# CLANDESTINE LABORATORIES AND PRECURSORS

## **EXEMPTION NEW WORKS**

- Many countries produce and trade chemicals that can be diverted for use in illicit drug manufacture.
  - While there are ongoing global efforts to prevent the diversion of precursors, reagents and solvents for use in illicit drug manufacture, trends point to an increase in the quantity of precursors seized globally in 2016.
- Indicators of domestic drug production provide a mixed picture.
  - The number of clandestine laboratories detected nationally decreased for the sixth consecutive reporting period in 2017–18.
  - The majority of clandestine laboratories detected nationally continue to be addict-based and located in residential areas.
  - While the majority of detected laboratories relate to methylamphetamine production, the number of laboratories producing MDMA more than doubled in 2017–18, with the 20 detections this reporting period the highest number reported in the last decade.
  - The number of clandestine laboratories detected nationally manufacturing GHB/GBL doubled this reporting period, reaching a record 22 laboratories in 2017–18.
  - Although the number of ATS (excluding MDMA) precursor detections at the Australian border decreased this reporting period, the weight detected increased to record levels in 2017–18 and is more than double the previous record weight detected in 2008–09.
  - The number and weight of MDMA precursors detected at the Australian border decreased for the third consecutive reporting period in 2017–18.



## **MAIN FORMS**

Clandestine laboratories—commonly referred to as clan labs—are used to covertly manufacture illicit drugs or their precursors. Clandestine laboratories range from crude, makeshift operations using simple processes, to highly sophisticated operations using technically advanced processes, equipment and facilities. Irrespective of their size and level of sophistication, the corrosive or hazardous nature of many of the chemical used in clandestine laboratories pose significant risks to the community. Many of the chemicals are extremely volatile and in addition to contaminating the laboratory premises, they can also contaminate the surrounding environment, including soil, water and air (EMCDDA & EUROPOL 2016; UNODC 2016).

Drug manufacture carried out in clandestine laboratories may involve any or all of the following processes:

- Extraction—the active chemical ingredients are extracted from a chemical preparation or plant, using a chemical solvent to produce a finished drug or a precursor chemical. Examples of extraction include the extraction of precursor chemicals from pharmaceutical preparations, or the extraction of morphine from opium.
- Conversion—a raw or unrefined drug product is changed into a sought-after product by altering the chemical form. Examples include converting cocaine base into cocaine hydrochloride, or methylamphetamine base into crystalline methylamphetamine hydrochloride.
- Synthesis—raw materials are combined and reacted under specific conditions to create the finished product through chemical reactions. Synthetic drugs such as methylamphetamine, 3,4-methylenedioxymethylamphetamine (MDMA) and lysergic acid diethylamide (LSD) are created through this process.
- Tableting—the final product is converted into dosage units. An example is pressing MDMA powder into tablets.

There are three types of substances used in illicit drug manufacture:

- Precursors—considered the starting materials for illicit drug manufacture. Through chemical reactions, the precursor's molecular structure is modified to produce a specific illicit drug. For example, precursors such as ephedrine (Eph) and pseudoephedrine (PSE) are converted into methylamphetamine.
- Reagents—substances used to cause a chemical reaction that modify the precursor's molecular structure. For example, when the reagent acetic anhydride is mixed with the precursor phenyl-2-propanone (P2P), the resulting compound is methylamphetamine.
- Solvents—added to the chemical mixture to ensure effective mixing by dissolving precursors and reagents, diluting the reaction mixtures, and separating and purifying other chemicals. For example, acetone and hydrochloric acid are used in heroin production (UNODC 2014).

The method of illicit manufacture employed is influenced by a number of factors, including the skill of the persons involved and the availability of precursors. In Australia, amphetamine-type stimulants (ATS), specifically methylamphetamine, are the predominant drugs manufactured in detected clandestine laboratories. The manufacturing methods and precursors used to manufacture ATS vary.

