

Outcomes for people with recent use of amphetamine-type stimulants accessing community alcohol and drug services

Acknowledgements

This report was prepared by Sandra Baxendine (information analyst), Maria Basabas (researcher), Angela Jury (research manager), Selina Elkington (programme manager addiction), and Mark Smith (principal advisor – outcomes and information) of Te Pou.

Contents

Executive summary	4
Key findings	4
Discussion	5
Introduction	6
Background	6
Purpose	7
Method	7
Results	7
Part one: ADOM collections	7
Part two: ADOM treatment start	9
Substance use in past 28 days	9
Main substance of concern	11
Lifestyle and wellbeing	11
Part three: Outcomes (matched pairs)	12
Changes in substance use	12
Changes in lifestyle and wellbeing	13
Changes in perceptions of recovery progress	15
Discussion	16
Multiple concurrent substance use is common among people who use ATS	16
Integrated support is needed to reduce harms linked with ATS use	16
Improved housing support is needed in community AOD services	17
Conclusion	17
Appendix A: Method	18
Appendix B: ADOM Section 2 questions	19
References	20

List of tables

Table 1. Average substance use in the past 28 days at ADOM treatment start by reported ATS	use
(April 2022 to March 2025)	10
Table 2. ADOM section two questions (lifestyle and wellbeing)	19
List of figures	
Figure 1. Valid ADOM collections by reported ATS use (April 2022 to March 2025)	8
Figure 2. Reported ATS use by organisation type (April 2022 to March 2025)	8
Figure 3. Reported ATS use by gender, ethnicity, and age group (April 2022 to March 2025)	9
Figure 4. Number of substances used in the past 28 days at ADOM treatment start by reported use (April 2022 to March 2025)	
Figure 5. Main substance of concern at ADOM treatment start by reported ATS use	11
Figure 6. At least weekly lifestyle and wellbeing problems at treatment start by reported ATS us	e
(April 2022 to March 2025)	12
Figure 7. Matched pair changes in average days of alcohol, cannabis, and ATS use in the past	28
days for matched pairs by reported ATS use (April 2022 to March 2025)	13
Figure 8. Matched pair changes in lifestyle and wellbeing problems by reported ATS use (April 2	2022
to March 2025)	14
Figure 9. Matched pair changes in engagement with work/study or caregiving by reported ATS	use
(April 2022 to March 2025)	14
Figure 10. Matched pair changes in perceptions of closeness to recovery goals by reported ATS	S
use (April 2022 to March 2025)	15
Figure 11. Matched pair changes in satisfaction with recovery progress by reported ATS use (A	
2022 to March 2025)	•

Glossary

Term	Definition
Amphetamine-type stimulants (ATS)	A range of drugs including amphetamine, methamphetamine, and phenethylamines (a class of drugs that includes ecstasy/MDMA) (Australian Institute of Health and Welfare, 2025).
AOD	Alcohol and other drugs.
Matched pairs	Two collections, in this case treatment start and routine treatment end collections
Episode of care	Where multiple referrals for a person are overlapping or within 14 days they have been condensed to one episode of care using the first referral and last discharge.
PRIMHD	Programme for the Integration of Mental Health Data
Tangata whai ora, Tāngata whai ora	Person or people seeking wellness; refers to people accessing AOD services

Executive summary

This 19th national Alcohol and Drug Outcome Measure (ADOM) report focuses on tangata whai ora accessing community alcohol and other drug (AOD) services who report recent use of amphetamine-type stimulants (ATS).

This report analyses data from non-government organisation (NGO) and Health New Zealand | Te Whatu Ora services mandated to offer the ADOM to tāngata whai ora. It includes data for people with valid ADOM collections at treatment start, and matched pairs (where people had data collected at both treatment start and end). Health New Zealand | Te Whatu Ora, (extracted on 28 July 2025) supplied the data from PRIMHD for the period April 2022 to March 2025. Appendix A summarises the method.

This report focuses on tāngata whai ora who report using ATS in the 28 days prior to treatment start. Results are presented in three parts.

- Part one provides an overview of ADOM collections for the analysis period.
- Part two summarises ADOM data at treatment start.
- Part three presents outcomes in substance use, lifestyle and wellbeing, and recovery progress (based on matched pairs data).

Note, results may not represent all people accessing community AOD services or those in other settings such as hospital and residential services.

Key findings

There were 26,715 valid ADOM treatment starts between April 2022 and March 2025, of which 20 percent reported ATS use in the prior 28 days. There was a larger proportion of ATS use among tangeta whai or accessing NGOs (23 percent) compared to Te Whatu Ora services (16 percent).

