

The Policing of Drugs in New Zealand

By: Dr Sheree de Malmanche, Chief Data Scientist

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The Policing of Drugs in New Zealand

Overall Summary

This report provides an overview of the policing of drugs in New Zealand. It focuses on changes to policing since the Amendments to the Misuse of Drugs Act (MODA) 1975 in August 2019. The report focuses on all events and occurrences pre and post the MODA Amendments, involving the personal possession and use of controlled drugs, and the possession of utensils. As most incidents or occurrences do not occur in isolation, all offences, incidents, and tasks were assessed in relation to an incident. All actions taken by Police were assessed, considering a person's age, past offending history, and other offences committed at the same time.

Post the MODA Amendments there has been:

- A significant decrease in the number of prosecutions taken by Police in relation to personal drug possession and use offences (down by an average of 250 prosecutions per month)
- A significant increase in alternative actions taken by Police in relation to personal drug possession and use offences including:
 - An average of 398 written and verbal warnings issued each month
 - An average of 93 offences that are closed each month due to Police Discretion
 - An average of 56 referrals to youth services each month
 - An average of 32 referrals per month to health and addiction services
 - An average of 29 referrals per month to Te Pae Oranga Iwi Community Panels

Post Amendments - of people with no prior cleared offences:

- 83% of adults and 99% of youth received an alternative action, and
- 17% of adults and 1% of youth were prosecuted for the possession and use of controlled drugs, and/or utensils

Post Amendments - of people with one or more prior cleared offence:

- 42% of adults and 76% of youth received an alternative action, and
- 58% of adults and 24% of youth were prosecuted for the possession and use of controlled drugs, and/or utensils

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Methodology:

SAS Software was used to identify significant changes in police calls for service, occurrences, and clearances for personal drug possession and use offences pre and post the MODA amendments in August 2019. For comparison, data was assessed from 1 January 2016 to 30 June 2023.

Analysis of Variance (ANOVA) using a general linear model, Tukey's Honest Significant Difference Test, and pairwise t-tests were performed for key variables pre and post the MODA amendments. Random forest modelling and linear discriminant analysis was also used to build prediction models for police actions (in relation to drug possession and use offences) pre and post the MODA amendments.

Conclusions:

The data and subsequent analysis revealed significant changes in the policing of personal drug possession and use offences pre and post the MODA amendments in August 2019. Significant increases were seen in the number of warnings, and other alternative actions taken, for the personal possession and use of drugs since August 2019. Significant changes were seen for:

- first-time offenders, as well as
- people with one or more prior cleared offence.

The actions taken by Police in relation to drug possession and use offences post the amendments was quite distinct from the actions taken for other offences that occurred at the same time. For adults, alternative actions for drug possession and use offences post the MODA amendments increased to 83% for first-time offenders, while the prosecution rate dropped to 17%. In contrast, the prosecution rate for other offences (committed at the same time) was 70-93%, depending on the persons offending history and the severity of their offending. There was no significant difference between the proportion of alternative actions and prosecutions taken against Europeans, compared to Māori, and other ethnic groups, for personal drug possession and use offences.

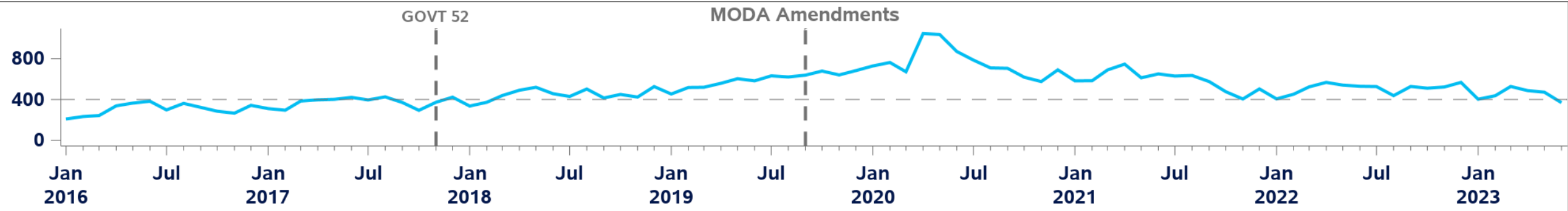
Regular monitoring and reporting will be key to ensuring Police's response to personal drug possession and use remains in line with both public and Government expectations going forward.



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Alternative actions taken by Police in relation to drug possession and use offences have significantly increased post the MODA amendments - by an average of 194 per month.

Graph showing alternative actions by Police in response to personal drug possession & use offences - Pre & Post Amendments



Statistical analysis:

No. of Reported Events per Month	Mean	Median	Standard Deviation	Minimum	Maximum
1. Pre-MODA GOVT 50-52	409	400	105	209	632
2. Post-MODA GOVT 52	603	580	147	369	1,046

Tukey Comparison	Difference Between Means	Lower 99.9% CI Limit	Upper 99.9% CI Limit	Significance
2. Post-MODA GOVT 52 - 1. Pre-MODA GOVT 50-52	194	102	286	<.001

ANOVA-GLM	Degrees of Freedom	Sum of Squares	Mean Square	F value	Significance
ANOVA: MODA Groups	1	849,792	849,792	52	<.001
Error	88	1,447,643	16,450	.	.

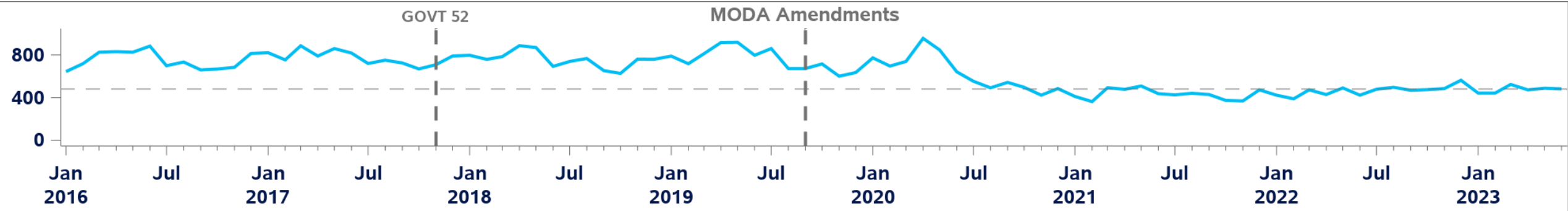
Analysis of Variance (ANOVA) was performed, to compare the number of alternative actions (e.g. warnings, youth referrals, etc) taken for drug possession and use offences pre and post the MODA amendments. The ANOVA showed there was a statistically significant difference between the mean number of alternative actions taken for these offences pre and post the MODA amendments (with an F-statistic of 52, and a p-value < 0.001). The number of alternative actions post the MODA amendments increased by an average of 194 per month



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Prosecutions taken by Police in relation to drug possession and use offences have significantly decreased post the MODA amendments - by an average of 250 per month.

Graph showing Prosecutions by Police in response to personal drug possession & use offences - Pre & Post Amendments



Statistical analysis:

No. of Reported Events per Month	Mean	Median	Standard Deviation	Minimum	Maximum
1. Pre-MODA GOVT 50-52	770	764	78	627	919
2. Post-MODA GOVT 52	520	484	128	363	956

Tukey Comparison	Difference Between Means	Lower 99.9% CI Limit	Upper 99.9% CI Limit	Significance
2. Post-MODA GOVT 52 - 1. Pre-MODA GOVT 50-52	-250	-326	-173	<.001

ANOVA-GLM	Degrees of Freedom	Sum of Squares	Mean Square	F value	Significance
ANOVA: MODA Groups	1	1,399,983	1,399,983	123	<.001
Error	88	998,062	11,342	.	.