- The predominant methods used in Australia to manufacture methylamphetamine are comparatively simple, using readily available basic equipment and precursor chemicals, with PSE and Eph the most common precursors used.
- By comparison, MDMA manufacture is considered more complicated, requiring a greater knowledge of chemistry and the use of precursor chemicals that are more difficult to obtain.

## **INTERNATIONAL TRENDS**

Preventing the diversion of precursors, reagents and solvents for use in illicit drug manufacture is an effective and efficient way of limiting the supply of illicit drugs. As many of these substances have legitimate application within various branches of industry, controls must balance legitimate access with efforts to reduce diversion to the illicit market. This section will focus on ephedrines, potassium permanganate and acetic anhydride—some of the key precursors, reagents and solvents used in the manufacture of ATS, cocaine and heroin—all of which recorded increases in the weight seized globally from 2015 to 2016.

- Eph and PSE are two of the most common precursors used in the illicit manufacture of amphetamines. According to data provided to the International Narcotics Control Board (INCB), the weight of ephedrines (including raw material and pharmaceutical preparations of both Eph and PSE) seized in 2016 ranged between 35 and 40 tonnes—higher than the estimated 25 tonnes reported in 2015. Over the period 2012–16, East and South East Asia accounted for the greatest proportion of the weight of ephedrines seized.
- Potassium permanganate is an oxidising agent used in the manufacture of cocaine. The number of potassium permanganate seizures increased over 300 per cent, from 140 tonnes in 2015 to 585 tonnes in 2016. The weight seized in 2016 is significantly higher than that reported in the preceding four years. Colombia accounted for over 99 per cent of the weight of potassium permanganate seized in 2016, with the combined weight seized from all other reporting countries equating to less than 100 kilograms.
- Acetic anhydride is the key chemical which, among other applications, enables the conversion of morphine into heroin base, as well for the manufacture of P2P from phenylacetic acid and its derivatives for the production of amphetamine and methylamphetamine. According to INCB data, there has been a considerable increase in the number of acetic anhydride seizures since the beginning of 2016. In 2016, 16 countries reported seizing a combined 116,000 litres of acetic anhydride, a quantity almost four times that of the amount reported in 2015. The largest seizures in 2016 were reported in China and Pakistan (56,000 and 40,000 litres respectively). While Myanmar reported no seizures of acetic anhydride in 2016, the quantity seized in Afghanistan nearly tripled from 2015 to 2016 (from 3,760 litres to 10,440 litres), with the illicit market price of acetic anhydride in Afghanistan reported to have significantly increased in 2017 (INCB 2018; INCB 2017).

## **DOMESTIC TRENDS**

### AUSTRALIAN BORDER SITUATION

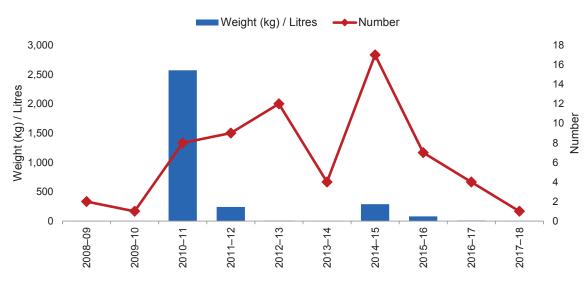
As ATS are the most common illicit drugs manufactured in domestic clandestine laboratories, this chapter focuses on ATS (excluding MDMA) and MDMA precursor detection data. The number of ATS (excluding MDMA) precursor detections at the Australian border decreased 39.9 per cent this reporting period, from 552 in 2016–17 to 332 in 2017–18. The weight of ATS (excluding MDMA) precursors detected this reporting period increased 210.1 per cent, from 1,584.0 kilograms in 2016–17 to a record 4,912.4 kilograms in 2017–18 (see Figure 39).<sup>121</sup>

FIGURE 39: Number and weight of ATS (excluding MDMA) precursor detections at the Australian border, 2008–09 to 2017–18 (Source: Department of Home Affairs)



The number of MDMA precursor detections at the Australian border decreased 75.0 per cent this reporting period, from 4 in 2016–17 to 1 in 2017–18. The weight of MDMA precursors detected this reporting period decreased 99.9 per cent, from 10.2 kilograms in 2016–17 to 5.0 grams in 2017–18 (see Figure 40). No significant MDMA precursor border detections were identified this reporting period.

