



# New Zealand Needle Exchange Programme

National Office | NEST

## Quarterly Drug Use Report

NZ Needle Exchange Programme

NEEDLE EXCHANGE SERVICES TRUST | November 2021

Authors:	Susan Yu, Jason George, Geoff Noller
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Approved:	Philippa Jones

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## Background

This report addresses overall trends, drug use and client characteristics, with the aim of highlighting risks, barriers to service provision, mitigations and informing service enhancements. The report also serves to meet our contractual obligations to The Ministry of Health to provide a quarterly reports on risks, barriers and mitigations to address emerging issues and changes in trends, drug use and clients.

Data contained in the present report are of two broad types: demographics, i.e. ethnicity and age; and type of drug injected by clients. Demographic data have been collected over many years while drug use data is a relatively new information source, with collection commencing in July 2020.

There are caveats regarding the quality of both types of data. Demographic data, for example, are not self-reported by clients but instead rely on assumptions by frontline staff, a practice we are in the process of changing to align with the Ministry of Health regulations covering ethnicity data protocols (MoH, 2017:2). Full drug use data reported by clients are available for three regional trusts – Midlands, DISC and TNET. The DHDP trust only reports drug use by clients for one month every 10 months, while the ADIO trust does not report data.

In the present report data are accompanied by commentary summarising the most salient aspects of reported information. This is followed by a discussion at the end of the report that highlights particular risks, barriers to service provision and mitigation options to inform service enhancements.

## Occasion of service - Client numbers by ethnicity and age

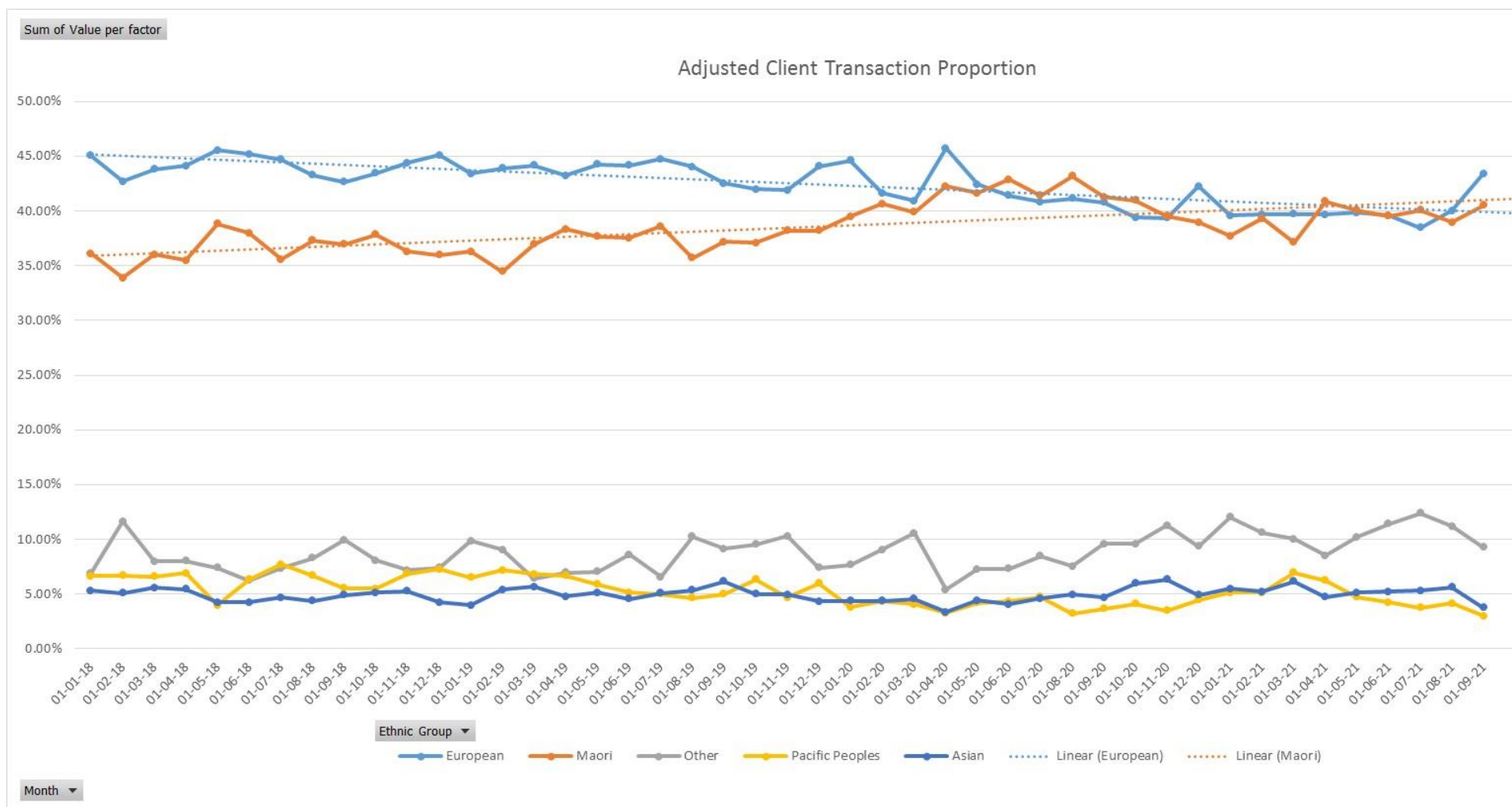


Figure 1: Adjusted client transaction proportions by ethnicity, January 2018 to September 2021

Comments:

*Figure 1* shows the demographics of NZNEP clients by transaction history from January 2018 to September 2021. The data have been adjusted using 2018 census, by assuming the populations are equal across the 5 ethnic groups. The data show European and Māori are the main ethnicities that use NEP services. Proportionately, the trend is for higher Māori client transactions relative to a decreasing trend for NZ European clients.

A risk with the current approach to reporting client ethnicity, i.e. that staff effectively guess this, is that the data will inevitably be inaccurate, thereby potentially misidentifying a portion of clients who might be more appropriately supported, if their cultural needs were correctly understood. The most effective response to this situation would be for the programme to follow Ministry of Health guidelines in reporting ethnicity, which requires it to be self-identified. In asking clients their ethnicity, staff would create further opportunities to engage more fully with those using the service, thereby increasing the opportunities for harm reduction.

