

<b>Report to:</b>	Overview and Scrutiny Committee (Adult Social Care and Health)	<b>Date of Meeting:</b>	Tuesday 5 September 2023
	Overview and Scrutiny Committee (Childrens Services and Safeguarding)		Tuesday 26 <sup>th</sup> September 2023
<b>Subject:</b>	Report for information on Vaping amongst Young People		
<b>Report of:</b>	Director of Public Health	<b>Wards Affected:</b>	(All Wards);
<b>Portfolio:</b>	Health and Wellbeing		
<b>Is this a Key Decision:</b>	No	<b>Included in Forward Plan:</b>	No
<b>Exempt / Confidential Report:</b>	No		

### Summary:

The purpose of this report is to provide a range of relevant information about vaping amongst young people in Sefton. The content centres on presentation and discussion of findings from a recent, large survey of young people's experiences, attitudes, and behaviours towards vaping and smoking in Sefton. This report has been jointly prepared by Officers from Public Health and Trading Standards teams following a request for information from the Chair of the Overview and Scrutiny Committee Health and Social Care (Adults) at the start of the year.

### Key points to note are:

- In a large survey of over 800 mostly 14- and 15-year-olds carried out in Sefton around the start of 2023, almost half had tried vaping and one in seven (14%) reported vaping regularly. National figures show that vaping rates in young people tripled in 2021-22, which coincided with the widespread availability of disposable vapes. During the first six months of 2023, Sefton Trading Standards received twice the number of complaints about underage (under 18) vape sales compared to the whole of 2022. Trading Standards have also encountered many instances of imported devices on sale, which do not comply with regulations.
- One fifth of 14- to 15-year-olds surveyed in Sefton reported ever having smoked a cigarette – an all-time low. However, 8% smoke regularly, which is above the national target for this age group of 3% or lower.
- The peak age for trying vaping in the Sefton survey sample of 14- and 15-year-olds is 13 to 14. The top four reasons for vaping were: 'to give it a try', vape flavours, enjoyment, and nicotine addiction. More than 3 out of 4 children who vape also have friends that vape. Shops and peers are the two main ways of obtaining vapes in the survey and only 21% reported being asked for identification when purchasing. Most children in the survey understood the law around vape sales.

- There is evidence that vaping worsens childhood asthma, but not more so than smoking. It is scientifically plausible that vaping could affect healthy lung and brain development and possibly mental health.
- There is a large data gap regarding long-term toxicity from vaping. There are also notable gaps around the possible toxic effects of some flavouring compounds, and the implications of research carried out on animals for our understanding of the health effects of vaping in children and young people.
- The public health team is currently recommissioning the smoking cessation service. The current service<sup>i</sup> benefits from having a specialist young person's advisor who has led the introduction of a range of educational and service interventions for young people, including on the issue of vaping.
- The Trading Standards Service has increased the number of surveys it carries out testing vape retailers, using underage volunteers and continues to advise businesses, and take appropriate and proportionate enforcement action when necessary.
- An excellent recent report into youth vaping from Health Watch Blackpool<sup>ii</sup> includes welcome and valuable insights into the issue of illicit vape use. There is a need for further research into evidence-based approaches to enabling young people to stop vaping.
- The current national policy position on vaping is best summarised in a recent official statement by the Chief Medical Officer for England, 'If you smoke, vaping is much safer; if you don't smoke, don't vape; marketing vapes to children is utterly unacceptable.' The Government has recently announced proposals for a range of legal and other measures to prevent children from vaping, whilst protecting harm reduction benefits for adult smokers.

### **Recommendation:**

(1) To note and feedback on the content of this report.

### **Reasons for the Recommendation:**

This report is provided to the Overview and Scrutiny Committee (Adult Social Care and Health) following a request for information about vaping and specifically trends in youth vaping, which was made at the Committee's meeting on 3 January 2023. Trading Standards and Public Health Officers have worked together to provide a thorough overview of this issue and are using this information to further develop the local response.

### **Alternative Options Considered and Rejected: (including any Risk Implications)**

Not applicable.

### **What will it cost and how will it be financed?**

**(A) Revenue Costs**

**(B) Capital Costs**

This report does not seek or directly imply any additional revenue or capital costs.

## Implications of the Proposals:

### **Resource Implications (Financial, IT, Staffing and Assets):**

This report discusses how relevant services are responding to youth vaping using existing resources. The report does not directly address resource implications from increased use of disposable vapes and increased vaping amongst children and young people.

### **Legal Implications:**

This report discusses laws on vaping, but there are no legal implications from the report itself.

### **Equality Implications:**

There are no equality implications insofar as this report is based on presenting data from a regional survey of 14- to 17-year-olds, including over 800 children from Sefton. Differences by age, sex and ethnicity are noted where data is available. Data on disability, sexuality, and gender reassignment was not available. The lack of desirable information about the socio-economic background of survey participants is noted in the report.

### **Impact on Children and Young People: Yes**

This report is about vaping, and about vaping behaviour amongst children and young people in particular. The report describes the likely extent of this issue in Sefton and recent trends; evidence for health effects; factors that influence and motivate children to vape; and the ways in which children obtain vapes. This valuable information is being used by Trading Standards and Public Health teams in Sefton Council to guide their ongoing response to this issue.

### **Climate Emergency Implications:**

The recommendations within this report will

Have a positive impact	
Have a neutral impact	Yes
Have a negative impact	
The Author has undertaken the Climate Emergency training for report authors	Yes

This report does not identify negative or positive impacts of vaping on the environmental determinants of climate change. However, it does highlight concern surrounding environmental harm and degradation caused by littering of single-use vapes, which are rapidly growing in popularity.

## **Contribution to the Council's Core Purpose:**

### **Protect the most vulnerable:**

This report focuses on the self-reported vaping and smoking behaviour of a large sample of mostly 14- and 15-year-olds who attend school in Sefton. It describes widespread experimentation with vaping and regular use of vapes and cigarettes consistent with nicotine addiction amongst many children and young people in Sefton. Current law prohibits sales (but not free trials) of vapes to under 18s and purchase by adults on behalf of someone under 18. Nevertheless, most children reported sourcing vapes from shops, followed by peers. This was also the case in the North West as a whole. Non-smokers of all ages are advised not to start vaping. This information is being used by Trading Standards and Public Health Officers to shape the local response and will be made available to other stakeholders.

### **Facilitate confident and resilient communities:**

Strong population health is a cornerstone of community resilience. This information serves the goal of improving population health. It is very important that communities have confidence in the advice and support the Council provides. The survey information in this report includes valuable insights into the knowledge and beliefs of children and young people surrounding smoking and vaping. This is helpful to refine messages to children to avoid smoking and vaping in the first place, and that specialist support to stop smoking and vaping is available.

### **Commission, broker and provide core services:**

This information is being fed into current work to recommission Sefton's smoking cessation service, and to inform the educational and enforcement work of Trading Standards relating to the sale of age-restricted vape products.

### **Place – leadership and influencer:**

See comments under Cleaner Greener.

### **Drivers of change and reform:**

This report provides a useful overview of the scale of youth vaping in Sefton, the local and national response, and areas where more information or research may be needed. It identifies key groups of professional stakeholders that are advocating for a range of policy reforms.

### **Facilitate sustainable economic prosperity:**

Health and wealth are intertwined. Sefton's economic strategy includes population health and wellbeing as a priority area. Taking action to achieve a best start in life for all children and narrow childhood inequalities in health and wellbeing is also a cross-cutting aim in Sefton's other major strategic plans. This report contributes information

that will be used to help and improve the health of children and young people in Sefton.