Among people accessing community AOD services who reported recent ATS use, ADOM data shows:

- multiple substance use was 2.5 times higher (86 percent; 35 percent with no ATS use)
- 62 percent report ATS as their main substance of concern, followed by alcohol (21 percent)
- problems with housing and criminal activity are three and four times higher respectively compared to people with no recent ATS use.

Between treatment start and end, matched pairs data among people who reported recent ATS show on average:

- a reduction by 70 percent in the number of days reported using ATS in the past 28 days
- a reduction by half in the number of days of alcohol and cannabis in the past 28 days (like those with no recent ATS use)
- a reduction by half in the proportion of those experiencing problems with mental health, friend/family arguments, and problems with engagement in meaningful activity at least weekly (like those with no recent ATS use)

¹ Tāngata whai ora could potentially have multiple treatment starts. ADOM treatment end is within October 2021 to September 2024.

• improvements in recovery progress similar to those who did not report recent ATS use.

Discussion

Findings show high rates of multiple substance use and lifestyle and wellbeing problems among tangata whai ora who have recently used ATS.

While data shows significant improvements in lifestyle and wellbeing areas at the end of treatment, more people within this group still report more frequent problems in most areas at treatment end than those with no recent ATS use. This may be due to complex interactions between many personal, social, and economic factors that can increase people's likelihood of using ATS and experiencing ATS-related harms; as well as the effects of using multiple substances (Adams et al., 2022; McKetin et al., 2019; Paz-Ramos et al., 2023).

Results underscore the importance of integrating mental health, peer and whānau, and broader support options into community AOD treatment to improve outcomes for people who use ATS. Findings also highlight the need to improve housing-related outcomes to support people's wellbeing and recovery. ADOM data shows 1 in 10 people with recent ATS use report at least weekly housing problems at treatment end. In addition, there were no notable improvements in housing problems among people with no recent ATS use.

To further improve outcomes for tāngata whai ora, there is a need to address the complex impacts of ATS and multiple substance use on wellbeing and recovery. Given recent spikes in methamphetamine use across Aotearoa it is crucial community AOD services have the capacity and resources to address ATS-related harms. This will involve integrating broader support options throughout and beyond AOD treatment, connecting tāngata whai ora with whānau and community-based support options that are locally available to them, and ensuring the workforce has the necessary knowledge and skills to support people who experience harms from ATS and multiple substances.

Introduction

Background

Amphetamine-type stimulants (ATS) are a group of synthetic substances that stimulate the central nervous system and can cause feelings of alertness, increased energy, and euphoria. ATS include illicit substances like methamphetamine and speed, as well as prescription medications such as Wellbutrin (bupropion) and Ritalin (methylphenidate) which are used to treat certain conditions like attention deficit hyperactivity disorder (ADHD) (Paz-Ramos et al., 2023; UNODC, 2024). This report focuses on the use of illicit ATS and misuse of any prescribed ATS medications (Te Pou, 2013).

Methamphetamine use is increasing in Aotearoa

Recent wastewater testing data shows national methamphetamine consumption almost doubled between 2023 and 2024 (New Zealand Police, 2025). Locations with high methamphetamine use were largely in rural North Island towns that experience higher rates of socioeconomic deprivation. These align with findings from the 2024 *New Zealand Drug Trends Survey* which show that among people who have used methamphetamine, the number who used it daily or nearly daily increased from 22 to 29 percent between 2023 and 2024 (Wilkins et al., 2024). Increases in wastewater detection and self-reported use are likely driven by increased local and international supply and demand, and declining prices of methamphetamine (New Zealand Police, 2025).

Problematic ATS use is increasing in the population

The *New Zealand Health Survey* shows the proportion of the adult population who may be at moderate to high risk of problematic ATS use increased from 1.2 percent to 1.8 percent between 2016/17 and 2022/23 (Ministry of Health, 2024).³ The proportion at moderate to high risk has more than doubled among those aged 15 to 24 (1.5 to 3.7 percent) over this period; and among European women (0.9 to 1.8 percent) and Māori men (2.1 to 4.1 percent).

Methamphetamine use can be harmful

There is an increasing focus in media and public discourse on the rising use of methamphetamine and its impacts on communities. The largest contributors to methamphetamine harm are negative impacts to whānau wellbeing and community damage (Crossin et al., 2023; National Drug Intelligence Bureau, 2023).⁴ Methamphetamine has greater negative impacts in rural and high-

² Wastewater testing has also detected a sharp increase in cocaine use nationally. In 2024, cocaine use doubled since 2023 and increased almost 7 times over since 2020 (New Zealand Police, 2025; NZ Drug Foundation, 2025). This report does not cover cocaine as currently the ADOM collection form does not specifically capture the use or impacts of cocaine. Te Pou will look to review how the ADOM can explicitly include cocaine in 2026.

