

Offending and Victimisation Trajectories with a Methamphetamine Offender cohort

Methamphetamine in New Zealand Research Programme

Tranche 3: Third Report

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Tranche 3: Third Report

Contents

	1
Executive Summary	
Purpose	3
Background	3
Method	3
Key Insights	3
Recommendations	4
Background	5
Method	6
Data	6
Offences, victimisation, and non-crime incidents	6
Crime harm	7
Analysis	7
Limitations	7
Results	8
Description of the birth cohort	8
Individuals' first contact with police	9
Offence and victimisation trends over time	10
Trends before, and after individuals' first recorded methamphetamine offence	10
Analysis by subgroup	16
Subgroup 1 (46 individuals)	16
Subgroup 2 (40 individuals)	18
Subgroup 3 (2,985 individuals) and Subgroup 4 (961 individuals)	20
Subgroup 5 (23 individuals)	
Summary	
References	27





Executive Summary

Purpose

This report presents the final of three stages of research conducted as part of Tranche 3 of the NZ Police-led Methamphetamine in New Zealand Research Programme. The purpose of this stage of the research was to investigate the trajectories of offences, victimisations, and non-crime incidents of individuals with recorded methamphetamine offences. As part of the trajectory analysis, the report examines whether particular offences were committed predominantly before or after individuals' first recorded methamphetamine offence.

Background

The first report in Tranche 3 found that individuals with methamphetamine offences committed more offences, caused more crime harm, experienced more victimisations and more harm from those victimisations, and were involved in more non-crime incidents than a cohort of offenders without methamphetamine offences. The purpose of the second report in Tranche 3 was to determine whether methamphetamine offenders committed similar types of offences to each other or whether there were different patterns of offending: the report identified five subgroups or subtypes of methamphetamine offenders based on the number and type of offences committed, and non-crime incidents involved in.

Method

A birth cohort approach was used for this analysis: specifically, individuals in the methamphetamine cohort born between 01 January 1990 and 31 December 1994 were studied. The use of a birth cohort approach allowed for the control of time as a factor meaning that individuals had a similar time period to offend, and were influenced by the same societal factors. Exploratory analysis techniques were used to understand the longitudinal nature of offending, victimisation, and non-crime incidents for the cohort. Exploratory analysis refers to the process of conducting analyses to discover patterns, or test hypotheses primarily through the use of summary statistics or visual representations.

Key Insights

Individuals in the cohort predominantly came to police attention at young ages (predominantly between age 12 and 17) and persistently offended and were victimised throughout their lives.

The number, and harm for offences, victimisations, and non-crime incidents increased until the year each individual committed their first recorded methamphetamine offence then decreased dramatically in the years after. It is not able to be determined from Police data alone why this decrease was present following the first recorded methamphetamine offence.

Individuals committed offences across all timepoints, however, there were individuals who only committed particular types of offences at particular periods of their offending trajectories. The





majority of people committed drug offences exclusively in the same year as their first recorded methamphetamine offence, whilst most people committed the majority of other types of offending beforehand. Therefore, it would seem that individuals in this cohort are already ensnared in anti-social behaviour patterns before they became involved with methamphetamine-related offending.

Recommendations

Tranche 3 was an exploratory piece of work which utilised police held data to investigate associations between methamphetamine, and offending and victimisations. The tranche led to the generation of useful insights across the three reports, however, at this stage, the limits of police held data have been reached. Therefore, in order to understand what factors influenced individuals in New Zealand who have committed methamphetamine offences to engage in drug offending (and to offend in general), obtaining additional data from non-police sources is recommended. It is acknowledged that there will be challenges in combining datasets due to the lack of consistent identification information used across government agencies.

Supplementary qualitative work with individuals to record their personal experiences may provide insight into why offending dramatically decreased after individuals' first recorded methamphetamine offence and may help to understand what factors might predict methamphetamine related offending in a New Zealand context. Furthermore, qualitative information may also provide a better understanding of when methamphetamine use occurred, and to what degree usage influenced offending outside of the offending that came to police attention.





Background

The analysis presented in this report is the third of three stages being conducted as part of Tranche 3 of the NZ Police-led Methamphetamine in New Zealand Research Programme.

The first report in Tranche 3 (Evidence Based Policing Centre, 2022a) found that individuals with methamphetamine offences committed more offences, caused more crime harm, experienced more victimisations and more harm from those victimisations, and were involved in more non-crime incidents (e.g., family harm investigations and mental health incidents) than a cohort of offenders without methamphetamine offences, both in total and for every specific type of offence. The second tranche 3 report (Evidence Based Policing Centre, 2022b) identified five distinct subgroups of methamphetamine offenders based on the number and type of offences perpetrated and non-crime incidents involved in. Whilst there was a degree of generalised offending and non-crime incident involvement for all of the subgroups, some subgroups disproportionately committed specific offence types:

- The first subgroup disproportionately committed dealing drug offences especially for methamphetamine
- the second subgroup of offenders were characterised by a high volume of non-crime incidents especially mental health and family harm investigations
- the third subgroup represented the majority of individuals in the cohort and was characterised by a more generalised offending and non-crime incident pattern
- the fourth subgroup was the second largest group and was characterised by generalised offending, however, individuals also disproportionally committed acquisitive crime, and offences relating to public order, property damage or crimes against justice; and
- the fifth subgroup appeared to be disproportionately represented in regards to fraud and acquisitive crimes. Additionally, subgroup 4 and subgroup 5 caused the highest crime harm on average.

