



# FENTANYL AND MDMA COST/BENEFIT ANALYSIS

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Ruth E. Winecker, Ph.D. F-ABFT

Co-Director, National Laboratory Certification Program  
Principal Scientist-Center for Forensic Advancement and  
Application

RTI International

# DRUG PREVALENCE

Drug	NFLIS (2022)		Federal Workplace (2023)	
	Prevalence	Rank	Prevalence	Rank
methamphetamine	29%	1	0.10%	6
cocaine	14%	2	0.21%	4
fentanyl	14%	3	0.20%*	5
Cannabis/THC	12%	4	0.93%	1
heroin	3.5%	5	<0.04%	8
oxycodone	1.4%	7	0.14%	7
amphetamine	0.71%	13	0.79%	2
hydrocodone	0.54%	15	0.22%	3
MDMA	0.28%	19	0.002%	9

\*proposed analyte/estimated prevalence

# FENTANYL

- Information Collection
  - Laboratory surveys
    - Costs
    - Cutoffs
  - Prevalence estimates
- Cost Analysis
  - Calculations referenced in previous UrMG (2015-proposed)
    - <https://thefederalregister.org/80-FR/28101/2015-11524.pdf>
- Assumptions:
  - Laboratory information reported in NLCP surveys has not changed substantially
  - Estimated initial test and confirmation rates will be similar to pulse testing rates
  - Total number of Federal employees and applicants tested has not changed

# 2023 NLCP FENTANYL SURVEY-URINE

- Capabilities
  - 84% test non-regulated workplace specimens for fentanyl and/or norfentanyl
  - 2 labs currently offer fentanyl testing of Federal agency specimens upon request
- Testing Panels
  - Initial test cutoffs ranged from 0.5-2 ng/mL for fentanyl
  - Confirmation cutoffs ranged from
    - 0.5- 2 ng/mL for fentanyl
    - 0.5- 5 ng/mL for norfentanyl
- Costs
  - Initial testing \$0.23 to \$5.00 per specimen
  - Confirmation testing \$8.00 to \$25.00 per specimen

# 2023 NLCP FENTANYL SURVEY-ORAL FLUID

- Capabilities
  - 43% offer oral fluid testing to non-regulated clients
  - 71% test oral fluid specimens for fentanyl and/or norfentanyl
- Testing Panels
  - Initial test cutoffs ranged from 1-4 ng/mL for fentanyl
  - Confirmation cutoffs ranged from 0.5- 1 ng/mL for fentanyl
- Costs
  - Initial testing \$0.80 to \$1.00 per specimen
  - Confirmation testing \$22.00 to \$25.00 per specimen

# WORKPLACE PREVALENCE ESTIMATES

Year	Assay	Specimens	# Initial Test Positive (%)	# Confirmed (%)
2017	EIA #1 cutoff 1 ng/mL	1,083	3 (0.27)	2 (66)
	ELISA (cutoff = 0.75 ng/mL)	1,056	3 (0.27)	3 (100)
2019	EIA #2 cutoff 1 ng/mL	2,158	8 (0.37)	2 (25)
2022*	EIA #3 cutoff 1 ng/mL	504	113 (22)	Fentanyl: 102 (90) Norfentanyl: 110 (97)
2023	Survey of non-regulated	na	0.1-1%	83-89%

\*morphine-positive (immunoassay 2,000 ng/mL cutoff) urine specimens

# FENTANYL COST ESTIMATES

- Administrative costs will likely be incurred
- Laboratories that already offer fentanyl and norfentanyl at the proposed cutoffs will likely experience less costs than those not currently offering these tests
- Total cost estimate to add fentanyl: \$9,139 to \$192,850 per year
  - Initial testing \$0.23 to \$5.00 per specimen
    - Total for initial testing \$8,740-\$190,000 per year
  - Confirmation testing \$8.00 to \$25.00 per specimen
    - Total for confirmation testing \$304-\$2,850 per year (\$0.008-\$0.075 per submitted specimen)

# FENTANYL SUMMARY

## Areas of agreement (pros):


- HHS-certified labs currently test for fentanyl
  - Fentanyl Prevalence: 3rd most frequently identified drug in seized drug exhibits (14% of total)
  - Workplace positivity similar to cocaine (~0.2%)
- Safety issue in regulated testing
- Improved deterrence

## Areas of concern (cons):

- Immunoassays currently in use are targeted towards fentanyl
- EIA's low specificity for norfentanyl
  - 30% of chronic pain patients treated with fentanyl were only positive for norfentanyl in urine.
- Costs are higher than more established targets (e.g., THCA)



# MDMA/MDA

- Information Collection
  - Reagents cost survey
    - \$0.10 to \$1.00 (for initial testing) and \$8.00 to \$25.00 (for confirmatory testing) per specimen tested
  - Prevalence from NLCP Non-Negative Specimen Lists (NNSL)
    - 0.001 to 0.003% (>25% are agency blind samples)
    - ~1 or fewer positive federal agency specimens per year
- Cost Analysis
  - Calculations referenced in previous UrMG (2015-proposed)
    - <https://thefederalregister.org/80-FR/28101/2015-11524.pdf> 
- Assumptions:
  - Total number of Federal employees and applicants tested has not changed
  - Reagent costs have not changed substantially

# MDMA/MDA COST ESTIMATES

- Administrative costs will likely be incurred
- Total cost savings to remove MDMA: \$3,800 and \$38,000 per year
  - Initial testing \$0.10 to \$1.00 per specimen
    - Total for initial testing \$3,800 and \$38,000 per year
  - Confirmation testing \$8.00 to \$25.00 per specimen
    - Positivity rate is low enough that cost is negligible

# MDMA/MDA SUMMARY

## Areas of agreement (pros):

- MDMA/MDA Prevalence:
  - Lowest of tested analytes
  - <1 Federal agency positives/year
  - 19<sup>th</sup> most frequently identified drug in seized drug exhibits (0.28% of total)
  - Similar acting drugs like psilocin/psilocybin have higher prevalence in NFLIS surveys (0.84%)
- Cost of maintaining assay
  - PT testing-NLCP
  - Annual assay re-verification - Labs

## Areas of concern (cons):

- Deterrence may not last
- Recent interest in MDMA for treatment of depression and PTSD
- Dipentylone commonly marketed as MDMA, masking true demand for these type of drugs



QUESTIONS?