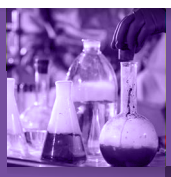
CLANDESTINE LABORATORIES & PRECURSORS

KEY POINTS

- The trafficking of precursor chemicals used in illicit drug production is a global market in itself, with the range of chemicals used worldwide to produce illicit drugs, including amphetamine-type stimulants (ATS) increasing.
- In 2020, of the chemicals seized globally under international control and commonly used to manufacture ATS, cocaine and heroin:
  - the weight of ephedrine and pseudoephedrine decreased to decade-low levels
  - the weight of potassium permanganate increased
  - the weight of acetic anhydride increased.
- Indicators of domestic illicit drug production in 2020–21 provide a mixed picture:
  - The number of clandestine laboratories detected nationally decreased.
  - Both the number and weight of ATS (excluding MDMA) precursors detected at the Australian border decreased.
  - The number of MDMA precursors detected at the Australian border increased, while the weight decreased.
  - The majority of laboratories detected nationally continue to be addict-based and located in residential areas.
  - While the proportion of clandestine laboratories manufacturing ATS (excluding MDMA) decreased, they continue to account for the greatest proportion of national detections, with methylamphetamine the main drug produced.



National clandestine laboratory detections and precursor border detection, point in time annual and decade trend comparison

		2019–20 and 2020–21	2011–12 and 2020–21
No. of clandestine detections		↓ -9% 312 → 284	↓ -65% 809 → 284
Clandestine laboratory category[69]	**Category A**	↑ 13% → 14%	↑ 7% → 14%
	Category B	↓ 34% → 32%	↓ 35% → 32%
	Category C	➲ 42% → 42%	↓ 56% → 42%
	Category D	↑ 11% → 12%	↑ 2% → 12%
Clandestine laboratory size and production capacity	**Addict-based**	↓ 44% → 40%	↓ 79% → 40%
	Other small	↑ 28% → 35%	↑ 13% → 35%
	Medium	↓ 24% → 20%	↑ 6% → 20%
	Industrial	↑ 4% → 6%	↑ 3% → 6%
Clandestine laboratory location	**Residential**	↑ 74% → 81%	↑ 71% → 81%
	Commercial/ industrial	➲ 8% → 8%	↑ 3% → 8%
	Vehicle	↓ 4% → 3%	↓ 9% → 3%
	Public place	↓ 4% → 3%	↓ 8% → 3%
	Rural	↓ 5% → 3%	➲ 3% → 3%
	Other	↓ 5% → 2%	↓ 7% → 2%

69 Category A—active (chemicals and equipment in use); Category B—stored/used (equipment or chemicals); Category C—stored/unused (equipment or chemicals); and Category D—historical site.

National clandestine laboratory detections and precursor border detection, point in time annual and decade trend comparison (continued)

		2019–20 and 2020–21	2011–12 and 2020–21
ATS (excluding MDMA) border detection	ATS precursors (no.)	↓ -28% 790 → 571	↓ -39% 937 → 571
	ATS precursors (weight)	↓ -51% 2,099kg → 1,031kg	↓ -41% 1,744kg → 1,031kg
MDMA border detection	ATS precursors (no.)	↑ 50% 4 → 6	↓ -33% 9 → 6
	ATS precursors (weight)	↓ -92% 4,000g → 320g	↓ ≈-100% 240 litres → 320g

MAIN FORMS

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

Drug manufacture carried out in clan labs may involve any or all of the following processes:

- Extraction—the active chemical ingredients are extracted from a preparation or plant, using a solvent to produce a finished drug or a precursor chemical. Examples include the extraction of precursor chemicals from pharmaceutical preparations, or of morphine from opium.
- Conversion—a raw or unrefined drug product is changed into a more 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 3 types of substances used in illicit drug manufacture:

- Precursors—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 to methylamphetamine.
- Reagents—substances that cause a chemical reaction to modify the precursor's molecular structure. For example, when the reagent acetic anhydride is mixed with the precursor P2P, the resulting compound is methylamphetamine.
- Solvents—substances 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; INCB 2022).