³ The survey included MDMA/ecstasy within ATS, aligning with drug classification within the World Health Organization Alcohol, Smoking and Substance Involvement Screening Test (WHO ASSIST V3.0).

⁴ Family adversities are defined as the extent to which the use of a drug negatively impacts whānau wellbeing (eg relationship breakdown, economic wellbeing, emotional or spiritual wellbeing, future prospects of children, child neglect, and maltreatment). Community damage is defined as the extent to which the use of a drug negatively impacts social cohesion, community productiveness and wellbeing, and community reputation; increases stigma and whakamā; and distorts the tikanga and/or narratives of hapū, iwi, or marae.

deprivation communities in particular; and for Māori who are criminalised for its use at higher rates and experience compounding harms compared to other groups (Yasbek et al., 2022).

It is important to understand how amphetamines may be impacting on the wellbeing of tangata whai ora who access AOD services.

Purpose

This report uses ADOM data to examine substance use, wellbeing, and recovery outcomes for tangata whai ora accessing community AOD services who reported using ATS in the past 28 days compared to those who did not.

Method

This report analyses ADOM data from PRIMHD supplied by Health New Zealand | Te Whatu Ora for the period April 2022 to March 2025 (extracted on 28 July 2025). During this period, there were 75,176 episodes opened for tāngata whai ora across Health New Zealand | Te Whatu Ora and NGO services mandated to offer the ADOM.⁵ Of those, this report analyses ADOM data from 26,715 valid treatment starts and 3,018 matched pairs. Appendix A provides full details of the method.

Section 1 of the ADOM records different types of substances tangata whai or identify as their main substance(s) of concern and what they have used in the past 28 days. Due to how data is collected it is not possible to report rates for specific types of ATS.

Results

This report presents findings in three main sections.

- Part one provides an overview of ADOM collections for the analysis period.
- Part two summarises ADOM data at treatment start.
- Part three summarises outcomes in substance use, lifestyle and wellbeing, and perceptions
 of recovery (based on matched pairs data).

It is important to consider the following when interpreting findings.

- The data presented in this report does not represent all people accessing AOD services.
- ADOM data is only collected for tangata whai or who complete the ADOM at community AOD services mandated to offer the tool. Findings may not be generalisable to people accessing other AOD services such as residential or inpatient services.
- Findings in part three reflect outcomes for people who completed the ADOM at both treatment start and end. Findings may not apply to others with different ADOM collections.
- Data cannot be used to estimate the level and impacts of ATS use in the general population.

Part one: ADOM collections

This section provides an overview of valid ADOM collections between April 2022 and March 2025 for tāngata whai ora with and without reported recent use of ATS.

⁵ Of these, 36.4 percent were ADOM treatment start or assessment only collections.

Figure 1 shows that over the analysis period, 1 in 5 (20 percent) tangata whai ora at community AOD services reported recent use of ATS.

Figure 1. Valid ADOM collections by reported ATS use (April 2022 to March 2025)

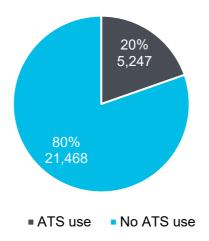


Figure 2 shows a higher proportion of recent ATS use among people accessing NGOs compared to Te Whatu Ora services (23 versus 16 percent respectively).

Figure 2. Reported ATS use by organisation type (April 2022 to March 2025)

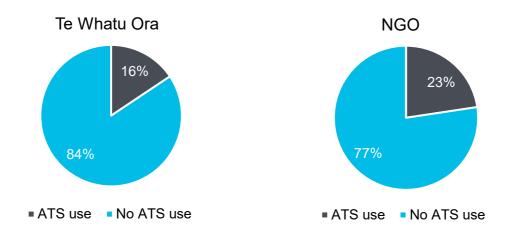


Figure 3 shows small differences in rates of ATS use across demographic groups. Overall, among people accessing community AOD services, there is slightly higher use of ATS among women and people aged between 25 and 44 years, and lower use among Pacific peoples.

