ALTERNATIVE RESEARCH INITIATIVE

ALTERNATIVE RESEARCH INITIATIVE NEWSLETTER
September 2026

Inside

Page 2
Second-hand smoke: 2.7 billion people worldwide exposed, study finds
One million UK people who have never smoked are now vaping

Page 3
Are e-cigarettes safe?

Page 4
Ban import, use of vapes, electronic cigarettes
Buying nicotine

Why quitting smoking matters

By Sarnawaz Salamat

Quitting smoking earlier in life brings the greatest health gains. However, it is never too late. Giving up smoking is beneficial at any age. Even lifelong or heavy smokers can experience significant improvements once they quit smoking. Apart from the smokers themselves, quitting smoking is the most effective way to shield family, coworkers, friends, and others from the serious health dangers of secondhand smoke. But the journey is not easy and smooth.

It's no wonder people believe smoking helps them relax. A cigarette may seem to bring calm, but in truth it's only tricking the body into a false sense of ease. Relief from stress is an illusion created by nicotine. When you smoke, nicotine rushes to your brain, bringing a fleeting sense of pleasure and calm. But the effect fades quickly, and as nicotine leaves your system, it sparks withdrawal—irritability, anxiety, and the urge for another cigarette. Each cigarette feels like relief, but it only drives the cycle deeper. Many smokers confuse withdrawal with everyday stress, so they light up again—believing smoking eases tension. In reality, it fuels harm to both body and mind, locking you into a loop that makes stress harder to manage over time.

Quitting smoking gives both body and mind the chance to heal. Your health improves, your mood lifts, and many people discover a new sense of control and positivity. The first days are tough, but once cravings fade, calm and stability return. The difference is real—you'll feel it when you quit.

Quitting smoking is not always easy and you might worry that giving up cigarettes will only add to your stress. But quitting will help you feel calmer and more in control. Smoking doesn't solve your problems. It just hides them for a bit. When you quit, you'll find healthier ways to handle stress without relying on cigarettes.

Once you quit, your brain's natural chemicals—like dopamine—begin to rebalance, lifting your mood. As cravings fade, anxiety eases, and within about 28 days most withdrawal subsides. Quitting smoking makes people feel stronger and more in control of their lives. You don't have to rely on cigarettes to get you through tough moments and you'll worry less about your physical health.

If you think that quitting is next to impossible for you, pause and think about the cost in terms of health. Smoking increases the risk of many types of cancers, including lung, throat, mouth, esophageal, stomach, kidney, bladder, and cervical. If you continue smoking, overtime you are risking hearing loss, possibility of brain stroke, cataracts, blindness, loss of right vision, wheezing, trouble in breathing or shortness of breath, pain or tightness in chest, frequent coughing or heavy chest colds along with emphysema, chronic bronchitis, etc.

On the other hand, what are the benefits? According to the 2020-Smoking Cessation: A Report of the Surgeon General of the US, the benefits include improved health, lower risk of 12 types of cancers, cardiovascular disease and chronic obstructive pulmonary disease (COPD). It's a better barter for yourself and for your family.

Second-hand smoke: 2.7 billion people worldwide exposed, study finds

Second-hand smoke causes serious health harm, including heart disease, respiratory illness and cancer, and remains a leading cause of preventable death worldwide.

A third of the world's population is exposed each year to second-hand smoke — also known as passive smoking — which continues to be a major source of illness and mortality among non-smokers.

An estimated 2.71 billion people around the world were exposed to second-hand smoke— a combination of two types of smoke inhaled by non-smokers — in 2023, contributing to 1.66 million deaths. This includes 767 million children under 15, who are especially vulnerable, along with 1.49 billion women.

These new findings come from the Global Burden of Disease (GBD) 2023 study, published in The Lancet Public Health, which estimated second-hand smoke exposure and health impacts across 204 countries and territories between 1990 and 2023.

Need for stronger regulation

Despite the scale of exposure, the study found that approximately 70% of the world's population is not protected by comprehensive smoke-free laws.

As of 2024, only 79 countries, approximately 70% of them in the Americas, have achieved the highest protection standards of the World Health Organization framework — with all public places completely smoke-free or at least 90% of the population covered by legislation.

The proportion of the global population covered by comprehensive smoke-free legislation has increased from 3% in 2007 to 33% in 2024, now covering 2.6 billion people.

