Dangers of Frequent or Prolonged recreational use of Nitrous Oxide

As we are approaching the summer and the post-COVID campouts and other events, I would like to do my part to inform our community of the inherent dangers of long-term or high-frequency or volume consumption of Nitrous Oxide i.e. "whippets".

Despite my personal research into the effects of various substances over the last two decades, I was frighteningly unaware of the effects that this substance, even in "moderate" quantities by some standards, can cause neurological and cardiovascular damage in our bodies. Most terrifyingly, some of it is irreversible.

In a nutshell, recent research shows that consuming more than 30-50 cartridges per occurrence, in total more than 10 times per year may lead to a set of nearly unrecoverable conditions, resulting in horrific health issues, and possibly death.

The first set of problematic symptoms are neurological in nature: they are described as the "tingly fingers and feet" in the beginning, followed by the inability to feel nerve responses in the upper body completely. Continued consumption may result in the subject's inability to move, loss of balance, resulting in a complete or partial disability, and the worst part is that it is potentially unrecoverable. The medical terminology for this is the following:

"Inactivation of vitamin B12 through the alteration of its metabolism, causing demyelination of the central and peripheral nervous system. A spectrum of neurological manifestations has been reported, including peripheral neuropathy, myelopathy, and subacute combined degeneration of the spinal cord."

In plain English, this happens due to the body's inability to absorb vitamin B12. Intramuscular injections of B12 do help some, however loading up on vitamins orally, even in enormous quantities, only helps up to a point, but does not reverse the damage. Only time (and complete abstinence) helps some but after a period of 6-12 months.

The next set of symptoms relate to a set of cardiovascular problems:

"Sixty percent nitrous oxide for 15 minutes significantly increased PaCO2, heart rate, stroke volume, cardiac output, mean arterial blood pressure, and central venous pressure." (<u>link</u>)

"Nitrous oxide has been implicated in the adverse effects on health seen in those individuals who are chronically exposed to trace amounts of the drug. These adversities include infertility, spontaneous abortion, blood dyscrasias, and neurologic deficits. These concerns pertain only to chronic exposure; it is presumed that healthy surgical patients could receive nitrous oxide without harm." (link)

Many people affected have no idea that their symptoms are caused by their repeated consumption of "whippets" until it's too late — so they continue consuming, while their symptoms deteriorate.

Please stay away from whippets! It's very hard to gauge the exact amount and frequency which causes vitamin B12 deficiency, and the subsequent neuropathy (aka nerve damage) in your body. Very few recreational substances have such horrific outcomes which are pretty hard to undo.

Please feel free to forward this to anyone who you think should know this information.

Many thank, and stay healthy!

References:

Woman Loses Control of Legs and Hands After Inhaling Nitrous Oxide

Nitrous oxide causes peripheral neuropathy in a dose dependent manner among recreational users

Whippits, nitrous oxide and the dangers of legal highs

Potential Side Effects of Nitrous Oxide

Cardiovascular responses to nitrous oxide exposure for two hours in man

Case report: Neurological complications of nitrous oxide abuse

Vitamin B12 deficiency-induced neuropathy secondary to prolonged recreational use of nitrous oxide

The dangers of recreational inhalation of nitrous oxide

Nitrous Oxide-Induced Vitamin B12 Deficiency Resulting in Myelopathy