

VIABILITY OF AN EARLY WARNING SYSTEM (VIEWS) STUDY: FINAL REPORT

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LIST OF ABBREVIATIONS

ACT	Australian Capital Territory
ADIS	Alcohol and Drug Information Services
BOCSAR	Bureau of Crime Statistics and Research
DASAS	Drug and Alcohol Specialist Advisory Service
DACAS	Drug and Alcohol Clinical Advisory Service
EWS	Early Warning System
GDEWS	Global Drug Early Warning System study
IDRS	Illicit Drug Reporting System (also referred to as 'Drug Trends')
LGA	Local Government Area
LHD	Local Health District
NDARC	National Drug and Alcohol Research Centre
NDEWS	US National Drug Early Warning System
NPS	New psychoactive substances
NSW	New South Wales
NT	Northern Territory
PHREDDS	Public Health Rapid, Emergency, Disease and Syndromic Surveillance System
SA	Statistical Area
SEIFA	Socio-Economic Indexes for Areas
ViEWS	Viability of an Early Warning System study

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EXECUTIVE SUMMARY

Objectives. There is a recognised opportunity for more systematic and timely triangulation of existing data to rapidly assess and identify emerging illicit drug trends in Australia. The overarching aim of this scoping study was to determine the feasibility of establishing an Australian early warning system (EWS). The objectives were to:

1. Identify existing data sources routinely collected and collated; and
2. Identify and describe the data sources feasible for inclusion in an EWS.

Given indications of feasibility, the following objectives also applied to those data sources that met feasibility criteria:

3. Describe coverage across drugs and outcomes of interest;
4. Identify and describe other data sources (not yet collated) for inclusion to address gaps in coverage;
5. Identify and describe analytic and triangulation approaches and mode of availability; and
6. Develop a proposal for a pilot study of an EWS.

Methods. In this scoping study, we systematically reviewed multiple sources to identify existing routine data collections. We utilised information from online and from direct communication with data custodians to assess each data source against pre-specified feasibility criteria. We evaluated the data sources against feasibility criteria to determine whether they provided data on key outcomes and drugs of interest, and we consulted with an Advisory Committee and with key figures involved in international EWS regarding features of an EWS.

Results and Conclusions. Key results and conclusions from this scoping study comprise the following.

1. **There is an array of existing data sources on illicit drugs in Australia.** There are currently 286 routinely collected and collated data sources measuring illicit drug use, harms, and/or market features in Australia.
2. **Approximately one-quarter of these are feasible for inclusion in an EWS.** A total of 76 sources met feasibility criteria for possible inclusion, with 53 sources pending feasibility on formal application for data access. There were a number of data sources meeting feasibility criteria in each jurisdiction, but only five data sources meeting criteria at the national level.

3. **An Australian EWS is feasible at the jurisdictional level.** A national profile of illicit drug use trends could be built bottom-up by establishing a jurisdictional-level EWS. State/territory custodians and stakeholders were supportive of establishing an EWS and noted existing informal information-sharing networks regarding illicit drug trends. Appropriate resourcing of data access, as well as ethical and organisational approval for data access, would be required for effective implementation.
4. **Data sources that met feasibility criteria offer coverage of key outcomes and drugs of interest but there are gaps.** The data sources cover most key outcomes and drugs of interest, with the exception of trends related to market features (e.g., illicit price, availability) and novel psychoactive substances.
5. **Other data sources (namely online sources) could easily address these gaps.** Online data sources comprise an easily accessible, relatively inexpensive, prolific (and relatively untapped) source of information which can complement traditional routine data collections. They are particularly important to monitoring illicit markets and novel psychoactive substances given availability of online drug marketplaces.
6. **Data analysis/triangulation is feasible and online access to outputs has benefits.** Quantitative analysis and triangulation would facilitate systematic and transparent detection of trends, and an online mode of availability could facilitate stakeholder engagement and allow for restricted access to outputs.
7. **A pilot EWS in two jurisdictions is a suitable next step.** Features of two jurisdictions (New South Wales and Queensland) are highlighted as indicative of particular preparedness for a pilot, with planned subsequent expansion to other jurisdictions. Implementation and evaluation over two years is proposed (with outputs within 6 months), and stakeholder involvement and appropriate resourcing flagged as key considerations.

1. INTRODUCTION

Illicit drugs differ in their physiological, psychological and behavioural effects, with subsequent varying risk of acute and chronic harms. This variation makes monitoring illicit drug trends critical. Indeed, the challenge of early and coordinated practical responses to new problems makes the desire for good information on emerging drug trends an important policy priority (1).

Early warning systems (EWS) identifying emerging illicit drug trends typically assess aspects of use, harms, and market features (e.g., purity, availability). They aim to identify:

- Availability and use of new drugs;
- Changes in the number of people using, or the way in which they use, drugs;
- Changes in the number of people experiencing health and social harms, or in the type of harms experienced, as a consequence of drug use; and
- Changes in the drug market which might alter patterns of use and harms.

To detect emerging trends, an EWS typically has the following attributes:

- Measurement of multiple indicators of use, harms, and market features;
- Data collected regularly, accessible at minimal time lag, and sensitive to change;
- Triangulation and cross-verification of data to increase certainty in emerging trends; and
- Communication of trends to those within policy and practice (2).

These features comprise particular strengths of an EWS. It is important to note that indicators (e.g., arrests for illicit drug-related offences) may capture a smaller part of overall behaviours related to illicit drugs (e.g., all illicit drug crime). Indeed, indicators may be approximate and imperfect measures of the event of interest (8). *Cross-validation* of sources (i.e., checking for similar findings across all indicators of the same outcome) and *triangulation* (i.e., combination of findings from various indicators) can address these limitations, and are critical to ensuring sensitivity to, and confidence in, detection of emerging trends.

Several EWS have been established globally, including in the United States (3), Canada (4), South Africa (5), Belgium (6), Netherlands (7), Norway (8), and Europe (9). These systems vary in comprising the aforementioned attributes. Yet, these systems have been successful in identifying emerging trends, namely related to prescription opioids (including fentanyl), heroin, methamphetamine, and new psychoactive substances (NPS; including synthetic opioids).

In Australia, the Illicit Drug Reporting System (IDRS) commenced in NSW in 1996, transitioning to a national system (now referred to as 'Drug Trends') in 2000. This program of research funded by the Australian Government includes:

- Annual interviews with people who inject drugs and who regularly use psychostimulants;
- Analysis of jurisdictional and national data collections (e.g., hospital admissions); and
- Analysis of data extracted from online drug marketplaces (10, 11).

Data from 'Drug Trends' are triangulated annually and findings reported typically 6-18 months following the end of data collection. Greater lags in reporting (≥ 2 years) are evident in jurisdictional-level monitoring systems (e.g., 'AODstats' in Victoria; 12).

Our information systems in Australia have good international standing, with the 'Drug Trends' model being adopted in other countries (e.g., New Zealand; 13). Yet, there is a recognised opportunity for more systematic and timely triangulation of illicit drug data in Australia (1, 14-16). Indeed, policy-makers have identified the need for a review of options in establishing systems for more timely detection of emerging illicit drug trends.

1.1 Objectives

The current report addresses the following objectives:

1. Identify existing data sources routinely collected and collated; and
2. Identify and describe the data sources feasible for inclusion in an EWS.

Given indications of feasibility, the following objectives also applied to those data sources that met feasibility criteria:

3. Describe coverage across drugs and outcomes of interest;
4. Identify and describe other data sources (not yet collated) for inclusion to address gaps in coverage;
5. Identify and describe analytic and triangulation approaches and mode of availability; and
6. Develop a proposal for a pilot study of an EWS.

1.2 Terminology

In this report, we define illicit drug use as the use of prohibited drugs (e.g., heroin), pharmaceutical drugs for non-medical purposes (e.g., pharmaceutical opioids), and other substances (e.g., inhalants) for reasons other than as intended, namely for intoxication (17).

2. METHODS

2.1 Systematic Review of Existing Routine Data Sources

We undertook the following research activities to compile a comprehensive list of existing data sources on illicit drug use, harms, and market features in Australia routinely collected and collated:

1. Reviewed existing documents which summarise available data sources (18, 19);
2. Reviewed existing reports which triangulate multiple data sources (11, 12, 20);
3. Systematically searched government health and law enforcement websites;
4. Systematically searched other government and non-governmental websites (21-25); and
5. Consulted with the Advisory Committee (see Section 2.7) for additional sources.

2.2 Identification and Description of Data Sources Feasible for Inclusion

Criteria were developed to assess data sources that may be eligible for inclusion in an EWS (Table 1). These criteria were developed in consultation with the Advisory Committee and international experts involved in EWS (see Section 2.5 and 2.7). Different terminology are given to monitoring systems (e.g., early warning system, surveillance system, emerging trends monitoring system), and each term infers a different temporality in detecting trends. An EWS is focused on rapid detection on trends, and we were particularly interested in identifying sources where data were accessible on a real-time basis (i.e., as the data regarding the event are recorded). Yet, in accordance with international EWS, we opted to consider less frequent access by including data sources available regularly throughout the year (e.g., every four months or more frequently). Other information considered important in describing feasible data sources are outlined in Box 1.

In order to complete the feasibility assessment, we extracted information from websites and online reports regarding each data source into a custom-built Microsoft Access 2016 database. Following this, we excluded data sources that did not meet **Criterion 1** or **2**.

We then emailed data custodians for the remaining data sources to ascertain responses to **Criteria 3-6** and features listed in Box 1 (example email in Appendix 1). Two reminder emails were sent and custodians were contacted directly via phone in the event of non-response.