Female 23% 18% 82% Male Māori 23% **∃thnicity** Pacific 13% 87% Other 19% 18 to 24 years 13% 87% 24% 25 to 44 years 76%

Figure 3. Reported ATS use by gender, ethnicity, and age group (April 2022 to March 2025)

■ATS use ■No ATS use

85%

96%

Part two: ADOM treatment start

15%

Substance use in past 28 days

45 to 64 years

65 and over

Table 1 shows the average number of days tangata whai or used different types of substances, and the number and proportion of people who reported using each type of substance in the past 28 days.

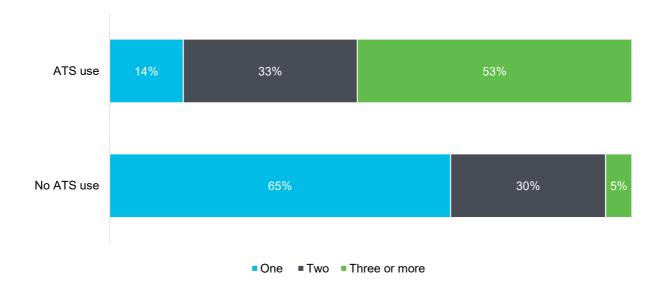
People who recently used ATS were more likely to have used cannabis, opioids, sedatives/tranquilisers, cigarettes/tobacco, and injected drugs in the past 28 days than those with no ATS use. Among people who recently used ATS, the average number of days of other substance use tended to be slightly lower than others. People who recently used ATS were more likely to have used cannabis, opioids, sedatives/tranquilisers, cigarettes/tobacco, and injected drugs in the past 28 days than those with no ATS use.

Table 1. Average substance use in the past 28 days at ADOM treatment start by reported ATS use (April 2022 to March 2025)

Substance	Average us	Average use (days)		Percentage		
	ATS	No ATS	ATS	No ATS	ATS	No ATS
Alcohol	10.2	12.2	64%	61%	3,328	13,006
Cannabis	15.9	16.1	62%	30%	3,233	6,387
ATS	10.0	0	100%	0%	5,247	0
Opioids	12.9	15.7	11%	3%	530	633
Sedatives/tranquilisers	11.3	12.2	10%	3%	499	626
Cigarettes/tobacco (amount)	10.8	10.5	56%	39%	2,680	7,771
Injected drugs	11.4	11.7	15%	1%	724	179

Among people who reported using any substance in the past 28 days, Figure 4 shows multiple substance use is higher among people who reported using ATS (86 percent) than those who did not (35 percent).

Figure 4. Number of substances used in the past 28 days at ADOM treatment start by reported ATS use (April 2022 to March 2025)



Main substance of concern

Figure 5 shows that among people who reported recent ATS use, the most common main substance of concern is ATS, followed by alcohol.⁶ Among others, alcohol is predominantly the main substance of concern, followed by cannabis.

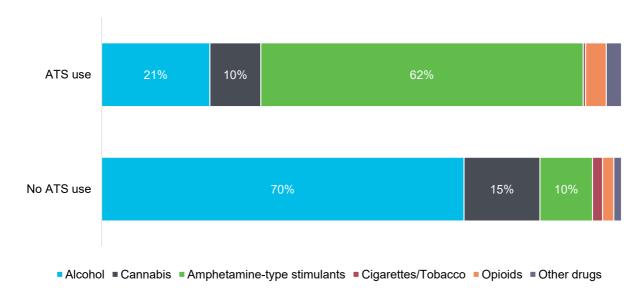


Figure 5. Main substance of concern at ADOM treatment start by reported ATS use

Note. Proportions under 5 percent are not labelled.

Lifestyle and wellbeing

This section describes lifestyle and wellbeing domains for tāngata whai ora at treatment start based on ADOM section two questions (see <u>Appendix B</u>).⁷

Figure 6 shows people who reported recent ATS use experienced more frequent problems across all lifestyle and wellbeing domains than those with no reported ATS use. Almost two-thirds report at least weekly mental health problems; half experience problems with friend/family arguments and meaningful activity; and one-fifth experience problems with housing and criminal activity.

⁶ Question 9 of the ADOM asks tāngata whai ora to identify their main substance(s) of concern and prioritise their top three, with '1' being their main substance of concern. This may not necessarily align with the substance(s) they use most frequently.

⁷ Table 7 in Appendix B provides the section two questions in full.

