

If you're looking into prescribed cannabis treatment in the UK, you might hear that the medicine is **vaporised, not smoked**. But what exactly does that mean? Vaporisation and combustion are two different ways to release active compounds from a herbal product, with very different effects, by-products, and implications — especially when it comes to safety and regulation.

This post will explain in simple terms *how vaporisation and combustion differ*, why vaporisation is preferred for prescribed cannabis in the UK, what the devices involved mean for treatment consistency, and how pharmacy regulation ties in. No jargon — just the facts you need.

Vaporisation vs Combustion: The Simple Science

What is Combustion?

Combustion means burning a material at or above its ignition temperature, causing it to catch fire and produce smoke and ash. This is what happens when you light a cigarette, or burn wood in a fire.

Combustion involves very high heat, usually above 600°C (about 1100°F), which causes complex chemical reactions. These reactions produce:

- target compounds (like cannabinoids or nicotine)
- thousands of additional by-products, many of which are harmful or irritants (e.g. tar, carbon monoxide, benzene)
- solid particulates (smoke, ash)

What is Vaporisation?

Vaporisation means heating a material just enough to release its active compounds as vapor, but *without burning it or producing smoke*. The key is to keep the temperature **below the combustion point**.

For cannabis, this means heating between around 160°C and 230°C (320°F to 450°F). At this range, cannabinoids like THC and CBD turn into vapor, but plant material does not combust. That results in a much cleaner inhaled product with:

- target compounds released
- significantly fewer harmful or irritant by-products
- no ash or smoke

In short, vaporisation heats but does not burn.

Why UK Prescribed Cannabis is Vaporised, not Smoked

The UK's healthcare system **does not license or recommend smoking cannabis for medical treatment**. Instead, specialist clinicians prescribe vaporised forms as the standard inhalation method. This comes down to:

- **Cleaner delivery:** vaporisers deliver active cannabinoids without dangerous combustion by-products (the "smoke").
- **Controlled dosing:** vaporisation devices can consistently reach specific temperatures to release a reliable amount of medicine.

- **Patient safety & regulation:** avoiding combustion lowers respiratory risk and aligns with pharmacy regulatory standards.

Crucially, prescribed cannabis in the UK is never described as "smokable." Vaporisation devices are used to release compounds safely and predictably.

By-Product Profiles: Combustion vs Vaporisation

Feature	Combustion (Burning)	Vaporisation (Heating Below Combustion Point)
Temperature	>600°C (above ignition point)	160-230°C (below ignition point)
By-products	Tar, carbon monoxide, carcinogens, irritants	Minimal toxic by-products; mostly active compounds
Smoke	Yes — visible smoke and ash	No smoke or ash, just vapor
Health impact	Greater respiratory irritation and risk	Lower respiratory irritation; safer inhalation
Dosing consistency	Variable; often less controlled	More precise and repeatable dosing

Devices as Part of Treatment: Why Does It Matter?

In the context of prescribed cannabis, the device used for vaporisation is much more than a gadget — it is part of how the medicine works. Here's why:





1. **Temperature control:** Medical vaporisers consistently maintain the heat below combustion point, ensuring clean compound release every time.
2. **Dosing consistency:** Devices deliver a repeatable dose of cannabinoids which helps clinicians manage and adjust treatment.
3. **Patient safety:** Certified devices are designed to avoid overheating, choking hazards, or other misuse risks.
4. **Regulatory compliance:** Using approved medical devices meets licensing standards and pharmacy governance.

Note:

Devices that allow smoking or burning are **not** suitable for prescribed cannabis use in the UK and cannot be supplied through regulated pharmacy channels.

Pharmacy and GPhC Regulation Around Vaporised Prescribed Cannabis

When it comes to prescribing, dispensing, and supplying cannabis-based medicines, UK pharmacies and pharmacists must follow strict regulations from the General Pharmaceutical Council (GPhC) and other NHS frameworks.

- **Medicine supply:** Only licensed products or unlicensed specials prescribed by registered clinicians can be dispensed.
- **Device supply:** Vaporisation devices used must be appropriate and safe as part of the treatment plan. Unregulated devices may not be supported through pharmacy channels.
- **Patient advice:** Pharmacists provide guidance to patients on correct use, dosing, cleaning, and storage of vaporisers to ensure safety and effectiveness.
- **Record keeping:** Both medicine and device supply are documented to ensure traceability and compliance.

In summary, the pharmacy role is not just about handing over cannabis medicines — it's about ensuring the whole vaporisation treatment pathway meets safety, quality, and regulatory standards.

Summary: What You Need to Know

- **Vaporisation heats cannabis below its combustion point**, releasing target active compounds without burning plant matter.
- **Combustion produces smoke and many harmful by-products** not suitable or safe for prescribed medical use in the UK.
- **Devices matter:** vaporisers are integral to treatment — they ensure safe, consistent doses and cleaner inhalation.
- **UK prescribed cannabis is only supplied for vaporisation** in line with pharmacy regulation and General Pharmaceutical Council standards.
- **Smoking (combustion) is not licensed or recommended in UK medical cannabis treatment.**

Understanding these differences helps patients, carers, and healthcare professionals navigate prescribed <https://www.thelondoneconomic.com/lifestyle/health/how-medical-cannabis-vaping-works-temperature-devices-and-the-economics-behind-it-409054/> cannabis treatment safely, avoiding confusion around “smokable cannabis” claims that often circulate online but do not match UK licensed practice.

Additional Resources

- General Pharmaceutical Council (GPhC)
- NHS Cannabis-Based Products for Medicinal Use
- Electronic Medicines Compendium (EMC) for licensed cannabis products