



Wastewater Pilot Programme – June 2017 Update

We know that drug use causes significant harm in our communities so in December 2016 New Zealand Police began a wastewater pilot programme to get an accurate assessment of the prevalence of drug use in the community.

This pilot programme is a study of wastewater for population drug use. The technique has been used in Europe for approximately 10 years, and complements existing methods of drug intelligence gathering.

When people consume drugs, they are processed by the body into other compounds (metabolites). A mixture of the parent compounds (drug taken) and associated metabolites are excreted and make their way into the wastewater system.

This approach is non-invasive and provides quantitative, near-real-time data for authorities to detect changes over time and as they occur. It is not able to identify the drug habits of individual people, but measures the drug use in communities as a whole.

The results will be primarily used to:

- inform treatment and enforcement strategies
- measure the effectiveness of education and enforcement interventions
- make comparisons with international data.

Wastewater collected from Christchurch and Auckland's Rosedale treatment plant is tested by the Institute of Environment Science and Research for methamphetamine, cocaine, heroin, alpha-PVP and MDMA.

Samples are collected from the wastewater facilities and analysed for one week every month and will be reported publicly on a quarterly basis through this report. The latest update is available on the Police website at www.police.govt.nz.

The pilot began in December 2016 and will run for 12 months. The initial testing will be used to form a baseline to inform the future analysis of results.



The Results

The following tables outline the key results for the three rounds of testing.

Testing Site: Christchurch	Total Grams per Week					
	December 2016	January 2017	February 2017	March 2017	April 2017	May 2017
Methamphetamine	731	458	798	536	564	676
Cocaine	Not detected	6	25	30	24	23
a-PVP	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
MDMA	261	142	120	154	172	192
Heroin	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

Testing Site: Auckland	Total Grams per Week					
	December 2016	January 2017	February 2017	March 2017	April 2017	May 2017
Methamphetamine	734	648	730	865	657	664
Cocaine	92	40	49	60	69	75
a-PVP	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
MDMA	111	97	51	114	84	112
Heroin	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

Not detected means the concentration of the drug or metabolite in the wastewater sample was below the method limit of detection.

Commentary

The six months of wastewater results above, show a small fluctuation in the amount of meth cocaine and MDMA detected at both sites, while alpha PVP and heroin were consistently not detected. The current focus of the programme is to establish a baseline of what consumption looks like among the population covered by the two testing sites.