The first two reports examined the offending record of the methamphetamine cohort for the entirety of offenders' history to date. Building upon those findings, this report aims to explore the longitudinal nature and trajectory of the offending of the methamphetamine cohort. Specifically, it investigates the trajectories of offences, victimisations, and non-crime incidents, and behavioural patterns of individuals from the methamphetamine cohort born during the early 1990s as a collective, and whether patterns are different for the five subgroups. The report also examines whether particular offences were committed predominantly before or after each individuals' first recorded methamphetamine offence.





Method

Data

Offences, victimisation, and non-crime incidents

The data used in this report was extracted from the NZ Police National Intelligence Application (NIA). The data included offences, victimisations¹, and non-crime incidents² linked to people with at least one methamphetamine related offence (the methamphetamine cohort). The methamphetamine cohort included 28,634 people who were recorded as the offender³ of a methamphetamine offence between 01 January 2010 and 24 June 2021. It was decided that a birth cohort approach would be used for this analysis. Specifically, it was determined that the cohort examined should be those in their adolescence when methamphetamine use reached a peak in New Zealand (around 2012; Evidence Based Policing Centre, 2021) as it was assumed that adolescents would have greater opportunities to have encountered methamphetamine. Therefore, those individuals in the methamphetamine cohort born between 01 January 1990 and 31 December 1994 were studied in this report (N = 4,055).

For each individual within the cohort, their number of offences, victimisations, and non-crime incidents during the data period per ANZSOC Division (for offences and victimisations) and per incident code (for specific non-crime incidents of interest) were counted. The number of offences and non-crime incidents of relevant ANZSOC categories were then summed in order to create a more manageable number of relevant offence and incident categories. The variables were:

- a) **Violence** which combined the offences relating to homicide, acts intended to cause injury, sexual assault, robbery, abduction and harassment, and negligent behaviour
- b) Acquisitive Crime which combined the offences for theft and burglary/unlawful entry
- c) Fraud which used the offences under the fraud ANZSOC Division
- d) **Manufacture** which combined the offences for importing or exporting drugs, and the offences for manufacturing or cultivating drugs
- e) Deal Drugs which used the offences relating to dealing or trafficking drugs
- f) Possess Drugs⁴ which used the offences for possessing or using drugs

 $^{^4}$ Due to the very small number of use of methamphetamine offences (n = 455), use was combined with possession for the purpose of analysis



¹ For the purpose of this report, a "victim" is a person linked in NIA to an offence as "victim", "complainant", or "principal victim".

² For the purpose of this report, a person is directly involved in a non-crime incident if they are linked in NIA as "subject of" or "subject of missing person"; "bound by order" or "person at risk" in relation to police safety orders; "applicant", "respondent", or "other protected person" of a Family Violence Act protection order; "predominant aggressor", "primary victim", "mutual participant", or "child or young person exposed to family violence" in relation to family harm investigations (5F); or the "target" of a warrantless search (6X).

³ For the purpose of this report, an "offender" is a person linked in NIA to an offence as "cleared offender", "offender", or "youth aid offender", being people, whom police have sufficient evidence to proceed against for a given offence.



- g) Other Drug Offences⁵ which used the offences that are under the other drug offences ANZSOC category
- h) **Traffic Offences** which combined traffic offences, and offences for dangerous driving or the dangerous use of a vehicle
- i) **Prohibited Weapons** which included the offences under the prohibited weapons ANZSOC Division
- j) Other Offences which included offences relating to property damage, public order, crimes against justice, and offences categorised as miscellaneous
- k) Mental Health which combined the incident codes of 1M mental health, and 1X threaten or attempt suicide
- l) **Family Harm** which combined the incident codes of 1D domestic dispute, 5F family harm investigation, 6C child protection report, and 6S police safety order breach

Crime harm

The crime harm associated with offences was calculated using the New Zealand Crime Harm Index (NZ CHI). The NZ CHI is a proxy measure of harm which calculates the minimum number of days a first-time offender would spend in prison for a specific offence code (Curtis-Ham & Walton, 2018). For offences that have fines rather than prison time, the equivalent number of days it would take for an individual to pay off the fine on minimum wage is calculated (Curtis-Ham & Walton, 2018). For this report, the highest NZ CHI value (most serious offence) in each occurrence for each offender was taken; these NZ CHI values were then summed for each individual to give a total highest crime harm score for each offender.

Analysis

Exploratory analysis techniques were used to understand the longitudinal nature of offending, victimisation, and non-crime incidents for the birth cohort. Exploratory analysis refers to the process of conducting analyses to discover patterns, or test hypotheses primarily through the use of summary statistics or visual representations. The report aims to understand whether the trajectories of offences, victimisations, and non-crime incidents were different when examining the birth cohort as a whole or as subgroups, and whether volume and harm of occurrences transpired predominantly before or after individuals' first recorded methamphetamine offence. This report does not focus on direct comparisons between the subgroups, however, comparisons are presented in report 2 (Evidence Based Policing Centre, 2022b).

Limitations

Several limitations of the analysis method warrant mention. First, it was not possible in this report to control for, or account for periods in which individuals were not in communities due to circumstances such as incarceration or treatment programmes, and were therefore unable

⁵ 'Other drug offences' include possessing utensils, and allowing premise/vehicle for manufacturing/supply purposes amongst others





to offend. Similarly, socio-economic variables, or variables concerning individuals' personal history are not available in Police data. Therefore, it is not possible to determine what other variables might have influenced the trends presented in this report.

Second, the analysis presented is exploratory, and non-statistical. Therefore, the results are descriptive, and unable to be used to infer causality. Furthermore, due to the fact that methamphetamine was becoming more available from 2012 onwards (Evidence Based Policing Centre, 2021), the dataset is limited in that methamphetamine offences are more likely to have occurred towards the end point of the existing data. As such, there is a shorter time period for individuals to potentially offend after being involved with methamphetamine than offending before methamphetamine involvement.