The method of manufacture employed is influenced by a number of factors, including the skill of the drug 'cook' and the availability of precursors. In Australia, methylamphetamine is the predominant drug manufactured in detected clan labs. The manufacturing methods and precursors used to manufacture methylamphetamine vary.

- The predominant processes used in Australia for manufacturing 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 use of precursor chemicals that are more difficult to obtain.

INTERNATIONAL TRENDS

Preventing the diversion of precursors, reagents and solvents for 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.

The trafficking of precursors, reagents and solvents is a global illicit market in itself and may involve diversion from licit channels and/or illicit manufacture. The illicit production of plant-based substances (primarily cocaine and heroin) relies on a number of known precursors, solvents and reagents used in common and well understood methods of production. In contrast, the illicit manufacture of synthetic drugs—in particular ATS—and the precursor chemicals used in its manufacture, is increasingly using a combination of old and newly developed techniques. The International Narcotics Control Board (INCB) noted an increasing trend of using non-scheduled chemicals and designer precursors[70] and pre-precursors as alternatives to traditional precursor chemicals, although trafficking in controlled precursors appears to have remained largely unaffected by COVID-19 restrictions (INCB 2022).

70 Designer precursors are substances that are close chemical relatives to controlled precursors, typically developed to evade international controls.

This section will focus on ephedrines, potassium permanganate and acetic anhydride seizures reported by the INCB. These chemicals are under international control and are used in the manufacture of ATS, cocaine and heroin.

- Eph and PSE: 28 countries reported Eph seizures in 2020 (totalling 8.9 tonnes), while 22 countries reported PSE seizures (totalling 1.4 tonnes). The combined weight of Eph and PSE seized globally continued to decrease in 2020 to a decade low (10.3 tonnes). East and South-East Asia accounted for more than 80% of the weight of Eph seized globally in 2020 (8.3 tonnes), of which China accounted for 7.6 tonnes. Australia and New Zealand are the only countries in the Oceania region that have reported seizures of Eph in the last 10 years, with Australia accounting for the majority of the weight seized (over 75%). In 2020, Australia seized 650 kilograms of Eph (among the lowest weight reported by Australia in the last decade) and 475 kilograms of PSE.
- Potassium permanganate: 12 countries reported potassium permanganate seizures in 2020. The weight of potassium permanganate seized globally increased from 65 tonnes (2019) to approximately 95 tonnes (2020). South America and China accounted for the majority of seizures, with Colombia accounting for the greatest proportion of the weight seized (almost 65 tonnes) in 2020.
- Acetic anhydride: 17 countries reported acetic anhydride seizures in 2020 totalling 106,000 litres, an increase from 60,049 litres in 2019. China accounted for the greatest proportion of the volume seized in 2020 (48,900 litres; INCB 2021; INCB 2022).

