Substance Drug Checking

Annual Review 2025

Substance Drug Checking on Vancouver Island offers free and confidential drug checking services in Victoria, Port Alberni, Comox Valley, Campbell River, Duncan, Port Hardy, and at local events. This report presents data about the drug supply on Vancouver Island for the 2025 calendar year.

7502

Samples Tested
Jan 1 - Dec 31 2025

Highlighted Findings

- 55.8% (4183/7502) of samples checked were confirmed to contain their expected active only with no other notable compounds detected.
- Samples expected to be benzodiazepines showed the highest level of misrepresentation, with 46.3% (199/430) of benzo samples containing an unexpected active. The least misrepresented samples were cocaine samples, with 90.5% (1021/1128) of samples containing the expected active component.
- Fentanyl continues to be the most common opioid found within the opioid–down supply, with 73.4% (1790/2407) of down samples containing fentanyl across all service locations on Vancouver Island. The median fentanyl concentration in opioid–down samples checked during 2025 was 8.7%.
- Fluorofentanyl prevalence in the opioid–down supply fluctuated between 20.1% and 66.9% between the months of January 2025 and December 2025. Throughout all of 2025, fluorofentanyl was found in 47.2% (1136/2407) of opioid–down samples with a median concentration of 5.5%.
- Ortho-Methyl fentanyl, which began appearing in opioid–down samples during 2024, waned in prevalence during 2025. This fentanyl analogues monthly prevalence fluctuated between 1.0% and 25%. Overall, ortho-methyl fentanyl was found in 11.1% (267/2407) of opioid–down samples with a median concentration of 1.6%.
- Benzodiazepines were detected in 41.5% (1000/2407) of opioid–down samples checked in 2025. Bromazolam remained the most common benzodiazepine adulterant detected in 2025, comprising 63.6% (636/1000) of benzodiazepines detected in opioid–down samples.
- “Tranq,” referring to the substances xylazine and medetomidine, was found in 10.5% (253/2407) of opioid–down samples during 2025. Medetomidine was found in 161 samples at a median concentration of 1.0%. Xylazine was found in 103 samples at a median concentration of 0.6%.
- Outside of opioid–down samples, unexpected opioids were found most frequently in samples expected to be opioid–other (17.7%), benzodiazepines (7.2%), and methamphetamine (5.8%).
- Unexpected opioids were detected in 17 (1.5%) cocaine samples, 3 (0.3%) MDMA samples, and 11 (2.0%) other samples. No unexpected opioids were found in samples expected to be dissociatives or psychedelics.

Substance Drug Checking

Annual Review 2025

Land Acknowledgement

Our project works on Indigenous land. We provide drug checking, harm reduction education and support across many territories on what is colonially known as *Vancouver Island*. We also act as a resource for these services across the province colonially known as *British Columbia*. We honour and offer respect to many Nations for their stewardship, care and leadership on these lands.

Our project originated on the territories of the lək̓ʷəŋən speaking Peoples, including the Songhees and Xwsepsum (Esquimalt) Nations, and the W̱SÁNEĆ (Saanich) Nations on whose land the University of Victoria is located. Some of the territories we are honoured to work across specifically include: Halalt, Lyackson, Meluxulh (Malahat), Puneluxutth', Quw'utsun, Stz-uminus, and Ts'uubaa-asatx; Hupačasath and Tseshaht; K'ómoks; Laich-kwil-tach; and Gwa'Sala-'Nakwaxda'xw.

We acknowledge the inextricable links between research, colonization and racism against Indigenous Peoples, which continue to this date. Ending the violence faced by people who use drugs cannot be achieved without actively working on decolonization. We also recognize that as the majority of our staff are not Indigenous there is much more work for us to do to challenge the settler lens and colonial framework. This includes learning and growing relationships in order to take an anti-colonial and inclusive approach to the work we do.

This map was sourced from the Pacific Salmon Foundation Marine Data Centre

Substance Drug Checking

Annual Review 2025

Narrative Report

In 2025, our service offered vitally important information throughout the community of so-called Victoria, the larger geographic region of so-called Vancouver Island, and within the province of British Columbia. In the ninth year of the overdose crisis fueled by an erratic and inconsistent unregulated drug supply, drug checking remains one of many vital community defenses against further loss of life due to drug toxicity.

Our main point-of-care site located within the North Park community of Victoria continues to operate. All walks of life are welcome in this space to learn about their substances via a world-class suite of instruments. We also receive samples that arrive by mail and through outreach conducted by Substance staff and partner organizations. We also continue to receive samples for confirmatory analysis from our distributed sites on Vancouver Island and from several sites across the province in partnership with the British Columbia Centre on Substance Use (BCCSU).

Our busiest month this year was July, where we checked 794 samples, these samples came from our point-of-care service, in addition to our distributed sites and outreach program. During each month of 2025 we not only checked samples from our own sites but also provided confirmatory analysis in partnership with the BCCSU, providing mass spectrometry for 3183 samples during this year. The figure below shows the total number of Substance samples we checked each month, with the solid blue line showing data for 2025.

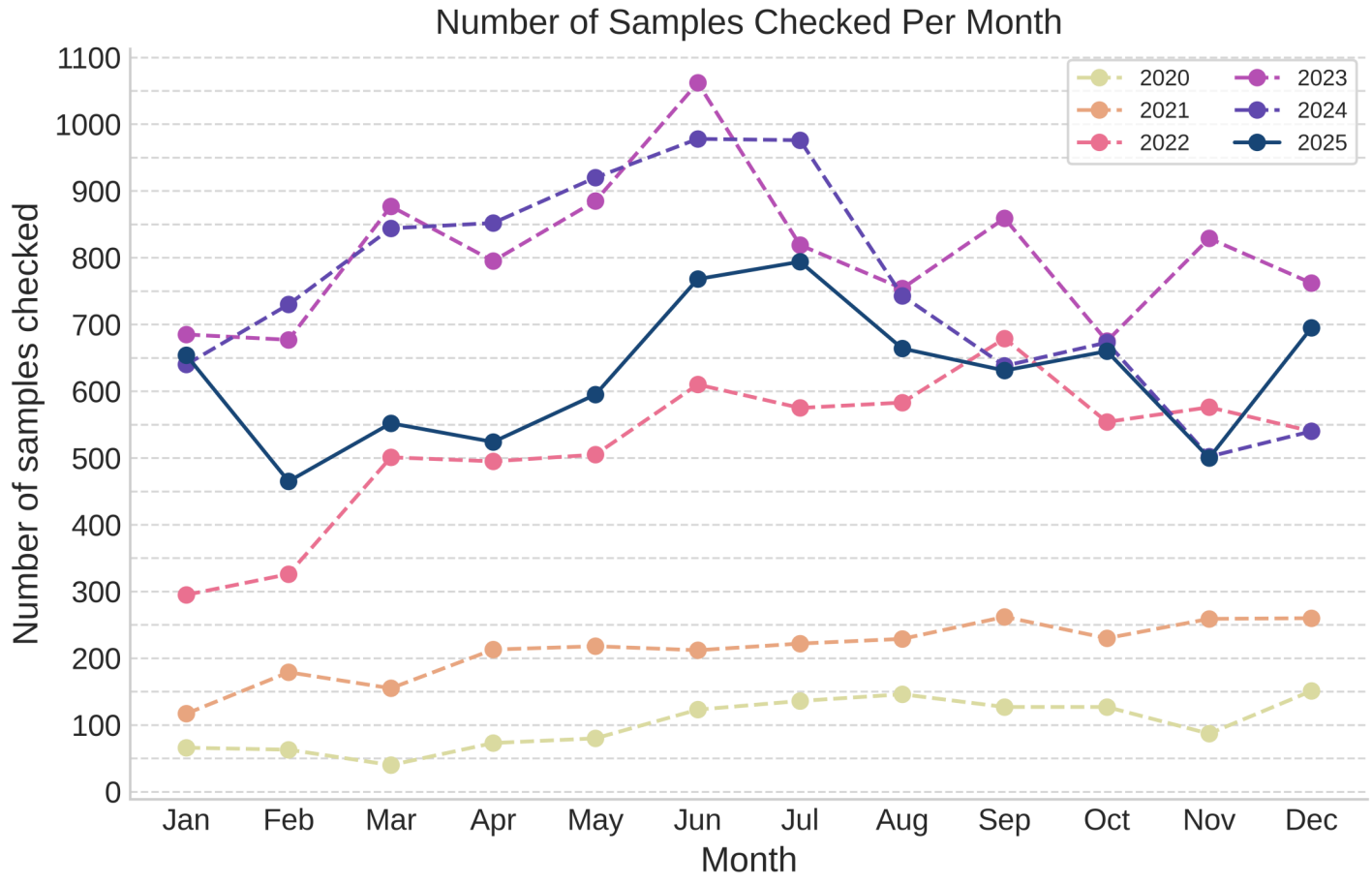

Figure 1. Number of samples checked per month between 2020 and 2025, across all service locations. Excluding confirmatory samples checked in partnership with the BCCSU.

Sample Volumes Per Service Location

This year we continued to provide confirmatory analysis via paper spray mass spectrometry to our distributed sites located in overdose prevention sites operated by the Port Alberni Shelter Society, the Vancouver Island Mental Health Society in *Campbell River*, Lookout Housing and Health Society in *Duncan*, Island Health Mental Health and Substance Use in *Port Hardy*, and AVI Health and Community Services in the *Comox Valley* and *Campbell River*. As part of a new partnership, we also provided our distributed drug checking services to the Nuu-chah-nulth Tribal Council, these samples are labelled as *Port Alberni* samples in the figures/tables henceforth.

Service Location	Number of Samples 2025	Number of Samples 2024	Relative Difference
Campbell River	237	337	-29.7%
Comox Valley	312	327	-4.6%
Duncan	171	383	-55.4%
Outreach	2260	2105	7.4%
Port Alberni	234	168	39.3%
Port Hardy	1	36	-97.2%
Substance	4287	5678	-24.5%
Overall	7502	9034	-17.0%

Table 1. Number of samples checked and percent change by service location.

A majority of service locations this year saw a decrease in sample volumes. Overall, we observed a 17% decrease in sample volumes compared to 2024. At our point-of-care site in Victoria, walk-in sample volumes decreased by 24.5%, with the largest drop in overall sample volumes being observed within the opioid–down class of samples (Table 2, Page 6).

The exceptions to the overall decrease in sample volumes we observed this year occurred at our services located in Port Alberni and our Outreach service. The increase in sample volumes observed within Port Alberni is likely due to our new partnership with the Nuu-chah-nulth Tribal Council, which provides another location to access drug checking within the Alberni–Clayoquot region. Here in so-called Victoria our outreach program collects samples from various housing and supervised consumption sites (SCS), additionally, samples checked at various events and festivals are also labelled as Outreach.

One goal of our outreach program is to help more people access drug checking, another goal is to create and nurture connections with community members and staff from other organizations. Housing and SCS outreach, in addition to festival drug checking, discussed on page 8, help us to reach new and returning service users. While our housing and SCS outreach route maintains our connections with other organizations by sharing information about the local drug supply through our weekly reports (which were redesigned last year based on community feedback). Furthermore, our monthly reports, blog posts, and other resources made or maintained by Substance, such as drug pamphlets and benzo equivalency charts, also help harm reduction information reach all types of people.

What were people bringing to get checked?

A wide variety of different people bring us a wide variety of substances, which can be grouped into different drug classes. The donut chart shown below (Figure 2) aggregates the total number of samples we checked by their expected drug class (i.e. the drug category reported by the service user), inclusive of all service locations. The consistent use of drug checking for a diverse range of drug categories, throughout the entire year, and across the island, demonstrates the continued need for both universal and population-targeted approaches to drug checking services and the accessibility of services.

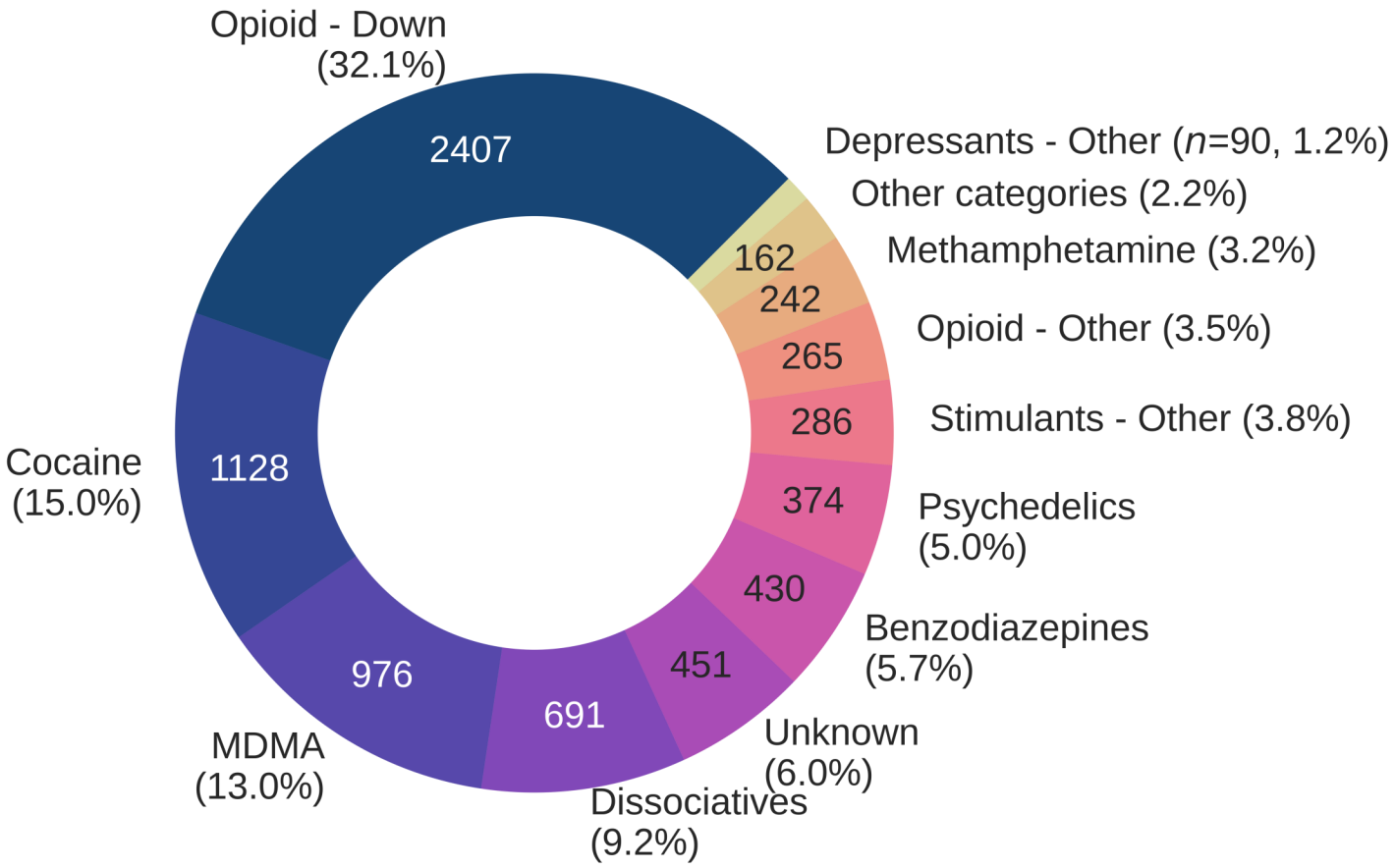

Figure 2. Number and proportion of samples checked by expected drug class, across all service locations.

Some example[1] drugs within each class are as follows: **Opioid–down**: fentanyl, fluorofentanyl, and heroin. **Cocaine**: cocaine HCl (powder/soft), cocaine base (crack). **MDMA**: MDMA, MDA. **Dissociatives**: ketamine, novel dissociatives like O-PCE. **Benzodiazepines**: bromazolam, desalkylgidazepam, diazepam (Valium), etizolam. **Psychedelics**: 2C-B, DMT, LSD. **Stimulants–other**: 4-MMC (mephedrone), amphetamine. **Opioid–other**: hydromorphone (Dilaudid), oxycodone. **Other categories**: Over-the-counter medications (i.e. ibuprofen), steroids, common cutting agents. **Depressants–other:** GHB, Phenibut, Medetomidine. **Unknown:** samples where the expected drug was not known by the service user.

[1]This list is not comprehensive to every expected drug within each subcategory

How did drug checking usage change between 2024 and 2025?

When compared to 2024, we observed changes in the number of samples we checked across many drug classes (Table 2). Most notably we observed a decrease in expected opioid–down samples, the class of samples which we check most often, by -33.9% when compared with 2024. A decline of this magnitude also affected expected unknown samples, which changed by a similar -35.1%. Most other drug classes also showed decreases between 2024 and 2025. However, we checked an increased number of samples expected to be dissociatives, benzodiazepines, Stimulant—Other, Opioid–other, other categories.

Most notably the number of Stimulant—Other samples we checked increased by 95.9%, which can largely be attributed to a 300% increase in the number of 4-MMC (Mephedrone) samples we checked this year. Benzodiazepines were another category we checked more often in 2025, showing an increase of +19.8%. Within the benzodiazepine class, we noted a +100% increase in the number of unique expected compounds. In other words, we checked a broader range of drugs categorized as benzodiazepines.

Expected Drug Class	Number of Samples Checked in 2025	Number of Samples Checked in 2024	Relative Difference
Opioid–down	2407	3641	-33.9%
Cocaine	1128	1325	-14.9%
MDMA	976	1051	-7.1%
Dissociatives	691	622	+11.1%
Unknown	451	696	-35.1%
Benzodiazepines	430	359	+19.8%
Psychedelics	374	389	-3.9%
Stimulants–other	286	146	+95.9%
Opioid–other	265	251	+5.6%
Methamphetamine	242	309	-21.7%
Other categories	162	132	+22.7%
Depressants–other	90	115	-21.7%

Table 2. Proportion of total samples in 2024 and 2025 by expected drug class.

What were people getting checked by location?

The expected substance data presented in the previous sections can be separated by sample collection location/method. Each site shows its own unique proportion of the types of samples checked, and these differences are based partially on the type of site that is offering drug checking (OPS vs. storefront), on community engagement with the service, and on the regional markets overall. Regardless of the type of service offering drug checking, all classes of drugs are checked on Vancouver Island. Figure 3 on the following page shows the proportion of samples checked at each location by their expected drug class, while Table 3 on the following page shows the total number of samples checked at each location by drug class.

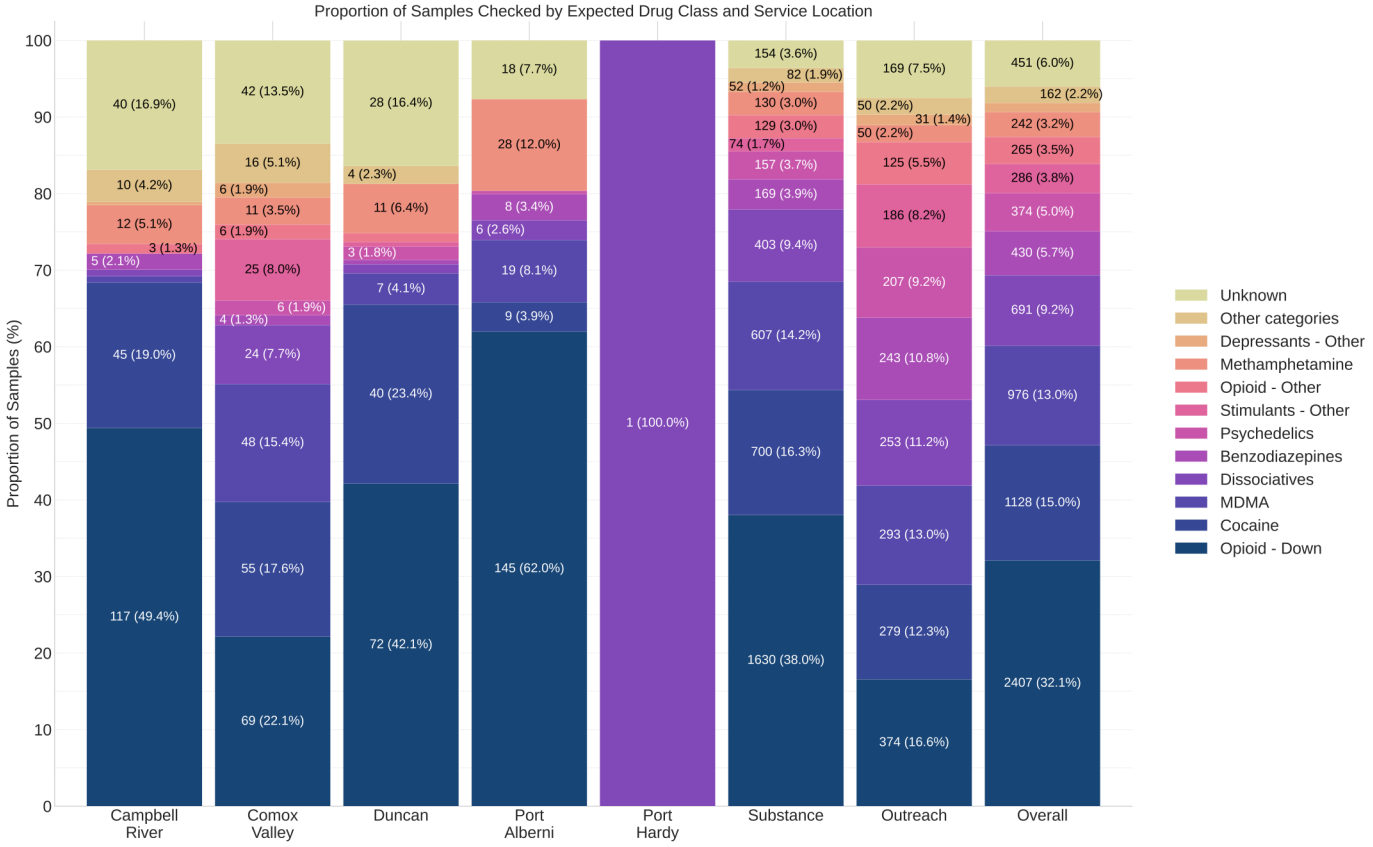

Figure 3. Proportion of samples checked by expected drug class and service location. Proportions less than or equal to 1.2% are omitted for readability.

Expected Substance Class	Campbell River	Comox Valley	Duncan	Port Alberni	Port Hardy	Substance	Outreach	Overall
Opioid–down	117	69	72	145	0	1630	374	2407
Cocaine	45	55	40	9	0	700	279	1128
MDMA	2	48	7	19	0	607	293	976
Dissociatives	2	24	2	6	1	403	253	691
Benzodiazepines	5	4	1	8	0	169	243	430
Psychedelics	0	6	3	1	0	157	207	374
Stimulants–other	0	25	1	0	0	74	186	286
Opioid–other	3	6	2	0	0	129	125	265
Methamphetamine	12	11	11	28	0	130	50	242
Depressants–other	1	6	0	0	0	52	31	90
Other categories	10	16	4	0	0	82	50	162
Unknown	40	42	28	18	0	154	169	451
Total	237	312	171	234	1	4287	2260	7502

Table 3. Number of samples checked and percent change by expected drug class.

Festival Drug Checking

Regardless of a specific budget for festival or event drug checking, we operated drug checking at several events during 2025. At these gatherings, our services reached a total of 187 service users (6 more than 2024) and provided valuable and pertinent information about the composition of 311 samples (60 more samples than 2024). The busiest event was Otherworld, Vancouver Island's regional burning man event, where we checked 122 samples for 67 unique Other-worldians (a.k.a. service users). The second busiest event was Samsara Music Festival where we checked 74 samples for 53 unique service users.

Event Name	Event Date(s)	Event Location	Service Users	Samples Checked
Song and Surf Music Festival	February 14 - 15, 2025	Port Renfrew, BC	9	16
Otherworld	June 05 - 08, 2025	Cowichan Valley, BC	67	122
Nectar Festival	June 20 - 22, 2025	Salt Spring Island, BC	10	18
Samsara Music Festival	August 08 - 10, 2025	Jordan River, BC	53	74
Rifflandia Music Festival	September 11 - 14, 2025	Victoria, BC	25	37
INIT Music Festival	September 19 - 21, 2025	Salt Spring Island, BC	23	44
All Events			187	311

Table 4. Number of samples checked at festivals and events in 2025.

Drug checking at events also acts as a form of outreach by engaging people who are new to having their substances checked. As part of our intake survey, we ask whether or not a service user has accessed any drug checking service before. When looking at the data from the events this year (Figure 2), we find that 39.4% of service users who re-sponded to the intake survey (170) had not used a drug checking service before. When compared with data col-lected at our storefront in “Victoria”, only 19.9% (617/3106) of respondents were new to drug checking. This suggests that event based drug checking is a viable method to expand the reach and accessibility of drug checking, especially to new service users.

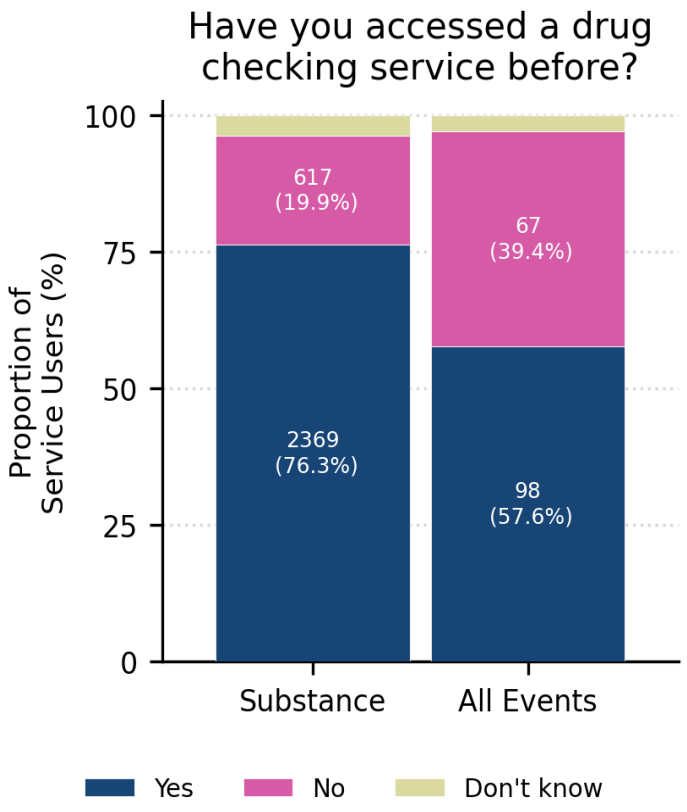

Figure 4: Proportion of new service users at all events versus at our storefront

Definitions of Composition Classes

All samples, regardless of expected substance or service location, are checked using relevant[1] analytical techniques to determine what active ingredients, adulterants, and cutting agents were present. Samples are then grouped into the following categories based on the composition we found in relation to the expected substance:

- ***"Expected Active Only"***: samples that were as expected with no other notable[2] compounds detected[3]
    - Example: An expected MDMA sample that was found to be MDMA with no cuts or adulterants detected
- ***"Expected + Unexpected Actives"***: samples that contained the expected drug and unexpected active compounds
    - Example: An expected cocaine sample that was found to contain cocaine and levamisole
- ***"Unexpected Active Only"***: samples that contained an unexpected active but the expected drug was not found
    - Example: An expected alprazolam (Xanax) sample that was found to be bromazolam instead
- ***"No actives found"***: samples where no active compounds were detected3
    - Example: An expected hydromorphone (Dilaudid) tablet that was found to be a sugar pill
- ***"Unknown composition"***: samples where analysis was performed but we were unable to determine the composition, these samples likely contain a compound not present in either libraries

[1]*The instrument best suited for the analysis of that particular drug class is prioritized*

[2]*"Active" or "notable" compounds are those which produce a psychoactive effect or are pharmacologically relevant (may have the potential for unexpected effects). While psychoactive/pharmacologically relevant, caffeine is an exception that is considered an "inactive cut" in our reporting.*

[3]*See limitations below*

Limitations

There are limitations to a drug checking result based on the technologies used, the analysis methods implemented, and the nature of the sample itself. The immunoassay strip tests used to detect fentanyl analogues and benzodiazepines are remarkably sensitive, but they are not tailored to detect all known analogues, nor are the concentration cut-offs consistent between different analogues. For example, etizolam, while often included with benzodiazepines is in fact a thienodiazepine derivative and has limited reactivity with benzodiazepine strip tests. Some compounds like benzodiazepines, cocaine base, and fluorofentanyl base also have poor water solubility which affects the reliability of strip test results when examining these samples.

