

Stop Smoking in Dental Practice

16th June 2026

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Health Improvement Manager



Aim of Course

- To raise awareness of smoking and the impact on Dental Health and the importance of the Dental Team in encouraging best practice related to stop smoking advice and support.



Background information

- Smoking Kills (1998)
- DHSSPS Smoking Cessation Service and Monitoring Guidance (2001/02)
- Training Framework for Smoking cessation for N. Ireland (2003)
- 10 Year Tobacco Action Plan (2012) – extended to February 2024
- Quality Standards (2011)

Priority Groups

- 1998 White Paper 'Smoking Kills' has three objectives
 - To reduce smoking amongst children and young people
 - To help adults, especially the most disadvantaged to give up smoking (routine and manual workers)
 - To offer particular help to pregnant women who smoke (and their partners)
 - (People with mental health needs who smoke)

Impact on Public Health

- Smoking kills 2,200 people in Northern Ireland each year
- £2.5 billion cost to NHS per year (Govt. earned £9.7 billion through taxation)
- £218 million in NI hospital costs (DH 2023)
- Cost to the economy- sick leave/ breaks
- 252 deaths each day in the U.K. due to smoking
- 1/5 all deaths across all ages in the U.K.

Smoking Facts

- 5.3 million adults in the U.K. smoke (10.6%) 18+ years
- 5.4 million adults in GB vape currently / occasionally (10%) 16+ years
 - 11.5% of men and 9.6% of women smoke in U.K. (ONS 2025)
 - 14% of men and 11% of women smoke in N.I. (Health Survey NI 2025)

Smoking prevalence in the target groups (DoH Target by 2020)

- NI overall 12% (15%)
- Manual workers 25.5% (20%) (ONS UK)
- Pregnant women 11.3% (9%) (NIMATS 2022)
- 11-16 year olds 2% (3%)

ASH NI has a target of 5% by 2035
– Smokefree NI

Children Young People Behaviour and Attitudes Survey (aged 11-16)

8% had ever smoked tobacco in 2022

55% having smoked aged 13 and younger (2013)

2% of young people saying they currently smoked every day

20% of respondents had ever used an e-cig

36% of pupils live in a household with an adult who smokes

21% of pupils live in a household with an adult who uses an e-cig

Smokers tend to start early with 2/3 starting before the age of 18

- Of people who try smoking 1/3-1/2 will become regular smokers

Tobacco and Vapes Act 2026 will make it illegal to sell to any person born on or after 1st January 2009 – from 1st January 2027

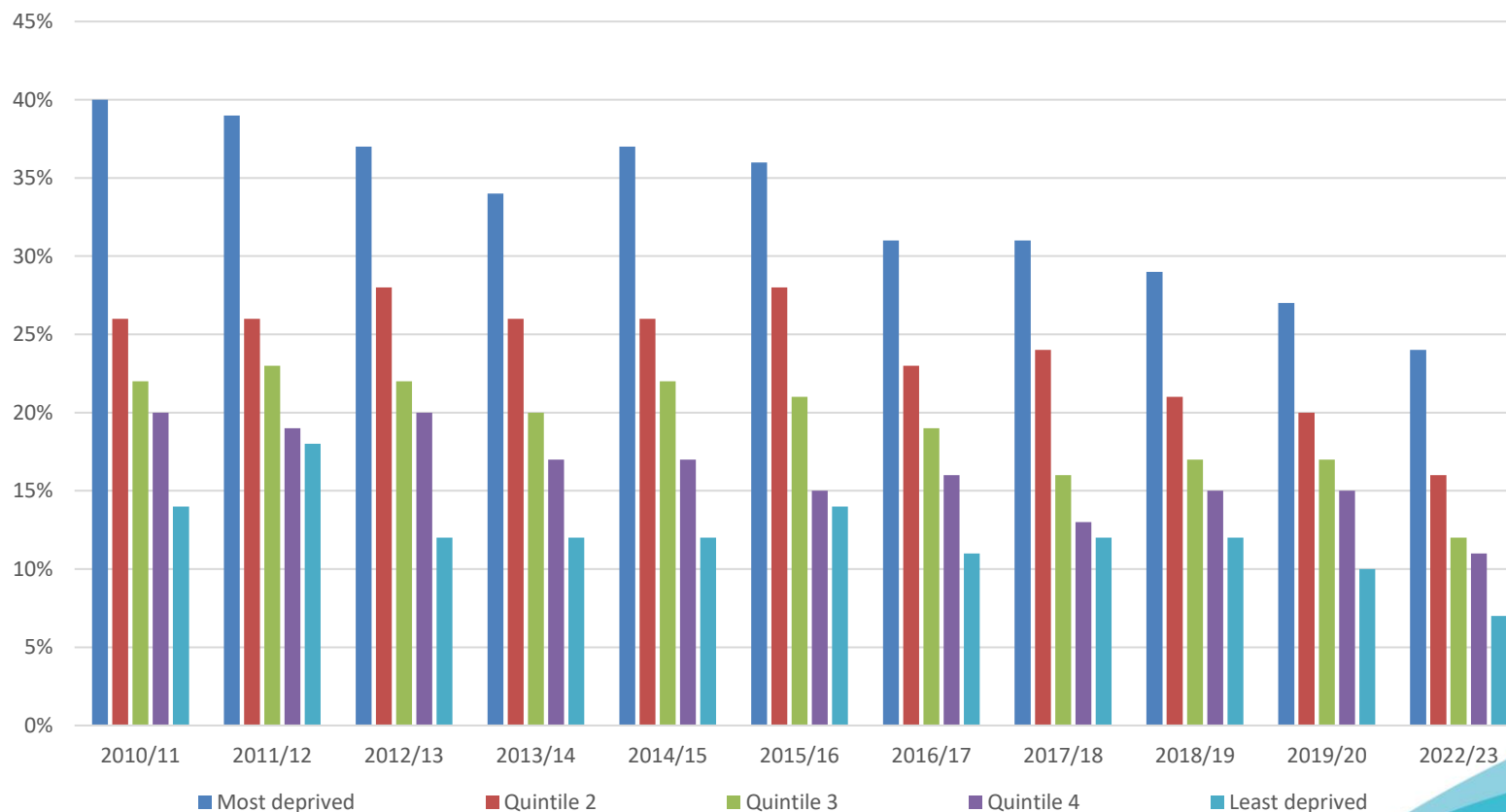
Effect of family smoking on smoking uptake *RCP*

2010

	Relative odds of smoking uptake
One parent	1.72
Both parents	2.73
Sibling smokes	2.30
Household smoking	1.92

- [Children whose parents smoke are 4 times as likely to take up smoking themselves - GOV.UK](#)

Smoking prevalence by SEG



Health Survey NI 2023

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Health Inequalities

Smoking remains **the major contributory factor to the gap** in mortality and healthy life expectancy between the rich and poor in our community.

Health Risks Associated With Smoking

- 25% of all cancer deaths are caused by smoking
- 80% lung cancer deaths are smoking related
- 14% of Ischaemic Heart Disease and 80% of chronic bronchitis and emphysema deaths are related to smoking
- Diabetics who smoke double their risk of heart attack

Risks of Smoking and Pregnancy

- Low birth weight baby – increased 300%
- Premature birth – increased 200%
- Stillbirths or neonatal deaths – increased 40%
- Spontaneous abortion – increased 25%
- Placenta praevia – increased 300%
- Placental abruption – increased 240%
- Foetal malformation – increased 30%

The mouth and smoking

- Oral cancer
- Periodontal disease
- Poor healing
- Post extraction problems
- Implants
- Bad breath
- Diminished taste and smell

Mouth Cancer

	Incidence (2018-2022)		Mortality	
Males	171	125 (2020)	72	71(2020)
Females	90	71 (2020)	32	35 (2020)

	Males	Females
Incidence/Mortality		
Least deprived	30/11	15/4
Most deprived	45/22	22/8
NICR 2025		

Staging of mouth cancer

Staging	Males	Females
I	24.2%	24.7%
II	12.6%	14.4%
III	16.3%	15.6%
IV	41.5%	38.7%

NICR 2025

Who mouth cancer effects

- More common in men
- 80% mouth cancers in NI in those over 54
- Rates much higher in white males
- 90% of mouth cancers in men, 85% in women are linked to lifestyle and environmental factors

The Risk Factors

- 2/3 mouth cancer cases are linked to smoking tobacco
- A morning cigarette doubles your chance of developing the disease
- Smokers have 3 x the risk of developing mouth cancer
- Pipe and cigar smokers even higher
- Ex-smokers reduce their risk by 1/3
- Smokeless tobacco can increase the risk x 30
- 30% of cases are linked with alcohol

Risk Factors continued

- More than half of cases in the UK are linked to poor diet
- Solar radiation linked to cancer of the lip
- HPV (Human papilloma virus) set to be the number one cause of mouth cancer in the future
- Mouth cancer 2.5 more likely in those with periodontal disease
- 60x higher in people with 6+ missing teeth
- Mouth cancer is 12-16x higher in those previously diagnosed with cancer
- 70% more common in families with a history of mouth cancer

Survival

Males

1 year	71.6%	5 year	46.3%
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Females

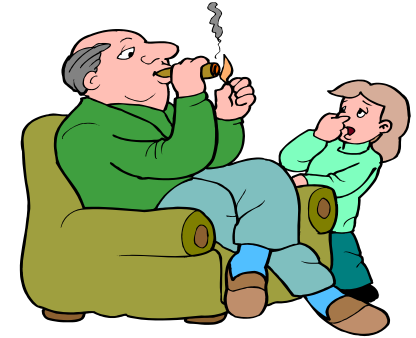
1 year	72.6%	5 year	53.1%
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NICR 2025

Second-hand Smoking

- Second-hand smoking in adults causes:
 - Increased sensitivity and reduced lung function in asthmatics
 - Irritation of eye, nose & throat
 - Reduced lung function in adults without chronic chest problems

Second-hand Smoking



- Second-hand smoking in babies and young children causes:
 - Increased risk of lower respiratory tract infection
 - Increased asthma symptoms, chronic coughs and wheezing
 - Greater risk of middle ear infection (glue ear)



Activity – Reasons Why People Start to Smoke

Reasons Why People Start to Smoke

- Curiosity
- Parental example
- Social acceptance
- Glamorous image
- Weight control
- Enjoyment

The Smoking Habit - Is It?

- Addiction?
- Dependence?
- Habit?



