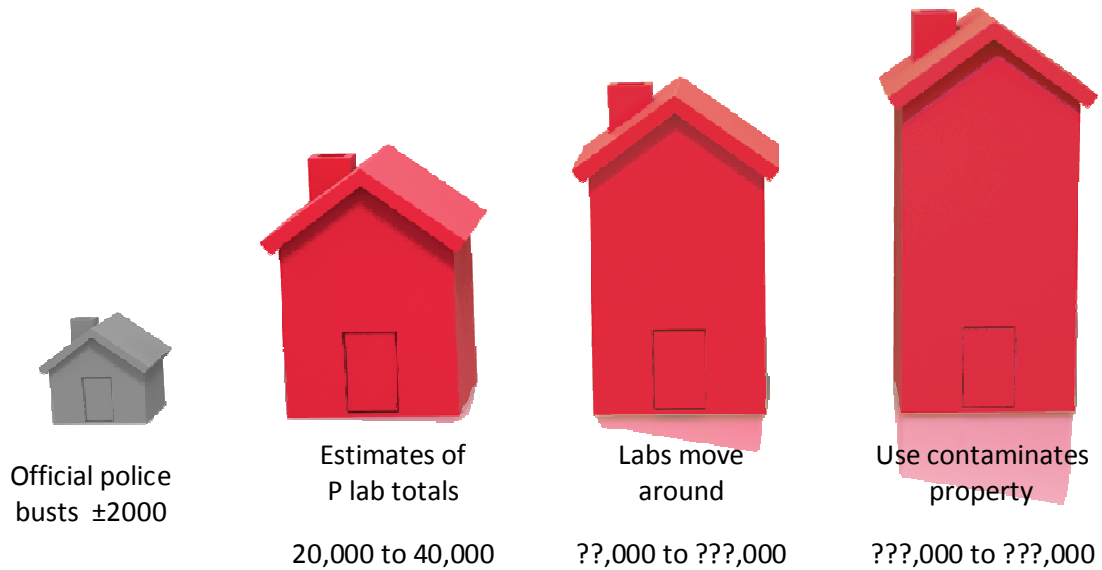


MAKING SENSE OF METH TESTING

The last year or so has seen a significant increase in people's awareness as to the risks associated with meth residues in property. Perhaps it is because companies like MethSolutions are finally making affordable, high quality meth tests available to people? Over 40% of the properties MethSolutions sample have meth in. It is irrefutable evidence like this, combined with an understanding of the likely scale of the problem 15 years of use and manufacture has had on property, which means more people are now getting a sense for how significant the risk is!

Scale of NZ's Meth Contamination Problem



After 15 years of use and manufacture the number of MethAffected properties is significantly greater than decent people realise

In response to growing public demand, more and more companies are offering meth testing services. On the face of it, one meth test is much like another. But this is far from being the case! Working through the different types of testing that are available, what they do, how they differ and the relative merits of each, is essential if you are to get the service you need!

This note has been put together to help people work through what can be a confusing issue. It is not a definitive guide on meth testing services in New Zealand.

The views expressed in this document are those of MethSolutions. They reflect our views at the time of writing and the experience gained in developing a high value, low cost approach to managing meth risk that puts peoples' health and safety first. Since MethSolutions was set up in October 2012, reports have been issued on over 1,000 properties around the country. In this time, the proportion of properties testing positive for meth remains +40%.

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NOT ALL METH TESTS ARE CREATED EQUAL!

The sensitivities of meth test kits can vary wildly. Where one might show no meth present, another can identify significant levels of meth. You must be clear on the capabilities of the testing service you use, before you commit to buying that service. **As a rule of thumb, lab based testing will always be more sensitive than an infield/self-testing kit!**



Testing samples in an independent laboratory is the best approach to testing for meth.

Top tips to improve the quality and accuracy of your meth test results

1. Lab based testing has significant advantages over infield/self-testing kits – use it where available.
2. If you do work with people who use lab based testing, have them provide evidence the lab is independently assessed by a reputable accreditation organisation. No system is perfect, but having independent oversight in place is recognised as a great way of assuring quality
3. If initial tests have been done using lab based testing and meth identified, insist that follow up testing is also done using lab based testing kits to avoid potentially confusing and contradictory results.
4. If you use infield/self-testing kits sourced from the internet, recognise their ability to identify meth is limited by their sensitivity and spend time educating yourself on how and where to take samples from.
5. If you work with a company that uses infield/self-testing kits, have them confirm the level of sensitivity of the kits that they use – as a minimum they should be able to detect 0.5 micrograms of meth.

