City & County of San Francisco
London N. Breed, Mayor

Office of the City Administrator
Carmen Chu, City Administrator
David Serrano Sewell, Executive Director
Office of the Chief Medical Examiner

February 22, 2024

Subject: Report on Drug and Alcohol Prevalence in Impaired Driving Casework – 2023

The enclosed report includes drug and alcohol prevalence data on received Driving Under the Influence of Drugs and/or Alcohol (DUID) casework in the City and County of San Francisco for the year 2023. The reports are published by the Office of the Chief Medical Examiner (OCME), Forensic Laboratory Division, to further the OCME's mission to provide neutral data to inform policymakers.

Pertinent for the accurate use of this report is understanding the scope of testing leading to the summarization of the data. The OCME performs full and comprehensive testing on all DUID casework to mitigate bias, ensure a complete toxicological profile is provided for each case, and to determine the extent of alcohol and drugs exposure within the community. The OCME scope of testing for DUID casework meets and exceeds the national scope and sensitivity standards (ASB Standard 120) and recommendations (NSC-ADID Recommendations).

The OCME has consistently met the target of issuing final reports within a month for over 90% of cases, with 95% of cases reported within 30 days in 2023.

Enclosed is a detailed DUID Data Report for 2023. Key findings were:

- One or more intoxicating substance was identified in 100% of cases.

- Bromazolam was detected in 2% of cases and Xylazine was detected in <1% of cases.

- The OCME identified the presence of alcohol in 80%, cannabis in 40%, and drugs in 50% of cases.

- Polysubstance use was the most common result of DUID casework with 57.1% of all cases positive for any combination of alcohol, cannabis, and/or drugs (e.g., positive for alcohol, cannabis, and drugs, etc.).
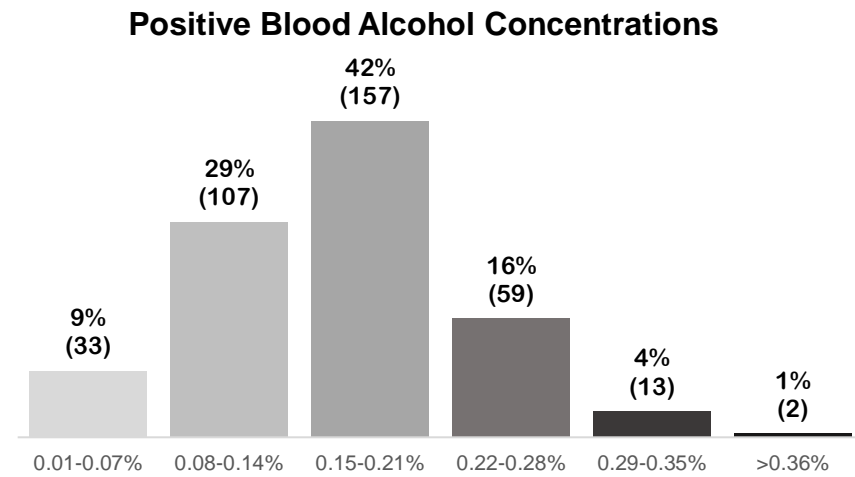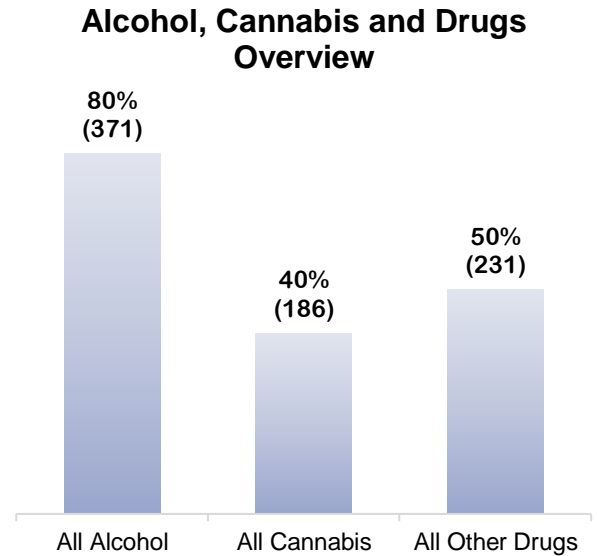
Sincerely,