DOMESTIC TRENDS

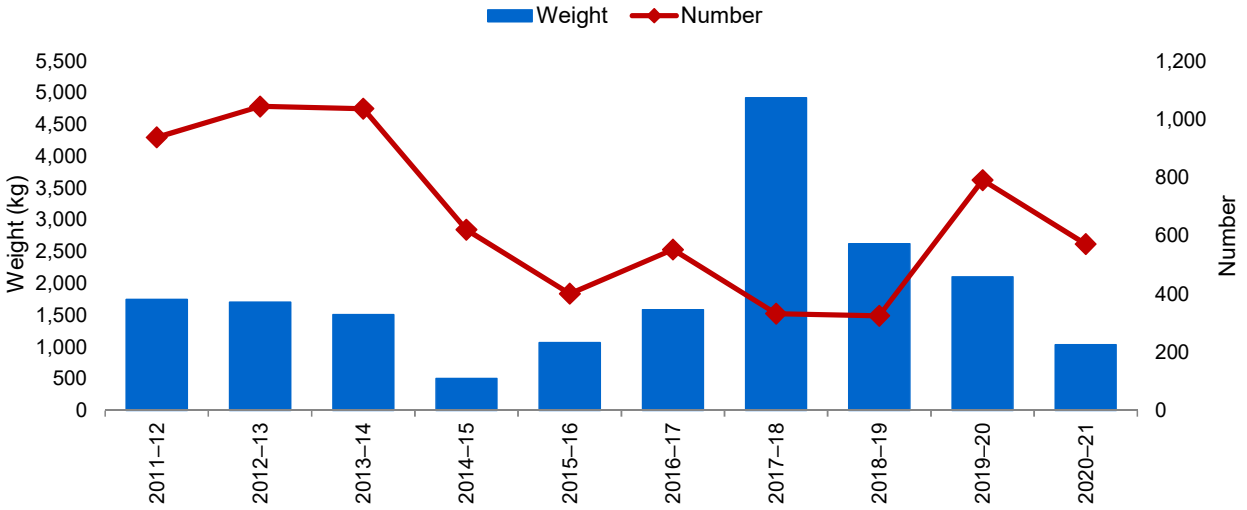
AUSTRALIA BORDER SITUATION

As ATS are the most common illicit drugs manufactured in domestic clan labs, this chapter focuses on ATS (excluding MDMA) and MDMA precursor detection data.

The number of ATS (excluding MDMA) precursor detections at the Australian border fluctuated, decreasing 39% from 937 in 2011–12 to 571 in 2020–21. This reporting period the number of detections decreased 28%, from 790 in 2019–20. The weight of ATS (excluding MDMA) precursors detected also fluctuated, decreasing 41% from 1,744.6 kilograms in 2011–12 to 1,031.0 kilograms in 2020–21. The weight detected this reporting period decreased 51%, from 2,099.1 kilograms in 2019–20 (see Figure 39).[71]

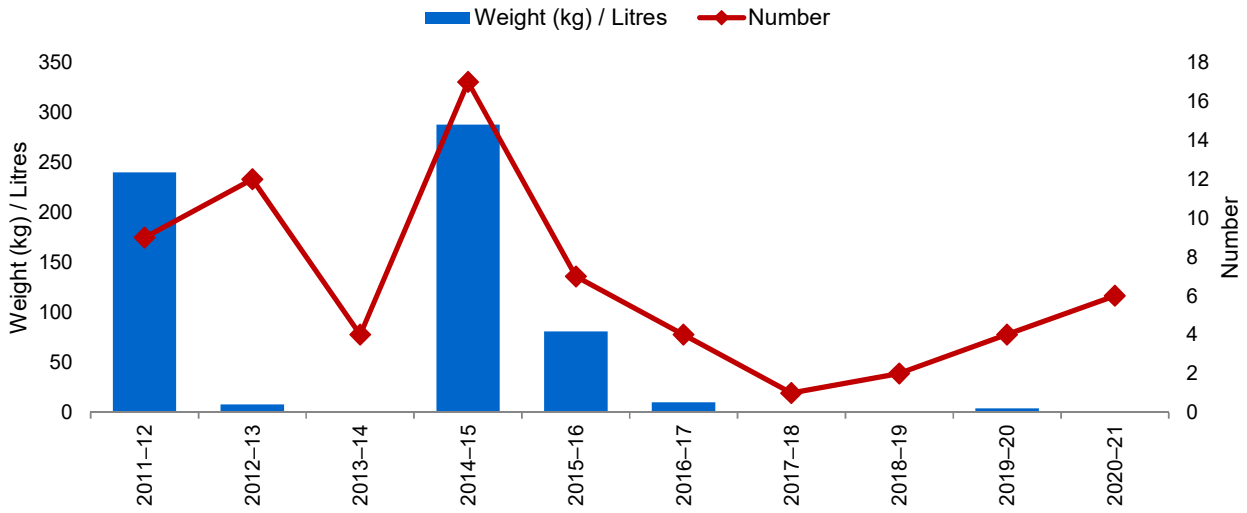
71 See Appendix 2 for significant ATS (excluding MDMA) precursor border detections in 2020–21.

FIGURE 39: Number and weight of ATS (excluding MDMA) precursor detections at the Australian border, 2011–12 to 2020–21 (Source: Department of Home Affairs)



The number of MDMA precursor detections at the Australian border fluctuated over the last decade, but remained relatively low. The number of detections decreased 33%, from 9 in 2011–12 to 6 in 2020–21. This reporting period the number of detections increased 50%, from 4 in 2019–20. The weight of MDMA precursor detected also fluctuated and decreased by close to 100% from 240.1 litres in 2011–12 to 320 grams in 2020–21. The weight detected this reporting period decreased 92%, from 4.1 kilograms in 2019–20 (see Figure 40).

