EUDA
EUROPEAN UNION DRUGS AGENCY

EU EARLY WARNING SYSTEM ADVISORY

Herbal cannabis adulterated with tiny glass beads – France, 2024-2025

RCS ID:	EU-EWS-RCS-AD-2025-0002	Issued by:	EUDA
Date issued:	28/03/2025	Transmitted by:	Early warning, alert, laboratory network sector, EUDA
Recipients:	Early Warning System Network		

1. Summary and purpose

This advisory concerns recent detections of herbal cannabis adulterated with tiny glass beads in France.

The purpose of this advisory is to:

- Notify you that France has reported three confirmed cases of herbal cannabis adulterated with tiny glass beads detected in November 2024 and January 2025. The cannabis was collected from users in three different regions of France. The source, prevalence, and the reason for the adulteration remain undetermined. The EUDA has not received similar reports from other countries.
- Highlight that similar incidents involving tiny glass particles occurred in Europe between 2006 and 2007, particularly affecting the United Kingdom and France. These past incidents were thought to be intended to increase the weight of the cannabis, enhance its apparent quality, and/or mimic high-THC 'skunk' varieties.
- Recommend that you inform relevant partners in your national early warning and alert systems, including laboratory networks, of these recent cases, review existing data, and remain vigilant for similar cases nationally.
- Request immediate reporting of any similar cases to the EUDA at: ews@euda.europa.eu

2. Advisory

Details of the event

France has reported three confirmed cases of herbal cannabis adulterated with tiny glass beads. The samples were collected from users by SINTES in different regions in France.

- Nouvelle Aquitaine in southwest France.
- Occitanie in southern France.
- Hauts de France in northern France.

Two samples were collected in November 2024, with the third obtained in January 2025. Unconfirmed media reports, including from cannabis publications, and discussions on online forums suggest this affected cannabis may have been circulating since at least summer 2024. The source, prevalence, and the reason for the adulteration remain undetermined.

The glass beads measure approximately 100-150 µm in diameter. While this size is within the range of human vision, their transparent nature and distribution within the cannabis plant material make microscopy necessary for reliable identification and characterisation (Figure).