Thirdly, it is not possible to determine from the Tranche 3 data as to whether individuals were using, or had used methamphetamine immediately prior to committing an offence. Therefore, the analysis cannot answer whether the drug methamphetamine is a cause or consequence of offending or non-crime incident involvement.

Finally, for the purpose of Tranche 3, offences where police had sufficient evidence to proceed against a given individual were included in the data: other person links (such as a suspect of an offence) were excluded. It was decided to restrict the data to include offences with sufficient evidence to proceed in order to provide a greater degree of certainty that methamphetamine was involved. However, this means that it is possible that individuals may have committed methamphetamine offences (or committed other offences) which police are unaware of or were unable to prove.

Results

Description of the birth cohort

There were 4,055 individuals in the methamphetamine cohort born between 01 January 1990 and 31 December 1994. Examining the people in the birth cohort found similar proportions to the original analysis for demographic variables i.e. the majority of individuals were classified as subgroup 3 followed by subgroup 4, were male, and were European (Evidence Based Policing Centre, 2022b).

Table 1: Number and percent of people in each subgroup from the birth cohort whose first recorded contact with police was as an offender, victim, or being involved in a non-crime incident

	Subgroup 1	Subgroup 2	Subgroup 3	Subgroup 4	Subgroup 5
	N = 46	N = 40	N = 2,985	N = 961	N = 23
Offender	28 (61%)	20 (50%)	1,634 (55%)	666 (69%)	13 (57%)
Victim	8 (17%)	9 (22.5%)	578 (19%)	106 (11%)	3 (13%)
Incident	10 (22%)	11 (27.5%)	773 (26%)	189 (20%)	7 (30%)





Individuals' first contact with police

Most individuals in each subgroup first came to police attention as an offender (58%, n = 2,361) whilst 17% of the cohort first came to police contact as a victim (n = 704), and a quarter came to attention during a non-crime incident (n = 990). The most common offences for first recorded contact as an offender were theft, property damage or public disorder⁶. The most common first victimisations were acts intended to cause injury, sexual assault, and theft whilst the most common first non-crime incident types were 2M: Missing Person, or 1J: Juvenile Complaint⁷. Of the individuals whose first recorded contact with police was as an offender, 196 or 8% had their first offence involve drugs, predominantly for cannabis offences (n = 133). There were a further 54 individuals whose first recorded police contact was for methamphetamine related offences, and 9 individuals for other drug types. Most of the individuals whose first recorded police contact involved a drug offence were from subgroup 3 (n = 169); four individuals from subgroup 1, and 23 individuals from subgroup 4.

The age at which individuals had their first recorded contact with police varied. The youngest person was age two in which they were a victim, and the oldest person was age 30 as an offender. The majority of individuals were between the ages of 12 and 17 when they had their first recorded encounter with police. Examining by subgroup highlighted that those in subgroups 1, 2 and 4 typically came to police attention earlier than those in subgroups 3 and 5. The youngest individual whose first contact was as an offender was from subgroup 4 at age seven⁸.

The earliest an individual committed their first recorded methamphetamine offence was in 2003 (Figure 1); every year since 2003 has had individuals commit their first recorded methamphetamine offence. Most individuals (68%) committed their first recorded methamphetamine offence between 2016 and 2020 which equates to individuals being between the ages of 22 and 30 years old.

⁸ Investigating these files in NIA indicated that the ages of these individuals was correctly recorded: the offences were property damage, burglary, and theft



Page 9

⁶ Acts intended to cause injury was also prevalent amongst individuals in subgroup 2 and subgroup 5

 $^{^7}$ 1V: Vehicle Collision, 1C: Car or Person acting Suspiciously, or 1U: Traffic Incident were also frequent

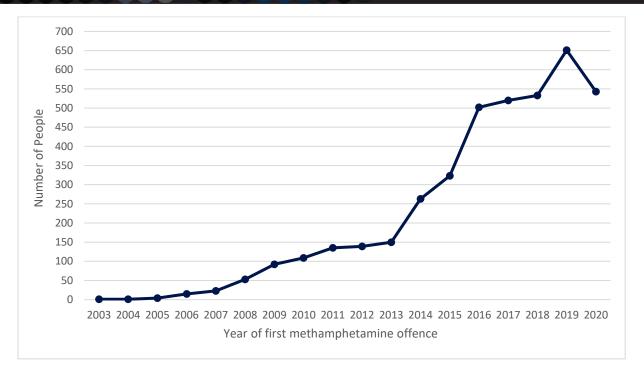


Figure 1: Number of people in the birth cohort who committed their first recorded methamphetamine offence each year

Offence and victimisation trends over time

The volume of offences perpetrated by the birth cohort increased from the early 2000s with a sharp increase between 2004 and 2009 (Figure 2). Afterwards, the volume of offending decreased slightly until 2013 and subsequently remained at a relatively stable level. The trend for crime harm of offending was similar to the trend for volume, however, crime harm has steadily increased from 2013. The number of victimisations experienced by the cohort remained relatively stable over time, however, the harm experienced as a consequence of those victimisations slowly increased. Furthermore, the number of non-crime incidents steadily increased since the early 2000s. As such, these trends indicate that whilst the number of offences committed, and experienced, by the birth cohort have remained steady each year, individuals committed (and also experienced) more harmful crimes.

Trends before, and after individuals' first recorded methamphetamine offence

For each individual in the birth cohort, the year of their first recorded methamphetamine offence was determined (referred to as year zero) to measure how many years before or after that date other offences, victimisations or non-crime incidents occurred. Therefore, the results presented in this section were calculated at an individual level. The first methamphetamine offence for each individual was excluded from the figures because the goal was to understand what happened for each individual outside of that occurrence.

