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# Environmental Impact

## Vaping



## Disposable Vapes

**Disposable vapes** are designed to be used once and then thrown away once the e-liquid has run out. They are **not refillable or rechargeable** and contain materials such as **plastic, copper, rubber, and lithium batteries**, which are valuable but difficult to recycle.

Since **1 June 2025**, it has been **illegal to sell or supply disposable vapes in Wales** under the *Environmental Protection (Single-Use Vapes) (Wales) Regulations 2024* (all UK countries have equivalent bans).

The ban aims to reduce **environmental damage, plastic waste, and fire risks** linked to discarded batteries.

Existing disposable vapes can and should be **disposed of responsibly**. Because they are classed as **Waste Electrical and Electronic Equipment (WEEE)**, they **must not** go in household bins. They should be **recycled through approved collection points or take-back schemes**.



# Disposable Vapes - Government Action

Due to growing concerns about the impact of **single-use vapes on young people's health and the environment**, the **Welsh Government**, along with the **UK and Scottish Governments**, introduced legislation to **ban the sale and supply of disposable vapes**.

The new law — the *Environmental Protection (Single-Use Vapes) (Wales) Regulations 2024* — came into effect on **1 June 2025** and applies to **both nicotine and non-nicotine products**.

The decision followed an **overwhelmingly positive public response**, with almost **70% of parents, teachers, healthcare professionals, and members of the public** supporting stronger restrictions to protect health and reduce waste.

This move was part of Wales' wider goal to create a **smoke-free, sustainable future** and reduce harm to children, young people, and the environment

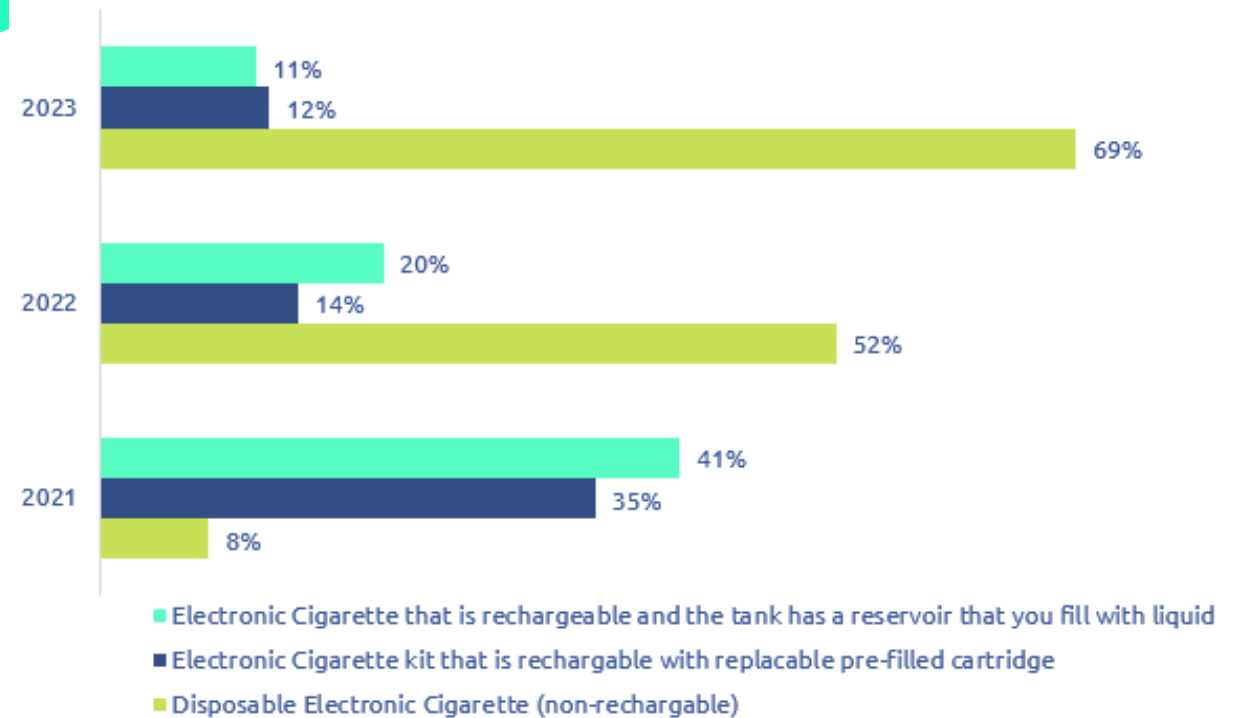
## Disposable Vapes

The use of disposable (single-use) vapes **increased sharply among young people** in recent years. According to the **ASH “Use of E-Cigarettes Among Young People in Great Britain” Survey (2023)**, **69% of current young vapers** reported using disposable vaping devices — up from **just 8% in 2021**.

This rapid rise is thought to be because **disposable vapes were cheaper, widely available, and often marketed in appealing flavours and colours**, making them **more accessible to young people**.

From **June 2025**, the **sale and supply of disposable vapes has been banned in Wales** to help tackle youth access, reduce waste, and support public health.

Most frequently used e-cigarette by device type, 11-17yr olds in the UK (2021 -2023)



Source: ASH Smokefree GB Youth Surveys

# Disposable Vapes

Facts about disposable vapes and the environment:

- Research from [Vape recycling: retailers, producers and councils briefing](#) found that in 2024 around 5 million disposable vapes were thrown away every week in the UK — enough to fill 22 football pitches.
- The number of disposable vapes discarded had quadrupled between 2022 and 2024, creating a growing waste and pollution problem.
- These products contain plastics, metals, and lithium batteries that are difficult to recycle and do not decompose naturally.
- When littered, vapes can leak harmful chemicals into soil and water, posing risks to wildlife, humans, and the environment.
- The lithium batteries inside disposable vapes can cause fires if not disposed of correctly.
- Because of these impacts, it is now illegal to sell or supply disposable vapes in Wales (from 1 June 2025) under the *Environmental Protection (Single-Use Vapes) (Wales) Regulations 2024*.
- The ban supports Wales' aim for a cleaner, greener, and more sustainable future.

Information about how to safely recycle vapes and other electrical waste in your area is available on the [Recycle Your Electricals](#) website.

## Microplastics

Vaping devices contain metals and plastics which can take many years to decompose.

Rather than decomposing, plastic turns into “microplastics” which continue to pollute the environment, our food and drinking water for many years.

Microplastics are tiny fragments of plastic smaller than 0.5 cm. These plastics break down slowly but do not decompose fully.

Overtime microplastics become small enough to be accidentally consumed by living things. They 'bioconcentrate' in food chains because they cannot be excreted. The effects of this build-up are not yet fully understood\*.



# Lithium

Lithium is a light, soft and low-density metal that can be found in many batteries.

Disposable vaping devices contain lithium batteries which, if damaged, can pose a fire hazard when thrown away in general waste or recycling.

Lithium is also a very valuable metal but tonnes of it is being thrown away each year and ends up in landfill or waste incinerators.

Material Focus estimated 5,000 electric car batteries worth of lithium in vapes were being thrown away every year.

The lithium polymer batteries used in some of the most popular vapes could be recharged 500 times if the product was designed to allow for recharging.





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