Analysis of Variance (ANOVA) was performed, to compare the number of Prosecutions for drug possession and use offences pre and post the MODA amendments. The ANOVA showed there was a statistically significant difference between the mean number of Prosecutions taken for these offences pre and post the MODA amendments (with an F-statistic of 123, and a p-value < 0.001). The number of Prosecutions post the MODA amendments decreased by an average of 250 per month



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Post the MODA amendments, on average:

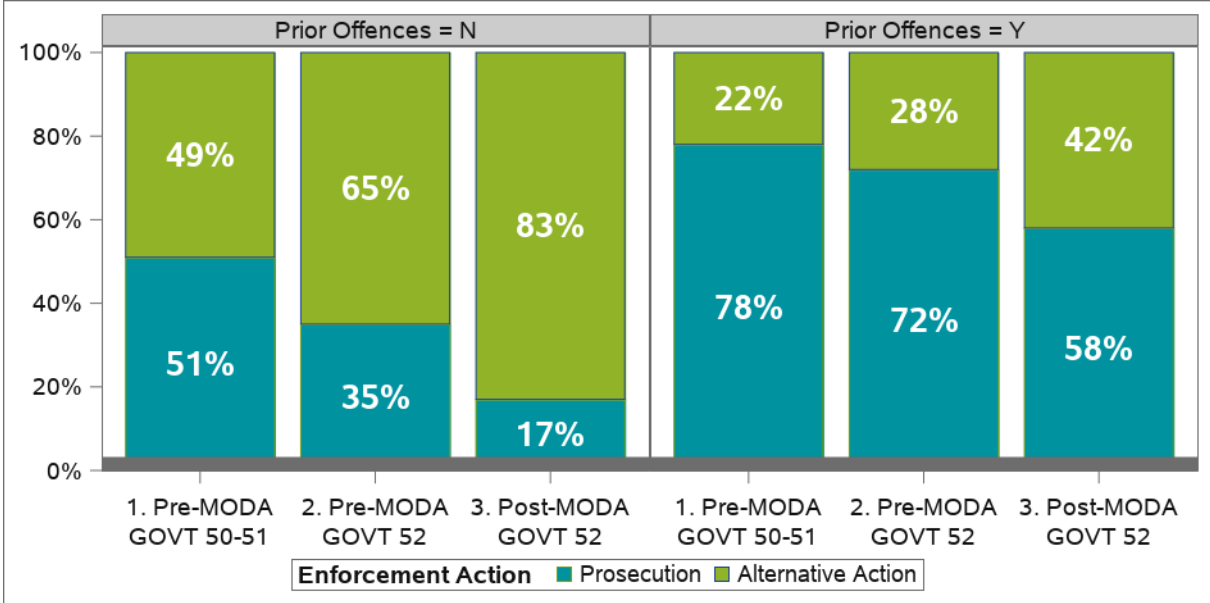
- 32 people per month were referred to health and addition services
- 93 drug possession offences were closed each month due to Police discretion
- 29 people per month were referred to Te Pae Oranga Iwi Community Panels
- 398 people per month received a warning
- 56 youth per month were referred to youth services
- 520 people were prosecuted

No. of Police Actions per Month		Mean	Standard Deviation	Minimum	Maximum
Health Referral	1. Pre-MODA GOVT 50-51	0	0	0	0
	2. Pre-MODA GOVT 52	0	0	0	0
	3. Post-MODA GOVT 52	32	10	2	52
Police discretion	1. Pre-MODA GOVT 50-51	27	32	1	85
	2. Pre-MODA GOVT 52	61	10	44	81
	3. Post-MODA GOVT 52	93	21	40	137
Te Pae Oranga	1. Pre-MODA GOVT 50-51	4	3	1	9
	2. Pre-MODA GOVT 52	14	7	4	33
	3. Post-MODA GOVT 52	29	12	3	67
Warning	1. Pre-MODA GOVT 50-51	286	43	200	352
	2. Pre-MODA GOVT 52	370	66	252	488
	3. Post-MODA GOVT 52	398	144	198	814
Youth Referral	1. Pre-MODA GOVT 50-51	20	9	4	33
	2. Pre-MODA GOVT 52	40	17	16	82
	3. Post-MODA GOVT 52	56	19	21	102
Prosecution	1. Pre-MODA GOVT 50-51	763	76	644	886
	2. Pre-MODA GOVT 52	776	80	627	919
	3. Post-MODA GOVT 52	520	128	363	956

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Post the MODA amendments:
83% of adults with no prior offences were warned or received another alternative action for the personal possession and use of controlled drugs, and/or the possession of utensils.
While 42% of adults with one or more prior offences received a warning or other alternative action.

Police Action based on Offending History for Adults



Analysis of Variance (ANOVA) was performed, to compare police actions for personal drug possession and use offences pre and post the amendments for adults. The ANOVA showed there was a statistically significant difference between the proportion of alternative actions and prosecutions taken against adults pre and post the MODA amendments for drug possession and use offences (with an F-statistic > 79, and a p-value < 0.001).

The graph shows that the proportion of prosecutions taken, post the MODA amendments, decreased to 17% for adults with no prior offences (labelled N), and decreased to 58% for adults with one or more prior cleared offence (labelled Y).

Statistical analysis:

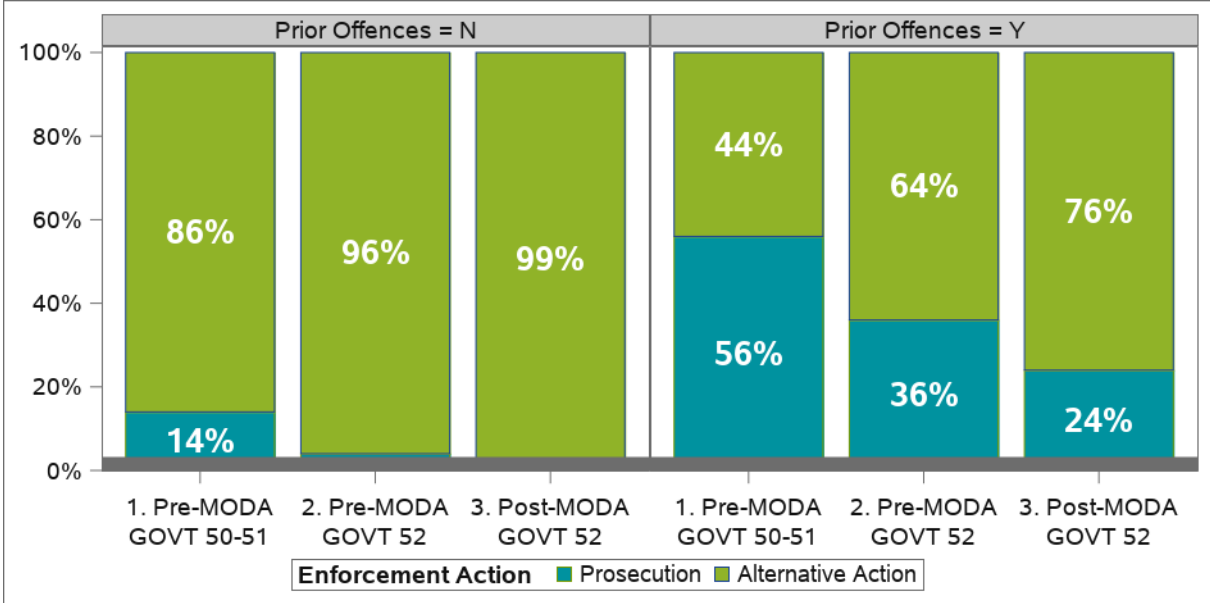
No. of Prosecutions per Month for Adults		Mean	Median	Standard Deviation	Minimum	Maximum
Prior Offences = N	1. Pre-MODA GOVT 50-52	97	95	32	44	200
	2. Post-MODA GOVT 52	40	40	16	19	86
Prior Offences = Y	1. Pre-MODA GOVT 50-52	652	659	72	498	800
	2. Post-MODA GOVT 52	472	444	114	320	869

Tukey Comparison: Prosecutions for Adults			Difference Between Means	Lower 99.9% CI	Upper 99.9% CI	Significance
2. Post-MODA GOVT 52 - 1. Pre-MODA GOVT 50-52	Prior Offences = N		-58	-76	-39	<.001
	Prior Offences = Y		-180	-249	-111	<.001

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Post the MODA amendments:
99% of youth with no prior offences were referred to youth services or received another alternative action for the personal possession and use of controlled drugs, and/or the possession of utensils. While 76% of youth with one or more prior offences received a referral or other alternative action.