Figure 3 highlights that the volume, and crime harm of offences increased up to eight years before year zero (9,897 total offences, and 111,903 total CHI), and remained stable. At this



BASED POLICING CENTRE

Tranche 3: Third Report

point, the volume of offences and crime harm peaked during year zero (18,544 total offences, and 261,845 total CHI) then decreased significantly in the succeeding years. Similarly, the number of victimisations experienced also increased up until year zero (total of 1,830 victimisations) before the number decreased in the years after; however, the increase and decrease was minimal overall. The crime harm of the victimisations experienced by the cohort followed the same trend as the number of victimisations although the increase was more noticeable. Finally, the number of non-crime incidents that the cohort were involved in gradually increased to 11,082 incidents during year zero before the number decreased. In order to examine whether these trends were exclusive to offenders born in the early 1990s, the process was replicated with the entire methamphetamine cohort, and a birth cohort of individuals born in the mid-1980s. The trends as described above for the 1990-1994 birth cohort was also found in the other two cohorts: this indicates that the trends are not solely due to individuals' birth date. Although, it could be that all individuals' started to become involved with methamphetamine at similar points in time based on the availability of the drug. Therefore, it could be beneficial to examine police data at a later point in time in order to re-examine the findings.



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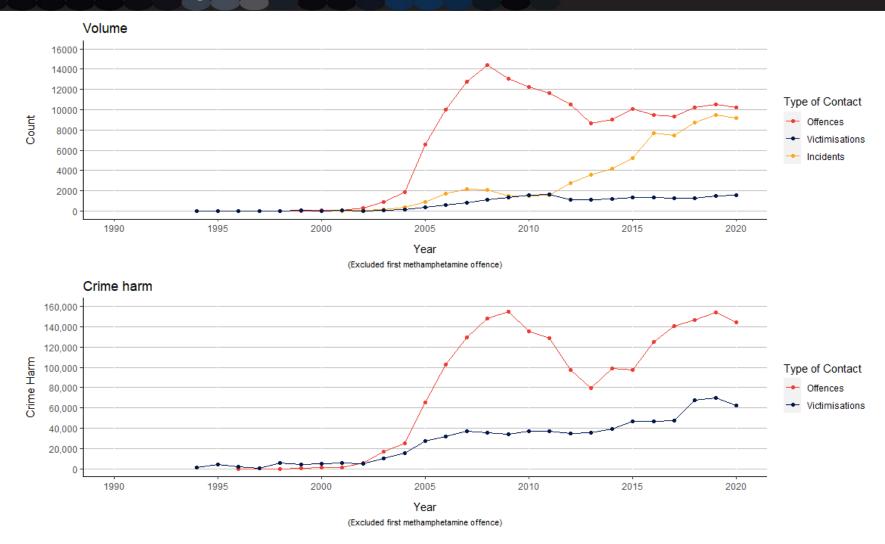


Figure 2: Volume and crime harm of offences committed, victimisations experienced, and non-crime incidents involved in each year for individuals from the methamphetamine cohort born between 1990 and 1994





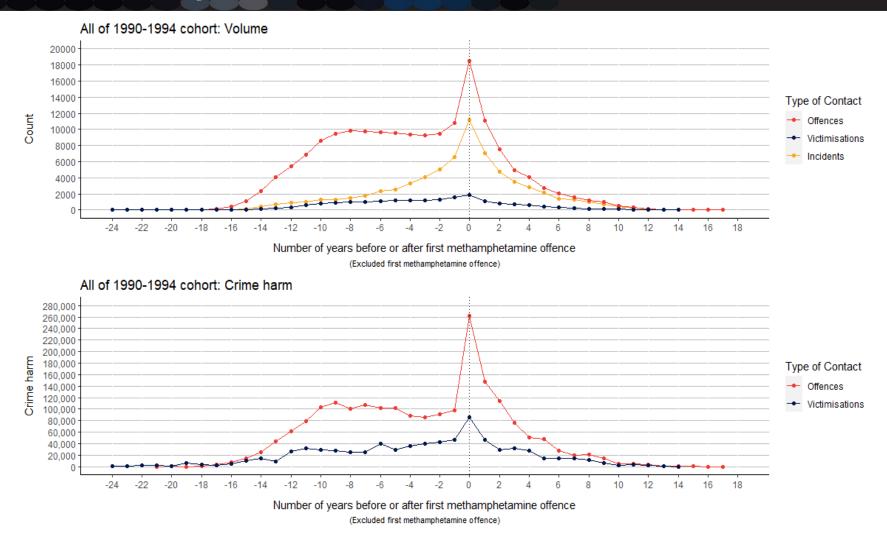


Figure 3: Volume and crime harm of offences committed, victimisations experienced, and non-crime incidents involved in before and after individuals' first recorded methamphetamine offence in years for the 1990-1994 birth cohort



EVIDENCE — BASED POLICING • •

Tranche 3: Third Report

Table 2 highlights that whilst there was no offence category or non-crime incident type that every individual committed or was involved in, individuals perpetrated offences across all timepoints. However, there were individuals who committed particular types of offences during specific periods of their offending trajectories. The highest percent of individuals who committed acquisitive offences (33%), fraud (43%), violent offences (40%), prohibited weapons offences (27%), and traffic offences (28%) committed them before year zero, and stopped; additionally, 46% of individuals who were involved in a mental health incident had the incident before year zero, and never again. Fifty-nine percent of individuals who committed a deal drugs offence, 54% of those who committed an 'other drug offence', and 37% of those who possessed drugs did so during year zero and then were never recorded committing that offence again. The majority of individuals who manufactured or cultivated drugs did so before (38%) or during (39%) year zero and then also stopped.