However, the authors noted that while smoke-free policies directly reduce smoke exposure, there is a need for extra measures such as tobacco taxation, marketing bans, plain packaging and cessation programmes.

Regional patterns

The researchers found that the number of people impacted by second-hand smoke exposure remained broadly the same globally, but rose sharply in sub-Saharan Africa, North Africa and the Middle East, which they attributed to population growth.

The exposure prevalence in the Central Europe, Eastern Europe and Central Asia region was 37.7% — higher than the global average of 33.9% — affecting 146 million people.

Most of the countries in Western Europe were included in the "high-income super region," which showed some of the most significant progress in reducing passive smoking.

Denmark and Norway achieved some of the world's largest reductions since 1990, at -48,8% and -44,3%, respectively.

Broad health impacts

Beyond how many people are exposed, the report found that second-hand smoke accounted for the loss of 44.8 million years of healthy life and continues to be a major contributor to disability and premature death.

While a smoker inhales "mainstream smoke" through the cigarette's filter, non-smokers primarily breathe in side stream smoke. This is unfiltered and contains higher per-unit concentrations of toxic and carcinogenic compounds than the smoke inhaled by the smoker.

The researchers estimated that second-hand smoke remains a substantial driver of global health loss, particularly through cardiovascular and paediatric respiratory diseases.

Exposure to tobacco smoke was associated with several health conditions, including stroke, lower respiratory infections, chronic obstructive pulmonary disease, asthma, type 2 diabetes and cancers of the trachea, lung and breast.

https://www.euronews.com/2026/09/08/second-hand-smoke-27-billion-exposed-767-million-of-them-children-study-finds

One million UK people who have never smoked are now vaping

London: More than a million people who say they have never smoked are now vapers, latest data for 2025 reveals - up from around 940,000 in 2024.

People aged 25-34 are vaping more than any others, overtaking 16 to 24-year-olds, with 16.4% using e-cigarettes daily or occasionally.

For the second year in a row, more over-16s in Great Britain are using vapes or e-cigarettes than smoking cigarettes, according to the Office for National Statistics (ONS).

Meanwhile, the number of smokers in the UK continues to fall to nearly one in 10 adults, or 4.9 million people, down from 5.3 million in 2024, with more over-16s now vaping than smoking at 5.4 million.

Vaping has overtaken smoking

Experts say the popularity of cigarette smoking has decreased as the harmful effects of tobacco have encouraged many to quit.

Vaping is less harmful than smoking, although the long-term effects are not yet clear, says the NHS.

It says non-smokers and people aged 17 and under should never vape.

The ONS figures show the percentage of people who had never used an e-cigarette continued to decrease in 2025 (83.0%) compared with 2024 (83.4%).

Twenty-five to 34-year-olds are now more likely to use vapes than 16 to 24-year-olds.

David Mais, from the ONS, said vapers were getting older and that "may reflect existing users getting older, growing popularity among this age group, or a combination of both".

Smoke-free generation

New legislation in the UK, taking affect in the new year, will permanently ban the legal sale of tobacco to anyone born on or after January 1, 2009 to create a "smoke-free" generation.

Hazel Cheeseman, from the charity Action on Smoking and Health, said the latest statics showed encouraging progress in cutting smoking rates.

She added: "Smoking has fallen enormously over recent decades, but it remains the biggest driver of preventable

death in the UK. Now is the time to finish the job."
According to the ONS, men were more likely to smoke than women in 2025, similar to previous years.
And people aged 45-54 had the highest proportion of current smokers (12.4%).
Young adults aged 18 to 24 years have seen the largest drop in smoking among all age groups.
Of the people who currently smoked in 2025, half said they intended to quit. Some 7.2% of people reported having used an e-cigarette, up from 6.6% in 2024.

Kruti Shrotri from Cancer Research UK said: "While a continued fall in smoking rates is encouraging, tobacco remains the leading cause of cancer in the UK.
"Although we don't know the long-term risks of vaping, evidence so far shows that legal vapes are less harmful than tobacco and an effective tool to stop smoking."
The vaping data includes people aged 16 and over in Great Britain, while the smoking statistics cover adults in the whole of the UK.
https://www.bbc.com/news/articles/cwe8ldgzj277o

Are e-cigarettes safe?