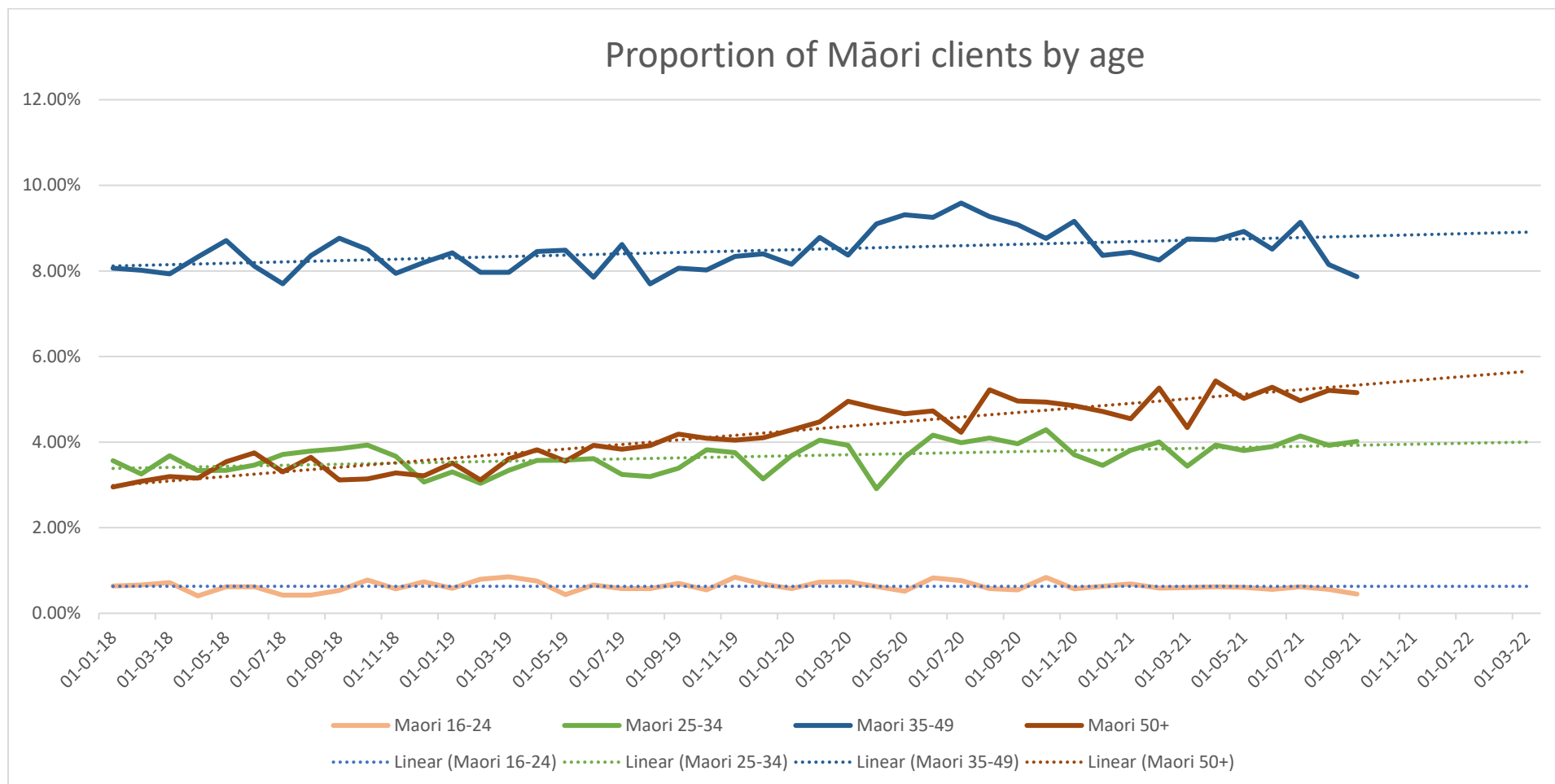


Figure 2: Māori clients as a proportion of all NEP clients, January 2018 to September 2021

#### Comments:

With the exception of those aged 16-24 years, there is a general trend for proportionately greater numbers of Māori clients using the NEP. This is most evident for Māori aged 50+ years and less so for the 25-34 and 35-49 age groups. Significantly, the youngest cohort, 16-24 years is not increasing.

It is probable that the increasing proportion of Māori aged 50+ years are using opioid drugs. This group is of particular interest as their longer career of injecting would typically be associated with an increased risk of exposure to HCV. Being aware of this in turn provides the opportunity to offer testing. Alternatively, not monitoring the liver health of this group risks increased incidence of significantly compromised health among this cohort.