**Greater income for social investment:**

Not applicable

**Cleaner Greener:**

This report notes population health issues associated with youth vaping, and also recognises the negative environmental impact from thousands of single-use vapes being disposed of on the street and in recreational, open spaces.

**What consultations have taken place on the proposals and when?**

**(A) Internal Consultations**

The Executive Director of Corporate Resources and Customer Services (FD.7343/23) and the Chief Legal and Democratic Officer (LD5543/23) have been consulted and any comments have been incorporated into the report.

**(B) External Consultations**

Not applicable.

This report presents the results of a survey of the health behaviours of 14- to 17-year-olds across the North West, including Sefton. It also draws on the knowledge and practice of Sefton Trading Standards Officers and staff working in the Smoke Free Sefton service.

**Implementation Date for the Decision**

Immediately following the Committee meeting.

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**Appendices:**

There are no appendices to this report.

**Background Papers:**

There are no background papers available for inspection.

**1. Background**

**1.1. Nicotine and nicotine inhaler devices**

Nicotine is a very addictive, psychoactive substance. When it reaches the brain it modifies the release of several neurotransmitters, which quickly increase

attention and focus, and reduce feelings of stress and anxiety. Human invention has devised many ways of getting nicotine into the body. For example, nicotine replacement therapies (NRT), which are used to help people stop smoking, include slower release formulations that deliver nicotine via patches placed on the skin, lozenges, and inhalators, and faster acting options e.g., chewing gum and mouth sprays. A variety of NRT products are available on open sale in supermarkets and chemists. The measured dose and delivery of nicotine from NRTs help smokers quit tobacco by reducing unpleasant withdrawal symptoms. Electronic cigarettes or ‘vapes’ are a type of nicotine inhaler device, and many people opt to use these to stop or reduce their smoking. Evidence reviews from national public health bodies have continued to produce recommendations in line with research findings, that for adult smokers the chances of quitting are highest amongst those who receive support from a stop smoking service and use both NRT products and vape products in their quit attempt.<sup>iii</sup>

Cigarettes, cigars, and pipes for smoking tobacco are another form of nicotine inhaler device, and so are newer ‘heat not burn’ tobacco products. The well known, harmful effects of tobacco are caused by the inhalation and ingestion of microfine, cancer-causing particles and harmful gases when tobacco is smoked or heated. Smokers understand that this is a lethal habit but continue to smoke largely because they have become dependent on the rapid ‘hit’ of nicotine in tobacco to feel ‘normal’.

## **1.2. Introduction of vaping to the UK**

The first e-cigarette was invented in China in 2003. They arrived in Europe around 2005 and grew in popularity, slowly at first and then more quickly.<sup>iv</sup>

The Office of National Statistics (ONS) has surveyed the prevalence of vaping in Great Britain by age, sex, frequency of use, and smoking status since 2014. The latest results were released in December 2022<sup>v</sup>; they show that among young adults (16-24 years old), 2017 was the peak year for the proportion who reported ever having tried vaping (31.7%), as well as for those who reported vaping daily (5.4%). In figures up to 2021, young adults have consistently reported almost the lowest rate of daily use (3.6%; lowest was in the 60 and over age group at 2.9%) but were most likely to have tried vaping at least once (19.0%). Adults in their 30s and 40s report the highest rates of regular use (9.2% in 2021), likely reflecting people turning to vaping to help them quit smoking and perhaps to save money.

As discussed in 2.4, it is illegal to sell vape products to someone under the age of 18 and to procure them on behalf of someone underage; but providing free samples has been legal, with the Government declaring its intention to close this loophole in May 2023. The ONS survey above includes 16- and 17-year-olds, but does not capture the recent, very noticeable growth in popularity of single-use, disposable vapes amongst the younger, school-age population in our communities. The next section looks at a nationwide survey of 11–17-year-olds, which shows how changes in vape technology coincided with increases in vaping in this age group.

### 1.3. E-cigarette technology and vaping amongst children and young people

The basic components of a vape are a battery, which powers a heated atomiser, and a reservoir of 'e-liquid' (propylene glycol or glycerol, typically with added nicotine and flavouring). When triggered, the atomiser heats the e-liquid, converting it into a mist or vapour of tiny droplets, which are carried into the mouth and lungs and dispersed into the air as the user breathes out.

Since the first 'cigalike' style vapes appeared in the UK, vape manufacturers have continued to launch new vape designs to meet demand from different parts of the market. Box kits feature larger batteries and refillable tanks; vape pens are slimmer in appearance and are also reusable; whilst pod kits are the smallest and most compact to date and include disposable vapes<sup>vi</sup>, of which the Elf Bar is by far the most popular brand in use amongst children and young people nationally (50%)<sup>vii</sup>.



Source: Ok Vape

Previous research suggested that when most vapes were reusable types, the 'faff factor' associated with charging, obtaining, and topping up e-liquid, may have deterred some underage users from moving beyond experimental use. Ease of use and ease of concealment are two important, but less obvious attractions of the latest disposable vapes for children and young people.

In a large-scale, annual survey of the vaping and smoking habits of 11- to 17-year-olds in Great Britain<sup>viii</sup>, it is striking that the prevalence of regular use more than doubled from 1.3% in 2021 to 3.1% in 2022. This jump in regular (and occasional) use coincides with the sudden emergence of disposable vapes as the

most frequently used type reported by this age group in 2022 (52%). Just one year earlier in 2021, only 7.7% reported using this type of device. The added appeal of single use vapes for children provides part of the rationale behind the Local Government Association's recent call for these products to be banned from sale and manufacture.<sup>ix</sup>

#### **1.4. Legal and regulatory status of vape products**

Devices used for vaping are known by various names e.g., electronic cigarettes, e-cigs, vapes, vape pens, nicotine inhaling devices. Even the legislation governing their manufacture, promotion and sale use differing terms, but a composite definition from the legislation defines them as: A device intended to enable nicotine to be inhaled through a mouthpiece but does not include:

- tobacco,
- cigarette papers,
- a device intended to be used for the consumption of lit tobacco,
- a medicinal product or medical device.

'Vape' is the term used in this report for such devices.

Trading Standards Officers are responsible for enforcing the various pieces of legislation designed to protect the public from the harms associated with using vapes. Most of the provisions are contained in the:

- Tobacco and Related Products Regulations 2016.
- Children and Families Act 2014.
- Nicotine Inhaling Products (Age of Sale and Proxy Purchasing) Regulations 2015.
- Children and Young Persons Act 1933.

#### **Product compliance**

The Tobacco and Related Products Regulations 2016 (TRPRs) sets out product requirements for vapes and their refill containers including:

- A maximum tank size of 2ml liquid (10ml for refill containers).
- A maximum nicotine concentration of 20 mg/ml.
- Must be child resistant, tamper evident and protected against breakage and leakage.
- Must not contain certain additives.
- All producers of vapes and refill containers must submit information about their products to the Medicines and Healthcare Regulatory Agency (MHRA). This includes ingredients and emissions information, toxicology data, information on the nicotine dose and uptake when used normally and a description of the components of the product. Producers must also notify of the withdrawal of a product from the market.
- Vapes cannot be sold until they are approved by the MHRA and details published on their website.



The TRPRs also prescribes the information required on labelling and accompanying documentation, including:

- A list of all ingredients, set out in descending order by weight.
- An indication of the nicotine content and the delivery per dose, (commonly referred to as 'puff' and often expressed as micrograms/puff or mcg/puff).
- A batch number.
- A recommendation to keep the product out of reach of children.
- The health warning '**This product contains nicotine which is a highly addictive substance**'.
- Instructions for use and storage of the product, including a reference that the product is not recommended for use by young people and non-smokers.
- Contra-indications.
- Warnings for specific risk groups.
- Possible adverse effects.
- Addictiveness and toxicity.
- Contact details of the producer/importer.