43% Physical Health 31% 63% Mental health 43% 44% Friend/family arguments 19% 47% Meaningful activity 20% 23% Housing 8% ■ ATS use ■ No ATS use 21% Criminal activity 5%

Figure 6. At least weekly lifestyle and wellbeing problems at treatment start by reported ATS use (April 2022 to March 2025)

Part three: Outcomes (matched pairs)

This section describes outcomes for people accessing community AOD services where ADOM was collected at both treatment start and end between April 2022 and March 2025 (3,018 matched pairs).8

The following analyses exclude people who completed treatment after this period and those with missing valid ADOM treatment end collections (see <u>Appendix A</u> for inclusion criteria).⁹

Changes in substance use

This section presents changes in people's substance use between treatment start and end. 10

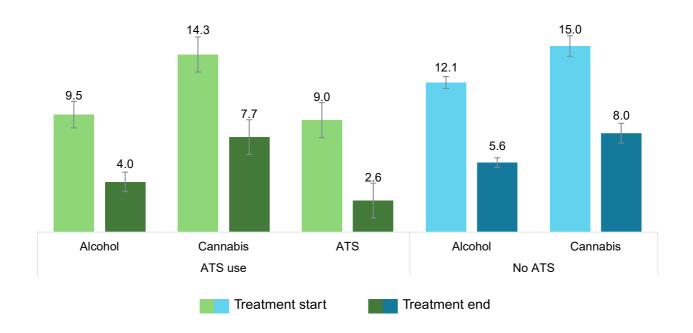
Figure 7 shows that ATS use reduced on average from nine days to 2.6 days between treatment start and end. That is, a reduction of 70 percent in days ATS was used. The frequency of alcohol and cannabis use halved during treatment, similar to those with no ATS use.

⁸ The main substance of concern for people with matched pairs data is similar to that of all people who had ADOM collected at treatment start.

⁹ Treatment for some substances (such as opioid substitution treatment) occurs over a long duration and are therefore less likely to be captured in matched pair analyses covering a short time period.

¹⁰ Analyses for opioids, sedatives/tranquilisers, and injected drugs are not shown due to the limited amount of data available.

Figure 7. Matched pair changes in average days of alcohol, cannabis, and ATS use in the past 28 days for matched pairs by reported ATS use (April 2022 to March 2025)



Changes in lifestyle and wellbeing

This section shows changes in problems in lifestyle and wellbeing occurring at least weekly.

Figure 8 shows reductions in lifestyle and wellbeing problems for people who reported ATS use between treatment start and end. Improvements were particularly large for mental health, friend/family arguments, meaningful activity, housing, and criminal activity. However, at treatment end, one-third still experienced at least weekly mental health problems. Also, the proportion of those who still experienced at least weekly problems with friend/family arguments, meaningful activity, housing, and criminal activity was twice as high as those with no recent ATS use.

People who reported no ATS use experienced fewer problems in most lifestyle and wellbeing domains at treatment end except for housing.

Figure 8. Matched pair changes in lifestyle and wellbeing problems by reported ATS use (April 2022 to March 2025)

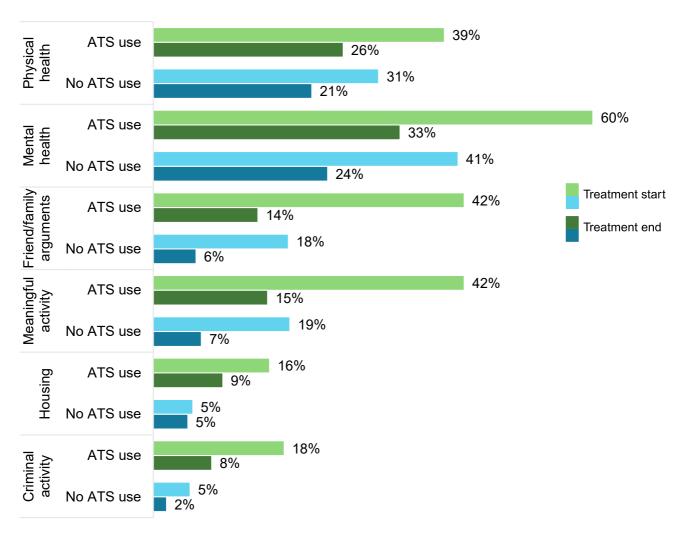
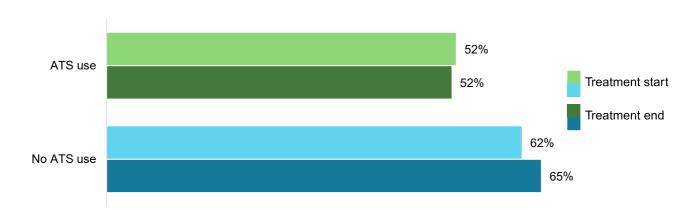


Figure 9 shows that among people who reported ATS use there was no change in their level of engagement with work/study or caregiving. Conversely, those who reported no ATS use have slightly higher levels of engagement at treatment end.

