

Don't use banned products to eradicate cockroaches, bed bugs and other pests!



© BNPC

A PRODUCT BANNED SINCE 2013...

SNIPER 1000 EC DDVP® contains dichlorvos, an active substance belonging to the organophosphate class. It is classified as toxic by inhalation, toxic in contact with skin and if swallowed, a skin sensitizer and very toxic to aquatic life.

Its use as a plant protection product¹ was prohibited in France in 2007. Its presence in biocidal² insecticides for household use has been banned since 2013. However, dichlorvos can still be purchased through illegal channels, particularly under the name SNIPER 1000 EC DDVP®, to combat pests such as bed bugs and cockroaches.

...BUT POISONING CASES ON THE RISE

Over the period from 1 January 2018 to 30 June 2023, poison control centres recorded 170 events³ related to SNIPER 1000 EC DDVP®, involving 206 people. In 154 of these events, just one person was affected. In the other 16, between two and eight people were exposed at the same time, i.e. a total of 52 people.

Despite its 2013 ban in France as an insecticide for household use, there has been an increase in the number of calls to poison control centres since 2018. This increase should be seen in light of the upsurge in bed-bug infestations in the last few years. ANSES has estimated that 11% of French households were infested by bed bugs between 2017 and 2022 [1].

In May 2023, ANSES received a report of a serious case of poisoning involving an infant who had ingested a third of a bottle of SNIPER 1000 EC DDVP®, an insecticide that is banned in France. The family had purchased the product at a market north of Paris.

Several minor cases of poisoning by this same insecticide had already been reported to ANSES in 2019. ANSES and the French poison control centres analysed the cases occurring since 2018, focusing particularly on the places where this insecticide was purchased, in order to alert the competent authorities to the circulation of a dangerous banned product in France and guide them on the management measures to be taken where applicable.

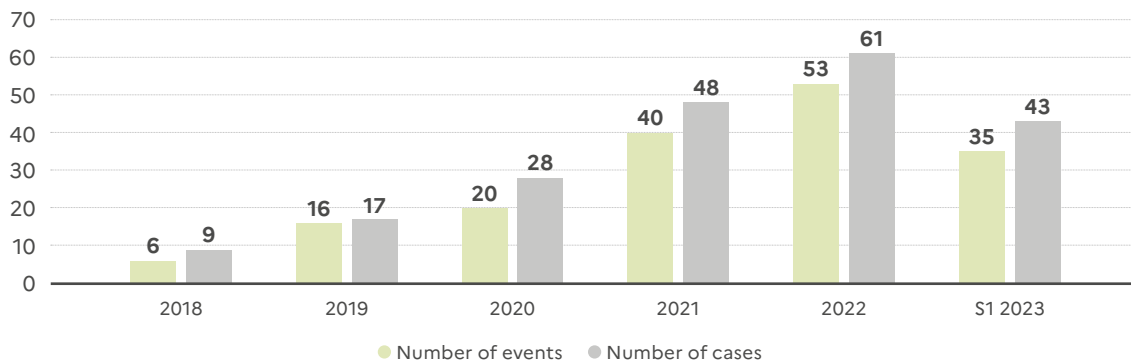
¹ Plant protection products, commonly known as pesticides, are preparations intended to protect plants and crop products from organisms such as insect pests, pathogens and weeds.

² Biocidal products are used with the intention of «destroying, deterring [or] rendering harmless ... any harmful organism». This group encompasses numerous products with a wide variety of uses. Biocides are used in industry and the workplace, but also as everyday products.

³ Situation in which one or more people have been exposed to the same agent, at the same time and in the same place. When several people have been exposed during the same event, certain information (such as their age or sex, for example) may not be specified for all of them.

Figure 1 – Annual breakdown of the numbers of events and exposed people involving the product SNIPER 1000 EC DDVP®, recorded by poison control centres

(Source SICAP : 2018-2023)



PRODUCTS MAINLY PURCHASED IN ÎLE-DE-FRANCE, IN MARKETS OR SHOPS...

The Île-de-France region was the most affected by this problem: almost 75% of events (n=127) took place in this region alone, and more specifically in the Seine-Saint-Denis *département* (35%, 45 events).

Where information was available (41% of events, n=70), people said they had bought the product in markets (37.1% of events, n=26) or shops/bazaars (20% of events, n=14), particularly in the northern *arrondissements* of Paris and in Seine-Saint-Denis. To a lesser extent, these products may also have been brought back from abroad (outside the European Union, mainly Africa) or given by a third party.