Table 1. Eligibility Criteria for Data Sources Assessed as Feasible for Inclusion in an EWS

Criterion	Data Source Feature	Eligibility
1	Indicators of drug-related outcomes	Measures drug use, drug market features, or harms occurring directly as a consequence of drug use
2	Frequency of data collection	Every four months or more frequently
3	Data availability for inclusion in an EWS	Data custodian provided in-principle approval
4	Frequency of data collation	Every four months or more frequently
5	Frequency of data access	Every four months or more frequently
6	Time lag between collection and access	Four months or less

Note. *Data collection*: generation of data based on an event; *data collation*: drawing together of data within a time period (e.g., data recorded by various hospitals within a one month period); and *data access*: minimum frequency of access.

Following data custodian response, sources were evaluated against **Criteria 3-6**. Data sources had to meet all stated criteria for inclusion. Data sources where custodians did not respond were classified as not feasible. Data sources where custodians indicated that access may be feasible with a formal application for access were classified as ‘feasibility pending’. Features listed in Box 1 were summarised to describe eligible data sources.

Box 1. Description of Data Sources for Inclusion

- Capacity to disaggregate data to identify geographic trends (including regional/remote trends);
- Capacity to disaggregate data to identify sociodemographic trends (e.g., age, gender, identification as an Aboriginal and/or Torres Strait Islander person);
- Need for approvals to access data;
- Costs to accessing data; and
- Any perceived opportunities or barriers to use of the data in an EWS.

2.3 Review of Coverage of Outcomes and Drugs by Data Sources Feasible for Inclusion

As part of the aforementioned data extraction into the Microsoft Access database, we extracted information from online reports and websites regarding whether data sources feasible for inclusion:

1. Disaggregated data by whether events related to key drugs of interest, namely heroin, pharmaceutical opioids, meth/amphetamine, ecstasy, cannabis, and NPS; and
2. Measured indicators of:
 - a) *Use* (e.g., use, illicit use, injecting drug use)
 - b) *Harms* (e.g., health harms, crime, treatment engagement); and/or
 - c) *Market features* (e.g., price, purity, availability).

2.4 Identification of Other Data Sources Feasible for Inclusion

We reviewed international EWS (Section 2.5) and literature related to other surveillance efforts (e.g., infectious disease, pharmacovigilance) to detect other data sources (namely online sources) which are not currently collated in Australia for illicit drug monitoring but could be utilised in an EWS.

2.5 Identification of Analysis/Triangulation Approaches and Mode of Availability

In considering the design of an Australian EWS, we consulted with key experts involved in international EWS, including the US National Drug Early Warning System (NDEWS; 3) and the European Early Warning System (26). Activities included:

- Visiting the NDEWS team in Silver Springs, Florida, in July, 2017;
- Participating in the 'Global Drug Early Warning System' (G-DEWS) program involving individuals establishing or currently running EWS internationally; and
- Participating in the EWS session at the Second European Conference on Addictive Behaviours and Dependences ('Lisbon Addictions 2017'), October, 2017.

These activities, combined with review of the peer-reviewed academic international literature on EWS (e.g., 2, 8), identified the key considerations in designing an EWS.

2.6 Development of Pilot Proposal

The pilot proposal was informed by the activities undertaken in addressing **Objectives 1-5**.

2.7 Study Advisory Committee

We established an Advisory Committee to bring together experts in EWS and various data collections and data types (Appendix 2 lists members). This group had input on all stages of the project, through formal consultation in face-to-face meetings in March and September, 2017, and informal consultation in the intervening period.

3. REVIEW OF EXISTING ROUTINE DATA SOURCES

The review yielded 286 sources (Table 2). Identified data sources are listed in Appendix 3.

Table 2. Summary of Total Sources Identified and Responses from Custodians

Jurisdiction	Total Sources	Total Contacted	Any response	Sources Feasible for Inclusion*	Sources Pending Feasibility Assessment
National	39	7	7	5	0
ACT	28	18	14	9	8
New South Wales	40	26	24	21	7
Northern Territory	24	16	14	11	6
Queensland	27	18	18	14	3
South Australia	27	18	15	8	9
Tasmania	30	20	20	15	4
Victoria	35	24	24	16	8
Western Australia	36	26	26	16	8

Note. *This number includes those data sources feasible for inclusion at the national level (n=5) that can be reported at the jurisdictional level; note one national source cannot provide data on Queensland (n=4). Thus, the number of sources feasible for inclusion and/or pending sources combined may be greater than the number listed as responding to our communication.

4. IDENTIFICATION AND DESCRIPTION OF DATA SOURCES FEASIBLE FOR INCLUSION

A number of data sources (n=111, 39%) were excluded from further consideration based on **Criteria 1** and **2**. Data custodians for the remaining sources were contacted (n=173 sources), and 94% responded (n=162).

For sources where custodians responded, we identified 76 data sources feasible for inclusion, with 53 additional sources pending feasibility on formal application for data access. The following sections outline assessment of feasibility and description of feasible data sources by jurisdiction.

4.1 National

Sources feasible for inclusion: Counselling Online; Family Drug Support Australia; Healthdirect Australia; National Death Index; National Wastewater Drug Monitoring Program

The majority (83%) of sources were collated annually or less frequently, and had a time lag of 6-36 months (Appendix 3). National Wastewater Drug Monitoring Program data could be accessed every four months at a four month lag (27). The National Death Index could provide monthly fatal overdose data at minimal lag, although custodians noted that financial support would be required for programming free-text search queries to identify cases. All other sources feasible for inclusion (i.e., helpline calls) could be disaggregated by sociodemographic characteristics, but generally custodians noted financial support may be required to facilitate regular data access. All data sources could disaggregate data by jurisdiction (noting Healthdirect does not collect data in Queensland), and thus are feasible for use at the state/territory level.

4.2 Australian Capital Territory

Sources feasible for inclusion: Alcohol and Drug Information Service (ADIS); Ambulance data; Drug and Alcohol Specialist Advisory Service (DASAS); Poison Information Centre

Sources pending feasibility assessment: Admitted Patient Collection; Court Alcohol and Drug Assessment Service; Crime Stoppers; Custody data; Emergency Department Data Collection; Illicit Drug Diversion Program; Magistrates Court data; Police drug seizure purity

Nine sources (including five national sources) were feasible against all criteria and eight sources pending approval on formal application for data access. All data sources feasible for inclusion could be disaggregated geographically, and most could be disaggregated by age and gender. Most custodians flagged costs associated with data access, and ACT Ambulance Service noted daily access to data was feasible with sufficient resourcing.

4.3 New South Wales

Sources feasible for inclusion: 1300 DRIVER Hotline; ADIS; Admitted Patients Data Collection*; NSW Ambulance*; Cannabis Cautioning Scheme; Criminal Court statistics; Custody data; DASAS; Emergency Department Data Collection*; Kirketon Road Needle-Syringe Program; Medically Supervised Injecting Centre; Opioid/Stimulant Treatment Lines; Poison Information Centre; Police arrests; Public Health Rapid Emergency, Disease, and Syndromic Surveillance (PHREDDs) System*

Sources pending feasibility assessment: Cause of Death; Crime Stoppers; Mental Health Ambulatory Data Collection; Minimum Data Set for Drug and Alcohol Treatment Services; Pharmaceutical Drugs of Addiction System; Police drug seizure (purity/number)

Two-thirds of sources identified in New South Wales were feasible against **Criteria 1** and **2**, and 21 sources (including five national sources) were feasible against all criteria. Utility of PHREDDs was highlighted by NSW Ministry of Health over similar data sources (*), capturing both ambulance callouts and emergency department presentations. Establishing free-text search queries for illicit drug cases was an anticipated upfront cost, yet it was noted this initial financial outlay would minimise resourcing for ongoing data access. Several custodians (e.g., ADIS, Poison Information Centre) flagged current or impending real-time data collection. NSW Ministry of Health, Police, and the Bureau of Crime Statistics and Research (BOCSAR)

expressed support, noting an EWS would support information-sharing groups within and across government divisions.

4.4 Northern Territory

Sources feasible for inclusion: ADIS; Deaths Registry; Drug and Alcohol Clinical Advisory Service (DACAS); Emergency Department Activity Collection; Inpatient Activity Collection; Poison Information Centre

Sources pending feasibility assessment: Alcohol and other Drug Treatment Services; Crime Stoppers; Custody Data; Police arrests; Police drug seizure (purity/number)

Eleven sources (including national sources) were feasible according to pre-specified criteria for the Northern Territory, and six pending approval on formal application for data access. Sources could be disaggregated geographically and socio-demographically, although custodians noted issues around confidentiality given low incidence of outcomes. Deaths Registry data were feasible to access with the caveat that drug-related deaths would not be coded within the timeframes of **Criteria 5** and **6**, and resourcing for free-text search queries would be required for access.

4.5 Queensland

Sources feasible for inclusion: ADIS; Crime Stoppers; Criminal Court data; Custody data; Emergency Data Collection; Hospital Admitted Patient Data Collection; Needle and Syringe Program Data Collection; Poison Information Centre; Police arrests; Police drug seizure (number)

Sources pending feasibility assessment: Monitoring of Drugs of Dependence System; Police Drug Diversion Program; Police drug seizure (purity)

Fourteen data sources (including four national sources) were considered feasible against the criteria in Table 1, and three data sources were pending formal application for access. Custodians were supportive of access to drug purity analysis but in-principle approval required formal application to Queensland Police Service Research Committee and Queensland Health. All sources could be disaggregated geographically and socio-demographically; most cited no costs for data access; and several custodians flagged impending real-time data collection (e.g., Needle and Syringe Program Data Collection, Poison Information Centre

calls). Custodians were supportive of establishing an EWS, and noted such a system would have great utility for an informal information-sharing network across health and law enforcement and including representatives from other government and non-government organisations.

