Fact Sheet

Clandestine drug laboratory assessment:

*for drugs other than methamphetamine*

The manufacture of illicit drugs can pose a number of risks to public health. In South Australia, clandestine drug laboratories must be assessed and managed in accordance with the South Australian Public Health (Clandestine Drug Laboratories) Policy 2016 (the Policy).

Under the Policy, regard should be had to the ‘Practice Guideline for the Management of Clandestine Drug Laboratories under the South Australian Public Health Act 2011’ (the Practice Guideline), and the ‘National Clandestine Drug Laboratory Remediation Guidelines’ (the National Guideline).

**What is the purpose of this fact sheet?**

To provide guidance on assessing potential contamination in properties used to manufacture illicit substances other than methamphetamine, in particular:

- To assist public health authorities manage the public health risks associated with clandestine drug laboratories identified within their areas where drugs other than methamphetamine have been manufactured.
- To inform home owners of the processes involved in assessing and managing the health risks associated with any illicit drug manufacture that has occurred on or within their property. Home owners should also refer to the SA Health fact sheet *A clandestine drug laboratory was detected on my property – what happens now?*
- To provide suitably qualified experts (as defined in the Practice Guideline) with specific guidance on assessing the level of contamination associated with clandestine drug laboratories where drugs other than methamphetamine have been manufactured.

**How does the Practice and National Guidelines apply to drugs other than methamphetamine?**

Whilst the Practice and National Guidelines have an emphasis on the manufacture of methamphetamine, the assessment and remediation processes described in these Guidelines are applicable to the manufacture of any illicit drug (excluding synthetic opioids). This process is summarised in Appendix A of the Practice Guideline.

**What are the risks to public health?**

Illicit drug manufacture presents a range of hazards depending on the type of drug or compound being manufactured, the drug manufacturing process, and the magnitude of manufacture. All of these factors can influence the type and level of contamination of indoor surfaces and on the property more generally. The hazards can be broadly characterised by evaluating the common components of the drug manufacture process including chemical synthesis (pre-precursors, precursors and other chemicals), separation, purification, crystallisation and finishing.
Illicit drug manufacture generates significant amounts of solid and liquid waste. Whilst the volume of waste product generated can vary, it is not uncommon to have a ratio of waste to final product in excess of 10:1. Many of the components of the synthesis process are in themselves likely to be present in greater concentrations than the final product. They are also a hazard in their own right from a physical and toxicological perspective.

**How should non-methamphetamine labs be assessed?**

Rather than using the presence and concentration of final drug product as indicator of contamination, a range of chemical markers should be measured to characterise the ongoing health risk posed by the manufacturing process. Suitably qualified experts (as defined in the Practice Guideline) should refer to the key chemicals described in Appendix 1 of the National Guideline and also apply professional judgement to identify the appropriate chemical markers to monitor in each of the chemical classes shown in the table below.

The assessment process can be conducted in a staged approach starting with a screening assessment. If the screening results show levels outside of the Investigation Levels described in the National Guideline, a detailed assessment is required to characterise the health risks and inform the development of a remediation action plan.

**Table 1. Common chemical markers of clandestine drug laboratory activity**

<table>
<thead>
<tr>
<th>Chemical class</th>
<th>Screening assessment</th>
<th>Detailed assessment</th>
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</thead>
<tbody>
<tr>
<td><strong>Extraction solvents</strong></td>
<td>Photoionisation Detectors (ppb)</td>
<td>Quantitative assessment</td>
</tr>
<tr>
<td><strong>pH modifiers (Acid/Base)</strong></td>
<td>pH paper</td>
<td>pH paper</td>
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<tr>
<td><strong>Reaction potentiators (oxidisers, reducers, metals and catalysts)</strong></td>
<td>Composite metals screen</td>
<td>Room and chemical specific assessment</td>
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<tr>
<td><strong>Reaction mixtures (by-products and finals products)</strong></td>
<td>Screening test kits</td>
<td>Quantitative analysis</td>
</tr>
</tbody>
</table>

**Where can I get more information?**

For more information, please contact Public Health Services on 8226 7100.

**Note:** The general advice provided in this document does not apply to the assessment or management of synthetic opioid chemicals (e.g. fentanyl).