Police Action based on Offending History for Youth



Analysis of Variance (ANOVA) was performed, to compare police actions for personal drug possession and use offences pre and post the amendments for youth. The ANOVA showed there was a statistically significant difference between the proportion of alternative actions and prosecutions taken against youth pre and post the MODA amendments for drug possession and use offences (with an F-statistic > 77, and a p-value < 0.01).

The graph shows that the proportion of alternative actions taken, post the MODA amendments, increased to 99% for youth with no prior offences (labelled N), and increased to 76% for youth with one or more prior cleared offence (labelled Y).

Statistical analysis:

No. of Prosecutions per Month for Youth		Mean	Median	Standard Deviation	Minimum	Maximum
Prior Offences = N	1. Pre-MODA GOVT 50-52	4	4	3	1	13
	2. Post-MODA GOVT 52	1	1	1	1	4
Prior Offences = Y	1. Pre-MODA GOVT 50-52	16	15	6	7	33
	2. Post-MODA GOVT 52	8	7	3	3	17

Tukey Comparison: Prosecutions for Youth			Difference Between Means	Lower 99.0% CI	Upper 99.0% CI	Significance
2. Post-MODA GOVT 52 - 1. Pre-MODA GOVT 50-52	Prior Offences = N		-3	-5	-0.3	<.01
	Prior Offences = Y		-9	-11	-6.1	<.01

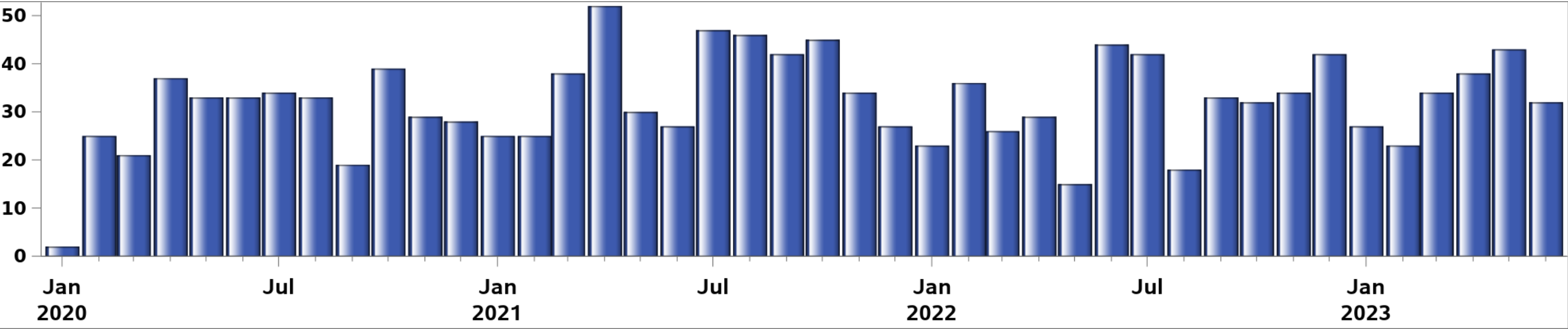
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Post the MODA amendments:

On average 32 ± 10 people per month were referred to health and addiction services

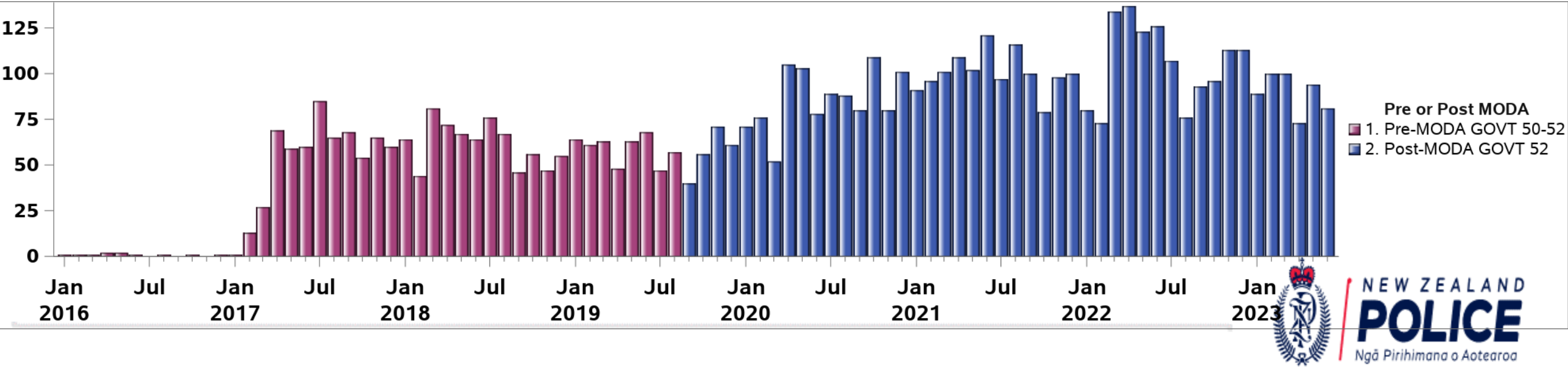
On average 93 ± 21 drug possession offences were closed each month due to Police discretion

Health Referrals recorded in Police Databases from January 2020



In 2019 a new national referral pathway to Whakarongorau Aotearoa’s Alcohol Drug Helpline was established by the Ministry of Health and Police to support the implementation of a health-based approach. All referrals from January 2020 are shown in the graph above (based on data held centrally).

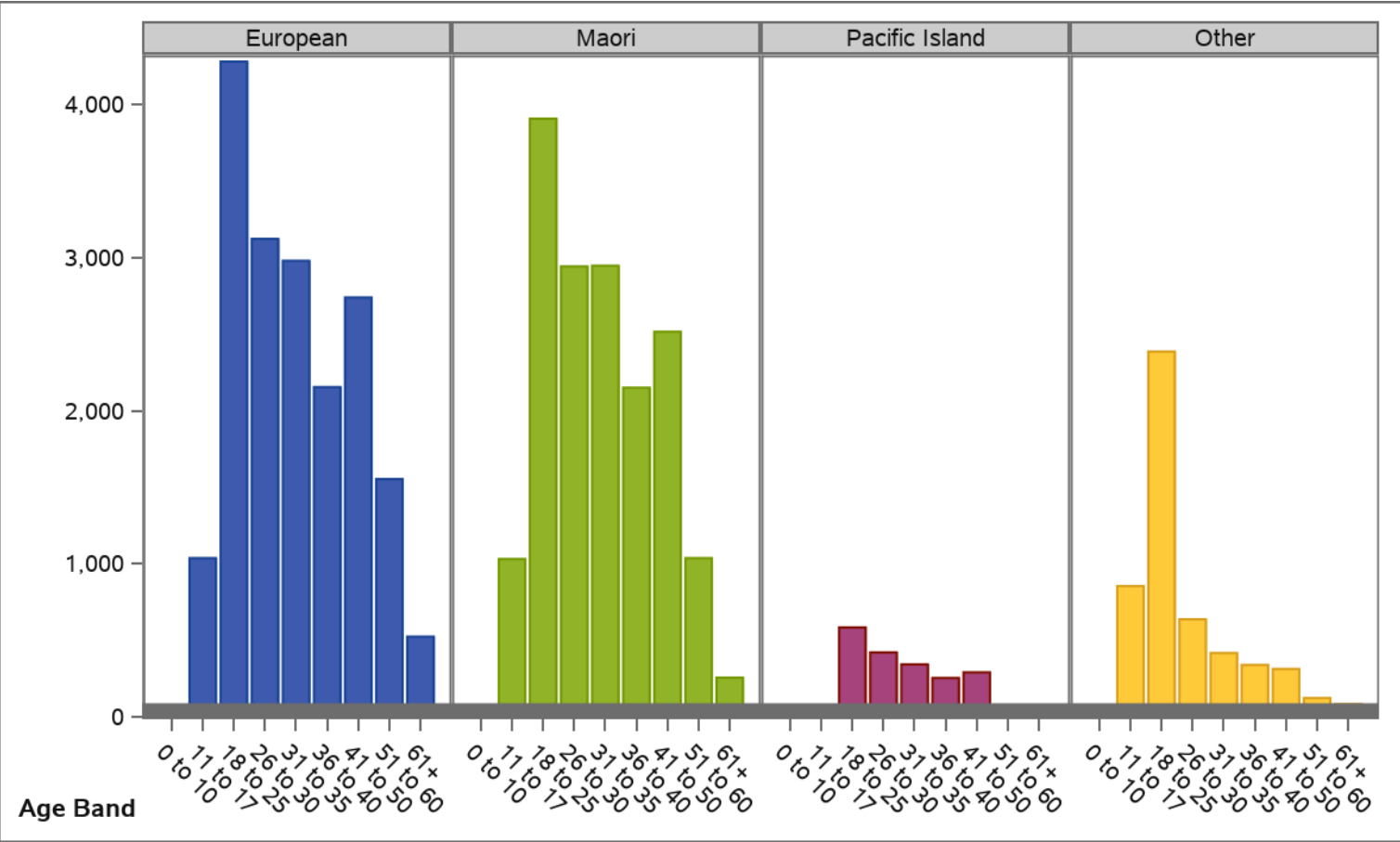
Police Discretion recorded in Police Databases from January 2016