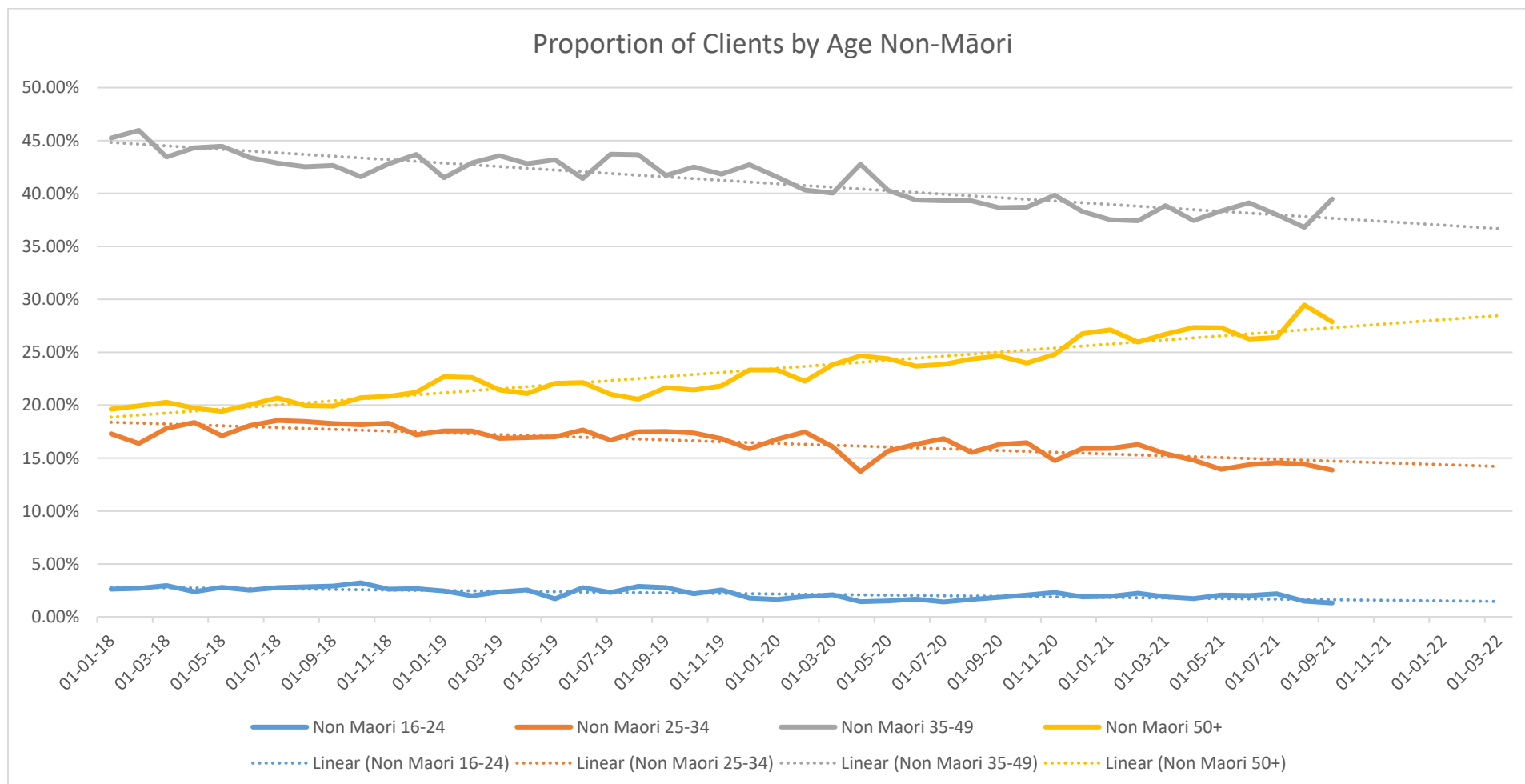


Figure 3: Non-Māori clients as a proportion of all NEP clients, January 2018 to September 2021

**Comments:**

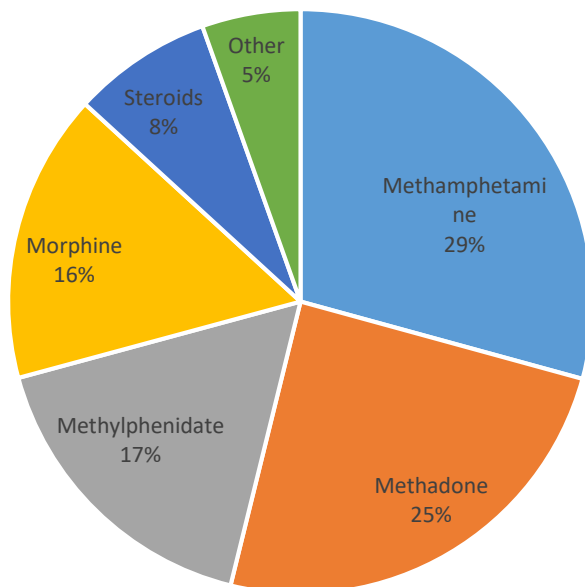
With the exception of those aged 50+ years, the proportions of non-Māori clients accessing the NEP are decreasing across age groups. This is most evident for those aged 35-49 years, though less so for the 25-34 and 16-24 age groups.

By contrast, the oldest cohort, 50+ years, is steadily increasing proportionately. As with preceding comments on Māori clients in this age group, it is probable that non-Māori clients aged 50+ years are using opioids and therefore will be more likely to experience higher levels of compromised health generally, as well as HCV-specific risks. In this regard they are a sentinel group and frontline NEP staff should be encouraged to engage with them at every opportunity. This is particularly important where HCV is concerned, as this cohort is most likely to potentially hold negative views about the viability of treatment, i.e. in terms of not being aware of the efficacy of new treatments with DAAs.



## Occasion of service - Drug use - all clients

### Drug use reported by clients



### Comments:

Overall Methamphetamine is the most commonly injected drug, Methadone is 2<sup>nd</sup>, Methylphenidate (Ritalin) 3<sup>rd</sup> and Morphine 4<sup>th</sup>. Steroids/Performance & Image Enhancing Drugs (PIEDs) are 5<sup>th</sup>

In terms of drug “classes”, stimulants (methamphetamine, methylphenidate) are most commonly injected at 46%, with opioids (i.e. CNS depressants; methadone, morphine) second at 41%

A caveat is that the “other” category of drugs would likely include further opioids (e.g. codeine, heroin, oxycodone, poppies etc.) and CNS depressants (e.g. benzodiazepines); therefore, CNS depressants are likely injected almost as frequently as stimulants

The increasing use of steroids is of significance due to clients using these not being traditionally associated with the NEP. Less is known about these clients and their needs, and they in turn often do not identify as “PWIDs”. The NEP would benefit from developing greater knowledge about this cohort, which would make it more attractive to them in terms of providing harm reduction services. In this regard NEST has recently partnered with researchers from the University of Auckland's School of Pharmacy. The project has recently completed phase one of a study, examining the knowledge of NEP staff with regard to the injecting of performance and image enhancing drugs (PIEDs), including understanding client needs. NEST Harm Reduction Lead, Jason George, has been actively involved in this project.

## Occasion of service - Drug use by regional trust

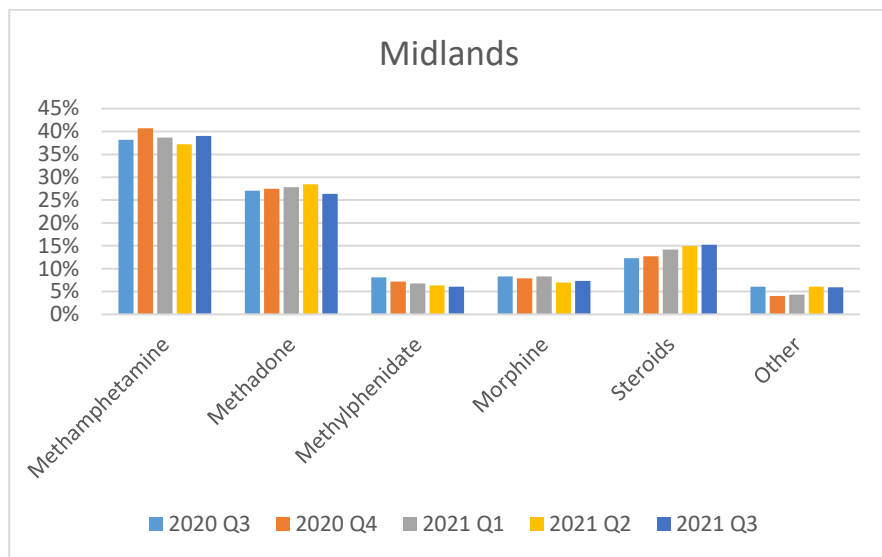


Figure 5: Quarterly drug use reported by Midlands, July 2020 to Sept.