121 See Appendix 1 for significant ATS (excluding MDMA) precursor border detections in 2017–18.



## FIGURE 40: Number and weight/litres<sup>a</sup> of MDMA precursor detections at the Australian border, 2008–09 to 2017–18 (Source: Department of Home Affairs)

a. Significant detections of MDMA precursors occur in both kilograms and litres. As this figure reflects two units of measurement, it is necessary to refer to 'Significant Border Detections' for individual reporting periods to determine the related unit of measurement.

### **IMPORTATION METHODS**

In 2017–18, ATS (excluding MDMA) precursor border detections occurred in the air cargo, air passenger/crew, international mail and sea cargo streams. By number, the international mail stream accounted for 53.0 per cent of ATS (excluding MDMA) precursor border detections this reporting period, followed by air passenger/crew (27.4 per cent), air cargo (16.9 per cent) and sea cargo (2.7 per cent). By weight, sea cargo accounted for the greatest proportion of ATS (excluding MDMA) precursor border detections (85.4 per cent), followed by international mail (7.4 per cent), air cargo (7.0 per cent) and air passenger/crew (0.2 per cent).<sup>122</sup>

In 2017–18, the MDMA precursor border detection occurred in the international mail stream.<sup>123</sup>

### **EMBARKATION POINTS**

By weight, Thailand was the primary embarkation point for ATS (excluding MDMA) precursor detections at the Australian border in 2017–18. Other key embarkation points by weight this reporting period include China (including Hong Kong), the United Kingdom, Republic of Korea, the United States, Malaysia, New Zealand, India, Singapore and Vietnam.

Germany was the embarkation point for the single MDMA precursor detection in 2017–18.

<sup>122</sup> Figures for ATS (excluding MDMA) precursor border detections by importation stream for 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://www.crimestats.aic.gov.au/IDDR/>">http://www.crimestats.aic.gov.au/IDDR/></a>.

<sup>123</sup> Figures for MDMA precursor border detections by importation stream for 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/">http://crimestats.aic.gov.au/IDDR/</a>>.

## **DOMESTIC MARKET INDICATORS**

The number of clandestine laboratory detections is not indicative of production output, which is calculated using a number of variables including the size of reaction vessels, amount and type of precursors used, the skill of people involved and the method of manufacture.

### **CLANDESTINE LABORATORY DETECTIONS**

The number of national clandestine laboratory detections decreased this reporting period, continuing a decreasing trend observed since 2011–12. In 2017–18, the number of clandestine laboratories detected nationally decreased 6.7 per cent, from 463 laboratories in 2016–17 to 432 in 2017–18 (see Figure 41).

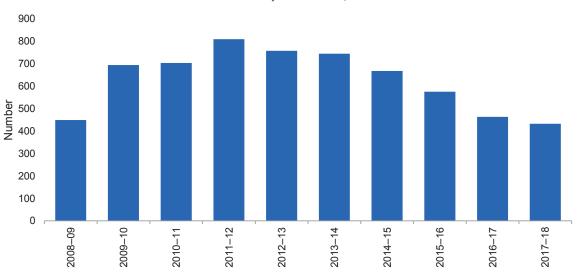


FIGURE 41: National clandestine laboratory detections, 2008–09 to 2017–18

All states and territories reported a decrease in the number of clandestine laboratories detected in 2017–18 with the exception of New South Wales, which reported an increase in the number of detections and the Australian Capital Territory, which remained stable (see Table 22). Queensland accounted for the greatest proportion of national clandestine laboratory detections in 2017–18 (32.6 per cent), followed by Victoria (22.7 per cent) and New South Wales (19.9 per cent). There were no clandestine laboratories detected in the Australian Capital Territory this reporting period.