4.6 South Australia

Sources feasible for inclusion: Custody data; Poison Information Centre; Treatment Intervention Court Program

Sources pending feasibility assessment: ADIS; Clean Needle Program; Crime Stoppers; Drugs of Misuse Surveillance System; Emergency Department Data Collection; Integrated South Australian Activity Collection; Police arrests; Police drug seizure (purity/number)

Custodians of most data sources in South Australia were unable to provide details of data access without a formal data access request and ethics approval. Eight sources (including five national sources) were feasible against the criteria, and nine pending application. Available data sources could be disaggregated geographically and socio-demographically. Discussions with custodians indicated existing information sharing networks across government departments, identifying emerging trends based on anecdotal or observational evidence. Possible benefits of systematic and regular data interrogation were noted in the course of these discussions.

4.7 Tasmania

Sources feasible for inclusion: ADIS; Alcohol and Other Drug Treatment Services data; Ambulance Collection; Community Mental Health Data Collection; Custody data; DACAS; Needle and Syringe Program Collection; Poison Information Centre; Public Hospital Admitted Patient Collection; Public Hospital Emergency Department Presentations

Sources pending feasibility assessment: Illicit Drug Diversion Initiative; Police arrests; Police drug seizure (purity/number)

Tasmanian data custodians were positive towards establishing an EWS, with 15 sources graded as (including national sources) feasible for inclusion and four pending formal application. Regarding the latter, communication was ongoing with Tasmania Police at the

time of submitting this report. Each of these data sources have the capacity for some geographical disaggregation, and most capture age, gender, and identification as an Aboriginal and/or Torres Strait Islander person. Custodians did note issues around confidentiality given low frequency of certain illicit drug indicators, and most indicated resourcing requirements for regular and ongoing data access.

4.8 Victoria

Sources feasible for inclusion: ADIS; Cannabis Cautioning Program; Death Index; Direct Line; Drug Diversion Program; DACAS; Emergency Minimum Dataset; Ice Advice Line; Needle and Syringe Program Information System; Poison Information Centre; Police arrests

Sources pending feasibility assessment: Ambulance data; Court Referral and Evaluation for Drug Intervention and Treatment Program and the Bail Support Program; Criminal Court data; Custody data; Drug Court; Family Drug Help; Police drug seizure (purity/number)

Sixteen data sources feasible for inclusion against pre-specified criteria were identified in Victoria (including national sources), and eight sources were pending application. Data from these sources could generally be disaggregated geographically and socio-demographically, and most custodians noted resourcing would be required for ongoing data access. It should be noted that some of these data sources are compiled as part of 'AODstats', yet these are only updated annual, with 2014/15 data comprising the most recent available at the time of submitting this report (≥ 2 year lag; 12).

4.9 Western Australia

Sources feasible for inclusion: Crime Stoppers; Criminal Court data; Custody data; Deaths Registry; Drug Court; Emergency Department Data Collection; Hospital Morbidity Data System; Needle and Syringe Program; Poison Information Centre; Pre-Sentence Opportunity Program; Supervised Treatment Intervention Regime

Sources pending feasibility assessment: ADIS; Ambulance Collection; Clinical Advisory Service; Mental Health Information System; Meth Helpline; Monitoring of Drugs of Dependence System; Parent and Family Drug Support Line; Working Away Alcohol and Drug Support Line

Sixteen data sources (including national sources) were feasible for inclusion against specified criteria for Western Australia, and eight were pending formal application for access. All of these sources have the capacity for geographical disaggregation (including identification of regional/remote trends) and most capture age, gender, and identification as an Aboriginal and/or Torres Strait Islander person. The Department of Justice flagged a number of real-time data collections accessible on a daily basis if appropriately resourced.

4.10 Summary of Feasibility Analysis

The feasibility assessment indicated that few national data sources met feasibility criteria detailed in Table 1. Yet, all states and territories had an array of data sources which met these criteria, suggesting a national profile of illicit drug use trends could be built bottom-up from the jurisdictional level. Indeed, custodians for jurisdiction-level data sources were generally supportive of establishing an EWS, particularly in those jurisdictions where there are informal information-sharing groups attempting to communicate about, and respond to, illicit drug trends.

Custodians noted costs of data access, and all custodians noted approval processes for data access. Indeed, details of access to some data sources were pending organisation/ethic approvals. Appropriate resourcing of an EWS and organisation/ethic approvals will thus be key factors in ensuring successful implementation.

5. COVERAGE OF DRUGS AND OUTCOMES WITH DATA SOURCES FEASIBLE FOR INCLUSION

5.1 Drugs

Except for some helpline data sources (e.g., Crime Stoppers), data sources that might be feasible for inclusion could be disaggregated by drug type. However, these sources varied in specificity regarding drug type. For example, most health data collections are coded according to the International Classification of Diseases (28), meaning data can be disaggregated by 10 broad drug classes (e.g., ‘opioids’, including heroin and various pharmaceutical opioids). In contrast, most law enforcement sources are coded according to the Australian Standard Classification of Drugs of Concern (29), meaning data can be disaggregated by nearly 200 drugs of concern.

Both of these coding systems (representing each end of the continuum in specificity of drug type) capture traditional illicit drugs of interest, including opioids, meth/amphetamine, ecstasy, and cannabis. In contrast, most of the data sources meeting feasibility criteria have limited capacity to identify NPS, instead often coded as ‘other drug’. This represents a possible limitation of sources that may be feasible for inclusion.

5.2 Outcomes

Sources that met feasibility criteria offer relatively good coverage of indicators of use and harm. For use (prevalence), the National Drug Wastewater Monitoring Program assesses population-level drug consumption, and needle-syringe program data assesses injecting drug use in sentinel populations. There are sources that may be feasible for inclusion with indicators of help-seeking and treatment (e.g., helpline calls), overdose and other health harms (e.g., emergency department presentations, Poison Information Centre calls), and crime (e.g., police arrests for illicit drug offences). There is a notable gap in coverage of outcomes related to market features, namely illicit price and availability.

6. OTHER DATA SOURCES (NOT YET COLLATED) THAT MAY BE FEASIBLE FOR INCLUSION

As noted in Section 5, data sources meeting feasibility criteria did not offer complete coverage of key drugs and outcomes of interest; key gaps were monitoring NPS and tracking illicit drug markets. Our review indicated that online data sources (Table 3) comprise a rich (and relatively untapped) source of information in both these respects.

Online data can provide information on use, harms and market features (e.g., availability, illicit price; 30) which can be lagged in, or not fully captured by, existing data collections (26). These sources are considered complementary to traditional routine data collections (e.g., emergency department presentations, hospital separations), the former used to flag emerging trends then cross-validated in the latter. These sources are particularly important for monitoring NPS given pervasive online availability and marketing of these substances (31, 32). They are also important for monitoring trends in illicit price and availability given the array of surface and deep web online drug marketplaces, and reports of illicit drug sales via social networking media.

Most online data sources can be accessed historically or in real-time, yielding a wealth of high quality data often at low cost. Complexity of accessing and analysing online data varies, from automated programs (e.g., Google Trends) to established software or custom-built programs for scraping data from online, text cleaning, and analyses (33). Consequently, there is also variation in possible costs of accessing these data sources, noting that some (e.g., Google Trends) are freely accessible. While these online data sources provide global data, use of geospatial information (e.g., social networking posts tagging the location of the individual) means data specific to the Australian context could be accessed in most instances.

Table 3. Other Data Sources Potentially Feasible for Inclusion in an EWS

Data Source	Indicator	Outcomes	Accessing Data	Australian Context	Anticipated Costs
Online social networking media (e.g., Twitter; Facebook)	Drug-related posts	Use; health harms; illicit availability; illicit price	Use application programming interfaces for scraping, cleaning and analysis	Identify text geospatially tagged as Australia (and at jurisdictional level)	Fee-based software or costs for custom-built programming
Online discussion forums (e.g., Bluelight)	Drug-related posts	Use; health harms; illicit availability; illicit price	Accessing historical data from discussion forum administration; Use application programming interfaces for scraping, cleaning and analysis	Identify text geospatially tagged as Australia (and potentially at jurisdictional level)	Costs for accessing data from administration/fee-based software or costs for custom-built programming
News media websites	Drug-related articles	Use; health harms; illicit availability; illicit price	Use application programming interfaces for scraping, cleaning and analysis	Search Australian news platforms (and at jurisdictional level)	Fee-based software/subscription or costs for custom-built programming
Online database searches (e.g., Google)	Drug-related database searches	Use; health harms; illicit availability; illicit price	Use tools which provide simple analytics (e.g., Google Trends)	Track search terms used in Australia (and at jurisdictional level)	Mostly freely accessible using Google Trends and Analytic package
Online drug marketplace listings	Illicit drug listings	Illicit availability; illicit price	Use application programming interfaces for scraping, cleaning and analysis	Extract data from Australian marketplaces	Fee-based software or costs for custom-built programming

Note. This table was compiled from various sources regarding use of online media in monitoring trends (26, 32-37).

