



Locating Methamphetamine Manufacture in New Zealand

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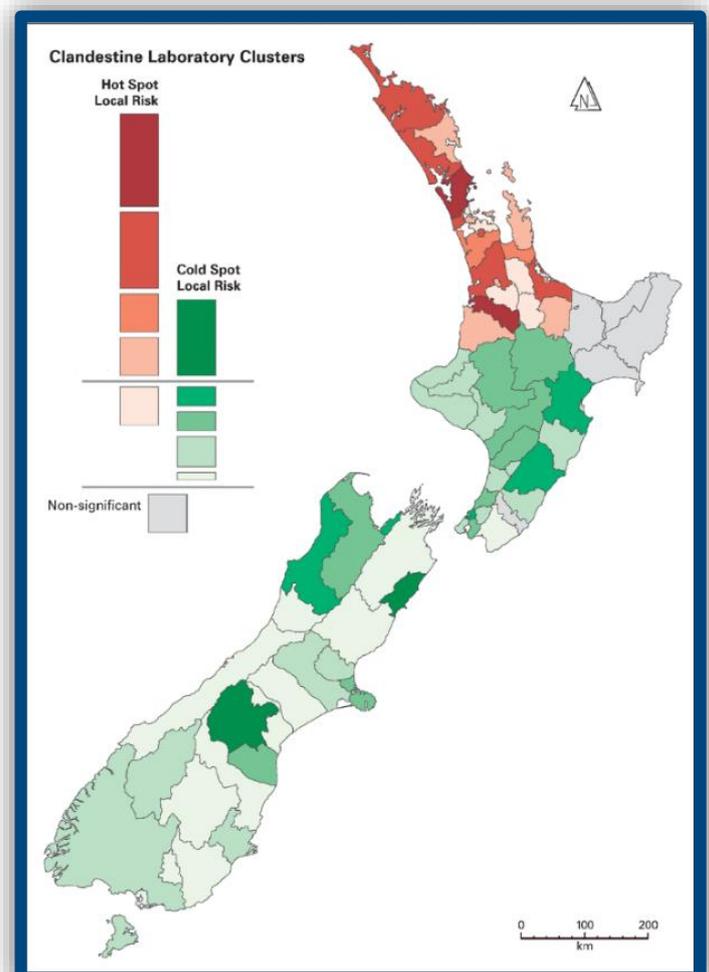
About the Research

Methamphetamine, or 'P' (for 'pure') as it is known colloquially in New Zealand (NZ), is a stimulant drug with high addiction liability. The World Health Organization argues that such drugs are a serious threat to the health, social and economic fabric of families, communities and countries and has called on researchers to map the extent of the problem and possible remedies.

There are strong regional trends in Methamphetamine Lab location that cannot be effectively explained by socio-demographic or ecological factors. Social norms in communities also matter, meaning community action groups could become a focus for intervention.

Methamphetamine can be manufactured with relative ease in houses, barns, motel rooms, and the boots of cars using common household products, automotive supplies, fertilizers, and cold medications containing pseudoephedrine. However, cooking methamphetamine is potentially dangerous as it involves caustic chemicals, toxic gases, and volatile reactions, with severe health repercussions. Those who cook the drug are also moderate to heavy users. Those who are likely to be users differ across communities but research tells us that the predictors of methamphetamine use differ substantially from those of other types of drugs such as cannabis, cocaine, and heroin, suggesting a strong ecological or 'risk environment' component to methamphetamine use patterns.

Clandestine laboratories producing methamphetamine first came to NZ Police attention in 1996, after which the number of police laboratory seizures increased, peaking in 2006 with 211 recorded seizures then reducing to 77 in 2013. Here we outline the prevalence and regional distribution (by census area of usual residence), of clandestine laboratories in NZ cities and urban areas based on 1056 seizures undertaken between 2004 and 2009. We also adjusted for median income, median age and area deprivation level.



We found that there were 11 territorial authorities that had no clandestine laboratory seizures between 2004 and 2009 and seizures were less common in the South Island and in rural areas. By contrast, laboratories were far more prevalent in the upper half of the North Island, particularly the Auckland area even after adjusting for population size. Nearly half of the NZ Police's Clandestine Laboratory Response Team's (CLRT's) seizures occurred in the seven local authorities that make up the current Auckland Council: Auckland City, North Shore City, Franklin District, Manukau City, Papakura District, Rodney District, and Waitakere City. Hamilton, and the Far North territorial authorities also featured as high-concentration areas.

In terms of socio-economic factors, we found that areas with a younger median age, lower median income, and rural land-use type were at greater risk for harbouring clandestine laboratories, while the strongest predictor was community-level deprivation. Adjusting for these four factors explained the high rates in the two Auckland clusters and the Far North cluster, however, the persistence of the Helensville and Hamilton clusters indicate there are other unknown actors that matter to lab presence.

Two key conclusions can be drawn from our research. First, we see that the prevalence of clandestine methamphetamine laboratories exhibits strong regional trends that cannot be effectively explained by socio-demographic or ecological correlates. Community-level influences such as social norms may play a significant role in influencing clandestine laboratory presence meaning community action groups could become a focus for interventions and prevention efforts.

Second, there is value in using Geographical Information Science (GIS) to track drug trends, particularly methamphetamine, thereby providing an evidence base for future policy interventions. The problem of clandestine methamphetamine production naturally comprises spatial elements that put some communities at greater risk than others. Geospatial tools and methods can be used to enhance NZ's current efforts to measure the impact of the Methamphetamine Action Plan's policies, to monitor trends in methamphetamine-related crime, to observe the status of contaminated and remediated properties, or to target educational campaigns aimed at prevention methamphetamine use.

Policy Recommendations

- Prevention and treatment resources, including community-level interventions and educational campaigns should be targeted at identifiable hotspots;
- More use should be made of GIS in examining health and crime data to guide law enforcement and public health intervention efforts;
- Given the majority of clandestine laboratories (77%) were located in houses, a public National Register of Clandestine Methamphetamine Laboratories be established for homeowners and renters who want to protect their families from exposure to methamphetamine contaminated homes;
- Further research be conducted on methamphetamine manufacture-related health harms. Hospital-based studies would be ideal for identifying health symptoms and injuries consistent with methamphetamine use and/or manufacture.

To find out more about this research, including related publications, please visit:

<https://unidirectory.auckland.ac.nz/profile/d-exeter>

<https://unidirectory.auckland.ac.nz/profile/d-newcombe>

You can also read the full article here:

<https://academic.oup.com/policing/article/doi/10.1093/police/pax013/3748247/The-Geography-of-Methamphetamine-Manufacture-in>

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