Mass poisoning in Markham highlights wolfsbane risk

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A mass poisoning event in Markham, Ontario, sparked warnings about the dangers of aconite, a common medicinal plant that also goes by the names wolfsbane and monkshood.

On August 29, reports surfaced on social media claiming that at least a dozen people had presented to York-region hospitals over the previous two days after eating at a local restaurant.

The patients allegedly tasted a bitter flavour in the food, followed by numbness and tingling in their faces and bodies, extreme nausea and vomiting, and cardiac arrhythmias and hypotension. Several required critical care.

Officials were reportedly aware of the poisonings. However, the region's public health unit didn't issue a statement for the better part of the day — hours after media requested information and days after the first poisonings occurred.

The region's medical officer of health later confirmed the poisonings came from a spice product — Mr. Right brand Keampferia Galanga Powder — which tested positive for aconite.

Officials pulled the product from local retailers but did not respond to questions

about why they didn't issue a public warning sooner.

In the absence of official information, health workers shared details gleaned from their personal networks.

One Reddit poster noted that the poisonings resembled sodium channel toxicity — a life-threatening condition often linked to overdoses of tricyclic antidepressants.

David Juurlink, head of the clinical pharmacology and toxicology division at Sunnybrook Health Sciences Centre in Toronto, forewarned that aconite may be to blame.

Aconitine, a toxic alkaloid produced by aconite and other plants in the *Aconitum* genus, works like a sodium channel opener, Juurlink explained. The influx of sodium through these channels and the delay in their repolarization can quickly lead to nausea, vomiting, diarrhea, ventricular arrhythmia, and death within hours.

In traditional Chinese medicine, the roots of these plants are used after soaking and boiling to break down their toxic properties. However, larger than recommended doses or inadequate processing increases the risk of poisoning.

Known as the "Queen of Poisons," aconite toxicity has been reported all over the world dating back to antiquity, although the best descriptions of poisonings from herbal soups and medicines come from China.

Earlier this year, two people in British Columbia were hospitalized after consuming sand ginger powder contaminated with monkshood, another name for the plant.

"Aconite is bad news," Juurlink tweeted. "Immediate medical attention is critical [and] treatment is mainly supportive. When in doubt or when managing these patients, contact your local Poison Centre immediately."

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