7. ANALYSIS AND TRIANGULATION OF DATA SOURCES FEASIBLE FOR INCLUSION AND MODE OF AVAILABILITY

7.1 Analysis and Triangulation

Analysis and triangulation of the data sources that met feasibility criteria for an EWS can be qualitative and/or quantitative. Review of international EWS indicated that the latter was common (8), ensuring a systematic and transparent approach to identification of emerging trends. Thus, the below and Figure 1 outline possible quantitative approaches to analysis and triangulation.

Following receipt of data from custodians (**Stage 1**; Figure 1), data can be transformed into time-series (**Stage 2**). Where appropriate, these time series can be disaggregated by drug (e.g., pharmaceutical opioid versus heroin), geographic unit (e.g., remoteness category or statistical area), and/or sociodemographic characteristics (e.g., age group, gender, or identification as an Aboriginal and/or Torres Strait Islander person).

Cross-validation of sources (i.e., checking for similar findings across all indicators of the same outcome) and *triangulation* (i.e., combination of findings from various indicators) is key to EWS. One approach to achieving quantitative cross-validation and triangulation is to compute a standard unit of measurement capturing the degree of change (**Stage 3**). This unit of change can even be computed to account for seasonal patterns in data (e.g., higher rates of ambulance attendances for opioid overdose in January each year relative to other months; 38).

For cross-validation purposes, the standardised unit of change for indicators of the same outcome (e.g., overdose) can be compared to see whether they are showing similar direction and magnitude of change. For triangulation purposes (**Stage 4**), a pooled change unit can be computed across the indicators; that is, an 'average change value' indicating degree of change across all indicators. Indicators can even be weighted differently in their contribution to the 'average change value' by the degree to which they may index the outcome of interest (e.g., weighting number of clients in treatment more heavily than helpline calls; 2).

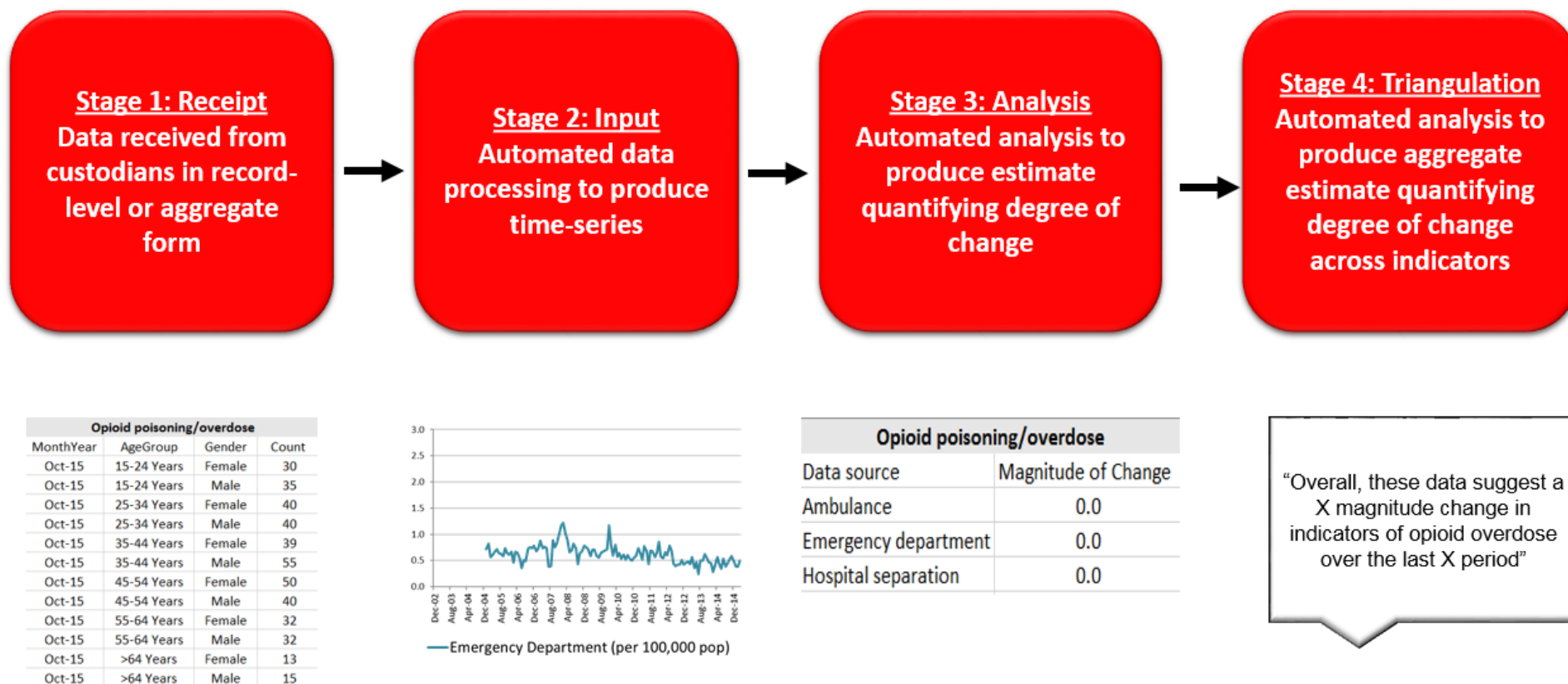


Figure 1. Depiction of stages of data input, analysis and triangulation. Note that data presented here are used for illustration and do not reflect disclosure of actual data extracted from data sources.

These options for analysing data allow for both practical and meaningful interpretation of emerging trends:

- **Stage 2** outputs allows for a practical interpretation of emerging trends
 - For example: “The time-series shows an increase of X number of ambulance attendances and an increase of X number of emergency department presentations since the previous reporting period”.
- **Stage 3** and **Stage 4** allow for a relative interpretation of emerging trends
 - For example: “The standardised unit of change suggests that there was a ‘small’ increase in the number of clients entering treatment and a ‘moderate’ increase in the number of people calling the helpline service”.

Both understandings of the data are likely to be important in determining whether to respond to emerging trends and informing, and the timing and type of response.

7.2 Mode of Availability

Most international models opt for a dynamic model, where stakeholders can:

1. Request that the system be interrogated for possible emerging trends (Figure 2, Pathway 1); and
2. Receive information from the system following detection of an emerging trend (Figure 2, Pathway 2).

However, discussions with custodians indicated that mode of availability is very important in respect to constraining access to EWS outputs.

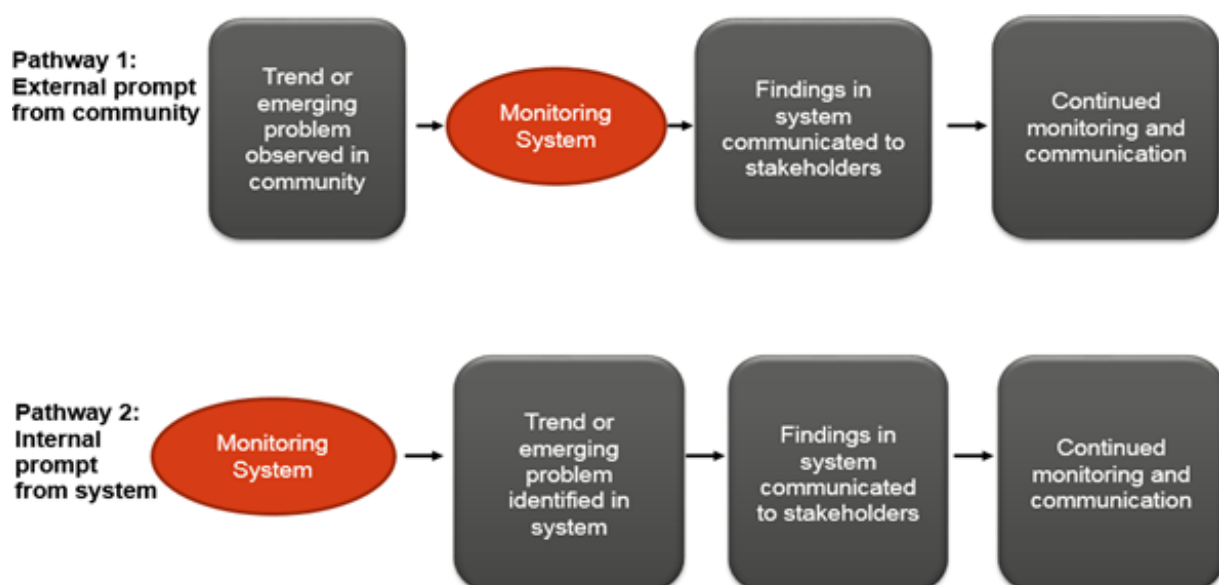


Figure 2. *Dynamic model of EWS.*

To satisfy ethical and custodian requirements for access, data received from custodians (**Stage 1**; Figure 1) would need to sit in a central secure repository and accessed only by researchers running the EWS. However, our learnings from international EWS suggest that making outputs (**Stage 2-3**) accessible in an online format can increase stakeholder engagement and allow for hierarchical access to outputs (e.g., user registration, log-in process, restricting access to certain webpages). Indeed, it may be feasible to display outputs on a custom-built study-dedicated website. This website could update in real-time as automated analyses detailed in Figure 1 are completed. Further, users could opt to display outputs in various ways: by the outcome, drug of interest, geographic characteristics, and/or socio-demographic characteristics.

It may also be that not all outputs (**Stages 2-4**) are displayed on this website or are available to those with certain access rights. Appropriate interpretation of emerging trends is important; not every change identified in an EWS translates to a real-world problem requiring a response. It is likely that there may need to be an overarching group of stakeholders identifying who has access to, and is informed, of changes in various indicators; how they are informed; and at what stage of proceedings they are informed or able to access that information.