FIGURE 40: Number and weight/litres[a] of MDMA precursor detections at the Australian border, 2011–12 to 2020–21 (Source: Department of Home Affairs)



a. Significant detections of MDMA precursors occur in both kilograms and litres. As this figure reflects 2 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 2020–21, 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 77% of ATS (excluding MDMA) precursor border detections, followed by air cargo (21%), air passenger/crew (1%) and sea cargo (1%). By weight, air cargo accounted for the greatest proportion of ATS (excluding MDMA) precursor border detections (42%), followed by sea cargo (35%), international mail (22%) and air passenger/crew (<1%).

In 2020–21, MDMA precursor border detections occurred in the air cargo and international mail streams. By number, the international mail stream accounted for 67% of MDMA precursor border detections, followed by air cargo (33%). By weight, air cargo accounted for the greatest proportion of MDMA precursor border detections (66%), followed by international mail (34%).

EMBARKATION POINTS

By weight, China (including Hong Kong) was the primary embarkation point for ATS (excluding MDMA) precursor detections at the Australian border in 2020–21. Other key embarkation points by weight this reporting period included India, the Netherlands, Malaysia, Singapore, Canada, the Republic of Korea, Nepal, Indonesia and the United Arab Emirates.

By weight, the United States was the primary embarkation point for MDMA precursor detections at the Australian border in 2020–21. Other key embarkation points this reporting period included the Netherlands and Poland.

TABLET PRESS DETECTIONS

The number of tablet press detections at the Australian border increased 305%, from 20 in 2011–12 to 81 in 2020–21. The number of detections increased 179% this reporting period, from 29 in 2019–20.

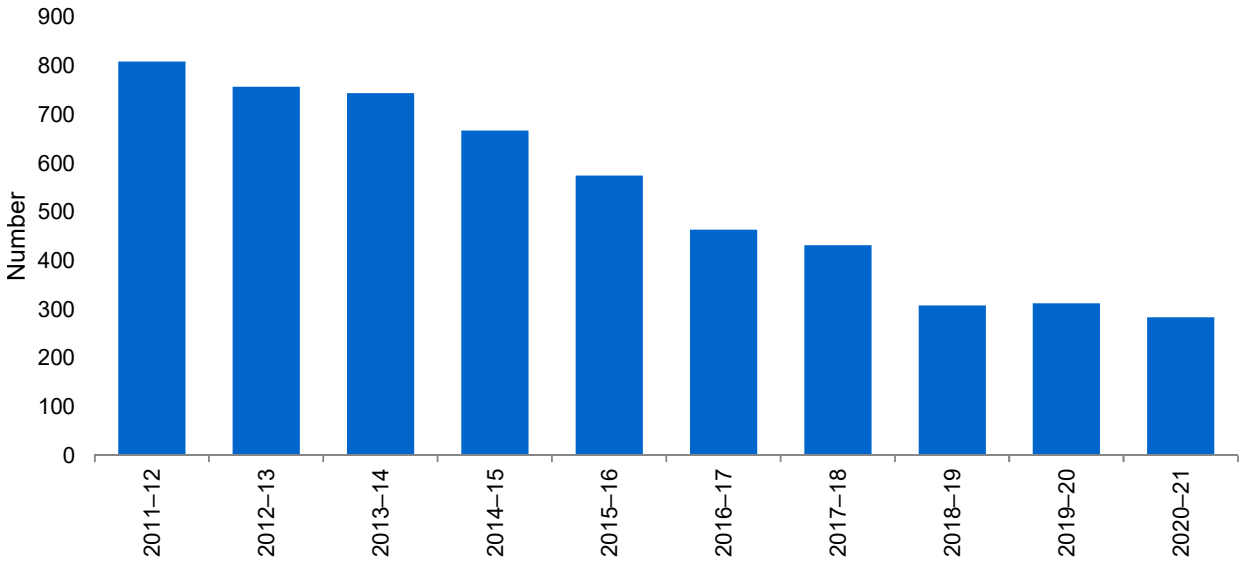
DOMESTIC MARKET INDICATORS

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

CLANDESTINE LABORATORY DETECTIONS

The number of national clan lab detections in Australia decreased 65%, from a record 809 in 2011–12 to 284 in 2020–21. Since 2011–12, the number of clan lab detections decreased in every subsequent reporting period, with the exception of 2019–20 which had a slight increase. This reporting period the number of clan labs detected nationally decreased 9%, from 312 in 2019–20 (see Figure 41).