FTIR has four primary limitations in the context of our service: a relatively high limit of detection, incomplete spectral reference libraries, challenges when analyzing mixtures, and non-quantitative results. The limit of detection for FTIR is around 5% (weight/weight) meaning low concentration compounds in a sample may not be detected on FTIR. Compound identification on FTIR relies on reference libraries - databases of FTIR spectra for drugs. Our spectral libraries are not exhaustive, especially for new/novel compounds and some pharmaceuticals. Samples containing multiple components present a challenge for FTIR as the mixture signal becomes increasingly difficult to interpret; we often limit our FTIR mixture analysis to 3-5 compounds and FTIR does not produce validated concentration estimates of compounds in a mixture. Finally, organic samples like cannabis and mushrooms are not suited for analysis on FTIR as the complex signal from organic material obfuscates the spectrum.

Limitations *(Continued)*

Paper spray mass spectrometry (PS-MS) is used to alleviate some of the aforementioned hurdles, but comes with limitations of its own. We primarily operate the PS-MS in using a targeted method meaning we scan every sample for a specific list of compounds. The current targeted method contains 120 different drugs spanning a wide range of drug classes. The list of compounds included in our targeted method can be found here:

PS-MS Targeted Compounds: https://substance.uvic.ca/paperspray

The sensitivity in detecting compounds on this list (the limit of detection) varies by compound, but most compounds can be detected in samples down to 0.1% (weight/weight). In addition to being able to *detect* compounds at low concentration, the targeted method allows us to *quantify* these compounds in a sample as well. In May of last year, our PS-MS method was updated. Previously the targeted method was calibrated over a range of concentrations spanning around 0.1% to 80% (weight/weight) for most compounds, though some drugs like bromazolam had an upper limit of quantitation set to 25%, and other drugs such as fluorofentanyl had an upper limit of quantification set to 40%. Now however, all compounds have an upper limit of 50%. If a sample contains a higher concentration of a compound than the PS-MS limits of quantitation, then only the upper limit will be reported. For example, the upper limit of quantitation for fentanyl on the PS-MS is 50% - any sample containing more than 50% fentanyl will be reported as “>50%”.

In specific circumstances, compounds beyond the routine target list can be identified by PS-MS. When a compound is common, well documented, and reliably detected beyond our service, we can deepen our analysis and use convergent evidence across instruments to confirm it. However, PS-MS cannot determine chemical structure and compounds that are the same mass (otherwise known as being “isobaric”) or are structurally similar to other compounds are difficult to differentiate. Concentrations cannot be provided for compounds detected through this untargeted analysis. Some drugs like GHB, steroids, sugars, and oils do not ionize consistently on PS-MS meaning we cannot analyze these samples to identify the compound.

Purity analysis is outside of the scope of our service and is beyond the capabilities of our instruments. “No cuts detect ed” is a ruling out of the compounds we're able to detect; not a confirmation of chemical purity. Purity, in a chemical sense, could be defined as the lack of impurities. Impurities could exist from the synthesis process where there are unintentional byproducts, leftover alkaloids, and residual precursors and solvents, could arise as breakdown products from storage and handling conditions, and could be intentionally added cutting agents or adulterants. Considering many possible sources of impurities, there is a massive list of compounds that could be present in sample but many of these compounds may be present in such trace levels that we are unable to detect them on our instruments. Even with PS-MS, where detection could be possible, the list of possible impurities to screen for is massive and the process to identify and quantify them would require extensive method development beyond the objectives/capabilities of our point-of-care service.

Results

For the majority of samples checked, we confirm the presence of the expected drug with no additional active compounds detected above the limitations of the drug check. Figure 5 highlights all drug classes, differentiating samples where only the expected active component was detected—from situations when other unexpected active components were detected, when the sample was of unknown composition, and when no active components were detected.

Examining Figure 5, we can see that a majority of the samples checked within each drug class, contain the expected active only. The main exceptions to this are expected opioid–down samples, expected benzodiazepines, and expected unknown samples. In the following sections we break down each of the drug classes, taking a look at their composition across locations, breaking down which substances and cutting agents we found, and quantifying actives when possible.

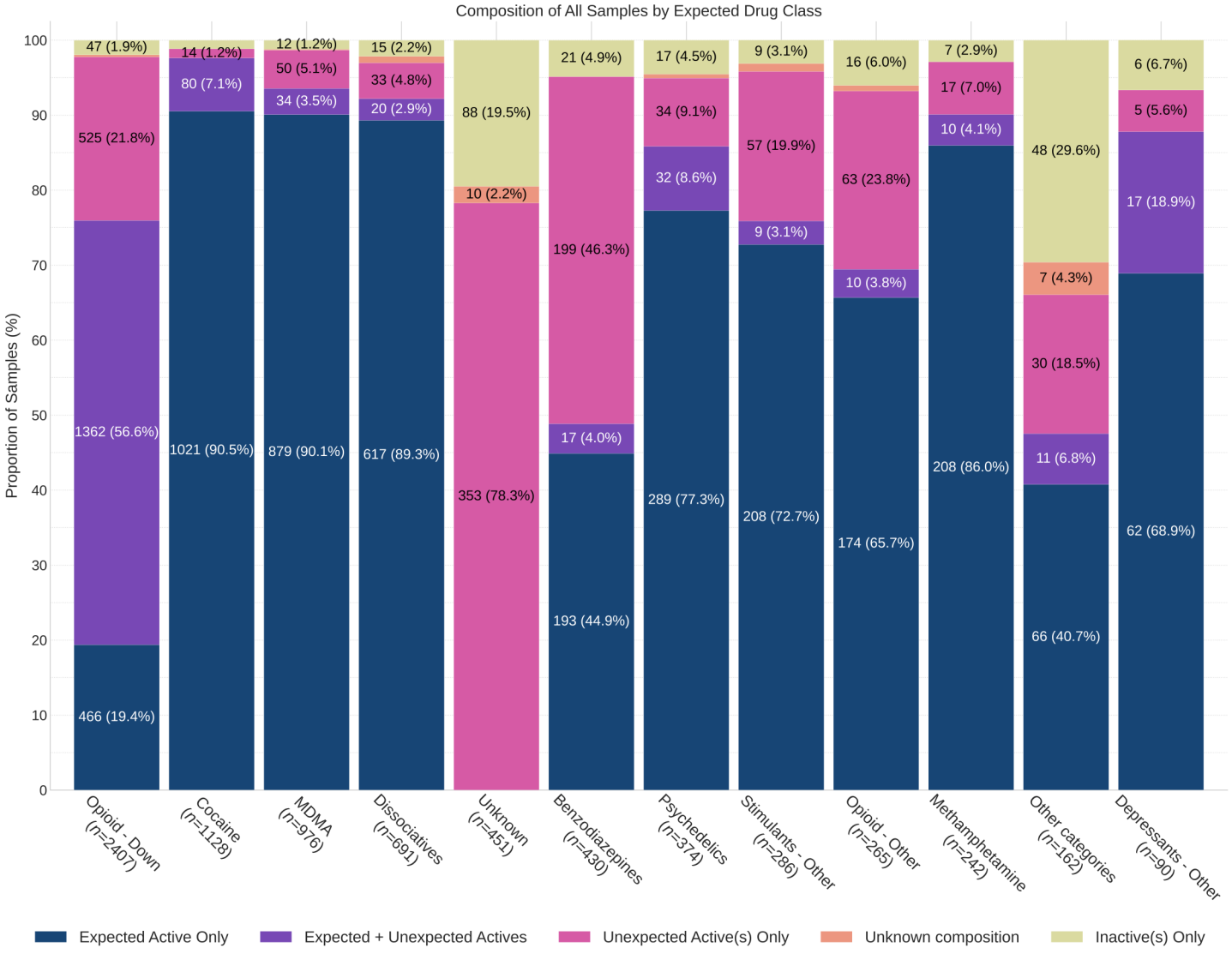

Figure 5. Proportion of samples checked by expected drug class, grouped by composition class (see page 9 for definitions). Proportions less than or equal to 1.1% are omitted for readability.

Opioid–Down

Opioid–down or more commonly just “down” refers to samples that are expected to be fentanyl, fentanyl analogues, and/or heroin. Other subcategories of down exist, most commonly, “benzo-down”, which describes samples that are expected to contain both an opioid and a benzodiazepine, and “tranq-dope”, which describes samples containing both an opioid and xylazine or medetomidine.

Due to the ever-changing nature of the down supply, the ubiquity of low concentration, potent synthetic compounds, and the frequency of unexpected polysubstance mixtures means that a majority of service users with down samples are seeking both trace compound *detection* and *quantification.* Opioid–down is the most prevalent expected substance class that we check across all locations and makes up around 16.6% - 62.0% of the samples that we check, depending on service location (Figure 3, page 7).

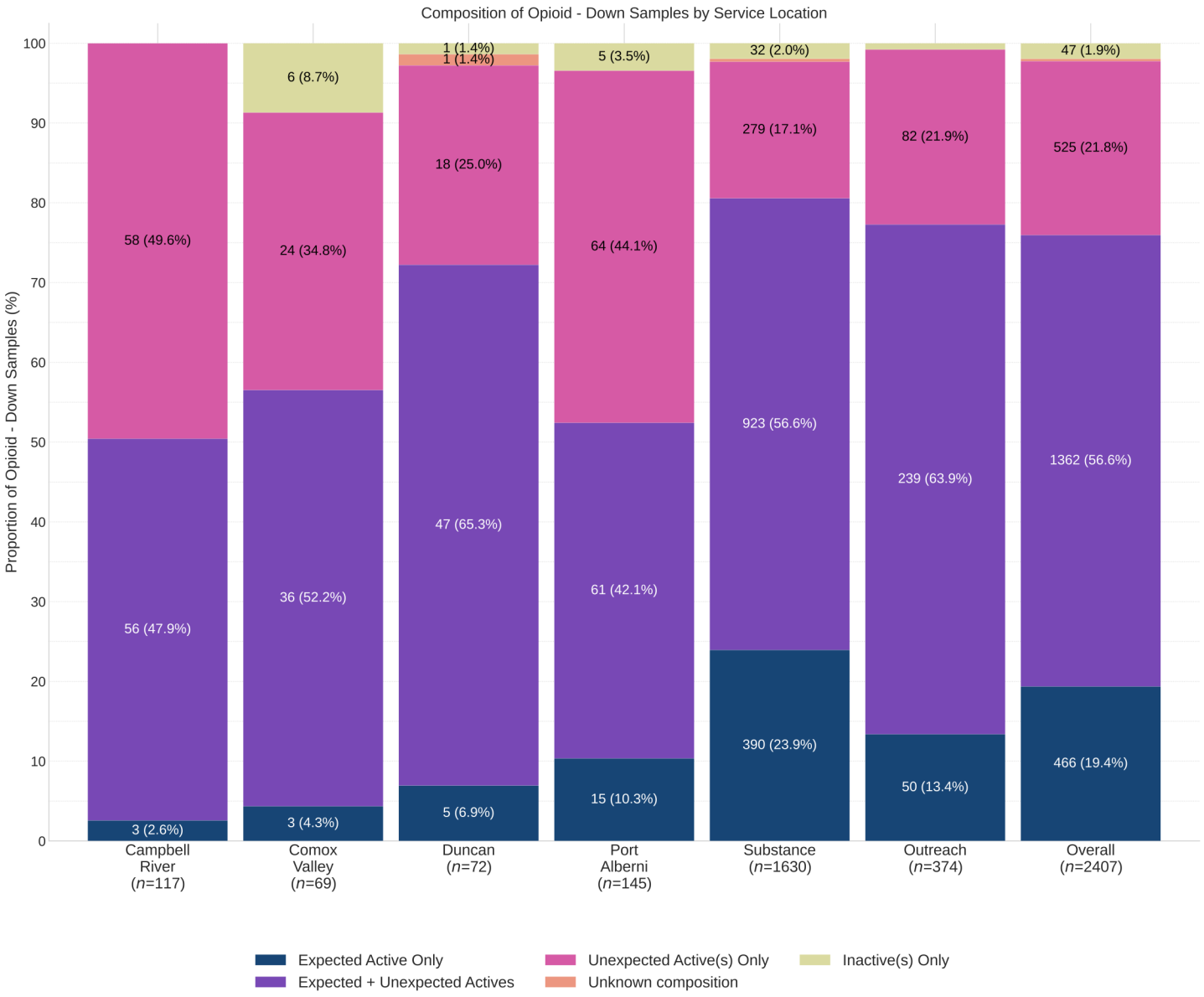

Figure 6. Proportion and number of Opioid–down samples checked by service locations, grouped by composition class (see page 10 for definitions). Proportions less than or equal to 1.2% are omitted for readability.

Opioid–Down Adulteration

The unregulated opioid–down supply shows the highest level of adulteration compared to the other drug classes that we check. More than half (56.6%) of down samples contained the expected active (fentanyl or heroin) *in addition to* other unexpected actives (Figure 6, page 12). Approximately one fifth (21.8%) of down samples did not contain the expected active and were found to contain only unexpected actives instead (Figure 6, page 12). Three primary categories of drugs that constituted the majority of unexpected actives that found within the down supply are benzodiazepines, fentanyl analogues, and tranq (xylazine and/or medetomidine).

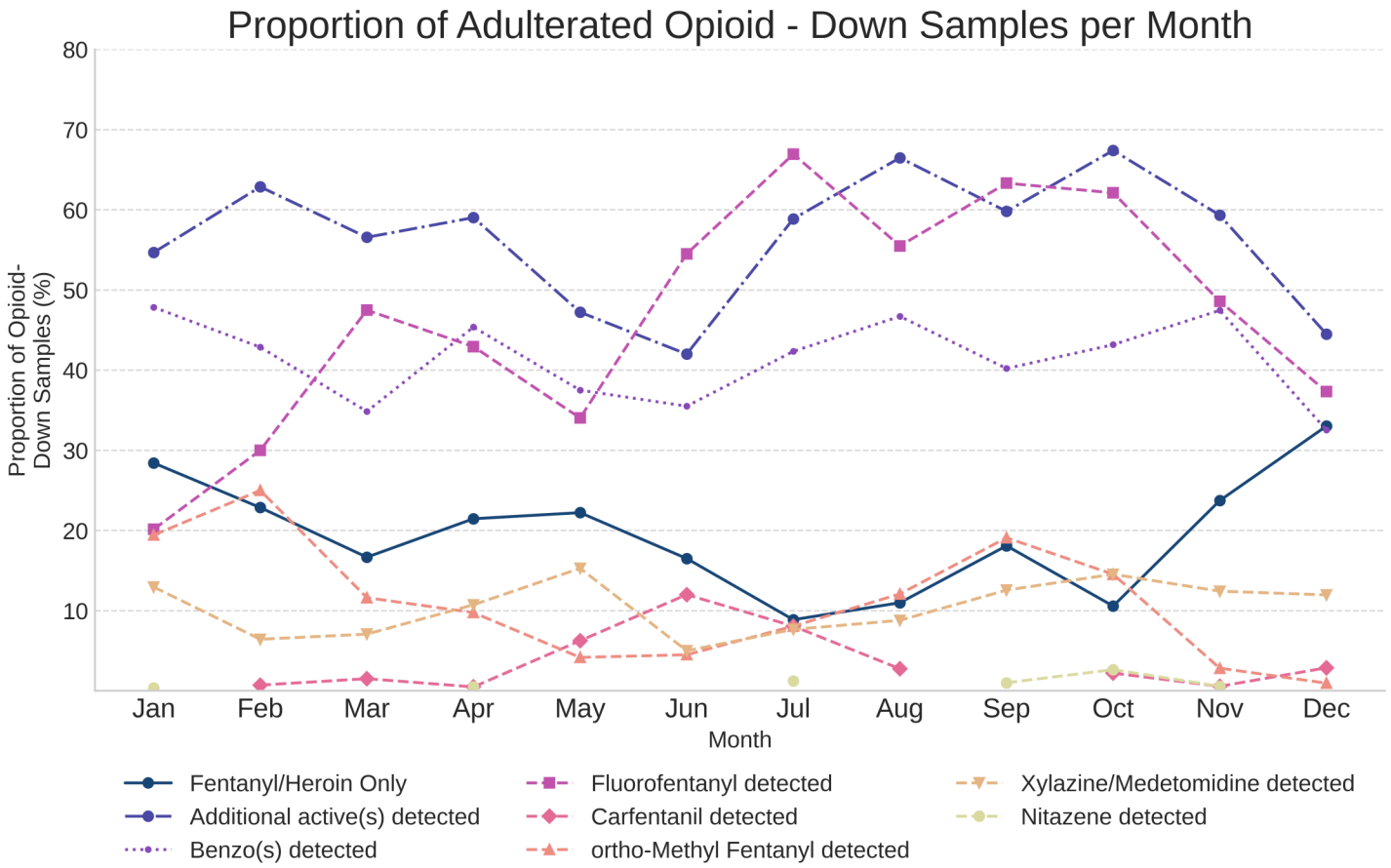

Figure 7. The proportion of expected opioid–down samples checked in 2025 that contained fentanyl/heroin as the only detected actives **(solid dark blue)**, opioid–down samples with an additional active detected **(dot-dashed purple)**, opioid–down samples that contained benzodiazepine-related drugs **(dotted purple)**, opioid–down samples that contained fluorofentanyl **(dashed violet)**, opioid–down samples that contained ortho-Methyl fentanyl **(dashed coral)**, opioid–down samples that contained xylazine and/or medetomidine **(dashed orange)**, and opioid–down samples that contained a nitazene **(dashed lime)**. Data are inclusive of all service locations.

Fluorofentanyl and benzodiazepines remained the most common additional active component found in opioid–down samples during 2025. Ortho-methyl fentanyl, an analogue which began appearing in down samples during 2024, remained within the supply during 2025, albeit at lower proportions than last year. Carfentanil, a potent fentanyl analogue with an estimated potency 20-100 times that of fentanyl, made a concerning reappearance in the supply on Vancouver Island during the late spring and early summer months of 2025. Another adulteration of concern during 2025 (and into 2026) is medetomidine, a veterinary tranquilizer, that is similar yet more potent than xylazine.

Opioid–Down Adulteration: Benzodiazepines

In 2025, the prevalence of benzodiazepines in the down supply remained high throughout the year, with 41.5% of all opioid–down samples checked in 2025 containing a benzo, aggregated across all locations. This represents a 0.5% decrease in the prevalence of "benzo-down" compared to 2024. January showed the highest prevalence of benzodiazepines in the down supply (47.8%) and December showed the lowest prevalence of benzodiazepines in the down suppl (32.5%).

By region, Duncan showed the highest level of benzodiazepine adulteration with 77.8% (56/72) of opioid–down samples containing benzodiazepines; Outreach samples showed the lowest degree of benzodiazepine positivity with 35.8% (134/374) of down samples containing benzodiazepines, although Substance was a close third at 35.9% (585/1630) of down samples containing benzo.

Across all months of 2025, bromazolam was the most common benzo found in the down supply, found in 63.6% (636/1000) of benzo-positive down samples or 26.4% (636/2407) of all down samples. The second most common benzodiazepine we found was desalkylgidazepam, which was found in 21.5% (215/1000) of benzo-positive down samples or 8.9% (215/2407) of all down samples. Of interest is ethylbromazolam, which, despite only beginning to gain prevalence in September, accounted for an overall 4.6% (46/1000) of benzo-positive down samples.

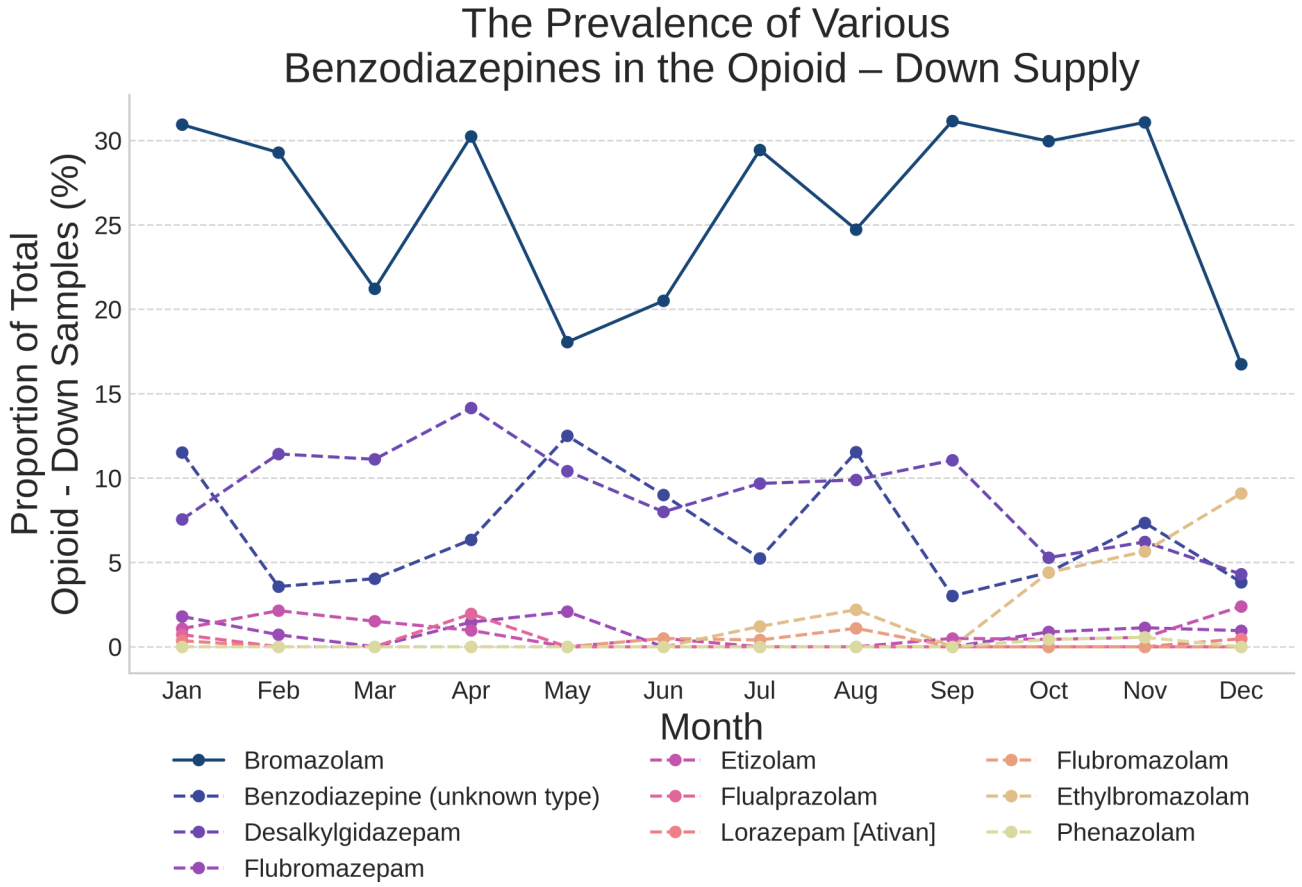

Figure 8. The proportion of expected opioid–down samples checked in 2025 that contained bromazolam **(solid dark blue)**, Benzodiazepine (unknown type) **(dashed blue)**, desalkylgidazepam **(dashed purple)**, flubromazepam **(dashed violet)**, etizolam **(dashed magenta)**, and other benzodiazepines. Data are inclusive of all service locations.

Opioid–Down Adulteration: Xylazine and Medetomidine

Xylazine and Medetomidine positive down samples, a.k.a. “Tranq-dope” comprised 10.5% (253/2407) of all expected down samples checked in 2025. This represents an increase of 4.3 percentage points in “Tranq-dope” from 2024, where 6.5% of all down samples contained xylazine. As shown in Figure 9, for a majority of months in 2025, medetomidine positive samples accounted for the majority of tranq prevalence.

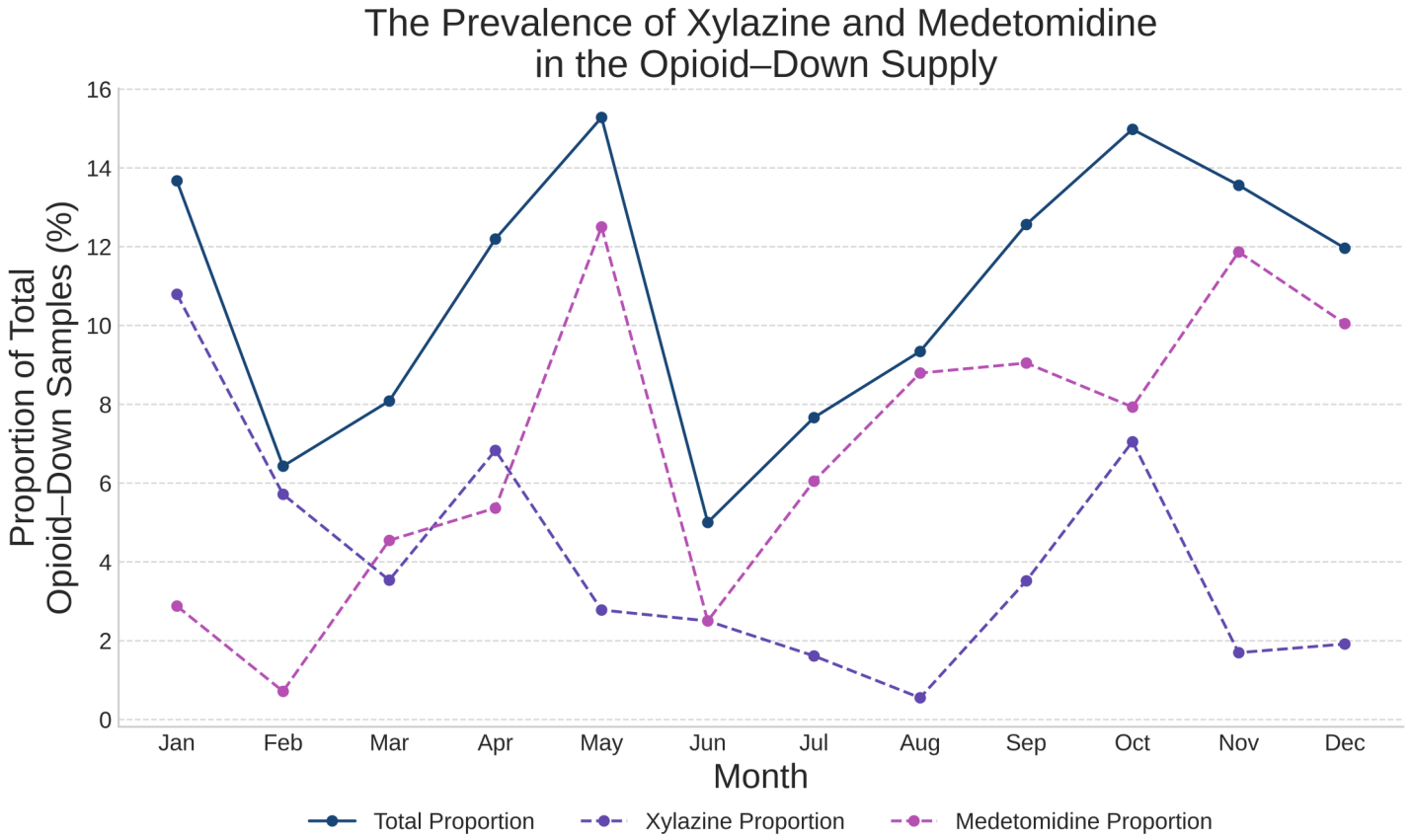

Figure 9. Prevalence of medetomidine and xylazine in the opioid-down supply during 2025 across all service locations.