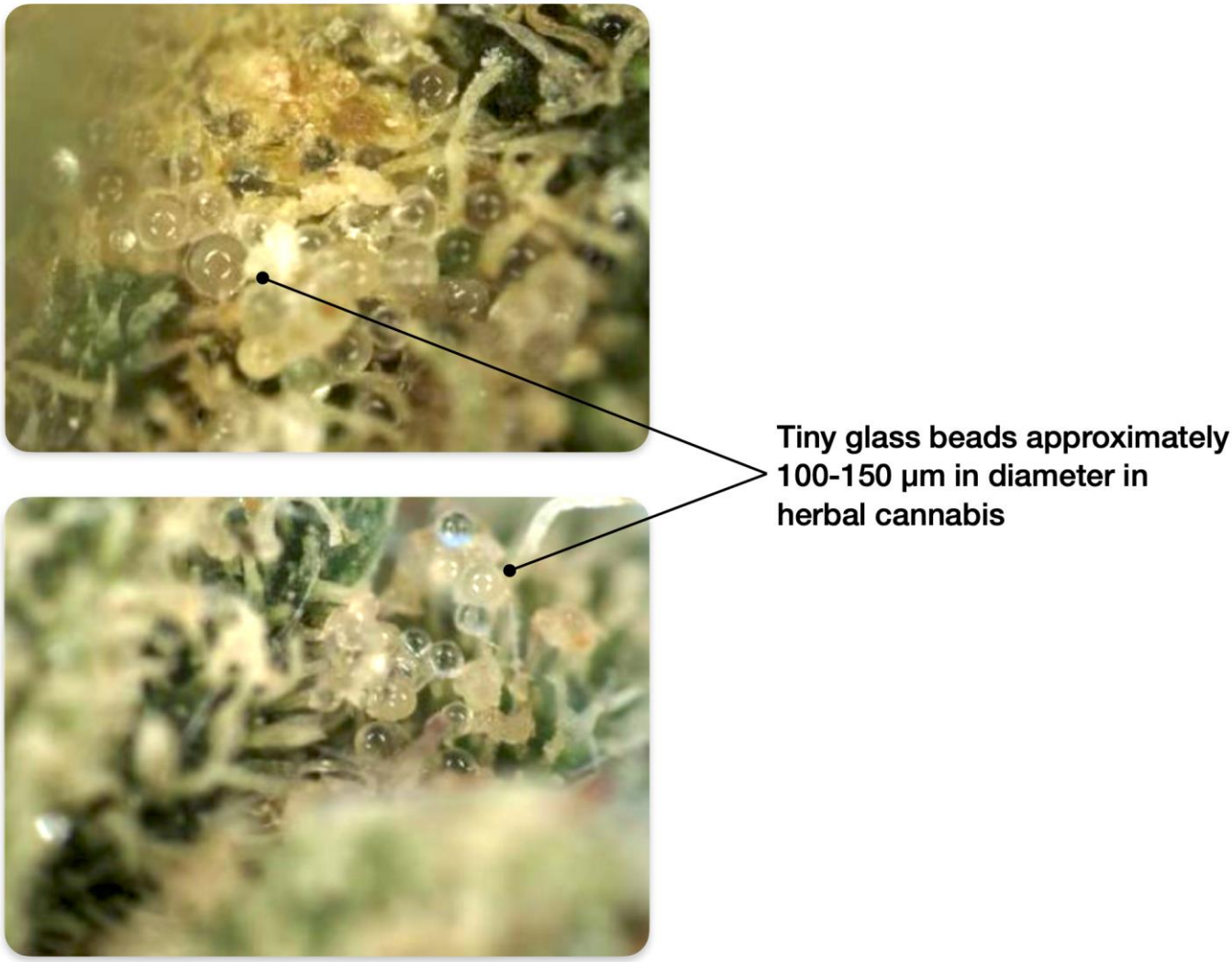

Figure. *Optical microscopy images of cannabis samples revealing tiny glass beads with diameters ranging from approximately 100-150 µm. Image courtesy of SINTES and the French National Focal Point.*

Key observations include:

- Both optical and scanning electron microscopy were used in sample analysis.
- Chemical analysis of two samples revealed typical phytocannabinoid profiles, including delta-9-THC, CBD, and CBN. The delta-9-THC concentrations were 9.7% and 15%, respectively.
- The affected cannabis exhibits an unusually shiny appearance and may leave a transparent residue on hands after handling.
- In one case, a user reported a 'cracking' sensation during inhalation. The cannabis also left scratches on the vaporiser they used.
- Unconfirmed online reports and videos suggest the glass beads may dislodge when shaking the plant material.

These cases are considered unusual and unexpected. Prior to these recent cases, it is thought that similar cases of adulterated cannabis have not been reported in France since 2007 (18 years ago).

In response to the current cases, French authorities have strengthened vigilance for additional cases. Relevant national competent authorities have been notified of these cases, including health agencies, specialised drug treatment centres and harm reduction facilities.

The EUDA has not received similar reports from other countries.

Historical context

Herbal cannabis adulterated with tiny glass particles — Multiple European countries, July 2006–September 2007

Similar incidents involving the adulteration of cannabis with tiny glass particles were previously reported in Europe between 2006 and 2007. While several countries reported cases, the United Kingdom and France were predominately affected [1-10].

In the United Kingdom, authorities suggested that following a police operation to dismantle cannabis farms in England in September 2006—especially targeting high-THC "skunk" cannabis—availability of the drug decreased, creating a temporary drought that caused changes in the supply chain. Glass beads were deliberately added to cannabis to:

- Add bulk weight;
- Mimic the crystalline appearance of trichomes that produce THC;
- Enhance the visual appeal of cannabis flowers to resemble high-THC cannabis (‘skunk’).

However, while the number of cases of adulterated cannabis increased significantly from November 2006 onwards, the first cases were reported in July 2006, which preceded the police operation.