The number of individuals involved in family harm incidents was spread across the time period: 22% of individuals who were involved in family harm incidents were involved throughout their offending lives, 19% were involved in family harm incidents exclusively before year zero, 17% were involved in family harm incidents exclusively after year zero, and 17% were involved in family harm incidents before and after year zero but not during year zero.

The results presented indicate that individuals in the cohort predominantly came to police attention at young ages, and persistently offended and were victimised throughout their lives. Furthermore, there is evidence that individuals were ensnared in antisocial behaviour patterns before they became involved with methamphetamine related offending. However, the background for these individuals is not known nor is it known at which point individuals may have used methamphetamine, as such, it is not possible to determine in this report what factors predict or contribute to starting a criminal trajectory. Therefore, additional data sources external to police are required to probe this further and it is likely matched personal journeys (i.e., qualitative histories) and criminal records would provide the richest source of information to answer this question.





Table 2: Number and percent of individuals in the 1990-1994 birth cohort who committed each type of offence before, after, or during year zero⁹ (N = 4,055)

	Deal Drugs n = 1,364	Possess Drugs n = 2,988	Manufac ture n = 561	Other Drug n = 3,108	Acquisitive Crime n = 3,358	Fraud n = 1,136	Violence n = 3,038	Prohibited Weapons n = 2,159	Traffic n = 3,501	Other Offence n = 3,625	Mental Health n = 863	Family Harm n = 3,309
Before year zero	167 (12%)	439 (15%)	215 (38%)	188 (6%)	1,1222 (33%)	483 (43%)	1,208 (40%)	591 (27%)	985 (28%)	804 (22%)	394 (46%)	631 (19%)
Before and During year zero	74 (5%)	570 (19%)	23 (4%)	431 (14%)	630 (19%)	66 (6%)	433 (14%)	315 (15%)	624 (18%)	803 (22%)	44 (5%)	533 (16%)
During year zero	803 (59%)	1,098 (37%)	217 (39%)	1,664 (54%)	167 (5%)	167 (15%)	139 (5%)	489 (23%)	123 (4%)	164 (5%)	111 (13%)	111 (3%)
After year zero	174 (13%)	210 (7%)	82 (15%)	160 (5%)	148 (4%)	266 (23%)	249 (8%)	288 (13%)	282 (8%)	144 (4%)	205 (24%)	576 (17%)
During and After year zero	109 (8%)	307 (10%)	6 (1%)	446 (14%)	127 (4%)	48 (4%)	63 (2%)	125 (6%)	151 (4%)	135 (4%)	22 (3%)	185 (6%)
Before and After year zero	24 (2%)	134 (4%)	15 (3%)	48 (2%)	435 (13%)	80 (7%)	572 (19%)	207 (10%)	620 (18%)	579 (16%)	55 (6%)	549 (17%)
All time points	13 (1%)	230 (8%)	3 (1%)	171 (6%)	729 (22%)	26 (2%)	375 (12%)	144 (7%)	716 (20%)	996 (27%)	32 (4%)	724 (22%)

⁹ This table presents individuals who are recorded to have committed a particular offence type: any individuals who had not committed that offence type were removed. As such, the total number of people is different for each type of offence. The table should be read down each column with the highest percent of individuals shaded dark blue; in cases where 10% of individuals or less committed an offence type during the period, the cell is coloured white.



EVIDENCE — BASED POLICING ••

Tranche 3: Third Report

Analysis by subgroup

For all subgroups in the 1990-1994 birth cohort, the general trend was that the volume of offences, victimisations, and non-crime incidents increased until year zero and then decreased in the years afterwards. However, there are differences from the overall trend for each subgroup which are discussed below.

Subgroup 1 (46 individuals)

Similar to the cohort as a whole, there was no offence category in which every individual committed said offence, however, 45 of the 46 people in subgroup 1 dealt drugs ¹⁰. The category that the least people had been involved with was mental health; five individuals from subgroup 1 had experienced or been involved in a mental health incident which is low compared to the other subgroups.

The number of offences committed by subgroup 1 (see Figure 4) increased up to six years before year zero with a total of 296 offences (median = 3, maximum = 196); the number of offences committed then dramatically decreased down to 77 offences one year later (median = 2, maximum = 16). The number of offences committed each year remained low before an increase in the year before year zero at 403 offences (median = 2, maximum = 274). Consequently, whilst individuals committed 434 offences during year zero (median = 6, maximum = 48), making this the point in time in which subgroup 1 perpetrated the most offences, the increase from one year before was not as great as in other subgroups.

Although the crime harm of offences presented a similar pattern to the wider cohort, harm and volume were not always mirrored for this subgroup. For example, one year before year zero, the number of offences committed was at its second highest for this subgroup, however, the crime harm was considerably lower (total CHI of 649, median = 7, maximum = 199).

Subgroup 1 experienced a relatively small number of victimisations over time (16 offences or less per time point), however, the harm of those victimisations was typically higher on average; the most harmful time period was seven years before year zero (total CHI of 1,509, median = 754, maximum = $1,498^{11}$). Furthermore, whilst the number of offences committed each year after year zero decreased, there were periods where the crime harm of those offences rose, specifically four- and nine-years post year zero.