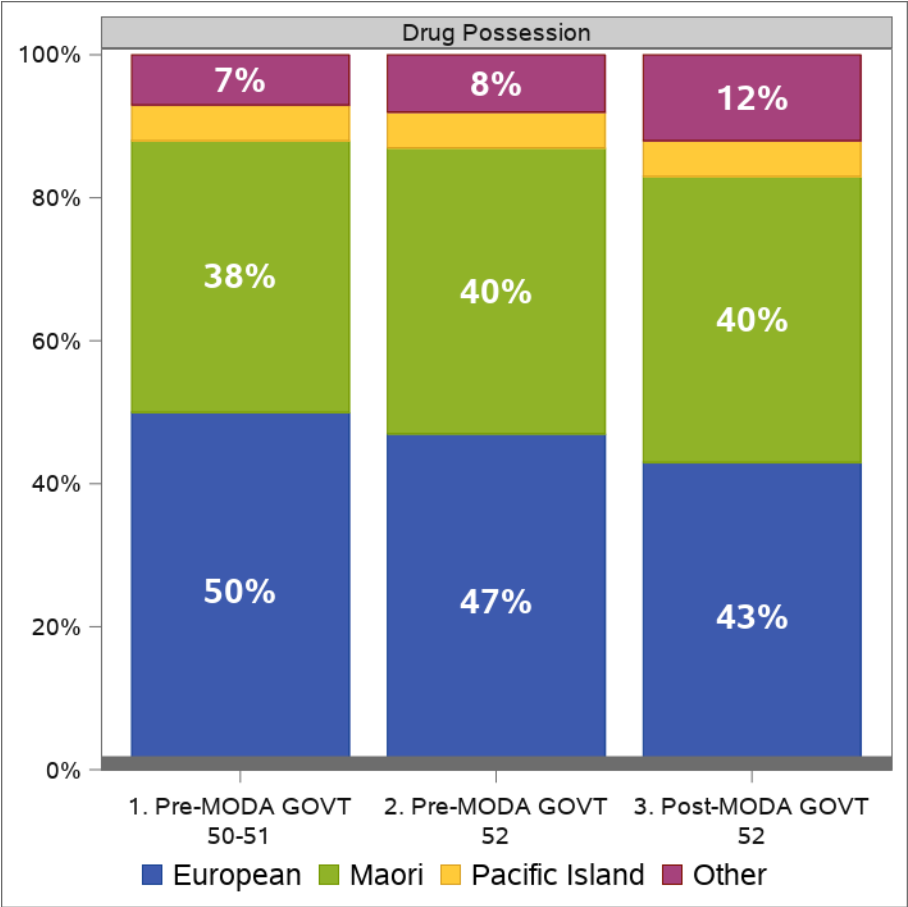
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Most people with drug possession and use offences post the MODA amendments were between 18-35 years of age. They were also primarily European (43%) and Māori (40%)

Age and Ethnicity of People with Drug Possession and Use Offences from September 2019



Ethnicity of people with drug possession offences

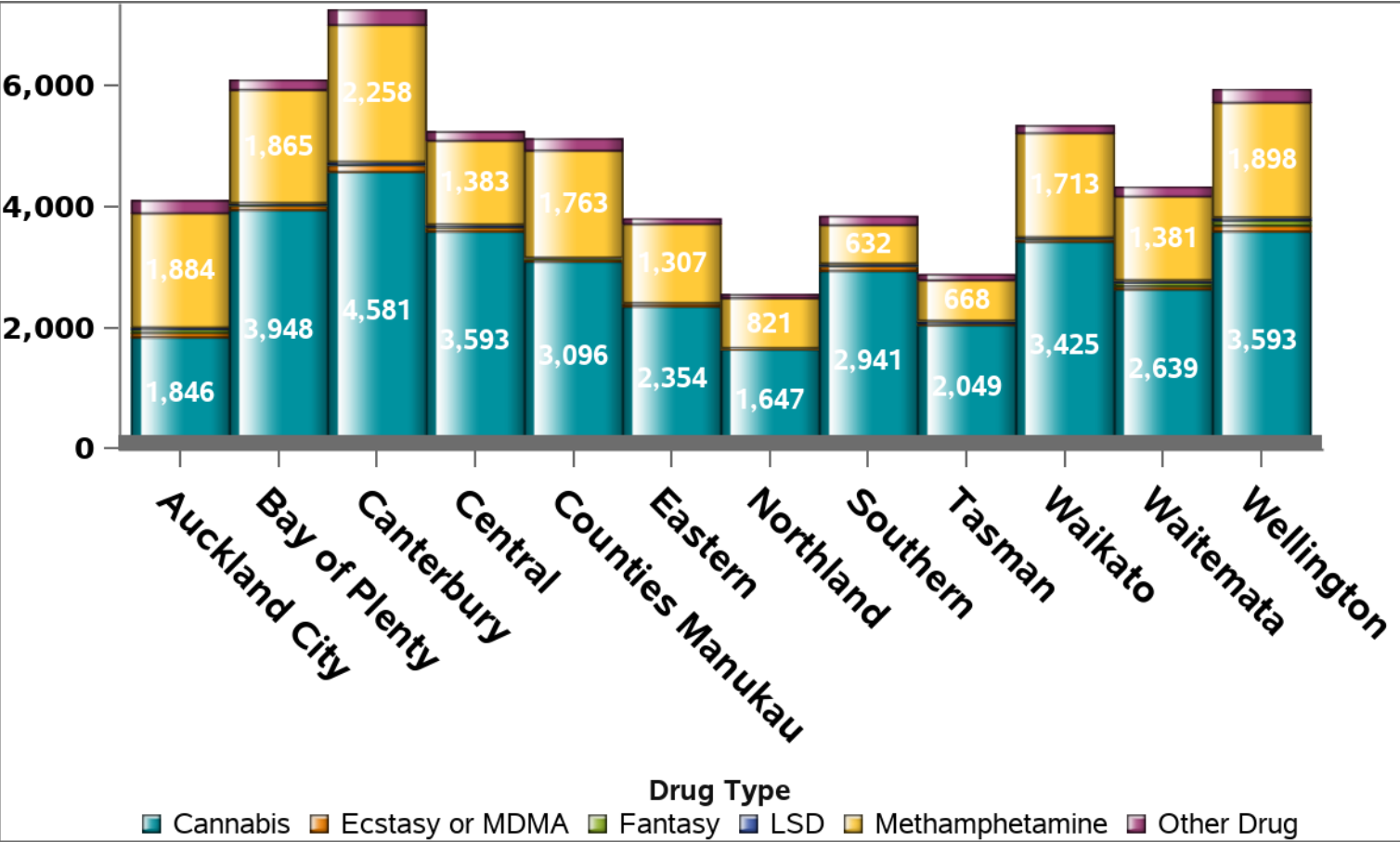


Māori are over-represented in these statistics, given that Māori comprise 17% of the national population.