Table 1 – Number of events and people exposed in connection with the use of SNIPER 1000 EC DDVP®

(Source SICAP)

ÎLE-DE-FRANCE DÉPARTEMENTS	NUMBER OF EVENTS	NUMBER OF CASES	OTHER REGIONS	NUMBER OF EVENTS	NUMBER OF CASES
Île-de-France	127	160	Provence-Alpes-Côte d'Azur	16	17
Seine-Saint Denis	45	53	Grand-Est	6	8
Paris	25	28	Auvergne-Rhône-Alpes	6	6
Essonne	18	26	Pays-de-la-Loire	4	4
Val-de-Marne	12	23	Centre-Val-de-Loire	3	3
Hauts-de-Seine	10	12	Bretagne	3	3
Seine-et-Marne	6	7	Nouvelle-Aquitaine	2	2
Val d'Oise	8	8	Normandie	1	1
Yvelines	3	3	Hauts-de-France	1	1
			International	1	1
			TOTAL	170	206

Table 2 – How SNIPER 1000 EC DDVP® was obtained

(Source SICAP)

PLACE OBTAINED	EVENTS		CASES	
	N	%	N	%
Markets	26	37.1	29	32.2
Shops/Bazaars	14	20.0	28	31.1
Given by a third party	12	17.1	13	14.4
Purchased abroad (outside the EU)	10	14.3	12	13.3
Purchased online	8	11.4	8	8.9
TOTAL	70	100.0	90	100.0

...TO CONTROL COCKROACHES AND BED BUGS

Three profiles of exposed people emerged from this study:

- adults between 20 and 60 years of age, exposed when using the products directly in their homes or when re-entering treated premises. This profile accounted for almost 75% of the 170 events (n=127). In the events for which information was available, the individuals reported that they had used the product to control cockroaches (n= 30), bed bugs (n=24) or lice (n=1);

- young children, i.e. «classic» cases of paediatric poisoning due to a lack of risk perception, accounting for 14% of events (n=25). Typically, the child was able to access the product, which had been left within reach, and had ingested it or put it on him or herself without being aware of the risk. Each event involved a single child;
- suicide attempts, which accounted for less than 10% of events.

Table 3 – Circumstances of exposure to SNIPER 1000 EC DDVP® reported to poison control centres

(Source SICAP)

	EVENTS	CASES
Used in the home to control pests	127	163
- unspecified	72	87
- cockroaches	30	44
- bed bugs	24	30
- lice	1	2
Product left within reach of a child	25	25
Suicide attempt	15	15
Ingestion of unpackaged product	2	2
Ingestion of food on which the product was present	1	1
TOTAL	170	206

While most poisoning cases were mild, 8.6% (n=14) were of moderate severity and 5.5% (n=9) were very serious, including three deaths.

Seven of the nine very serious poisonings (including the three deaths) were due to ingestion with suicidal intent. The other two involved respectively an infant who had ingested the product (the case that prompted the alert and this study) and a man who developed respiratory symptoms after using the product.

AN ISSUE THAT ALSO CONCERNS OTHER PRODUCTS

Given the rise in infestations and the difficulty in eradicating cockroaches and bed bugs, people are turning to banned products, whose use has become a public health problem. These pesticides are considered to be more effective and can be easily found on the internet or in shops, or even purchased abroad (outside the European Union).

However, this phenomenon is not limited to the SNIPER 1000 EC DDVP® product. Other cases of exposure to banned products containing dichlorvos were identified in the poison control centres' database, but not included in this study, which focused on SNIPER 1000 EC DDVP®.

Products banned in France are also used to combat pests other than bed bugs and cockroaches. In 2021, two children died due to a rat poison banned in France [2] [3]. It is doubtful that the people who buy these products, in shops or on the internet, are aware that they have been banned because of their toxicity.

In view of the growing number of poisoning cases, it seems necessary to:

- identify the supply channels for these products and seize imported products as they enter the country;
- step up checks in markets and shops selling this type of product;
- inform the professionals selling these products about their toxicity and illegality;
- inform the general public about products that are banned in the European Union and the risks involved in using them.

In its opinion published in 2023 [1], ANSES made recommendations for effectively controlling bed bugs and called for non-chemical control methods to be prioritised.



Chloé Greillet (ANSES) and Hervé Laborde-Casterot (Paris poison control centre)

REFERENCES

[1] **Anses. (2023).** Avis relatif aux punaises de lit : impacts, prévention et lutte. [Opinion on bed bugs: impact, prevention and control] (Request No 2021-SA-0147). Maisons-Alfort: ANSES, 26 p. This opinion is accompanied by a collective expert appraisal report.

[2] **Anses. (2022).** Intoxications par les produits utilisés dans le cadre de la lutte contre les punaises de lit. Analyse des cas enregistrés par les Centres antipoison et de toxicovigilance français du 1^{er} janvier 1999 au 31 décembre 2021. [Poisonings caused by bed-bug control products. Analysis of cases recorded by poison control centres from 1 January 1999 to 31 December 2021.] Request No 2021-SA-0147

[3] **LABADIE, M., LANGRAND, J., PAGES, R. 2021.** «Banned rat poison causing death and serious poisoning in children in France.» Vigil'Anses 15: 8–10

FIND OUT MORE