Year	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
2008–09	67	84	148	65	78	0	7	0	449
2009–10	82	113	297	71	118	1	12	0	694
2010–11	87	63	293	75	171	11	2	1	703
2011–12	90	99	379	58	160	15	7	1	809
2012–13	105	113	330	56	136	9	8	0	757
2013–14	98	114	340	80	96	5	11	0	744
2014–15	99	161	236	71	84	5	10	1	667
2015–16	83	144	234	69	40	1	3	1	575
2016–17	56	135	150	81	33	3	5	0	463
2017–18	86	98	141	78	25	2	2	0	432

TABLE 22: Number of clandestine laboratory detections, by state and territory, 2008–09 to 2017–18

### SIZE AND PRODUCTION CAPACITY

In 2017–18, state and territory police services were asked to provide an indication of the size and production capacity of detected laboratories using categories provided by the United Nations Office of Drugs and Crime in their data collection for the World Drug Report. Full definitions for the four categories—addict-based, other small scale, medium scale and industrial scale—are found in the *Statistics* chapter.

In 2017–18, clandestine laboratories detected in Australia ranged from addict-based laboratories, which typically use basic equipment and simple procedures, through to industrial scale laboratories, using oversized equipment. For those categorised, the majority of laboratories continue to be addict-based, with the proportion of laboratories attributed to this category increasing from 49.5 per cent in 2016–17 to 52.8 per cent in 2017–18. The proportion of laboratories categorised as other small scale decreased this reporting period, from 27.7 per cent in 2016–17 to 26.2 per cent in 2017–18, with the proportion of medium sized laboratories decreasing from 20.0 per cent in 2016–17 to 19.4 per cent in 2017–18. The proportion of industrial-scale laboratories continued to decrease this reporting period, from 2.7 per cent in 2016–17 to 1.6 per cent in 2017–18.

### DRUG TYPES AND METHODS OF PRODUCTION

Of those able to be identified, clandestine laboratories manufacturing ATS (excluding MDMA) continue to account for the greatest proportion of detections (46.2 per cent in 2017–18; see Table 23). Methylamphetamine remains the main drug produced in clandestine laboratories detected nationally.

<sup>124</sup> A figure for the size and production capacity of detected clandestine laboratories in 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/>">http://crimestats.aic.gov.au/IDDR/></a>.

State/	ATS (excluding		Homebake	Cannabis oil	PSE	GHB/			
Territory	MDMA)	MDMA	heroin	extraction	extraction	GBL	<b>Other</b> <sup>a</sup>	Unknown <sup>b</sup>	<b>Total</b> <sup>c</sup>
NSW	58	10	0	4	0	5	16	4	97
Vic	49	2	0	2	0	5	40	0	98
Qld	60	7	0	2	1	4	67	57	198
SA	44	1	0	6	1	8	13	9	82
WA	18	0	0	3	0	0	4	0	25
Tas	2	0	0	0	0	0	0	0	2
NT	2	0	0	0	0	0	0	0	2
ACT	0	0	0	0	0	0	0	0	0
Total	233	20	0	17	2	22	75	135	504

#### TABLE 23: Number of clandestine laboratory detections, by drug production type and state and territory, 2017–18

a. 'Other' refers to the detection of other illicit manufacture.

b. 'Unknown' includes seized substances which were unable to be identified or are awaiting analysis.

c. Total may exceed the number of clandestine laboratory detections due to multiple drug production types being identified in a single laboratory.

The number of national ATS (excluding MDMA) laboratory detections decreased 23.6 per cent this reporting period, from 305 in 2016–17 to 233 in 2017–18. Queensland accounted for the greatest proportion of national ATS (excluding MDMA) laboratories (25.8 per cent), followed by New South Wales (24.9 per cent). All state and territories reporting clandestine laboratory detections in 2017–18 reported ATS (excluding MDMA) production.