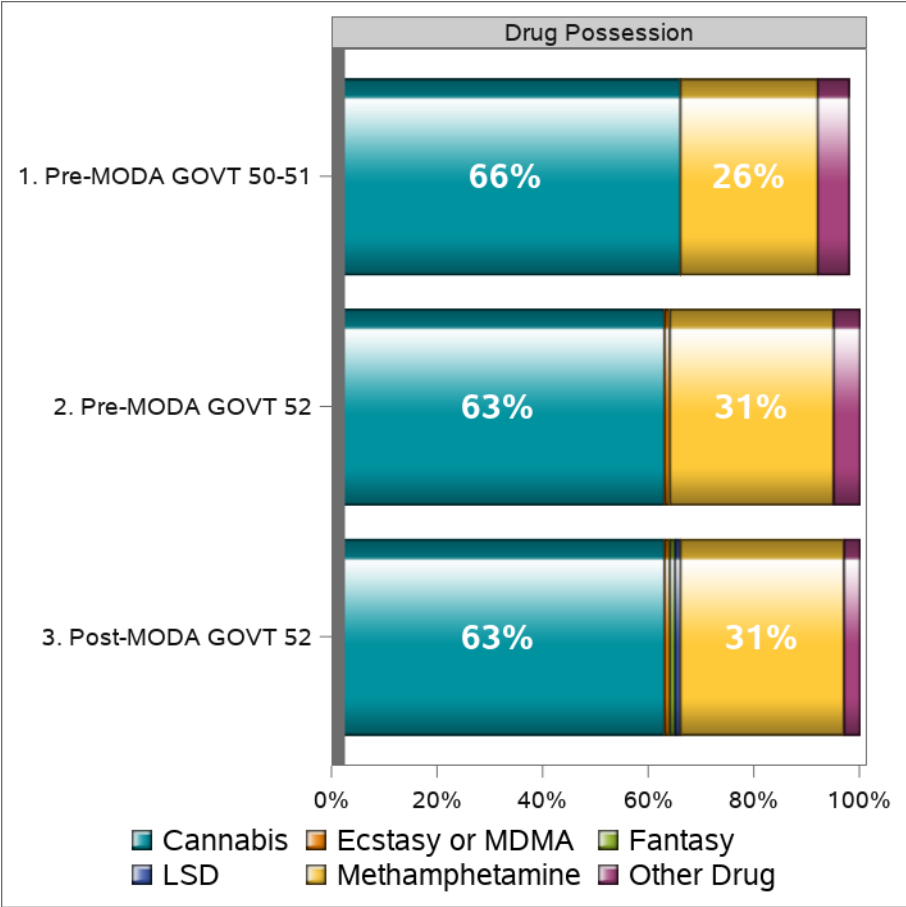
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Cannabis and Methamphetamine are the most common drugs involved in personal drug possession and use offences. Overall 63% are Cannabis-related and 31% are Methamphetamine-related

Drug Types by District - for Drug Possession and Use Offences from September 2019



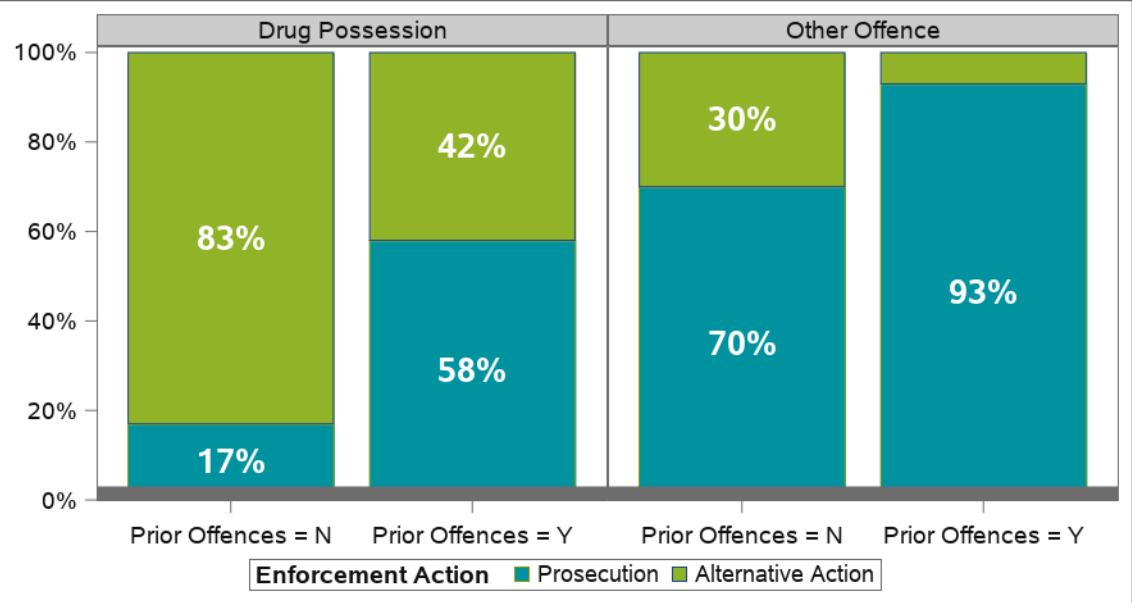
Drug Type for Drug Possession and Use Offences



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Drug possession offences often occur in conjunction with other offences. In adults, the actions taken by Police in relation to drug possession and use offences post the amendments was quite distinct from the actions taken for other offences that occurred at the same time

Police Action based on Offending History for Adults



Analysis of Variance (ANOVA) was performed, to compare Police actions post the MODA amendments for personal drug possession and use offences with other offences committed at the same time (for adults). The ANOVA showed there was a statistically significant difference between the proportion of alternative actions and prosecutions taken for drug possession, compared to other offences committed at the same time for adults (with an F-statistic > 680, and a p-value < 0.001).

The graph shows the proportion of prosecutions taken, post the MODA amendments decreased to 17% for adults with no prior offences (labelled N). In contrast, the proportion of prosecutions taken, against adults for other offences committed at the same time was 70% (labelled N).