¹¹ The maximum crime harm experienced by an individual during this time period is so high due to a victim experiencing an aggravated sexual assault



 $^{^{10}}$ As discussed in more detail in Report 2, subgroup 1 disproportionately committed dealing drug offences. However, an individual could have been classified into this subgroup without dealing drugs due to their other offending being most similar to these individuals

EVIDENCE — BASED POLICING

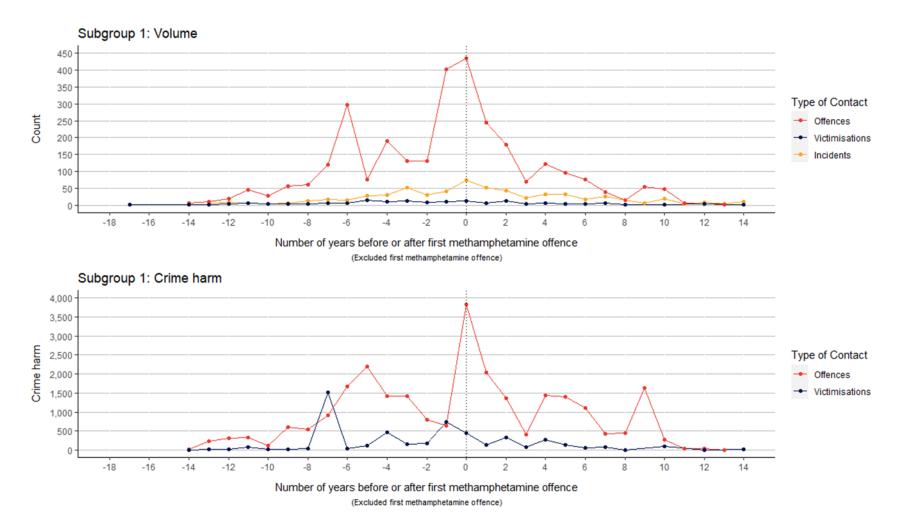


Figure 4: Volume and crime harm of offences committed, victimisations experienced, and non-crime incidents involved in before and after individuals' first recorded methamphetamine offence in years for individuals in subgroup 1 from the 1990-1994 cohort



EVIDENCE — BASED POLICING

Tranche 3: Third Report

Subgroup 2 (40 individuals)

The number of offences committed by subgroup 2 (see Figure 5) increased up until ten years prior to year zero (total of 174 offences, median = 4, maximum = 35) before the number gradually decreased to 144 offences perpetrated one year before their first recorded methamphetamine offence (median = four, maximum = 19). Once again, individuals committed the most offences during year zero (total of 242 offences, median = 6, maximum = 21) before the number of offences committed decreased. Subgroup 2 is the only subgroup in which the number of non-crime incidents individuals were involved with steadily increased, and was greater than the number of offences committed by the individuals at year zero (total of 269 incidents, median = 7, maximum = 21). The other main point of difference for subgroup 2 was the erratic pattern of the crime harm of victimisations experienced: individuals experienced multiple periods of high crime harm (both before, and after year zero) followed by periods of reduced crime harm.

Whilst there was a small number of people in this subgroup, all forty of them had had mental health incidents, and 16 individuals were involved in mental health incidents at multiple time periods throughout their lives: no other subgroup has such a high rate of mental health incidents per person. Furthermore, 37 individuals had been involved in family harm incidents, and 39 individuals committed an acquisitive crime, and 'other offences' such as public disorder. Involvement in drug related offending was relatively low though 37 individuals had committed an 'other drug offence'. These findings indicate that whilst these individuals were offenders, they were also highly victimised, and were at risk of experiencing high amounts of harm.





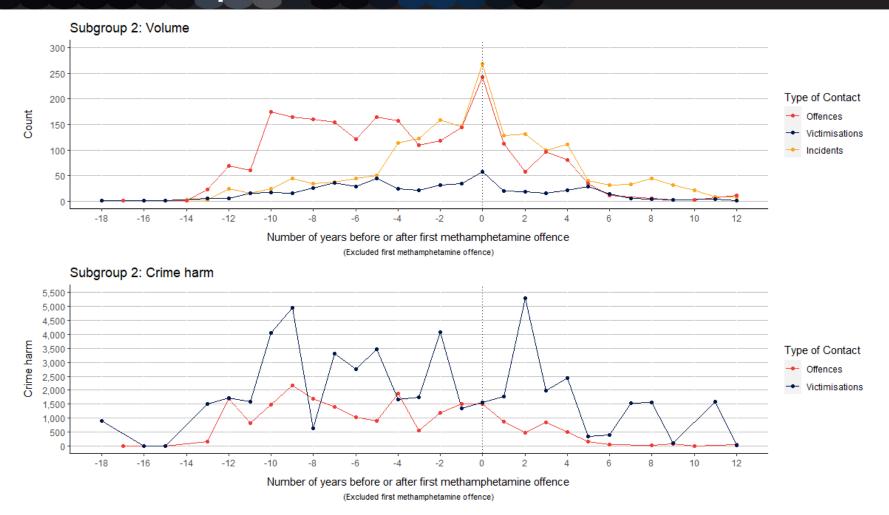


Figure 5: Volume and crime harm of offences committed, victimisations experienced, and non-crime incidents involved in before and after individuals' first recorded methamphetamine offence in years for individuals in subgroup 2 from the 1990-1994 cohort



EVIDENCE — BASED POLICING • •

Tranche 3: Third Report

Subgroup 3 (2,985 individuals) and Subgroup 4 (961 individuals)

For subgroup 3 (Figure 6) and subgroup 4 (Figure 7), the trajectories of individuals are similar to the trends of the cohort as a whole which is to be expected given that the majority of individuals can be categorised to these two subgroups. However, for subgroup 4, the number of offences individuals committed drastically increased up until nine years before year zero and stabilised with between 5,172 - 5,780 offences at each time point (medians = five or six, maximums = between 55 and 121) until one year before individuals' first recorded methamphetamine offence. Therefore, the increase in offending during year zero (total of 7,742 offences, median = 7, maximum = 58) was not as pronounced as in other subgroups as volume was already high.