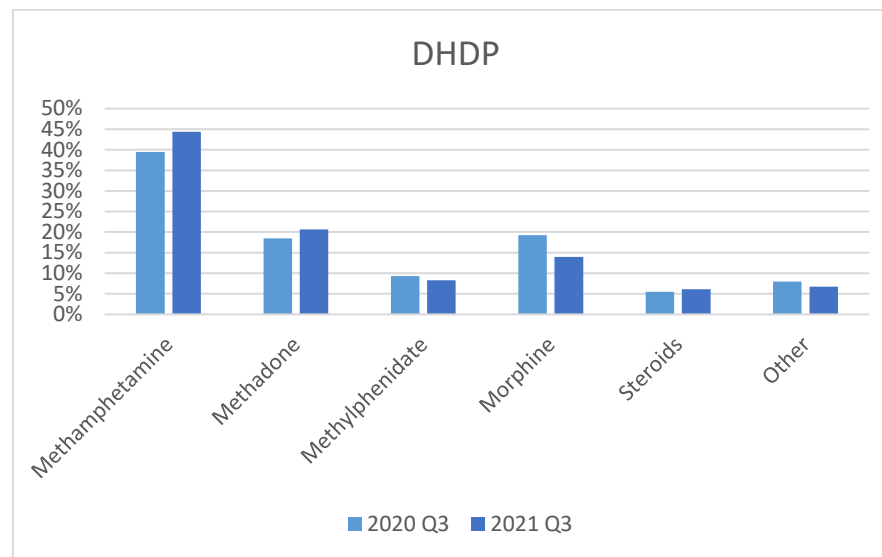


Figure 6: One-month drug use reported by DHDP, 3rd quarter 2020 &

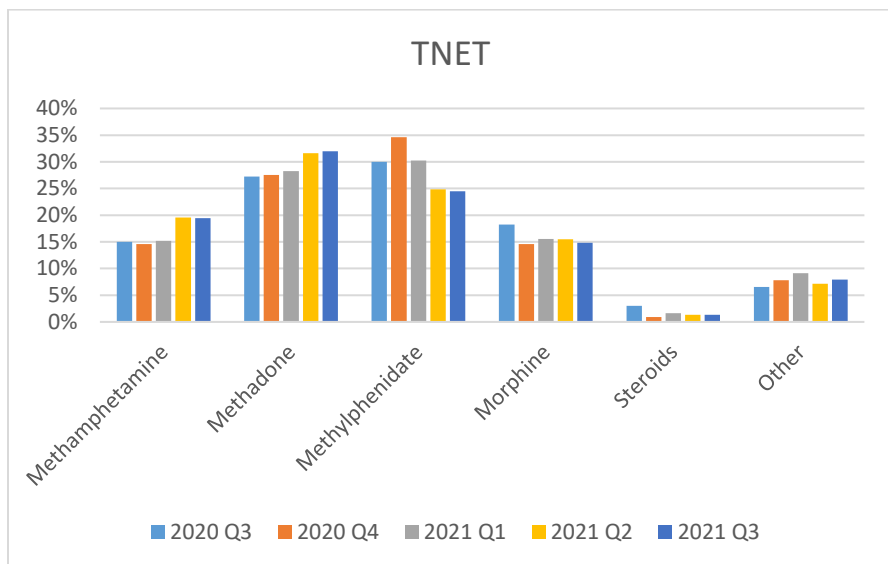


Figure 7: Quarterly drug use reported by TNET, July 2020 to Sept. 2021

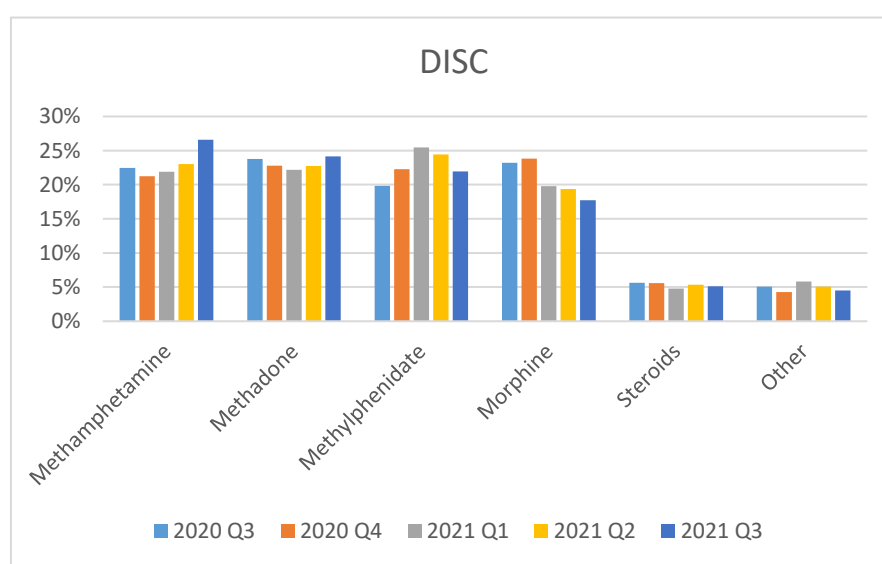


Figure 8: Quarterly drug use reported by DISC, July 2020 to Sept. 2021

Comments:

As noted previously, the collection of drug use data from clients is a relatively new initiative, having commenced in July 2020. Full data, i.e. all clients presenting are asked what drugs they are currently injecting, is only collected by three trusts: Midlands, the Timaru-headquartered TNET and DISC trust, headquartered in Christchurch (*Figures 5, 7 & 8* respectively). It is nonetheless evident from these data that there is considerable variation in drug use trends across the country, which is clearly of interest regarding specific drug harms and which the knowledge of facilitates more targeted harm reduction advice.

Problematically, however, data collection is not consistent across the country, with the Wellington-headquartered DHDP NEXs only collecting snapshot data for one month every 10 months and Auckland-headquartered ADIO trust not collecting any data at all. Given its value, all NEXs should be encouraged to collect these data as they not only provide an understanding of the acute needs of clients, but also as with any interaction with clients, opportunities exist for greater engagement with a broader range of harm reduction activities, including testing and referrals, where appropriate.