Failing to comply with the TRPRs is an offence punishable by an unlimited fine and/or 3 months imprisonment.

### **Underage Sales**

Under the Children and Families Act 2014 and the Nicotine Inhaling Products (Age of Sale and Proxy Purchasing) Regulations 2015, it is an offence to sell a vape to anyone under the age of 18. It is also an offence to purchase or attempt to purchase a vape for anyone under the age of 18. Both offences are punishable by a fine of up to £2500. Exemptions are provided for vapes supplied as a medical device in accordance with a prescription.

### **Repeat Offenders of Underage Sales**

Under the Children and Young Persons Act 1933, Trading Standards can apply to a Magistrates Court for a restricted premises order and/or a restricted sales order, if at least 3 underage sales offences have occurred in a 2-year period (at least one offence must have resulted in a conviction). These orders prohibit the sale of vapes from a premises and/or prohibit a specified person from selling vapes and from having any management function related to the sale of vapes, for a period of up to 12 months. It is an offence to contravene an order, punishable by a fine of up to £20,000.

## **2. Evidence of health effects of vaping on children**

In 2020, the UK Committee on Toxicity of Chemicals in Food, Consumer Products, and the Environment (COT) releases its statement on the potential toxicological risks from electronic nicotine (and non-nicotine) delivery systems (ENDS)<sup>x</sup>. The committee examined evidence on the effects on health of the main constituents in e-liquids and vapour: particulates, propylene glycol, glycerol, nicotine, flavourings and their breakdown products, and other compounds. Findings were expressed as a series of opinions that reflect absolute risk and risk relative to smoking cigarettes. The authors

note that, 'the assessment for users was predominantly limited to effects in adults, as ENDS products are not permitted for sale to anyone under 18 years of age in the UK'. Nevertheless, the report does reflect findings drawn from its own substantial review of relevant research, however the reliance on adolescent animal studies limited what the Committee was confident to express in its conclusions. Summary points are given below:

### **Gaps in evidence**

- There is a large data gap regarding long-term toxicity from vaping and it is not currently possible to predict the adverse health effects that could arise over the long term.
- The health effects of inhaling flavouring ingredients are an area of particular uncertainty. Evidence and concern currently focus on health risk from nicotine and inhalation of particulates, which includes a small amount of solid particles but mostly microscopic droplets of e-liquid vapour.
- Evidence relating to specific health risks amongst children and young people who vape still relies on studies carried out on animal models, e.g., adolescent rats, which have uncertain implications for humans.

### **Levels of risk: fresh air vs vaping vs smoking vs 'dual use'**

- Non-smokers who vape have a greater risk of experiencing irritation in the throat and lung; new or worse respiratory symptoms; possible allergic reaction to substances in vapour; and nicotine addiction. Research has shown an association between worsening of asthma symptoms in adolescents and vaping. The impact of vaping was not worse than effects measured in adolescents who smoke.
- In most second-hand vapour exposure scenarios, the level of exposure to nicotine from the air would be low, but for young children levels capable of causing health effects, such as those above are considered plausible.
- An 'experienced' user of vaping products who is using a high-powered device or e-liquid with a high concentration of nicotine achieve blood nicotine levels like those from an equivalent pattern of smoking (N.B., nicotine is not regarded as carcinogenic). Inexperienced users typically show blood concentrations that are lower than those achieved from smoking.
- Compared to smoking, the relative risk of adverse health effects would be expected to be substantially lower from vaping.
- There is some evidence that smoking and vaping ('dual use') could lead to increased risk compared with smoking alone.

### **Serious health problems**

- A cluster of recent high-profile cases of lung injury in the US related to the use of ENDS and involving young people was found to be linked to a thickening agent added to cannabis vaping products, which is banned from UK-regulated nicotine vaping products.

- Case reports in the medical literature describe poisoning from accidental ingestion of e-liquids containing nicotine. Many involved young children and resulted in vomiting, short-term metabolic problems and rarely, death.

### **Vaping and healthy development**

- Brain development continues until around 25 years of age in humans. Nicotine is a neuroactive substance, which means it interacts with specific receptors in the brain and alters the release of neurotransmitters. Hence, adverse neurodevelopmental effects might occur. However, more work needs to be done to understand the scale of these possible effects from vaping.
- Previous research into smoking has identified a possible two-way relationship between mental disorders and nicotine dependence. It is suggested that increased prevalence and intensity of smoking amongst people experiencing mental health problems may reflect the ability of nicotine to improve focus and reduce stress in some people (so-called self-medication), whilst it can also contribute to inattention and anxiety in others (reducing mental wellbeing). This is a notable finding at a time when more young people are vaping, and more young people are experiencing poor mental health.
- The committee also concluded that there is good biological plausibility for an effect of nicotine on healthy lung development.

#### **2.1. Cost and product warning labels**

The Medicines and Healthcare Products Regulatory Agency (MHRA) requires vape products that contain nicotine or could contain nicotine to display this warning, 'this product contains nicotine which is a highly addictive substance'. The cost of disposable vapes that are popular with young people such as Elf Bar or Lost Mary is around £5 to £6 in general retailers.

The messages and images carried on cigarette packets are also regulated. Cigarettes must now carry a general warning, smoking cessation support information, a health information message, and an image. Together these should take up most of the space on the otherwise plain packaging. The cost of a packet of cigarettes in a high street retailer is around £12.

#### **2.2. Policy developments**

##### **Tobacco Control Plan for England**

The Government is continuing to pursue the ambitions set out in its most recent tobacco control plan, *Towards a Smokefree Generation (2017-2022)*,<sup>xi</sup> which aimed to reduce smoking amongst 15 year-olds to 3% in 2022 from 8% in 2017. A smokefree generation is defined as a national smoking rate of 5% or less and the Government has set out to achieve this by 2030. The latest prevalence figures for England and Sefton in 2021 are 13.0% and 10.0%. Based on crude extrapolation of trend over the past decade it appears at least feasible that Sefton will reach this target, but improbable that it will be met nationally.

The now expired national tobacco control plan had a clear stance on preventing children from smoking through effective enforcement and by maximising the availability of safer alternatives to smoking for adults. There are several commitments to continue to evaluate the evidence base for vapes and to communicate what is known about the absolute risk of vaping for children. The strategic position was to, ‘... review policy and regulation of nicotine delivery systems to provide an environment that facilitates smokers taking action to improve their health and the health of those around them, whilst minimising any risk of new nicotine addiction in children’.

### **Recent national developments**

Recent developments in the national policy area of tobacco and vaping are well captured in a research briefing published by the House of Commons Library in June 2023.<sup>xii</sup> These have a clear emphasis on preventing children from vaping, and this priority has been informed and endorsed by several recent high-profile reviews and policy updates,

- An almost 1500-page report on Nicotine Vaping in England was produced by a team at King’s College London on behalf of the Office for Health Improvement and Disparities (OHID) in 2022<sup>xiii</sup>
- An independent review – The Khan review: making smoking obsolete was commissioned by OHID and published in 2022<sup>xiv</sup>.
- An update to the National Institute of Health and Care Excellence aimed at smoking cessation services was published at the start of 2023,<sup>xv</sup> which recommends supporting people to use vaping alongside different forms of NRT. NRT alone is also recommended for children aged 12 and over who smoke. The guideline does not address how children should be supported to stop vaping.
- The Royal College of Paediatrics and Child Health (RCPCH) produced a policy briefing on Vaping in Children in June 2023<sup>xvi</sup>, which emphasised that the harms of vaping and second-hand vaping are not fully established. The briefing went on to highlight evidence that vaping can be a gateway to nicotine addiction, with young people who vape being at higher risk of taking up smoking. THE RCPCH called for tighter regulation of sales and marketing of vapes and a ban on disposable vapes, which has been echoed by the LGA<sup>ix</sup> and Directors of Public Health in Cheshire and Merseyside.<sup>xvii</sup>
- A nationwide call for evidence on Youth Vaping ran from April through June 2023<sup>xviii</sup>.
- The Chief Medical Officer has released an official statement to the press, which he summarised in his own words as, ‘If you smoke, vaping is much safer; if you don’t smoke, don’t vape; marketing vapes to children is utterly unacceptable.’<sup>xix</sup>