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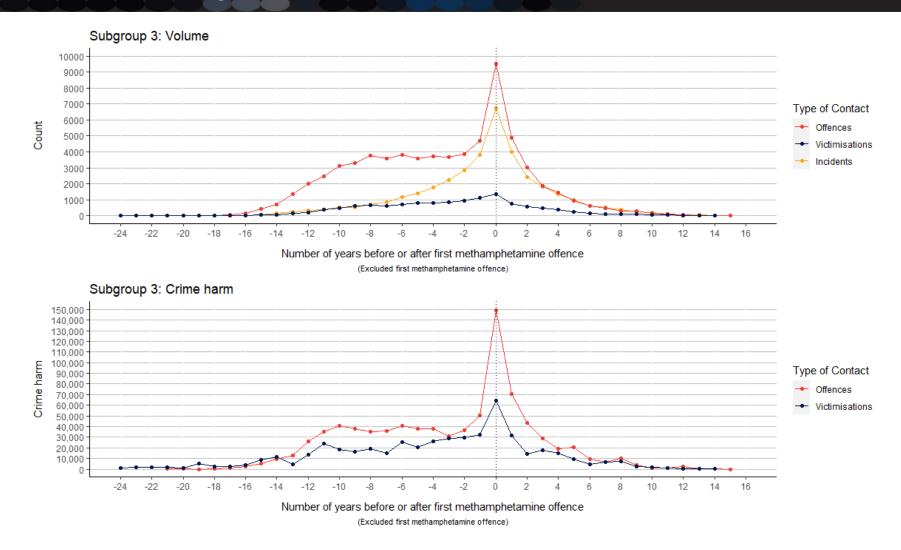


Figure 6: Volume and crime harm of offences committed, victimisations experienced, and non-crime incidents involved in before and after individuals' first recorded methamphetamine offence in years for individuals in subgroup 3 from the 1990-1994 cohort





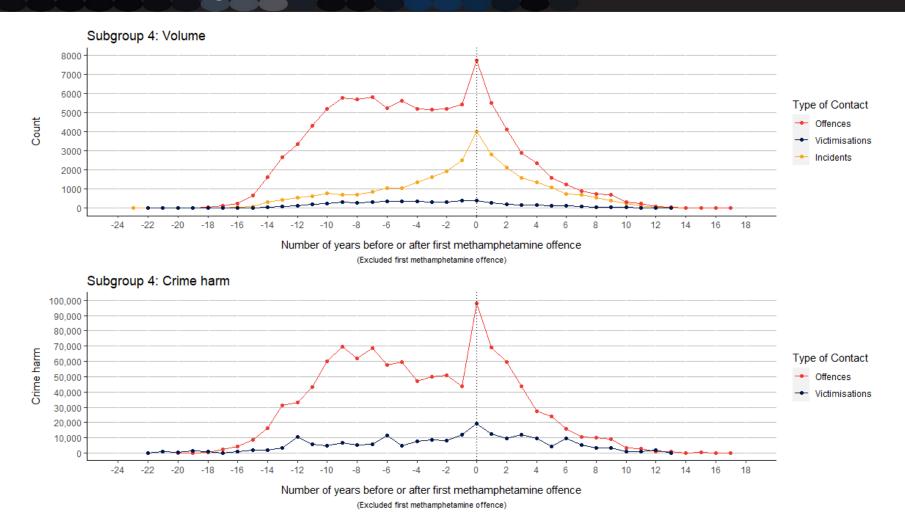


Figure 7: Volume and crime harm of offences committed, victimisations experienced, and non-crime incidents involved in before and after individuals' first recorded methamphetamine offence in years for individuals in subgroup 4 from the 1990-1994 cohort



EVIDENCE — BASED POLICING ••

Tranche 3: Third Report

Subgroup 5 (23 individuals)

All of the individuals in subgroup 5 committed acquisitive crimes, traffic offences, 'other offences', and every individual was involved in at least one family harm incident. Subgroup 5 (Figure 8) committed an increased number of offences up to eight years before year zero (total of 220 offences, median = 4, maximum = 97) before periods of higher and lower levels of offending (between 79 - 247 offences at each time point prior to year zero). Individuals committed significantly fewer offences, and caused less crime harm in the years after their first methamphetamine offence with one spike in crime harm committed seven years after year zero (total CHI of 1,774, median = 22, maximum = 933). The number of victimisations experienced by individuals remained stable and low at each time point. Similarly, the crime harm experienced for these individuals followed the same trend with two exceptions: individuals experienced periods of higher harm fourteen (911 CHI¹²) and ten years (1,803 total CHI, median = 20, maximum = 1,506¹³) before year zero.

¹³ The maximum crime harm experienced by an individual during this time period is so high due to the fact that an individual was a victim of an aggravated sexual assault



¹² There was one victimisation during this time period for an aggravated sexual assault against an underage female. Therefore, the total, median, and maximum CHI for this victimisation were the same.