Location	Proportion of Opioid Samples Containing Xylazine and/or Medetomidine	Location	Proportion of Opioid Samples Containing Xylazine and/or Medetomidine
Campbell River	29.9%	Port Hardy	N/A
Comox Valley	26.1%	Substance	4.9%
Duncan	11.1%	Outreach	21.9%
Port Alberni	20.7%	Overall	10.5%

Table 5. Prevalence of medetomidine and xylazine in opioid-down samples in 2025 per service location

Per service location we found that our Campbell River service location had the highest prevalence of “Tranq-dope”, with 29.9% (Table 5) of down samples containing medetomidine and/or xylazine, followed by our Comox Valley location with 26.1%, and Outreach with 21.9%. Our Substance service location had the lowest proportion of “Tranq-dope” samples, with only 4.9% of the down supply containing xylazine and/or medetomidine .

Opioid–Down: What did we find?

Table 6 below (and on the following pages) aggregates all active compounds detected in the opioid–down supply in 2025, across all service locations. The number of detections, and the prevalence with respect to all opioid–down samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 7 on page 20 aggregates all cutting agents detected in opioid–down samples, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (Percentage of all down samples)
Expected Active Only	***466 (19.4%)***
Fentanyl	463 (19.2%)
Fluorofentanyl	3 (0.1%)
Heroin	1 (0.0%)
Methamphetamine‡	1 (0.0%)
Expected* + Unexpected Active(s)	***1362 (56.6%)***
Fentanyl*	1310 (54.4%)
Heroin*	133 (5.5%)
Acetaminophen (Tylenol)	7 (0.3%)
Acetylcodeine	77 (3.2%)
Acetylmorphine (MAM, 6-MAM)	123 (5.1%)
Benzodiazepine (unknown type)	113 (4.7%)
Bromazolam	539 (22.4%)
Carfentanil	43 (1.8%)
Cocaine Base (crack, rock, hard)	1 (0.0%)
Cocaine HCl (powder)	21 (0.9%)
Codeine (T3's / T4's)	2 (0.1%)
Desalkylgidazepam	154 (6.4%)
Despropionyl para-fluorofentanyl	2 (0.1%)
Dimethocaine	1 (0.0%)
Ethylbromazolam	28 (1.2%)
Etizolam	19 (0.8%)
Etodesnitazene	1 (0.0%)
Etoetonitazene	1 (0.0%)

Table 6 *(Continued on the next page)*. Active compounds detected in opioid–down samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray. *Expected active component.* ‡Sample was expected to contain fentanyl and methamphetamine.

Opioid–Down: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (Percentage of all down samples)
Expected* + Unexpected Active(s)	***1362 (56.6%)***
Fentanyl or analogue	1 (0.0%)
Flualprazolam	3 (0.1%)
Flubromazepam	15 (0.6%)
Flubromazolam	3 (0.1%)
Fluorofentanyl	736 (30.6%)
Fluorofentanyl Base	7 (0.3%)
Furanyl UF-17	3 (0.1%)
Gabapentin	2 (0.1%)
Ketamine	4 (0.2%)
Levamisole	2 (0.1%)
Lidocaine	11 (0.5%)
Lorazepam (Ativan)	1 (0.0%)
MDMA	2 (0.1%)
Medetomidine	95 (3.9%)
Methamphetamine	30 (1.2%)
Metonitazene	5 (0.2%)
Morphine	11 (0.5%)
N-desethyl etonitazene	2 (0.1%)
Nitazene (unknown type)	2 (0.1%)
Noscapine	2 (0.1%)
Phenacetin	6 (0.2%)
Phenazolam	2 (0.1%)
Pregabalin	1 (0.0%)
Procaine	3 (0.1%)
Tadalafil (Cialis)	1 (0.0%)
Unknown	2 (0.1%)
Xylazine	64 (2.7%)
ortho-Methyl fentanyl	225 (9.3%)

Table 6 *(Continued from previous page)*. Active compounds detected in opioid–down samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component. "Fentanyl or analogue" and "Nitazene (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.*

Opioid–Down: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (Percentage of all down samples)
Unexpected Active(s) Only	***525 (21.8%)***
Acetaminophen (Tylenol)	3 (0.1%)
Acetylcodeine	21 (0.9%)
Acetylmorphine (MAM, 6-MAM)	24 (1.0%)
Benzocaine	1 (0.0%)
Benzodiazepine (unknown type)	52 (2.2%)
Bromazolam	97 (4.0%)
Carfentanil	32 (1.3%)
Cocaine Base (crack, rock, hard)	11 (0.5%)
Cocaine HCl (powder)	9 (0.4%)
Codeine (T3's / T4's)	1 (0.0%)
DMT (Dimethyltryptamine)	1 (0.0%)
Desalkylgidazepam	61 (2.5%)
Despropionyl para-fluorofentanyl	8 (0.3%)
Ethylbromazolam	18 (0.7%)
Etizolam	1 (0.0%)
Fentanyl	17 (0.7%)
Fentanyl Base	1 (0.0%)
Fentanyl analogue (unknown type)	3 (0.1%)
Fentanyl or analogue	18 (0.7%)
Flualprazolam	3 (0.1%)
Flubromazepam	3 (0.1%)
Flubromazolam	1 (0.0%)
Fluorofentanyl	397 (16.5%)
Fluorofentanyl Base	10 (0.4%)
Gabapentin	1 (0.0%)
Heroin	24 (1.0%)
Hydromorphone (Dilaudid, Dillies)	1 (0.0%)

Table 6 *(Continued from previous page)*. Active compounds detected in opioid–down samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component. "Fentanyl or analogue" and "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.*

Opioid–Down: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (Percentage of all down samples)
Unexpected Active(s) Only	***525 (21.8%)***
Isotonitazene	1 (0.0%)
Ketamine	4 (0.2%)
Lidocaine	1 (0.0%)
Lorazepam (Ativan)	1 (0.0%)
MDA	1 (0.0%)
MDMA	4 (0.2%)
Medetomidine	66 (2.7%)
Methamphetamine	10 (0.4%)
Metonitazene	1 (0.0%)
Morphine	12 (0.5%)
N-desethyl isotonitazene	1 (0.0%)
Oxycodone (Oxycontin)	1 (0.0%)
Phenacetin	4 (0.2%)
Pregabalin	1 (0.0%)
Procaine	1 (0.0%)
THC	1 (0.0%)
Unknown	3 (0.1%)
Xylazine	39 (1.6%)
ortho-Methyl fentanyl	42 (1.7%)
Unknown Composition	***7 (0.3%)***
Unknown	7 (0.3%)

Table 6 *(Continued from previous page)*. Active compounds detected in opioid–down samples checked in 2025, inclusive of all service locations.

Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations.

Opioid–Down: Cutting Agents

Detected Compounds	**Number of Samples** (% of all down samples)
Caffeine	1854 (77.0%)
Caffeine hydrate	225 (9.3%)
Carbohydrate (unknown type)	9 (0.4%)
Corn starch	4 (0.2%)
Dextrose	5 (0.2%)
Dimethyl sulfone (MSM)	27 (1.1%)
Erythritol (sugar)	1290 (53.6%)
Flour	3 (0.1%)
Inositol (sugar)	1 (0.0%)
Lactose (sugar)	6 (0.2%)
Magnesium sulfate	1 (0.0%)
Mannitol (sugar)	134 (5.6%)
Microcrystalline cellulose	8 (0.3%)
Mineral (unknown type)	4 (0.2%)
Monosodium glutamate (MSG)	1 (0.0%)
Nicotinamide (Niacin)	1 (0.0%)
Oil (unknown type)	12 (0.5%)
Polyethylene glycol (PEG)	3 (0.1%)
Sodium bicarbonate (Baking soda, Baking powder)	5 (0.2%)
Sorbitol (sugar)	1 (0.0%)
Starch	2 (0.1%)
Sucrose (sugar)	18 (0.7%)
Sugar (unknown type)	9 (0.4%)
Talc	1 (0.0%)
Water	1 (0.0%)
Xylitol (sugar)	132 (5.5%)

Table 7. Cutting agents detected in opioid–down samples across all service locations. *Quantitative concentrations are not available for these compounds.*

Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations.

Opioid–Down: Quantification

Using PS-MS, we were able to quantify the concentration of select compounds detected in opioid–down samples. Not all samples can be analyzed via PS-MS, primarily due to samples that are too small to be accurately weighed, so the values listed in Table 8 below may not match those listed in Table 6. Table 8 aggregates the results from all *expected* opioid–down samples checked in 2025 across all service locations. Refer to Table 9 on page 23 and 24 for a subset of these data separated by service location. Weight percentage is reported below. "IQR" is the interquartile range: the concentration range containing half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
Fentanyl	1683	8.7%	<0.1%	>50.0%*	3.2% - 18.2%
Fluorofentanyl	1060	5.5%	<0.1%	>50.0%*	1.7% - 12.3%
Bromazolam	623	3.2%	<0.1%	>50.0%*	1.3% - 6.1%
ortho-Methyl fentanyl	266	1.6%	<0.1%	>50.0%*	0.9% - 4.8%
Desalkylgidazepam	209	3.2%	0.1%	42.0%	1.0% - 7.3%
Medetomidine	161	1.0%	0.2%	12.3%	0.5% - 2.2%
Acetylmorphine (MAM, 6-MAM)	147	1.7%	0.1%	>50.0%*	0.6% - 5.0%
Heroin	144	4.5%	0.1%	>50.0%*	1.4% - 21.2%
Xylazine	103	0.6%	<0.1%	28.5%	0.1% - 2.7%
Acetylcodeine	97	1.0%	<0.1%	7.9%	0.4% - 2.2%
Carfentanil	75	0.2%	<0.1%	6.7%	0.1% - 0.5%
Ethylbromazolam	37	1.5%	<0.1%	14.1%	<0.1% - 3.6%
Methamphetamine	34	7.6%	<0.1%	>50.0%*	3.0% - 21.9%
Morphine	23	1.4%	0.2%	33.7%	0.8% - 4.0%
Etizolam	20	1.3%	0.2%	26.9%	0.4% - 5.5%
Flubromazepam	18	1.6%	0.2%	14.8%	0.6% - 4.2%
Fluorofentanyl Base	12	8.3%	1.9%	>50.0%*	6.9% - 20.7%
Lidocaine	11	1.6%	0.3%	>50.0%*	0.6% - 19.1%
Phenacetin	10	8.3%	1.3%	26.7%	2.5% - 18.4%
Ketamine	7	3.6%	1.4%	>50.0%*	2.9% - 8.5%
Metonitazene	6	1.2%	0.7%	3.4%	0.9% - 1.7%
Flualprazolam	6	0.3%	0.2%	0.4%	0.2% - 0.3%
MDMA	5	32.5%	2.4%	>50.0%*	12.0% - 41.4%
Procaine	4	4.6%	1.2%	40.0%	1.3% - 15.8%

Table 8 *(Continued on the next page)*. PS-MS quantification of targeted active compounds detected in *expected* opioid–down samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS's limits, then only the upper limit will be reported. Not all samples can be quantified.*

Opioid–Down: Quantification *(Continued)*

Compound	# Quant.	Median	Min	Max	IQR
Flubromazolam	4	0.2%	0.2%	0.5%	0.2% - 0.3%
Gabapentin	3	6.9%	1.4%	>50.0%*	
Furanyl UF-17	3	0.4%	0.2%	8.7%	
Codeine (T3's / T4's)	3	0.5%	<0.1%	2.2%	
Lorazepam (Ativan)	2		0.7%	9.8%	
Levamisole	2		2.3%	3.4%	
N-desethyl etonitazene	2		<0.1%	0.3%	
Phenazolam	2		<0.1%	<0.1%	
Pregabalin	2		3.5%	3.9%	
MDA	1		34.4%		
Etoetonitazene	1		<0.1%		
N-desethyl isotonitazene	1		0.2%		
Oxycodone (Oxycontin)	1		4.0%		
Hydromorphone (Dilaudid, Dillies)	1		5.7%		
Cocaine Base (crack, rock, hard)	1		15.4%		
Etodesnitazene	1		1.4%		

Table 8 *(Continued from the previous page)*. PS-MS quantification of targeted active compounds detected in *expected* opioid–down samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS's limits, then only the upper limit will be reported. Not all samples can be quantified.*

Opioid–Down: Quantification by Service Location

In Table 8 below we expand upon Table 7 to examine the regional variability in the unregulated opioid market, focusing on select actives quantified within *expected opioid–down samples*, aggregated over the full year. Not all samples were analyzed via PS-MS, so the values listed in Table 8 below may not match those listed in Table 5

Service Model	Compound	# Quant.	Median	Min	Max	IQR
Campbell River 117 total down samples 76.1% (89/117) benzo-positive 29.9% (35/117) tranq-positive	Bromazolam	57	5.6%	0.4%	35.5%	3.2% - 7.9%
	Carfentanil	2		0.1%	4.2%	
	Desalkylgidazepam	27	3.9%	0.2%	15.4%	1.6% - 7.4%
	Fentanyl	62	12.5%	0.2%	45.0%	3.8% - 20.6%
	Fluorofentanyl	70	10.3%	0.3%	>50.0%*	4.3% - 19.5%
	Medetomidine	29	0.7%	0.3%	12.3%	0.4% - 1.4%
	Xylazine	6	0.3%	0.1%	8.4%	0.1% - 1.2%
	ortho-Methyl fentanyl	6	1.8%	0.8%	12.7%	0.9% - 5.7%
Comox Valley 69 total down samples 72.5% (50/69) benzo-positive 26.1% (18/69) tranq-positive	Bromazolam	26	3.6%	<0.1%	22.2%	1.5% - 7.5%
	Carfentanil	1		0.1%		
	Desalkylgidazepam	22	14.3%	0.3%	41.1%	3.8% - 24.0%
	Fentanyl	40	16.8%	0.2%	>50.0%*	7.2% - 33.6%
	Fluorofentanyl	25	7.3%	0.2%	>50.0%*	2.6% - 17.4%
	Medetomidine	10	2.5%	0.3%	10.7%	0.8% - 4.3%
	Xylazine	10	5.3%	0.2%	28.5%	0.7% - 13.7%
	ortho-Methyl fentanyl	3	14.6%	0.7%	18.4%	
Duncan 72 total down samples 77.8% (56/72) benzo-positive 11.1% (8/72) tranq-positive	Bromazolam	38	3.8%	0.2%	26.0%	2.1% - 8.8%
	Desalkylgidazepam	8	3.1%	0.6%	31.7%	2.4% - 9.9%
	Fentanyl	53	8.4%	0.5%	>50.0%*	5.0% - 19.5%
	Fluorofentanyl	24	2.5%	<0.1%	23.5%	0.7% - 5.4%
	Medetomidine	4	6.0%	1.7%	7.3%	4.3% - 7.0%
	Xylazine	5	0.3%	0.1%	1.1%	0.1% - 0.5%
	ortho-Methyl fentanyl	7	5.7%	0.7%	17.5%	1.4% - 13.7%

Table 9 *(Continued on the next page)*. PS-MS quantification of select active compounds detected in *expected* opioid–down samples per service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS's limits, then only the upper limit will be reported. Not all samples can be quantified.*

Opioid–Down: Quantification by Service Location *(Continued)*

Service Model	Compound	# Quant.	Median	Min	Max	IQR
Port Alberni 145 total down samples 59.3% (86/145) benzo-positive 20.7% (30/145) tranq-positive	Bromazolam	38	1.9%	0.2%	12.6%	1.0% - 4.4%
	Carfentanil	1		0.1%		
	Desalkylgidazepam	21	4.5%	0.2%	20.6%	0.6% - 6.4%
	Fentanyl	68	10.7%	<0.1%	>50.0%*	3.8% - 19.0%
	Fluorofentanyl	71	10.9%	0.2%	45.3%	3.7% - 13.8%
	Medetomidine	26	0.8%	0.4%	1.7%	0.6% - 1.0%
	Xylazine	4	0.8%	0.5%	3.3%	0.6% - 1.6%
Substance 1630 total down samples 35.9% (585/1630) benzo-positive 4.9% (80/1630) tranq-positive	Bromazolam	392	2.8%	<0.1%	>50.0%*	1.1% - 5.1%
	Carfentanil	58	0.2%	<0.1%	6.7%	0.1% - 0.4%
	Desalkylgidazepam	101	2.0%	0.1%	42.0%	0.9% - 4.6%
	Fentanyl	1215	8.4%	<0.1%	>50.0%*	3.0% - 17.6%
	Fluorofentanyl	699	5.2%	0.2%	>50.0%*	1.7% - 11.3%
	Medetomidine	34	0.6%	0.2%	5.2%	0.4% - 1.9%
	Xylazine	49	0.7%	<0.1%	20.3%	0.1% - 2.4%
	ortho-Methyl fentanyl	201	1.5%	<0.1%	>50.0%*	0.9% - 4.2%
Outreach 374 total down samples 35.8% (134/374) benzo-positive 21.9% (82/374) tranq-positive	Bromazolam	72	3.7%	0.2%	>50.0%*	1.2% - 7.0%
	Carfentanil	13	0.2%	0.1%	1.4%	0.1% - 0.5%
	Desalkylgidazepam	30	3.6%	0.4%	18.0%	1.6% - 9.4%
	Fentanyl	245	8.5%	<0.1%	>50.0%*	3.4% - 16.7%
	Fluorofentanyl	171	4.1%	<0.1%	>50.0%*	1.3% - 11.5%
	Medetomidine	58	1.6%	0.3%	8.9%	0.6% - 2.6%
	Xylazine	29	0.3%	<0.1%	22.2%	0.1% - 2.0%
	ortho-Methyl fentanyl	45	1.8%	<0.1%	48.9%	0.8% - 5.8%

Table 9 *(Continued from the previous page)*. PS-MS quantification of select active compounds detected in *expected* opioid–down samples per service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS's limits, then only the upper limit will be reported. Not all samples can be quantified.*

Opioid–Down: Quantification by Time

Here we examine the variability of the concentration of common actives found in down samples as a function of time in 2025. Not only does the median concentration of these compounds fluctuate throughout the year, but the volatility, shown here by the *interquartile range*, the concentration range that contains half of the quantified samples, also remains high every month. We assert that this "consistently inconsistent" nature of the opioid–down supply, i.e. the persistently high variability in composition and concentration, is a greater risk to people who use opioids than the compounds themselves. Data shown here and on the following pages are inclusive of all service locations.

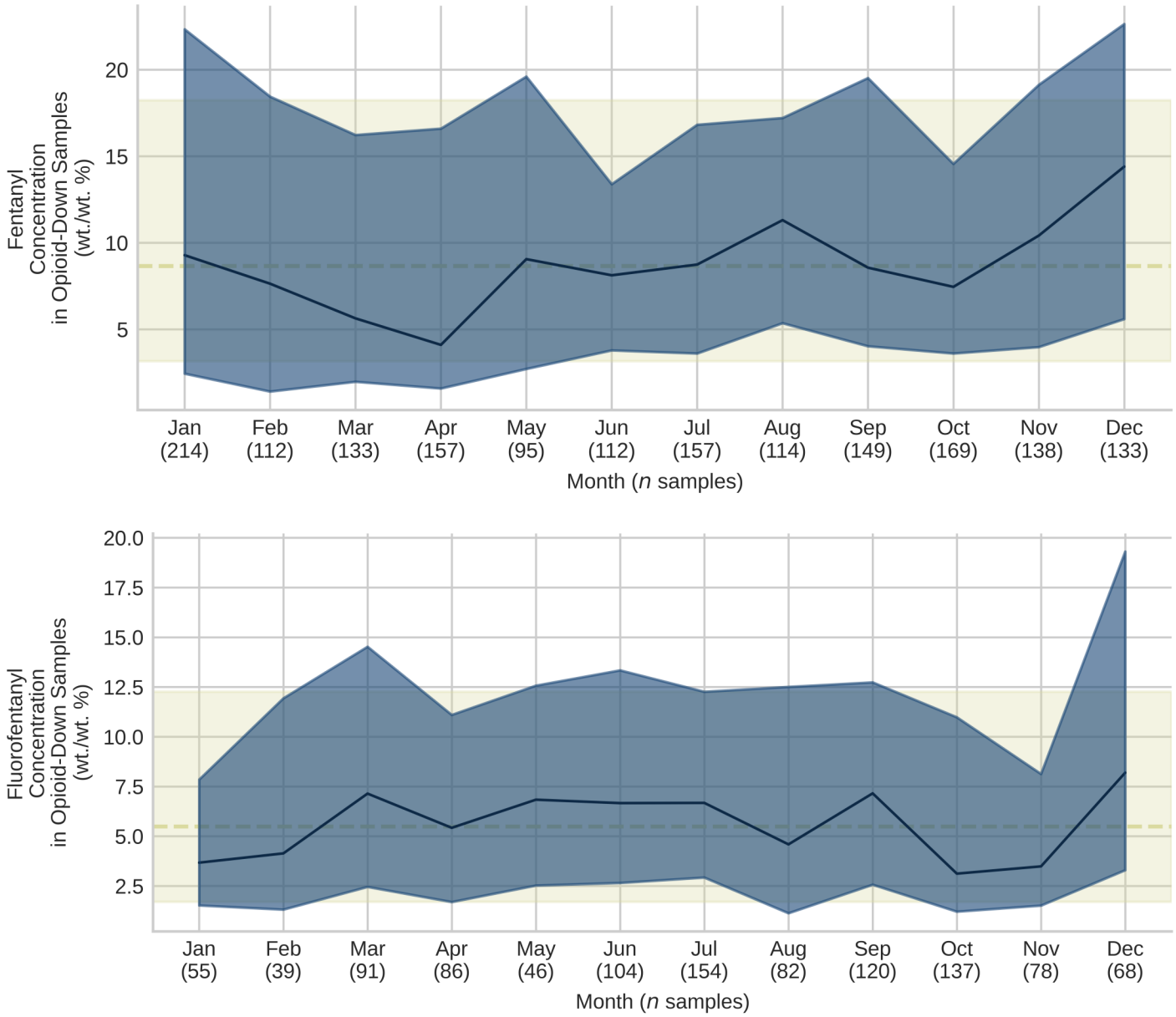

Figure 9. Monthly variability of the concentration of fentanyl (top) and fluorofentanyl (bottom) quantified in opioid–down samples checked in 2025 across all service locations. The number of samples quantified each month is shown in parentheses. The solid line represents the median concentration each month, while the dark shaded region bounds the monthly interquartile range. The dashed line in the background of each panel displays the annual median concentration and the light shaded region bounds the annual interquartile range. Weight/weight percentage is shown, as determined via PS-MS.

Opioid–Down: Quantification by Time *(Continued)*

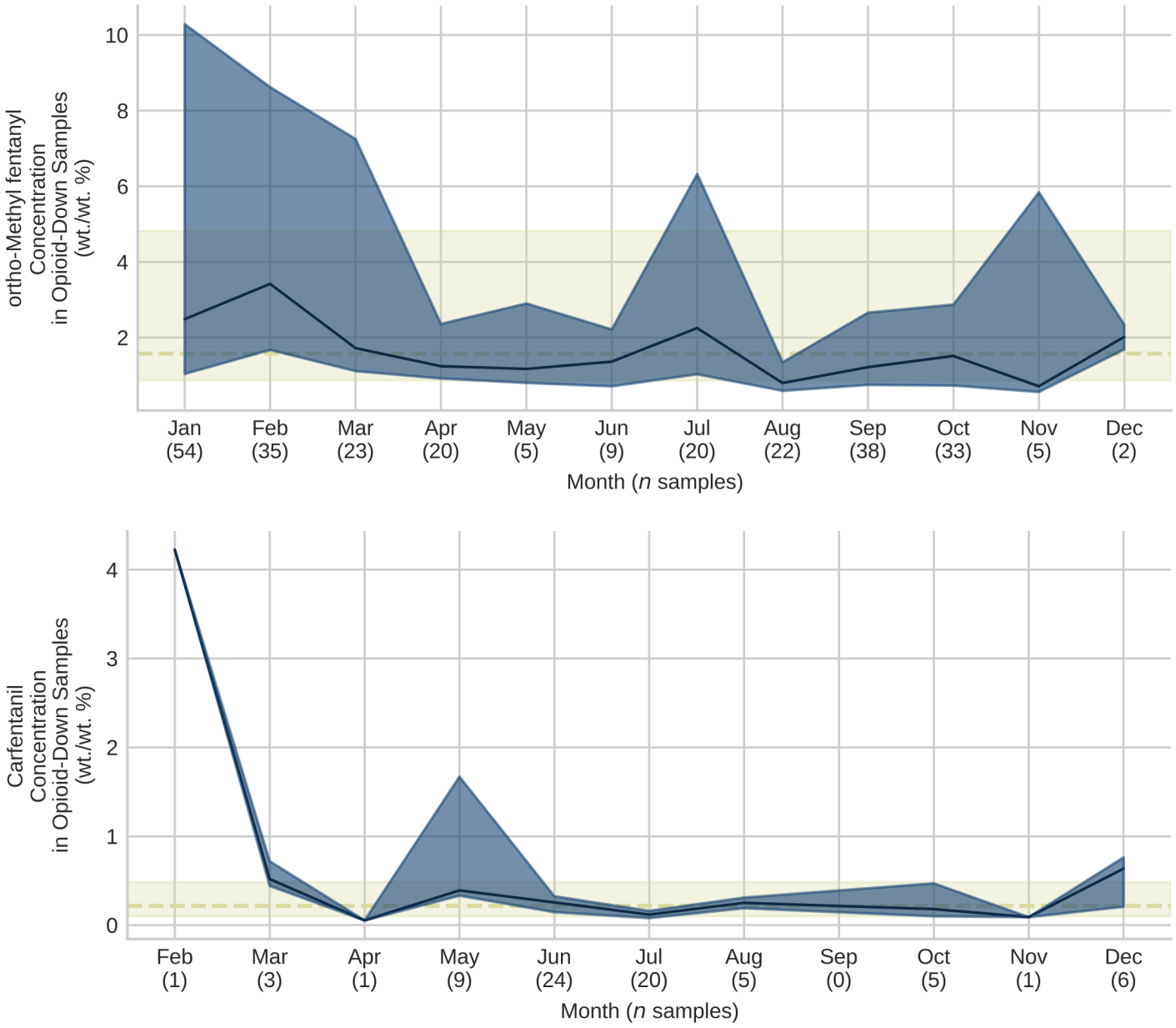

Figure 10. Monthly variability of the concentration of ortho-Methyl fentanyl (top) and carfentanil (bottom) quantified in opioid–down samples checked in 2025 across all service locations. The number of samples quantified each month is shown in parentheses. The solid line represents the median concentration each month, while the dark shaded region bounds the monthly interquartile range. The dashed line in the background of each panel displays the annual median concentration and the light shaded region bounds the annual interquartile range. Weight / weight percentage is shown, as determined via PS-MS.