FIGURE 41: National clan lab detections, 2011–12 to 2020–21



New South Wales, Victoria, South Australia and the Australian Capital Territory reported a decrease in the number of clan labs detected this reporting period compared to 2019–20, while Queensland, Western Australia and Northern Territory reported an increase. The number of clan labs detected in Tasmania remained stable (see Table 22). Victoria accounted for the greatest proportion of national clan lab detections in 2020–21 (24%), followed by Queensland (23%).

TABLE 22: Number of clan lab detections, by state and territory, 2011–12 to 2020–21

Year	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Total
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
2018–19	59	91	81	58	14	1	2	2	308
2019–20	80	77	62	61	28	2	1	1	312
2020–21	56	68	66	56	33	2	3	0	284

SIZE AND PRODUCTION CAPACITY

State and territory police services are asked to provide an indication of the size and production capacity of detected laboratories using categories provided by the United Nations Office on Drugs and Crime in their data collection for the World Drug Report. Full definitions for the 4 categories—addict-based, other small scale, medium scale and industrial scale—are found in the *Statistics* chapter.

In 2020–21, clan labs detected in Australia ranged from addict-based laboratories, which typically use basic equipment and simple procedures, through to industrial-scale laboratories using oversized equipment. The majority of detected laboratories in Australia continue to be addict-based, though the proportion continued to decrease, from 44% in 2019–20 to 40% in 2020–21. In 2011–12, this proportion was 79%. The proportion of laboratories categorised as other small-scale laboratories increased this reporting period, from 28% in 2019–20 to 35% in 2020–21. In 2011–12 this proportion was 13%. The proportion of laboratories categorised as medium sized laboratories decreased this reporting period, from 24% in 2019–20 to 20% in 2020–21. In 2011–12 this proportion was 6%. The proportion of industrial-scale laboratories increased this reporting period, from 4% in 2019–20 to 6% in 2020–21. In 2011–12 this proportion was 3%.

DRUG TYPES AND METHODS OF PRODUCTION

Over the last decade and of those able to be identified, clan labs manufacturing ATS (excluding MDMA) accounted for the greatest proportion of national detections, with methylamphetamine the main drug produced. The proportion of ATS (excluding MDMA) laboratory detections fluctuated, decreasing from 66% in 2011–12 to 51% in 2020–21. In 2019–20 the proportion was 48%.

The number of national ATS (excluding MDMA) laboratory detections decreased 73%, from 552 in 2011–12 to 149 in 2020–21. This number decreased 8% this reporting period from 162 in 2019–20.

- In 2020–21, Victoria accounted for the greatest proportion of national ATS (excluding MDMA) laboratories (26%), followed by New South Wales (24%). All states and territories, with the exception of the Australian Capital Territory, reported ATS (excluding MDMA) production this reporting period (see Table 23).

While fluctuating, the proportion of MDMA laboratory detections increased from less than 1% of national clan lab detections in 2011–12 to 2% in 2020–21. In 2019–20 the proportion was 3%.

- The number of detections increased 200%, from 2 in 2011–12 to 6 in 2020–21. This number decreased 45% this reporting period, from 11 in 2019–20.
- In 2020–21, MDMA laboratories were detected in Victoria (3), New South Wales (2) and Queensland (1).

The proportion of cannabis oil extraction laboratory detections increased, from less than 1% of national clan lab detections in 2011–12 to 6% in 2020–21. In 2019–20 the proportion was 9%.

- Detections increased 533%, from 3 in 2011–12 to 19 in 2020–21. This number decreased 34% this reporting period, from a record 29 in 2019–20.
- South Australia accounted for the majority of detections (8), followed by Victoria (5), Western Australia (5) and Queensland (1).