EVIDENCE — BASED POLICING CENTRE

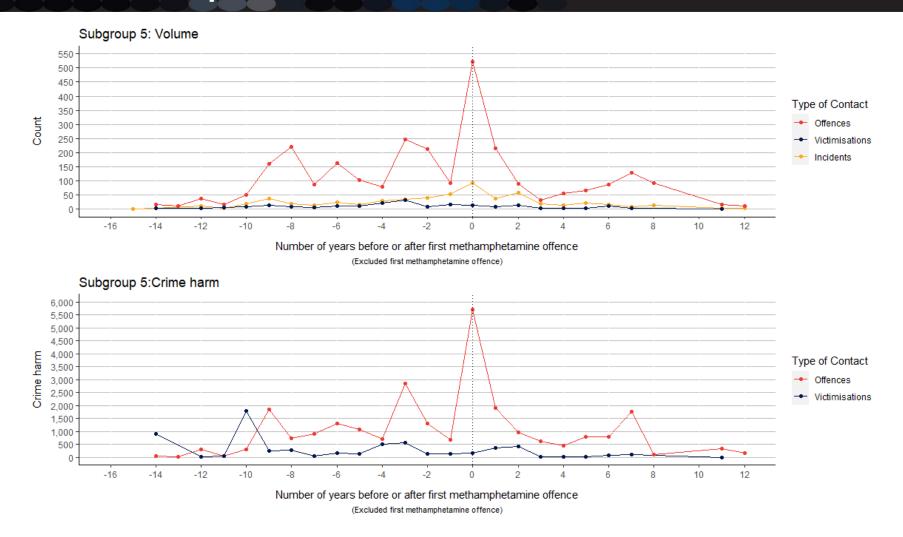


Figure 8: Volume and crime harm of offences committed, victimisations experienced, and non-crime incidents involved in before and after individuals' first methamphetamine offence in years for individuals in subgroup 5 from the 1990-1994 cohort





Summary

The results presented indicate that individuals in a methamphetamine offender cohort born between 01 January 1990 and 31 December 1994 predominantly came to police attention at young ages, and persistently offended and were victimised throughout their lives. The volume, and crime harm for offences, victimisations, and non-crime incidents typically increased until an individual's first recorded methamphetamine offence then decreased. Individuals committed offences across all timepoints, however, there were individuals who only committed particular types of offences at certain periods of their offending trajectories. The majority of people committed drug offences exclusively in the same year as their first recorded methamphetamine offence whilst most people committed the majority of other types of offending beforehand. However, it is important to note that the data used was unable to account for any periods of incarceration (or other reasons that prevented an individual from being in the community) which could partially account for the decreases. Additionally, it is possible that individuals committed offences which have not come to police attention, or that police lacked sufficient evidence to prove which could also alter the presented trends.

Most of the subgroups had similar overall patterns to the cohort as a whole, however, some important differences were observed. Subgroup 2 experienced multiple periods of high crime harm (both before, and after year zero) followed by periods of reduced crime harm, and all forty of them had been involved in mental health incidents, highlighting that whilst these individuals were offenders, they were highly victimised, and at risk of experiencing high amounts of harm.

The use of the 1990-1994 cohort allowed for the control of time as a factor (i.e., each individual had a similar time period and same societal influences, and therefor similar opportunity, to offend). However, this approach also limited the time in which individuals had to offend after their first recorded methamphetamine offence. Despite this, a similar pattern was found when the entire methamphetamine cohort was examined, and in a cohort of methamphetamine offenders born in the mid-1980s which indicates that all methamphetamine offenders share similar offending and victimisation patterns over time regardless of when they were born. Therefore, it could be beneficial to examine police data at a later point in time as trends are likely to change.

The evidence suggests that individuals in the birth cohort were already ensnared in antisocial behaviour patterns before they became involved with methamphetamine related offending. However, the data available for this report cannot inform why or how individuals started their criminal trajectory, nor why the decrease in offending, victimisations, and non-crime incident involvement occurred after the first recorded methamphetamine offence. Available research in New Zealand has found that methamphetamine use is predicted by being male, having behavioural problems in childhood or adolescence, poor role modelling, antisocial peer





influence, personality tendencies towards substance use, and stressful life events in adulthood (Boden et al., 2021).

International literature has specified eight broad risk factors for engaging in criminal activity which could be relevant for individuals in New Zealand. The risk factors are (Bonta & Andrews, 2016):

- 1. Thoughts or values supportive of criminal or antisocial behaviour
- 2. Family, friends or associates who model, encourage or support criminal behaviour
- 3. Antisocial personality patterns such as low self-control, disregard for others, thrill seeking, issues with authority
- 4. Early onset of antisocial behaviours or conduct problems
- 5. Family instability, poor parental skills, or criminality within the family
- 6. Difficulty or poor performance in school or work settings
- 7. Lack of prosocial leisure or recreation activities, and
- 8. Substance abuse.

It is argued that targeting these risk factors, also known as criminogenic needs, through interventions should help to prevent individuals from offending in the first instance or if they have already offended, then should lead to reductions in recidivism. The first four factors are considered as the most important and therefore should create the biggest impacts, however, impacting the other four can still lead to reductions. Although the predictive validity of these risk factors has been documented, there is also evidence that the predictive power may be lessened for older populations (Wilpert et al., 2018). Wooditch et al (2014) also found that reductions in substance use alongside reduced interactions with criminal family members and increased income from legal sources was more likely to accelerate recidivism reductions within a six-to-twelve-month treatment period.

Consequently, in order to understand what factors influenced individuals in New Zealand who have committed methamphetamine offences to offend in general, and to also engage in drug offending, more data from non-police sources is recommended ¹⁴. Indeed, most individuals in the 1990-1994 cohort examined in this report had committed offences before their first recorded methamphetamine offences which suggests that targeting factors in order to prevent early offending is key. Supplementary qualitative work with individuals to record their personal experiences may also help to understand what factors might predict methamphetamine related offending in a New Zealand context, and provide a better understanding as to when methamphetamine use occurred, and to what degree usage influenced offending outside of the offending that came to police attention.

¹⁴ It is acknowledged that there will be challenges in combining datasets due to the lack of consistent identification information used across agencies.





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