

Laughing gas abuse among young people a concern: Medical experts

Canisters and cartridges of the gas are sold on e-commerce platforms in Singapore

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Medical professionals say they are concerned that young people may be abusing nitrous oxide to feel intoxicated, with buyers purchasing the gas from dubious sellers.

The Straits Times was alerted to the illegal activity by a reader who gave her name only as Ms Pang.

She had witnessed the driver of a luxury car unloading canisters at a condominium in the East in February.

Ms Pang said the boot was filled with cartons of nitrous oxide, which is commonly used to make whipped cream and merengue.

"It was concerning and suspicious because it was on the second day of the Chinese New Year, and all the baking of cakes and cookies would have been done before the new year," she added.

Ms Pang later spoke to the resident who collected the nitrous oxide canisters, and he told her that he gets weekly deliveries to his home to get his fix of laughing gas.

On March 29, police arrested the driver of a sports car in Killiney Road for a rash act offence. The 37-year-old man was suspected to be intoxicated with nitrous oxide.

The last case of nitrous oxide addiction in Singapore was reported in 2017, but medical professionals say there has been an uptick in recent years.

Psychiatrist Jared Ng, medical director and senior consultant psychiatrist at Connections Mind-Health, told ST that he now treats between three and four patients a year.

Dr Ng said there may be under-reporting of the issue, adding that patients do not typically seek help specifically for nitrous oxide abuse.

Instead, the behaviour often emerges during a psychiatric assessment for other issues, such as anxiety, depression or substance use concerns.

Dr Kelvin Kuan said he had three referrals involving two patients in the past two years for advice on the management of nitrous oxide abuse or intoxication.

The senior consultant with the department of emergency medicine at Changi General Hospital and Toxicology Service at Sing-Health said: "The patients experienced a combination of symptoms including drowsiness, vomiting, abdominal discomfort and weakness.

"These symptoms were transient, and the patients were discharged from hospitals after a short period of observation."

Dr Ng said most of his patients who report nitrous oxide use are younger individuals, typically in their late teens to early 30s.

They included a tertiary student and a man in his late 20s who was working in a high-stress industry and excelling in his career.

"Without treating his mood disorder, the risk of relapse would have remained high, as he was using nitrous oxide as a way to self-medicate," said Dr Ng, referring to the man in his late 20s.

Nitrous oxide is used in the confectionery industry in Singapore and in other countries for creating whipped cream and merengues.

Britain, Belgium and Australia are among jurisdictions that have placed bans on the use and sale of the gas to minors.

In 2023, Britain changed the law

SEEN AS HARMLESS

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DR JARED NG, a psychiatrist.

to make nitrous oxide a Class C drug under the Misuse of Drugs Act, making its possession and sale for recreational use an offence.

This was after 56 deaths where nitrous oxide was mentioned on the death certificate were reported in England and Wales between 2001 and 2020.

Canisters and cartridges of nitrous oxide, called whippets of the gas, are sold on e-commerce plat-

forms in Singapore.

A set comprising a 640g canister with a gas regulator and dispenser costs \$130.

ST found that the gas is also being offered on two Telegram groups which peddle drugs such as cannabis and methamphetamine.

Medical practitioners said long-term use of nitrous oxide could lead to serious health problems.

Dr Bryan Ng, head and senior consultant with the department of anaesthesia at National University Hospital, said the gas is usually exhaled and cleared from the body within minutes when used in surgery.

"Long-term nitrous oxide exposure interferes with Vitamin B12 metabolism, which is needed for normal nerve function and the production of red blood cells," said Dr Bryan Ng.

"These chronic abusers may develop numbness or weakness of their limbs or encounter sustained clumsiness."

Dr Kuan said other issues that may occur with laughing gas abuse include frostbite, usually at the mouth or nose, or lung injury.

"In severe cases, abnormal cardiac rhythms and deaths can occur," he added.

The Health Sciences Authority

(HSA) said it regulates nitrous oxide only when it is used in a specific therapeutic product for treating a medical condition.

A spokesman said: "For such uses, the product is required to be registered with HSA to ensure that it meets the quality, safety and efficacy standards before the product can be supplied for use by registered medical practitioners."

The Singapore Food Agency (SFA) said nitrous oxide is a permitted food additive that can be used at levels in accordance with Good Manufacturing Practice under Singapore's Food Regulations.

"This means that the quantity of the additive added to food shall be limited to the lowest possible level necessary to accomplish its desired effect," it said.

SFA added that food products that do not comply with the agency's food safety requirements will not be allowed for sale in Singapore.

Young abusers had previously used legal items like inhalants and glue, easily available over the counter, to feel intoxicated.

Dr Jared Ng is concerned that young people may be abusing nitrous oxide without awareness of the ramifications.

In England, a 24-year-old student died after abusing nitrous oxide. She had been inhaling up to three bottles of the gas every day.

Dr Jared Ng said: "My main concern is that nitrous oxide is often perceived as harmless because it is not illegal per se, and is easily available.

"However, frequent or heavy misuse can cause serious health problems."

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