METH TESTING BASICS

Testing a property for meth residues has two stages:

1. Taking samples – the most common approach is wiping the surface in a property
2. Testing the samples – this is what gives you the result

Obvious as it may seem, the more areas you get sampled the more likely you are to find meth. So, if you want to increase the likelihood of identifying potential problems, you will test as many surfaces as you can. This has great significance for somebody getting a meth test done.

Meth residues in a house accumulate in the area or areas where meth related behaviour takes place. If you don't test the area where the meth is, then you don't find any meth. If you only sample 3 or 4 areas in a property meth residues can be missed.

How do you avoid the risk of meth residues being missed? You sample and test as many rooms in the property as possible. The limitation on the number of areas tested is typically an economic one.



The more areas sampled the more likely you are to find meth



-  Four samples taken using infield/self-test kits
-  Eight composite samples taken using the baseline MethSolutions kit then processed by a laboratory
-  Meth contamination detected - missed by infield kits

Variables affecting meth tests

The accuracy of a test result, depends on a range of factors, many relating to the characteristics of the property. There are two key variables relating to the sampling/testing service you use:

1. How and where a sample is taken, and
2. How sensitive the testing procedure is that is used to process the sample.

Taking samples - approaches to sampling

No approach to sampling is perfect. The approach that you select, will typically depend on what you want to achieve and what budget you have for achieving it. There are two commonly used sampling techniques:

Discrete or Individual sampling – where one kit is used to sample one ‘discrete’ area:

Advantage	Disadvantages
Results given by area	Testing all rooms increases cost
	Not sampling widely increases risk of missing meth

Composite or Group sampling* – where one kit is used to sample multiple areas.

Advantages	Disadvantages
Wide coverage at low cost	Can't identify problem areas
Risk of missing meth reduced	Can't isolate specific levels of meth
Lowest cost lab based testing	

* Some States in the USA, Colorado for example, have recommended this approach to screen properties not known to be affected by meth for well over 10 years.

Taking samples – where you sample

As already mentioned, meth accumulates in areas where meth related behaviour takes place. Having some sense for this will help in sample site selection.

Painting and cleaning surfaces can mask underlying meth issues. So, in a renovated and freshly painted house, sampling freshly painted surfaces will not tell you what underlying issues, if any, exist. If you want to get insights into the meth history of a property that has been subject, you need to sample those area which are less likely to have been cleaned or renovated or get in behind the paint!



Training in sampling is important to increase the likelihood of meth, if present, being found. Beware of renovations!

The impact of testing methods

Different testing methods have different levels of sensitivity. The more sensitive the testing method, the greater the insights you will get to the history of meth use and manufacture.

Samples taken in a property are typically tested in one of two ways:

Lab based testing –This is where samples are sent to a laboratory for processing. Again, not all laboratories are created equal. While no system is completely fool proof, those laboratories that invest in getting systems and processes independently accredited and assessed, recognise the benefits this can bring in assuring service quality.

Advantages	Disadvantages
Very sensitive. Can pick up low levels of use or residues masked by paint	Results take time – minimum 3 days
You get a meth level reading that helps you understand how significant the risk is	If individual samples taken costs can be high
Very accurate. Only looking for meth no false positives	
Testing is usually done independently of people sampling	
Group sampling still low cost	