Luke N. Rodda, Ph.D. MRACI CChem
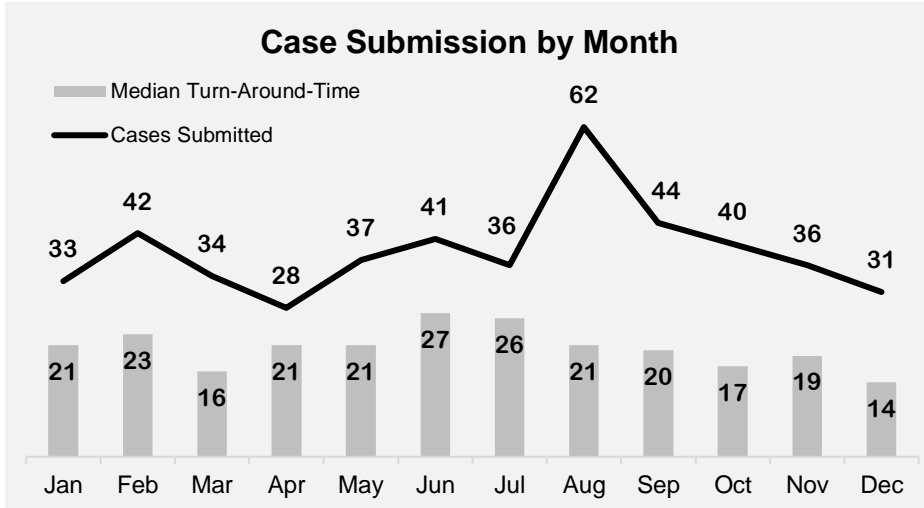Chief Forensic Toxicologist and Director, Forensic Laboratory Division

cc: Office of the City Administrator
enclosures: Driving Under the Influence of Drugs and/or Alcohol (DUID) Data Report – 2023

Accredited by the National Association of Medical Examiners | American Board of Forensic Toxicology | ANSI National Accreditation Board ISO/IEC 17025:2017 Testing

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Driving Under the Influence of Drugs and/or Alcohol (DUID)
2023

464 Submitted Cases

Case Submission by Month

- Median Turn-Around-Time
- Cases Submitted

Cases Submitted: Jan 33, Feb 42, Mar 34, Apr 28, May 37, Jun 41, Jul 36, Aug 62, Sep 44, Oct 40, Nov 36, Dec 31

Median Turn-Around-Time: Jan 21, Feb 23, Mar 16, Apr 21, May 21, Jun 27, Jul 26, Aug 21, Sep 20, Oct 17, Nov 19, Dec 14

Alcohol, Cannabis and Drugs Overview

- All Alcohol: 80% (371)
- All Cannabis: 40% (186)
- All Other Drugs: 50% (231)

Positive Blood Alcohol Concentrations

- 0.01-0.07%: 9% (33)
- 0.08-0.14%: 29% (107)
- 0.15-0.21%: 42% (157)
- 0.22-0.28%: 16% (59)
- 0.29-0.35%: 4% (13)
- >0.36%: 1% (2)

Drug Class Prevalence	Cases	
Cannabinoids	40%	186
Amphetamines	19%	88 (1)
Cocaine and Metabolites	17%	79
Opioids	16%	52 (23)
Antihistamines	11%	49 (3)
Benzodiazepines	11%	45 (7)
Dissociatives	4%	19
Anticonvulsant	4%	16 (2)
Anesthetic	2%	11
Miscellaneous	1%	6
Hallucinogen	1%	5
Muscle Relaxant	1%	3
Barbiturates	1%	3
Z Drugs	1%	3