Opioid–Down: Quantification by Time *(Continued)*

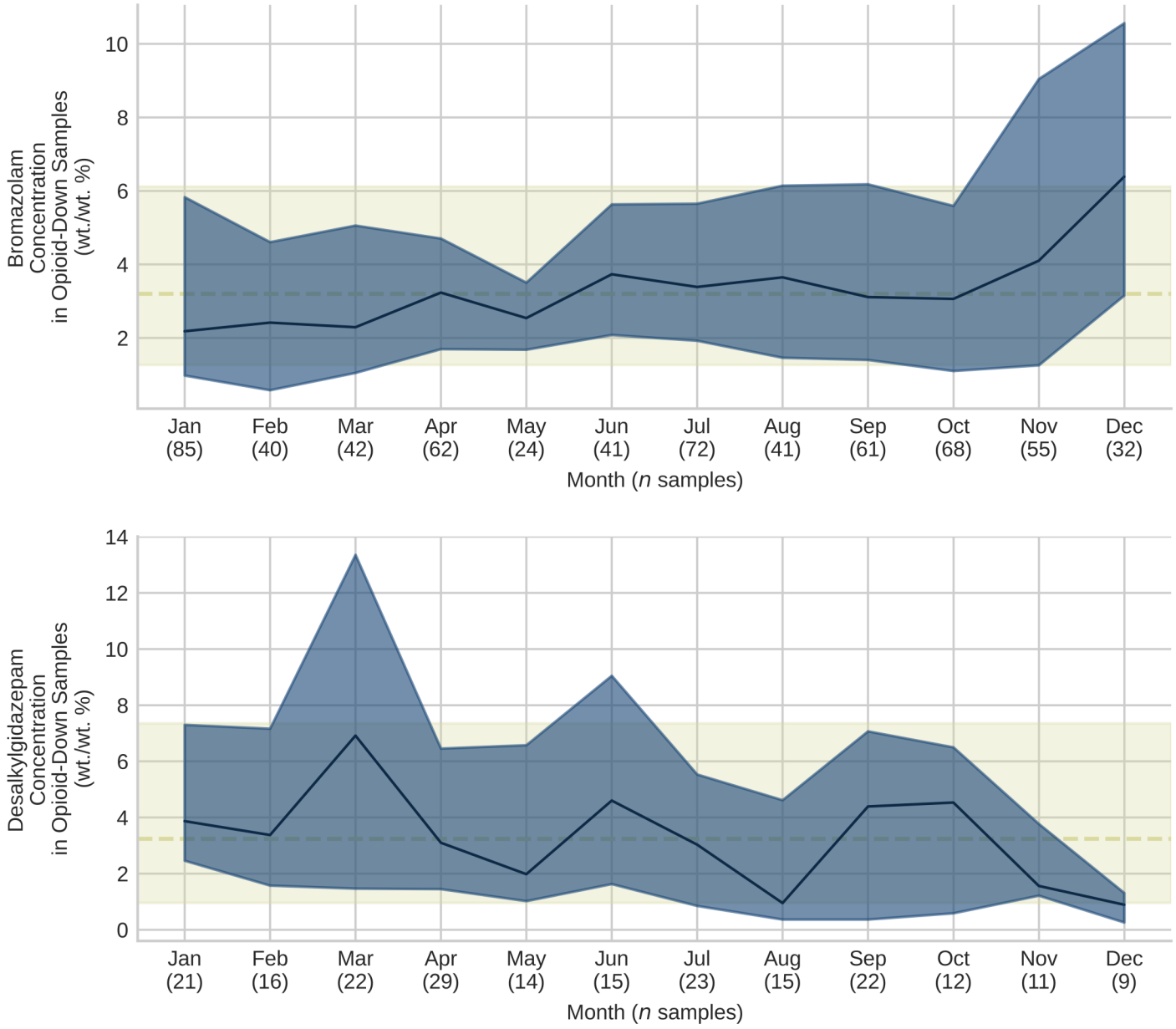

Figure 11. Monthly variability of the concentration of bromazolam and desalkylgidazepam quantified in opioid–down samples checked in 2025 across all service locations. The number of samples quantified each month is shown in parentheses. The solid line represents the median concentration each month, while the dark shaded region bounds the monthly interquartile range. The dashed line in the background of each panel displays the annual median concentration and the light shaded region bounds the annual interquartile range. Weight / weight percentage is shown, as determined via PS-MS.

Opioid–Down: Quantification by Time *(Continued)*

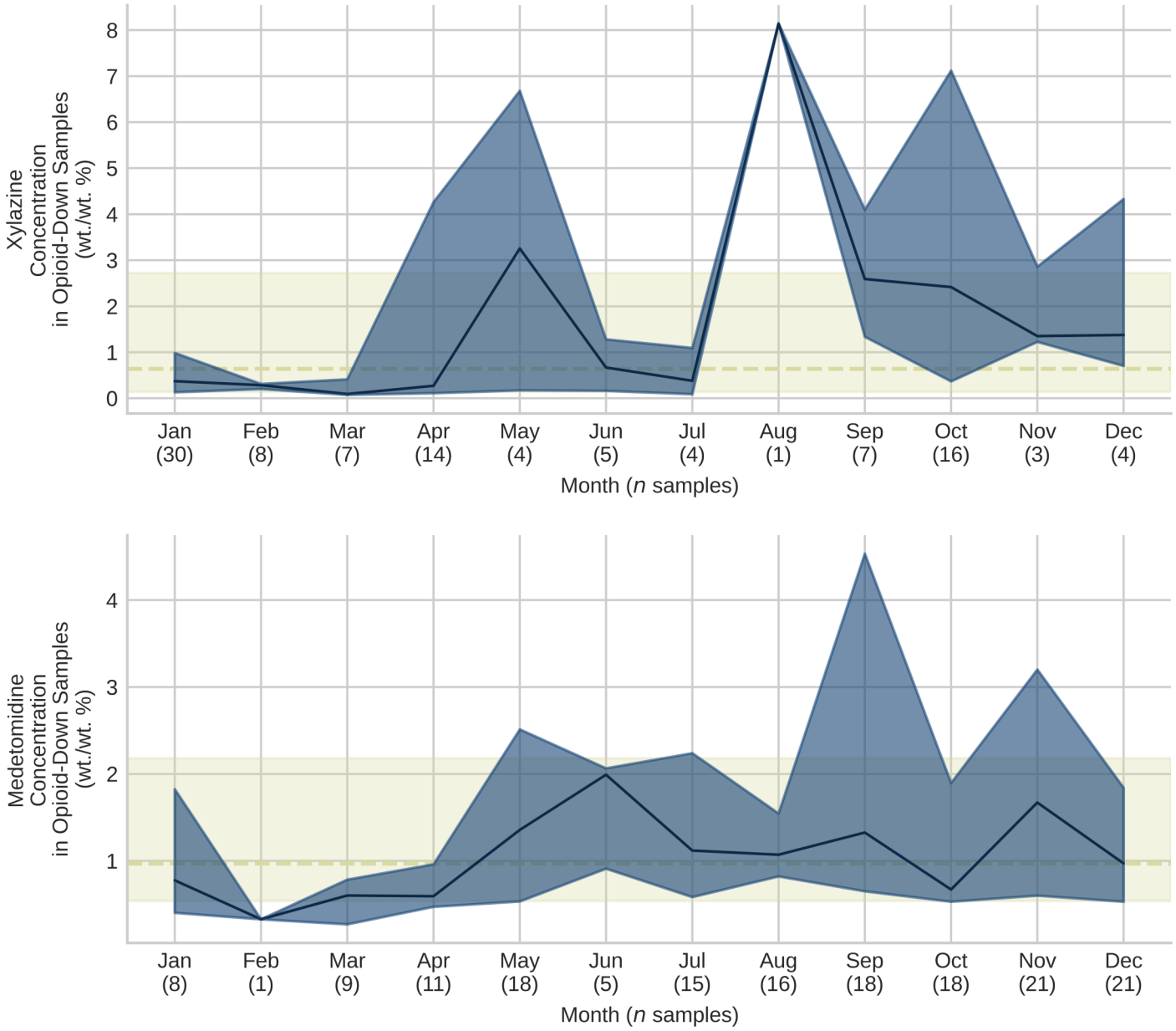

Figure 12. Monthly variability of the concentration of xylazine (top) and medetomidine (bottom) quantified in opioid–down samples checked in 2025 across all service locations. The number of samples quantified each month is shown in parentheses. The solid line represents the median concentration each month, while the dark shaded region bounds the monthly interquartile range. The dashed line in the background of each panel displays the annual median concentration and the light shaded region bounds the annual interquartile range. Weight / weight percentage is shown, as determined via PS-MS.

Cocaine

"Cocaine" includes samples that are expected to be cocaine HCl (soft/powder) and cocaine base (hard/rock/crack). We receive many questions regarding the purity cocaine and what we mean when a sample was *"found to be cocaine with no cuts or adulterants detected." "No cuts detected"* certainly does not mean "pure" and should not be interpreted as such. Please refer to our Limitations on page 10 and 11 for a more detailed discussion around purity analysis. Despite our inability to comment on purity, we check every sample for the most common active cuts found in cocaine: benzocaine, levamisole, and phenacetin. Table 12 on page 31 aggregates the quantitative data for select actives detected within cocaine samples across all service locations and a summary of the inactive cuts found in cocaine can be found on page 31 in Table 11.

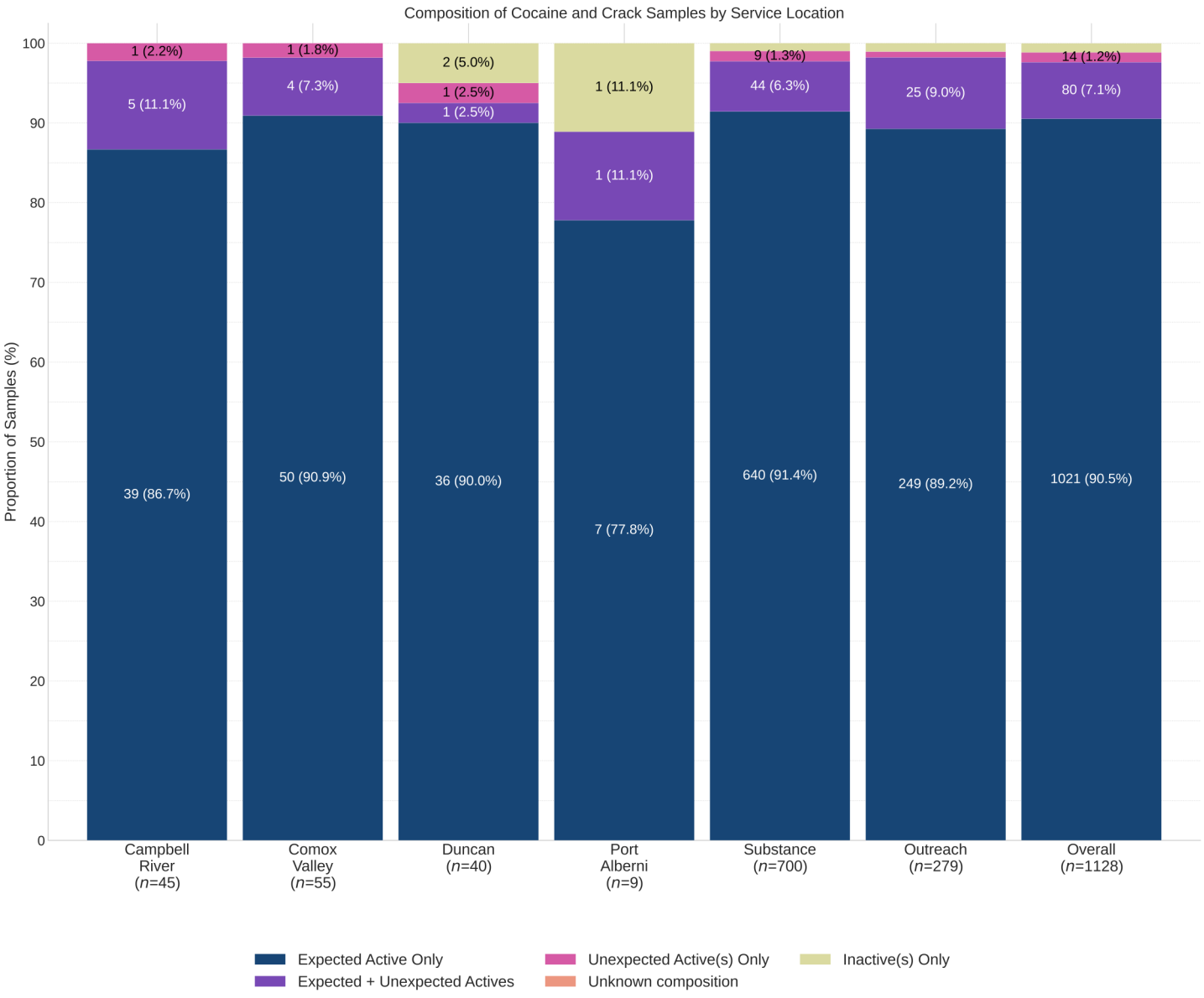

Figure 12. Proportion and number of cocaine samples checked by service locations, grouped by composition class (see page 10 for definitions). Proportions less than or equal to 1.2% are omitted for readability.

Cocaine: What did we find?

Table 9 below (and on the following page) aggregates all active compounds detected in cocaine samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all cocaine samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 10 on page 30 aggregates all cutting agents detected in cocaine samples, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all cocaine samples)
Expected Active Only	**1021 (90.5%)**
Cocaine Base (crack, rock, hard)	200 (17.7%)
Cocaine HCl (powder)	821 (72.8%)
Expected* + Unexpected Active(s)	**80 (7.1%)**
Cocaine Base (crack, rock, hard)*	23 (2.0%)
Cocaine HCl (powder)*	59 (5.2%)
Acetaminophen (Tylenol)	4 (0.4%)
Benzocaine	2 (0.2%)
Benzoylecgonine	1 (0.1%)
Bromazolam	1 (0.1%)
Fentanyl	3 (0.3%)
Fentanyl or analogue	7 (0.6%)
Fluorofentanyl	1 (0.1%)
Ketamine	2 (0.2%)
Levamisole	35 (3.1%)
Lidocaine	2 (0.2%)
MDMA	1 (0.1%)
Norcocaine (N-Demethylcocaine)	1 (0.1%)
Phenacetin	23 (2.0%)
Procaine	2 (0.2%)
Unexpected Active(s) Only	**14 (1.2%)**
BMK Glycidic Acid	1 (0.1%)
Bromazolam	2 (0.2%)

Table 10 *(Continued on the next page)*. Active compounds detected in cocaine samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component. "Fentanyl or analogue" and "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.*

Cocaine: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all cocaine samples)
Unexpected Active(s) Only	**14 (1.2%)**
Fentanyl	6 (0.5%)
Fentanyl Base	1 (0.1%)
Fluorofentanyl	2 (0.2%)
Gabapentin	1 (0.1%)
Ketamine	3 (0.3%)
Methamphetamine	4 (0.4%)

Table 10 (*Continued from previous page)*. Active compounds detected in cocaine samples checked in 2025, inclusive of all service locations

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *: Expected active component. 1: "Fentanyl or analogue" and "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.*

Cocaine: Cutting Agents

Compound	**Number of Samples** (% of all Cocaine samples)
Caffeine	11 (1.0%)
Caffeine hydrate	2 (0.2%)
Carbohydrate (unknown type)	1 (0.1%)
Corn starch	3 (0.3%)
Creatine	1 (0.1%)
Erythritol (sugar)	2 (0.2%)
Glutamine	1 (0.1%)
Inositol (sugar)	7 (0.6%)
Lactose (sugar)	1 (0.1%)
Mannitol (sugar)	4 (0.4%)
Oil (unknown type)	4 (0.4%)
Polyethylene glycol (PEG)	2 (0.2%)
Sodium bicarbonate (Baking soda, Baking powder)	14 (1.2%)
Starch	2 (0.2%)
Sucrose (sugar)	1 (0.1%)
Sugar (unknown type)	3 (0.3%)
Water	3 (0.3%)
Xylitol (sugar)	1 (0.1%)

Table 11. Cutting agents detected in cocaine samples across all service locations. *Quantitative concentrations are not available for these compounds.*

Cocaine: Quantification

Using PS-MS, we were able to quantify the concentration of select compounds detected in cocaine samples. Not all samples can be analyzed via PS-MS, primarily due to samples that are too small to be accurately weighed, so the values listed in Table 12 below may not match those listed in Table 9. Table 12 aggregates the results from all *expected* cocaine samples checked in 2025 across all service locations. Weight percentage is reported below. "IQR" is the interquartile range: the concentration range containing half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
Fentanyl	9	5.4%	0.4%	>50.0%*	0.8% - 9.7%
Levamisole	7	9.4%	0.8%	>50.0%*	3.9% - 18.7%
Phenacetin	7	10.5%	3.7%	>50.0%*	7.0% - 27.4%
Bromazolam	3	1.1%	0.3%	9.6%	
Fluorofentanyl	3	0.5%	0.2%	3.7%	
Lidocaine	2		0.1%	29.8%	
Methamphetamine	2		2.6%	3.8%	
Procaine	2		3.2%	6.2%	
Gabapentin	1		>50.0%*		
Ketamine	1		1.8%		

Table 12. PS-MS quantification of targeted active compounds detected in *expected* cocaine samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS's limits, then only the upper limit will be reported. Not all samples can be quantified.*

MDMA/MDA

"MDMA" groups samples that are expected to be either MDMA or MDA. In 2025, 90.1% (879/976) of expected MDMA/MDA samples were confirmed to be MDMA/MDA with no other active compounds detected. 42 samples (4.3% of all expected MDMA/MDA samples) came in the form of pressed pills. Overall, inactive cutting agents were found in 115 samples (11.8% of all expected MDMA/MDA). Similar to the story with cocaine, *"no cuts detected"* certainly does not mean these samples were pure, but instead these samples likely contain impurities below the limits of detection for FTIR and/or compounds outside of our targeted method for PS-MS. The MDMA-MDA mix-up represents 64% (32/50) of samples that had an unexpected composition, with 18 expected MDMA samples instead containing MDA and 14 expected MDA samples instead containing MDMA. This also occurred with samples that had a unexpected additional composition (expected + unexpected actives in Figure 13), with 55.9% (19/34) of unexpected additional samples including a combination of MDMA and MDA. Lastly are the samples which did not contain an active, which make up 1.2% of the overall samples within the MDMA category.

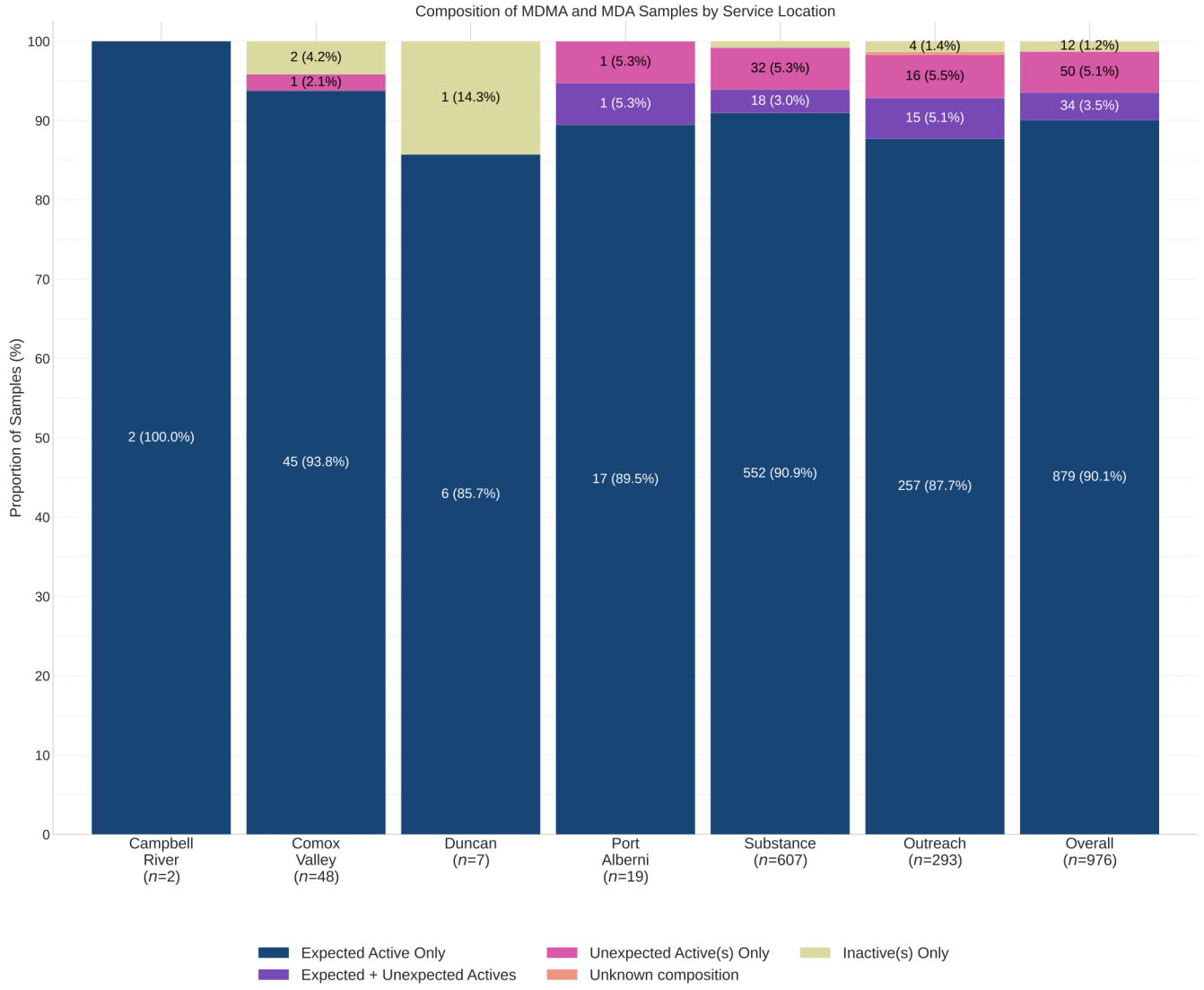

Figure 13. Proportion and number of MDMA samples checked by service locations, grouped by composition class (see page 10 for definitions). Proportions less than or equal to 1.2% are omitted for readability.

MDMA/MDA: What did we find?

Table 13 below (and on the following page) aggregates all active compounds detected in MDMA/MDA samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all MDMA/MDA samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 14 on page 35 aggregates all cutting agents detected in MDMA, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all MDMA samples)
Expected Active Only	**879 (90.1%)**
MDA	61 (6.2%)
MDMA	826 (84.6%)
Expected* + Unexpected Active(s)	**34 (3.5%)**
MDA*	21 (2.2%)
MDMA*	32 (3.3%)
Cocaine HCl (powder)	1 (0.1%)
Fentanyl or analogue	1 (0.1%)
Ketamine	4 (0.4%)
Methamphetamine	3 (0.3%)
Methoxymethamphetamine	1 (0.1%)
Tadalafil (Cialis)	4 (0.4%)
Unknown	3 (0.3%)
Unexpected Active(s) Only	**50 (5.1%)**
3,4-MDMA methylene homolog HCl	1 (0.1%)
Amphetamine	1 (0.1%)
Bromazolam	1 (0.1%)
Cathinone (unknown type)	1 (0.1%)
Cocaine HCl (powder)	1 (0.1%)
Eutylone	1 (0.1%)
Fentanyl	2 (0.2%)
Ketamine	6 (0.6%)
MDA	18 (1.8%)
MDMA	18 (1.8%)

Table 13 *(Continued on the next page)*. Active compounds detected in MDMA samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component. "Fentanyl or analogue" are based on a positive strip test and are unconfirmed by paper spray.*

MDMA/MDA: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all MDMA samples)
Unexpected Active(s) Only	**50 (5.1%)**
MMDA	1 (0.1%)
Methamphetamine	5 (0.5%)
O-PCE (Deschloro-N-ethyl-ketamine)	1 (0.1%)
Unknown Composition	**1 (0.1%)**
Unknown	1 (0.1%)

Table 13 *(Continued from previous page)*. Active compounds detected in MDMA/MDA samples checked in 2025, inclusive of all service locations.

Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations.

MDMA: Cutting Agents

Compound	**Number of Samples** (% of all MDMA samples)
Caffeine	10 (1.0%)
Calcium carbonate (Chalk)	1 (0.1%)
Carbohydrate (unknown type)	2 (0.2%)
Dicalcium phosphate	2 (0.2%)
Dimethyl sulfone (MSM)	1 (0.1%)
Erythritol (sugar)	2 (0.2%)
Flour	1 (0.1%)
Lactose (sugar)	1 (0.1%)
Mannitol (sugar)	2 (0.2%)
Microcrystalline cellulose	59 (6.0%)
Mineral (unknown type)	5 (0.5%)
Oil (unknown type)	10 (1.0%)
Stearic acid	5 (0.5%)
Sucrose (sugar)	8 (0.8%)
Sugar (unknown type)	5 (0.5%)
Water	1 (0.1%)

Table 14. Cutting agents detected in MDMA/MDA samples across all service locations. *Quantitative concentrations are not available for these compounds.*

MDMA/MDA: Quantification

Using PS-MS, we were able to quantify the concentration of select compounds detected in MDMA samples. Not all samples can be analyzed via PS-MS, primarily due to samples that are too small to be accurately weighed, so the values listed in Table 14 below may not match those listed in Table 12. Table 14 aggregates the results from all *expected* MDMA samples checked in 2025 across all service locations. Weight percentage is reported below. "IQR" is the inter-quartile range: the concentration range containing half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
Methamphetamine	4	12.1%	3.3%	>50.0%*	5.1% - 26.4%
Fentanyl	2	6.2%	1.7%	10.7%	3.9% - 8.4%
Bromazolam	1		8.7%		
Cocaine HCl (powder)	1		>50.0%*		
Ketamine	1		>50.0%*		
Methoxymethamphetamine	1		31.6%		

Table 15. PS-MS quantification of targeted active compounds detected in *expected* cocaine samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS's limits, then only the upper limit will be reported. Not all samples can be quantified.*

Methamphetamine

86.0% (208/242) of the methamphetamine samples checked in 2025 were confirmed to contain methamphetamine with no other active compounds detected. Cutting agents were found in 18.6% (45/242) of methamphetamine samples. Caffeine, the most common cut found in methamphetamine, was detected 5.4% (13/242) of samples and Dimethyl sulfone (MSM) was found in 2.1% (5/242) samples. Despite a majority of meth being "as expected" from a chemical lens, many service users still report unexpected or adverse effects from samples that were found to be "*meth with no cuts or adulterants detected*". We suspect this can be attributed to the purity of the meth, the relative ratios of the *d*- and *l*- isomers of meth in any given sample, and the set and setting in which the drug was consumed. Unfortunately we are unable to address these first two speculations given the limitations of our instrumentation, but fortunately practices around safer meth use can help minimize the possible harms introduced through set and setting. Starting "low and slow", using clean supplies, staying hydrated, staying cool, eating food, getting some sleep, and (when possible) consuming in safer places with people you trust are some recipes for success.