Figure 9. Matched pair changes in engagement with work/study or caregiving by reported ATS use (April 2022 to March 2025)



Changes in perceptions of recovery progress

Figure 10 shows that people who reported ATS use at treatment start, experienced improvements in how close they felt to their recovery goals at treatment end (similar to those with no recent ATS use).

Figure 10. Matched pair changes in perceptions of closeness to recovery goals by reported ATS use (April 2022 to March 2025)

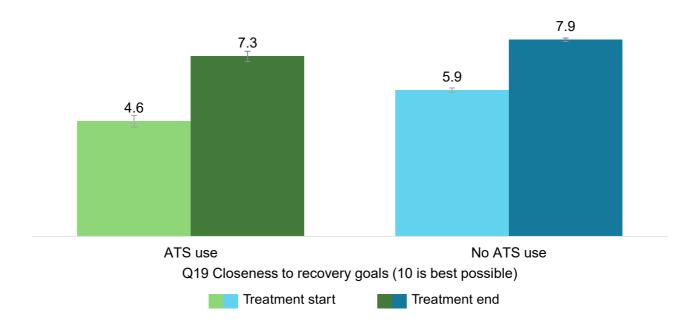
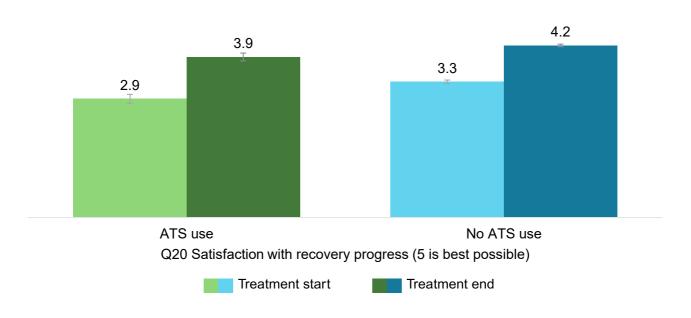


Figure 11 shows that at treatment end, tangata whai or report similar perceptions of satisfaction with their progress towards achieving recovery goals, regardless of recent ATS use.

Figure 11. Matched pair changes in satisfaction with recovery progress by reported ATS use (April 2022 to March 2025)



Discussion

Among people accessing community AOD services who report recent use of ATS, this report summarises ADOM data about substance use, lifestyle and wellbeing, and recovery outcomes. Improvements in lifestyle and wellbeing problems and perceptions of recovery progress reflect the positive outcomes community AOD services achieve with people who have used ATS and other substances.

Multiple concurrent substance use is common among people who use ATS

Among people who reported recent ATS use, the proportion of those using more than one substance in the past 28 days was 2.5 times higher than those with no recent ATS use (86 versus 35 percent). Within this group, the proportion of those who reported using cannabis, opioids, sedatives/tranquilisers, cigarettes/tobacco, and injected drugs was higher than those with no recent ATS use. This is of concern given evidence showing greater negative impacts of using ATS with other substances (such as cardiovascular problems, mental health challenges, and injuries and accidents) compared to using substances alone (Åhman et al., 2025; Mefodeva et al., 2022; Narayan et al., 2021; Paz-Ramos et al., 2023). It is essential that community AOD services, particularly NGOs who support a greater proportion of tāngata whai ora who use ATS, have the capacity and capability to address the complex interactions that using multiple substances can have on people's wellbeing and recovery progress.

Integrated support is needed to reduce harms linked with ATS use

At treatment start, people who reported recent ATS use experienced more frequent problems across all ADOM lifestyle and wellbeing domains than those with no reported ATS use. While matched pairs data shows large improvements in most lifestyle and wellbeing domains, at treatment end many people continued to experience at least weekly problems in most domains compared to those with no recent ATS use. Notably, at treatment end one-third still reported frequent mental health problems, one-quarter physical health problems, and 8 percent problems with criminal activity problems.

There are known links between ATS use and a range of individual and community harms such as lower wellbeing, relationship problems, violence, and crime (Adams et al., 2022; Crossin et al., 2023). Many personal, social, and economic factors like trauma, violence, and homelessness are associated with an increased likelihood of using ATS and experiencing further ATS-related harms (Adams et al., 2022; McKetin et al., 2019). These complex interactions highlight the critical need for AOD services to address a range of wellbeing determinants and needs among people who use ATS and multiple substances (Crummy et al., 2020; Yasbek et al., 2022). This includes providing, offering, or connecting tāngata whai ora with community-based support options including psychosocial approaches, physical and mental healthcare, cultural support, harm reduction information and resources, and peer, whānau, vocational, housing, and legal support (Yasbek et al., 2022). It is important for services to ensure tāngata whai ora have the right information and tools to access the supports they need throughout treatment and at discharge.