8. PILOT AS A NEXT STEP

The previous sections identified that there are existing data sources routinely collected and collated which would be feasible for inclusion in an EWS, as well as appropriate methods for analysing data and making outputs available. The next step would be a proof-of-concept pilot study, as detailed below.

The literature on surveillance systems in other fields (39) supports a stepped implementation approach, whereby systems are trialled in a number of jurisdictions and then scaled up to achieve national coverage. Piloting in two jurisdictions to demonstrate that the model is workable, sustainable, and can be adapted to suit the data sources available within different jurisdictions, would be a suitable approach.

While every jurisdiction has the potential to be a pilot site, features of two jurisdictions (New South Wales and Queensland) were identified as highly suited to a pilot, because:

1. There is support for an EWS from custodians and key stakeholders;
2. A number of data sources are available, meet feasibility criteria, and have in-principle approval to access data;
3. There are existing information sharing networks which are under-resourced to implement ongoing systematic monitoring; and
4. There is an absence of existing illicit drug monitoring systems regularly reporting on these sources (12).

The data sources from New South Wales and Queensland feasible for inclusion are overviewed in Section 4.3 and Section 4.5, as well as Appendix 3. Inclusion of these sources in the pilot study will require consideration of costs of data access, approvals required, and uniqueness relative to other included sources in assessing outcomes and illicit drugs of interest. Formal data access approval could mean that those sources listed as pending feasibility assessment (Appendix 3) could also be considered for a pilot. Given the gaps in indicators of market features (e.g., illicit price, purity, and availability), online data sources detailed in Section 6 could also be considered for inclusion with sufficient resourcing for data collation.

The pilot should focus on the ability of an EWS to deliver the kinds of data analyses and reports as described in Section 7. Specifically, the EWS pilot will need to incorporate quantitative triangulation and cross-validation of data sources (options for this outlined in Figure 1). The system should prospectively and systematically identify and communicate trends, yet also be open to interrogation, so that key stakeholders can obtain information to respond to concerns or queries from the community regarding changes in illicit drug use, harms, and market features (Figure 2). Outputs can be displayed in an online format to enhance stakeholder engagement, yet a hierarchical access to outputs (e.g., user registration, secure log-in) may be necessary to manage data custodian and key stakeholder restrictions on access to findings from various data sources.

Key to implementation will be consultation with data custodians, stakeholders, and individuals experienced in monitoring illicit drug trends. Following international models (e.g., 3), establishing the following groups (or a single group comprising a combination of these individuals) would be an appropriate way to support the pilot:

- A 'Technical Advisory Group' comprising individuals with expertise in the conduct of monitoring systems who provide guidance and monitor technical conduct; and
- A 'Steering Committee' comprising key stakeholders who serve as first point of notification regarding emerging trends, and play a role in decision-making around if, and how, to communicate and respond to trends.

It is essential that the pilot study be assessed in terms of its ability to meet the expected outcomes. As discussed in Section 1, an EWS has two core objectives:

1. Identifying emerging trends in illicit drug use, harms, and market features; and
2. Communicating these trends to key stakeholders.

The pilot phase would thus be assessed against the following indicators of success:

1. Whether data can be accessed regularly (with a specific focus on real-time or near to access);
2. Whether data can be accessed at a minimal time lag;
3. Whether data can be transferred/stored according to custodian requirements;
4. Whether data can be analysed to detect change in a meaningful way;
5. Whether data can be triangulated in a meaningful way;
6. Whether the system is sensitive to emerging trends;
7. The magnitude of burden on custodians and methods for minimising burden;
8. The degree of stakeholder engagement with the system and methods for maximising engagement;

9. The degree of utility of the system for stakeholders and methods for maximising utility;
10. Best approaches for establishing the EWS in other jurisdictions; and
11. How the system might be funded in the future.

A number of data collection approaches could be included in the pilot to assess the above, including:

1. Survey of data custodians and other stakeholders regarding utility/burden;
2. Survey of stakeholders in other jurisdictions to ascertain views regarding expansion of the EWS;
3. Monitoring frequency of data access and time lags from collection to access, analysis, and communication to stakeholders; and
4. Monitoring costs of EWS implementation.

Project outputs may be dependent on the time to receive organisational and ethical approvals for data access. Given anticipated variation in this timing, staggered integration of data sources into the EWS may be necessary. However, first project outputs could be proposed within 6 months given custodians of feasible data sources have provided in-principle approval. Submission of the pilot evaluation after two years (including at least one year of monitoring primary data sources of interest - equivalent to at least three waves of data from custodians) could be suitable.

As aforementioned, it is recommended that key stakeholders in other jurisdictions are surveyed throughout the pilot phase to ascertain their views regarding expansion of the EWS. The pilot evaluation report should detail a proposal for expansion of the EWS to other jurisdictions. This should include mention of any necessary adaptations to the EWS based on the pilot evaluation and the needs of the funders and/or stakeholders in other jurisdictions.

The funding required for a pilot study in two jurisdictions comprises two key parts:

1. *Funding for EWS activities.* This would include personnel costs (a co-ordinator, data analysts, IT support), as well as costs of meeting with custodians/stakeholders.
2. *Data access costs.* Around half of data custodians consulted for this project noted that funds would be required for regular data extraction and cleaning (and that resourcing would not be covered by their existing activities). In some cases, data custodians noted that drug-related events were not currently coded in existing data collections, and that it would be necessary to develop programming to search free-text fields to identify relevant cases. Custodians generally reported that costs of utilising a data source within an EWS could be estimated with formal application for data access.

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APPENDIX 1. EXAMPLE EMAIL TO CUSTODIANS

Dear Data Custodian,

A scoping study is being conducted by myself and Professor Michael Farrell (amongst others) at the National Drug and Alcohol Research Centre to identify the feasibility of an Australian illicit drug early warning system using existing collections on drug use and related harms. We believe we may be able to further maximise utility of existing information collections on drug use and harms. Whilst an immediate response system is not envisioned, it is thought that regular triangulation of data (e.g., monthly-quarterly) may provide a better picture of emerging patterns of drug use and harms in Australia to enable better responding.

We have identified nearly 300 data sources on drug use and associated harms, and we are now contacting data custodians of a shortlisted number of sources. Further information can be found here: <https://ndarc.med.unsw.edu.au/project/viability-early-warning-system-views-study>

We were hoping you may be able to assist us by confirming the information below regarding possible inclusion of your data source in an early warning system. This initial work will not bind any agency to any outcome.

Data source:	
Custodian:	
Key contact person:	
Could data be accessed for a government early warning system?	<input type="checkbox"/> No <input type="checkbox"/> Yes, Record level <input type="checkbox"/> Yes, Aggregate
Frequency of data collection:	<input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Annually <input type="checkbox"/> Other, specify:
Possible frequency of collation for an early warning system:	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Annually <input type="checkbox"/> Other, specify:
Possible frequency of access for an early warning system:	<input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Annually <input type="checkbox"/> Other, specify:
Possible minimum time lag between end of data collection and access for an early warning system:	
What geographic unit(s) could data be disaggregated by:	<input type="checkbox"/> Postcode <input type="checkbox"/> SA1 <input type="checkbox"/> SA2 <input type="checkbox"/> SA3 <input type="checkbox"/> SA4 <input type="checkbox"/> LGA <input type="checkbox"/> LHD <input type="checkbox"/> LAC <input type="checkbox"/> Suburb/City <input type="checkbox"/> Remoteness <input type="checkbox"/> Other, specify:
What other variables could data be disaggregated by:	<input type="checkbox"/> Gender <input type="checkbox"/> Age/Date of birth <input type="checkbox"/> Indigenous status
What approvals would be required?	
Would a fee be charged for regularly extracting data?	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Don't know If yes, provide specify:

Any other perceived barriers or opportunities for using data source as part of an early warning system?	<input type="checkbox"/> No <input type="checkbox"/> Yes <i>If yes, specify:</i>
---	---

Could you please provide any information you may have by Thursday, 31 August. Please feel free to forward this email to anyone you think may have access to such information.

We look forward to receiving any information you may be able to share, as we wish to ensure our reporting on each data source is accurate. Please do let us know of any queries or concerns.