Contents of Cigarettes

- Tobacco smoke contains over 7000 chemicals
 - Nicotine
 - Carbon Monoxide
 - Tar



Hydrogen cyanide
Gas chamber poison

Nicotine
Insecticide

Ethanol
Alcohol

Stearic acid
Candle wax

Formaldehyde
Preserve dead
bodies

Acetic acid
Vinegar

Arsenic
Poison



Butane
Lighter
fluid



Cadmium
Batteries



Toluene
Industrial
solvent



Hexamine
BBQ lighter

Carbon monoxide
Car exhaust fumes



Methanol
Rocket fuel



Ammonia
Toilet cleaner



Acetone
Paint stripper

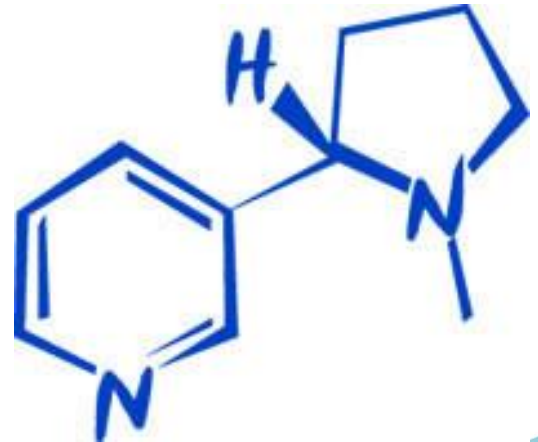


DDT/Deildrin
Insecticides



Immediate Effects of Nicotine

- Release of adrenaline into the bloodstream
 - Increased heart rate
 - Increased blood pressure
- Constricts arteries
- Release of dopamine



Addictive Nature of Nicotine

Dependency Nicotine > Heroin > Cocaine > Alcohol > Caffeine

Tolerance Nicotine = Heroin = Alcohol > Cocaine > Caffeine

Withdrawal Alcohol > Heroin > Nicotine = Cocaine > Caffeine

Deaths Nicotine > Alcohol > Cocaine = Heroin > Caffeine

Prevalence Caffeine > Nicotine > Alcohol > Cocaine = Heroin

Activity – Reasons for Giving up Smoking

Reasons for Giving up Smoking



- Health
- Family
- Social acceptance
- Workplace policies
- Health campaigns
- Economic
- Appearance
- Significant dates
- Sense of control

The Cost of Smoking

20 a day / 5 years = £26,880
(36,500 cigarette butts)



Health Benefits of Quitting

20 minutes	Blood pressure & pulse return to normal
8 hours	Nicotine & carbon monoxide levels in blood reduce by half, oxygen levels return to normal
24 hours	Carbon monoxide will be eliminated from the body
48 hours	There is no nicotine left in the body
3-9 months	Coughs, wheezing & breathing problems improve as lungs clear
1 year	Risk of a heart attack falls to half that of a smoker
10 years	Risk of lung cancer falls to half that of a smoker



Activity – How to Motivate People to Think About Stopping?

Campaigns

- New Year's resolution
- Lent
- No Smoking Day / No Smoking Month
- 28 day Challenge
- Stoptober
- Other media campaigns

No Smoking Day / Month



For help and information on free stop smoking services visit want2stop.info

Produced by the Public Health Agency, Tel: 0300 555 0114 (local rates)

Make March your month to quit.

Ask us about the **free** stop smoking service.

You're up to **4 times more likely** to quit with our help.

For more information on the service go to stopsmokingni.info

Stop Smoking Service
helping you to quit

HSC Public Health Agency
Produced by the Public Health Agency, Tel: 0300 555 0594 (local rates)

No Smoking Day

- Introduced in 1984
- National Social marketing campaign
- In 2010, the cost per smoker of NSD in England was £0.088, with a cost of £76-£114 per life year gained.
- Cost comparison with UK mass media campaign to prevent smoking uptake in children and young people - £40-£2000 per life year gained.
- NSD costs about 10% of cost for medical interventions, i.e. Nicotine Replacement Therapy or bupropion.

Kotz et al 2010

Stoptober

- Started in late 2012 (only in England)
- Cost per smoker £557.70
- Encourages people to quit for 28 days, as if you quit for 28 days you are 5 x more likely to stay quit for good.

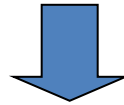
BEST CONTENT / IMPACT FOR THE INDIVIDUAL

Smoking Cessation

- Brief intervention can be effective(2%)
- Use of Nicotine Replacement Therapy can double the effectiveness of brief intervention advice
- Use of intensive support can further double the effectiveness

What Does a 2% Cessation Rate in N.I. Represent?

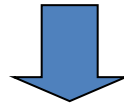
12% of adults in N.I. smoke



300,000 adults smoke



2% cessation rate by 3 minutes brief intervention



6000 adults could quit / year

The 4 A's & 2 R's Approach

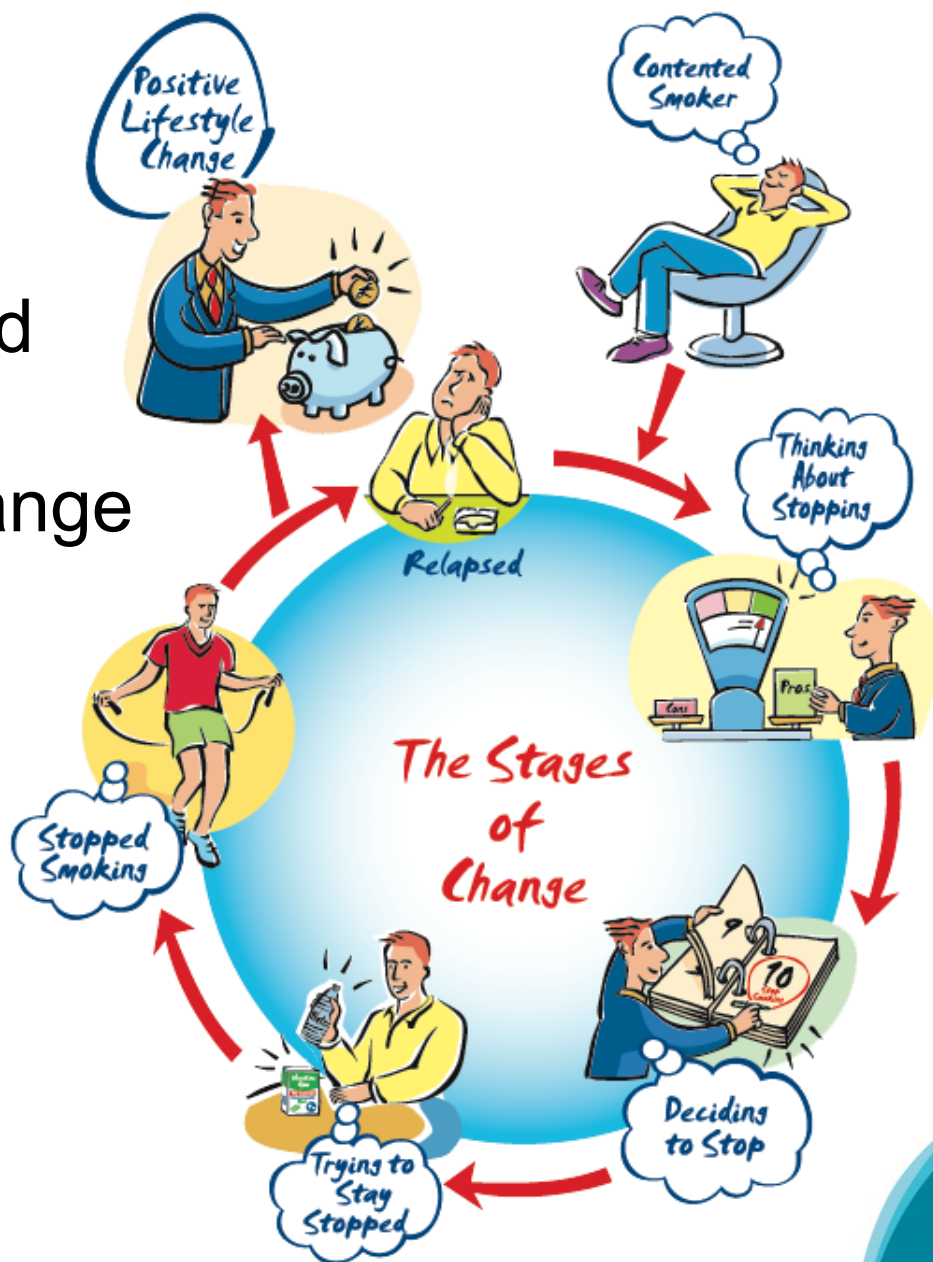
- **ASK** all smokers about their smoking at every opportunity
- **ADVISE** all smokers to stop
- **ASSIST** smokers to stop
- **ARRANGE** a follow up
- **RECOMMEND** using stop smoking aids
- **REFER** to further sources of support

Smoking Cessation Interventions and Their Rates

Brief intervention	2%
Brief intervention and NRT	6%
Smokers' clinic	10%
Smokers' clinic and NRT	20%
Pregnant women	7%
Support and Zyban	18%
Varenicline and support	22-23%

West et al (1998) Smoking cessation guidelines for health professionals. Thorax 53(1):1-19.

Prochaska and DiClemente Stages of Change model



Tips to Help Staying Stopped

- Delay acting on the urge to smoke
- Deep breathe
- Drink water
- Do something else
- Decide to think positively

Efficacy figures from the Cochrane review

Sustained quit rates for 1-year

<u>Combination NRT versus placebo</u>	1.93
(225 studies)	(95 % CI, 1.61-2.34)
<u>Bupropion SR versus placebo</u>	1.43
(71 studies)	(95% CI, 1.26-1.62)
<u>Varenicline versus placebo</u>	2.33
(67 studies)	(95% CI, 2.02-2.68)
<u>Nicotine e-cigarette</u>	2.37
(16 studies)	(95% CI, 1.73-3.24)
<u>Cytisine</u>	2.21
(7 studies)	(95% CI, 1.66-2.97)

<https://doi.org/10.1002/14651858.CD015226.pub2>

Pharmacological and electronic cigarette interventions for smoking cessation in adults: component network meta-analyses

Nicola Lindson, Annika Theodoulou, José M Ordóñez-Mena, Thomas R Fanshawe, Alex J Sutton, Jonathan Livingstone-Banks, Anisa Hajizadeh, Sufen Zhu, Paul Aveyard, Suzanne C Freeman, Sanjay Agrawal, Jamie Hartmann-Boyce

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Pilot Stop Smoking Service

Dunmurry Dental Practice – evening clinic/fortnightly

• Referrals from staff	29	
• Number of Quit Dates set	9	20
• Number Quit at 4 weeks	8 (88%)	16 (80%)

Cancer Focus NI 2016-2019 figures

Symptoms of Nicotine Withdrawal

	% Smokers	Duration
Irritability	50	<4 weeks
Depression *	60	<4 weeks
Poor concentration	60	<2 weeks
Restlessness	60	<4 weeks
Urges to smoke*	70	>2 weeks
Increased appetite	70	>10 weeks
Anxiety	50	<1 week
Light headedness	10	<48 hours
Night-time wakening	25	<1 week

