounds including known carcinogens.
- Tar is the sticky brown residue left behind from burning toxins in cigarette smoke and contains many toxins and carcinogens.



# Effects of tobacco on your body



## Effects of tobacco on your body

Diseases caused by tobacco use

**Cancers:** – larynx, oropharynx, oesophagus, trachea, bronchus, lung, acute myeloid leukaemia, pancreas, stomach, colon, kidney, cervix, bladder

**Respiratory system**: – Shortness of breath – Exacerbated asthma – Chronic obstructive pulmonary disease – Respiratory infections

**Cardiovascular system**: – Heart attack/angina – Stroke/transcient schaemic attack – Peripheral vascular disease – Aortic aneurism

#### Diabetes

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Effects of tobacco on your body



## Health effects of tobacco

### Chewing tobacco can lead to cancer









Heart attack

chronic breathing problems

### Health effects of tobacco

- Mortality of all types of cancer is higher in smokers. Smoking is the cause of 30% of cancer deaths among smokers.
- The risk of dying from lung cancer is 4–24 times higher in smokers than nonsmokers.
- The earlier you start smoking, the more you smoke and the longer you smoke, the higher the mortality.
- Tobacco causes cancer of the mouth and esophagus
- Smokers are at 2.5 times greater risk of death from coronary artery disease.
- Quitting smoking can prevent 55% of myocardial infarction recurrence

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### **Quitting tobacco is possible !!**

Tobacco is addictive. It contains nicotine, a substance that makes people get addicted and can make it very hard, but not impossible, to quit.



Picciotto MR, et al. Nicotine and Tob Res. 1999:Suppl 2:S121-S125.

# **Quitting tobacco is possible !!**

- Nicotine has been shown to have effects on brain dopamine systems similar to those of drugs such as heroin and cocaine.
- **Positive reinforcement**: binds to the nicotinic receptors, causing the release of dopamine, which makes tobacco users feel good.
- The quickest delivery of nicotine: inhalation in the form of smoke.
- **Tolerance**: it gradually increases the number of nicotinic receptors in the brain and tobacco users need amounts of tobacco in order to achieve the same levels of satisfaction.
- Negative reinforcement: reducing withdrawal symptoms.
- With adequate professional support it is possible to quit tobacco.

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# How can you understand your level of nicotine dependence?

1. How soon after you wake up do you smoke your first cigarette?



2. How many cigarettes do you smoke each day?



\_\_\_\_\_sticks

minutes

### Nicotine dependence test

- The nicotine dependence test evaluates your physical withdrawal symptoms by asking two questions.
- Check the patient score and discuss the results.

#### Nicotine dependence test

1. How soon after you wake up do you smoke your first cigarette?



- Within 5 minutes (3 points)
- 5 to 30 minutes (2 points)
- 31 to 60 minutes (1 point)
- After 60 minutes (0 points)
- 2. How many cigarettes do you smoke each day?



- 31 or more (3 points)
- 21 to 30 (2 points)
- 11 to 20 (1 point)
- 10 or fewer (0 points)

What is your nicotine dependence score?

Total score of 4 or higher

- high dependence
- consultation for nicotine replacement therapy



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1. How soon after you wake up do you smoke your first cigarette?



\_\_\_\_\_minutes

2. How many cigarettes do you smoke each day?



SOURCE:

Heatherton, Todd F., et al. The Fagerström test for nicotine dependence: a revision of the Fagerstrom Tolerance Questionnaire. British Journal of Addiction, 1991, 86.9:1119-1127.

# What are the temporary unpleasant experiences when one quits tobacco?





# What are the temporary unpleasant experiences when one quits tobacco?

- Nicotine in cigarettes causes dependence by changing your nervous system.
- When you quit smoking, withdrawal symptoms can bother you a lot. Insomnia, fatigue, irritability, anxiety, headache, coughing and difficulty concentrating are some common withdrawal symptoms.
- Symptoms of nicotine withdrawal generally peak at four days after quitting.
- They gradually decrease from 5–10 days, but can last up to four weeks.

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What happens when one quits smoking?



SOURCE:

US Department of Health and Human Services. The health consequences of smoking—50 years of progress: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014, 17.

### The health benefits of quitting



It's never too late to quit

# Health benefits of quitting

The earlier you quit smoking, the greater the benefit.

**1 to 9 months**: Any smoking related sinus congestion, fatigue or shortness of breath has decreased.

Cilia have regrown in your lungs, thereby increasing their ability to handle mucus, keep your lungs clean and reduce infections. Your body's overall energy has increased.

**1 year** : Your excess risk of coronary heart disease, heart attack and stroke has dropped to less than half that of a smoker.