While fluctuating, the proportion of clan labs extracting PSE remained relatively stable, decreasing from 2% of national clan lab detections in 2011–12 to 1% in 2019–20 and 2020–21.

- PSE laboratory detections decreased 82%, from 17 in 2011–12 to 3 in 2020–21. This number decreased 25% this reporting period, from 4 in 2019–20.
- In 2020–21, laboratories were detected in New South Wales (1), Victoria (1) and South Australia (1).

The proportion of gamma-hydroxybutyrate (GHB)/gamma-butyrolactone (GBL) laboratory detections increased, from 1% in 2011–12 to 6% of national clan lab detections in 2020–21. In 2019–20 the proportion was 7%.

- The number of detections increased 183%, from 6 in 2011–12 to 17 in 2020–21. This number decreased 26% this reporting period, from a record 23 in 2019–20.
- In 2020–21, laboratories were detected in Victoria (7), Queensland (6), New South Wales (2), South Australia (1) and Western Australia (1).

While fluctuating, the proportion of homebake heroin laboratories decreased, from less than 1% of national clan lab detections in 2011–12 to no detections in 2020–21. No detections were reported in 2019–20.

Clan labs detected in Australia also produce a range of other illicit drugs, precursors and pre-precursors, as well as being used in extraction and conversion processes.

- In 2020–21, this included laboratories manufacturing DMT, MDP2P, P2P, MDA, steroids, psilocybin, 1,4-butanediol (1,4-BD), mescaline and controlled precursors and pharmaceuticals. A cocaine and an iodine extraction laboratory were also detected this reporting period.

TABLE 23: Number of clandestine laboratory detections, by drug production type and state and territory, 2020–21

State/ Territory	ATS (excl. MDMA)	MDMA	Homebake heroin	Cannabis oil extraction	PSE extraction	GHB/ GBL	Other[a]	Unknown[b]	Total[c]
NSW	36	2	0	0	1	2	13	6	60
Vic	39	3	0	5	1	7	8	6	69
Qld	33	1	0	1	0	6	8	18	67
SA	23	0	0	8	1	1	23	2	58
WA	14	0	0	5	0	1	11	3	34
Tas	2	0	0	0	0	0	0	0	2
NT	2	0	0	0	0	0	1	0	3
ACT	0	0	0	0	0	0	0	0	0
Total	**149**	**6**	**0**	**19**	**3**	**17**	**64**	**35**	**293**

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 clan lab detections due to multiple drug production types being identified in a single laboratory.

The hypophosphorous method of production continues to be the predominant method of ATS (excluding MDMA) manufacture identified in Australia (see Table 24). While fluctuating over the last decade, the proportion of ATS (excluding MDMA) laboratories detected nationally using the hypophosphorous method of production decreased, from 59% in 2011–12 to 54% in 2020–21. In 2019–20 this proportion was 53%. The number of laboratories detected using this method of production decreased 81%, from 354 in 2011–12 to 68 in 2020–21. The number of laboratories detected decreased 15% this reporting period, from 80 in 2019–20.

Other trends observed in ATS (excluding MDMA) laboratory detections nationally over the last decade include:

- The proportion of detections identified using the red phosphorous method decreased, from 10% in 2011–12 to 5% in 2020–21. In 2019–20, this proportion was 7%. The number of laboratories detected decreased 89%, from 57 in 2011–12 to 6 in 2020–21. The number of laboratories detected decreased 45% this reporting period, from 11 in 2019–20.
- The proportion of detections identified using the Nazi/Birch method decreased, from 26% in 2011–12 to 18% in 2020–21. In 2019–20 this proportion was 13%. The number of laboratories detected decreased 86%, from 157 in 2011–12 to 22 in 2020–21. The number of laboratories detected increased 16% this reporting period, from 19 in 2019–20.
- The proportion of detections identified using the P2P method doubled, increasing from 3% in 2011–12 to 6% in 2020–21. In 2019–20 this proportion was 9%. The number of laboratories detected decreased 56%, from 16 in 2011–12 to 7 in 2020–21. The number of laboratories detected decreased 46% this reporting period, from 13 in 2019–20.
- In 2020–21, New South Wales accounted for the greatest proportion of the number of hypophosphorous laboratories detected nationally (32%), South Australia accounted for the greatest proportion of red phosphorus laboratory detections (50%), Victoria accounted for the greatest proportion of P2P laboratory detections (57%) and Western Australia accounted for the greatest proportion of Nazi/Birch laboratory detections (64%).