* Predicts relapse

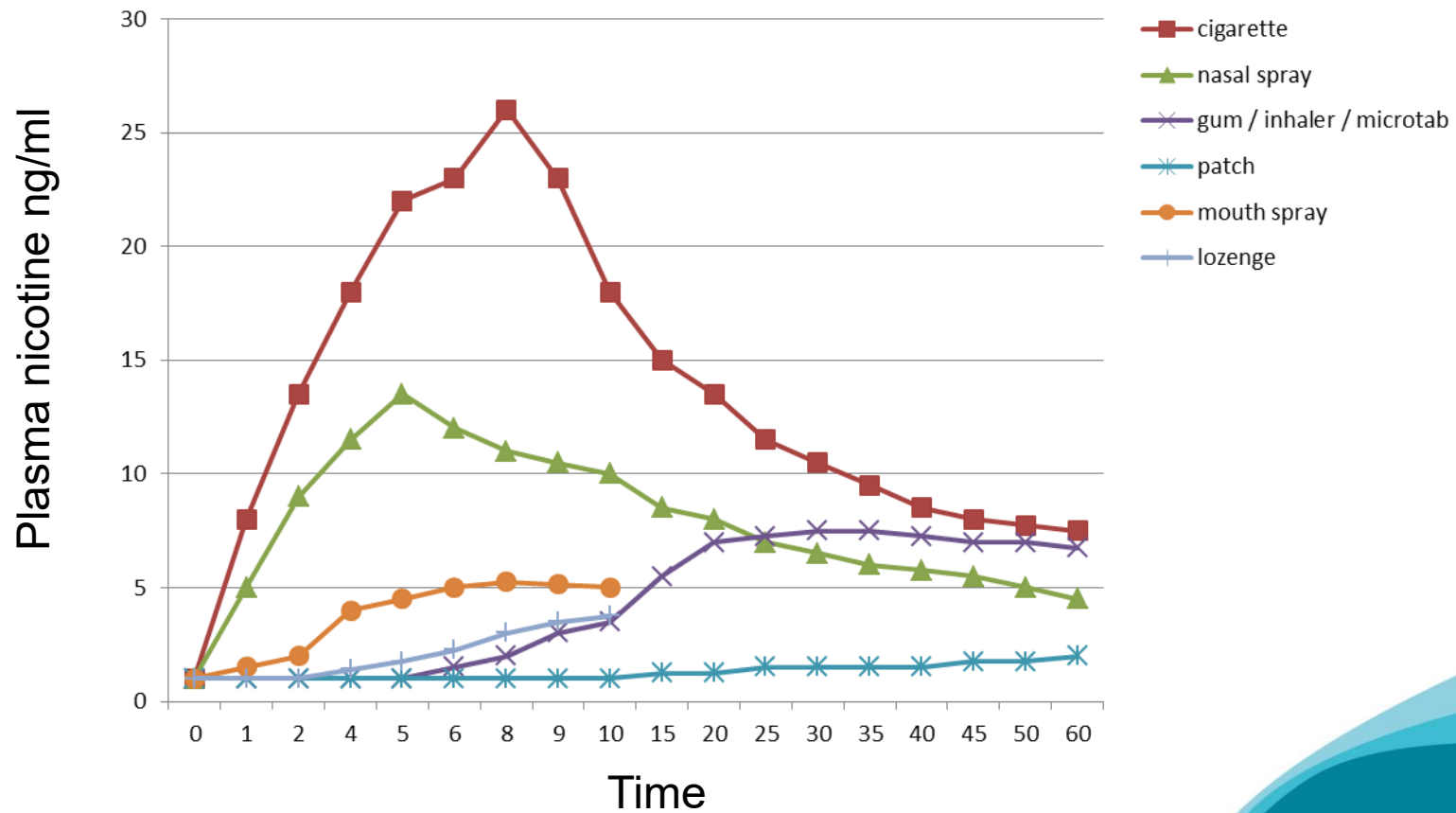
Physical signs of nicotine withdrawal

	% smokers	Duration
Drop in heart rate (8bpm avg)	> 80	Long-term
Decreased adrenaline	nk	Short-term
Decreased cortisol	nk	<4 weeks
Decreased tremor	> 80	Long-term
Decreased resting metabolic state	nk	Long-term
Increased skin temperature	> 80	Long-term
Decreased IgA	nk	<14 days
Decreased caffeine metabolism	> 80	Long-term
Constipation	10	> 4 weeks
Cold symptoms and mouth ulcers	10	Short-term
Increase in weight (6-8kgs avg)	> 80	Long-term

Stop Smoking Services – what you can do

- Brief Intervention
- Recording smoking status
- Referral to Stop Smoking Service
 - Hospital
 - GP Practice
 - Pharmacy
 - Community
- Resources – www.stopsmokingni.info, Stop smoking made easier leaflet

Nicotine delivery



Royal College of Physicians, *Nicotine Addiction in Britain*, 2000 (adapted)

Nicotine Replacement Therapies

- Patches
- Gum
- Nasal Spray
- Inhalator
- Microtabs
- Lozenge
- Mouth Spray



Precautions When Using NRT

- Severe cardiac disease
- Hypertension
- Recent M.I.
- CVA
- Lactation & pregnancy
- Active peptic ulceration
- Diabetes mellitus

Side Effects of NRT

- Itching
- Local irritation
- Sleep disturbance
- Possible arrhythmias
- Angina

Bupropion SR (Zyban)



- The first non-nicotine prescription medicine to aid people stop smoking.
- Works directly on the areas of the brain responsible for addiction.
- Course of treatment 7 - 9 weeks.
- Patients are advised to complete whole course if no side effects occur.

Contra-indications to Zyban

- History of epilepsy
- History of eating disorders
- Bipolar disorder
- Pregnancy
- Breast feeding

Zyban - Precautions

- Increased risk of seizures for patients with
 - Previous head injury
 - Brain tumour
 - Alcohol abuse
 - Diabetes
- Renal or mild to moderate hepatic impairment
- Elderly
- Susceptibility to psychotic episodes

Varenicline

- Varenicline works on the $\alpha 4\beta 2$ receptors in the brain, blocking the effect of nicotine and encouraging dopamine release (reward)
 - Regime
 - Day 1 - 3 0.5mg daily
 - Day 4 - 7 0.5mg bd
 - Day 8 - week 12 1mg bd
- Quit day 8-35

Contra-indications

- Hypersensitivity to Varenicline
- Under 18's
- Pregnancy

Precautions

- Epilepsy
- Psychiatric conditions

Side effects

- Nausea
 - Headache
 - Abnormal dreaming
 - Insomnia
-
- EAGLES Study looked at adverse events in clients with psychiatric and no psychiatric diagnosis – no statistical difference between varenicline and placebo results.

Cytisinicline

Cytisine is a safe and effective treatment, working in a similar way to varenicline, reducing urges to smoke as it attaches to the receptors in the brain – selective partial agonist to $\alpha 4\beta 2$ receptors.

Standard course of treatment 25 days. Evidence suggests it is as effective as NRT.

Instructions for use, each tablet contains 1.5mg of cytisine. One pack of Cytisine contains 100 tablets which is a complete treatment course (25 days). Cytisine should be taken with water according to the following schedule with the quit date no later than the fifth day of treatment.

Days of treatment	Recommended	Maximum dosing daily dose
From 1st to the 3rd day	1 tablet every 2 hours	6 tablets
From 4th to the 12th day	1 tablet every 2.5 hours	5 tablets
From 13th to the 16th day	1 tablet every 3 hours	4 tablets
From 17th to the 20th day	1 tablet every 5 hours	3 tablets
From 21st to the 25th day	1–2 tablets a day	2 tablets

Cytisine – current contra-indications

Not recommended for patients

- with renal (kidney) impairment
- with hepatic (liver) impairment
- over 65 years of age
- under 18 years of age

Due to lack of clinical experience and safety data.

- hypersensitivity to cytisine
- hypersensitivity to any of the excipients (non-active ingredients): mannitol, microcrystalline cellulose, magnesium stearate, glycerol dibehenate and hypromellose
- unstable angina (chest pain caused by reduced blood supply to the heart)
- had recent myocardial infarction (heart attack)
- clinically significant arrhythmias (irregular or abnormal heart rhythm)
- had a recent stroke
- pregnant or breastfeeding

Women of childbearing age using hormonal contraception should add a secondary barrier method whilst taking cytisine as its impact on the effectiveness of oral contraceptives is not known

Precautions

- ischaemic heart disease
- heart failure
- hypertension (high blood pressure)
- pheochromocytoma (tumour in the adrenal glands)
- atherosclerosis (thickening or hardening of the arteries) and other peripheral vascular diseases
- gastric and duodenal ulcer
- gastroesophageal reflux disease
- hyperthyroidism (overactive thyroid)
- diabetes
- schizophrenia

Drug interactions

- Should not be used with anti-tuberculosis drugs

For further information on possible interactions with smoking and best advice check

[Managing specific interactions with smoking – SPS - Specialist Pharmacy Service – The first stop for professional medicines advice](#)

Cessation Rates with Pharmacotherapy

% abstinent after
12 months

Smokers' clinic & NRT	20%
Motivational support & Zyban	18%
Varenicline and support	22-23%

Importance of Pharmacotherapy

- Fewer than 1 in 5 smokers making a quit attempt use NRT¹
- Using any NRT will double the chances of a person still not smoking after 12 months.
- Consider offering a combination of nicotine patches and another form of NRT...to people who show a high level of dependence on nicotine or who have found single forms of NRT inadequate in the past²

1.Cummings KM & Hyland A Annu Rev Public Health 2005;
26:583-599

2.NICE PH010 Guidance, February 2008

Importance of Pharmacotherapy

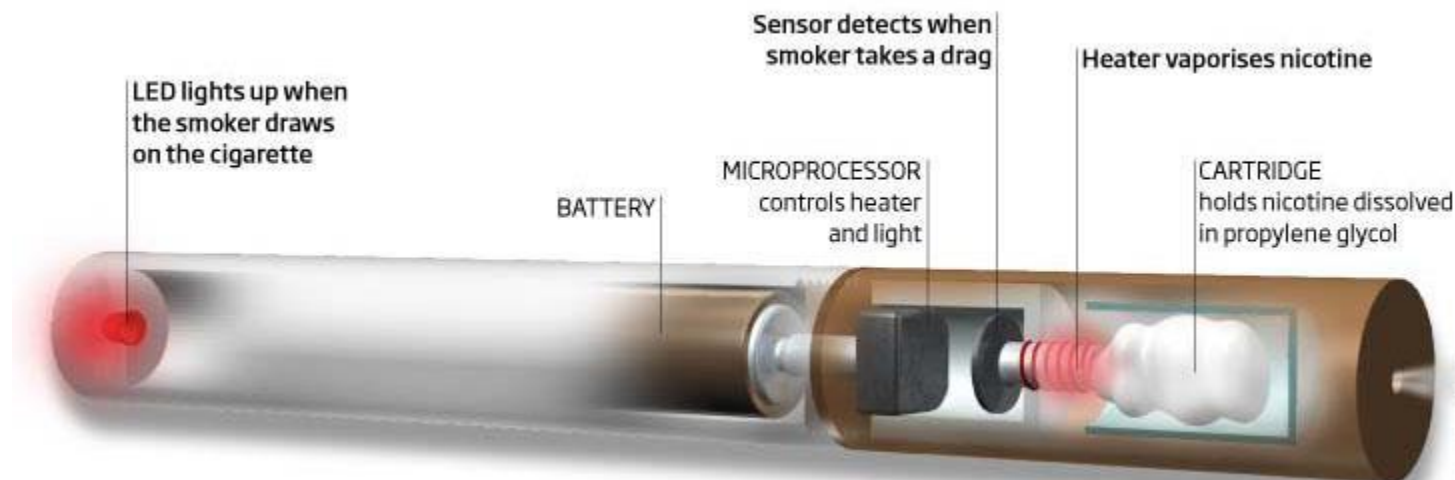
- Any Pharmacotherapy should be offered as first line of treatment (NICE).
- All products are available on prescription.