## Occasion of service - Drug type - By Age, all clients

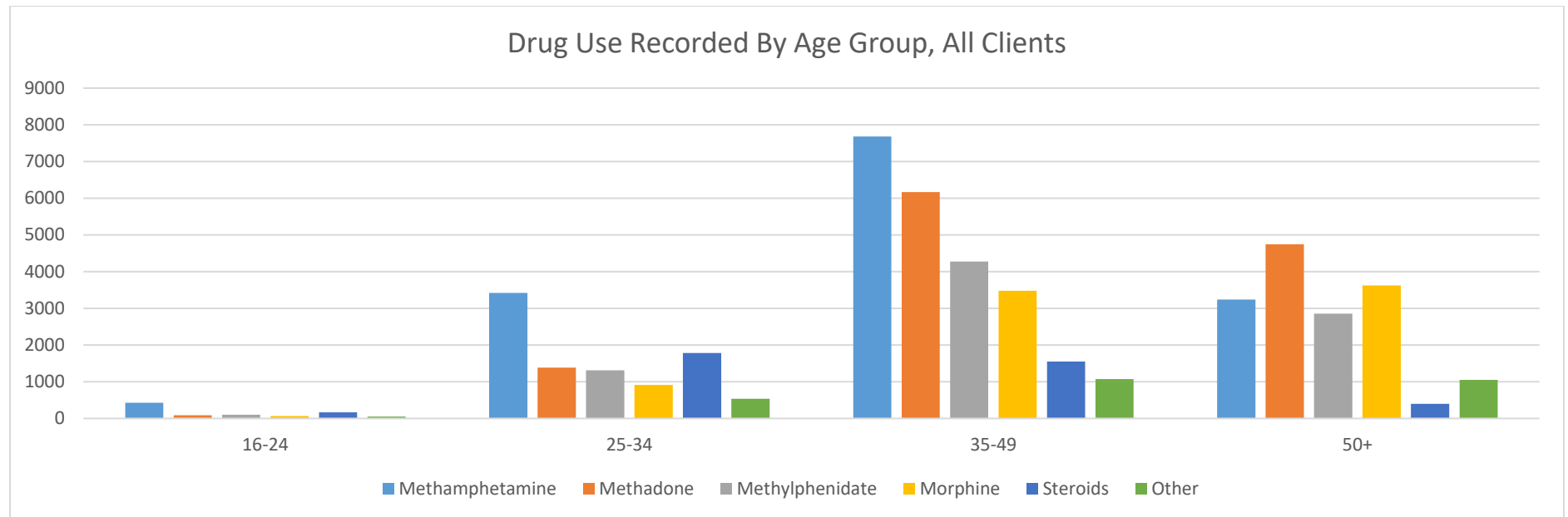


Figure 9: Proportions of clients reporting drugs injected, by age, from four regions (Northern data not available), July 2020 to September 2021

### Comments:

*Figure 9* reports drug use by age for all clients. Most salient is that for all age groups up to 49 years, methamphetamine is most prevalent, with methadone second in all groups. However, for the 50+ group, methadone is most common, with morphine second. These data highlight that there is an older cohort of clients who have likely primarily always injected opioids. Given their lengthy injecting careers and concomitant risk for HCV exposure, they will be a high priority group for testing, and for monitoring their health generally, where clinical services are available. As clients age, the latter issue of general health will become important for the programme and therefore the onus on it to either develop in-house clinical services or to establish meaningful linkages with primary care will increase.

By contrast, issues related to methamphetamine use, which may not currently be fully appreciated by the programme, in the context of targeted harm reduction activities, become more relevant to clients aged up to 49 years. This is likely to be especially relevant in the future for the younger clients, with those aged 25-35 appearing to significantly favour methamphetamine, for which there is a growing body of evidence linking to multi-morbidities, e.g. cardiac damage, psychiatric disorders due to neurotoxicity etc. (see e.g. Darke et al., 2008). Of particular concern will be the long-term impact on Māori clients, among whom methamphetamine use is very prevalent and who already experience poor health outcomes. These issues pose a significant challenge to the programme, as does better Māori engagement generally.

## Occasion of service - Drug type - By age (all clients) and with Māori ethnicity

Drug Use of All Ethnicity 16-24

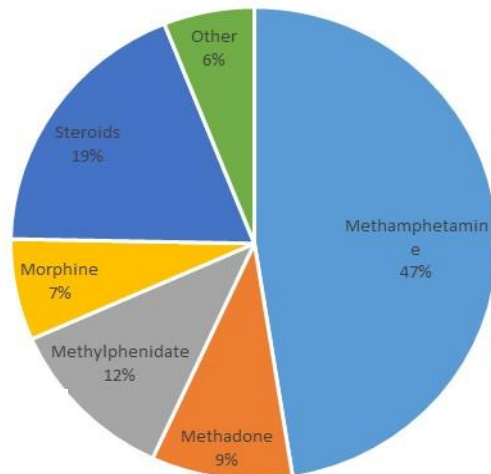


Fig. 10

Drug Use Maori 16-24

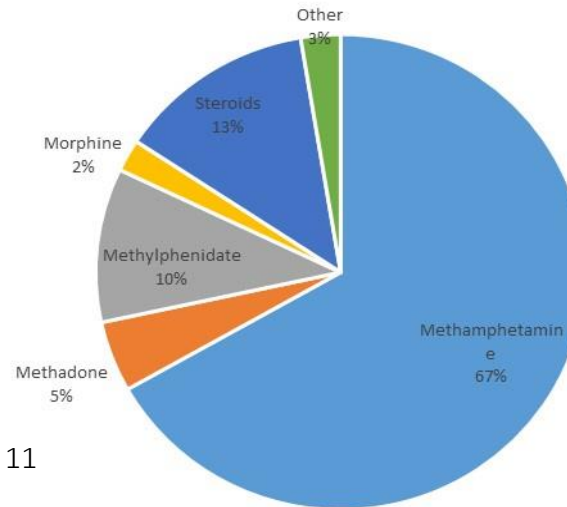


Fig. 11

Drug Use of All Ethnicity 25-34

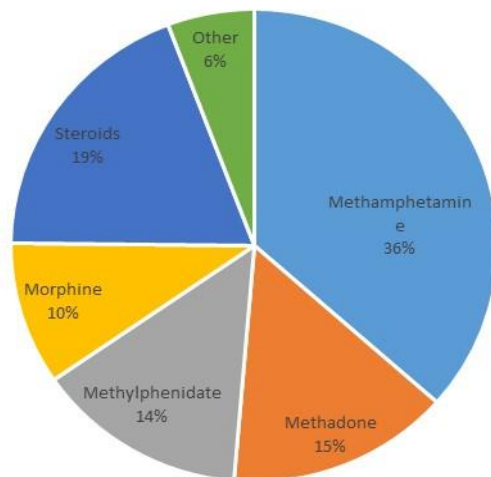


Fig. 12

Drug Use Maori 25-34

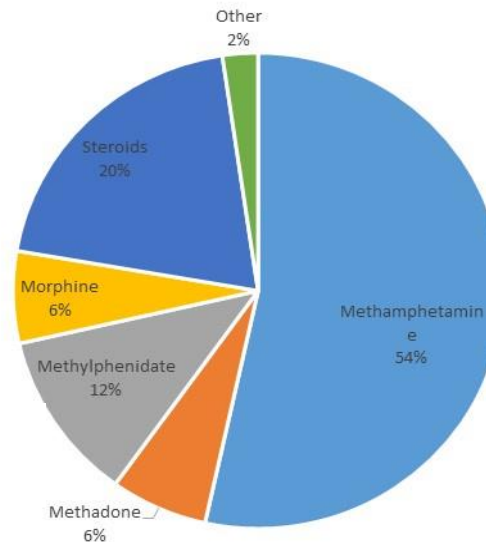


Fig. 13

Figures 10-13: Proportions of clients reporting drugs injected, by age (16-24, 25-34) and ethnicity (all and Māori), from four regions