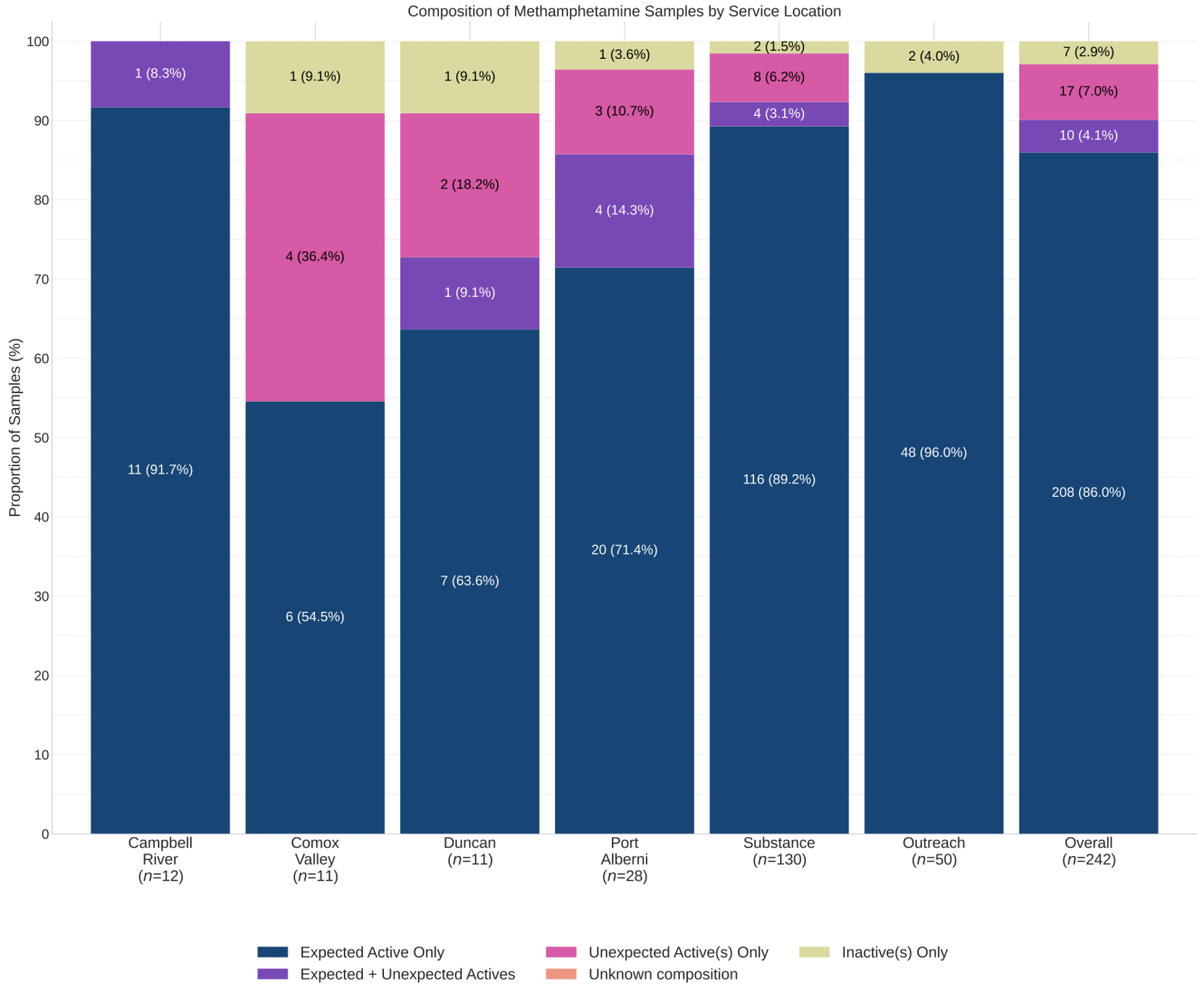

Figure 14. Proportion and number of methamphetamine samples checked by service locations, grouped by composition class (see page 10 for definitions). Proportions less than or equal to 1.1% are omitted for readability.

Methamphetamine: What did we find?

Table 15 below aggregates all active compounds detected in methamphetamine samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all methamphetamine samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 16 aggregates all cutting agents detected in meth, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all meth samples)
Expected Active Only	**208 (86.0%)**
Methamphetamine	208 (86.0%)
Expected* + Unexpected Active(s)	**10 (4.1%)**
Methamphetamine*	10 (4.1%)
Benzodiazepine (unknown type)	1 (0.4%)
Cocaine Base (crack, rock, hard)	1 (0.4%)
Fentanyl or analogue	8 (3.3%)
Fluorofentanyl	1 (0.4%)
Ketamine	1 (0.4%)
Unexpected Active(s) Only	**17 (7.0%)**
Cocaine Base (crack, rock, hard)	3 (1.2%)
Cocaine HCl (powder)	1 (0.4%)
Etoetonitazene	1 (0.4%)
Fentanyl	2 (0.8%)
Fentanyl or analogue	3 (1.2%)
Ketamine	7 (2.9%)
MDA	2 (0.8%)
THCA	1 (0.4%)
Unknown	2 (0.8%)

Table 16. Active compounds detected in methamphetamine samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component. "Fentanyl or analogue" and "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.*

Methamphetamine: Cutting Agents

Compound	**Number of Samples** (% of all meth samples)
Caffeine	13 (5.4%)
Carbohydrate (unknown type)	2 (0.8%)
Dimethyl sulfone [MSM]	5 (2.1%)
Erythritol (sugar)	1 (0.4%)
Menthol	1 (0.4%)
Microcrystalline cellulose	10 (4.1%)
Mineral (unknown type)	3 (1.2%)
Oil (unknown type)	5 (2.1%)
Salt	1 (0.4%)
Stearic acid	1 (0.4%)
Sugar (unknown type)	1 (0.4%)
Water	2 (0.8%)

Table 17. Cutting agents detected in methamphetamine samples across all service locations. *Quantitative concentrations are not available for these compounds.*

Methamphetamine: Quantification

Using PS-MS, we were able to quantify the concentration of select compounds detected in methamphetamine samples. Not all samples can be analyzed via PS-MS, primarily due to samples that are too small to be accurately weighed, so the values listed in Table 17 below may not match those listed in Table 15. Table 17 aggregates the results from all *expected* meth samples checked in 2025 across all service locations. Weight percentage is reported below. "IQR" is the interquartile range: the concentration range containing half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
Fentanyl	2		<0.1%	5.4%	
Ketamine	2		>50.0%*	>50.0%*	
Cocaine Base (crack, rock, hard)	1		3.1%		
Etoetonitazene	1		<0.1%		
Fluorofentanyl	1		0.2%		

Table 18. PS-MS quantification of targeted active compounds detected in *expected* methamphetamine samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS's limits, then only the upper limit will be reported. Not all samples can be quantified.*

Dissociatives

The dissociative class is largely represented by ketamine, with expected ketamine samples making up 91.0% (627/691) of the dissociative samples checked in 2025. We occasionally see novel dissociatives such as O-PCE and DMXE. The dissociative class shows one of the lowest levels of adulteration or misrepresentation out of all of the drug classes that we check: 89.3% (617/691) of dissociative samples checked in 2025 were "as expected" and cutting agents were detected in only 5.9% (41/691) of expected dissociative samples. Despite the apparent "quality" of the dissociatives, we still caution service users that "no cuts detected" does not reflect compound purity, that we cannot differentiate the *r*- and *s*-ketamine isomers with our current methods, and that cuts or adulterants may still be present in these samples below the limits of detection of our instruments.

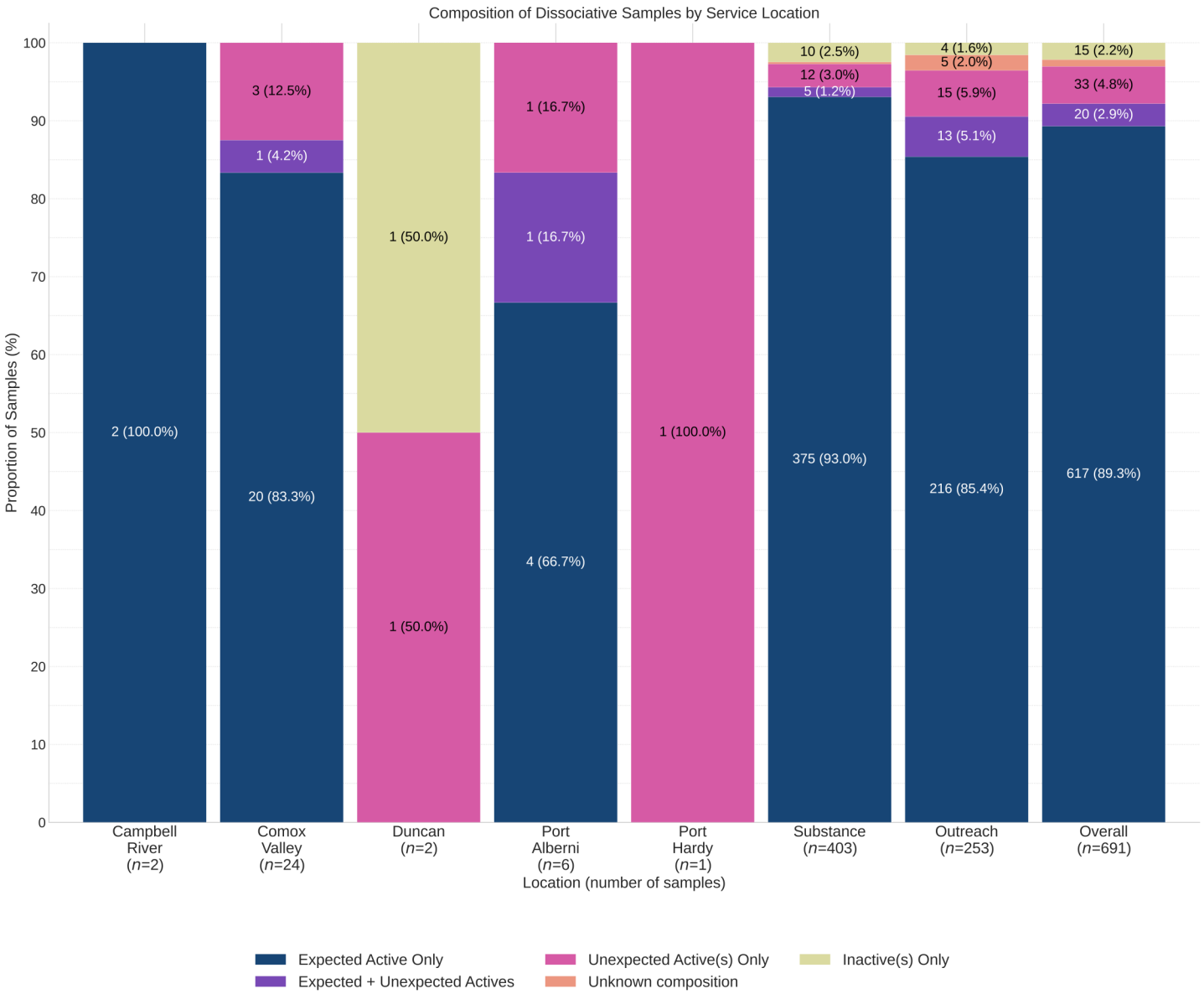

Figure 15. Proportion and number of dissociative samples checked by service locations, grouped by composition class (see page 10 for definitions). Proportions less than or equal to 1.1% are omitted for readability.

Dissociatives: What did we find?

Table 19 below aggregates all active compounds detected in dissociative samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all dissociative samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 20 on page 43 aggregates all cutting agents detected in dissociative samples across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all dissociative samples)
Expected Active Only	**617 (89.3%)**
2-FXiPr	1 (0.1%)
3-HO-PCE	2 (0.3%)
3-HO-PCP	2 (0.3%)
3-Me-PCE	1 (0.1%)
3-Me-PCP	2 (0.3%)
3-Me-PCPy	1 (0.1%)
3-MeO-PCE	1 (0.1%)
3-MeO-PCP	1 (0.1%)
DMXE (Deoxymethoxetamine)	3 (0.4%)
DXM (Dextromethorphan)	1 (0.1%)
Fluorexetamine (FXE)	2 (0.3%)
Fluorodeschloroketamine	2 (0.3%)
Ketamine	590 (85.4%)
MXE (Methoxetamine)	2 (0.3%)
MXPCP	1 (0.1%)
MXPR (Methoxpropamine)	1 (0.1%)
MXiPr (Methoxisopropamine)	1 (0.1%)
O-PCE (Deschloro-N-ethyl-ketamine)	3 (0.4%)
Expected* + Unexpected Active(s)	**20 (2.9%)**
Ketamine*	9 (1.3%)
MXPR (Methoxpropamine)*	8 (1.2%)
MXE (Methoxetamine)*	1 (0.1%)
2-fluoro-2-oxo-PCE (2F-NENDCK, CanKet)*	2 (0.3%)
Fluorexetamine (FXE)*	1 (0.1%)

Table 19 *(Continued on the next page)*. Active compounds detected in dissociative samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component.*

Dissociatives: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all dissociative samples)
Expected* + Unexpected Active(s)	**20 (2.9%)**
3-HO-PCE	8 (1.2%)
4-FA (4-Fluoroamphetamine)	1 (0.1%)
Cathinone (unknown type)	1 (0.1%)
Fluorodeschloroketamine	1 (0.1%)
MDMA	2 (0.3%)
Methamphetamine	1 (0.1%)
O-PCE (Deschloro-N-ethyl-ketamine)	2 (0.3%)
Ondansetron	4 (0.6%)
Phenacetin	4 (0.6%)
Unknown	1 (0.1%)
Unexpected Active(s) Only	**33 (4.8%)**
2-FXiPr	1 (0.1%)
2-fluoro-2-oxo-PCE (2F-NENDCK, CanKet)	3 (0.4%)
3-CMC (Clophedrone)	1 (0.1%)
3-HO-PCE	2 (0.3%)
3-Me-PCP	3 (0.4%)
5-MeO-DMT	1 (0.1%)
Arylcyclohexylamine (unknown type)	4 (0.6%)
Cocaine HCl (powder)	5 (0.7%)
Desmetramadol (O-DSMT)	1 (0.1%)
Fluorodeschloroketamine	1 (0.1%)
Ketamine	1 (0.1%)
Ketamine Base	1 (0.1%)
Levomethorphan	1 (0.1%)
MDA	2 (0.3%)
MDMA	6 (0.9%)
MMMP	1 (0.1%)

Table 19 *(Continued on the next page)*. Active compounds detected in dissociative samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component.*

Dissociatives: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all dissociative samples)
Unexpected Active(s) Only	**33 (4.8%)**
Methamphetamine	1 (0.1%)
O-PCE (Deschloro-N-ethyl-ketamine)	2 (0.3%)
Unknown	2 (0.3%)
Xylazine	1 (0.1%)
Unknown Composition	**6 (0.9%)**
Unknown	6 (0.9%)

Table 19 *(Continued from the previous page)*. Active compounds detected in dissociative samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component.*

Dissociatives: Cutting Agents

Compound	**Number of Samples** (% of all dissociative samples)
Caffeine	1 (0.1%)
Corn starch	1 (0.1%)
Creatine	2 (0.3%)
Dimethyl sulfone (MSM)	2 (0.3%)
Magnesium sulfate	2 (0.3%)
Mannitol (sugar)	1 (0.1%)
Microcrystalline cellulose	2 (0.3%)
Monosodium glutamate (MSG)	14 (2.0%)
Polyethylene glycol (PEG)	1 (0.1%)
Propylene Glycol	2 (0.3%)
Sodium bicarbonate (Baking soda, Baking powder)	1 (0.1%)
Sucrose (sugar)	2 (0.3%)
Sugar (unknown type)	1 (0.1%)
Water	9 (1.3%)

Table 20. Cutting agents detected in dissociative samples across all service locations. *Quantitative concentrations are not available for these compounds.*

Benzodiazepines

When checking benzodiazepines, we see a suite of both prescribed benzo samples and non-medical benzos in illicitly manufactured pressed pills. The benzodiazepine supply also has close relations to the opioid–down supply and we also check benzodiazepine powders for suppliers who are performing quality control prior to preparing "benzo-down". The most common benzo samples that we check are expected alprazolam tablets (39.5% (170/430) of benzo samples) which often present similar to 2mg Xanax bars. Though alprazolam is expected, alprazolam is only detected in 21.8% (37/170) of expected alprazolam tablets. Instead, non-medical benzos/benzo analogues like bromazolam (found in 42.3% (77/170) of expected alprazolam samples) and flualprazolam (found in 5.3% (9/170) of expected alprazolam samples) are more frequently seen in illicit "Xanax". Despite "unexpected actives" showing up, these results were not unexpected to a majority of the service users who brought in these samples as many service users suspect other benzos based on their experiential knowledge of the drugs they use and the markets from which they come. Table 21 on page 46 lists the other compounds that are considered "unexpected actives".

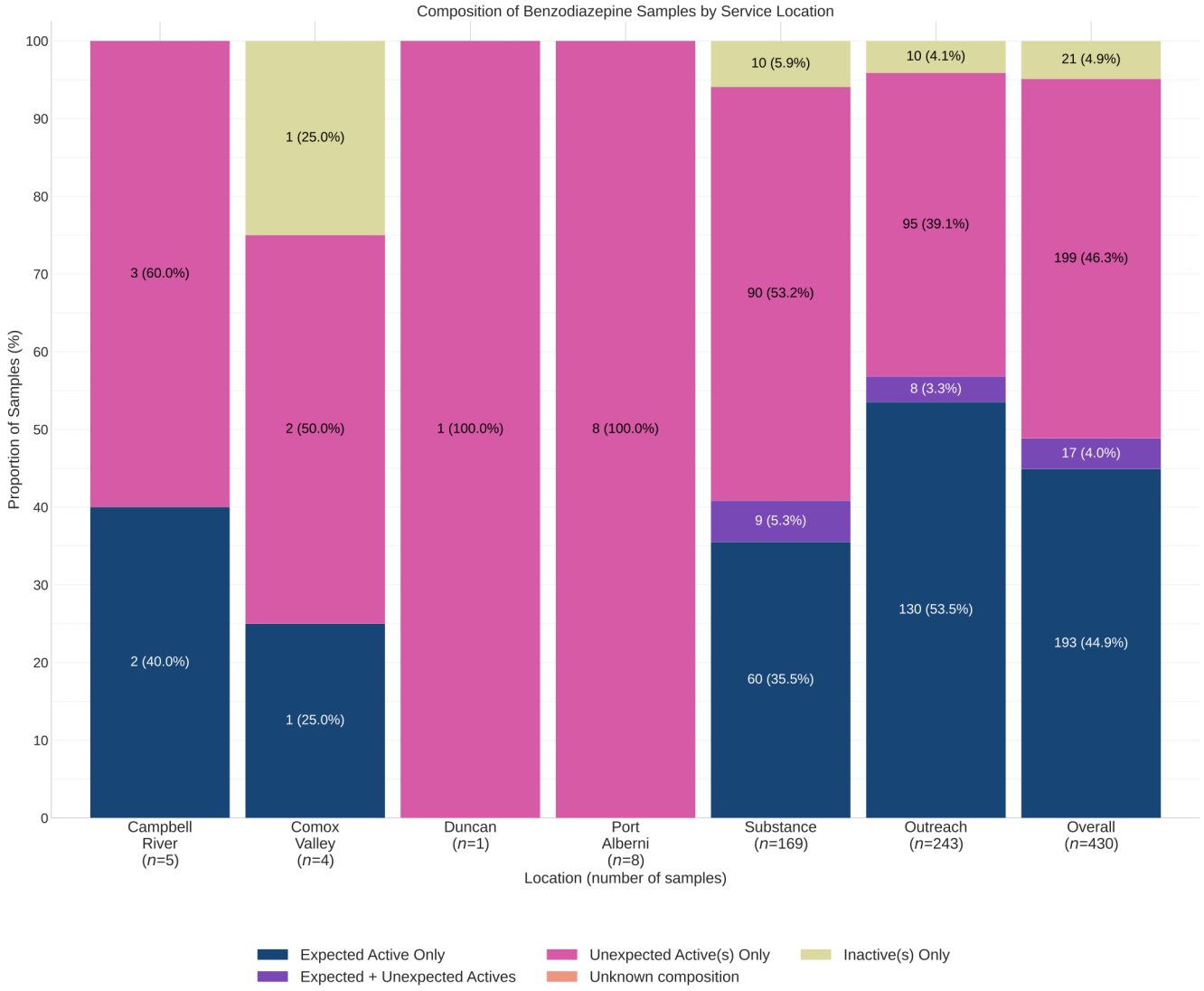

Figure 16. Proportion and number of benzodiazepine samples checked by service locations, grouped by composition class (see page 10 for definitions).

Benzodiazepines: What did we find?

Table 21 below (and on the following pages) aggregates all active compounds detected in benzodiazepine samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all benzodiazepine samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 22 on page 47 and 48 aggregates all cutting agents detected in benzodiazepines, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all benzo samples)
Expected Active Only	***193 (44.9%)***
Alprazolam (Xanax)	34 (7.9%)
Avizafone	18 (4.2%)
Bretazenil	14 (3.3%)
Bromazolam	35 (8.1%)
Clonazepam (Klonopin)	14 (3.3%)
Desalkylgidazepam	1 (0.2%)
Diazepam (Valium)	21 (4.9%)
Ethylbromazolam	2 (0.5%)
Ethylflualprazolam	2 (0.5%)
Etizolam	26 (6.0%)
Flualprazolam	7 (1.6%)
Flubromazepam	1 (0.2%)
Lorazepam (Ativan)	14 (3.3%)
N-Desalkylflurazepam	1 (0.2%)
Phenazolam	1 (0.2%)
Pyrazolam	1 (0.2%)
Rilmazafone	1 (0.2%)
Expected* + Unexpected Active(s)	***17 (4%)***
Alprazolam (Xanax)*	3 (0.7%)
Bromazolam*	11 (2.6%)
Ethylbromazolam*	3 (0.7%)
Etizolam*	2 (0.5%)
Fluclotizolam*	1 (0.2%)

Table 21 *(Continued on the next page)*. Active compounds detected in benzodiazepine samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component.*

Benzodiazepines: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all benzo samples)
Expected* + Unexpected Active(s)	***17 (4%)***
Desalkylgidazepam	5 (1.2%)
Fentanyl	1 (0.2%)
Fentanyl analogue (unknown type)	1 (0.2%)
Fentanyl or analogue	1 (0.2%)
Flualprazolam	1 (0.2%)
Flubromazolam	1 (0.2%)
Fluorofentanyl	2 (0.5%)
Ibuprofen	1 (0.2%)
Isotonitazene	3 (0.7%)
Unexpected Active(s) Only	***199 (46.3%)***
3-hydroxy Desalkylgidazepam	1 (0.2%)
Acetaminophen (Tylenol)	2 (0.5%)
Acetylmorphine (MAM, 6-MAM)	2 (0.5%)
Alprazolam (Xanax)	2 (0.5%)
Benzodiazepine (unknown type)	40 (9.3%)
Bromazolam	94 (21.9%)
Clonazepam (Klonopin)	2 (0.5%)
Delorazepam	2 (0.5%)
Desalkylgidazepam	18 (4.2%)
Diazepam (Valium)	2 (0.5%)
Ethylbromazolam	7 (1.6%)
Ethylflualprazolam	3 (0.7%)
Etizolam	4 (0.9%)
Fentanyl	13 (3.0%)
Fentanyl analogue (unknown type)	1 (0.2%)
Fentanyl or analogue	3 (0.7%)
Flualprazolam	15 (3.5%)

Table 21 *(Continued on the next page).* Active compounds detected in benzodiazepine samples checked in 2025, inclusive of all service locations.

Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.

Benzodiazepines: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all benzo samples)
Unexpected Active(s) Only	***199 (46.3%)***
Flubromazepam	1 (0.2%)
Flubromazolam	1 (0.2%)
Fluorofentanyl	14 (3.3%)
Gidazepam	1 (0.2%)
Heroin	2 (0.5%)
Ketamine	1 (0.2%)
MDMA	1 (0.2%)
Medetomidine	2 (0.5%)
Meperidine	1 (0.2%)
Methylmethylphenidate (4-MeTMP)	1 (0.2%)
N-desethyl isotonitazene	1 (0.2%)
Rilmazafone	2 (0.5%)
Tadalafil (Cialis)	1 (0.2%)
Temazepam	1 (0.2%)
Unknown	3 (0.7%)
Xylazine	2 (0.5%)
ortho-Methyl fentanyl	1 (0.2%)

Table 21 *(Continued from the previous page).* Active compounds detected in benzodiazepine samples checked in 2025, inclusive of all service locations.

Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.