TABLE 24: Method of ATS (excluding MDMA) production in clandestine laboratory detections, by state and territory, 2020–21

State/ Territory	Hypophosphorous	Red-phosphorus	Nazi/ Birch	Phenyl-2-propanone (P2P)	Other[a]	Total[b]
NSW	22	2	0	1	10	35
Vic	16	1	6	4	10	37
Qld	15	0	0	2	0	17
SA	13	3	0	0	2	18
WA	0	0	14	0	0	14
Tas	0	0	2	0	0	2
NT	2	0	0	0	0	2
ACT	0	0	0	0	0	0
Total	**68**	**6**	**22**	**7**	**22**	**125**

a. 'Other' includes the detection of other ATS (excluding MDMA) production methods.
b. Total may not equal the number of ATS (excluding MDMA) clan lab detections as the method of production may not be identified or the detection is awaiting analysis.

SIGNIFICANT PRECURSOR SEIZURES

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

3-oxo-4-phenylbutanoate (MOPB) P2P isomer

- 85.00 kilograms in Victoria
- 1.10 kilograms in Victoria.

Ephedrine

- 8.50 kilograms in South Australia
- 0.98 kilograms in New South Wales.

Hypophosphorous acid

- 174.00 kilograms in Victoria
- 1.00 kilogram in Victoria
- 0.50 kilograms in Victoria
- 0.46 kilograms in Queensland.

Iodine

- 70.00 kilograms in Victoria
- 25.00 kilograms in Victoria
- 20.00 kilograms in Victoria
- 10.00 kilograms in Victoria
- 7.50 kilograms in South Australia
- 3.50 kilograms in South Australia
- 2.00 kilograms in South Australia
- 0.50 kilograms in Victoria
- 0.20 kilograms in Victoria.

MDP2P/PMK

- 760.00 kilograms in Victoria
- 160.00 kilograms in New South Wales.

Methylamine

- 4.40 tonnes in Victoria.

Methyl-alpha acetylphenylacetate (MAPA)

- 1.00 tonne in Victoria
- 1.00 kilogram in Victoria.

Pseudoephedrine

- 3.00 kilograms in Victoria
- 1.00 kilogram in South Australia
- 0.10 kilograms in the Northern Territory.

Red phosphorous

- 60.00 kilograms in Victoria
- 36.00 kilograms in Victoria.

Sodium hydroxide

- 1,075.00 kilograms in South Australia
- 25.00 kilograms in Victoria.

Other

- 1.00 tonne of MMDMG in Victoria
- 10.00 kilograms of GABA in Victoria
- 4.50 kilograms of 4-fluro-3-methyl-alpha-PVP (Alpha-PVP) in Victoria
- 3.60 kilograms of nitro ethane in Victoria
- 1.50 kilograms of GABA in Queensland
- 1.00 kilogram of piperonal in New South Wales
- 0.81 kilograms of sodium hypophosphite and hydrochloric acid in Victoria
- 0.50 kilograms of magnesium in Victoria
- 0.50 kilograms of mandelic acid in Victoria
- 0.39 kilograms of potassium iodide in Victoria.

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

1,4-BD

- 20.00 litres in Western Australia.

GBL

- 29.00 litres in Queensland
- 25.00 litres in Queensland
- 20.00 litres in Queensland.

Hypophosporous acid

- 220.00 litres in New South Wales
- 11.20 litres in South Australia
- 10.90 litres in South Australia
- 1.00 litre in Victoria
- 0.60 litres in Victoria.

Pseudoephedrine

- 1,125.00 litres in New South Wales.

Other

- 3,500.00 litres of hydrobromic acid in Victoria
- 3,500.00 litres of hydrofluoric acid in Victoria
- 200.00 litres of nitro ethane in Victoria
- 40.00 litres of toluene in South Australia
- 3.00 litres of formaldehyde in Victoria
- 1.00 litre of safrole in New South Wales.