Drug Use of All Ethnicity 35-49

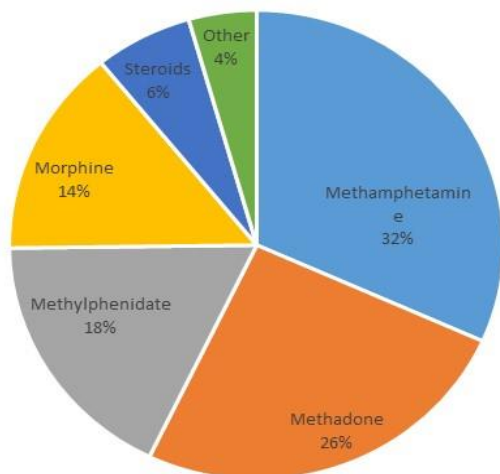


Fig. 14

Drug Use Maori 35-49

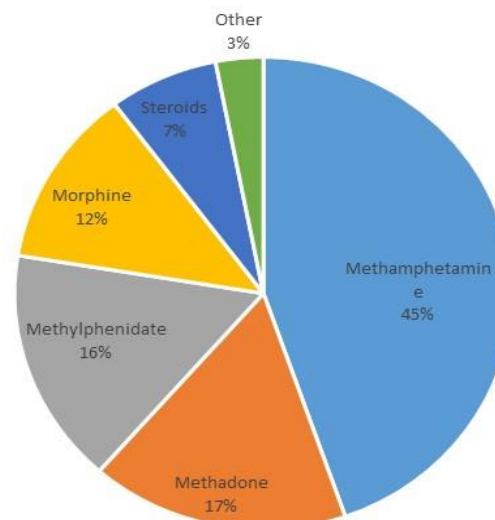


Fig. 15

Drug Use of All Ethnicity 50+

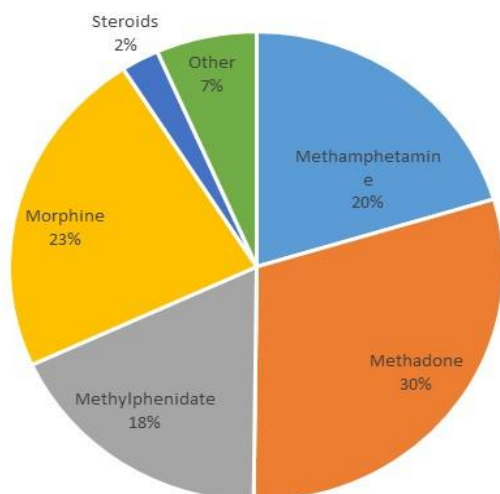


Fig. 16

Drug Use Maori 50+

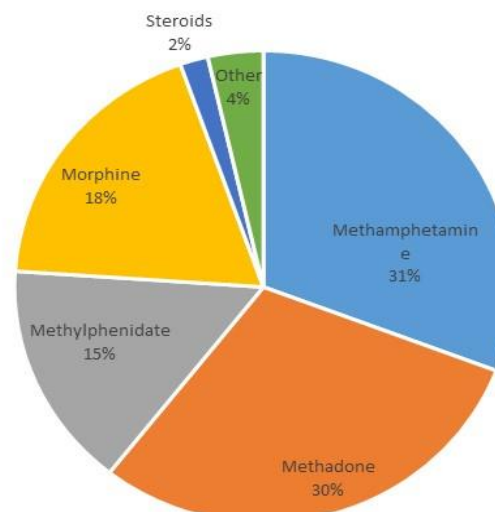


Fig. 17

Figures 14-17: Proportions of clients reporting drugs injected, by age (35-49, 50+) and ethnicity (all and Māori), from four regions (Northern data not available), July 2020 to September 2021

Comments:

*Figures 10-17* combine drug type by age for all clients and for Māori specifically. Two general trends are evident across the data with

- a) methamphetamine use predominant but decreasing in prevalence with age, for both Māori and all clients, and
- b) the predominance of methamphetamine for Māori generally.

The latter extends even to the 50+ age group for Māori, with 31% reporting injecting methamphetamine. These data highlight the significance of methamphetamine for NZ PWID, particularly for 16-24 year-olds (47%), and especially for young Māori (67%). This high prevalence emphasises the need for specific focus on the implications of methamphetamine injecting which, as noted above, is increasingly being associated with multi-morbidities, particularly regarding mental ill-health.

Additionally, the 50+ age group for both Māori and all clients reports the highest use of methadone (30% each) and morphine (18% and 23% respectively). If these two drugs are combined, 50% of the 50+ age group is injecting opioids. This is consistent with older clients having likely started injecting before the greater availability of methamphetamine, thereby signifying their lengthy injecting careers and concomitant higher risk profile for HCV exposure. The latter in turn emphasises the need for heightened engagement with and surveillance of this sub-population of NEP clients.

Also of significance is the relatively high use of steroids (i.e. PIEDs) among younger clients, with all clients aged 16-34 years reporting 19% use, while for Māori PIEDs injecting expanded from 13% for 16-24 year-olds to 20% for 25-34 year-olds. This is an increasingly prevalent drug type differing from more commonly injected psychotropics and is potentially also associated with clients who do not see themselves as “drug users”, i.e. a stigmatised group, a phenomenon that potentially adds risk, where clients ignore safe injecting practices and harm reduction education relating to this. As noted above, NEST is currently exploring the implications of PIEDs injecting and staff knowledge of these clients, through a research partnership with Auckland University's School of Pharmacy.