(Denotes where 2 or more of the same drug class was prevalent within same case)
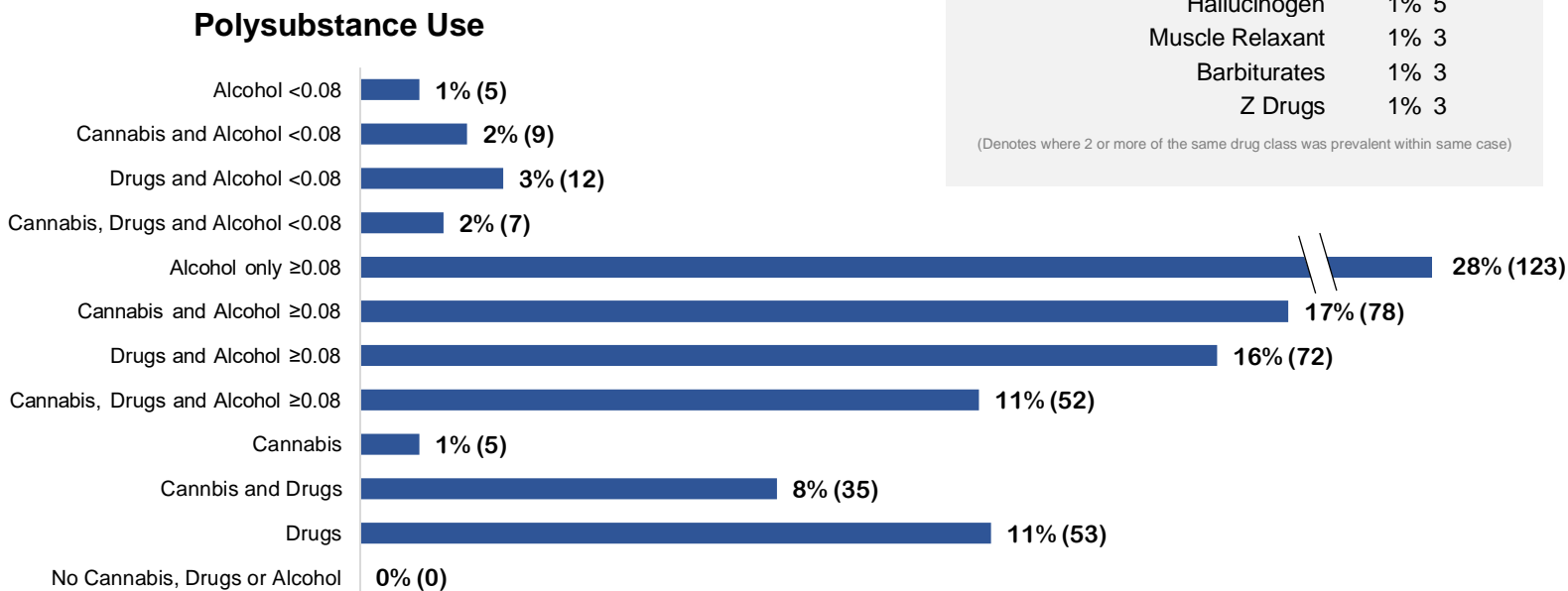
Polysubstance Use

- Alcohol <0.08: 1% (5)
- Cannabis and Alcohol <0.08: 2% (9)
- Drugs and Alcohol <0.08: 3% (12)
- Cannabis, Drugs and Alcohol <0.08: 2% (7)
- Alcohol only ≥0.08: 28% (123)
- Cannabis and Alcohol ≥0.08: 17% (78)
- Drugs and Alcohol ≥0.08: 16% (72)
- Cannabis, Drugs and Alcohol ≥0.08: 11% (52)
- Cannabis: 1% (5)
- Cannbis and Drugs: 8% (35)
- Drugs: 11% (53)
- No Cannabis, Drugs or Alcohol: 0% (0)