Nicotine Containing Products

- Electronic Nicotine Delivery Systems (ENDS) – E cigarettes
 - All ENDS heat a solution to create an aerosol.
- Heat Not Burn (HnB)
 - A tobacco product that produces an aerosol through heating tobacco up to 350°C.
- Oral nicotine pouches - Nordic Spirit

Nicotine Containing Products – ENDS

Electronic Nicotine Delivery System



NI advice

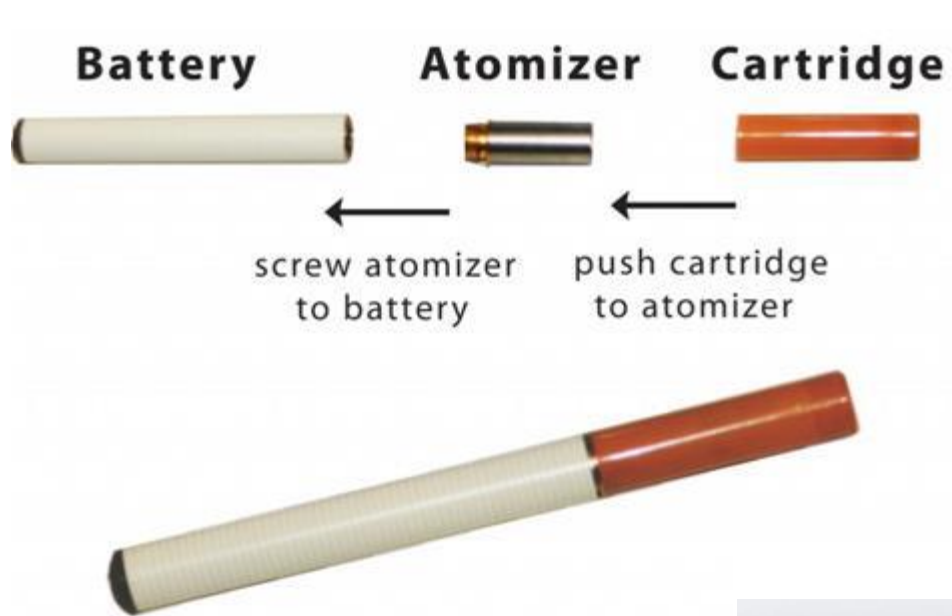
The Public Health Agency (PHA) has issued advice on e-cigarettes to help people make informed decisions.

Monday 20th March 2023 – Health and Social Wellbeing Improvement

[Public Health Agency \(PHA\) advice to help people make informed decisions on e-cigarettes | HSC Public Health Agency \(hscni.net\)](https://www.hscni.net/public-health-agency/advice-to-help-people-make-informed-decisions-on-e-cigarettes)

E-cigarettes (vapes) are not licensed as medicines for smoking cessation by the MHRA

E-cigarettes **will therefore not be offered** as a cessation aid within PHA-commissioned services



How does addiction taste for YP?

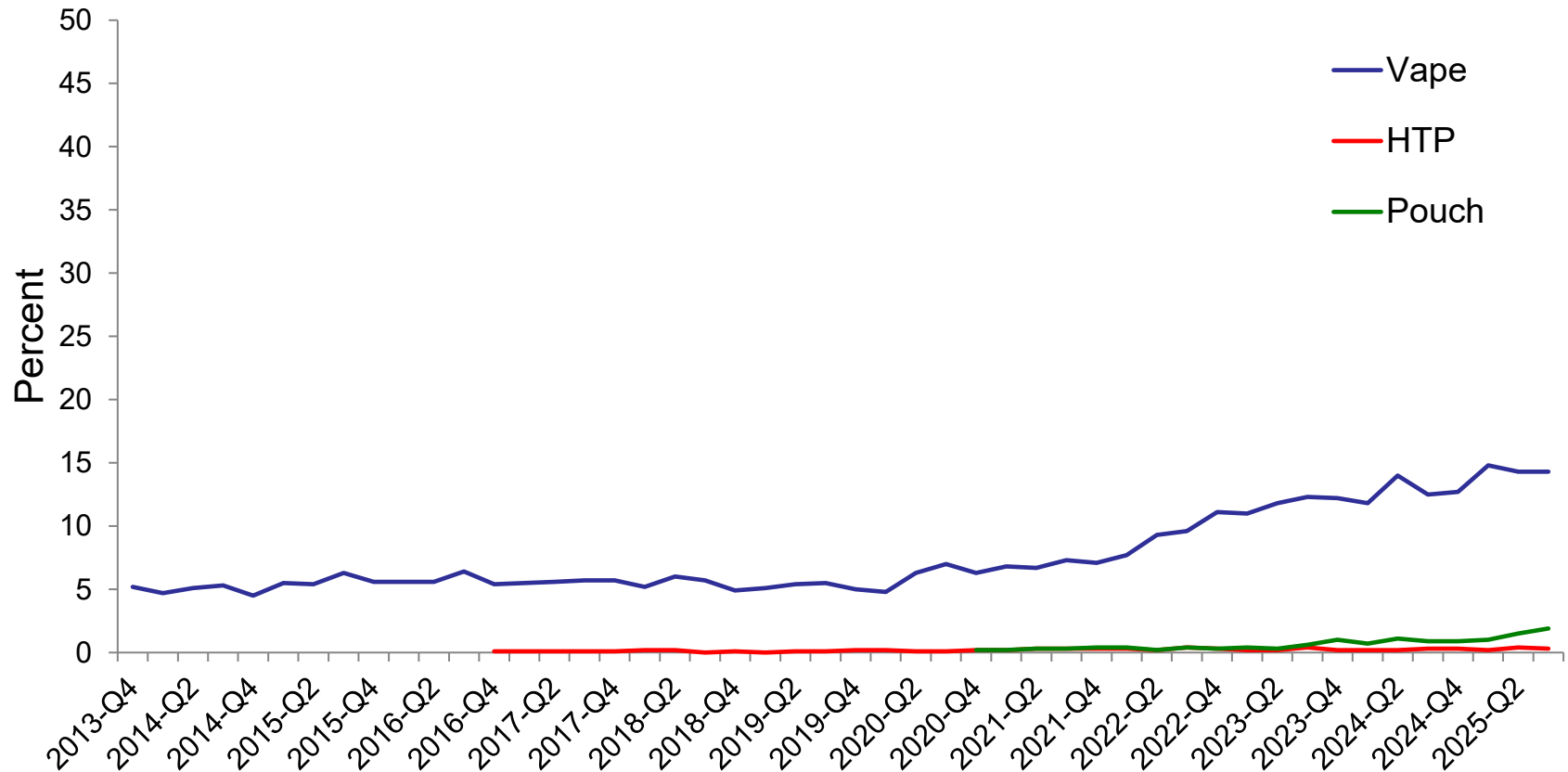


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Health Survey NI 2024-2025

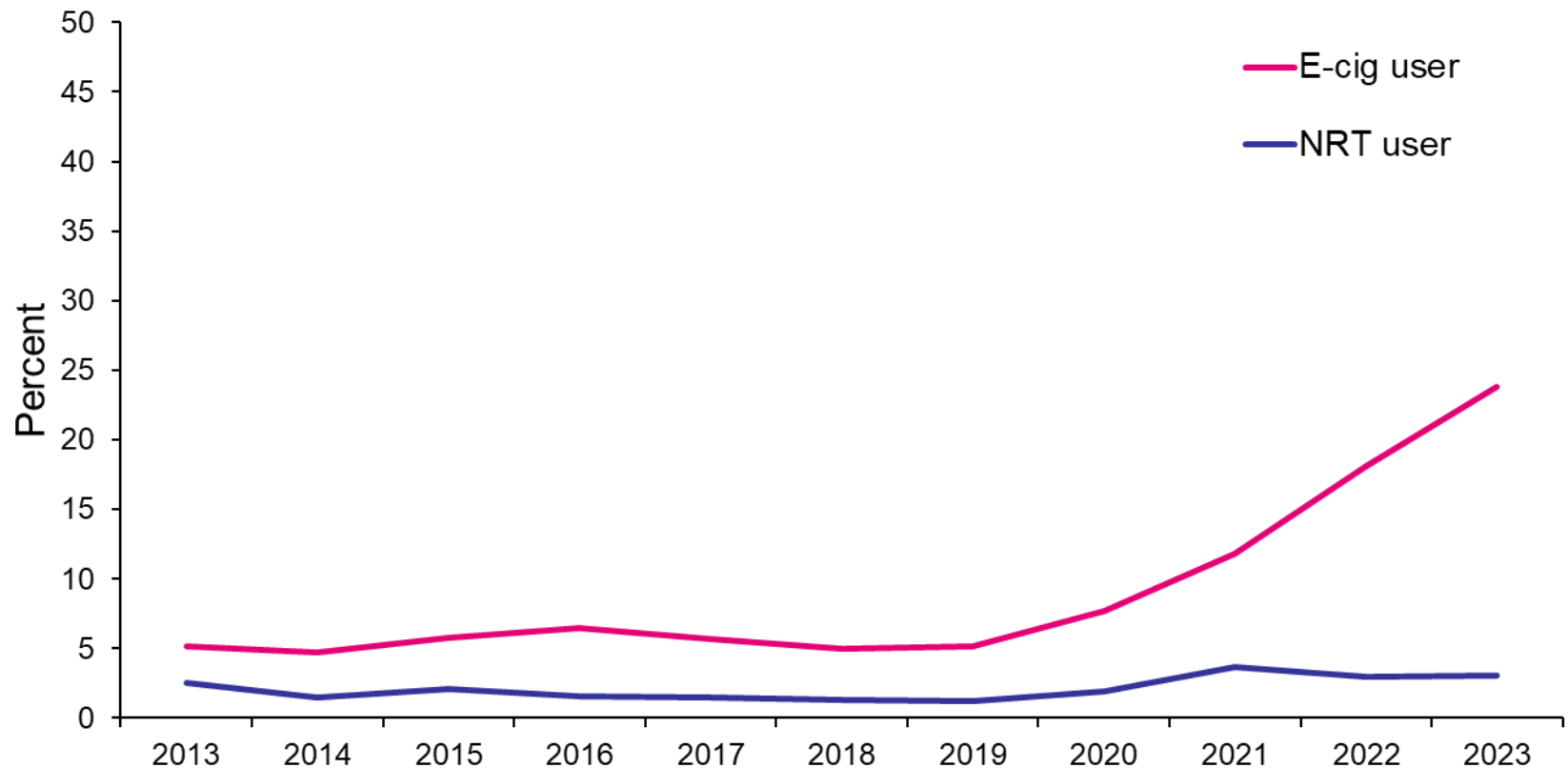
- E-cig use in NI – 9% current users
- Male 10% Female 8%, Urban 11% / Rural 8%
- 15% use in more deprived areas; 8% use in least deprived areas
- Of these, 56% are current smokers (dual users) (2017-18)
- 3% of e-cig users are never smokers (2023-24)
- 72% of those currently using an e-cig that used to smoke have quit for more than 6 months (2015-16)
- 45% of those who had used an e-cig said it had helped them quit tobacco completely (2018-19)