**Methylphenidate Use by Ethnicity**

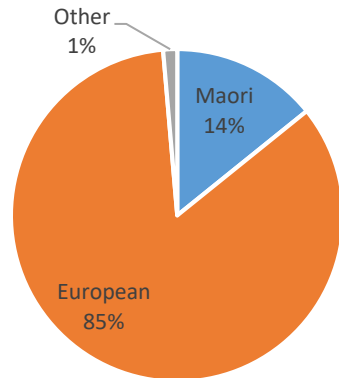


Fig. 18

**Methadone Use by Ethnicity**

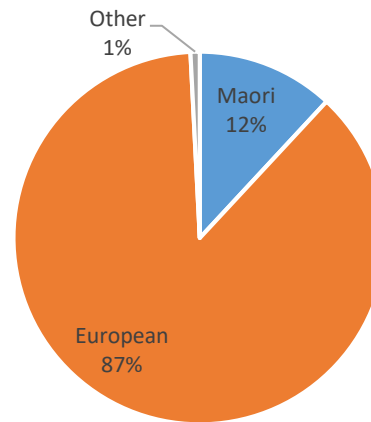


Fig. 19

**Methamphetamine Use by Ethnicity**

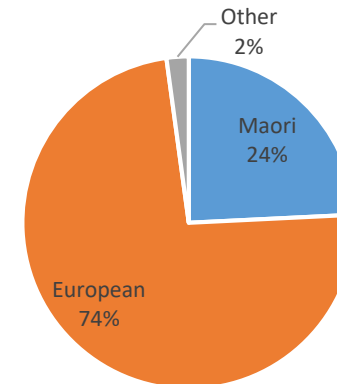


Fig. 20

**Morphine Use by Ethnicity**

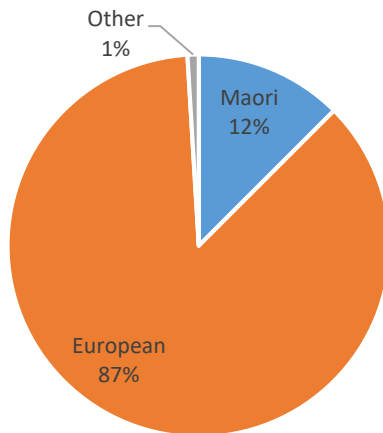


Fig. 21

**Performance & Image Enhancing Drug Use by Ethnicity**

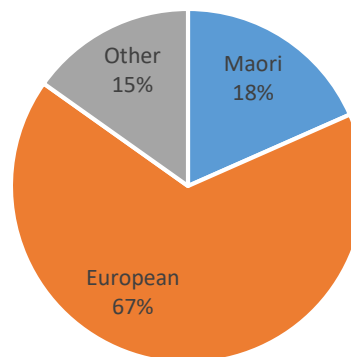


Fig. 22

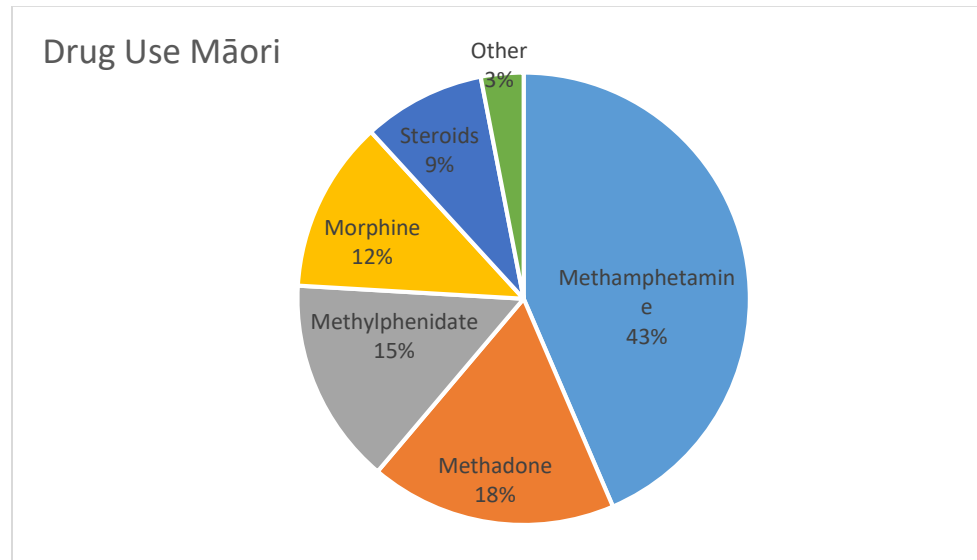
**Comments:**

Methylphenidate, methadone and morphine are equivalently and most commonly injected by NZ European clients (85-87%) compared with Māori (12-14%), with methamphetamine less so (74% vs 24% respectively). PIEDs are least commonly injected by NZ European, with both Māori (18%) and 'other' ethnicities (15%) over represented. The latter two statistics suggest that increasing attention should be paid both to these drug types and the populations most likely to use them, i.e. Māori and non-NZ European other ethnicities.

Figures 18-22: Drug use by ethnicity, from four regions (Northern data not available), July 2020 to September 2021



## Occasion of service - Drug type - Māori



### Comments:

While Māori are slightly over represented amongst NZNEP clients (18.2% v 16.6% of the national population), as previously discussed, they are disproportionally using methamphetamine compared to NEP clients generally (43% vs 29% in all ethnicities [Figure 4]). This is most evident in the preceding figures, for example, in the 16-24 age group two thirds of young Māori reported injecting methamphetamine, with the trend extending across all age groups. Along with negative consequences of use of methamphetamine per se, its use with other drugs, particularly alcohol and opioids, is known to increase harmfulness (Darke et al., 2008), thereby adding further impetus to the need for the NEP to support this client group.

Figure 23: Proportions of drugs reported injected by Māori clients from four regions (Northern data not available), July 2020 to September 2021

## Naloxone

### Comments:

NZNEP Outlets have distributed 262 Naloxone kits since they were first made available in May 2020 (*Table 10*). Distribution is facilitated via Opioid Substitution Treatment services (OST) and drug treatment (AOD) services, with 12-month's funding initially available via the Ministry of Health's Acute Drug Harm Discretionary Fund. However, this funding ceased in July 2021, with no further kits currently available. Additionally, national availability has not been consistent due in part to availability of kits being dependent on the attitude of potential OST and AOD services. For example, DHDP's Palmerston North and Whanganui NEXs only recently (i.e. October 2021) received kits diverted from DHDP Wellington, due to services in the former areas being unable or unwilling to supply directly to those NEXs.

Two types of kits are available: nasal spray and ampoule. The latter come in 2-ampoule and 5-ampoule kits, however, the nasal spray kits are preferred due to ease of use. The NEP is currently aware of three reports where Naloxone has been used in an overdose situation to save lives.

While distribution from NEXs is recorded on VEND, the *ad hoc* nature of Naloxone provision has resulted in variable reporting of distribution at some sites, including supply outcomes and clients' levels of knowledge associated with receiving kits. Due to this and the issues noted above NEST is currently preparing to undertake an evaluation of distribution and uptake of kits at two NEX sites, in partnership the NZ Drug Foundation, who have funded 60 kits and are also prepared to partially resource the project, which is timed to commence before the end of 2021.

Table 1: Distribution of Naloxone kits per NEX for the period May 2020 to October 2021, and current stocks

OUTLET	KIT TYPE	To Sept. '21	Oct-21	Total Sold	Distribution per trust	NEXs currently stocking kits
EAST ST AK	Nasal Spray	10	4	14	24 ADIO	Yes
AK SOUTH	Nasal Spray	4	0	4		Yes
WELLSFORD	Nasal Spray	1	5	6		Yes
HAMILTON	Ampoule Kit	74	2	76	97 MIDLANDS	Yes
NEW PLYMOUTH				8		Yes
ROTORUA				6		Yes
MT. MAUNGANUI				7		
WELLINGTON	Ampoule Kit	79	1	80	103 DHDP	Yes
WAIRARAPA	Ampoule Kit	7	0	7		Yes
NAPIER	Ampoule Kit	13	3	16		Yes
PALM. NORTH						Yes
WHANGANUI						Yes
DUNEDIN	Ampoule Kit	27	0	27	31 DISC	
NELSON	Ampoule Kit	4	0	4		
TIMARU/ASHB.	Ampoule Kit	6	1	7	7 TNET	Yes

## Discussion

There are four areas requiring further comment in this report:

- NEP client characteristics
- Drug use, i.e. the association of drug type with specific NEP client groups
- National consistency regarding data collection
- National policy where this intersects with the needs and obligations of the NEP.

