



# The impact of clandestine laboratories

Dealing with drug contamination in Australia's property market

It's an investment property owner's worst nightmare. Forget about unauthorised pets or the rent being a few weeks in arrears, today's real estate market has a new scourge — clandestine laboratories.

A clandestine laboratory (or clan lab) is a location used for the manufacture or preparation of illegal substances, such as drugs, explosives and biological or chemical weapons. While the term 'laboratory' conjures up images of sterile surfaces and white lab coats, the reality is a nightmare!

Clan labs can be temporary and transient and can be set up virtually anywhere – commercial premises, vehicles, watercraft, hotel and motel rooms, purpose-built facilities and residential properties ranging from single-dwelling houses through to high-rise apartments. They're generally built and operated by unscrupulous and unskilled people with no regard for the property of others.

## MAINLY METHAMPHETAMINE

Australia's property market — including short-term and holiday rentals — is increasingly open to the threat of clan lab set-ups used specifically for the manufacture of methamphetamine. It's enough of a concern that the Australian Crime Commission (ACC) developed a comprehensive set of guidelines for clandestine drug laboratory remediation, in which it identified methamphetamine (and its derivatives) as the illicit substance most commonly manufactured in premises seized by law enforcement agencies.

The guidelines advise that the individuals involved usually lack adequate knowledge and/or the technical skill levels required to perform the operations they undertake and therefore tend to use improvised and unsuitable equipment in their endeavours. Likely outcomes of this mismanagement include 'vessel failures, spillages and escapes of reaction materials'.

The ACC guidelines say the combination of 'compromised safety and inappropriate facilities presents a high likelihood that some level of environmental contamination will be a legacy of most clandestine laboratory sites'.

Contamination can have serious effects on the wellbeing of inhabitants of those properties if remediation is not appropriately handled. Methamphetamine production leaves chemical residue — in solid, liquid and gaseous form — that can pervade fixtures and fittings including carpets and other floor coverings, curtains and blinds, gyprock walls, air conditioning systems, drains, furniture and general household contents.

To make matters worse, manufacturing methamphetamine creates a lot of waste – up to 10 kilograms for each kilo of the finished product, depending on the production processes being used. If that auxiliary material is disposed of on or near the premises, the risk to occupants of the property escalates, as both the plumbing and septic systems can be tainted, as well as exterior areas including gardens. Harmful meth manufacture by-products include heavy metals, carcinogens and phytotoxic substances.

## WHERE ARE CLAN LABS LOCATED?

enHealth is a standing committee that includes members of Australian Commonwealth, State and Territory health departments, the New Zealand Ministry of Health and the National Health and Medical Research Council.

In January 2017, the committee released a paper titled '[enHealth Guidance on: Clandestine Drug Laboratories and Public Health Risks](#)' and it paints a grim picture of the impact in Australia. Some of the more notable statistics:

- › 68.4% of detected labs are either in or adjacent to domestic dwellings
- › The number of clan lab detections in Australia has more than doubled since 2002
- › In Victoria, there has been an eightfold increase
- › Queensland is disproportionately represented, comprising 40% of total detected labs in 2014-15
- › For every identified lab, **at least 10** will go undetected

Undetected labs pose the greatest threat, because people may be 'subject to two or more times the duration/dose exposure level than would be found with people from "busted" labs', according to the enHealth report.

## WHAT'S THE HARM?

Exposure occurs through skin contact with contaminated surfaces, as well as inhalation of the chemicals and organic compounds. Symptoms of exposure are broad, so it can initially be difficult to pinpoint the cause.

Signs include disrupted sleep, or difficulty getting to sleep. Affected individuals may also experience very vivid dreams. When awake, they can display heightened anxiety levels and children often exhibit notable behavioural changes — likened to those associated with ADHD.

Physical contamination indicators include nausea, headaches, skin rashes and respiratory difficulties, such as the wheezing normally seen in asthma sufferers. Unchecked, contamination can lead to damage of the brain, liver and kidneys.

In late 2016, [reports surfaced](#) of a six-year-old Melbourne boy recording levels of meth in his system equal to that of an adult low-level user. He was contaminated after his family had moved into a new home and were unknowingly living in a former drug lab.

Despite conducting all the usual pre-purchase inspections, no-one thought to test for methamphetamine. The boy's parents first became aware that something was wrong when his behaviour at school drastically changed. His physical health also deteriorated and subsequent testing exposed methamphetamine in his system. Twelve months after the house was purchased, analysis revealed that methamphetamine contamination was 40 times the normal level. The family subsequently abandoned the property and their possessions.

## HOW CAN YOU SPOT PROPERTY CONTAMINATION?

In short, you can't necessarily see any signs.

Clan labs aren't permanent and can be constructed and dismantled quickly. The length of time they remain operational is at the pleasure of the users and some may be disassembled after only one cook. Building contamination concentration will vary according to frequency of manufacture and operational duration, but even the most productive operations can display no visible signs of toxicity in the property.



The chemical by-products of meth production seep into porous surfaces and heavy contamination can even compromise the timber structure of the house. Surface remedies — such as painting over plasterboard or steam cleaning carpets — are completely ineffective, as the chemical will leach back through. Remediation treatments range from chemical washes through to complete knock-downs, with the average scenario requiring the removal and replacement of internal walls, ceilings, carpets and insulation.

While former labs often go undetected, there are some indicators to be on the lookout for;

- › Signs of chemical exposure including rusting or corrosion in drains or acid burns on walls and other surfaces
- › Yellow staining on walls, benches, sinks and other surfaces
- › Discolouration of extraction fans, filters and vents
- › Noticeable chemical odours

## RISK EXPOSURE BEYOND CLAN LABS

The health risks when exposed to premises formerly used for meth manufacture are significant, but there is also threat associated with locations where the drug has been consumed, as opposed to produced.

**enHealth puts the number of people potentially exposed to some level of incidental health risk in this category in the tens of thousands.**

## WHAT CAN BE DONE?

Surface drug testing technology detects the invisible residue left from drug manufacture or use. Virtually any surface can be tested including walls, ceilings, floors, benchtops, windowsills, sinks, vents, furniture and appliances. The Securetec DrugWipe 1A device from Pathtech is easy-to-use and delivers reliable, accurate results in just eight minutes. Designed specifically to detect methamphetamine, it is fully compliant with the recently released New Zealand standard - NZS 8510:2017 Testing and decontamination of methamphetamine contaminated properties.

The NZ standard was developed in response to the growing number of property buyers requesting contamination checks and there are increasing calls in Australia for drug testing to be offered as part of pre-purchase home inspections. For property managers and investors who suspect illicit behaviours, regular checks using surface drug testing technology is a simple solution that delivers significant peace of mind, without the need to engage expensive specialist testing services.

**For further information on DrugWipe Surface Testing devices, contact the Pathtech drug detection team via email at [drugwipe@pathtech.com.au](mailto:drugwipe@pathtech.com.au) or call 1800 069 161**