Tobacco control policy will now be delivered within the new Major Conditions Strategy, which succeeds the Health Disparities white paper. Whilst there will not

be a new standalone tobacco control plan, the Government has announced several measures it intends to implement, for example,<sup>xx</sup>

- Increased education<sup>xxi</sup> and dedicated school police liaison officers to keep illegal vapes out of schools.
- Review of rules around sale of nicotine-free vapes and fines for shops selling illicit vapes.
- Closure of the loophole that permits children to be given free samples of vapes.
- A new 'illicit vapes enforcement squad', led by Trading Standards services with additional £3 million funding from the Government.
- Introduction of a two-year national scheme to support one million smokers to 'swap to stop', by providing them with a free vaping kit, targeting settings such as job centres, homeless centres, and social housing providers.

### **2.3. Environmental impact**

At a time when the threats to population health from all forms of environmental pollution are becoming increasingly well understood and visible in day-to-day life, vaping has come under the spotlight. For example, the Chief Medical Officer's independent report on Air Pollution in 2022, notes that vaping contributes to the chemical burden of indoor air pollution.<sup>xxii</sup>

Calls to ban disposable vapes have led on the environmental pollution issues created by people throwing away over a million vapes each week in England and Wales.<sup>ix</sup> Lithium batteries are not designed to be easily removable from these products for separate recycling and have been the cause of fires during waste processing and when discarded as litter. Disposable vapes are an increasingly common form of plastic pollution, visible in urban and natural environments.

## **3. Health effects of smoking**

### **3.1. Tobacco-related harm across the life course**

Smoking is the single biggest preventable cause of illness, chronic conditions and death affecting our population today. It is also the single biggest driver of unequal health outcomes patterned along lines of socio-economic inequality.

Cigarettes contain over 5000 chemicals, which are released as they burn. Well known toxins are tar and carbon monoxide gas and over 70 separate cancer-causing compounds have been identified, with more remaining to be discovered, despite decades of regulation aimed at reducing the health harms of cigarettes and other forms of tobacco.<sup>xxiii</sup>

Exposure to these compounds affects children's health from conception onwards. There is clear evidence linking smoking in pregnancy and exposure to second-hand smoke to risk of prematurity and associated complications, sudden infant death, and respiratory infections, glue ear, and meningitis in childhood. Cigarettes also pose a major risk of fire in domestic settings, although there has

been more publicity surrounding vapes in this context in recent years. Parental tobacco addiction has previously been identified as an exacerbating factor in child poverty.<sup>xxiv</sup> As is now being seen with vapes, tobacco waste has been an almost ubiquitous form of litter and environmental pollution for decades.

### **3.2. Tobacco addiction in young people**

The younger someone starts to smoke, the greater the harm is likely to be, because early uptake is associated with subsequent heavier smoking, higher levels of dependency, a lower chance of quitting, and higher mortality.<sup>xxv</sup> This explains the continued emphasis on primary prevention and early intervention in both local and national approaches to smoking policy, as well as concern about the implications of vape use amongst young people.

In *Smoking and Health*, a lengthy report produced by the Royal College of Physicians in 2021<sup>xxvi</sup>, just before the take off in disposable vape use amongst young people, the authors note that,

‘There is consistent evidence that tobacco-naïve young people who use an e-cigarette are more likely to go on to smoke, although it remains unclear the extent to which this is a causal connection, reflects common risk factors, or is a combination of the two. Certainly, the risk of becoming a smoker following initial e-cigarette use is much lower than the risk of becoming a regular smoker following a single cigarette: a meta-analysis found that two-thirds of people who tried one cigarette went on to temporarily become daily smokers.’

This observation reflects the potency of the nicotine ‘hit’ from cigarettes and the susceptibility of young people to nicotine addiction and was linked to a recommendation that individual cigarettes should each carry a printed health warning.

The data discussed below, provided by over 800 young people shows that in 2023 14% of young females and 11% of young males described themselves as regular vape users (using more than once per week). This suggests widespread patterns of nicotine use, which are in keeping with dependence and which could set the scene for other nicotine containing products, including cigarettes and smoked cannabis. This possibility is already reflected in Sefton’s local response (see section 5.2).

## **4. Results of a survey of vaping in Sefton**

### **4.1. Survey methodology**

The data presented and discussed below belongs to a series of surveys of 14–17-year-olds that are carried out every two years in local authorities across the North West region. The series dates back to 2005, and in 2020 and 2023 a local authority level report as well as a regional analysis has been produced. The

report is jointly commissioned by Trading Standards North West (TSNW) services and the provider was Mustard Research.

The data in the latest report was gathered between November 2022 and February 2023. The survey included questions about young people's experiences with alcohol, smoking, shisha, vaping, and knives. Each of the 21 participating local authorities were responsible for disseminating the survey, and 810 anonymous responses were received from Sefton, accounting for 5.7% of the total number of surveys that were returned.

- 56% of Sefton respondents were aged 14, 42% aged 15 and, 1% 16 or 17.
- 89% were of White ethnicity and 11% recorded another ethnic group.
- 54% gave their gender as male, 43% as female and 3% gave another gender.

Some limitations of the survey process and analysis are listed in section 4.4 of this briefing report.

#### 4.2. Descriptive statistics on vaping

The graphs below are reproduced from the latest Trading Standards North West report for Sefton, published in 2023. Commentary below each graph emphasise key points, including any important changes from the previous Sefton level survey in 2020 and comparison with data for the North West region.

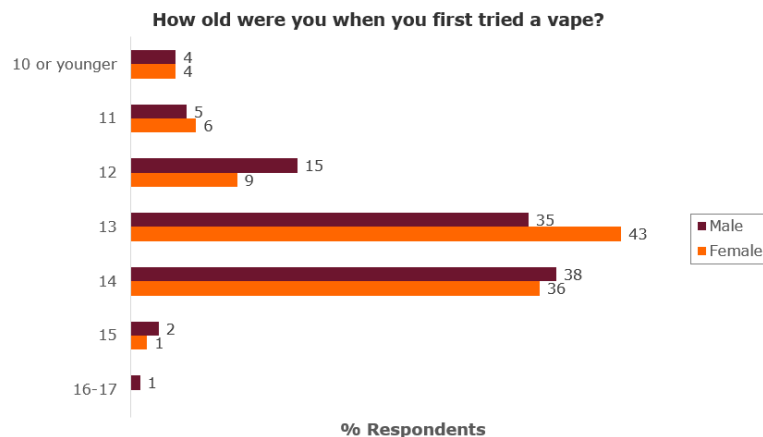
##### Prevalence of vaping experiences



- Between 2020 and 2023 the percentage of young people surveyed who vape regularly has increased from 3% to 14% and 43% have now at least tried vaping compared to 35% in 2020.
- These statistics mirror data at North West level, and support the common perception that an increasing proportion of young people now vape.
- The shift into regular vaping (noting that 1 in 6 young women and girls reported vaping regularly) likely reflects the popularity and accessibility of fashionable brands of disposable vapes for young people.