Improved housing support is needed in community AOD services

While reported housing problems among people with recent ATS use almost halved between treatment start and end (from 16 to 9 percent), around 1 in 10 still experienced housing problems. On average, 5 percent of people who access community AOD services who reported no recent ATS experienced housing problems at both treatment start and end. These findings indicate the need to strengthen housing support for tangata whai ora accessing community AOD services. While housing problems stem from a broad range of socioeconomic, cultural, and environmental factors community AOD services could support housing outcomes by providing information, resources, and support for people's whānau, financial, and legal needs.

Conclusion

ADOM data demonstrates some positive outcomes for people accessing community AOD treatment who have recently used ATS. Among this group, notable improvements include less frequent substance use in the past month and fewer mental health problems, friend/family arguments, and problems with meaningful activities at the end of treatment.

Most people who recently used ATS at treatment start reported multiple substance use and continuing lifestyle and wellbeing problems at treatment end. Findings align with broader concerns about the impacts of multiple concurrent substance use on wellbeing and recovery. There is a need for community AOD services to have the capacity and capability to provide and connect tangata whai ora with support options to address the range of wellbeing, social, and broader harms related to ATS and multiple substance use.

Appendix A: Method

Below is an overview of the inclusion and exclusion criteria for data used in this report. Please see full details for ADOM report building rules at https://www.tepou.co.nz/resources/adom-report-building-rules/775

AOD episode of care entering mandated services:

- includes teams mandated to collect ADOM¹²
- includes team type of alcohol and drug team or a co-existing team
- includes tāngata whai ora aged 18 years and over
- includes referrals with an in-scope contact. Excludes activity settings: WR, PH, SM, OM and exclude activity type: T08, T32, T35, T46, T47 and T49. The activity type is a contact.
- join referrals together to make an episode of care if they overlap or have 14 days or less between referral end and referral start date
- includes those episodes of care which start in the period of the report.

Treatment starts are within the episode of care: include only episodes of care with a treatment start ADOM collection including assessment only (RC13, RC14, RC15) in the analysis.

ADOM collections analysis:

- includes teams recognised or identified as those mandated to collect ADOM
- includes tāngata whai ora are aged 18 years and over
- excludes ADOM collections with five or more missing items¹¹
- excludes RC19 Treatment end DNA and RC21 Treatment end other.

For treatment start ADOM collections (RC13, RC14) are used.

ADOM matched pairs:

- based on ADOM collections above
- includes those for 28 days or longer
- uses the date of the end collection. Start collection can be outside the period but after 1 July 2015.

Other notes

'Not specified' answers to items are excluded for specific questions. For example, substance of main concern analyses exclude several collections without a response to this question

¹¹ Excluding question 7, 9, and 11.

Appendix B: ADOM Section 2 questions

Table 2. ADOM section two questions (lifestyle and wellbeing)

Question key

Q12 How often has your physical health caused problems in your daily life?

Q13 How often has your general mental health caused problems in your daily life?

Q14 How often has your alcohol or drug use led to problems or arguments with friends or family members?

Q15 How often has your alcohol or drug use caused problems with your work or other activities in any of the following: social, recreational, looking after children or other family members, study or other personal activities?

Q16 How often have you engaged in any of the following: paid work, voluntary work, study, looking after children or other caregiving activities?

Q17 Have you had difficulties with housing or finding somewhere stable to live?

Q18 How often have you been involved in any criminal or illegal activity such as driving a motor vehicle under the influence of alcohol or drugs, assault, shoplifting, supplying an illicit substance to another person?