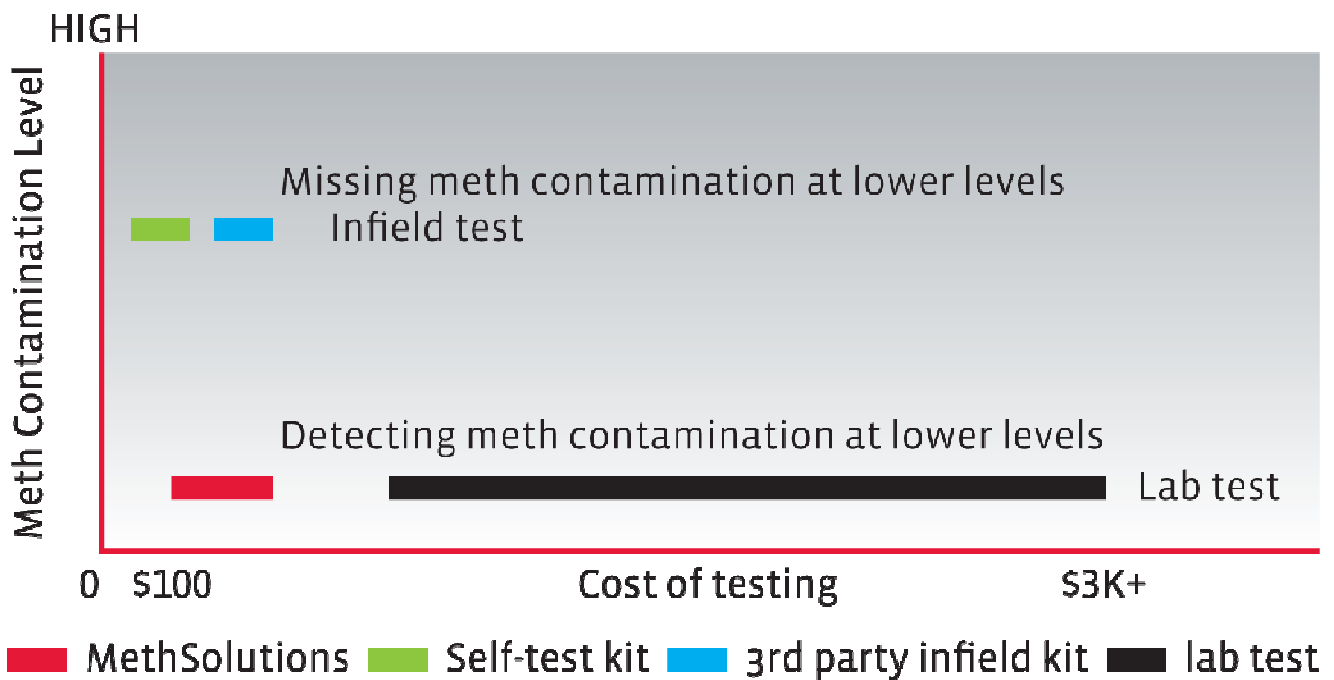
In the field/ self-testing –This is where the samples are processed at the same time as they are taken. There are a wide range of kits available and the ones which are used to test houses for meth, can be very similar to ones which are used to test people’s urine for meth. So, care in kit selection must be taken if adopting this approach.

Advantages	Disadvantages
Wide range of low cost kits available	Less sensitive when compared to a lab. Meth is missed even though it is present
You get an answer there and then	If meth is present, you only know above a certain level not how significant the risk is
	Risk of false positives Meth said to be there when it isn’t
	Costs much higher when you use a third party
	Inexperience increases risk of meth being missed
	Testing done by same people who take samples



To increase accuracy of results and reduce the gap between the meth present and what a kit can identify, use lab based testing

GETTING THE SERVICE YOU WANT



When it comes to making decisions regarding which meth testing service to use, you first need to decide what it is you want to understand and what budget you have available. Consider the following:

What level of meth are you interested in identifying?

Different sampling and testing methodologies will allow you to detect down to different levels of meth residues. If you are focused on finding meth residues, use lab backed testing. See the 'Insights' table on page 8

How many rooms do I want to screen for meth?

Meth related activity takes place in lots of different areas in a property. Perhaps in response to companies testing in just 4 areas, typically the highest risk ones, meth cooks also use bedrooms. The more rooms you test the better and you can still get cost effective service by using composite/group sampling techniques.

How much money do you have to spend?

Limited budgets are not a barrier to lab based testing. If composite/group sampling is used, labs based testing is still cost effective and its high sensitivity gives you greater insights what meth is present.

What renovation or redecoration has been done in the property?

The more renovation and redecoration the more likely problematic levels of meth will be masked and surface residues will be low. Sensitive lab based testing increases accuracy and insights.