**5 to 15 years:** Your risk of stroke has declined to that of a non-smoker.

**10 years**: Your risk of cancer of the mouth, throat, esophagus and pancreas, lung cancer have declined.

**15 years:** Your risk of coronary heart disease is now that of a person who has never smoked.

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### Prepare to quit smoking

### Set a quit date.

**Tell** family, friends and coworkers you plan to quit.

**Anticipate** and plan for the challenges you will face while quitting.

**Remove** cigarettes and other tobacco products from your home, car and workplace.

**Talk** to your doctor about getting help to quit.



# Prepare to quit smoking

- 1. Pick a quit date. Choose a date 1 to 2 weeks away so that you can get ready to quit. If possible, choose a time when things in your life will change or just pick a time when you don't expect any extra stress at school, work or home.
- 2. Make a list of the reasons why you want to quit. Keep the list in hand so that you can look at it when you have a nicotine craving
- 3. Keep track of where, when and why you smoke or chew
- 4. Throw away all of your tobacco
- 5. Tell your friends and family members that you're quitting
- 6. STOP, when your quit date arrives

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other tobacco products from your home, car and workplace Talk to your doctor about getting help to quit.

### Things to do..... instead of smoking or chewing tobacco



- .....Chew on something- sugarless gum (chewing gum), cardamom
- Call a friend and chat
- Take a walk or work out
- Do exercise
- Think about or write down the reasons why you have taken the decision to quit
- Practice deep breathing

## Things to do..... instead of smoking or chewing tobacco

- .....Chew on something- sugarless gum (chewing gum), cardamom (elachi), cloves (lavanga), tulsi leaves, mint leaves
- Call a friend and chat
- Take a walk or work out or go for a movie or to another place where you can't smoke
- Develop a healthy lifestyle i.e., do not skip meals, do exercise
- Think about or write down the reasons why you have taken the decision to quit
- Practice deep breathing, do some activity to delay and distract from the craving and drink plenty of water

The craving will go away in a couple of minutes

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#### Source:

Resource Centre for Tobacco Control, National Institute of Mental Health and Neuro Sciences Hosur Road, Bangalore, India

# **Nicotine replacement therapy**

# Doubles the chance of quitting successfully

If you can't help yourself in quitting.... It is understandable...

because tobacco is so addictive!

You can GET HELP through Counselling and Medication including nicotine gum



Patch

Change the patch daily for continuous effect



Gum, lozenges

- Fast acting
- Help reduce the urge to smoke

### **Nicotine replacement therapy**

- Nicotine replacement therapy helps control withdrawal symptoms.
- Start nicotine replacement therapy from the day you quit smoking.
- If you wear a new nicotine patch every day, you will experience the effect continuously.
- Gum and lozenges act for a short time, so they help with sudden urges to smoke.
- If needed, you can use a combination of patch and gum or patch and lozenges.

SOURCE:

• Combination therapy is shown to be more effective than monotherapy.

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Patch • Change the patch daily for continuous effect Gum, lozenges • Fast acting • Help reduce the urge to smoke Stead, Lindsay F., et al. Nicotine replacement therapy for smoking cessation. The Cochrane Library, 2008. Fiore, Michael C., et al. Treating tobacco use and dependence: 2008 update US Public Health Service Clinical Practice Guideline executive summary. Respiratory Care, 2008, 53.9: 1217-1222.

# **E** cigarettes



Source: National Institute on Drug Abuse (NIDA)

# **E cigarettes**

- Electronic cigarettes, also known as e-cigarettes, e-vaporizers, or electronic nicotine delivery systems, are battery-operated devices that people use to inhale an aerosol,
- Contains nicotine, flavorings, and other chemicals.
- They can resemble traditional tobacco cigarettes(*cig-a-likes*), cigars, or pipes, or even everyday items like pens or USB memory sticks. Other devices, such as those with fillable tanks, may look different.

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# Are E cigarettes safe ? No, e-cigarettes are not safe

Liquid nicotine is toxic and is highly addictive even in small doses



If you've never smoked or used other tobacco products or e-cigarettes, DON'T START

# Are E cigarettes safe ?

- Nicotine in any form is a highly addictive even in small doses
- E-cigarettes are not safe for youth, young adults, pregnant women, or adults who do not currently use tobacco products.
- In addition to the unknown health effects, early evidence suggests that e-cigarette use may serve as an introductory product for preteens and teens who then go on to use other tobacco products, including cigarettes

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Source : https://www.cdc.gov/tobacco/basic\_information/e-cigarettes/index.htm https://www.who.int/bulletin/volumes/95/7/16-186536/en/

# **Reverse smoking and its ill effects**

The lit end of the cigarette is kept inside the oral cavity while smoking for enhanced effect of heat and smoke





# **Reverse smoking and its ill effects**

### Ill effects of reverse smoking

Palatal changes in reverse smokers is a lesion caused by the effect of tobacco smoke and heat

- Reverse smoking is a habit noticed in some tribal populations in South East Asia India and Philippines.
- Noticed in the Southern Indian provinces- tribal populations of Aruku, Visakhapatnam
- The lit end of the cigarette is kept inside the oral cavity while smoking for enhanced effect of heat and smoke

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Reverse smoking and its ill effects The lit end of the cigarette is kept inside the oral cavity while smoking for enhanced effect of heat and smoke



Source : Bharath, Tsreenivasa; Kumar, Ngovind Raj; Nagaraja, A; Saraswathi, TR; Babu, Gsuresh; Raju, Pramanjaneya (2015). <u>"Palatal changes of reverse smokers in a rural coastal Andhra population</u> with review of literature". Journal of Oral and Maxillofacial Pathology. 19 (2): 182–7. doi:10.4103/0973-029X.164530. PMC 4611926. PMID 26604494.





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