E-cigarettes contain nicotine, the addictive stimulant in tobacco, and some flavorings, but because the liquid is heated rather than burned, the aerosol carries far fewer harmful chemicals than the smoke from combustible tobacco products. As a result, authorized e-cigarettes are a significantly less risky form of consuming nicotine than combustible cigarettes.
While some global health authorities, including the US Food and Drug Administration (FDA) have concluded that some e-cigarettes are appropriate for the protection of public health, in most countries e-cigarettes are not authorized as smoking cessation devices. This means that while health authorities have not sanctioned the use of these products to help people quit, some health authorities have recognized that for certain e-cigarettes, the potential benefits for adults who smoke combustible cigarettes and switch entirely to e-cigarettes outweigh the potential risks to youth or those who have never smoked. If a person who smokes cannot or will not quit using traditional cessation methods, switching entirely to an authorized e-cigarette can lower their long-term risks.

It's important to note that even if e-cigarettes are less harmful, it doesn't mean that they're completely safe. Nicotine should not be used by anyone who has never used it before, especially youth. Additionally, e-cigarettes contain other chemical components, including flavoring agents, some of which have unknown health effects. Long-term studies are still underway.
In sum, e-cigarettes are relatively less harmful than cigarettes and can offer adults who smoke an alternative to cigarettes that decreases their risk of tobacco-related disease and death. But they are still riskier than not using any form of nicotine at all.

Didn't nicotine e-cigarettes cause EVALI and popcorn lung?

In a word, no. There have been a number of health conditions that have been purported to be related to e-cigarette use, but follow-up studies have failed to confirm these links.
One example is EVALI, which stands for E-cigarette and Vaping Acute Lung Injury, the name given by the U.S. Centers for Disease Control and Prevention to a series of serious and sometimes fatal lung injuries that occurred in 2019 in the United States. An epidemiological investigation found that EVALI was strongly associated with an ingredient found in illegally produced (not authorized) e-cigarette products containing THC, the active ingredient in marijuana, along with a highly dangerous substance called vitamin E acetate. The products most strongly linked to EVALI did not contain nicotine. Once the dangerous ingredients were identified and those illicit sales were stopped, EVALI ended.
The use of authorized nicotine e-cigarettes has never been associated with other lung injuries, including popcorn lung, which is associated with the inhalation of diacetyl, a butter-flavoring chemical used in manufacturing microwave popcorn. No confirmed cases of popcorn lung have been tied to the use of authorized nicotine e-cigarettes, and authorized products are reviewed for their ingredients.
That said, nicotine e-cigarettes are not risk-free. Nicotine is a stimulant and can raise blood pressure and elevate heart rate. Inhaling heated aerosols of an e-cigarette can also lead to coughing due to airway irritation. Though e-cigarettes pose fewer health risks than combustible tobacco, researchers are still studying the long-term impacts of them on health.

Are e-cigarettes a good way to quit smoking?

E-cigarettes are not approved as smoking cessation devices in all parts of the world. However, many health authorities agree that for a person who smokes, switching entirely to an e-cigarette can reduce their long-term health risks.
There is ample evidence that e-cigarettes can be more effective than a single traditional nicotine replacement therapy. In 2026, the latest Cochrane review of existing scientific studies found high-certainty evidence that nicotine e-cigarettes are better able to help people who smoke to quit than other tools like nicotine patches or gum. This review is updated regularly as new evidence emerges, so it will continue to be updated as more studies are completed.
However, e-cigarettes may not work for everyone. Other methods of smoking cessation, including nicotine patches, gum, or lozenges, counseling, medication, or combinations of these tools, may also help a person who smokes to quit.
https://globalactiontoendsmoking.org/news-and-press/press/are-e-cigarettes-safe/

Ban import, use of vapes, electronic cigarettes

ISLAMABAD: The Young Pharmacists Association of Pakistan (YPAP) has urged the government to immediately ban the import, sale, and use of vape/electronic cigarettes, which are highly toxic and endanger the lives of Pakistani youth.

In a written letter to the Prime Minister (PM) of Pakistan and the Health Minister, the YPAP said that vape/ electronic cigarettes contain not only ethylene glycol and heavy metals but also formaldehyde, acetaldehyde, and acrolein.

These e-cigarettes are heavily imported and sold across the country, and their use is becoming a fashion not only among youngsters but also in all age groups in Pakistan.

The YPAP said that Johns Hopkins University has analyzed the vape clouds of popular brands such as Juul and Vuse, and found "nearly 2,000 chemicals, the vast majority of which are unidentified.