Prevalence of novel nicotine delivery systems use



N=240074 adults in England from Nov 13 (vape); N=177903 adults in England from Jan 17 (HTP: heated tobacco product); N=99159 adults in England from Nov 20 (Pouch: oral nicotine pouches)

E-cigarette and NRT use in age 16-24 (2013-2023)



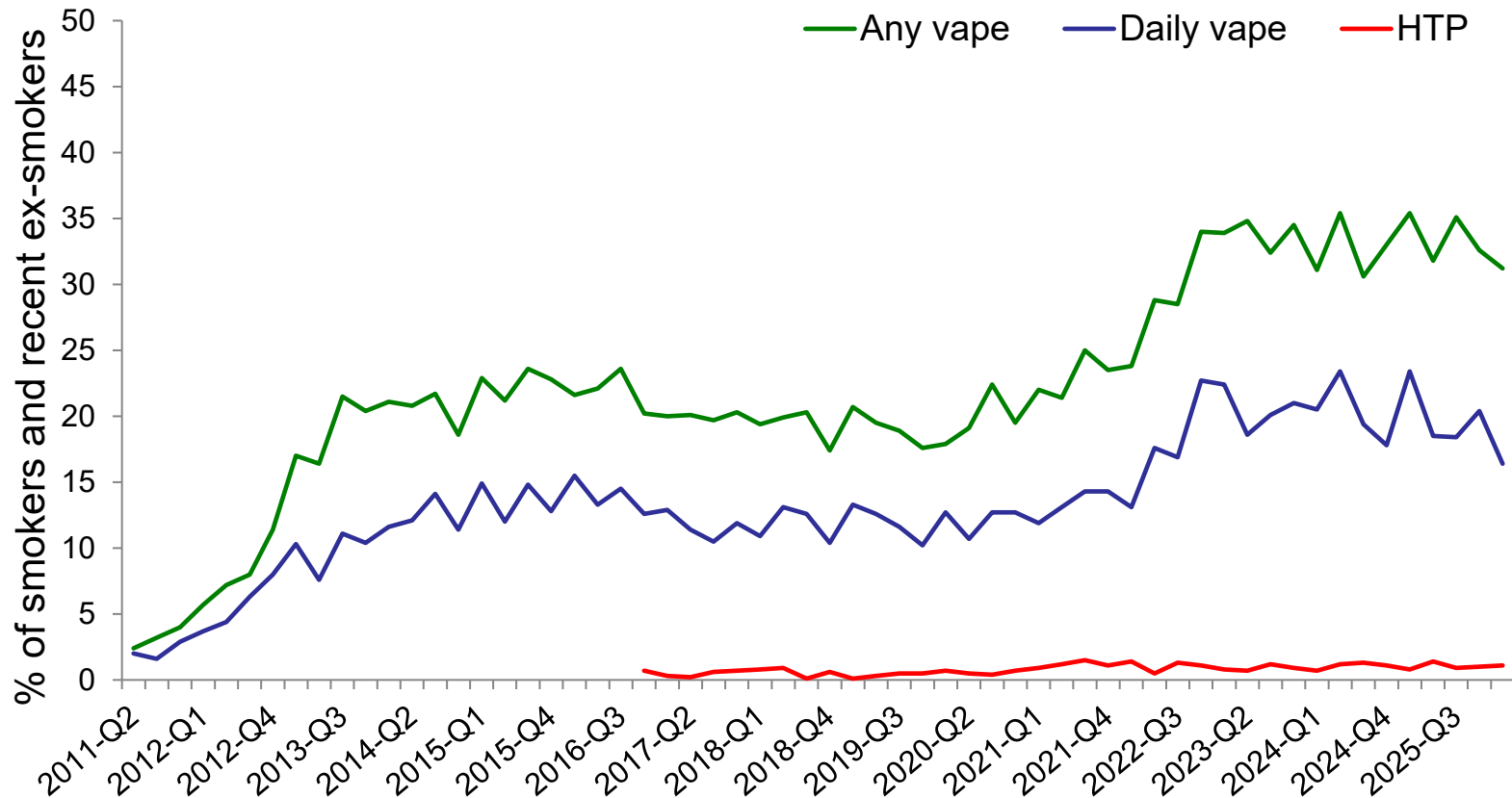
N= 7029 adults aged 16-24*

*Age 18-24 between April 2020 – December 2021.

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Prevalence of novel nicotine delivery use: smokers and recent ex-smokers

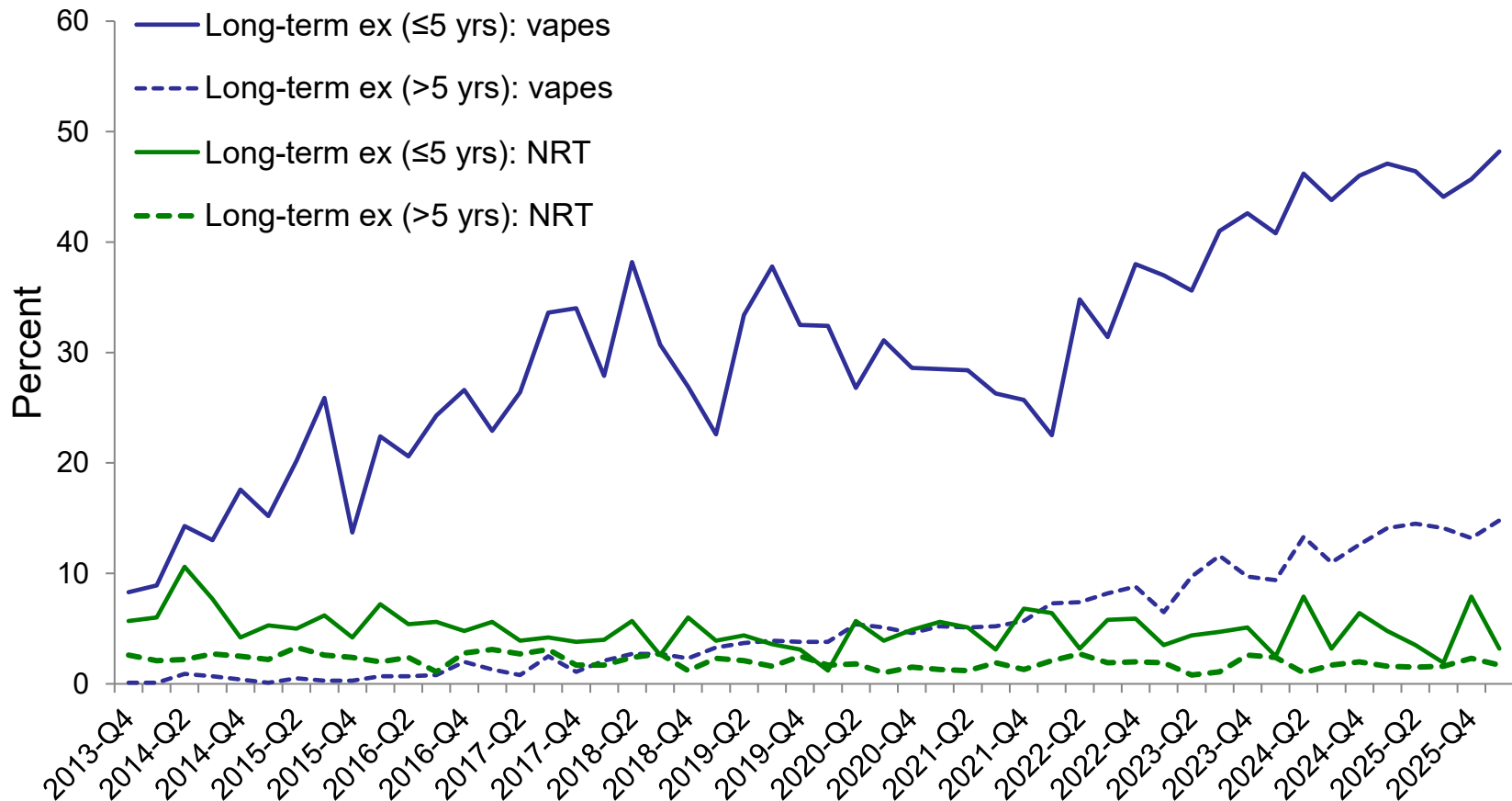


N=60060 adults who smoke or who stopped in the past year (N=32697 asked about HTP)

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Nicotine use by long-term ex-smokers ($\leq$ or >5 years)

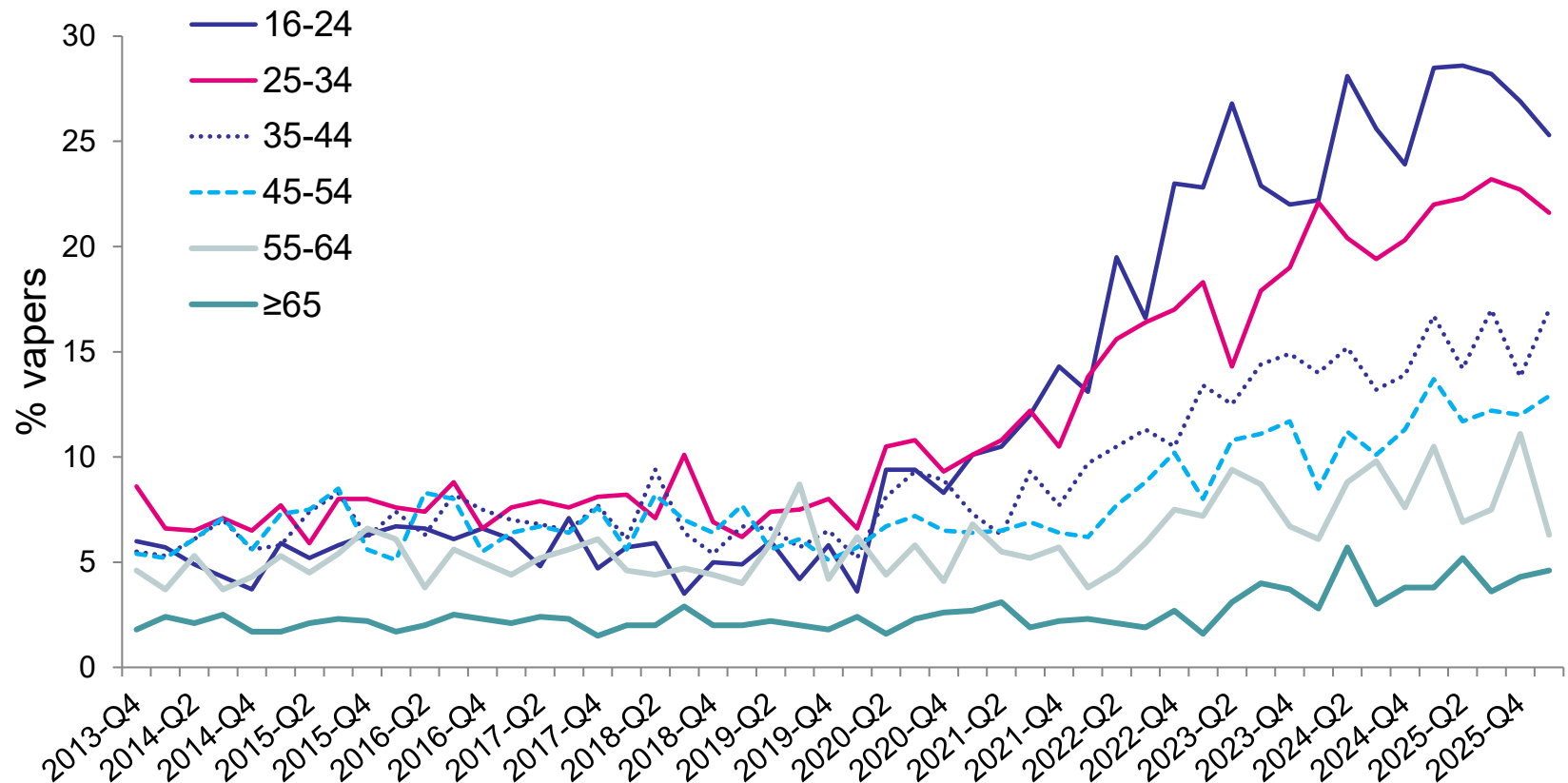


N=39807 ex-smokers >5 years from Nov 13; N=10720 ex-smokers ≤ 5 years from Nov 13