What problems are known to exist?

If problems are known to exist, there is no point in wasting money on indicative sampling or infield test kits. Cut straight to lab based detailed testing provided by specialist companies who are able to give advice regarding safe remediation of the property. We believe it will be cheaper in the long run!



Ask questions to make sure you get what you need!

Questions to ask prospective service providers

- What type of testing kit do you use?
- What level of meth contamination is the service able to identify?
- How many areas are sampled?
- How is the quality of the work done by the laboratory you use verified?
- How will your service help me identify if meth has been used on a property?

MAKING SENSE OF TEST RESULTS

When you get your results, what do they mean? The result will depend on the kits and testing methodology used to take the samples. **NOTE: Meth test kits rarely pick up 100% of the meth that is present on a surface, so readings tend to be a minimum.**

Also, there are no official standards for what constitutes a 'safe' level of meth residue in a property. Guidelines were established by the Ministry of Health in 2010 to help with the clean-up of meth labs. These established a currently acceptable limit for occupation of a property of 0.5 µg (micrograms), in a 10 x 10 cm² area (100sqcms). It is for this reason that most tests look to use this unit of measure when taking samples. Many US States adopt 0.1 µg per 100 sqcms others 1.5 µg per 100 sqcms.

In addition, the Guidelines relate to the clean-up of meth labs not meth contamination from use. Over time however, the figure of 0.5 µg per 100sqcms, has become the benchmark against which Territorial and Judicial Authorities assess all meth residue issues. Above this level clean it up. Below this level, you may not need to.

Results

'No meth present' = no meth identified in concentrations in the sample taken greater than the detection limit of the sample kit. This is what can **lead to the MethGap**.

'Meth present' = meth identified in concentrations in the sample taken higher than the detection limit of the sample kit. Lab based tests provide a specific reading and may be used to get some relativity with the Guidelines.

NOTE: for Group Samples a total reading for the area sampled is provided. This means an indication only can be provided for this area. If only one room is sampled, the result can be reasonably interpreted by averaging the reading. If more than one room is sampled, then an average will give you a sense for how significant the levels of meth are, but it **cannot** confirm what the meth level is in any one area sampled.

Meth Test Insights Summary

Meth contamination is usually a hidden issue. As such, real estate agents cannot be expected to spot it and nor are they required to go looking for it. As a result, it rarely gets found unless a meth test is done. The table below summarises the level of insight into the MethStatus of a property associated with the different approaches to testing described in this document.

Type of testing	Sampling technique	Detection Limit per sample	Areas sampled	Level of insight	Cost
Lab backed	Individual + behind paint	0.02-0.03µg	All	Highest in the areas sampled	Highest +\$2500
Lab backed	Individual	0.02-0.03µg	All	Very High in the areas sampled	+\$1800
Lab backed	Group Samples	0.02-0.03µg	8 - 16	High across the property in areas sampled	\$100 to \$330
Lab backed	Individual samples	0.02-0.03µg	3 - 4	High in areas sampled Nil to low in areas missed	+\$500
Infield/ self-test Third party specialist	Individual	> 0.5µg	3 - 4	Medium to high in areas sampled Nil in areas missed	\$250 to +\$500
Infield/ self-test Internet sourced	Individual	> 0.5µg	3 - 4	Lowest	\$20 to 100 per test/test kit

METH RISK REDUCTION

There are a number of no cost things that you can do to reduce the risk of buying a property with a meth history. While the impact on risk reduction is typically low, they can help. Actions include but are not limited to:

- **Physically go to the property.** Don't expect to see anything, but be aware of how you feel. Itchy skin, headaches, sore or burning eyes/nose, metallic taste in the mouth, headaches and feeling a bit dizzy, can all be indicators of a meth history.
- **Ask the agent** – if an owner fails to declare a meth history to the agent, then they can't tell you about it. But if you ask them questions, then they may get more information! If provided to you verbally, confirm the responses you get in writing and ask for confirmation in writing from the agent.
- **Ask the neighbours** – Neighbours are often the people who tell the new owners or tenants all about what went on.



Always bear in mind meth testing is essential if you want to significantly reduce risk – experienced Police officers rely on it