Benzodiazepines: Cutting Agents

Compound	**Number of Samples** (% of all benzo samples)
Ascorbic acid (Vitamin C)	1 (0.2%)
Caffeine	17 (4.0%)
Caffeine hydrate	2 (0.5%)
Carbohydrate (unknown type)	1 (0.2%)
Corn starch	3 (0.7%)
Erythritol (sugar)	13 (3.0%)

Table 22 *(Continued on the next page)*. Cutting agents detected in benzodiazepine samples across all service locations. *Quantitative concentrations are not available for these compounds.*

Benzodiazepines: Cutting Agents *(Continued)*

Compound	**Number of Samples** (% of all benzo samples)
Flour	1 (0.2%)
Lactose (sugar)	87 (20.2%)
Microcrystalline cellulose	210 (48.8%)
Mineral (unknown type)	2 (0.5%)
Oil (unknown type)	68 (15.8%)
Propylene Glycol	4 (0.9%)
Sorbitol (sugar)	2 (0.5%)
Starch	2 (0.5%)
Stearic acid	17 (4.0%)
Sucrose (sugar)	1 (0.2%)
Sugar (unknown type)	7 (1.6%)
Water	1 (0.2%)
Xylitol (sugar)	1 (0.2%)
alpha-Lactose	1 (0.2%)

Table 22 *(Continued from the previous page)*. Cutting agents detected in benzodiazepine samples across all service locations. *Quantitative concentrations are not available for these compounds.*

Benzodiazepine: Quantification

Using PS-MS, we were able to quantify the concentration of select compounds detected in benzodiazepine samples. Not all samples can be analyzed via PS-MS, primarily due to samples that are too small to be accurately weighed, so the values listed in Table 23 below may not match those listed in Table 21. Table 23 aggregates the results from all *expected* benzodiazepine samples checked in 2025 across all service locations. Weight percentage is reported below. "IQR" is the interquartile range: the concentration range containing half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
Bromazolam	121	1.0%	<0.1%	>50.0%*	0.5% - 2.0%
Alprazolam (Xanax)	39	1.3%	<0.1%	>50.0%*	0.6% - 2.2%
Etizolam	27	1.0%	<0.1%	>50.0%*	0.4% - 2.0%
Desalkylgidazepam	23	2.7%	0.3%	>50.0%*	0.9% - 7.4%
Diazepam (Valium)	23	12.8%	3.9%	39.0%	8.2% - 22.3%
Flualprazolam	20	0.7%	0.2%	>50.0%*	0.4% - 1.3%

Table 23 *(Continued on the next page)*. PS-MS quantification of targeted active compounds detected in *expected* benzodiazepine samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS limit, then only the upper limit will be reported.*

Benzodiazepine: Quantification *(Continued)*

Compound	# Quant.	Median	Min	Max	IQR
Clonazepam (Klonopin)	16	2.0%	<0.1%	4.3%	1.0% - 3.3%
Fluorofentanyl	15	2.5%	0.2%	24.9%	0.5% - 8.1%
Fentanyl	14	3.9%	0.3%	>50.0%*	1.9% - 18.5%
Lorazepam (Ativan)	14	2.2%	<0.1%	7.7%	1.3% - 3.7%
Ethylbromazolam	9	2.1%	<0.1%	>50.0%*	0.3% - >50.0%*
Isotonitazene	3	0.7%	0.3%	0.9%	
Acetylmorphine (MAM, 6-MAM)	2		0.2%	0.3%	
Xylazine	2		0.8%	1.3%	
Medetomidine	2		0.6%	0.9%	
Flubromazolam	2		<0.1%	2.6%	
Heroin	2		0.7%	1.1%	
Ketamine	1		38.8%		
Flubromazepam	1		0.6%		
MDMA	1		39.4%		
Meperidine	1		4.9%		
N-desethyl isotonitazene	1		>50.0%*		
Pyrazolam	1		>50.0%*		
Temazepam	1		4.1%		
Bretazenil	1		<0.1%		
ortho-Methyl fentanyl	1		4.9%		

Table 23 *(Continued from the previous page)*. PS-MS quantification of targeted active compounds detected in *expected* benzodiazepine samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS limit, then only the upper limit will be reported.*

Psychedelics

The psychedelics class includes drugs such as lysergamides (LSD), substituted tryptamines (DMT, 5-MeO-MiPT, etc.), some substituted phenethylamines (mescaline, 2C-X), and others (DOM, ibogaine). Our project does not include MDMA/MDA, nor ketamine, into the psychedelics class. Instead this class focuses on what are generally thought of as "classical" psychedelics. Overall, 77.3% of expected psychedelic samples were "as expected", yet, we still see misrepresentations quite regularly. Often times this misrepresentation can be attributed to the often confusing naming convention of psychedelics (sometimes we like to call this "alphabet soup"): 5-MeO-DiPT vs. 5-MeO-MiPT; 5-MeO-DMT vs. DMT; 1P-LSD vs. LSD; 2C-B vs. "tucibi" (a polysubstance mixture also known "pink cocaine" and "tusi"; often a mixture of cocaine, MDMA, and ketamine) - the list goes on. 47.1% (16/34) of psychedelic samples that contained unexpected actives were found to contain an analogue of the expected compound. Despite the similar names and structural similarities of many psychedelics, dosage and effect can be vastly different between compounds. As an example, 3.6% (4/110) of expected 2C-B samples were consistent with so-called tucibi/tusi. Overall, we hope that drug checking can aide people in informing dose and in understanding experience.

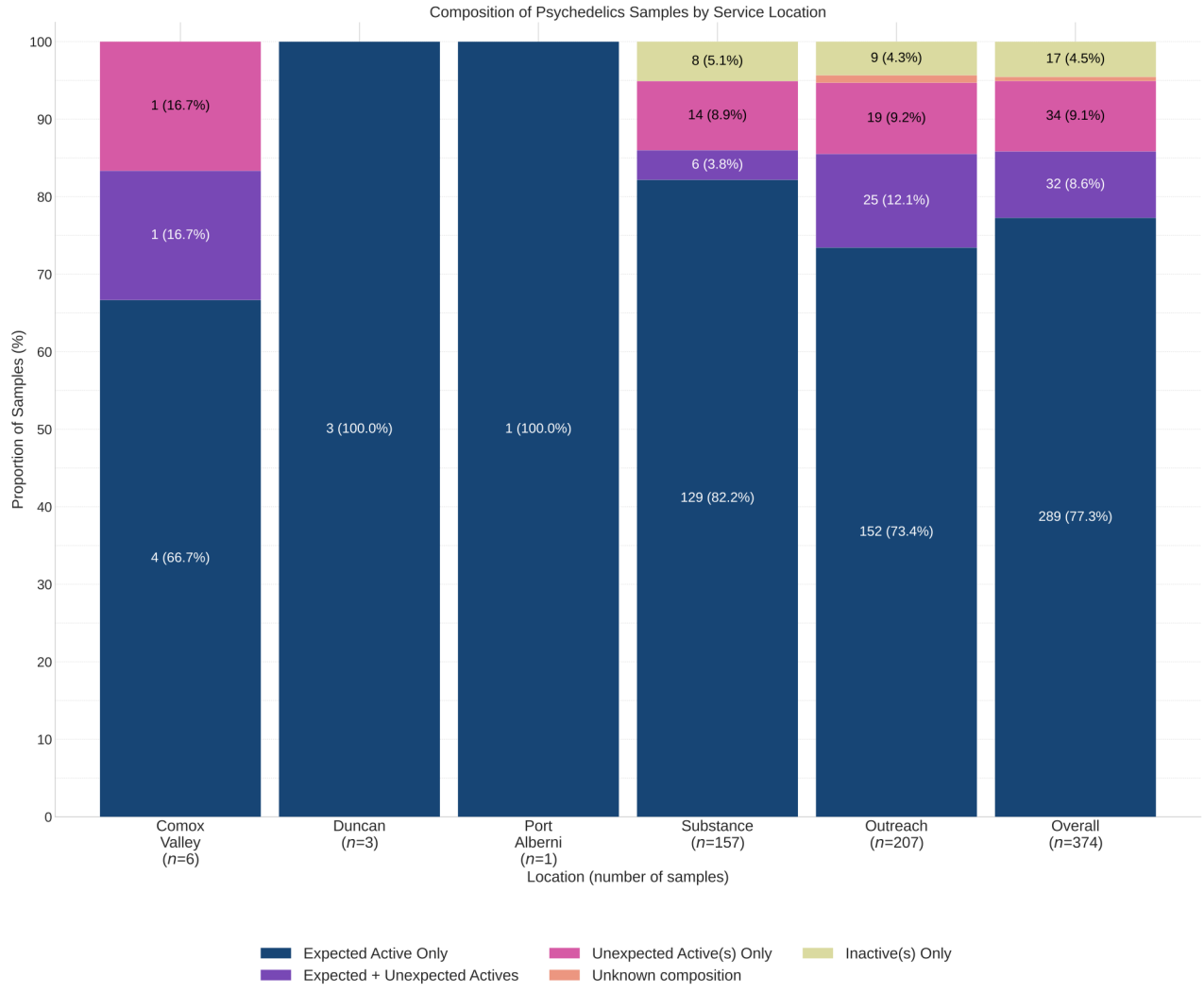

Figure 17. Proportion and number of psychedelic samples checked by service locations, grouped by composition class (see page 10 for definitions).

Psychedelics: What did we find?

Table 24 below (and on the following page) aggregates all active compounds detected in psychedelic samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all psychedelic samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 25 on page 53 aggregates all cutting agents detected in psychedelics, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all psychedelic samples)
Expected Active Only	**289 (77.3%)**
25B-NBOH	1 (0.3%)
25E-NBOH	3 (0.8%)
25I-NBOH	1 (0.3%)
2C-B	93 (24.9%)
2C-D	1 (0.3%)
2C-H	1 (0.3%)
2C-I	1 (0.3%)
2C-P	1 (0.3%)
3C-P	3 (0.8%)
4-AcO-DMT (O-Acetylpsilocin)	4 (1.1%)
4-HO-MET (Metocin, Colour)	23 (6.1%)
4-HO-MiPT (Miprocin)	1 (0.3%)
4-PrO-DMT	3 (0.8%)
5-MeO-DMT	10 (2.7%)
5-MeO-DMT Base	2 (0.5%)
5-MeO-DiPT (Foxy)	2 (0.5%)
5-MeO-MiPT (Moxy)	7 (1.9%)
5F-MET (Bretisilocin)	1 (0.3%)
Allylescaline	1 (0.3%)
BOH-2C-B	1 (0.3%)
Cocaine HCl (powder) (Tucibi expected)	1 (0.3%)

Table 24 *(Continued on the next page)*. Active compounds detected in psychedelic samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component. "Fentanyl or analogue" and "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.*

Psychedelics: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all psychedelic samples)
Expected Active Only	**289 (77.3%)**
DMT (Dimethyltryptamine)	22 (5.9%)
DOC	1 (0.3%)
DOI (2,5-Dimethoxy-4-iodoamphetamine)	1 (0.3%)
DOM	1 (0.3%)
DPT	1 (0.3%)
DiPT	1 (0.3%)
Ibogaine	1 (0.3%)
Ketamine	12 (3.2%)
LSD (acid)	77 (20.6%)
MDMA	13 (3.5%)
Mescaline	11 (2.9%)
Methylethyltryptamine (MET)	2 (0.5%)
Expected* + Unexpected Active(s)	**32 (8.6%)**
2C-B	8 (2.1%)
2C-H	1 (0.3%)
2C-I	1 (0.3%)
4-AcO-DMT (O-Acetylpsilocin)	1 (0.3%)
4-AcO-DPT	1 (0.3%)
4-HO-MET (Metocin, Colour)	1 (0.3%)
4-HO-MPT (Meprocin)	1 (0.3%)
5-MeO-DBT	1 (0.3%)
5-MeO-DMT	3 (0.8%)
5-MeO-DMT Base	1 (0.3%)
5-MeO-MiPT (Moxy)	3 (0.8%)
Acetaminophen (Tylenol)	1 (0.3%)
Cocaine HCl (powder)	7 (1.9%)
DMT (Dimethyltryptamine)	5 (1.3%)

Table 24 *(Continued from previous page). A*ctive compounds detected in psychedelic samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component.*

Psychedelics: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all psychedelic samples)
Expected* + Unexpected Active(s)	**32 (8.6%)**
Etizolam	1 (0.3%)
Ketamine	11 (2.9%)
LSD (acid)	1 (0.3%)
Lidocaine	1 (0.3%)
MDA	7 (1.9%)
MDMA	10 (2.7%)
Mescaline	1 (0.3%)
Methamphetamine	2 (0.5%)
Phenacetin	3 (0.8%)
Unknown	13 (3.5%)
Unexpected Active(s) Only	**34 (9.1%)**
25B-NBOH	1 (0.3%)
25E-NBOH	1 (0.3%)
2C-B	3 (0.8%)
2C-E	1 (0.3%)
4-AcO-DMT (O-Acetylpsilocin)	2 (0.5%)
4-AcO-MET	1 (0.3%)
4-HO-MET (Metocin, Colour)	3 (0.8%)
4-HO-MiPT (Miprocin)	1 (0.3%)
4-MMC (Mephedrone)	1 (0.3%)
5-MeO-DMT	8 (2.1%)
5-MeO-DMT Base	2 (0.5%)
5-MeO-MiPT (Moxy)	1 (0.3%)
AL-LAD	1 (0.3%)
Bromazolam	1 (0.3%)
DMT (Dimethyltryptamine)	1 (0.3%)
Ketamine	3 (0.8%)

Table 24 *(Continued from previous page).* Active compounds detected in psychedelic samples checked in 2025, inclusive of all service locations.

Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations.

Psychedelics: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all psychedelic samples)
Unexpected Active(s) Only	**34 (9.1%)**
LSD (acid)	1 (0.3%)
MDA	2 (0.5%)
MDMA	6 (1.6%)
Methamphetamine	2 (0.5%)
Unknown	10 (2.7%)
Unknown Composition	**2 (0.5%)**
Unknown	2 (0.5%)

Table 24 *(Continued from previous page). A*ctive compounds detected in psychedelic samples checked in 2025, inclusive of all service locations.

Psychedelics: Cutting Agents

Compound	**Number of Samples** (% of all psychedelic samples)
Caffeine	26 (7.0%)
Carbohydrate (unknown type)	3 (0.8%)
Corn starch	3 (0.8%)
Dimethyl sulfone (MSM)	3 (0.8%)
Erythritol (sugar)	1 (0.3%)
Fumaric acid	1 (0.3%)
Inositol (sugar)	3 (0.8%)
Lactose (sugar)	2 (0.5%)
Mannitol (sugar)	9 (2.4%)
Microcrystalline cellulose	25 (6.7%)
Oil (unknown type)	16 (4.3%)
Polyethylene glycol (PEG)	1 (0.3%)
Propylene Glycol	3 (0.8%)
Sucrose (sugar)	2 (0.5%)
Sugar (unknown type)	2 (0.5%)
Water	4 (1.1%)

Table 25. Cutting agents detected in psychedelic samples across all service locations. *Quantitative concentrations are not available for these compounds.*

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component. "Fentanyl or analogue" and "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.*

Psychedelics: Quantification

Using PS-MS, we were able to quantify the concentration of select compounds detected in psychedelic samples. Not all samples can be analyzed via PS-MS, primarily due to samples that are too small to be accurately weighed, so the values listed in Table 25 below may not match those listed in Table 24. Table 26 aggregates the results from all *expected* psychedelic samples checked in 2025 across all service locations. Weight percentage is reported below. "IQR" is the interquartile range: the concentration range containing half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
LSD (acid)	35	0.8%	<0.1%	>50.0%*	<0.1% - 39.0%
2C-B	19	25.6%	1.1%	>50.0%*	6.9% - >50.0%*
MDMA	15	18.2%	2.4%	39.2%	11.9% - 23.6%
Ketamine	12	31.3%	15.6%	>50.0%*	19.5% - 46.0%
5-MeO-DMT	5	>50.0%*	26.6%	>50.0%*	27.2% - >50.0%*
MDA	5	4.3%	<0.1%	6.4%	1.9% - 6.4%
5-MeO-MiPT (Moxy)	3	>50.0%*	4.4%	>50.0%*	
Cocaine HCl (powder)	3	1.8%	0.5%	7.3%	
Methamphetamine	3	8.8%	3.1%	23.4%	
Phenacetin	3	7.2%	3.0%	>50.0%*	
5F-MET (Bretisilocin)	1		<0.1%		
Etizolam	1		0.2%		
Ibogaine	1		<0.1%		
Lidocaine	1		0.4%		

Table 26. PS-MS quantification of targeted active compounds detected in *expected* psychedelic samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS limit, then only the upper limit will be reported.*

Opioid–Other

We group prescription opioids like hydromorphone (Dilaudid), oxycodone (Oxycontin and Percocet), morphine (Kadian), and their illicitly manufactured look-alikes into the opioid–other category. Samples expected to contain oxycodone were the most common other opioids checked and also displayed the highest prevalence of unexpected compounds. 54.0% (143/265) of opioid–other samples were expected to contain oxycodone, either as oxycodone alone or as Percocet (oxycodone + acetaminophen), however, only 63.7% (91/143) of these samples were "as expected". Nitazenes were found in 14.0% (20/143) of Oxycontin and Percocet samples which contained additional or unexpected actives. In comparison, 70 samples were expected to be hydromorphone; 72.9% (51/70) were as expected, nitazenes were detected in 3/15 hydromorphone samples containing unexpected or additional actives. Table 43 on page 81 gives a full break down of which and how many unexpected opioids were detected in opioid–other samples.

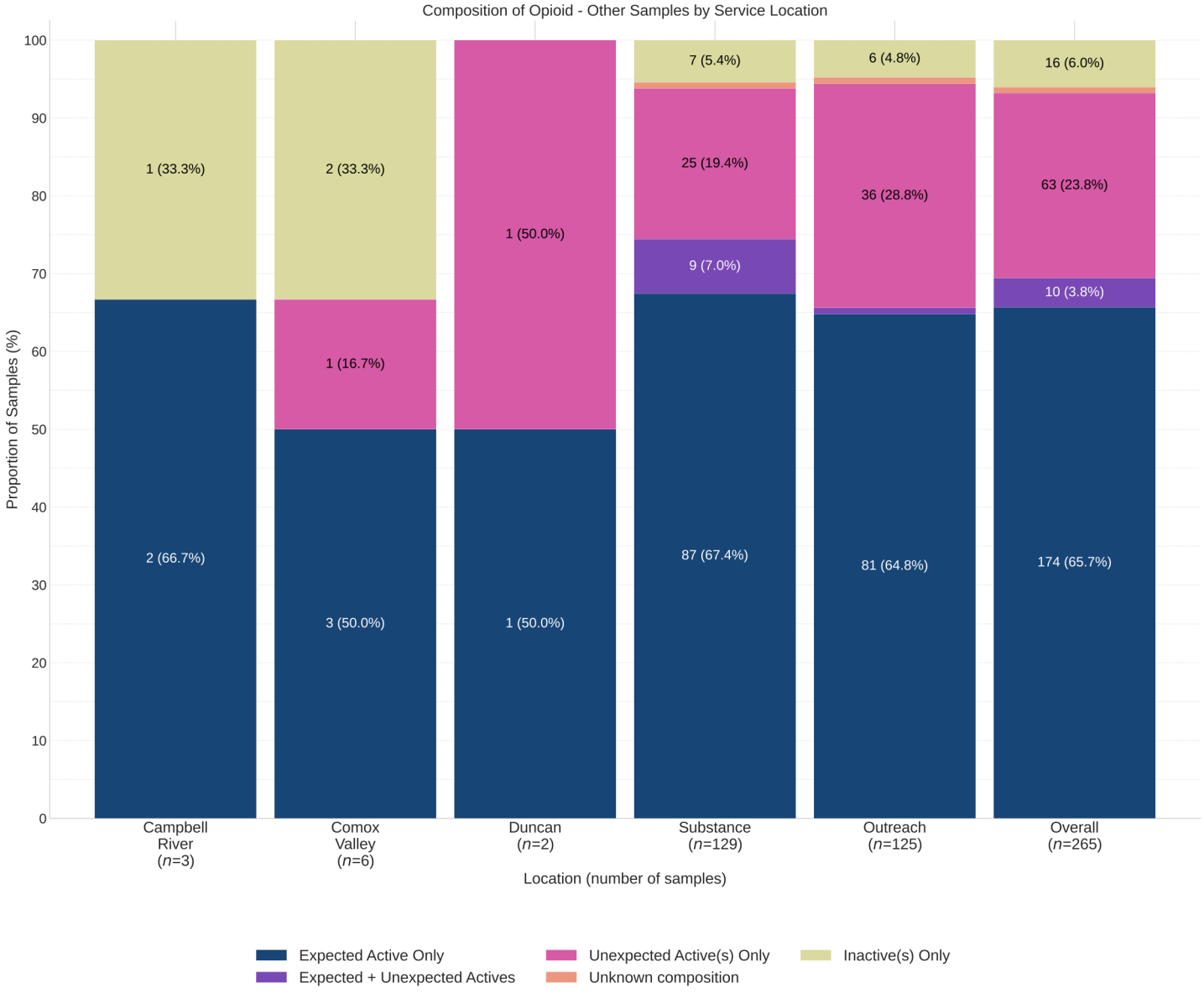

Figure 18. Proportion and number of opioid–other samples checked by service locations, grouped by composition class (see page 10 for definitions).

Opioid–Other: What did we find?

Table 27 below aggregates all active compounds detected in opioid–other samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all opioid–other samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 28 on page 59 aggregates all cutting agents detected in opioid–other samples, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all opioid-other samples)
Expected Active Only	**174 (65.7%)**
Acetaminophen (Tylenol)	28 (10.6%)
Codeine (T3's / T4's)	1 (0.4%)
Desmetramadol (O-DSMT)	1 (0.4%)
Hydromorphone (Dilaudid, Dillies)	51 (19.2%)
MGM-15	1 (0.4%)
Morphine	19 (7.2%)
Opium	4 (1.5%)
Oxycodone (Oxycontin)	88 (33.2%)
SR-17018	5 (1.9%)
Tapentadol	1 (0.4%)
Expected* + Unexpected Active(s)	**10 (3.8%)**
Acetaminophen (Tylenol)	7 (2.6%)
Bromazolam	1 (0.4%)
Codeine (T3's / T4's)	3 (1.1%)
Fentanyl or analogue	1 (0.4%)
Hydromorphone (Dilaudid, Dillies)	2 (0.8%)
Isotonitazene	4 (1.5%)
Morphine	1 (0.4%)
Oxycodone (Oxycontin)	2 (0.8%)
ortho-Methyl fentanyl	1 (0.4%)
Unexpected Active(s) Only	**63 (23.8%)**
Acetaminophen (Tylenol)	7 (2.6%)
Benzodiazepine (unknown type)	2 (0.8%)

Table 27 *(Continued on the next page)*. Active compounds detected in opioid–other samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component. "Fentanyl or analogue" and "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.*

Opioid–Other: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all psychedelic samples)
Unexpected Active(s) Only	**63 (23.8%)**
Bromazolam	4 (1.5%)
Codeine (T3's / T4's)	2 (0.8%)
Cychlorphine (N-Propionitrile chlorphine)	1 (0.4%)
Desalkylgidazepam	1 (0.4%)
Diclofenac (Voltaren)	1 (0.4%)
Fentanyl	6 (2.3%)
Fentanyl or analogue	2 (0.8%)
Fluorofentanyl	10 (3.8%)
Fluorofentanyl Base	2 (0.8%)
Hydrocodone	4 (1.5%)
Hydromorphone (Dilaudid, Dillies)	2 (0.8%)
Isotonitazene	1 (0.4%)
MDA	1 (0.4%)
MMDA	1 (0.4%)
Melatonin	1 (0.4%)
Metodesnitazene	3 (1.1%)
Metonitazene	2 (0.8%)
Morphine	2 (0.8%)
N-Propionyl norfentanyl	2 (0.8%)
N-Pyrrolidino Protonitazene	1 (0.4%)
N-desethyl isotonitazene	4 (1.5%)
Nitazene (unknown type)	9 (3.4%)
Oxybutynin	1 (0.4%)
Oxycodone (Oxycontin)	2 (0.8%)
Promethazine	4 (1.5%)
Unknown Composition	**2 (0.8%)**
Unknown	2 (0.8%)

Table 27 *(Continued from the previous page)*. Active compounds detected in opioid–other samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component. "Fentanyl or analogue" and "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.*

Opioid–Other: Cutting Agents

Compound	Number of Samples (% of all opioid–other samples)
Benzoic acid	3 (1.1%)
Caffeine	2 (0.8%)
Carbohydrate (unknown type)	9 (3.4%)
Corn starch	3 (1.1%)
Dextrose	1 (0.4%)
Dextrose anhydrous	1 (0.4%)
Dicalcium phosphate	3 (1.1%)
Lactose (sugar)	83 (31.3%)
Magnesium sulfate	2 (0.8%)
Mannitol (sugar)	3 (1.1%)
Microcrystalline cellulose	78 (29.4%)
Mineral (unknown type)	5 (1.9%)
Oil (unknown type)	45 (17.0%)
Polyethylene glycol (PEG)	15 (5.7%)
Propylene Glycol	2 (0.8%)
Stearic acid	7 (2.6%)
Sucrose (sugar)	18 (6.8%)
Sugar (unknown type)	28 (10.6%)
Water	8 (3.0%)

Table 28. Cutting agents detected in opioid–other samples across all service locations. *Quantitative concentrations are not available for these compounds.*

Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations.

Opioid–Other: Quantification

Using PS-MS, we were able to quantify the concentration of select compounds detected in opioid other samples. Not all samples can be analyzed via PS-MS, primarily due to samples that are too small to be accurately weighed, so the values listed in Table 28 below may not match those listed in Table 26. Table 29 aggregates the results from all *expected* opioid–other samples checked in 2025 across all service locations. Weight percentage is reported below. "IQR" is the interquartile range: the concentration range containing half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
Oxycodone (Oxycontin)	85	6.4%	<0.1%	>50.0%*	2.2% - 21.7%
Hydromorphone (Dilaudid, Dillies)	51	4.2%	<0.1%	12.3%	3.0% - 5.5%
Morphine	14	13.3%	4.2%	>50.0%*	5.8% - 21.6%
Fentanyl	6	0.7%	<0.1%	2.8%	0.2% - 2.2%
Fluorofentanyl	6	0.6%	0.2%	1.5%	0.2% - 1.2%
Codeine (T3's / T4's)	6	4.5%	0.9%	>50.0%*	2.6% - 38.9%
Bromazolam	5	0.3%	0.3%	0.6%	0.3% - 0.4%
Isotonitazene	5	<0.1%	<0.1%	7.8%	<0.1% - <0.1%
Hydrocodone	4	1.3%	0.8%	1.5%	1.0% - 1.5%
N-desethyl isotonitazene	4	0.3%	0.3%	1.1%	0.3% - 0.6%
Metodesnitazene	3	<0.1%	<0.1%	<0.1%	
SR-17018	3	<0.1%	<0.1%	<0.1%	
Fluorofentanyl Base	2		0.2%	0.5%	
Metonitazene	2		5.3%	8.8%	
Promethazine	2		<0.1%	<0.1%	
Desalkylgidazepam	1		3.3%		
ortho-Methyl fentanyl	1		1.1%		

Table 29. PS-MS quantification of targeted active compounds detected in *expected* opioid–other samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS limit, then only the upper limit will be reported.*

Stimulants–Other

The "stimulants–other" class includes all stimulant samples outside of cocaine, methamphetamine, and MDMA/MDA and includes drugs like prescription amphetamines (Adderall and Dexedrine), methylphenidate (Ritalin/Concerta), and stimulating substituted cathinones like 3-MMC and 4-MMC. The most common misrepresentation that we see within the simulants are methamphetamine pressed pills that are expected to be Adderall, Dexedrine, or amphetamine in general. 79 samples checked in 2025 were expected to contain amphetamine in some form (Adderall, Dexedrine, amphetamine, amphetamine + cocaine). Of these, 25.3% (20/79) contained an unexpected active. The most commonly expected stimulant was 4-MMC (a.k.a. mephedrone), 88.6% (78/88) of 4-MMC samples were as expected. Out of the remaining 10 samples, 3 contained unexpected actives only, 6 contained additional actives, and 1 did not contain any active components.