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Prevalence of vaping by age

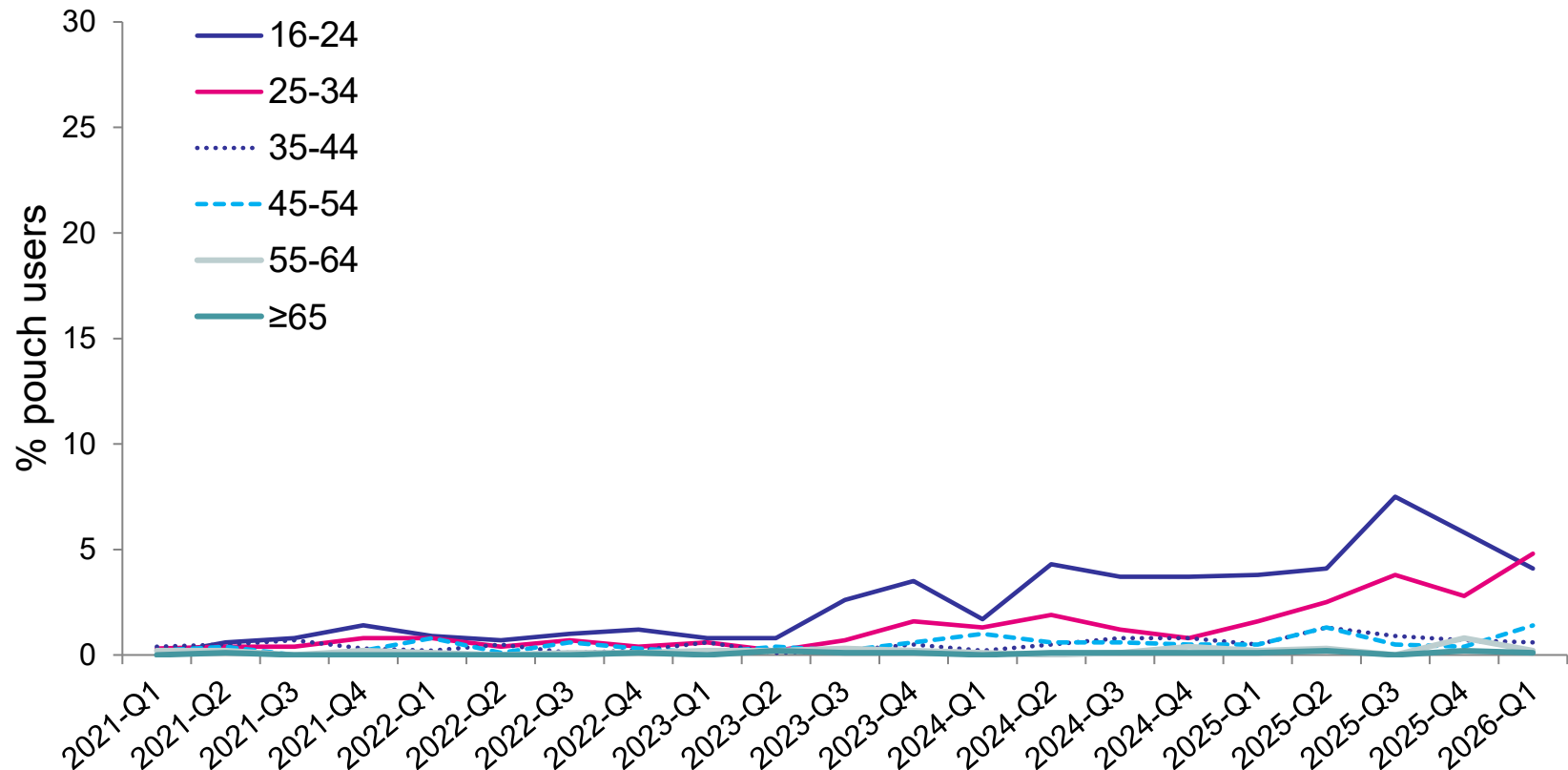


N=250447 adults (16 and over till Feb 20; 18 and over from April 20; 16 and over from Jan 22)

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Prevalence of pouch use by age

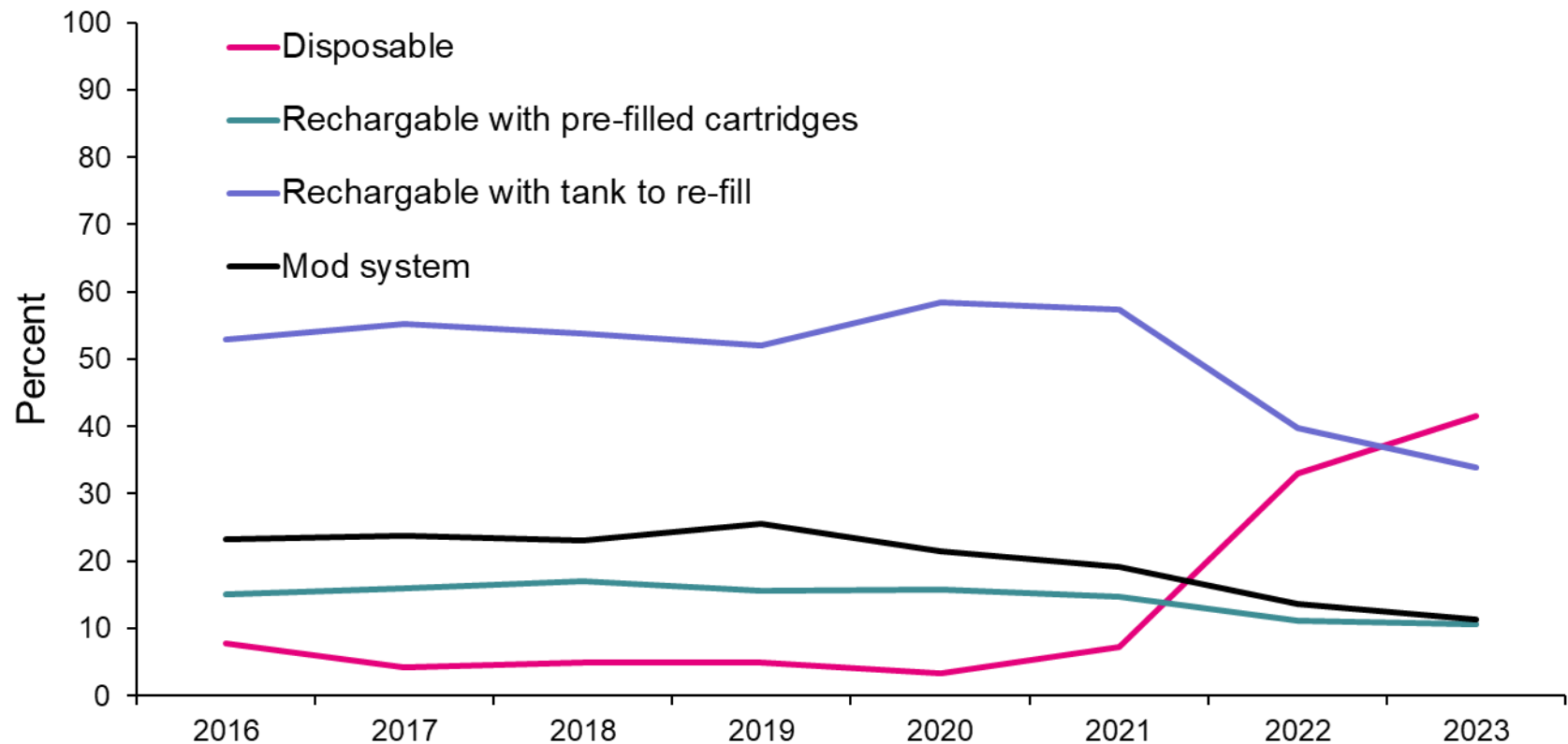


N=106265 adults (18 and over in 2021; 16 and over from 2022)

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Characteristics (2016-2023)



N=10159 e-cigarette users

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Contents in general – 500 brands / 55,000 products registered

- nicotine 20/18/12/6/3/0mg
(1/5 synthetic)
- propylene glycol PG – flavour
carrying ingredient, throat hit
- vegetable glycerin VG -
sweeter / thicker – vapour cloud
- water
- flavourings (8,000)

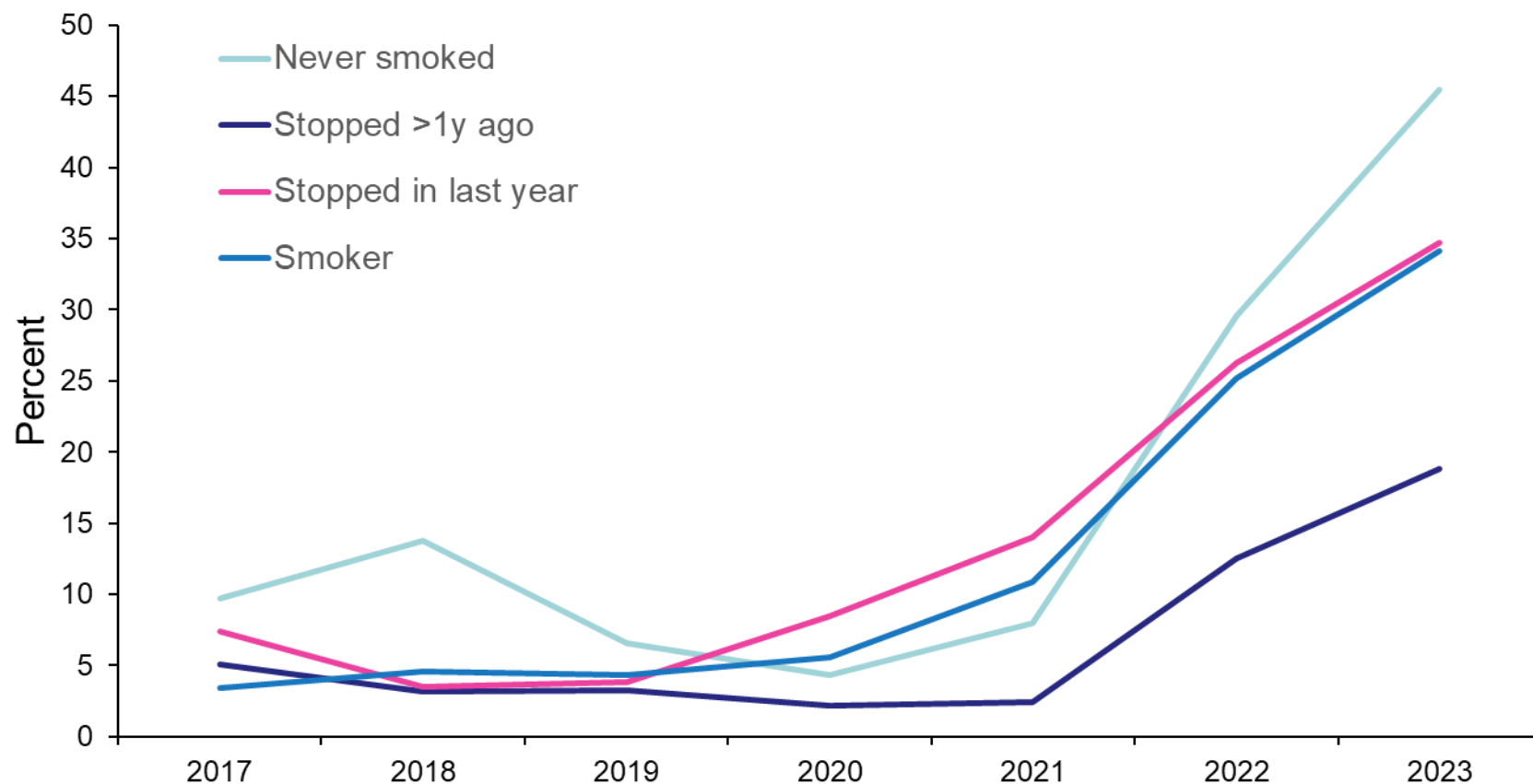
Generally recognised as safe
(oral intake)



