

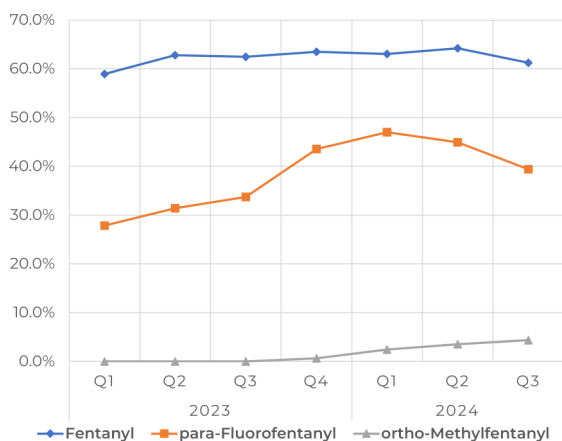
ORTHO-METHYLFENTANYL PROLIFERATING ACROSS NORTH AMERICA AS NEWEST SYNTHETIC OPIOID IDENTIFIED IN FATAL DRUG OVERDOSES

PURPOSE: The objective of this announcement is to notify public health, public safety, first responders, clinicians, medical examiners and coroners, forensic and clinical laboratories, and all other related communities about new information surrounding the emergent synthetic opioid *ortho*-methylfentanyl.

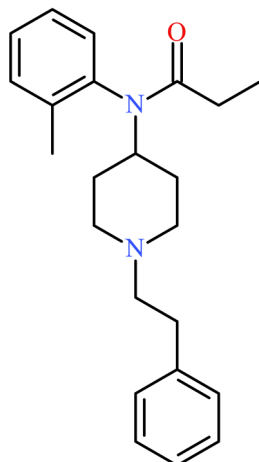
BACKGROUND: *ortho*-Methylfentanyl is an active mu-opioid receptor agonist with potency similar to that of fentanyl. *ortho*-Methylfentanyl bears structural resemblance to fentanyl and fentanyl analogues (e.g., *para*-fluorofentanyl). *ortho*-Methylfentanyl is synthetically manufactured and can appear in three positional isomeric forms: *ortho*-, *meta*-, and *para*-methylfentanyl. *ortho*-Methylfentanyl is a Schedule I drug in the United States under the Controlled Substances Act (21 CFR 1308). The effects of *ortho*-methylfentanyl are similar to those of fentanyl, including analgesia, sedation, drowsiness, euphoria, etc., and in severe intoxication cases respiratory depression and death.

SUMMARY: *ortho*-Methylfentanyl is the latest synthetic opioid to appear in the recreational drug supply with increasing regularity in North America. *ortho*-Methylfentanyl is often identified alongside fentanyl and/or *para*-fluorofentanyl in drug materials and biological specimens. *ortho*-Methylfentanyl first emerged in early 2023 in British Columbia, Canada, and since initial identification, *ortho*-methylfentanyl has been confirmed in >200+ forensic specimens originating from Canada and the United States.

POSITIVITY: Q1 2023-Q3 2024



ortho-METHYLFENTANYL



GEOGRAPHICAL DISTRIBUTION



CANADA	#	USA	#
British Columbia	182	California	4
Manitoba	21	Arizona	1
Newfoundland	2	Massachusetts	1
Nova Scotia	2	Pennsylvania	Pending
Ontario	1	Florida	Pending
Prince Edward	1	West Virginia	Pending

MEDICOLEGAL DEATH INVESTIGATIONS

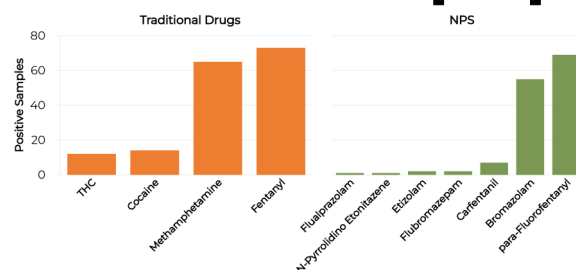
ortho-Methylfentanyl (oMF) Summary:

- ▶ oMF commonly detected alongside fentanyl and *para*-fluorofentanyl (pFF)
- ▶ oMF quantified at wide concentration range; however, primarily <10 ng/mL
- ▶ oMF first dominating Canadian drug market; now present in United States
- ▶ Proliferation of oMF across North America continues at an increasing rate

BLOOD CONCENTRATIONS (NG/ML) [TOTAL N=83]

DRUG ▶	oMF	FENTANYL	pFF
N	83	73	69
Mean ± SD	5.8 ± 16	53 ± 94	12 ± 18
Median	2.1	25	3.4
Range	<0.1 - 130	1.6 - 700	0.1 - 75

DRUG CO-POSITIVITY [N=83]



DEMOGRAPHICS [N=83]