It is evident that while some client groups are declining in terms of NEP service utilisation (e.g. NZ European clients) there is simultaneously an emerging cohort of younger Māori. This group will become of increasing significance to the programme due to the aging of longer-term clients, a majority of whom are of NZ European ethnicity. This should be of concern to the NEP as culturally, its origins and focus historically lay with NZ European injectors. The culturally homogeneous orientation of the NEP is evidenced by Stephen Luke's otherwise excellent PhD study, a theoretically informed social history of the programme, failing to even mention Māori (Luke, 2007). As the programme develops, therefore, it should be encouraged to build networks and alliances with Māori health providers, as well as services appropriately culturally aligned with these, particularly those with a harm reduction focus. Consequently, whakawhanaungatanga should become a key component of any developmental strategy planned to be implemented by the programme going forward.

Associated with the above, the most salient issue regarding drug use by client type is Māori clients and their use of methamphetamine. As noted in preceding comments (e.g. regarding *Figures 4, 9, 11, 13, 15, 17, 20 and 23*), Māori and particularly young Māori (16-34 years) report a significantly higher prevalence of methamphetamine injecting. Along with the acute harms associated with its injecting, including those associated with combining methamphetamine with other drugs such as alcohol and opioids, as well as risks of BBV exposure, its cumulative harm due to use over an extended period is increasingly recognised (Darke et al., 2008). Therefore, given the emerging cohort of young Māori clients, it is likely that this group will experience significant physical and mental health issues as they age. While dedicated health services will be faced with meeting the future needs of this cohort, the NEP's position as a current service provider to them places it in a crucial position to be able to ameliorate harm or reduce its severity. Hence it is vital that the programme recognises this opportunity and upskills itself appropriately. Again, whakawhanaungatanga becomes essential and along with Māori service providers the NEP should continue to nurture its relationships with research partners. In this regard the partnerships it is presently developing with researchers at Auckland and Otago Universities are of significance and should be encouraged.

While methamphetamine is a clearly significant and emerging concern, it should not obscure the need for the programme to maintain close relationships with its aging cohort of opioid clients. This group will likely experience significant health issues associated with their lengthy injecting careers, including vein damage and greater likelihood of having been exposed to HCV. Consequently, they should become a priority focus of the programme and their needs add urgency to establishment of broader health services at current NEP dedicated NEXs where these do not exist, as well as the extension of services where they do and, again, the development of relationships with relevant services where the establishment of on-site services is not practicable. Regarding BBVs generally and especially HCV, it goes without saying that those younger clients within their first five years as PWID should also be a high priority, in terms of prevention, testing and early treatment. In this regard the programmes peer workers are ideally placed to provide expertise and support, but require the appropriate resourcing to do so. An

example of this would be the establishment of a peer navigator component of the programme, such as exists at DISC's Rodger Wright Centre, with their Māori outreach worker, Patchz Mackinnon.

A final group of note is the increasing cohort of PIEDs clients. In terms of ethnicity, Māori are over represented in this group. Interestingly, the ethnicity category 'other' i.e. unspecified ethnicities, is comparatively large relative to other ethnicities by drug type. This apparent over representation is most likely a bi-product of inappropriate data collection practices, whereby our staff are guessing ethnicity, rather than self-report which is the required Ministry practice. In general terms, the programme has less knowledge about PIEDs clients and their needs, and therefore there is an opportunity for staff education and potentially a reorientation of services to encourage engagement with this group who tend not to view themselves as 'drug users'. It is pleasing in this regard that the programme's national office (NEST) has recently initiated a research project with Auckland University's School of Pharmacy, to understand staff knowledge of these clients and their drug use.

The preceding discussion of drug type and ethnicity highlights the issue of inconsistency in the programme's data collection. In the present instance there are two issues: a lack of understanding regarding appropriate reporting of client ethnicity; and the matter of collecting drug use data from clients. The former is partially a consequence of convention, whereby the NEP has traditionally supplied ethnicity data to the Ministry in biannual reports but has not been encouraged by the Ministry to do this as set out by the Ethnicity Data Protocol guidelines (MoH, 2017). This has resulted in frontline staff effectively guessing clients' ethnicity. This is entirely inappropriate and the Ministry has already indicated the requirement for this to change. We should expect clear direction on this through the RFP.

Additionally, the matter of correctly reporting ethnicity is not merely one of appropriateness. Given the needs of specific groups and obligations to them - Māori being an obvious example - improvement of service delivery and appropriately targeted harm reduction information is facilitated by having a clear understanding of the client groups utilising the programme.

Notwithstanding the above, data collection generally is not consistent across the programme, with an important example being the recently initiated practice of asking clients at each visit, what drugs they are using. It will be evident from preceding comments (e.g. *Figures 5-8*) that there are significant variations in drug use patterns across regions. The advantages of knowing about these patterns is equally obvious, with opportunities to target clients likely exposed to harms associated with specific drugs, such as the relatively large group injecting methylphenidate (a drug with a particularly harmful profile) reported from the Timaru service. It is frustrating, therefore, that not all regions do not supply client drug use data.

The two preceding issues, i.e. drug use data generally and the collection of client data highlight the extraordinary value of undertaking regular seroprevalence surveys, which enable the collection of a range of risk behaviours along, with BBV prevalence. It is now almost a decade since a national seroprevalence survey (BBVNEX 2013) was undertaken and the lack of up-to-date data associated with such a survey is ever more keenly felt. The national office has recently undertaken meetings with the NEP's Australian counterpart regarding options for participating in the 2022 iteration of their annual survey and while the Australians are supportive of such a partnership this will not occur without specific funding from the Ministry. The value of this enterprise cannot be overstated.

The final issue highlighted in the present report concerns the lack of consistency in the availability of Naloxone, where this is supplied via AOD and OST services, to NEXs for subsequent distribution to clients as take home kits. This is a complex issue that captures both the actual commercial availability of Naloxone in different formulations, i.e. ampules vs pre-loaded syringes vs nasal spray, and government policy. There is no question that it is desirable for clients to have ready access to Naloxone and the project is supported across the programme and in many parts of the sector. Reinforcing this is that the programme is aware of at least three

reports where Naloxone was administered to reverse an overdose. It is likely, therefore, that the Naloxone provision will require intervention at the government policy level, both an example of the programme's limited resources being diverted to push for what appears to be important yet obvious solution to a genuine harm, but also an example of the NEP's effectiveness as an industry shaper in a sector aiming to meet the needs of a vulnerable population.

## References

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