If user needs higher
nicotine use 50:50 e
liquid

If lower nicotine use
higher VG 70:30/80:20 –
clouds or subOhm vape

E-liquid strength 20mg (2%) nicotine or more (2016-2023)

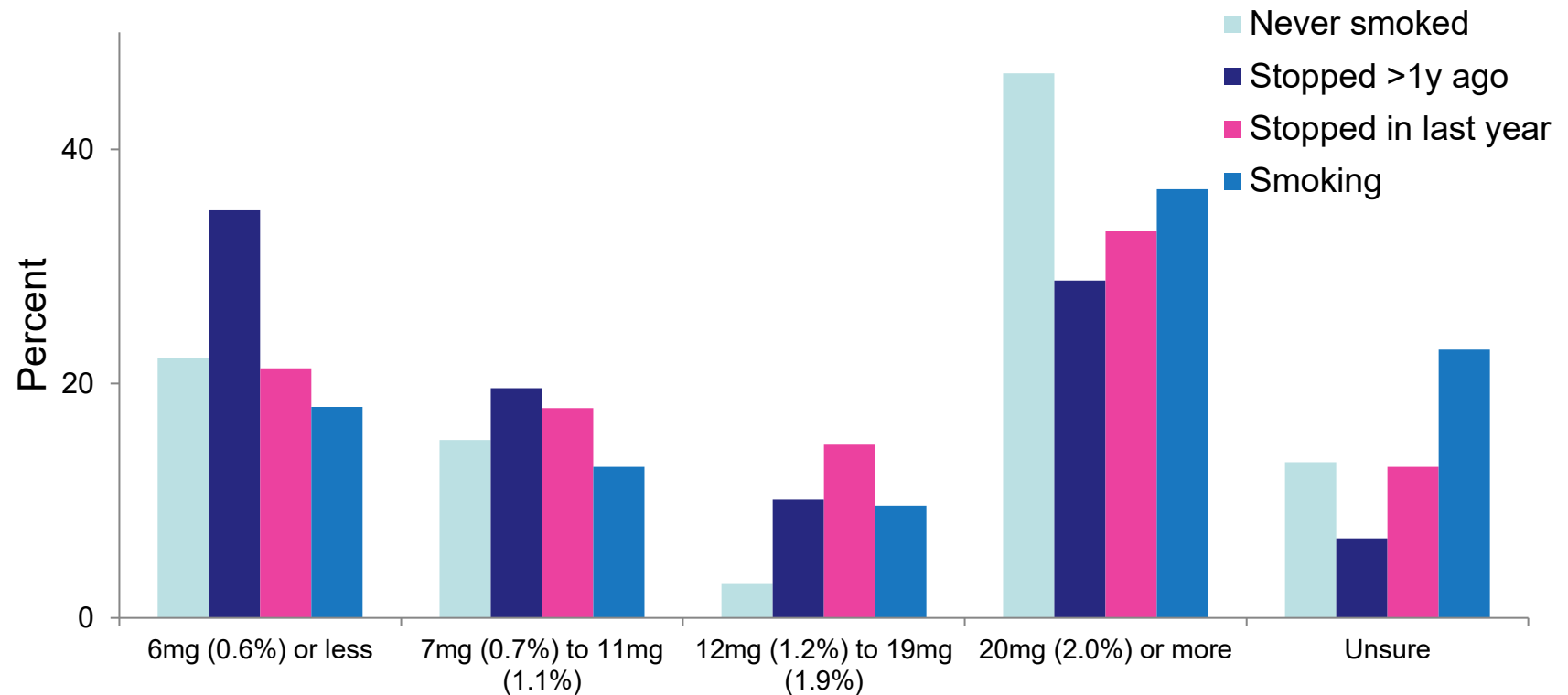


N= 6309 nicotine containing e-cigarette users

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E-liquid strength (2025)



N=747 nicotine-containing vape users, surveyed in 2025

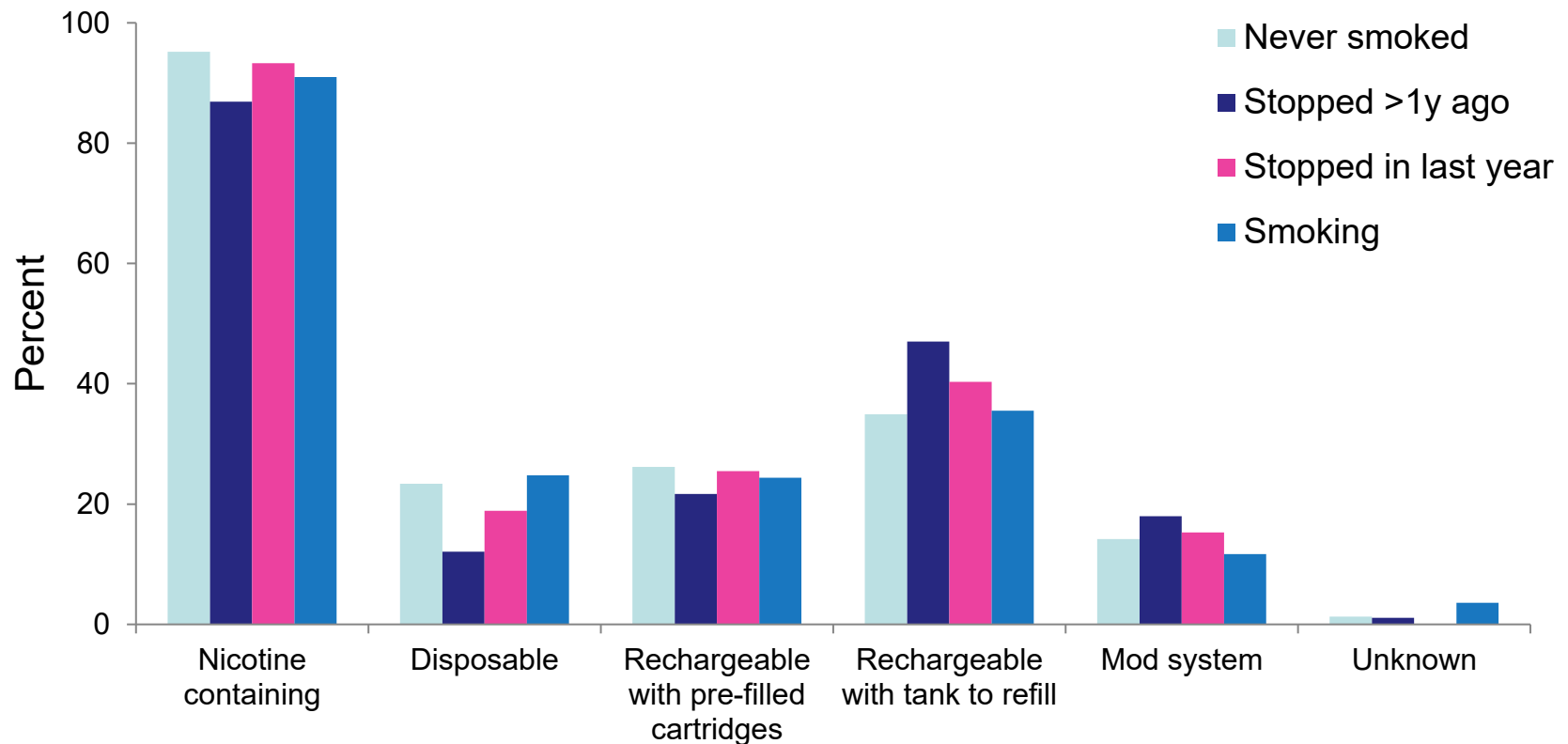
Strength of liquid

- Heavier smoker >20 cig – 18-20mg
 - Pack a day – 12mg
 - Light smoker – 6mg
 - Social smoker – 3mg or 0mg
-
- Nic salt formulations give stronger nicotine hit (similar to cigarette)

Electronic cigarettes

- MHRA regulates all nicotine-containing products
- NICE supports the use of licensed NCP's to help smokers cut down, for temporary abstinence and as a substitute for smoking.

Characteristics of vapes (2025)



N=2684 people vaping (for nicotine-containing N=825), surveyed in 2025
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Cochrane review

Electronic cigarettes for smoking cessation - Jamie Hartmann-Boyce, Hayden McRobbie, Ailsa R Butler, Nicola Lindson, Chris Bullen, Rachna Begh, Annika Theodoulou, Caitlin Notley, Nancy A Rigotti, Tari Turner, Thomas R Fanshawe, Peter Hajek



- Nicotine EC v NRT RR 1.59 high
- Nicotine EC v non-nicotine EC RR 1.46 moderate
- Nicotine EC v behave/no support RR 1.96 low

Quit at 6 months

<https://www.cebm.ox.ac.uk/research/electronic-cigarettes-for-smoking-cessation-cochrane-living-systematic-review-1>

EC for harm reduction

- EC v NRT (reduction)

At 4 weeks RR 1.8

At 6 months RR 4.4

- EC v NRT (sustained abstinence)

At 4 weeks RR 2.0

At 6 months RR 6.4

Research findings

- Smokers not interested in quitting, after 8 weeks of e-cig use 34% had quit compared to 0% of those who had not used e cigs
 - McNeill 2015
- Intensive e-cig users quit, but there is a decline in cessation for dual users
 - Schraufnagel 2015 PMID 25830075
- Limit e-cigs to smokers who are unwilling or unable to quit
 - Pisinger 2014 PMID 25456810

A Randomised Trial of E-Cigarettes versus Nicotine-Replacement Therapy

January 31, 2019 Lancet Vol. 380 No. 5

Peter Hajek, Ph.D., Anna Phillips-Waller, B.Sc., Dunja Przulj, Ph.D., Francesca Pesola, Ph.D., Katie Myers Smith, D.Psych., Natalie Bisal, M.Sc., Jinshuo Li, M.Phil., Steve Parrott, M.Sc., Peter Sasieni, Ph.D., Lynne Dawkins, Ph.D., Louise Ross, Maciej Goniewicz, Ph.D., Pharm.D.