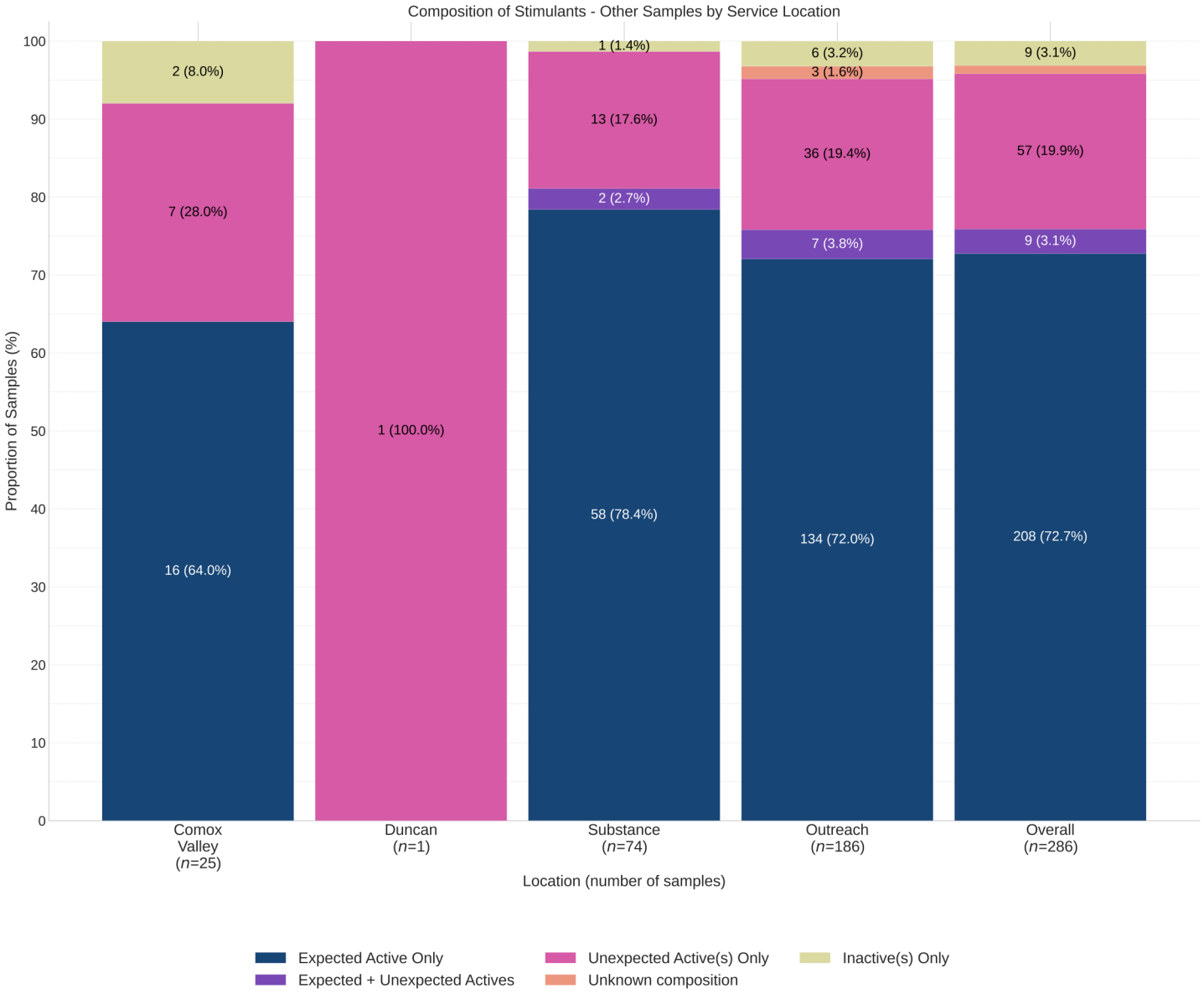

Figure 19. Proportion and number of Stimulant - Other samples checked by service locations, grouped by composition class (see page 10 for definitions).

Stimulants–Other: What did we find?

Table 30 below aggregates all active compounds detected in stimulant–other samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all stimulant–other samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 31 aggregates all cutting agents detected in stimulant–other samples, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all stimulant-other samples)
Expected Active Only	**208 (72.7%)**
2-FMA	1 (0.3%)
2-MMC	13 (4.5%)
3-CMC (Clophedrone)	1 (0.3%)
3-FEA	1 (0.3%)
3-FPM	2 (0.7%)
3-MMC (Metaphedrone)	20 (7.0%)
4-FA (4-Fluoroamphetamine)	1 (0.3%)
4-Fluoroethylphenidate (4F-EPH)	2 (0.7%)
4-MMC (Mephedrone)	78 (27.3%)
4-MPM	3 (1.0%)
4F-MPH	2 (0.7%)
5-APB	3 (1.0%)
5-MAPB	3 (1.0%)
6-APB	6 (2.1%)
APB	1 (0.3%)
Amphetamine	44 (15.4%)
Cocaine HCl (powder)	1 (0.3%)
Eutylone	1 (0.3%)
Isopropylphenidate	1 (0.3%)
Lisdexamfetamine dimesylate (Vyvanse)	7 (2.4%)
MDPM	2 (0.7%)
Methylmethylphenidate (4-MeTMP)	2 (0.7%)
Methylphenidate (Ritalin)	2 (0.7%)

Table 30 *(Continued on the next page)*. Active compounds detected in opioid–other samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component.*

Stimulants–Other: What did we find?

Detected Compounds by Composition Class	**Number of Samples** (% of all stimulant-other samples)
Expected Active Only	**208 (72.7%)**
Modafinil	3 (1.0%)
N-Ethylhexedrone (Hexen)	1 (0.3%)
N-Ethylpentedrone	3 (1.0%)
alpha-PHP	1 (0.3%)
alpha-PHiP	2 (0.7%)
alpha-PvP	2 (0.7%)
Expected* + Unexpected Active(s)	**9 (3.1%)**
3-CMC (Clophedrone)	1 (0.3%)
3-MMA	1 (0.3%)
4-MDMC (4-Methyldimethcathinone)	3 (1.0%)
4-MMC (Mephedrone)	6 (2.1%)
Cathinone (unknown type)	1 (0.3%)
Ketamine	1 (0.3%)
Lisdexamfetamine dimesylate (Vyvanse)	1 (0.3%)
Methamphetamine	1 (0.3%)
Unknown	3 (1.0%)
Unexpected Active(s) Only	**57 (19.9%)**
2-MMC	21 (7.3%)
3-CMC (Clophedrone)	1 (0.3%)
4-BMC (Brephedrone)	2 (0.7%)
4-CMC (Clephedrone)	2 (0.7%)
4-MMC (Mephedrone)	6 (2.1%)
5-MAPB	1 (0.3%)
Amphetamine	1 (0.3%)
Cathinone (unknown type)	1 (0.3%)
Cocaine HCl (powder)	1 (0.3%)
Dextroamphetamine (Dexedrine)	1 (0.3%)

Table 30 *(Continued from the previous page)*. Active compounds detected in opioid–other samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component.*

Stimulants–Other: What did we find?

Detected Compounds by Composition Class	**Number of Samples** (% of all stimulant-other samples)
Unexpected Active(s) Only	**57 (19.9%)**
Eutylone	1 (0.3%)
Ketamine	1 (0.3%)
Metamfepramone (Dimethylcathinone)	1 (0.3%)
Methamphetamine	19 (6.6%)
Unknown Composition	**3 (1.0%)**
Unknown	3 (1.0%)

Table 30 *(Continued from the previous page)*. Active compounds detected in opioid–other samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component. "Fentanyl or analogue" and "Benzodiazepine (unknown type)" results are based on a positive strip test and are unconfirmed by paper spray.*

Stimulants–Other: Cutting Agents

Compound	**Number of Samples** (% of all stimulant - other samples)
Caffeine	14 (4.9%)
Carbohydrate (unknown type)	2 (0.7%)
Dimethyl sulfone (MSM)	1 (0.3%)
Lactose (sugar)	8 (2.8%)
Mannitol (sugar)	2 (0.7%)
Microcrystalline cellulose	27 (9.4%)
Oil (unknown type)	13 (4.5%)
Sorbitol (sugar)	3 (1.0%)
Starch	1 (0.3%)
Stearic acid	4 (1.4%)
Sucrose (sugar)	15 (5.2%)
Sugar (unknown type)	1 (0.3%)

Table 31. Cutting agents detected in stimulant–other samples across all service locations. *Quantitative concentrations are not available for these compounds.*

Stimulants–Other: Quantification

Using PS-MS, we were able to quantify the concentration of select compounds detected in stimulant samples. Not all samples can be analyzed via PS-MS, primarily due to samples that are too small to be accurately weighed, so the values listed in tables below may not match those listed in Tables 30. Weight percentage is reported below. “IQR” is the inter-quartile range: the concentration range containing half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
Amphetamine	22	8.1%	<0.1%	>50.0%*	5.5% - 14.9%
Methamphetamine	14	3.1%	<0.1%	12.9%	2.3% - 5.3%

Table 32. PS-MS quantification of targeted active compounds detected in *expected* stimulant–other samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS limit, then only the upper limit will be reported.*

Depressants–Other

"Depressants–other" describe samples that are non-opioid and non-benzodiazepine depressants like GHB, 1,4-butanediol, pregabalin, and the "Z-drugs" (zolpidem and zopiclone). Expected GHB samples make up a majority of these samples, representing 71.1% (64/90) of "depressant–other" samples checked, 68.5% (44/64) of which were "as expected." 1,4-butanediol, a prodrug to GHB, was the second most common other depressant, making up 7.8% (7/90) of the samples checked within this drug class.

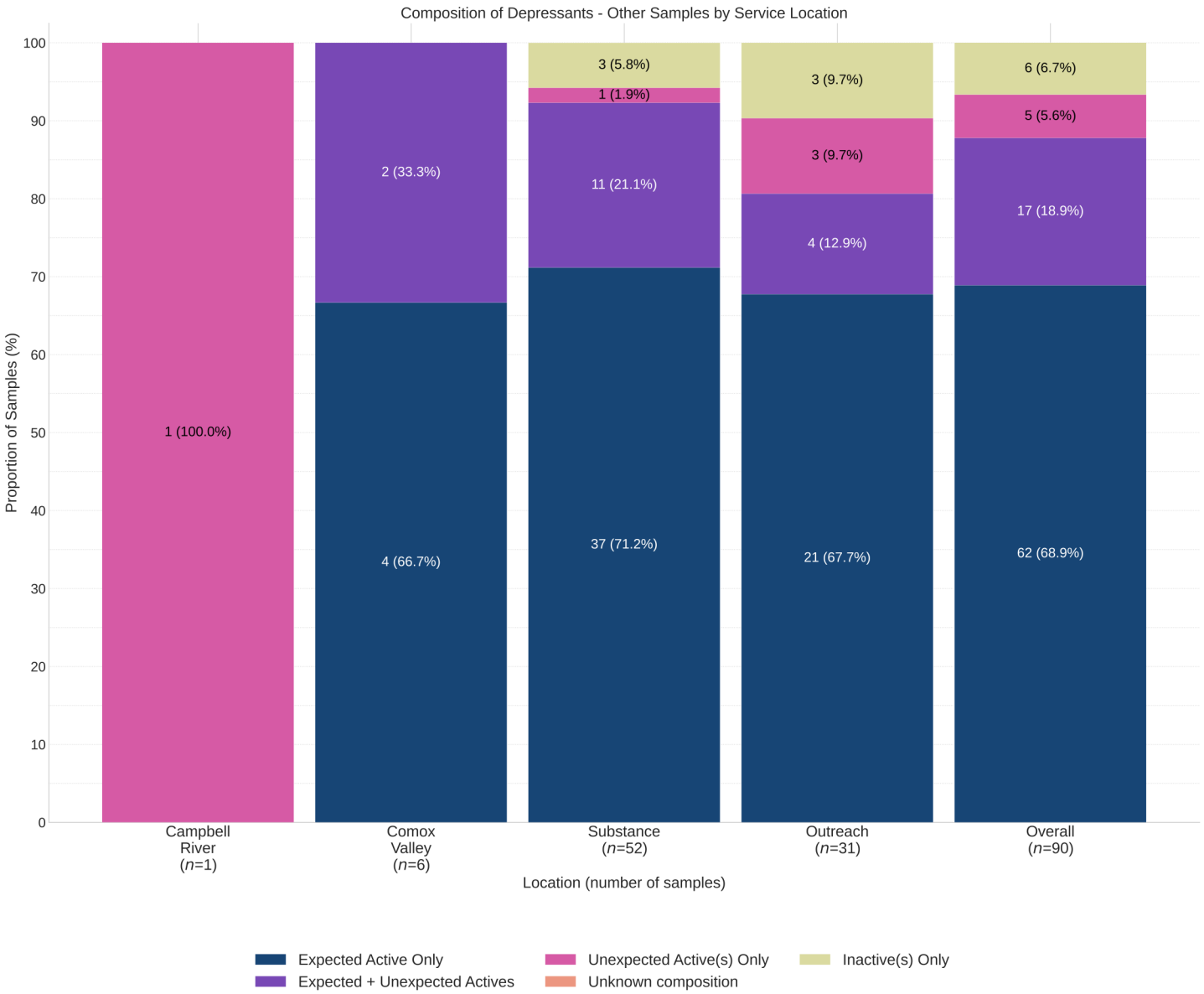

Figure 20. Proportion and number of depressants–other samples checked by service locations, grouped by composition class (see page 10 for definitions).

Depressants–Other: What did we find?

Table 33 below aggregates all active compounds detected in depressant-other samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all depressant–other samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 34 aggregates all cutting agents detected in depressant-other samples, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all depressant-other samples)
Expected Active Only	**62 (68.9%)**
1,4-Butanediol	6 (6.7%)
Dicloqualone	1 (1.1%)
GHB	44 (48.9%)
Methaqualone (Quaaludes)	2 (2.2%)
Phenibut	1 (1.1%)
Pregabalin	2 (2.2%)
Secobarbital	1 (1.1%)
Zolpidem (Ambien)	3 (3.3%)
Zopiclone	2 (2.2%)
Expected* + Unexpected Active(s)	**17 (18.9%)**
1,4-Butanediol	5 (5.6%)
Benzodiazepine (unknown type)	1 (1.1%)
Fentanyl or analogue	1 (1.1%)
Fluorofentanyl	1 (1.1%)
GBL	9 (10.0%)
GHB	14 (15.6%)
Medetomidine	1 (1.1%)
Unknown	1 (1.1%)
Xylazine	2 (2.2%)
Unexpected Active(s) Only	**5 (5.6%)**
1,4-Butanediol	1 (1.1%)
Cocaine HCl (powder)	1 (1.1%)
Etizolam	2 (2.2%)
Qualone (unknown type)	1 (1.1%)

Table 33 *(Continued on the next page)*. Active compounds detected in depressant-other samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component.*

Depressants–Other: Cutting agents

Compound	**Number of Samples** (% of all depressant - other samples)
Carbohydrate (unknown type)	2 (2.2%)
Lactose (sugar)	4 (4.4%)
Magnesium sulfate	2 (2.2%)
Microcrystalline cellulose	3 (3.3%)
Mineral (unknown type)	1 (1.1%)
Propylene Glycol	5 (5.6%)
Sugar (unknown type)	2 (2.2%)
Water	28 (31.1%)

Table 34. Cutting agents detected in depressant-other samples across all service locations. Quantitative concentrations are not available for these compounds.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component.*

Depressants–Other: Quantification

Using PS-MS, we were able to quantify the concentration of select compounds detected in depressant samples. Not all samples can be analyzed via PS-MS, primarily due to samples that are too small to be accurately weighed, so the values listed in tables below may not match those listed in Tables 33. Weight percentage is reported below. "IQR" is the inter-quartile range: the concentration range containing half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
Xylazine	2		>50.0%*	>50.0%*	
Zolpidem (Ambien)	2		6.2%	12.2%	
Zopiclone	2		3.7%	8.8%	
Cocaine HCl (powder)	1		25.1%		
Fluorofentanyl	1		0.3%		
Medetomidine	1		>50.0%*		
Pregabalin	1		31.1%		

Table 35. PS-MS quantification of targeted active compounds detected in *expected* depressant–other samples, inclusive of all service locations.

**There is a maximum concentration limit that the PS-MS can quantify for each compound of interest. If a sample contains a higher percentage of a compound than the PS-MS limit, then only the upper limit will be reported.*

Other categories

All other drugs that do not fit into the aforementioned categories are classified as “Other”. This includes samples like cannabis (and its extracts), steroids, cutting agents, precursors, various pharmaceuticals, and some polysubstance mixtures. The complexity of plant material presents a challenge when examining cannabis on FTIR. While we are often able to confirm the presence of THC and/or CBD in cannabis products, we do not have the methodology to determine concentrations of THC or CBD. THC and CBD present a unique challenge with PS-MS as well since both compounds are isobaric and are structurally quite similar; differentiating these compounds with PS-MS is beyond our current methodology. At best, we screen cannabis samples for any unexpected substances. The analysis of steroids on FTIR has unique limitations as well. Most steroids brought to our service are delivered in a carrier oil that often complicates the analysis of the FTIR spectrum. Furthermore, we do not have comprehensive spectral libraries available for all of the different esters, meaning we can often only narrow a steroid down to a broad class like “Nandrolone”. Similarly, our spectral libraries for pharmaceuticals are not exhaustive and there are some samples checked for which we do not have a reference spectrum. In these scenarios, we rely on other resources, untargeted analysis on PS-MS, and/or collaboration with other drug checking projects to help the identity the compound.

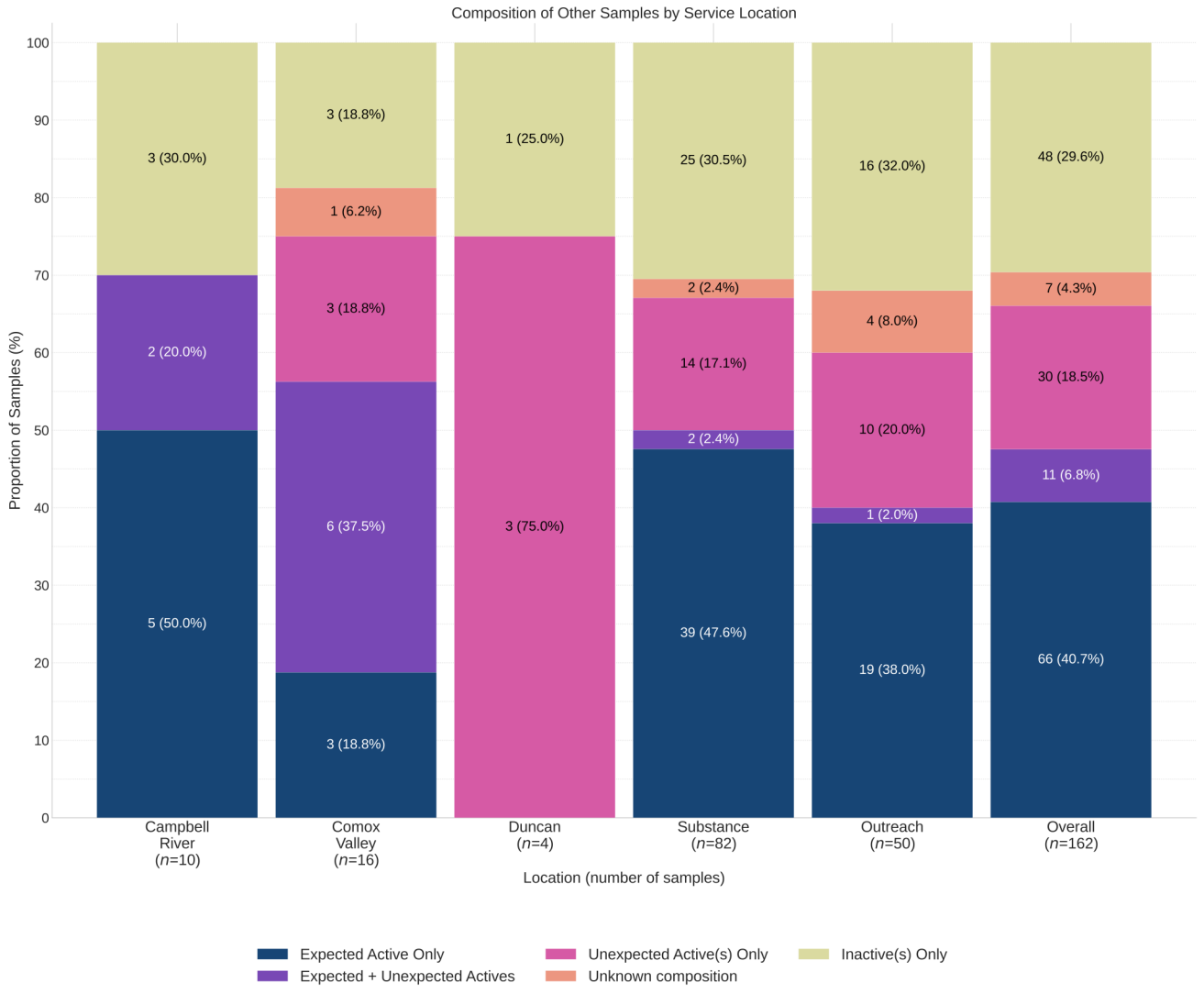

Figure 21. Proportion and number of other samples checked by service locations, grouped by composition class (see page 10 for definitions).

Other categories: What did we find?

Table 36 below aggregates all active compounds detected in "other" samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all "other" samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 37 on page 72 aggregates all cutting agents detected in "other" samples, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all other samples)
Expected Active Only	**66 (40.7%)**
5-Methoxy-2-aminoindane (MEAI)	1 (0.6%)
Acetaminophen (Tylenol)	3 (1.9%)
Bromantane	1 (0.6%)
Cannabidiol (CBD)	1 (0.6%)
Cardarine	2 (1.2%)
Chlorodehydromethyltestosterone	1 (0.6%)
Clindamycin	1 (0.6%)
Clomiphene	2 (1.2%)
Hydroxyzine	1 (0.6%)
Ivermectin	1 (0.6%)
JWH-210	1 (0.6%)
Mebendazole	1 (0.6%)
Methandrostenolone	1 (0.6%)
Methenolone	1 (0.6%)
Oxandrolone	11 (6.8%)
Oxymetholone	1 (0.6%)
Phenacetin	1 (0.6%)
Sildenafil (Viagra)	7 (4.3%)
Stanozolol	1 (0.6%)
THC	1 (0.6%)
THCA	5 (3.1%)
Tadalafil (Cialis)	18 (11.1%)
Tamoxifen	4 (2.5%)
Testosterone enanthate	1 (0.6%)
Trenbolone enanthate	1 (0.6%)

Table 36 *(Continued on the next page)*. Active compounds detected in "other" samples checked in 2025, inclusive of all service locations.

Other categories: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all other samples)
Expected* + Unexpected Active(s)	**11 (6.8%)**
2-MMC	1 (0.6%)
Alcohol (Ethanol)	1 (0.6%)
Benzocaine	1 (0.6%)
Cocaine Base (crack, rock, hard)	1 (0.6%)
Desalkylgidazepam	1 (0.6%)
Drostanolone enanthate	1 (0.6%)
Fentanyl	2 (1.2%)
Ketamine Base	1 (0.6%)
Lidocaine	1 (0.6%)
Nandrolone decanoate	1 (0.6%)
Oxandrolone	2 (1.2%)
Sildenafil (Viagra)	1 (0.6%)
THC	1 (0.6%)
Tadalafil (Cialis)	1 (0.6%)
Testosterone cypionate	2 (1.2%)
Trenbolone enanthate	4 (2.5%)
Unknown	2 (1.2%)
ortho-Methyl fentanyl	1 (0.6%)
Unexpected Active(s) Only	**30 (18.5%)**
Benzodiazepine (unknown type)	1 (0.6%)
Bromazolam	2 (1.2%)
Clomiphene	1 (0.6%)
Diclofenac (Voltaren)	1 (0.6%)
Fentanyl	4 (2.5%)
Fentanyl or analogue	3 (1.9%)
Fluorofentanyl	1 (0.6%)
Ligandrol	1 (0.6%)
MDA	2 (1.2%)

Table 36 (*Continued from previous page*). Active compounds detected in "other" samples checked in 2025, inclusive of all service locations.

Other categories: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all other samples)
Unexpected Active(s) Only	**30 (18.5%)**
MDMA	2 (1.2%)
Methamphetamine	1 (0.6%)
Methandrostenolone	3 (1.9%)
Pregabalin	1 (0.6%)
Salbutamol	1 (0.6%)
Sildenafil (Viagra)	2 (1.2%)
Steroid (unknown type)	2 (1.2%)
Tadalafil (Cialis)	1 (0.6%)
Trenbolone enanthate	7 (4.3%)
Unknown Composition	**7 (4.3%)**
Unknown	7 (4.3%)

Table 36 (*Continued from previous page*). Active compounds detected in "other" samples checked in 2025, inclusive of all service locations.

*Instruments may not be able to detect all ingredients and certainty of interpretations may vary. Multiple substances may be present in one sample and substances may be present in trace concentrations. *Expected active component.*

Other categories: Cutting Agents

Compound	**Number of Samples** (% of all other samples)
Caffeine	9 (5.6%)
Caffeine hydrate	2 (1.2%)
Carbohydrate (unknown type)	12 (7.4%)
Corn starch	2 (1.2%)
Creatine	2 (1.2%)
Erythritol (sugar)	3 (1.9%)
Lactose (sugar)	9 (5.6%)
Microcrystalline cellulose	55 (34.0%)
Mineral (unknown type)	5 (3.1%)
Oil (unknown type)	43 (26.5%)
Propylene Glycol	1 (0.6%)
Salt	1 (0.6%)
Sodium bicarbonate (Baking soda)	1 (0.6%)
Starch	3 (1.9%)
Stearic acid	5 (3.1%)
Sucrose (sugar)	4 (2.5%)
Sugar (unknown type)	1 (0.6%)
Water	5 (3.1%)

Table 37. Cutting agents detected in “other” samples across all service locations. *Quantitative concentrations are not available for these compounds.*

Other categories: Quantification

Little quantitative data is available for samples in the “other” category as none of the compounds expected “other” category are within the targeted method for PS-MS.

Compound	# Quant.	Median	Min	Max	IQR
Fentanyl	6	1.0%	0.2%	7.4%	0.7% - 1.9%
Bromazolam	2		0.2%	3.3%	
Desalkylgidazepam	1		1.7%		
Fluorofentanyl	1		1.6%		

Table 38. PS-MS quantification of targeted active compounds detected in *expected* “other” samples, inclusive of all service locations.

Other categories: Quantification

Little quantitative data is available for samples in the “other” category as none of the compounds expected “other” category are within the targeted method for PS-MS. Therefore, the compounds present in Table 38 below (except for benzocaine) are considered adulterants.

Compound	# Quant.	Median	Min	Max	IQR
Lidocaine	1		>50.0%*		
Phenacetin	1		>50.0%*		
Pregabalin	1		5.5%		
Sildenafil (Viagra)	1		<0.1%		
ortho-Methyl fentanyl	1		2.8%		

Table 38. PS-MS quantification of targeted active compounds detected in *expected* “other” samples, inclusive of all service locations.

Unknown samples

"Unknown" samples are those with an identity, or suspected identity, unknown to the service user (such as ground scores and unlabeled baggies). "Unknown" samples are the fifth most common "drug class" that we check, representing 6.0% of the total samples checked in 2025. Given that there is no expected active in this class of samples, by default all are either classified as "unexpected", "inactive", or "unknown composition" depending on whether active drugs were detected, not detected, or if we were unable to determine what was present in the sample.