Kind regards,

Louisa Degenhardt

APPENDIX 2. ADVISORY COMMITTEE MEMBERS

Title	Name	Organisation/Affiliation
A/Prof	Robert Ali	Australian National Advisory Council on Alcohol and Drugs
Ms	Jo Baxter	Australian National Advisory Council on Alcohol and Drugs
Dr	Jared Brown	New South Wales Poison Information Centre
Prof	Louisa Degenhardt	National Drug and Alcohol Research Centre
A/Prof	Adrian Dunlop	Hunter New England Local Health District Drug and Alcohol Clinical Services
A/Prof	Diana Egerton-Warburton	Australian National Advisory Council on Alcohol and Drugs
A/Prof	Nadine Ezard	St Vincent's Hospital Drug and Alcohol Service
Prof	Michael Farrell	National Drug and Alcohol Research Centre
Mr	Tony Fleming	Australian National Advisory Council on Alcohol and Drugs
Dr	Belinda Lloyd	Turning Point
Prof	Jochen Mueller	National Research Centre for Environmental Toxicology
Ms	Chelsea Muscat	National Drug and Alcohol Research Centre
Mr	Shane Neilson	Australian Institute of Criminology
Dr	Amy Peacock	National Drug and Alcohol Research Centre
Prof	Alison Ritter	National Drug and Alcohol Research Centre
Ms	Amanda Roxburgh	National Drug and Alcohol Research Centre
Dr	Debbie Scott	Turning Point
Ms	Rachel Sutherland	National Drug and Alcohol Research Centre

APPENDIX 3. REVIEW OF DATA SOURCES

3.1 National

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion Available Inclusion	3: for	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Australian Aboriginal and Torres Strait Islander Health Survey	Australian Bureau of Statistics	✓	X Less than annual	X	-	-	-	-	-	-	-	-	-	X
Australian Collaboration for Coordinated Enhanced Sentinel Surveillance of Sexually Transmissible Infections and Blood-borne Viruses	The Kirby Institute	✓	X Annual	X	-	-	-	-	-	-	-	-	-	X
Australian Needle and Syringe Program Survey	Kirby Institute, University of New South Wales	✓	X Annual	X	-	-	-	-	-	-	-	-	-	X
Australian Secondary Students Alcohol and Drug Survey	Department of Health	✓	X Less than annual	X	-	-	-	-	-	-	-	-	-	X
Causes of Death Collection	Australian Bureau of Statistics	✓	X Annual	X	-	-	-	-	-	-	-	-	-	X
Counselling Online	Turning Point	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1-2 months	✓ Postcode, LGA, state/ territory	X	✓	✓	✓
Criminal Courts Collection	Australian Bureau of Statistics	✓	X Annual	X	-	-	-	-	-	-	-	-	-	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Customs Drug Detections	Department of Immigration and Border Protection	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Ecstasy and Related Drugs Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Family Drug Support Australia	Family Drug Support Australia	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 3 months	✓ Postcode, Suburb, state/territory	✓ G, A	TBC	✓
Gay Community Periodic Survey	Centre for Social Research in Health	✓	X Less than annual	X	-	-	-	-	-	-	-	-	X
General Practice Research Network	Medical Director Research	✓	X Unknown	X Commercial interest	-	-	-	-	-	-	-	-	X
Global Drug Survey	Global Drug Survey	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Healthdirect Australia (excludes Qld)	Department of Health	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly (TBC)	✓ 5 days	✓ Postcode, remote. state/territory	✓ G, A, I	✓	✓
Illicit Drug Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Medicare Benefits Schedule	Department of Human Services	X Not use illicit	-	X	-	-	-	-	-	-	-	-	X
National Coronial Information System	Department of Justice and Regulation	✓	✓ Daily	✓	✓	✓	X 2 years	X 2 years	X 2 years	✓ Postcode, SA2, LGA, suburb, SA, SLA, state/territory	✓ G, A, I	✓	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
National Death Index	Australian Institute of Health and Welfare	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 4 months	✓ Postcode, SA2, state/territory	✓ G, A, I	✓	✓ (see note)
National Deaths in Custody Program	Australian Institute of Criminology	✓	X Annual	X	-	-	-	-	-	-	-	-	X
National Drug Strategy Household Survey	Australian Institute of Health and Welfare	✓	X Less than annual	X	-	-	-	-	-	-	-	-	X
National Hospital Morbidity Database	Australian Institute of Health and Welfare	✓	X Annual	X	-	-	-	-	-	-	-	-	X
National Minimum Data Set – Alcohol and Other Drug Treatment Services	Australian Institute of Health and Welfare	✓	X Annual	X	-	-	-	-	-	-	-	-	X
National Notifiable Diseases Surveillance System	Department of Health	X Unclear	-	X	-	-	-	-	-	-	-	-	X
National Opioid Pharmacotherapy Statistics Annual Data Collection	Australian Institute of Health and Welfare	✓	X Annual	X	-	-	-	-	-	-	-	-	X
National Prison Entrants' Bloodborne Virus Survey	The Kirby Institute	✓	X Annual	X	-	-	-	-	-	-	-	-	X
National Prisoner Census	Australian Bureau of Statistics	✓	X Annual	X	-	-	-	-	-	-	-	-	X
National Prisoner Health Data Collection	Australian Institute of Health and Welfare	✓	X Annual	X	-	-	-	-	-	-	-	-	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
	Health and Welfare												
National Survey of Mental Health and Wellbeing	Australian Bureau of Statistics	✓	X Less than annual	X	-	-	-	-	-	-	-	-	X
National Wastewater Drug Monitoring Program	Australian Criminal Intelligence Commission	✓	✓ 2 months	✓	✓	✓	✓ 2 months	✓ 4 months	✓ 4 months	✓ Remote., suburb, sites, state/territory	X	TBC	✓
Needle Syringe Program National Minimum Data Collection	The Kirby Institute	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Pharmaceutical Benefits Scheme	Department of Human Services	X Not illicit use	-	X	-	-	-	-	-	-	-	-	X
Police arrests	Australian Federal Police	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Police clandestine laboratory detections	Australian Federal Police	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug price data	Australian Federal Police	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug seizure purity	Australian Federal Police	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Police drug seizure (weight/number)	Australian Federal Police	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Prescription sales data	IMS Health	X Not illicit use	-	X	-	-	-	-	-	-	-	-	X
Self Harm and Mental Health-Related Ambulance Attendances in Australia	Turning Point	✓	✓ Daily	✓	✓	TBC	✓ Quarterly	✓ Quarterly	X 6 months	✓ Postcode, LGA, state/territory	TBC	✓	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion Available Inclusion	3: for	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
StreetRx	RADARS System	✓	✓	X Few Australian cases recorded	-	-	-	-	-	-	-	-	-	X

Note. *Criterion 1:* Measures drug use, drug market features, or harms occurring directly as a consequence of illicit drug use; *Criterion 2, 4 and 5:* Data collection, collation and access every four months or more frequently; *Criterion 3:* Data custodian provided in-principle or pending approval; *Criterion 6:* Time lag between data collection and access four months or less. *Geo unit:* geographic disaggregation possible; *Gender/Age/Indig:* disaggregation by gender (G), age (A) and identification as an Aboriginal and/or Torres Strait Islander (I) possible; *\$:* data custodian anticipates costs associated with data access requests. Note that feasible data sources with the comment 'see note' require programming of free-text search queries to access data; drug-related cases are not currently identified.

Notations/Abbreviations: ✓ = yes; X = no; TBC = to be confirmed; LGA: Local Government Area; SA: Statistical Area; LHD: Local Health District; SEIFA: Socio-Economic Indexes for Areas.

3.2 ACT

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion Available Inclusion	3: for	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Admitted Patient Data Collection	ACT Health	✓	✓ Daily	✓	✓	TBC		TBC	TBC	TBC	TBC	TBC	TBC	Pending
Alcohol and Drug Information Service	Turning Point	✓	✓ Daily	✓	✓	✓		✓ Quarterly	✓ Quarterly	✓ 1-2 months	✓ Postcode, LGA	✓ G, A	✓	✓
Alcohol and other Drug Treatment Services Data	ACT Health	✓	X Annually	✓	✓	✓		X Annually	X Annually	✓ 3-4 months	✓ Postcode, SA2, suburb/city	✓ G, A, I	✓	X
Ambulance Service	ACT Health	✓	✓ Daily	✓	✓	✓		✓ Quarterly	✓ Quarterly	✓ 12 hours	✓ Postcode, suburb/city	✓ G, A	X	✓
Causes of Death	ACT Health	✓	X 6 months	X	-	-		-	-	-	-	-	-	X
Court Alcohol and Drug Assessment Service	Justice and Community Safety Directorate	✓	✓ Daily	✓	✓	TBC		TBC	TBC	TBC	TBC	TBC	TBC	Pending
Crime Stoppers	Australian Federal Police	✓	✓ Daily	✓	✓	✓		✓ Monthly	✓ Monthly	TBC	✓ Suburb/city	X	TBC	Pending
Custody data	Justice and Community Safety Directorate	✓	✓ Daily	✓	✓	TBC		TBC	TBC	TBC	TBC	TBC	TBC	Pending
Directions Health Services Needle-Syringe Program	ACT Health	✓	✓ Daily	✓	X	-		-	-	-	-	-	-	X
Drug and Alcohol Specialist Advisory Service	St Vincent's Hospital Sydney	✓	✓ Daily	✓	✓	✓		✓ Monthly	✓ Monthly	✓ 1 day	✓ Postcode, LHD, suburb/city	✓ G, A, I	TBC	✓
Ecstasy and Related Drugs Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-		-	-	-	-	-	-	X
Emergency Department Data Collection	ACT Health	✓	✓ Daily	✓	✓	TBC		TBC	TBC	TBC	TBC	TBC	TBC	Pending
Gay Community Periodic Survey	Centre for Social	✓	X Annual	X	-	-		-	-	-	-	-	-	X



Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion Available Inclusion	3: for	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
	Research in Health													
Illicit Drug Diversion Program	ACT Policing; ACT Health	✓	✓	✓	✓	TBC		TBC	TBC	TBC	TBC	TBC	TBC	Pending
Illicit Drug Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-		-	-	-	-	-	-	X
Magistrates Court (illicit drug offences)	Justice and Community Safety Directorate	✓	✓ Daily	✓	✓	TBC		TBC	TBC	TBC	TBC	TBC	TBC	Pending
Notifiable Diseases Management System	ACT Health	X	-	X	-	-		-	-	-	-	-	-	X
Pharmaco- therapy data	ACT Health	✓	X Annual	✓	✓	✓		X Annual	X Annual	TBC	✓ Postcode, SA2	✓ G, A, I	TBC	X
Poison Information Centre	NSW Poisons Information Centre	✓	✓ Daily	✓	✓	✓		✓ Monthly	✓ Monthly	✓ 2 weeks	✓ Postcode, suburb/city	✓ G, A	✓	✓
Police arrests	ACT Policing	✓	✓ Daily	✓	X	-		-	-	-	-	-	-	X
Police clandestine laboratory detections	ACT Policing	✓	X Irregular	X	-	-		-	-	-	-	-	-	X
Police drug test driving results	ACT Policing; ACT Government Analytical Laboratory	✓	X Irregular	X	-	-		-	-	-	-	-	-	X
Police drug price data	ACT Policing	✓	X Irregular	X	-	-		-	-	-	-	-	-	X
Police seizure drug purity	ACT Government Analytical Laboratory	✓	TBC	✓	✓	TBC		TBC	TBC	TBC	X	X	TBC	Pending
Police drug seizure (number/weight)	ACT Policing	✓	✓	✓	X	-		-	-	-	-	-	-	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Prisoner Census	Justice and Community Safety Directorate	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Sharps Hotline	Community Services Directorate	X	-	X	-	-	-	-	-	-	-	-	X
Simple Cannabis Offence Notice	ACT Policing	✓	✓	✓	X	-	-	-	-	-	-	-	X

Note. *Criterion 1:* Measures drug use, drug market features, or harms occurring directly as a consequence of illicit drug use; *Criterion 2, 4 and 5:* Data collection, collation and access every four months or more frequently; *Criterion 3:* Data custodian provided in-principle or pending approval; *Criterion 6:* Time lag between data collection and access four months or less. *Geo unit:* geographic disaggregation possible; *Gender/Age/Indig:* disaggregation by gender (G), age (A) and identification as an Aboriginal and/or Torres Strait Islander (I) possible; *\$:* data custodian anticipates costs associated with data access requests.

Notations ✓ = yes; X = no; TBC = to be confirmed; LGA: Local Government Area; SA: Statistical Area; LHD: Local Health District; SEIFA: Socio-Economic Indexes for Areas.

3.3 New South Wales

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
1300 DRIVER Hotline	St Vincent's Hospital Sydney	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 day	✓ Postcode, LHD, suburb/city	✓ G, A, I	TBC	✓
Admitted Patients Data Collection	NSW Ministry of Health	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	✓	✓ (see note)
Alcohol and Drug Information Service	St Vincent's Hospital Sydney	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 day	✓ Postcode, LHD, suburb/city	✓ G, A, I	TBC	✓
Ambulance Data Collections	NSW Ministry of Health	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	✓	✓ (see note)
Cannabis Cautioning Scheme	NSW Police Force; Bureau of Crime Statistics and Research	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 2 months	✓ Postcode, SA2/3/4, LGA, LAC, suburb/city	✓ G, A, I	X	✓
Causes of Death	NSW Ministry of Health	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	✓	Pending
Crime Stoppers	Crime Stoppers	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Criminal Court Statistics	Bureau of Crime Statistics and Research	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 month	✓ SA2, LGA, Suburb/city, SLA	✓ G, A, I	TBC	✓
Custody data	Bureau of Crime Statistics and Research; Department of Justice	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 2 months	TBC	✓ G, A, I	X	✓
Drug and Alcohol Specialist Advisory Service	St Vincent's Hospital Sydney	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 day	✓ Postcode, LHD, suburb/city	✓ G, A, I	TBC	✓
Drug Court	Department of Justice	✓	✓ Daily	✓	X	-	-	-	-	-	-	-	X
Drug Use in Prison Survey	Department of Corrective Services	✓	X Annual	X	-	-	-	-	-	-	-	-	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Drug Monitoring Australia	Use in Australian Institute of Criminology	✓	✓ Quarterly	✓	✓	✓	✓ Quarterly	✓ Quarterly	X 6 months	✓ Suburb/city	✓ G, A, I	N	X
Ecstasy and Related Drugs Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Emergency Department Data Collection	NSW Ministry of Health	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	✓	✓ (see note)
Gay Community Periodic Survey	Centre for Social Research in Health	✓	X Annual	X	-	-	-	-	-	-	-	-	X
HIV/AIDS Database	NSW Ministry of Health	Unclear	-	X	-	-	-	-	-	-	-	-	X
Illicit Drug Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Inmate Census	Department of Justice	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Kirketon Road Centre Needle-Syringe Program	Kirketon Road Centre	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1 month	✓ Site	✓ G, A	TBC	✓
Magistrates Early Referral Into Treatment program	Department of Justice	✓	✓ Daily	✓	X	-	-	-	-	-	-	-	X
Mental Health Ambulatory Data Collection	NSW Ministry of Health	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	✓	Pending
Minimum Data Set for Drug and Alcohol Treatment Services	NSW Ministry of Health	✓	✓	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	✓	Pending
Needle Clean Up Hotline	The Albion Centre; NSW Ministry of Health	X	-	X	-	-	-	-	-	-	-	-	X



Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Notifiable Conditions Information Management System	NSW Ministry of Health	Unclear	-	X	-	-	-	-	-	-	-	-	X
NSP Enhanced Data Collection	The Kirby Institute	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Opioid Treatment Line	St Vincent's Hospital Sydney	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 day	✓ Postcode, LHD, suburb/city	✓ G, A, I	TBC	✓
Pacific Laboratory Medicine Services Toxicology Data	Pacific Laboratory Medicine Services	✓	X Unknown	X	-	-	-	-	-	-	-	-	X
Pharmaceutical Drugs of Addiction System (PHDAS)	NSW Ministry of Health	✓	✓	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	✓	Pending
Poison Information Centre	NSW Poisons Information Centre	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 2 weeks	✓ Postcode, suburb/city	✓ G, A	✓	✓
Police arrests	Bureau of Crime Statistics and Research; NSW Police Force	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 2 weeks	✓ Postcode, SA2, LGA, LAC, suburb/city, SEIFA, ARIA	✓ G, A, I	X	✓
Police clandestine laboratory detections	NSW Police Force; NSW Forensic and Analytical Science Service	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug test results	NSW Police Force; Forensic and Analytical Science Service	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug price data	NSW Police Force	✓	X Irregular	X	-	-	-	-	-	-	-	-	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Police drug seizure purity	NSW Forensic and Analytical Science Service; NSW Police Force; NSW Ministry of Health	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	X	X	TBC	Pending
Police drug seizure (number/weight)	NSW Police Force	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	X	X	TBC	Pending
Public Health Rapid, Emergency, Disease and Syndromic Surveillance (PHREDSS) system	NSW Ministry of Health	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	✓	✓ (see note)
Stimulant Treatment Line	St Vincent's Hospital Sydney	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 day	✓ Postcode, LHD, suburb/city	✓ G, A, I	TBC	✓
Sydney Medically Supervised Injecting Centre	Uniting Care	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 3 months	TBC	✓ G, A	✓	✓
Sydney Women and Sexual Health Survey	ACON; University of Sydney	✓	X Annual	X	-	-	-	-	-	-	-	-	X

Note. *Criterion 1:* Measures drug use, drug market features, or harms occurring directly as a consequence of illicit drug use; *Criterion 2, 4 and 5:* Data collection, collation and access every four months or more frequently; *Criterion 3:* Data custodian provided in-principle or pending approval; *Criterion 6:* Time lag between data collection and access four months or less. *Geo unit:* geographic disaggregation possible; *Gender/Age/Indig:* disaggregation by gender (G), age (A) and identification as an Aboriginal and/or Torres Strait Islander (I) possible; *\$:* data custodian anticipates costs associated with data access requests. Those data sources flagged as feasible without details of access are a result of correspondence with key stakeholders at NSW Health who indicated that access would most likely be feasible according to the criteria specified.

Notations/Abbreviations: ✓ = yes; X = no; TBC = to be confirmed; NSW: New South Wales; LGA: Local Government Area; SA: Statistical Area; LHD: Local Health District; SEIFA: Socio-Economic Indexes for Areas.

3.4 Northern Territory

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Alcohol and Drug Information Service	Turning Point	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1-2 months	✓ Postcode, LGA	✓ G, A	✓	✓
Alcohol and other Drug Treatment Services	NT Department of Health	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	TBC	✓ Postcode, SA2, suburb/city, remoteness	✓ G, A, I	X	Pending
Crime Stoppers	NT Police Force	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	X	TBC	Pending
Criminal Court data	Department of the Attorney-General and Justice	✓	✓ Daily	✓	X	-	-	-	-	-	-	-	X
Custody data	Department of the Attorney-General and Justice	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	✓ Suburb/city, Prison	✓ G, A, I	TBC	Pending
Deaths Registry	NT Registrar of Births, Deaths and Marriages	✓	✓ Weekly	✓	✓	✓	✓ Weekly	✓ Weekly	✓ 1 week	✓ Postcode, suburb/city	✓ G, A, I	✓	✓ (see note)
Drug and Alcohol Clinical Advisory Service	Turning Point	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1-2 months	✓ Postcode, LGA	X	✓	✓
Drug Monitoring System Database	NT Department of Health	✓	✓ Daily	✓	✓	X	-	-	-	-	-	-	X
Ecstasy and Related Drugs Reporting System	National Drug and Alcohol Research Centre	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Emergency Department Activity Collection	NT Department of Health	✓	✓ Daily	✓	✓	✓	TBC	✓ Monthly	✓ 1-2 days	✓ Postcode, SA2, remoteness	✓ G, A, I	✓	✓
HIV/AIDS Database	NT Department of Health	Unclear	-	X	-	-	-	-	-	-	-	-	X
Illicit Drug Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Inpatient Activity Collection	NT Department of Health	✓	✓ Daily	✓	✓	✓	TBC	✓ Quarterly	✓ 3 months	✓ Postcode, SA2, remoteness	✓ G, A, I	✓	✓
Needle Syringe Program Minimum Data Set	NT Department of Health	✓	✓ Daily	✓	✓	✓	X Annually	X Annually	TBC	✓ Suburb/city, remoteness	✓ G, A, I	✓	X
Notifiable Diseases System	NT Department of Health	Unclear	-	X	-	-	-	-	-	-	-	-	X
Poison Information Centre	WA Poison Information Centre	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 month	✓ Postcode, suburb/city, hospital	✓ G, A	✓	✓
Police arrests	NT Police Force	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Police clandestine laboratory detections	NT Police Force	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug driving results	NT Police Force	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug price data	NT Police Force	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug seizure purity	NT Police Force	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	X	X	TBC	Pending
Police drug seizure (weight/number)	NT Police Force	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	X	X	TBC	Pending
Prisoner Census	Department of the Attorney-General and Justice	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
St John Ambulance	St John Ambulance	✓	✓ Daily	✓	X	-	-	-	-	-	-	-	X