- 1-year abstinence rate was 18.0% in the e-cigarette group compared with 9.9% in the nicotine-replacement group
- Among participants with 1-year abstinence, e-cigarette group were more likely than those in the nicotine-replacement group to use their assigned product at 52 weeks (80% vs. 9%).

General health risk?

- 500 different brands and 8000 different flavours

Higher risk identified in studies

Some brands

Some flavours

High voltage devices

Second half of vaping period

Overheating

'dripping'

'dry puff' conditions

The state of the heating element

The vaporiser

Vehicle / carrier – ethylene glycol, propylene glycol

Dental risk

Less risk than smoking.

In the short-term

- Excess bacteria – tooth decay, cavities and gum diseases
- Dry mouth – bad breath, mouth sores, tooth decay
- Inflamed gums
- Mouth and throat irritation – tenderness, swelling and redness
- ? Cell death – periodontal diseases, bone loss, tooth loss, dry mouth, bad breath, tooth decay

If vape juice contains nicotine – dry mouth, plaque accumulation, gum inflammation.

Possibly – teeth stains / discolouration, teeth grinding, gingivitis, periodontitis, receding gums

Flavours - ? Reduce healthy cells (menthol), increase risk of cavities (sweet flavours), increase gum inflammation (any flavour)

Respiratory Risk

- Some animal studies are showing changes in the lungs due to sweet flavours (berry), that could lead to increased infections or damage.
- Anecdotally asthma risk seems to be increased.

What can we say / What can we not say?

- Safer than tobacco
- Some e cigs (tank versions) may support quitting
- Some young people are using e cigs as a fashion accessory
- People are trying e cigs over NRT or Stop Smoking Services (West 2016)
- Not completely safe
- Not all e cigs will support a quit attempt
- No consistent evidence says young people who try an e cig will move to tobacco

Stopping smoking using a vape

- Offer behavioural support
- Can use with NRT
- Only replace the cigarette use
- Look after your vape (no dry puff, change coil)
- Close the mouthpiece, reduce air intake
- Reduce the strength of the liquid
- Reduce the battery power
- Buy from a reputable source

Stopping vaping

Treat like combustible tobacco

If cutting down use before quitting

- Look after your vape (no dry puff, change coil)
- Close the mouthpiece, reduce air intake
- Reduce the strength of the liquid
- Reduce the battery power
- Can use NRT – licensed for quitting, some evidence to suggest Varenicline and NRT may be useful

Vaping concerns for Young People

Nicotine addiction

More likely to smoke tobacco

Greater risk of other addictions

Harm the part of the brain that controls attention, learning & mood

Unregulated vapes contain chemicals that cause cancer

Tampering with vapes

Lung injuries?

Legalities

- Tank size – if an e-cig has more than 700 puffs the tank is probably too big.
- Strength – if an e-liquid / vape is stronger than 20mg it is illegal.
- Proxy purchasing – if a parent or other adult purchases an e-cig for a person under 18 – this is illegal.
- Smokefree legislation – as vapes are not combustible tobacco they do not fall under smokefree legislation, however they can be added to a policy – this may change with TAVA 2026.

Warnings



DANGER: Toxic if swallowed. Fatal in contact with skin. May cause an allergic skin reaction. Harmful if inhaled. Harmful to aquatic life with long lasting effects.

Illegal additives

- THC – tetrahydrocannabinol – psychoactive constituent of cannabis – produces the ‘high’
- Spice – synthetic drug (cannabinoid), often smoked with tobacco, unpredictable, powerful, causes anxiety, panic, trance / hallucinations, acute kidney failure, seizures, LOC, respiratory failure
- Pine – pine resin in cannabis vaping devices, can also have vit E acetate and oleamide (synthetic marijuana) – EVALI (E cigarette or vaping associated lung injury)

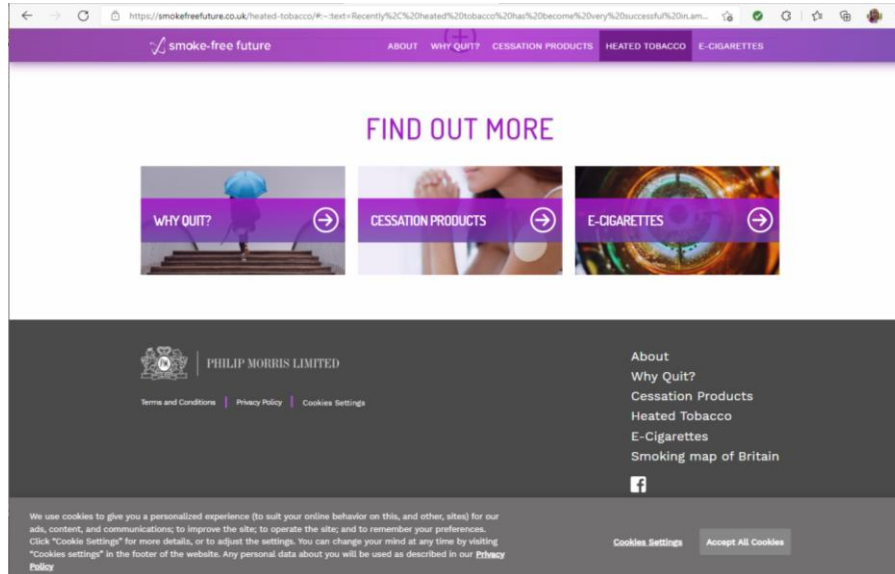
E-cigarettes and the environment



E-cig waste won't biodegrade even under severe conditions

Tobacco Industry involvement

- Small share of EC market (apart from Juul in US)
- More likely to promote HTP and oral tobacco – proprietary technology, less independents



WHO Europe

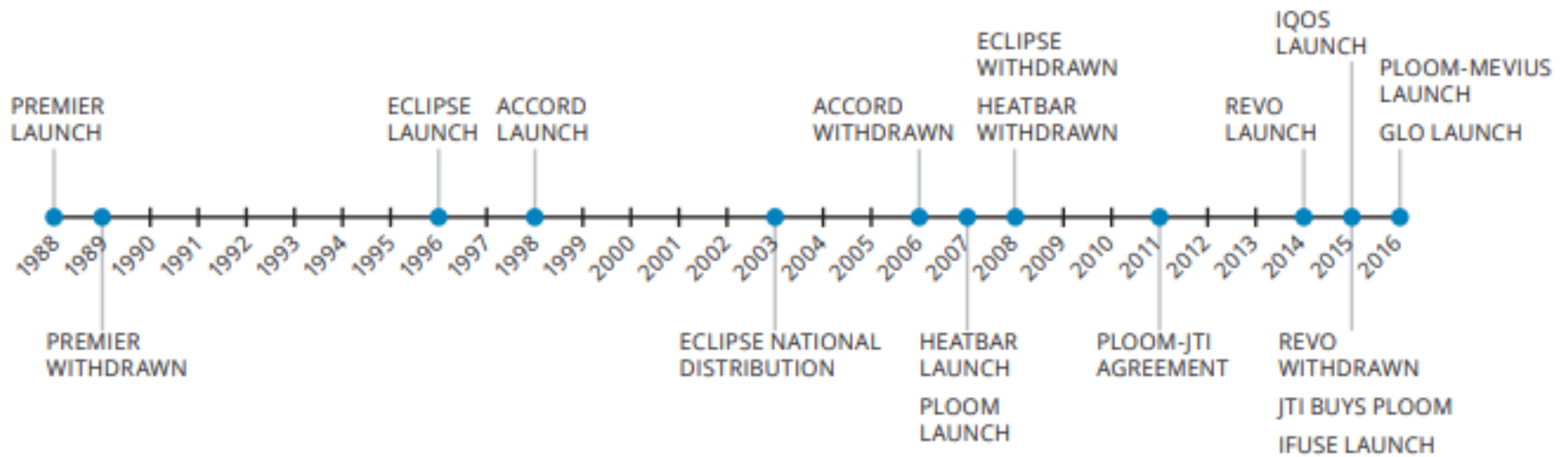
Heated tobacco products (HTPs) are tobacco products that produce an emission containing nicotine and other chemicals, which is then inhaled by users. HTPs are marketed as potentially reduced-exposure products, or even as modified-risk tobacco products.

Currently there is insufficient evidence to conclude that HTPs are less harmful than conventional cigarettes. In fact, there are concerns that while they may expose users to lower levels of some toxicants than conventional cigarettes, they also expose users to higher levels of other toxicants. It is not clear how this toxicological profile translates into short- and long-term health effects.

The Conference of the Parties to the WHO Framework Convention on Tobacco Control (WHO FCTC) recognises HTPs as tobacco products and therefore considers them to be subject to the provisions of the WHO FCTC

HTPs

- contain tobacco and are tobacco products
- do not help smokers to end tobacco use
- emit toxic emissions similar to those in cigarette smoke, many of which can cause cancer
- expose users to toxic emissions, some of which are specific to HTPs and which could also expose bystanders
- contain toxicants – though generally lower than those found in conventional cigarettes – this may not translate to a reduction in health harms; the levels of some toxicants are higher and there are new substances absent in tobacco smoke which could potentially harm human health
- contain nicotine, which is highly addictive, at levels similar to conventional cigarettes
- have an unknown long-term health impact in terms of their use and exposure to their emissions, and because there is currently insufficient independent evidence on the relative and absolute risk, independent studies are needed to determine the health risk they pose to users and bystanders



Nicotine pouches

Nicotine pouches are an alternate to smoking and vaping to use nicotine in a less harmful way (possibly) - give you a great nicotine kick, with their own flavours. All of them are tobacco-free and made out of natural ingredients.



Activity - 4 A's and 2 R's in Practice

Effective Stop Smoking Services

- Effective referrals
- Initial assessment
- Information on appropriate products
- Full explanation on effect of quitting smoking
- Practical issues – regular appointments; ease of getting prescription – no gaps, no changes; encouraging repeated quit attempts (after 6 months)

Sources of support

- www.stopsmokingni.info
- Quit kits (not currently available)
- Pharmacy
- GP
- Community
- Trust
- Hospital

N.I. Services 2024-25 – 23%

	Community clinic		GP Practice		Hospital		Pharmacist		Other	
Total number setting a quit date	N	%	N	%	N	%	N	%	N	%
	626		92		1524		6857		488	
Successful @ 4 week follow-up		61%		27%		73%		55%		64%

Successes in Stopping Happen When:



- The person is ready to stop.
- They understand their smoking pattern and reasons for smoking.
- Know why they want to stop smoking now.
- Are prepared for how they will feel when they stop.
- Have developed coping strategies.
- Make staying stopped a priority.
- See themselves as non-smokers rather than ex-smokers.

Further Information

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