Vape/E-cigarettes are a relatively new phenomenon, initially introduced to help smokers reduce their tobacco intake; the devices have become increasingly abused, especially by youth, especially by school and college-going students. The toxicity of vape/ e-cigarettes ingredients is not well established when inhaled. The main ingredients are nicotine, propylene glycol, glycerol, ethylene glycol, vitamin E, flavourings, and heavy metals, each with a potentially harmful effect on human health.

Vape / E-cigarettes aerosol could also contain toxic compounds such as formaldehyde, acetaldehyde, and acrolein due to glycerin's thermal degradation. Despite the limited knowledge of vaping's health effects, recent studies have linked e-cigarette ingredients to some health problems such as lung injury, cancers, heart and respiratory diseases.

The aerosol of e-cigarettes is generated when the e-liquid comes in contact with a coil heated to a temperature of roughly 100–250 °C (212–482 °F) within a chamber, which is thought to cause pyrolysis of the e-liquid and could also lead to decomposition of other liquid ingredients. The aerosol (mist) produced by an e-cigarette is commonly but inaccurately called vapor. E-cigarettes simulate the action of smoking, but without tobacco combustion.

The e-cigarette aerosol looks like cigarette smoke to some extent. E-cigarettes do not produce aerosol between puffs.

The e-cigarette aerosol usually contains propylene glycol, glycerin, nicotine, flavours, aroma transporters, and other substances. The levels of nicotine, tobacco-specific nitrosamines (TSNAs), aldehydes, metals, volatile organic compounds (VOCs), flavors, and tobacco alkaloids in e-cigarette aerosols vary greatly.

The yield of chemicals found in the e-cigarette aerosol varies depending on several factors, including the e-liquid contents, puffing rate, and the battery voltage.

Metal parts of e-cigarettes in contact with the e-liquid can contaminate it with metals. Heavy metals and metal nanoparticles have been found in tiny amounts in the e-cigarette aerosol. Once aerosolized, the ingredients in the e-liquid go through chemical reactions that form new compounds not previously found in the liquid. Many chemicals, including carbonyl compounds such as formaldehyde, can inadvertently be produced when the nichrome wire (heating element) that touches the e-liquid is heated and chemically reacted with the liquid.

Propylene glycol-containing liquids produced the most amounts of carbonyls in e-cigarette vapors.

Propylene glycol and glycerin are oxidized to create aldehydes that are also found in cigarette smoke when e-liquids are heated and aerosolized at a voltage higher than 3 V. Depending on the heating temperature, the carcinogens in the e-cigarette aerosol may surpass the levels of cigarette smoke.

Reduced-voltage e-cigarettes generate very low levels of formaldehyde. A Public Health England (PHE) report found "At normal settings, there was no or negligible formaldehyde release." However, this statement was contradicted by other researchers in a 2018 study. E-cigarettes can emit formaldehyde at high levels (between five and 15 times higher than what is reported for cigarette smoke) at moderate temperatures and under conditions that have been reported to be non-averse to users. As e-cigarette engineering evolves, the later-generation and "hotter" devices could expose users to greater amounts of carcinogens.

https://www.brecorder.com/news/40442800/ypap-urges-govt-to-ban-import-use-of-vapeelectronic-cigarettes

Buying nicotine

The use of nicotine pouches and vaping devices among the teenagers across Pakistan is increasing rapidly even though they are not meant for people under 18 years of age. However, we all know that the implementation of regulations in Pakistan mostly remains weak and sometimes completely missing. As underage cigarette smoking remains a serious issue, there is an urgent need to ensure that young people do not have easy access to nicotine products.

The federal and provincial governments should ensure that underage buying of nicotine pouches and vaping devices is strictly prohibited. There is also a need for transparency over who is selling and who is buying nicotine products. Purchases should be recorded digitally at the point of sale throughout Pakistan.

https://www.thenews.pk/print/1440520-buying-nicotine Letter to edito

Established in 2018, ARI is an initiative aimed at filling gaps in research and advocacy on ending combustible smoking in a generation. Supported by the Global Action to Ending Smoking (GA), ARI established the Pakistan Alliance for Nicotine and Tobacco Harm Reduction (PANTHR) in 2019 to promote innovative solutions for smoking cessation.

To know more about us, please visit: www.aripk.com and www.panthr.org

Follow us on www.facebook.com/ari.panthr/ | https://twitter.com/ARI_PANTHR | https://instagram.com/ari.panthr

Islamabad, Pakistan | Email: info@aripk.com