## Age at first experience of vaping

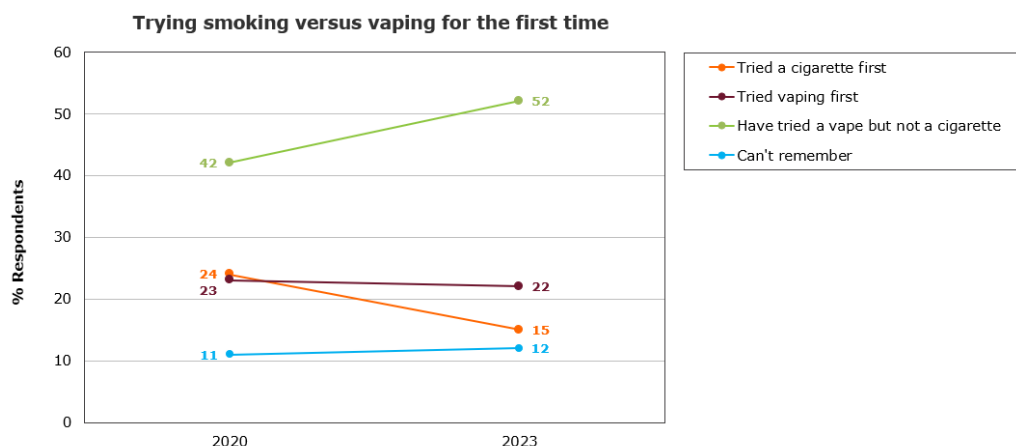
Boys and girls in Sefton are most likely to first try vaping between the ages 13 and 14.



- The peak age for trying vaping is 13 and 14; boys are more open to experimentation a little younger, at age 12, while 43% of girls first tried vaping when they were 13. This pattern is broadly similar in the North West data, except for a higher proportion first trialling vaping at age 15 (16%). This is due to the higher representation of 16-year-olds in the North West sample.

## Order of trying smoking and vaping

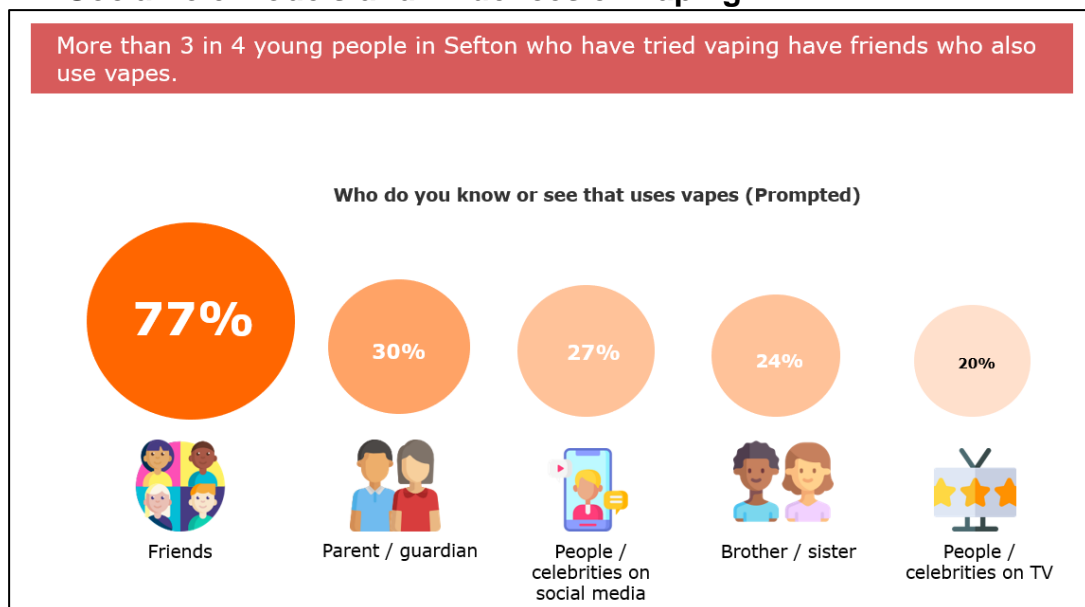
In line with the [North West](#) overall, young people in Sefton are increasingly trying vaping rather than smoking tobacco cigarettes.





- The graph above has two lines that move in opposite directions from 2020 to 2023. The orange line shows the percentage of young people who tried a cigarette first and then moved on to vaping – 24% in 2020, down to 15% in 2023. The green line shows the percentage that started with vaping and had not ever tried a cigarette when they were surveyed – 42% in 2020, up to 52% in 2023.
- North West level data covers a longer time period back to 2015. It shows a complete reversal in the pattern of trying smoking and vaping. In 2015, 50% of survey respondent said they tried a cigarette before they tried a vape, and only 25% had tried a vape and had not tried a cigarette. Eight years later in 2023, 50% of respondents had tried vaping but not smoking, and only 18% had tried a cigarette before trying a vape.
- This clearly suggests that changes in availability, appeal and beliefs about vaping and possibly also smoking are drawing more young people to experiment with vaping at a young age, when in the past they may have first experimented with smoking.

### Social role models and influences on vaping

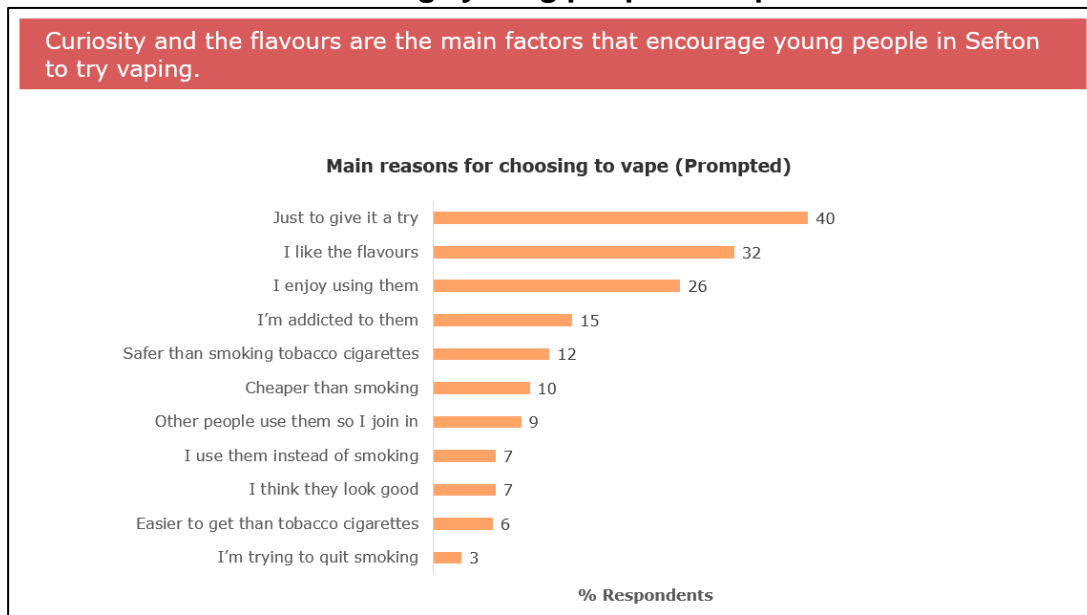


- When vaping first became popular young people often reported the availability of vaping equipment at home as an influence on early vaping.
- The statistics above align with well-established theory about social influences and cues towards health behaviours, e.g., only 23% of young people that were surveyed in Sefton reported that they had no friends who vaped. Research shows that friendship groups are a major influence on a range of health behaviours from a young age.
- Brothers and sisters, people on TV and social media are all examples of usually older peers with positive status in the eyes of children and young people. Regularly encountering these reinforcing images of

vaping is an important way that young people internalise cultural norms for their age group and social groups.