Statistical analysis post the MODA amendments:

Percentage of Prosecutions per Month for Adults			Mean	Median	Std Dev	Minimum	Maximum
Drug Possession	Prior Offences = N	Prosecution	17%	16%	5%	7%	32%
	Prior Offences = Y	Prosecution	58%	59%	5%	48%	71%
Other Offence	Prior Offences = N	Prosecution	67%	68%	12%	38%	90%
	Prior Offences = Y	Prosecution	93%	94%	2%	83%	97%

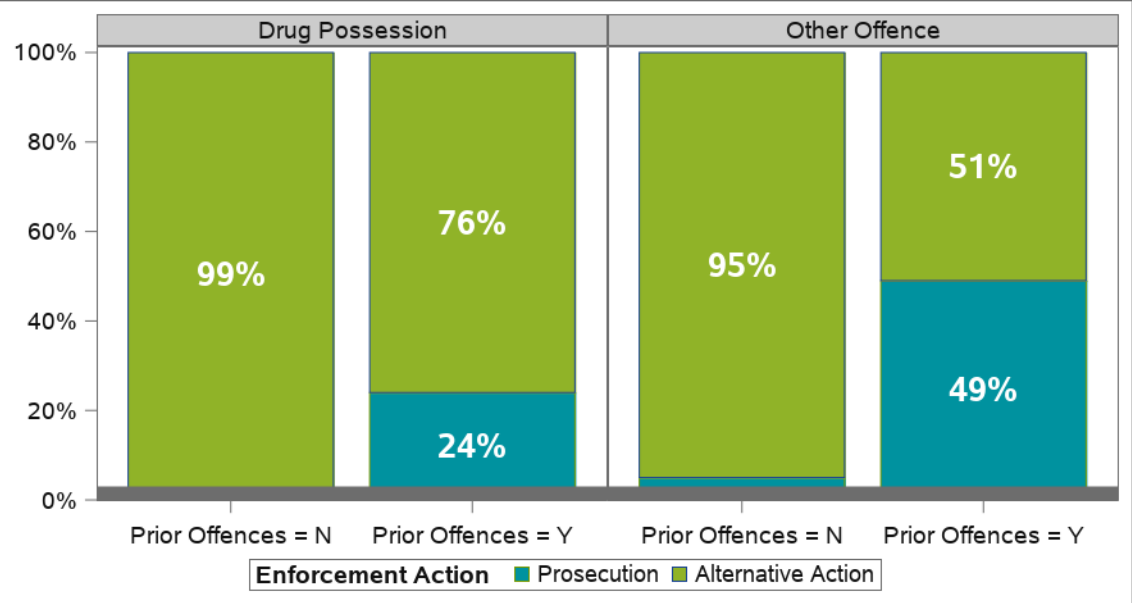
Tukey Comparison: Prosecutions for Drug Possession versus Other Offences			Difference Between Means	Lower 99.9% CI	Upper 99.9% CI	Significance
Drug Possession - Other Offence	Prosecution	Prior Offences = N	-51%	-57%	-44%	<.001
		Prior Offences = Y	-35%	-38%	-32%	<.001



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Drug possession offences often occur in conjunction with other offences. In Youth, the actions taken by Police in relation to drug possession and use offences post the amendments was quite distinct from the actions taken for other offences that occurred at the same time

Police Action based on Offending History for Youth



Analysis of Variance (ANOVA) was performed, to compare Police actions post the MODA amendments for personal drug possession and use offences with other offences committed at the same time (for youth). The ANOVA showed there was a statistically significant difference between the proportion of alternative actions and prosecutions taken for drug possession, compared to other offences committed at the same time for youth (with an F-statistic > 10, and a p-value < 0.001).

The graph shows the proportion of alternative actions taken, post the MODA amendments increased to 76% for youth with one or more prior offences (labelled Y). In contrast, the proportion of alternative actions taken against youth for other offences committed at the same time was 51%.

Statistical analysis post the MODA amendments:

Percentage of Prosecutions per Month for Youth			Mean	Median	Std Dev	Minimum	Maximum
Drug Possession	Prior Offences = N	Prosecution	1%	0%	2%	0%	9%
	Prior Offences = Y	Prosecution	25%	23%	10%	0%	45%
Other Offence	Prior Offences = N	Prosecution	4%	0%	6%	0%	24%
	Prior Offences = Y	Prosecution	45%	47%	17%	0%	82%

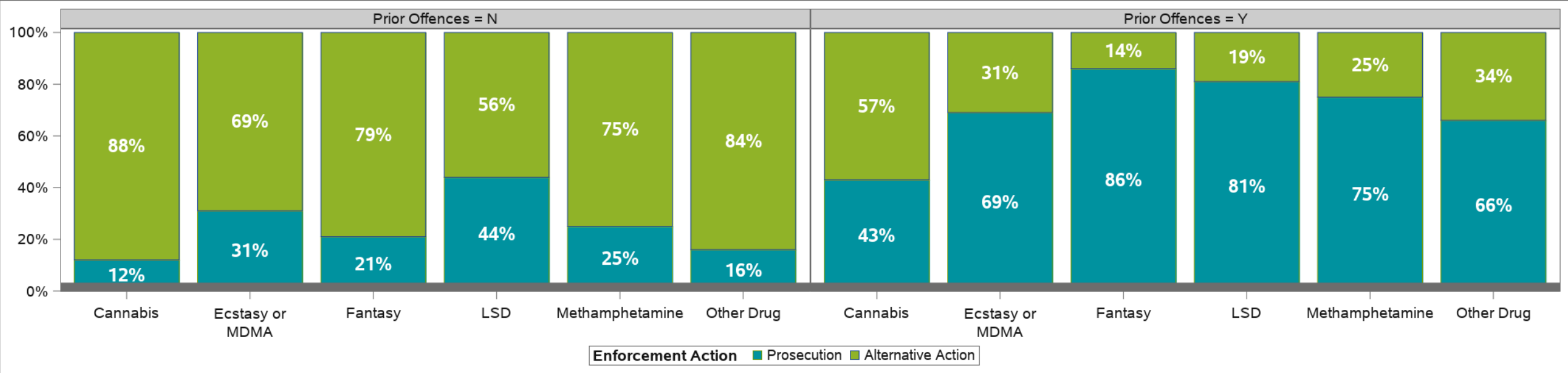
Tukey Comparison: Prosecutions for Drug Possession versus Other Offences			Difference Between Means	Lower 99.9% CI	Upper 99.9% CI	Significance
Drug Possession - Other Offence	Prosecution	Prior Offences = N	-3%	-6%	0%	.
		Prior Offences = Y	-21%	-31%	-11%	<.001



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Outcomes are drug-type specific - with more alternative actions being taken for cannabis-related offences. A greater proportion of people are prosecuted for Class A drug possession, particularly with a prior offending history

Police Action post the MODA amendments based on Offending History by Drug Type



Statistical analysis post the MODA amendments :

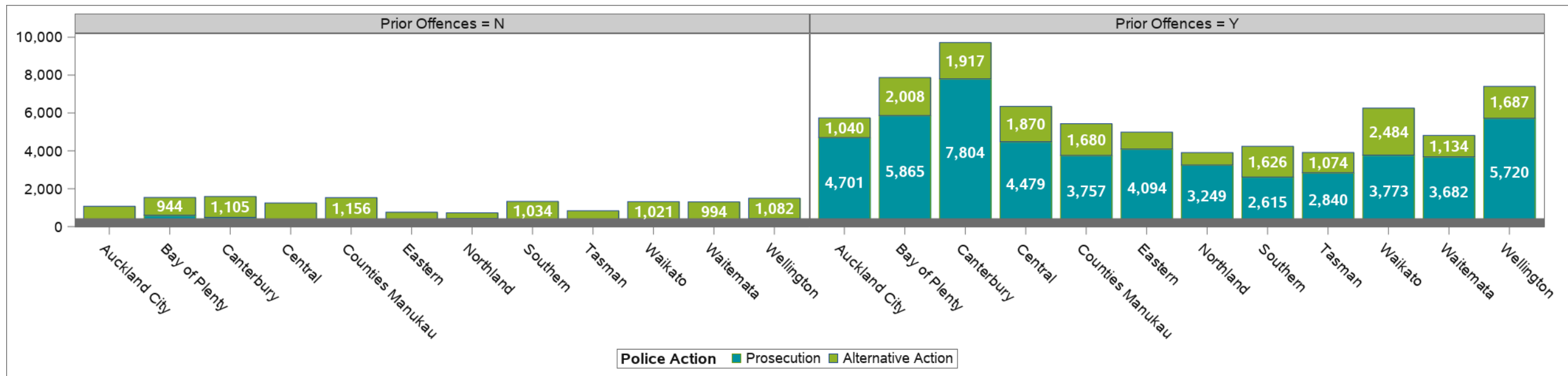
Percentage of Prosecutions per Month by Drug Type			Mean	Median	Std Dev	Minimum	Maximum
Cannabis	Prior Offences = N	Prosecution	12%	11%	5%	0%	26%
	Prior Offences = Y	Prosecution	42%	43%	8%	0%	57%
Ecstasy or MDMA	Prior Offences = N	Prosecution	27%	14%	32%	0%	100%
	Prior Offences = Y	Prosecution	69%	71%	19%	0%	100%
Fantasy	Prior Offences = N	Prosecution	8%	0%	26%	0%	100%
	Prior Offences = Y	Prosecution	79%	89%	32%	0%	100%
LSD	Prior Offences = N	Prosecution	35%	33%	38%	0%	100%
	Prior Offences = Y	Prosecution	81%	83%	19%	0%	100%
Methamphetamine	Prior Offences = N	Prosecution	25%	23%	13%	0%	54%
	Prior Offences = Y	Prosecution	74%	76%	12%	0%	87%