The number of national MDMA laboratory detections increased 150.0 per cent this reporting period, from 8 in 2016–17 to 20 in 2017–18. This reporting period MDMA laboratories were detected in New South Wales (10), Queensland (7), Victoria (2) and South Australia (1).

The 20 MDMA laboratories detected in 2017–18 is the highest number detected in the last decade and the second highest number on record.

The number of laboratories detected nationally extracting cannabis oil decreased 19.0 per cent this reporting period, from 21 in 2016–17 to 17 in 2017–18. This reporting period cannabis oil extraction laboratories were detected in South Australia (6), New South Wales (4), Western Australia (3), Victoria (2) and Queensland (2).

The 17 laboratories detected this reporting period is the third highest number of cannabis oil extraction laboratories detected since related reporting began in 2007–08, with the 26 detections reported in 2015–16 the highest number on record.

The number of laboratories detected nationally manufacturing gamma-hydroxybutyrate (GHB)/gamma-butyrolactone (GBL) increased 100.0 per cent this reporting period, from 11 in 2016–17 to a record 22 in 2017–18. This reporting period GHB/GBL laboratories were detected in South Australia (8), New South Wales (5), Victoria (5) and Queensland (4).

The number of clandestine laboratories detected nationally extracting pseudoephedrine decreased 83.3 per cent this reporting period, from 12 in 2016–17 to 2 in 2017–18. This reporting period pseudoephedrine extraction laboratories were detected in Queensland (1) and South Australia (1).

The number of homebake heroin laboratories detected nationally decreased this reporting period, from 1 in 2016–17 to 0 in 2017–18.

Clandestine laboratories detected in Australia also manufacture a range of other illicit drugs, precursors and pre-precursors as well as being used in extraction and recrystallization processes. The number of laboratories detected manufacturing other drugs increased 53.3 per cent this reporting period, from 30 in 2016–17 to 46 in 2017–18.

In 2017–18, this included laboratories manufacturing 3,4-methylenedioxyamphetamine (MDA), P2P, dimethyltryptamine (DMT), paramethoxyamphetamine (PMA), fentanyl, steroids, psilocybin and methylamine. Ephedrine and heroin extraction laboratories were also detected in 2017–18.

The hypophosphorous method of production continues to be the predominant method of ATS (excluding MDMA) manufacture in Australia (see Table 24).

- The number of hypophosphorous laboratories detected nationally decreased 23.1 per cent this reporting period, from 134 in 2016–17 to 103 in 2017–18.
- The number of red phosphorous laboratories detected nationally decreased 57.8 per cent this reporting period, from 45 in 2016–17 to 19 in 2017–18.
- The number of Nazi/Birch laboratories detected nationally decreased 36.0 per cent this reporting period, from 25 in 2016–17 to 16 in 2017–18.
- The number of P2P laboratories detected nationally decreased 42.1 per cent this reporting period, from 19 in 2016–17 to 11 in 2017–18.
- The number of ATS (excluding MDMA) laboratories detected nationally using other methods of production increased 152.4 per cent this reporting period, from 21 in 2016–17 to 53 in 2017–18.

In 2017–18, New South Wales accounted for the greatest proportion of the number of hypophosphorous laboratory detections (40.8 per cent). Queensland accounted for the greatest proportion of red phosphorous laboratory detections (57.9 per cent), while Victoria accounted for the greatest proportion of P2P laboratory detections (45.5 per cent). Similar to previous reporting periods, Western Australia accounted for the greatest proportion of Nazi/Birch laboratory detections in 2017–18 (87.5 per cent).