- Not all media aimed at a youth audience will cast vaping in a positive light, but it is interesting to reflect on and contrast the changes that have come about in relation to media depictions of smoking in recent years.

### Factors which encourage young people to vape

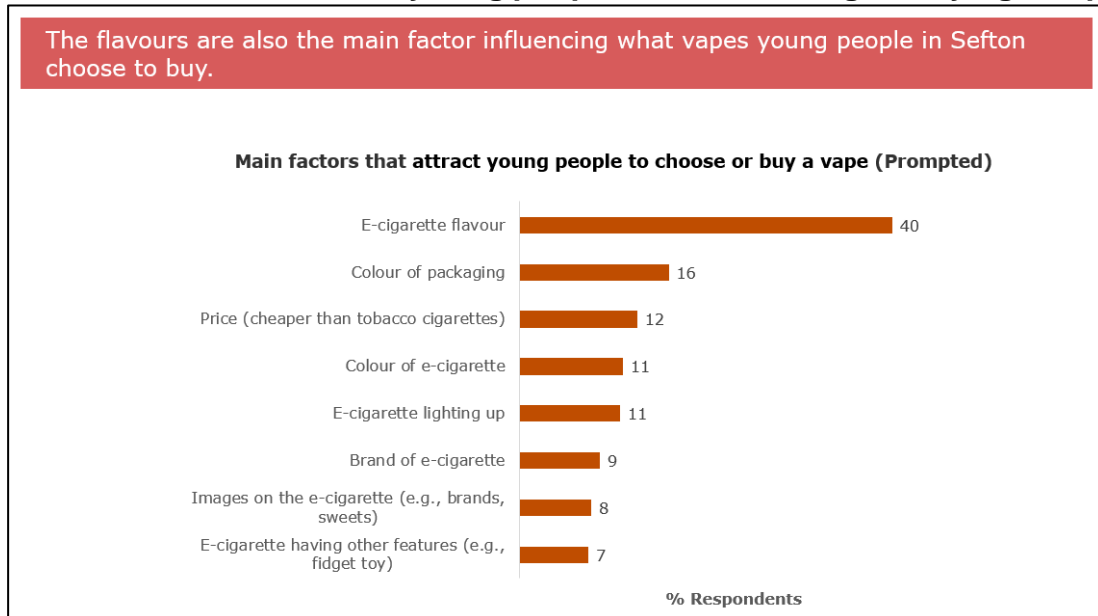


- This data deals with the young people's motivations to vape in Sefton. The findings for this question closely mirrored findings in the North West as a whole.
- The top reported reason is 'just to give it a try' (40%). This reflects a typical openness to new experiences for this age group and may be underpinned by attitudes to risk and reward.
- The second highest motivation is 'I like the flavours' (32%). The sensory reward of sweet, fruity taste is an evolutionary adaptation in growing humans, and the range of different flavours to try maintains a higher degree of novelty value, compared to traditional cigarettes, which largely relied on brand affiliation.
- The third main reason for choosing to vape is 'I enjoy using them' (26%). This partly reflects the previous point, but also identifies with the next reason 'I'm addicted to them' (15%). The positive reward neurological reward from using addictive substances experienced as enjoyment, good mood, relaxation, pleasure etc is a key first step in the pathway to developing physical and psychological dependence. It is the same mechanism as for nicotine in cigarettes.
- As noted previously, the hit of nicotine for inexperienced users of vapes is lower than that from a cigarette. Without the other motivations described above it is likely that fewer young people would maintain a vaping behaviour long

enough and with sufficient intensity to develop physical dependence/addiction, which then becomes a potent driver of continued, regular use.

- A number of the other reasons for vaping make comparisons with smoking, recognising vaping as safer, cheaper, an alternative to smoking, an aid to quitting smoking, and more available than cigarettes. Although the percentages are small, these represent a large number of young people who are rejecting or trying to reject smoking by choosing to vape. Vaping is a healthier swap for smoking, but the healthiest swap is to fresh air.

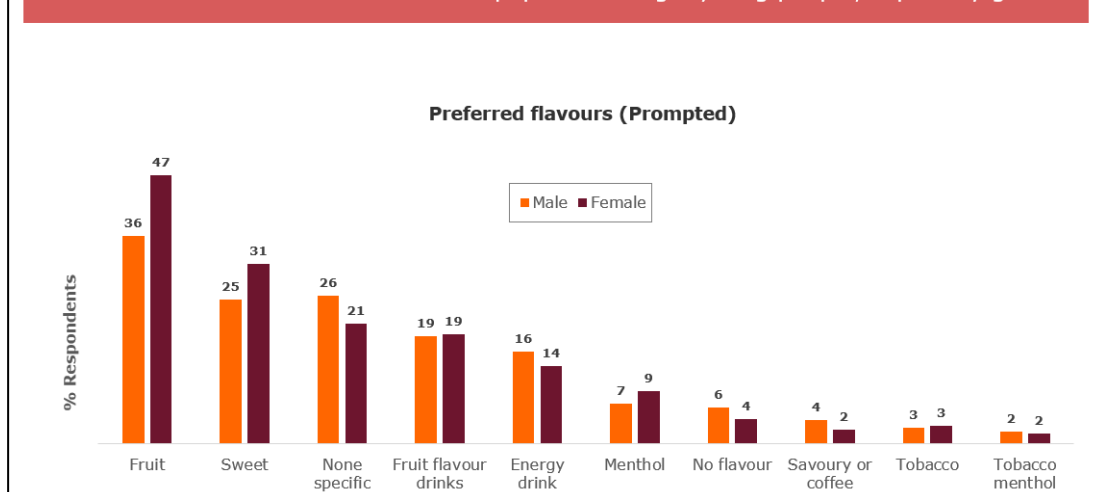
### Factors that matter to young people when choosing or buying a vape



- This a question about consumer choice and preference in response to the vapes available to young people in Sefton. The prompt in the survey is about what young people choose or buy, even though none of the young people surveyed were old enough to have been sold a vape product legally.
- The biggest influence on choice was flavour, 40% mentioned this. Policymakers in favour of maximising the potential of vapes as a quit aid for adults often point to the fact that flavour choice, especially alternatives to tobacco are an important part of the appeal of vapes for people of all ages.
- The effectiveness of promoting flavour, colour, novelty, brand, and price with young people, and even children in mind (note the bottom two responses which mention images of sweets and built in toys) is borne out by these statistics.

### Vape flavour preference

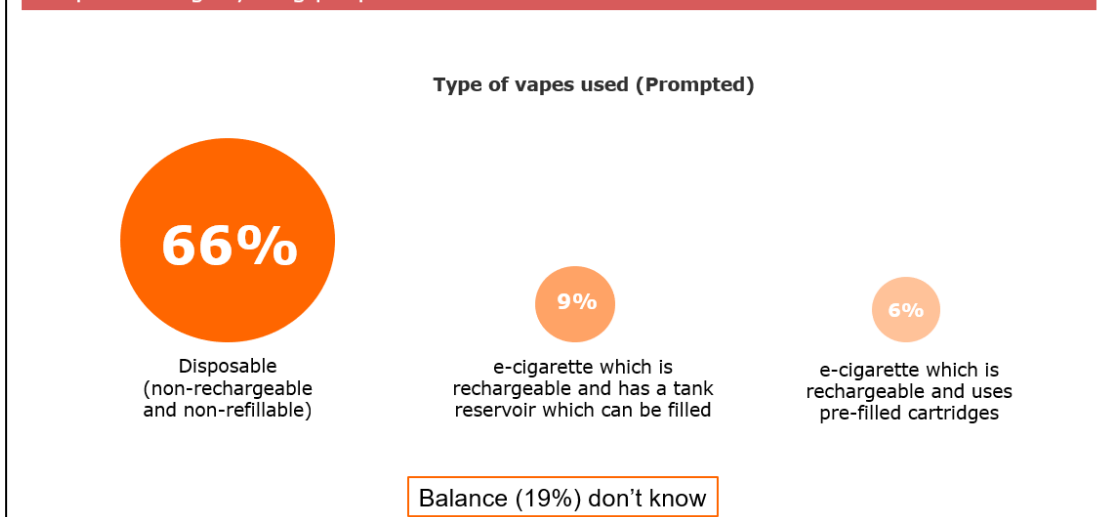
Fruit and sweet flavours are the most popular amongst young people, especially girls.