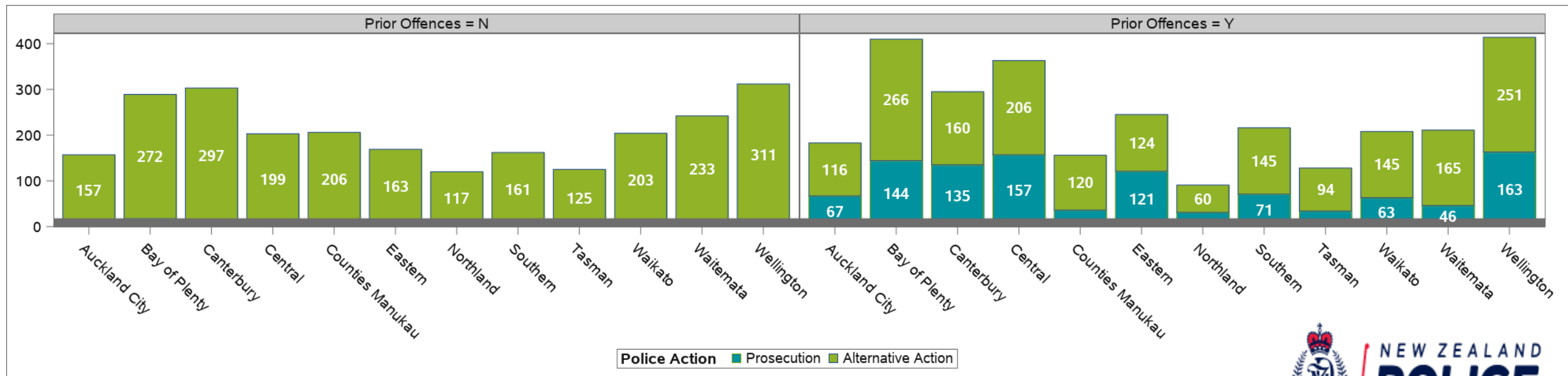
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Police Action for Drug Possession and Use Offences by Police District and Offending History. Prosecutions are primarily taken against adults with a prior offending history across all twelve Police Districts.

Police Action post the MODA amendments based on Offending History by District for Adults



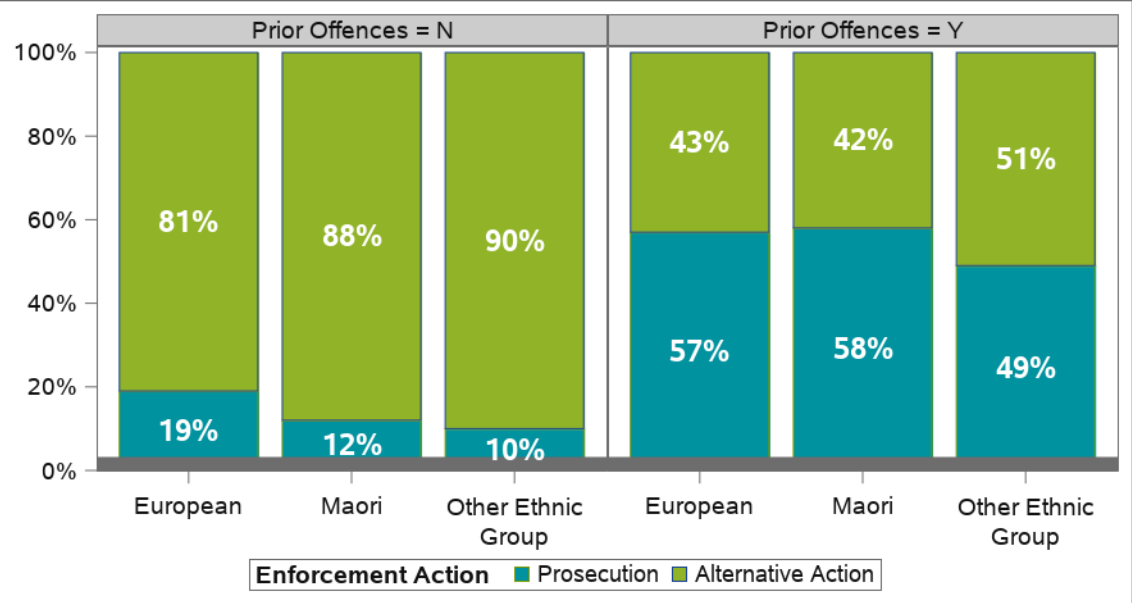
Police Action post the MODA amendments based on Offending History by District for Youth



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Outcomes based on Ethnicity: There was no significant difference between the proportion of alternative actions and prosecutions taken against Europeans, compared to Māori, and other ethnic groups, for personal drug possession and use offences

Police Action based on Offending History by Ethnic Group



Analysis of Variance (ANOVA) was performed, to compare Police actions post the MODA amendments for personal drug possession and use offences by ethnicity. The ANOVA showed there was no statistically significant difference between the proportion of alternative actions and prosecutions taken against Europeans and Māori for drug possession and use offences (with an F-statistic < 4, and a p-value > 0.01).

The proportion of alternative actions and prosecutions taken against Europeans and Māori were not significantly different post the MODA amendments for 1) people with no prior offences and 2) people with one or more prior offences.

Statistical analysis post the MODA amendments:

Percentage of Prosecutions per Month by Ethnic Group			Mean	Median	Std Dev	Minimum	Maximum
European	Prior Offences = N	Prosecution	18%	18%	7%	0%	37%
	Prior Offences = Y	Prosecution	57%	57%	10%	0%	74%
Māori	Prior Offences = N	Prosecution	12%	12%	6%	0%	27%
	Prior Offences = Y	Prosecution	57%	57%	10%	0%	71%
Pacific Island	Prior Offences = N	Prosecution	13%	0%	18%	0%	67%
	Prior Offences = Y	Prosecution	58%	61%	14%	0%	85%

Tukey Comparison: Prosecutions by Ethnic Group			Difference Between Means	Lower 99% CI	Upper 99% CI	Significance
Māori - European	Prosecution	Prior Offences = N	-6%	-15%	3%	
		Prior Offences = Y	1%	-8%		



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Variables that Distinguish Police Actions: Pre and Post the MODA Amendments in relation to Personal Drug Possession and Use.

Random Forest Modelling and Linear Discriminant Analysis were used to model and predict police actions pre and post the MODA amendments, in relation to personal drug possession and use offences.

Over 100 metrics were assessed in the models including offending history, offending frequency, ethnicity, age, and gender.

Police actions pre and post the MODA Amendments could be reliably predicted based on several key metrics. These metrics included:

- The age of the offender (e.g. youth vs adult)
- Recency of offending
- The offence type (e.g. warnings are more likely to be issued for procuring/possessing cannabis plants, possessing a pipe or utensils for cannabis, and for consuming/smoking/using cannabis plant than any other offence)
- Offence severity (measured by the NZ Crime Harm Index, National Offence Index, and other metrics)
- Prior offending history

Ethnicity and gender were neither predictive nor important in the model, suggesting they had little or no bearing on outcomes, both pre and post the MODA amendments.