References

- Adams, E. A., Spencer, L., Addison, M., McGovern, W., Alderson, H., Adley, M., McGovern, R., Gilvarry, E., Kaner, E., & O'Donnell, A. (2022). Substance Use, Health, and Adverse Life Events amongst Amphetamine-Type Stimulant Users in North East England: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*, 19(12), 6996. https://doi.org/10.3390/ijerph19126996
- Åhman, A., Berge, J., & Håkansson, A. (2025). Amphetamine use as a predictor of cardiovascular and cerebrovascular mortality and morbidity: A longitudinal cohort study of criminal justice clients. *Frontiers in Cardiovascular Medicine*, *12*, 1378833. https://doi.org/10.3389/fcvm.2025.1378833
- Australian Institute of Health and Welfare. (2025). *Alcohol, tobacco & other drugs in Australia, Amphetamines and other stimulants*. Australian Institute of Health and Welfare. https://www.aihw.gov.au/reports/alcohol/alcohol-tobacco-other-drugs-australia/contents/drug-types/amphetamines-and-other-stimulants
- Crossin, R., Cleland, L., Wilkins, C., Rychert, M., Adamson, S., Potiki, T., Pomerleau, A. C., MacDonald, B., Faletanoai, D., Hutton, F., Noller, G., Lambie, I., Sheridan, J. L., George, J., Mercier, K., Maynard, K., Leonard, L., Walsh, P., Ponton, R., ... Boden, J. (2023). The New Zealand drug harms ranking study: A multi-criteria decision analysis. *Journal of Psychopharmacology*, 02698811231182012. https://doi.org/10.1177/02698811231182012
- Crummy, E. A., O'Neal, T. J., Baskin, B. M., & Ferguson, S. M. (2020). One Is Not Enough:

 Understanding and Modeling Polysubstance Use. *Frontiers in Neuroscience*, *14*, 569.

 https://doi.org/10.3389/fnins.2020.00569
- McKetin, R., Leung, J., Stockings, E., Huo, Y., Foulds, J., Lappin, J. M., Cumming, C., Arunogiri, S., Young, J. T., Sara, G., Farrell, M., & Degenhardt, L. (2019). Mental health outcomes associated with of the use of amphetamines: A systematic review and meta-analysis.

 EClinicalMedicine, 16, 81–97. https://doi.org/10.1016/j.eclinm.2019.09.014
- Mefodeva, V., Carlyle, M., Walter, Z., Chan, G., & Hides, L. (2022). Polysubstance use in young people accessing residential and day-treatment services for substance use: Substance use

- profiles, psychiatric comorbidity and treatment completion. *Addiction (Abingdon, England)*, 117(12), 3110–3120. https://doi.org/10.1111/add.16008
- Ministry of Health. (2024). *Mental health and problematic substance use: New Zealand health*survey: 2016/17 and 2021–23.

 https://www.health.govt.nz/system/files/documents/publications/mental_health_and_problem

 atic substance use report final.pdf
- Narayan, A. J., Aitken, B., Downey, L. A., & Hayley, A. C. (2021). The effects of amphetamines alone and in combination with alcohol on functional neurocognition: A systematic review.

 Neuroscience & Biobehavioral Reviews, 131, 865–881.

 https://doi.org/10.1016/j.neubiorev.2021.10.003
- National Drug Intelligence Bureau. (2023). New Zealand illicit drug harm index 2023.
- New Zealand Police. (2025). *Drugs in Wastewater 2024 Annual Review*.

 https://www.police.govt.nz/sites/default/files/publications/wastewater-2024-annual-overview.pdf
- NZ Drug Foundation. (2025). *Drug Use in Aotearoa 2023/2024*. https://drugfoundation.org.nz/news-and-reports/report-drug-use-in-aotearoa-202324
- Paz-Ramos, M. I., Cruz, S. L., & Violante-Soria, V. (2023). Amphetamine-type Stimulants: Novel Insights into their Actions and use Patterns. *Revista de Investigación Clínica*, 75(3), 143–157. https://doi.org/10.24875/RIC.23000110
- Te Pou. (2013). Alcohol and Drug Outcome Measure collection form.

 https://www.tepou.co.nz/resources/adom-collection-form
- UNODC. (2024). World Drug Report 2024. United Nations publication.

 https://www.unodc.org/documents/data-andanalysis/WDR_2024/WDR24_Key_findings_and_conclusions.pdf
- Wilkins, C., Sanden, R. van der, Rychert, M., Romeo, J. S., & Graydon-Guy, T. (2024). Price of meth continues to decline. Shore and Whāriki Research Centre College of Health.
 https://static1.squarespace.com/static/59152c88b8a79bdb0e644f2a/t/673d0aaefbe6f80e10f
 36b5f/1732053690595/4-Meth+availability+and+price-release-final.pdf

Yasbek, P., Mercier, K., Elder, H., Crossin, R., & Baker, M. (2022). *Minimising the harms from methamphetamine*. The Helen Clark Foundation and New Zealand Drug Foundation. https://helenclark.foundation/app/uploads/2022/09/HCF-NZ-Drug-Foundation-Minimising-the-harms-from-methamphetamine-report-LR.pdf