Driving Under the Influence of Drugs and/or Alcohol (DUID)
2023

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Drug Prevalence		Cases
Amphetamines		
Methamphetamine	16%	73
Amphetamine	15%	69
Norephedrine/Norpseudoephedrine	2%	8
3,4-Methylenedioxymethamphetamine (MDMA)	2%	7
3,4-Methylenedioxyamphetamine (MDA)	2%	7
Ephedrine/Pseudoephedrine	<1%	4
Phentermine	<1%	1
Anesthetics		
Lidocaine	3%	12
Anticonvulsants		
Gabapentin	3%	16
Lamotrigine	<1%	4
Antihistamines		
Diphenhydramine	8%	38
Doxylamine	2%	8
Hydroxyzine	1%	5
Promethazine	<1%	4
Chlorpheniramine	<1%	2
Cetirizine/Levocetirizine	<1%	1
Norchlorcyclizine	<1%	1
Barbiturates		
Phenobarbital	<1%	3
Benzodiazepines		
Alprazolam	3%	14
Midazolam	3%	12
alpha-Hydroxy Midazolam	2%	11
Bromazolam	2%	9
Nordiazepam	2%	8
Lorazepam	2%	7
7-Amino Clonazepam	1%	6
Clonazepam	<1%	4
Diazepam	<1%	4
alpha-Hydroxy Alprazolam	<1%	3
Chlordiazepoxide	<1%	2
Oxazepam	<1%	2
Temazepam	<1%	2
7-Amino Nitrazepam	<1%	1
8-Amino Clonazolam	<1%	1
Flualprazolam	<1%	1
Nitrazepam	<1%	1
Phenazepam	<1%	1
Cannabis		
Carboxy THC	38%	178
delta-9 Carboxy THC		147
Unspecified Carboxy THC		31
Tetrahydrocannabinol (THC)	31%	145
delta-9 Tetrahydrocannabinol (delta-9 THC)		153
11-Hydroxy THC	23%	108
Tetrahydrocannabivarinic Acid (THCVA)	10%	46

Drug Prevalence		Cases
Tetrahydrocannabinol Acid (THCA)	10%	45
Cannabichromene (CBC)	2%	10
Cannabinol (CBN)	1%	6
Cannabigerol (CBG)	1%	5
Cannabidiol (CBD)	<1%	3
Cocaine		
Benzoylecgonine	16%	75
Cocaine	14%	65
Cocaethylene	10%	46
meta-/para-Hydroxy Cocaine	3%	12
Anhydroecgonine Methyl Ester	1%	6
Norcocaine	<1%	3
Dissociatives		
Norketamine	3%	16
Ketamine	3%	13
Phencyclidine (PCP)	<1%	2
gamma-Hydroxybutyric Acid (GHB)	<1%	1
Hallucinogens		
Psilocybin	<1%	4
Psilocin	<1%	2
Miscellaneous		
Mitragynine	<1%	4
Xylazine	<1%	2
Muscle Relaxants		
Meprobamate	<1%	3
Carisoprodol	<1%	2
Opioids		
Fentanyl	13%	59
Norfentanyl	11%	49
Naloxone	3%	12
Dextromethorphan/Levomethorphan	2%	8
Morphine	2%	8
Noroxycodone	2%	8
Oxycodone	1%	6
Acetyl Fentanyl	1%	5
EDDP (Methadone Metabolite)	1%	5
Methadone	1%	5
Codeine	<1%	4
Hydrocodone	<1%	4
Norbuprenorphine	<1%	3
Norhydrocodone	<1%	3
Noroxymorphone	<1%	3
Buprenorphine	<1%	2
Dextrorphan/Levorphanol	<1%	2
Dihydrocodeine	<1%	2
Tramadol	<1%	2
6-Monoacetylmorphine (6-MAM)	<1%	1
Hydromorphone	<1%	1
O-Desmethyl-Tramadol	<1%	1
Oxymorphone	<1%	1

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Drug Prevalence		Cases
Volatiles		
Ethanol	80%	372
Z (sleeping) Drugs		
Zolpidem	<1%	3
Zolpidem Phenyl-4-Carboxylic Acid	<1%	3
Out-of-Scope		
9-Hydroxy Risperidone	<1%	1
Acetaminophen	<1%	1
Citalopram/Escitalopram	<1%	1
Salicylic Acid	<1%	1