- Fruit flavours are the most popular with young males and females. In fact, fruit flavour is the most popular in all age groups up to age 55, after which tobacco flavour takes its place<sup>xiii</sup>.
- Recent research into the health impacts of flavourings in vape products has suggested the possibility that some may strengthen the effect of nicotine, and some, though non-toxic themselves, may interact with other ingredients causing new compounds, which may have toxic potential. This is recognised as an area in need of further research<sup>x, xiii</sup>.

### Vape design preference

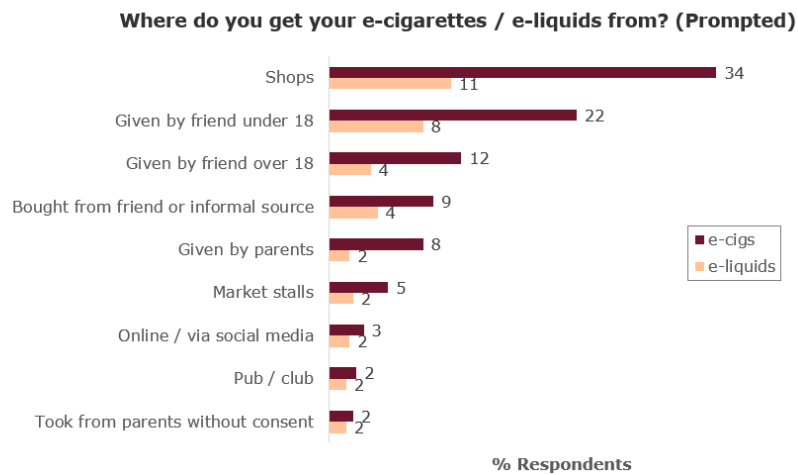
Consistent with the North West region, disposables are by far the most used type of vapes amongst young people in Sefton.



- In the latest survey in Sefton, two thirds of young people were using disposable vapes, and note a further one in five could not say what type of vape they had used, so the true percentage may be even higher.
- This clearly reflects the same rapidly rising trend shown in national figures discussed in 2.3 above.

## Sources of vapes and e-liquids amongst young people

Young people in Sefton are more likely to use e-cigarettes than e-liquids, and get them primarily from shops and / or friends who are also underage.



- The most common response to the question of where young people obtain vapes was 'shops' (34%), although the breakdown of purchase and free samples is not specified. The next most common response is 'given by a friend under 18'. Together these were usual sources for almost half of respondents and shows that young people are used to taking steps to obtain vapes for themselves and peers.
- It is noticeable that market stalls, online retail, and pubs/clubs are a source of vapes for just 10% of respondents.
- Parents (8%) and friends aged over 18 (12%) were the source of vapes for one in five respondents, but taking from parents without consent was mentioned by just one in fifty. This may suggest that a lack of awareness or understanding of the law, growing tolerance of this behaviour amongst young people or sympathy on the part of purchasers for the distress caused by nicotine withdrawal.
- Two thirds of the 14–17-year-olds in this survey denied shopping for vapes. Of those who did, just 21% said they were asked for identification (a similar experience was reported by young people who bought cigarettes, and slightly more were asked for identification when attempting to buy alcohol, even so, 72% were not asked for ID). Looking at the North West level figures, respondents from Sefton were slightly less likely to be asked for ID when buying cigarettes and alcohol and slightly more likely to be asked when shopping for vapes.
- Using another person's identification to facilitate purchase of vapes does not seem to be common - only 11% reported doing this. North West figures show that when shopping for vapes, cigarettes or alcohol use of fake identification is less frequent than in Sefton. This may reflect the overall younger age profile of the Sefton survey sample.
- In terms of the law, only 16% did not know that selling vaping products to under 18s is illegal, but 22% denied knowing that it is illegal for someone over 18 to buy vaping products for someone younger.

#### **4.3. Descriptive statistics on smoking and shisha use from the TSNW survey for Sefton 2023**

To further understand the context surrounding this vaping data, it is useful to also examine survey results for the two other non-therapeutic nicotine inhaler devices that continue to attract underage users, namely cigarettes and shisha.

- It is just over 16 years since the ban on smoking in indoor public spaces came into effect on 1 July 2007. At that time 21% of respondents to this survey in Sefton reported smoking. In 2020, this figure had dropped to an all-time low of 5% of 14–17-year-olds. This may have reflected a degree of pandemic suppression, because in the current 2023 survey 8% (61/767) claimed to smoke cigarettes occasionally or daily. This suggests that Sefton came close to but missed reaching the national government target of 3% of 15-year-olds smoking occasionally or regularly by 2022.
- 79% of young people in the 2023 survey reported that they had never tried smoking (92% had never used shisha), which is an all-time high in Sefton and is in dramatic contrast to the situation at the start of this data series in 2007 when only 40% of survey respondents in Sefton said they had never tried smoking. In the current survey, just over half of respondents (57%) said they had never tried vaping, and most had not tried a cigarette before trying vaping.
- Characteristics that were more associated with having never tried smoking and shisha were, being male, being at the lower end of the 14-17 age range and being White.
- The most frequently reported age to try smoking for the first time was 13 or 14 years (59% of responses in total), which is similar to what children reported about their first experience with vaping. Surprisingly, the next most frequently reported age for smoking was under the age of 10 years (17% of respondents reported being this young when they first tried smoking). In the North West survey, the figure is 10% for the under ten age group. A substantial part of the disparity between these two sets of data likely depends on the more balanced age profile at North West level compared to Sefton, which has 1.2% of its sample in the 16 and 17 age group.
- This data suggests that some young people who would have taken up smoking by the age of 14 are now not experimenting with cigarettes or shisha but are trying out vaping. It is also clear that a proportion of children who would never have smoked are open to vaping.
- The data does not provide direct information about take-up of smoking after trying vaping, but only 14% of children in the North West survey who had tried smoking said they had first tried it at age 15, and only 2% at age 16 or 17. The typical pattern appears to be first encounter with vaping and smoking at age 13 to 14, with a significant minority of 20-30% experimenting at younger ages.
- The younger the age at which someone starts smoking habitually, the stronger the addiction tends to be. As noted in the previous section, 7% said they vaped as a replacement for cigarettes, and 3% reported vaping to help them quit smoking.

- Despite shisha use having fallen from 12% in 2020 to 8% in 2023, the most reported reason for trying shisha remained a false belief that it is safer than smoking (65%, down from 82% in 2020); other common motivators were the flavours and relaxing effect. Given the superficial similarities between shisha and vapes, it is important to ensure that young people are supported to quit shisha use and to avoid trying shisha, and this may require messaging targeted at parents as well as peers.
- As for vaping, shops and peers were the main source of cigarettes, followed by older friends. Just 10% of respondents claimed not to know that selling cigarettes to someone under 18 is against the law; 17% claimed not to know that it is illegal for someone 18 or over to buy cigarettes on behalf of someone under 18 (not understanding this law was higher for vaping – 22% claimed not to know this arrangement is illegal).
- For shisha, holidays and shisha cafes were the two main venues for using shisha but compared to 2020 there was a rise in young people who reported using shisha at home, and the influence of family and friends on using shisha was significant, especially so for minority ethnic groups.