State/ Territory	Hypophosphorous	Red-phosphorus	Nazi/Birch	Phenyl-2- propanone (P2P)	<b>Other</b> <sup>a</sup>	Total⁵
NSW	42	0	0	4	12	58
Vic	13	3	1	5	27	49
Qld	15	11	1	1	3	31
SA	29	4	0	1	10	44
WA	2	1	14	0	1	18
Tas	2	0	0	0	0	2
NT	0	0	0	0	0	0
ACT	0	0	0	0	0	0
Total	103	19	16	11	53	202

## TABLE 24: Method of ATS (excluding MDMA) production in clandestine laboratory detections, by state and territory, 2017–18

a. 'Other' includes the detection of other ATS (excluding MDMA) production methods.

b. Total may not equal the number of ATS (excluding MDMA) clandestine laboratory detections as the method of production may not be identified or the detection is awaiting analysis.

### SIGNIFICANT PRECURSOR SEIZURES

The following provides a snapshot of the identification and/or seizure of some significant quantities of precursors, reagents and solvents (by weight) this reporting period:

#### Ephedrine

- 8.0 kilograms in New South Wales
- 0.2 kilograms in South Australia
- 0.2 kilograms in South Australia

#### Hypophosphorous acid

- 1.7 kilograms in Victoria
- 1.0 kilogram in Victoria
- 1.0 kilogram in Victoria

#### Iodine

- 35.0 kilograms in New South Wales
- 4.8 kilograms in Queensland
- 2.9 kilograms in Victoria
- 1.8 kilograms in Victoria
- 1.6 kilograms in Victoria

#### **Red phosphorous**

- 10.0 kilograms in New South Wales
- 0.8 kilograms in South Australia
- 0.3 kilograms in South Australia

#### Other

- 25.0 kilograms of benzaldehyde in New South Wales
- 5.0 kilograms of P2P in New South Wales
- 5.0 kilograms of GABA in South Australia
- 4.7 kilograms of phosphorous acid in Victoria
- 1.9 kilograms of hypophosphite in Victoria
- 1.0 kilogram of mercuric chloride in New South Wales
- 0.3 kilograms of benzyl chloride/benzyl cyanide in Victoria
- 0.3 kilograms of methylamine/dimethylamine in Victoria.

The following provides a snapshot of the identification and/or seizure of some significant quantities of precursors, reagents and solvents (by volume) this reporting period:

- 480.0 litres N-isopropylbenzylamine (Iso) in Victoria
- 155.0 litres of butanediol in Western Australia
- 50.0 litres of hypophosphorous acid in New South Wales
- 25.0 litres of hypophosphorous acid in South Australia
- 20.0 litres of hypophosphorous acid in South Australia
- 6.0 litres of nitroethane in New South Wales
- 2.5 litres of acetic anhydride in South Australia
- 2.0 litres of helional in South Australia
- 1.0 litre of safrole in New South Wales
- 0.8 litres of red phosphorous in South Australia
- 0.4 litres of benzaldehyde in South Australia.

### LOCATION AND CATEGORY

The majority of clandestine laboratories detected in Australia continue to be located in residential areas. The proportion of clandestine laboratories detected in residential areas increased this reporting period, from 63.9 per cent in 2016–17 to 70.8 per cent in 2017–18. Clandestine laboratories located in vehicles accounted for the second greatest proportion of national detections (9.5 per cent, a decrease from 12.5 per cent in 2016–17), followed by rural areas (6.5 per cent, an increase from 4.1 per cent in 2016–17) and other locations (5.3 per cent, a decrease from 8.4 per cent in 2016–17). Laboratories detected in commercial and industrial areas accounted for 4.4 per cent of national clandestine laboratory detections in 2017–18 (a decrease from 6.0 per cent in 2016–17), followed by laboratories detected in public places (3.5 per cent, a decrease from 5.0 per cent in 2016–17).<sup>125</sup>

Laboratories detected in storage sheds continue to account for the majority of laboratories detected within the 'other' category (73.9 per cent in 2017–18), the majority of which were located in Queensland this reporting period. In 2017–18, Victoria also reported several instances of underground laboratories located in buried shipping containers.