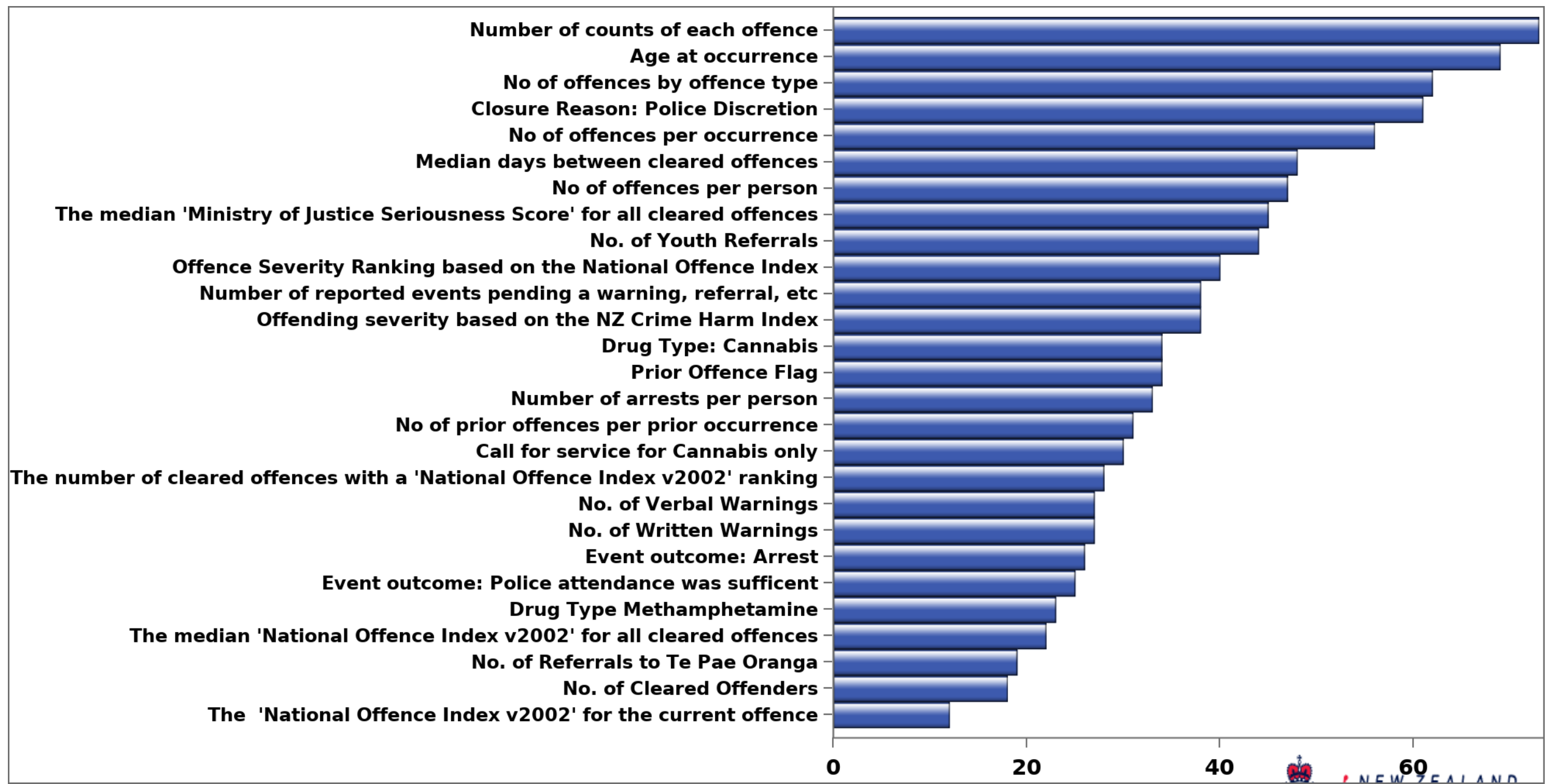
The random forest model had a:

- Sensitivity of 80%
- Specificity of 87%, and
- Test error rate of 16%

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Key Variables, and their Relative Importance in distinguishing Drug Possession Offences Pre and Post the MODA Amendments

Random Forest Modelling: The Relative Importance of variables based on the Mean Decrease in Accuracy (i.e. how much accuracy the model losses by excluding the variable)



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Appendix A: List of Drug Possession Offences and Other Related Offences covered in this Report

Cleared Drug Possession Offences: Post-MODA	Clearance No.	Common Related Cleared Offences: Post-MODA	Clearance No.
3252 - Procure/Possess Cannabis Plant	15,715	6851 - Unlawfully Carry/Possess Firearm/Restricted Weapon/Explosives	2,958
5985 - Possess/Uses Utensils Methamphetamine / Amphetamine	8,943	5931 - Supply/Admin/Deal Methamphetamine And Amphetamine	2,648
3284 - Possess Pipe or Utensil for Cannabis	6,776	1756 - Possess Offensive Weapon (Other)	2,481
5951 - Procure/Possess Methamphetamine And Amphetamine	6,246	3242 - Possess For Supply Cannabis Plant	1,556
3271 - Cultivate Cannabis	3,813	7191 - Failure To Answer District Court Bail	1,326
3262 - Consume/Smoke/Use Cannabis Plant	671	5941 - Possess For Supply Methamphetamine And Amphetamine	1,168
5952 - Procure/Possess Ecstasy	611	3232 - Sell/Give/Supply/Administer/Deal Cannabis Plant	1,168
3251 - Procure/Possess Cannabis Seed	515	1758 - Possess Knife In Public Place (Summ Off)	1,101
3185 - Possess Needle/syringe Etc For Drugs	425	3514 - Resist Police	797
3159 - Procure/Possess Other Drugs (Not Cannabis)	370	6857 - Unlawfully Carry/Possess Firearm/Ammunition/Explosives Public Place	696
3153 - Procure/Possess Lsd	330	B184 - Unlicensed Driver Failed To Comply With Prohibition	677
5953 - Procure/Possess Fantasy Type Substances	239	6827 - Unlawfully Possess Ammunition	637
3254 - Procure/Possess Cannabis Oil	237	L230 - Drove While Disqualified 3rd Or Subsequent	633
3281 - Permit Premises/Motor Vehicle Used For Cannabis Offence	185	D201 - Driving In A Dangerous Manner	624
3259 - Procure/Possess Cannabis Other Form	159	4417 - Receives Property (Over \$1,000)	536
3151 - Procure/Possess Cocaine	148	5127 - Wilful Damage	490
3157 - Procure/Possess Stimulants And Depressants	98	1545 - Assault on Person in Family Relationship	456
0000 - Other	88	4223 - Unlawful Gets Into/Upon Motor Vehicle/Motor Cycle	442
5961 - Consume/Smoke/Use Methamphetamine And Amphetamine	87	6856 - Unlawfully Possess Pistol/Restricted Weapon	428
3253 - Procure/Possess Cannabis Resin	85	B223 - Failed to stop when followed by red/blue flashing lights - aggravated	398
3181 - Permit Premises/Motor Vehicle Used For Drug Offence	51	4211 - Unlawful Takes Motor Vehicles (Motor Cars/Trucks Etc)	359
3154 - Procure/Possess Morphine	45	B110 - Failed to stop when followed by red/blue flashing lights	332
3156 - Procure/Possess Other Opiates	28	3518 - Obstruct/Hinder Medical Officer of Health or Person Assisting Med Officer	329
3169 - Consume/Smoke/Use Other Drugs (Not Cannabis)	23	3511 - Obstruct/Hinder Police	319
3261 - Consume/Smoke/Use Cannabis Seed	22		
3269 - Consume/Smoke/Use Cannabis Other Form	17		