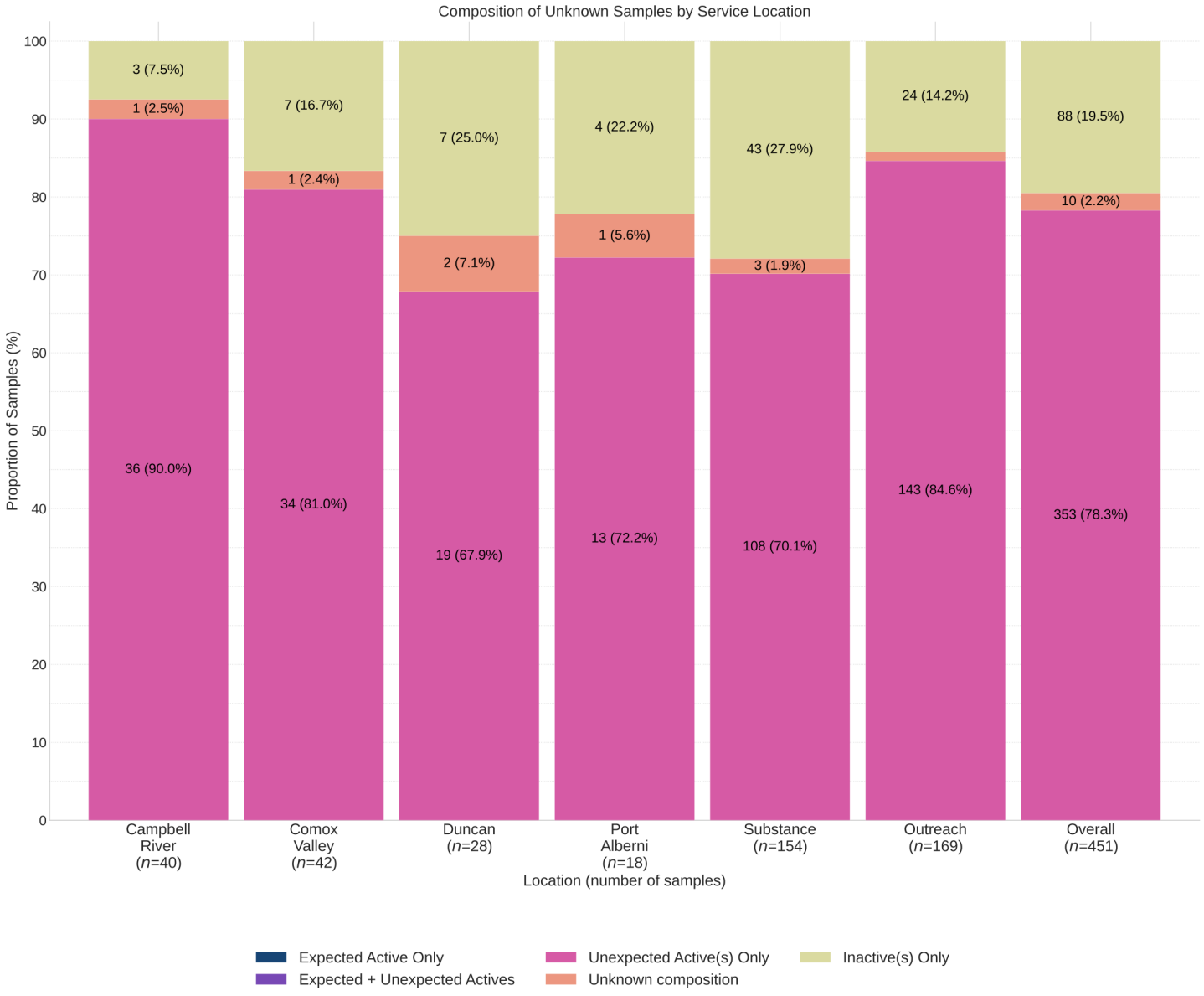

Figure 22. Proportion and number of expected unknown samples checked by service locations, grouped by composition class (see page 10 for definitions).

Unknown: What did we find?

Table 38 below aggregates all active compounds detected in unknown samples in 2025, across all service locations. The number of detections, and the prevalence with respect to all unknown samples checked, is listed. Samples with no detected actives have been excluded for brevity, however Table 40 on page 77 aggregates all cutting agents detected in unknown samples, across all service locations. See page 10 for definitions of the different composition classes.

Detected Compounds by Composition Class	**Number of Samples** (% of all unknown samples)
Unexpected Active(s) Only	**353 (78.3%)**
2-MMC	2 (0.4%)
2C-B	6 (1.3%)
3-MMC (Metaphedrone)	1 (0.2%)
4-CMC (Clephedrone)	1 (0.2%)
4-HO-MET (Metocin, Colour)	3 (0.7%)
4-MMC (Mephedrone)	2 (0.4%)
5-MeO-MiPT (Moxy)	1 (0.2%)
Acetaminophen (Tylenol)	5 (1.1%)
Acetylcodeine	3 (0.7%)
Acetylmorphine (MAM, 6-MAM)	3 (0.7%)
Adinazolam	1 (0.2%)
Alprazolam (Xanax)	1 (0.2%)
Amoxicillin trihydrate	1 (0.2%)
Amphetamine	3 (0.7%)
Benzocaine	1 (0.2%)
Benzodiazepine (unknown type)	19 (4.2%)
Bromazepam	1 (0.2%)
Bromazolam	32 (7.1%)
Buprenorphine	1 (0.2%)
Carfentanil	2 (0.4%)
Chlorphine	1 (0.2%)
Cocaine Base (crack, rock, hard)	13 (2.9%)
Cocaine HCl (powder)	52 (11.5%)
Codeine (T3's / T4's)	2 (0.4%)

Table 39 *(Continued on the next page)*. Active compounds detected in unknown samples checked in 2025, inclusive of all service locations.

Unknown: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all unknown samples)
Unexpected Active(s) Only	**353 (78.3%)**
Desalkylgidazepam	14 (3.1%)
Deschloroetizolam	1 (0.2%)
Despropionyl para-fluorofentanyl	1 (0.2%)
Diphenhydramine (Benadryl)	4 (0.9%)
Ethylbromazolam	2 (0.4%)
Etizolam	4 (0.9%)
Fentanyl	53 (11.8%)
Fentanyl or analogue	3 (0.7%)
Flubromazepam	3 (0.7%)
Fluorodeschloroketamine	1 (0.2%)
Fluorofentanyl	43 (9.5%)
GHB	1 (0.2%)
Gabapentin	2 (0.4%)
Heroin	4 (0.9%)
Hydromorphone (Dilaudid, Dillies)	3 (0.7%)
Ibutamoren	1 (0.2%)
Ketamine	35 (7.8%)
Levamisole	3 (0.7%)
Lidocaine	1 (0.2%)
Lisdexamfetamine dimesylate (Vyvanse)	1 (0.2%)
Lorazepam (Ativan)	4 (0.9%)
MDA	11 (2.4%)
MDMA	59 (13.1%)
Medetomidine	7 (1.6%)
Mescaline	1 (0.2%)
Metamizole (Dipyrone)	1 (0.2%)
Methadone	1 (0.2%)
Methamphetamine	30 (6.7%)

Table 39 *(Continued from previous page)*. Active compounds detected in unknown samples checked in 2025, inclusive of all service locations.

Unknown: What did we find? *(Continued)*

Detected Compounds by Composition Class	**Number of Samples** (% of all unknown samples)
Unexpected Active(s) Only	**353 (78.3%)**
Methylphenidate (Ritalin)	2 (0.4%)
Metodesnitazene	1 (0.2%)
Metonitazene	1 (0.2%)
Mirtazapine	1 (0.2%)
Morphine	2 (0.4%)
N-desethyl isotonitazene	1 (0.2%)
Oxycodone (Oxycontin)	5 (1.1%)
Phenacetin	3 (0.7%)
Sertraline (Zoloft)	2 (0.4%)
Sildenafil (Viagra)	4 (0.9%)
THCA	1 (0.2%)
THCV	1 (0.2%)
Tadalafil (Cialis)	4 (0.9%)
Tianeptine	1 (0.2%)
Trazodone	1 (0.2%)
Unknown	2 (0.4%)
Xylazine	7 (1.6%)
Zolpidem (Ambien)	1 (0.2%)
Zopiclone	1 (0.2%)
alpha-PvP	1 (0.2%)
ortho-Methyl fentanyl	6 (1.3%)
Unknown Composition	**10 (2.2%)**
Unknown	10 (2.2%)

Table 39 *(Continued from previous page)*. Active compounds detected in unknown samples checked in 2025, inclusive of all service locations.

Unknown: Cutting Agents

Compound	Number of Samples (% of all other samples)	Compound	Number of Samples (% of all other samples)
Aluminum Potassium Sulphate	1 (0.2%)	Maltose (sugar)	1 (0.2%)
Ascorbic acid (Vitamin C)	4 (0.9%)	Mannitol (sugar)	8 (1.8%)
Caffeine	68 (15.1%)	Microcrystalline cellulose	45 (10.0%)
Caffeine hydrate	3 (0.7%)	Mineral (unknown type)	2 (0.4%)
Calcium carbonate (Chalk)	1 (0.2%)	Nicotinamide (Niacin)	1 (0.2%)
Carbohydrate (unknown type)	11 (2.4%)	Oil (unknown type)	28 (6.2%)
Corn starch	1 (0.2%)	Polyethylene glycol (PEG)	2 (0.4%)
Creatine	1 (0.2%)	Propylene Glycol	5 (1.1%)
Dextrose anhydrous	1 (0.2%)	Sodium bicarbonate	3 (0.7%)
Dicalcium phosphate	2 (0.4%)	Sorbitol (sugar)	3 (0.7%)
Dimethyl sulfone (MSM)	3 (0.7%)	Starch	3 (0.7%)
Erythritol (sugar)	44 (9.8%)	Stearic acid	11 (2.4%)
Flour	2 (0.4%)	Sucrose (sugar)	4 (0.9%)
Fumaric acid	1 (0.2%)	Sugar (unknown type)	10 (2.2%)
Glutamine	1 (0.2%)	Talc	1 (0.2%)
Inositol (sugar)	1 (0.2%)	Water	12 (2.7%)
Lactose (sugar)	25 (5.5%)	Xylitol (sugar)	10 (2.2%)
Magnesium sulfate	1 (0.2%)	alpha-Lactose	1 (0.2%)

Table 40. Cutting agents detected in unknown samples across all service locations. *Quantitative concentrations are not available for these compounds.*

Unknown samples: Quantification

Using PS-MS, we were able to quantify the concentration of select compounds detected in unknown samples. Not all samples can be analyzed via PS-MS, primarily due to samples that are too small to be accurately weighed, so the values listed in Table 40 below may not match those listed in Table 38. Table 40 aggregates the results from all unknown samples checked in 2025 across all service locations. Weight percentage is reported below. "IQR" is the interquartile range: the concentration range containing half of the quantified samples.

Compound	# Quant.	Median	Min	Max	IQR
Fentanyl	44	7.2%	0.2%	>50.0%*	2.7% - 15.7%
Fluorofentanyl	37	5.2%	0.2%	>50.0%*	1.7% - 11.2%
Bromazolam	30	2.3%	0.2%	23.6%	0.9% - 4.3%
Desalkylgidazepam	12	3.4%	0.3%	>50.0%*	0.6% - 6.6%
MDMA	10	29.8%	3.3%	>50.0%*	14.0% - 44.4%
Methamphetamine	9	13.0%	2.3%	>50.0%*	3.0% - 19.3%
Medetomidine	7	3.1%	0.4%	>50.0%*	1.0% - 7.8%
ortho-Methyl fentanyl	6	0.8%	0.5%	12.0%	0.6% - 1.1%
Xylazine	5	0.3%	0.2%	2.6%	0.3% - 1.2%
Oxycodone (Oxycontin)	5	1.6%	1.2%	>50.0%*	1.4% - >50.0%*
Lorazepam (Ativan)	4	6.4%	1.1%	9.6%	2.8% - 9.4%
Heroin	4	20.3%	0.5%	45.4%	1.6% - 40.3%
Etizolam	3	1.0%	0.9%	36.9%	0.9% - 18.9%
Acetylcodeine	3	1.8%	0.1%	1.9%	0.9% - 1.8%
Flubromazepam	3	1.4%	0.6%	2.1%	1.0% - 1.8%
2C-B	3	2.5%	2.2%	7.7%	2.3% - 5.1%
Amphetamine	3	14.6%	10.7%	20.3%	12.6% - 17.4%
Acetylmorphine (MAM, 6-MAM)	3	5.9%	0.3%	6.0%	3.1% - 6.0%
Cocaine HCl (powder)	3	>50.0%*	<0.1%	>50.0%*	25.0% - >50.0%*
Ketamine	2	40.2%	30.3%	>50.0%*	35.2% - 45.1%
Morphine	2	29.3%	22.0%	36.6%	25.6% - 32.9%
MDA	2	1.8%	0.7%	3.0%	1.3% - 2.4%
Ethylbromazolam	2	0.7%	<0.1%	1.3%	0.4% - 1.0%
Hydromorphone (Dilaudid, Dillies)	2	6.0%	4.5%	7.4%	5.3% - 6.7%
Codeine (T3's / T4's)	2	4.6%	2.8%	6.5%	3.7% - 5.6%
Gabapentin	2		>50.0%*	>50.0%*	

Table 41 *(Continued on the next page)*. PS-MS quantification of targeted active compounds detected in *expected* unknown samples, inclusive of all service locations.

Unknown samples: Quantification *(Continued)*

Compound	# Quant.	Median	Min	Max	IQR
Buprenorphine	1		2.5%		
Benzodiazepine (unknown type)	1		<0.1%		
Despropionyl para-fluorofentanyl	1		0.2%		
Methadone	1		0.5%		
Alprazolam (Xanax)	1		2.0%		
Levamisole	1		0.2%		
Metonitazene	1		>50.0%*		
Carfentanil	1		0.2%		
N-desethyl isotonitazene	1		>50.0%*		
Adinazolam	1		6.5%		
Bromazepam	1		2.0%		
Zolpidem (Ambien)	1		15.4%		
Zopiclone	1		3.8%		
Metodesnitazene	1		<0.1%		

Table 41 *(Continued from previous page)*. PS-MS quantification of targeted active compounds detected in *expected* unknown samples, inclusive of all service locations.

Opioid–Positivity in Non-Opioid–Down Samples

In 2025, we checked 4644 samples across all service locations that were not expected to contain fentanyl or other unexpected opioids. Since the opioid–down supply is no longer "just heroin" or "just fentanyl" and is instead a complex, potent, and ever-changing polysubstance market containing other opioids like carfentanil and nitazenes, here we will examine the prevalence of any unexpected opioid, not just fentanyl, detected in non-opioid–down samples. In the case of "opioid-other" samples, "unexpected opioids" are defined as any other opioid detected that is not the expected opioid (e.g. fentanyl in an expected oxycodone pill). Unknown samples have been excluded from these data and "Other categories" is comprised of the following drug classes: precursors, cutting agents, steroids, and other.

These data are split into two categories in Table 40 below: samples in each drug class where unexpected opioids were detected (Total Opioid Positive) vs. samples where unexpected opioids were detected alongside the expected drug (Number of Samples Containing Expected Active & Opioid-Positive). The intention of this split is to examine opioid misrepresentation vs. the co-prevalence of opioids with non-opioids. Examining Table 40, we find that unexpected opioids were detected in 2.6% (versus 3.2% in 2024) of all non-opioid–down samples. However, if we are interested in the co-prevalence of opioids and non-opioid samples, we see that 1.0% of the samples that were confirmed to contain the expected substance also contained an unexpected opioid.

As a guiding example from these data, 7.2% (31/430) of expected benzodiazepine samples were found to contain unexpected opioids. However, not all benzo samples are "as expected" and only 48.8% (210/430) of benzo samples actually contained the expected benzo. Of these 210 samples, 8 samples were found to contain opioids as well (3.8% of benzo samples that contained the expected benzo). Samples in the opioid-other, benzodiazepine, and methamphetamine classes showed the highest total prevalence of unexpected opioids.

Expected Substance Class	**Total Samples**	**Total Opioid Positive** (% of Total Expected)	**Number of Samples Containing Expected Active** (% of Total Samples in Class)	**Number of Samples Containing Expected Active & Opioid-Positive** (% of Samples Containing Expected Active)
Cocaine	1128	17 (1.5%)	1101 (97.6%)	10 (0.9%)
MDMA	976	3 (0.3%)	913 (93.5%)	1 (0.1%)
Dissociatives	691	0 (0.0%)	637 (92.2%)	0 (0.0%)
Benzodiazepines	430	31 (7.2%)	210 (48.8%)	8 (3.8%)
Psychedelics	374	0 (0.0%)	321 (85.8%)	0 (0.0%)
Stimulants - Other	286	0 (0.0%)	217 (75.9%)	0 (0.0%)
Opioid - Other	265	47 (17.7%)	184 (69.4%)	6 (3.3%)
Methamphetamine	242	14 (5.8%)	218 (90.1%)	9 (4.1%)
Other	162	9 (5.6%)	77 (47.5%)	2 (2.6%)
Depressants - Other	90	2 (2.2%)	79 (87.8%)	2 (2.5%)
Total	**4644**	**123 (2.6%)**	**3957 (85.2%)**	**38 (1.0%)**

Table 42. Overview of the prevalence of unexpected opioids found within non-opioid–down samples in 2025, inclusive of all service locations.

Opioid–Positivity in Non-Opioid–Down Samples *(Continued)*

Opioid–Positivity in "Opioid–Other" Samples

17.7% (47/265) of expected opioid–other samples contained an unexpected opioid. 17 were expected to be oxycodone, 16 were expected to be Percocet, 13 were expected to be hydromorphone, and 1 was expected to be Codeine and Promethazine. The composition of the 47 expected "opioid–other" samples which contained an unexpected opioid are shown below in Table 42.

Expected Active Compound	Unexpected/Additional Opioid(s) Detected	Number of Detections
Oxycodone (Oxycontin)	Nitazene (unknown type)	5
	Fentanyl	4
	N-desethyl isotonitazene	4
	Fluorofentanyl	2
	N-Pyrrolidino Protonitazene	1
	ortho-Methyl fentanyl	1
Percocet (Oxycodone + Acetaminophen)	Fluorofentanyl	4
	Isotonitazene	4
	Metodesnitazene	3
	Nitazene (unknown type)	3
	Fentanyl	1
	Fentanyl or Analogue	1
Hydromorphone (Dilaudid)	Fluorofentanyl	4
	Fentanyl or analogue	2
	Fluorofentanyl Base	2
	Metonitazene	2
	N-Propionyl norfentanyl	2
	Fentanyl	1
	Nitazene (unknown type)	1
Codeine + Promethazine (Lean)	Isotonitazene	1

Table 43. Expected "Opioid–other" samples checked in 2025 containing an unexpected opioid, inclusive of all service locations. Only unexpected opioids are shown, other compounds may be present in these samples.

Opioid–Positivity in Non-Opioid–Down Samples *(Continued)*

Opioid–Positivity in Benzodiazepine Samples

7.2% (31/430) of expected benzodiazepine samples contained an unexpected opioid. 15 had an unspecified expected compound and 12 were expected to be bromazolam. The composition of the 27 expected benzodiazepine samples which contained an unexpected opioid are shown below in Table 43.

Expected Active Compound	Unexpected/Additional Opioid(s) Detected	Number of Detections
Alprazolam (Xanax)	Fentanyl analogue (unknown type)	1
	Fentanyl or analogue	1
	N-desethyl isotonitazene	1
Bromazolam	Fentanyl	4
	Fluorofentanyl	3
	Isotonitazene	2
	Fentanyl or analogue	1
	ortho-Methyl fentanyl	1
Ethylbromazolam	Fentanyl analogue (unknown type)	1
	Fentanyl or analogue	1
	Isotonitazene	1
Flurazepam	Fentanyl, Fluorofentanyl	1
Unspecified / Other	Fluorofentanyl	12
	Fentanyl	9
	Acetylmorphine (MAM, 6-MAM)	2
	Heroin	2
	Fentanyl or analogue	1

Table 44. Expected Benzodiazepine samples checked in 2025 containing an unexpected opioids, inclusive of all service locations. Only unexpected opioids are shown, other compounds may be present in these samples.

"Fentanyl or analogue" results are based on a positive strip test and are unconfirmed by paper spray.

Opioid–Positivity in Methamphetamine Samples

Unexpected opioids were found in 5.8% (14/242) of expected methamphetamine samples. Among these, 9 samples also contained methamphetamine. In 11 of the 14 samples containing methamphetamine, the presence of fentanyl or an analogue was likely due to cross-contamination. In 1 sample, etoetonitazene was detected alongside fentanyl. In 1 sample, an unknown benzodiazepine was detected alongside fentanyl or an analogue.

Opioid–Positivity in Non-Opioid–Down Samples *(Continued)*

Opioid–Positivity in Cocaine Samples

1.5% (17/1128) of expected cocaine samples were found to contain an unexpected opioid. In all 17 cases, the unexpected opioid was fentanyl or a fentanyl analogue. Among the samples with an unexpected opioid, 10 also contained the expected active component (cocaine or crack). In 8 of these 17 samples, the presence of fentanyl or a fentanyl analogue was likely due to cross-contamination rather than intentional adulteration with fentanyl. 5 of the 17 samples were consistent with down samples, containing fentanyl or a fentanyl analogue, often cut with caffeine and/or sugar.

Opioid–Positivity in MDMA Samples

Out of 976 MDMA/MDA samples, three were found to contain an unexpected opioid, one contained the expected active. One of the three expected MDMA/MDA samples which contained an unexpected opioid was consistent with a down sample, containing fentanyl and bromazolam cut with caffeine and a sugar. One of the samples contained methamphetamine and fentanyl instead of the expected MDMA/MDA. The remaining sample contained MDMA and tested positive for fentanyl via a strip test only.

Opioid–Positivity in Depressant—Other Samples

The two samples which contained expected opioids from the Depressant—Other category were both expected to be and contained xylazine. The first sample additionally contained fluorofentanyl and an unknown benzodiazepine. The other sample additionally contained an unknown mineral and tested positive for fentanyl or an analogue via strip test only.

Opioid–Positivity in Other Categories

The nine samples which fall into “other” categories (i.e., precursors, cutting agents, steroids, and other) that contained an unexpected opioid were expected to be caffeine, ketamine + cocaine base, CBD, THC, and alcohol. In the four expected caffeine samples, two tested positive for fentanyl via strip test only, the remaining two samples contained fentanyl at 1% or less. In the case of the two ketamine + cocaine base samples, one tested positive for both fentanyl or an analogue and an unknown benzodiazepine via strip test, however, no other actives were detected. The other ketamine + cocaine base sample contained fentanyl, ortho-methyl fentanyl, and desalkygidazepam cut with caffeine. The expected CBD sample was consistent with a down sample, containing multiple opioids and a benzodiazepine. The expected THC sample presented as a cannabis joint and the presence of fentanyl was confirmed via strip test and paper spray. Similarly, the alcohol sample presented as a tequila bottle and was confirmed to contain fentanyl via strip test and paper spray.

2025 Publications

In 2025 we published five research articles. A full list of our publications in available on our website.

Implementing community drug checking in smaller urban communities: a qualitative study exploring contextual factors to consider.

Hutchison, A., Urbanoski, K., Hore, D., & Wallace, B.

Harm Reduction Journal, 22, 83 doi.org/10.1186/s12954-025-01234-8

Visioning towards a decolonized, Indigenous-centered service model for drug checking: An auto-ethnographic exploration.

Littlechild, S., Wallace, B., & Hore, D

Canadian Institute for Substance Use Research (Substance Drug Checking Project)

Development of a high-resolution paper-spray mass spectrometry method using street drugs for the early detection of emerging drugs in the unregulated supply.

Miskulin, A., Wallace, B., Hore, D. K., & Gill, C.

Analyst doi.org/10.1039/D5AN00086F

Is fentanyl in everything? Examining the unexpected occurrence of illicit opioids in British Columbia's drug supply.

Wallace, B., Shkolnikov, I., Kielty, C., Robinson, D., Gozdzialski, L., Jai, J., Margolese, A., Gonzalez-Nieto, P., Saatchi, A., Zarkovic, T., Gill, C. & Hore, D.

Harm Reduction Journal 22, 28 doi.org/10.1186/s12954-025-01189-w

Not just fentanyl: Understanding the complexities of the unregulated opioid supply through results from a drug checking service in British Columbia, Canada

Gonzalez-Nieto, P., Wallace, B., Kielty, C., Gruntman, K., Robinson, D., Substance Staff, Arredondo Sanchez Lira, J., Gill, C., & Hore, D.

International Journal of Drug Policy, 138, 104751 doi.org/10.1016/j.drugpo.2025.104751

Substance Drug Checking

Annual Review 2025

Where to Find Us

Campbell River
Vancouver Island Mental Health Society Overdose Prevention Site
1330 Dogwood St, Unit #5, Campbell River, BC

Campbell River AVI
AVI Health & Community Services
1371 Cedar Street, Campbell River

Comox Valley
AVI Health & Community Services
355 6th St, Courtenay, BC

Duncan
Duncan Lookout Society Overdose Prevention Site
Cowichan Valley Wellness and Recovery Center
5878 York Road, Duncan, BC

Port Alberni
Port Alberni Shelter Society Overdose Prevention Site
3699 3rd Ave, Port Alberni, BC

Nuu-chah-nulth Tribal Council
5001 Mission Road
PO Box 1383
Port Alberni, BC V9Y 7M2

Port Hardy
Island Health Mental Health and Substance Use
7070 Shorncliffe Ave, Port Hardy, BC

Victoria
Substance Drug Checking
1802 Cook Street, Victoria, BC

Substance Drug Checking

Annual Review 2025

Substance Drug Checking is based out of the University of Victoria and operates community-wide drug checking services within Campbell River, the Comox Valley, Duncan, Port Alberni, Port Hardy, and Victoria, BC. We are continuing to offer drug checking services in response to the toxic drug public health emergency, and exploring new ways to better reach those who may benefit from this service. We have partnered with Dr. Chris Gill and the team at Vancouver Island University to improve detection and reporting using their methods for the paper spray - mass spectrometer.

See the blog portion of our website to view our more detailed interpretations of our reports.

Our project works on Indigenous land. We provide drug checking, harm reduction education and support across many territories on what is colonially known as 'Vancouver Island.' We also act as a resource for these services across the province colonially known as 'British Columbia.' We honour and offer respect to many nations for their stewardship, care and leadership on these lands.

Our project originated on the territories of the lək̓ʷəŋən speaking peoples, including the Songhees and Xwsepsum (Esquimalt) Nations, and the W̱SÁNEĆ (Saanich) Nations on whose land the University of Victoria is located. Some of the territories we are honoured to work across specifically include: Halalt, Lyackson, Meluxulh (Malahat), Puneluxutth', Quw'utsun, Stz-uminus, and Ts'uubaa-asatx; Hupačasath and Tseshaht; K'ómoks; and Laich-kwil-tach.

We acknowledge the inextricable links between research, colonization and racism against Indigenous peoples, which continue to this date. Ending the violence faced by people who use drugs cannot be achieved without actively working on decolonization.

For more information please visit: substance.uvic.ca or email: substance@uvic.ca

We gratefully acknowledge our partners on this project

Agilent Technologies
AVI Health and Community Services
BC Ministry of Health
BC Ministry of Mental Health and Addictions
BC SUPPORT Unit Vancouver Island Centre
Canadian Institutes for Health Research
Canadian Institute for Substance Use Research
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IBM Canada
Island Health Authority
NSERC Canada
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Vancouver Foundation
Westgrid