CLANDESTINE LABS AND PRECURSORS

<sup>125</sup> A figure for the size and production capacity of detected clandestine laboratories in 2017–18 will be available on the

Based on their operating status, there are four distinct categories of clandestine laboratories:

- Category A—active (chemicals and equipment in use)
- Category B—stored/used (equipment and chemicals)<sup>126</sup>
- Category C—stored/unused (equipment and chemicals)
- Category D—historical site.

Consistent with previous reporting periods, Category C was the most common category for clandestine laboratories detected nationally, accounting for 46.8 per cent of laboratories in 2017–18, a decrease from 49.4 per cent in 2016–17. This was followed by Category B, which accounted for 32.2 per cent this reporting period (an increase from 29.1 per cent in 2016–17), Category D which accounted for 13.0 per cent (a decrease from 13.4 per cent in 2016–17) and Category A, which remained stable at 8.1 per cent.<sup>127</sup>

### NATIONAL TABLET PRESS SEIZURES

The number of tablet presses seized nationally increased 138.5 per cent this reporting period, from 13 in 2016–17 to 31 in 2017–18. The 31 national tablet press seizures this reporting period comprised 18 single station/simple presses and 13 rotary presses. In 2017–18, seizures were made in New South Wales (15), Victoria (8), South Australia (5) and Queensland (3).

The number of encapsulators seized nationally remained stable this reporting period. In 2017–18, the 5 encapsulators were seized in South Australia (2), New South Wales (1), Queensland (1) and Western Australia (1).

Crime Statistics Australia website. See <http://crimestats.aic.gov.au/IDDR/>.

<sup>126</sup> Laboratories which are fully assembled, but not active at the time of detection.

<sup>127</sup> A figure for the size and production capacity of detected clandestine laboratories in 2017–18 will be available on the Crime Statistics Australia website. See <a href="http://crimestats.aic.gov.au/IDDR/">http://crimestats.aic.gov.au/IDDR/</a>.

## NATIONAL IMPACT

An effective and efficient way to limit the supply of illicit drugs is to prevent the diversion of precursors, reagents and solvents used in their manufacture. As many of these chemicals have legitimate industrial and domestic uses, control measures have to balance access for legitimate use with efforts to reduce diversion. This remains an enduring issue, with both international and domestic control strategies implemented in support of this.

Indicators of domestic drug production provide a mixed picture. These include border detection, seizure, clandestine laboratory, tablet press and encapsulator data.

- In 2017–18, the number of ATS (excluding MDMA) precursors detected at the Australian border decreased, while the weight detected increased to record levels.
- In 2017–18, both the number and weight of MDMA precursors detected at the Australian border decreased.
- In addition to detections of precursors at the Australian border, precursors, reagents and solvents were also seized nationally this reporting period, the majority of which relate to the manufacture of methylamphetamine.
- The number of clandestine laboratories detected nationally decreased for the sixth consecutive reporting period in 2017–18.
- Clandestine laboratories in Australia manufacture and process a range of illicit drugs, precursors and pre-precursors.
  - In 2017–18 this included ATS (excluding MDMA), MDMA, GHB/GBL, DMT, MDA, PMA, P2P, fentanyl, methylamine, steroids and psilocybin, as well as cannabis oil, PSE, Eph and heroin extraction laboratories.
  - Clandestine laboratories manufacturing ATS (excluding MDMA) continue to account for the greatest proportion of national detections, with methylamphetamine the main drug produced in 2017–18.
  - The number of clandestine laboratories manufacturing MDMA more than doubled in 2017–18.
- Despite a decrease in the number of laboratories using the hypophosphorous method of production this reporting period, it remains the predominant method of ATS (excluding MDMA) production in Australia.
- Clandestine laboratories detected in Australia range from addict-based through to industrial scale laboratories.
  - The majority of laboratories detected nationally in 2017–18 continue to be addict-based and located in residential areas.
  - The majority of laboratories relate to the detection of stored/unused equipment or chemicals (Category C), with the proportion of active laboratories (Category A) detected in 2017–18 remaining relatively stable.
  - In 2017–18, 31 tablet presses and 5 encapsulators were seized nationally.

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