LOCATION AND CATEGORY

The majority of clan labs detected in Australia continue to be located in residential areas. The proportion of clan labs detected in residential areas increased this reporting period, from 74% in 2019–20 to 81% in 2020–21. Clan labs located in commercial and industrial areas accounted for the second largest proportion of national detections this reporting period (remaining stable at 8% in 2019–20 and 2020–21), followed by laboratories detected in vehicles (3%, a decrease from 4% in 2019–20), public places (3%, a decrease from 4% in 2019–20), rural areas (3%, a decrease from 5% in 2019–20) and other locations (2%, a decrease from 5% in 2019–20).

- Victoria and South Australia reported detections of laboratories in hotels/motels in 2020–21.
- South Australia reported the detection of a laboratory in a storage unit in 2020–21.
- Victoria reported the detection of a laboratory in a community hall in 2020–21.
- Western Australia reported the detection of a laboratory in a nightclub in 2020–21.

Based on their operating status, there are 4 distinct categories of clan labs:

- Category A—active (equipment and chemicals in use)
- Category B—stored/used (equipment and chemicals)[72]
- Category C—stored/unused (equipment and chemicals)
- Category D—historical site.

72 Laboratories which are fully assembled, but not active at the time of detection.

Consistent with previous reporting periods, Category C was the most common category for clan labs detected nationally, accounting for 42% of laboratories in 2020–21, unchanged from 2019–20. This was followed by Category B, which accounted for 32% this reporting period (a decrease from 34% in 2019–20), Category A, which remained relatively stable at 14% (13% in 2019–20) and Category D, which remained relatively stable at 12% (11% in 2019–20).

NATIONAL TABLET PRESS SEIZURES

The number of tablet presses seized nationally increased 52% this reporting period, from 29 in 2019–20 to 44 in 2020–21. The 44 national tablet press seizures this reporting period comprised 25 single station/simple presses and 19 rotary presses. In 2020–21, seizures were made in Victoria (20), New South Wales (8), South Australia (8), Queensland (5) and Western Australia (3).

The number of encapsulators seized nationally decreased 58% this reporting period, from 12 in 2019–20 to 5 in 2020–21. The 5 encapsulators were seized in New South Wales (1), Victoria (1), Queensland (1), South Australia (1) and Western Australia (1).

SUMMARY

The trafficking of precursor chemicals used to produce illicit drugs is a global market in itself and the range of chemicals used worldwide in illicit drug production is increasing. In 2020, of the chemicals seized globally under international control commonly used to manufacture ATS, cocaine and heroin:

- The weight of Eph and PSE decreased to decade-low levels.
- The weight of potassium permanganate increased.
- The weight of acetic anhydride increased.

Clan labs in Australia manufacture and process a range of illicit drugs, precursors and pre-precursors:

- In 2020–21, this included ATS (excluding MDMA), MDMA, cannabis oil extraction, PSE extraction and GHB/GBL. Additional drugs manufactured in laboratories detected include DMT, MDP2P, P2P, MDA, steroids, psilocybin, 1,4-BD, mescaline and controlled precursors and pharmaceuticals as well as a cocaine and an iodine extraction laboratory.
- While decreasing over the last decade, clan labs manufacturing ATS (excluding MDMA) continue to account for the greatest proportion of national detections, with methylamphetamine the main drug produced in 2020–21.

REFERENCES

European Centre for Monitoring Drugs and Drug Addition (EMCDDA) and Europol 2016, *EU Drug Markets Report: In Depth Analysis,* EMCDDA-Europol Joint Publications, Publications Office of the European Union, Luxemburg, <https://www.emcdda.europa.eu/publications/joint-publications/eu-drug-markets-2016-in-depth-analysis_en>.

International Narcotics Control Board (INCB) 2021, *Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances 2020*, United Nations, Vienna.

International Narcotics Control Board (INCB) 2022, *Precursors and chemicals frequently used in the illicit manufacture of narcotic drugs and psychotropic substances 2021*, United Nations, Vienna.

United Nations Office on Drugs and Crime (UNODC) 2016, *Report of the International Narcotics Control Board for 2015*, INCB, Vienna.

United Nations Office on Drugs and Crime (UNODC) 2014, *World Drug Report 2014*, UNODC, Vienna.