Authorities in the United Kingdom noted that evidence supported the view that the adulterated cannabis may have originated from the Netherlands, highlighting a cross-border risk to other countries [6,8].

Anecdotal reports from users in the United Kingdom suggested that smoking this adulterated cannabis was associated in some cases with sore mouth, mouth ulcers, chesty persistent coughs, and a tight chest lasting a few days after use [3]. A case report from France involving a patient thought to have smoked adulterated cannabis noted similar features of nose bleeds, mouth ulcers, sore throat, and a cough [8]. In another case report, also from France, the patient experienced acute inhalation pneumonitis [8]. A small number of other serious but unspecified forms of lung injury were also reported in France [9].

Outbreak of lead poisoning from adulterated herbal cannabis — Leipzig, Germany, 2007–2008

During 2007 and 2008, an outbreak of lead poisoning linked to herbal cannabis adulterated with lead, a heavy metal, was identified in Leipzig, Germany. Overall, 197 patients required treatment. It is presumed, though unconfirmed, that the lead was intentionally added to increase the weight of the cannabis. The source of the adulteration could not be identified [10,11].

Risks to users

At this time, the health risks from using this herbal cannabis adulterated with tiny glass beads are unclear.

No serious adverse effects have been reported related to the use of this affected cannabis. Mild symptoms such as headaches and ‘uneasiness’ have been noted in one case.

Potential risks could include lung injury from the inhalation of fine glass particles, including irritation and cuts. The risks of adverse effects may be higher when using a cannabis grinder, as the mechanical action will crush the beads, dispersing fine glass particles which could then by ingested or inhaled.

3. Action required

Please immediately report any similar cases of adulterated cannabis to ews@euda.europa.eu to help us improve our understanding of this issue and potential risks.

4. Preparedness and response options

Existing monitoring systems may not routinely identify and collect information on adulterated cannabis, such as the presence of tiny glass beads.

Initial detection of cases appears to primarily rely on user observations of the unusual appearance, texture, or effects from the cannabis. These may be reported through personal networks, cannabis publications, online forums, and to health services like drug checking programs.

In the incident in the United Kingdom between 2006 and 2007, the adulterated cannabis was called ‘grit weed’ by users due to its granular texture when handled and the distinctive cracking sensation when chewed. However, it was also noted that over time, online cannabis forums reported the appearance of cannabis contaminated with much finer particles that were not easily detected as a gritty feeling.

Depending on your national situation, response options may include:

1. Inform health agencies responsible for the analysis of collected samples, such as drug checking services to:
    - Be vigilant for such incidents
    - Determine their current ability to identify such adulteration
    - Report any suspected or confirmed cases
2. Inform law enforcement agencies and their laboratory networks to:
    - Be vigilant for such incidents
    - Determine their current ability to identify such adulteration
    - Report any suspected or confirmed cases
3. Inform health and social organisations that engage with people who use cannabis, to be vigilant for such incidents and report any suspected or confirmed cases.
4. Monitor national and local media reports, cannabis and drug publications, and online forums to identify and document suspected cases of cannabis adulteration.
5. Review recent cannabis market changes that may:
    - Indicate emerging market trends
    - Promote cannabis adulteration

5. How to use this advisory

This advisory is addressed to the Early Warning System Network, specifically the national early warning system correspondents in the Reitox National Focal Points, Europol, and the Commission. Guidance on the use of advisories and other risk communications issued by the EUDA is provided in section 4.11.2 of the operating guidelines for the European Union Early Warning System.

If you received this advisory at the Reitox National Focal Point, please note that it must be restricted to your national early warning system network and other partners (as relevant to your national situation). Do not make it public. If you have any questions in this respect, please contact the EUDA.

If this advisory has been sent to you by your Reitox National Focal Point, please direct any questions that you may have to them[1].

6. Acknowledgments

The EUDA would like to thank the members of the EU Early Warning System Network who contributed to the information used in this advisory, in particular the French National Focal Point, SINTES, and experts from the French EWS network.

[1] https://www.euda.europa.eu/about/partners/reitox_en

7. References

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