#### 4.4. Survey limitations

As with all population surveys, this one has some limitations. These affect how confidently data can be interpreted over time, and between Sefton and the North West, and also the ways in which the report is capable of informing the local response.

#### Demographic differences between samples

As shown in the example below using age, the Sefton 2023 sample of 14–17-year-olds was almost entirely comprised of 14- and 15-year-olds, and the lack of 16-year-olds is an important difference compared to the North West sample and also the previous sample from Sefton in 2020. Since the author of the report does not mention that a statistical process such as ‘weighting’ has been applied to overcome this difference in age profile it is important to recognise the possibility that some comparative differences are likely to reflect differences in age to some extent, and possibly to a large extent, as well as possible changes or differences in beliefs and behaviours. This type of issue has been highlighted in the commentary in the previous section.

Age of respondent (years)	% of Sefton sample 2023 (2020)	% of North West sample 2023
14	56.0 (29.0)	33.0
15	42.0 (49.0)	49.0
16	<1.0 (22.0)	17.0
17	<1.0	1.0

## **Omissions and question structure**

Understandably, questions are added to and removed from the survey over time as new issues arise to explore. Sometimes, questions are phrased or analysed differently in different report cycles, and this can add to the difficulty of examining some trends.

Some questions and data points, which were missing from the 2023 survey include young people's experience of dual use (vaping and smoking); awareness of illicit vapes; frequency of being offered free vape samples; and an indication of socio-economic background. This last omission would help to inform comparisons over time and with the region; suggest how representative the large sample of 810 is compared to the whole population of 14- to 17-year-olds in Sefton and could be used to better understand social inequalities in smoking and vaping in the borough.

## **Recall**

Some questions in the survey ask young people to recall the age at which they first tried smoking or vaping. Vape technology continues to develop at a rapid pace, and it is important to recognise that the age of first trying vaping for many in the survey will pre-date the widespread availability of disposable vapes, so responses for this type of question may not be a good reference for how children in primary school and the start of secondary school will respond to disposable vapes.

## **5. Local response**

### **5.1. Trading standards**

Trading Standards enforce the legislation around both product compliance and underage sales. However, they do not have any powers to deal with non-compliant products at the border. As the vast majority of vapes are imported, this has led to the market being flooded with non-compliant devices. Leaving Trading Standards to deal with the problem inland. In Sefton this has meant visiting retailers and examining vapes, seizing non-compliant products and advising businesses of their responsibilities under the legislation and how to ensure the vapes they sell are compliant.

Over the last 18 months the Trading Standards service has seen an increase in complaints regarding the underage sales of vapes. During the first 6 months of 2023, twice the number have been received compared to the whole of 2022. As a result, the service has increased the number of surveys it carries out testing vape retailers, using underage volunteers. The TSNW Young Persons survey has validated this action.

The service will continue to focus its underage sales activities on vapes, provide advice to businesses, and take appropriate and proportionate enforcement action when necessary, including the use of restricted premises/sales orders.



Members can encourage the public to provide intelligence to Trading Standards around underage sales and illicit vapes, via the Citizens Advice Consumer Helpline on 0808 223 1133 or email the Trading Standards service direct using [etscontact@sefton.gov.uk](mailto:etscontact@sefton.gov.uk)

## 5.2. Public health

The Public Health team are currently recommissioning the Stop Smoking Service and updating the specification which will include a priority focus on smoking amongst children and young people. The specification is also being updated to reflect the growing prevalence of vaping amongst young people in Sefton.

The current stop smoking service provider continue to deliver workshops across secondary schools and youth groups in Sefton with clear messages around the individual and combined risks associated with smoking and vaping. This work benefits from being led by a specialist young person's advisor from the service, and support has expanded to now include,

- Train the trainer session to upskill school staff to address smoking and vaping at their school.
- Delivering assemblies to give an overview of the risks of smoking and vaping.
- A series of 6 workshops to help students understand the dangers of smoking and the benefits of quitting.
- 1:1 and group support to quit, delivered in person, over the phone or on video call.
- Offer of NRT to use during the school day for young people experiencing addicted to vaping.
- Colocation at Brunswick Youth Club, Sefton Youth Council.

Additionally, at the start of the academic year in 2022 the service commissioned a theatre company to deliver a play and associated workshops for primary pupils as a means of delivering a preventative message to younger children on the risks associated with smoking and vaping.

The Sefton Tobacco Control group also plans to introduce a stronger focus on vaping in Sefton by bringing together key partners to explore the different aspects highlighted in this report.

## 6. Recommendation

- 1) To note and feedback on the content of this report.

<b>Margaret Jones</b> Director of Public Health	<b>Peter Moore</b> Assistant Director Place (Highways and Public Protection)
Helen Armitage Consultant Public Health	Steve Smith Service Manager Environmental Health & Trading Standards
Heather Redhead Public Health Lead	Tony Jackson Manager – Trading Standards

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- i [Smoke Free Sefton – We’re here to help you stop smoking. For good.](#)
- ii [Children and young people’s vaping report - Blackpool - Healthwatch Blackpool](#)
- iii [Vaping in England: an evidence update including vaping for smoking cessation, February 2021 \(publishing.service.gov.uk\)](#)
- iv [Electronic cigarettes: report commissioned by PHE \(publishing.service.gov.uk\)](#)
- v [E-cigarette use in Great Britain - Office for National Statistics \(ons.gov.uk\)](#)
- vi [Beginners Guide to Vaping | Vape Information Hub | OK Vape](#)
- vii [Use-of-vapes-among-young-people-GB-2023.pdf \(ash.org.uk\)](#)
- viii [Use-of-vapes-among-young-people-GB-2023.pdf \(ash.org.uk\)](#)
- ix [Councils call for ban of disposable vapes | Local Government Association](#)
- x [COT E\(N\)NDS statement \(food.gov.uk\)](#)
- xi [Smoke-free generation: tobacco control plan for England - GOV.UK \(www.gov.uk\)](#)
- xii [The Smokefree 2030 ambition for England CBP-9655.pdf \(parliament.uk\)](#)
- xiii [Nicotine vaping in England: an evidence update including health risks and perceptions, September 2022 \(publishing.service.gov.uk\)](#)
- xiv [The Khan review: making smoking obsolete - GOV.UK \(www.gov.uk\)](#)
- xv [Recommendations on treating tobacco dependence | Tobacco: preventing uptake, promoting quitting and treating dependence | Guidance | NICE](#)
- xvi [Policy briefing: Vaping in young people | RCPCH](#)
- xvii [Directors of Public Health in Cheshire and Merseyside condemn harmful disposable vapes and “disgraceful” targeting of children by tobacco companies | Champs Public Health Collaborative](#)
- xviii [Youth vaping: call for evidence - GOV.UK \(www.gov.uk\)](#)
- xix [Chief Medical Officer for England on vaping - GOV.UK \(www.gov.uk\)](#)
- xx [No more free vapes for kids - GOV.UK \(www.gov.uk\)](#)
- xxi [Vaping year 9 lesson pack \(pshe-association.org.uk\)](#)
- xxii [Chief Medical Officer’s Annual Report 2022 \(publishing.service.gov.uk\)](#)
- xxiii [What chemicals are in a cigarette? | What does smoking do to your body? \(cancerresearchuk.org\)](#)
- xxiv [Parental smoking and child poverty in the UK: an analysis of national survey data | BMC Public Health | Full Text \(biomedcentral.com\)](#)
- xxv [Young people and smoking - ASH](#)
- xxvi <https://www.rcplondon.ac.uk/file/30236/download>