Note. *Criterion 1:* Measures drug use, drug market features, or harms occurring directly as a consequence of illicit drug use; *Criterion 2, 4 and 5:* Data collection, collation and access every four months or more frequently; *Criterion 3:* Data custodian provided in-principle or pending approval; *Criterion 6:* Time lag between data collection and access four months or less. *Geo unit:* geographic disaggregation possible; *Gender/Age/Indig:* disaggregation by gender (G), age (A) and identification as an Aboriginal and/or Torres Strait Islander (I) possible; *\$:* data custodian anticipates costs associated with data access requests. Note that feasible data sources with the comment 'see note' require programming of free-text search queries to access data; drug-related cases are not currently identified.



UNSW
SYDNEY

NDARC
National Drug &
Alcohol Research Centre

Notations/Abbreviations: ✓ = yes; X = no; TBC = to be confirmed; NT: Northern Territory; LGA: Local Government Area; SA: Statistical Area; LHD: Local Health District; SEIFA: Socio-Economic Indexes for Areas.

3.5 Queensland

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Alcohol and Drug Information Services	Queensland Health	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 day	✓ Postcode	✓ G, A	✓	✓
Alcohol and other Drug Treatment Services Data	Queensland Health	✓	✓ Daily	✓	✓	✓	X Annually	X Annually	X 5 months	✓ Postcode, SA2, suburb/city	✓ G, A, I	TBC	X
Ambulance Service Collection	Queensland Health	✓	✓ Daily	✓	✓	X	-	-	-	-	-	-	X
Clean Needle Helpline	Queensland Health	X	-	X	-	-	-	-	-	-	-	-	X
Crime Stoppers	Crime Stoppers Queensland	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 day	✓ Suburb/city	X	✓	✓
Criminal Court data	Department of Justice and Attorney-General	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1 month	✓ Court location	✓ G, A, I	X	✓
Custody data	Department of Justice and Attorney-General	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 2 weeks	✓ Postcode, suburb/city	✓ G, A, I	X	✓
Death Registry	Registrar of Births, Deaths and Marriages	✓	✓ Daily	✓	✓	✓	X Annually	X Annually	X Up to 3 years	✓ SA2, LGA, Suburb/city, SLA	✓ G, A, I	✓	X
Drug Monitoring Use in Australia	Australian Institute of Criminology	✓	✓ Quarterly	✓	✓	✓	✓ Quarterly	✓ Quarterly	X 6 months	✓ Suburb/city	✓ G, A, I	X	X
Ecstasy and Related Drugs Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Emergency Data Collection	Queensland Health	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 2-3 weeks	✓ Postcode, SA2, Suburb	✓ G, A, I	X	✓
Gay Community Periodic Survey	Centre for Social	✓	X Annual	X	-	-	-	-	-	-	-	-	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
	Research in Health												
Hospital Admitted Patient Data Collection	Queensland Health	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly (TBC)	✓ 6-8 weeks	✓ Postcode, SA2, Suburb	✓ G, A, I	X	✓
Illicit Drug Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Magistrates Early Referral Into Treatment Program	Department of Justice and Attorney-General	✓	✓ Weekly	✓	✓	✓	X Annually	X Annually	X 1 year	✓ Postcode, Suburb/city	✓ G, A, I	TBC	X
Needle and Syringe Program Data Collection	Queensland Health	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	TBC	✓ Site	✓ G, A, I	X	✓
Monitoring of Drugs Dependence System	Queensland Health	✓	✓ Daily	✓	✓	TBC	✓ Monthly	TBC	✓ 1 month	✓ Postcode, SA2, Remoteness	✓ G, A, I	TBC	Pending
Notifiable Conditions System	Queensland Health	Unclear	-	X	-	-	-	-	-	-	-	-	X
Poison Information Centre	Children's Health Queensland Hospital and Health Service	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1-2 weeks	✓ Postcode	✓ G, A	✓	✓
Police Drug Diversion Program	Queensland Police Service	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	TBC	TBC	✓ G, A	✓	Pending
Police arrests	Queensland Police Service	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ TBC	✓ Policing area	✓ G, A, I	X	✓
Police clandestine laboratory detections	Queensland Police Service; Queensland Health	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug driving results	Queensland Police Service	✓	X Irregular	X	-	-	-	-	-	-	-	-	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Police drug price data	Queensland Police Service	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug purity data	Queensland Health	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	X	X	Pending
Police drug seizure (weight/number)	Queensland Police Service	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ TBC	✓ Policing area	✓ G, A, I	X	✓
Prisoner Census	Department of Justice	✓	X Annual	X	-	-	-	-	-	-	-	-	X

Note. *Criterion 1:* Measures drug use, drug market features, or harms occurring directly as a consequence of illicit drug use; *Criterion 2, 4 and 5:* Data collection, collation and access every four months or more frequently; *Criterion 3:* Data custodian provided in-principle or pending approval; *Criterion 6:* Time lag between data collection and access four months or less. *Geo unit:* geographic disaggregation possible; *Gender/Age/Indig:* disaggregation by gender (G), age (A) and identification as an Aboriginal and/or Torres Strait Islander (I) possible; *\$:* data custodian anticipates costs associated with data access requests.

Notations/Abbreviations: ✓ = yes; X = no; TBC = to be confirmed; LGA: Local Government Area; SA: Statistical Area; LHD: Local Health District; SEIFA: Socio-Economic Indexes for Areas.

3.6 South Australia

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Alcohol and Drug Information Service	SA Health	✓	✓ Daily	✓	✓	TBC	TBC	TBC	✓ 3 months	✓ Postcode	✓ G, A	TBC	Pending
Alcohol and other Drug Treatment Services Data	SA Health	✓	✓	✓	✓	TBC	X Annually	X Annually	✓ 3 months	✓ Postcode, SA2, Suburb/city, Remoteness	✓ G, A, I	TBC	X
Ambulance Service Collection	SA Health	✓	✓ Daily	✓	X	-	-	-	-	-	-	-	X
Clean Needle Program	SA Health	✓	✓ Monthly	✓	✓	TBC	✓ Monthly	✓ Quarterly	✓ 3 months	✓ Site	✓ G, A, I	TBC	Pending
Crime Stoppers	SA Police	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Criminal Court data	Courts Administration Authority of SA	✓	✓ Daily	✓	X	-	-	-	-	-	-	-	X
Custody Data	Department for Correctional Services	✓	✓ Daily	✓	✓	✓	✓ Weekly	✓ Weekly	✓ 1 week	✓ Postcode, Suburb	✓ G, A, I	X	✓
Deaths Registry	Registrar of Births, Deaths and Marriages	✓	✓ Daily	✓	X	-	-	-	-	-	-	-	X
Drug Monitoring in Australia	Australian Institute of Criminology	✓	✓ Quarterly	✓	✓	✓	✓ Quarterly	✓ Quarterly	X 6 months	✓ Suburb/city	✓ G, A, I	X	X
Drugs of Misuse Surveillance System	SA Health	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Ecstasy and Related Drugs Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Emergency Department Data Collection	SA Health	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Gay Community Periodic Survey	Centre for Social	✓	X Annual	X	-	-	-	-	-	-	-	-	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
	Research in Health												
Illicit Drug Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Integrated South Australian Activity Collection	SA Health	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Needle Clean Up Hotline	SA Health	X	-	X	-	-	-	-	-	-	-	-	X
Notifiable Disease Surveillance System	SA Health	Unclear	-	X	-	-	-	-	-	-	-	-	X
Poison Information Centre	WA Poison Information Centre	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 month	✓ Postcode, suburb/city, hospital	✓ G, A	✓	✓
Police Drug Diversion Initiative	SA Health	✓	✓ Daily	✓	✓	TBC	X Annually	X Annually	✓ 3 months	✓ Postcode, suburb/city, Police station	✓ G, A, I	X	X
Police arrests	Office of Crime Statistics and Research; SA Police	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Police clandestine laboratory detections	Office of Crime Statistics and Research; SA Police; Forensic Science SA	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug test results	SA Police	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug price data	Office of Crime Statistics and Research; SA Police	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug seizure purity	SA Police	✓	✓ Monthly	✓	✓	TBC	✓ Monthly	✓ Monthly	TBC	X	X	TBC	Pending

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Police drug seizure (weight/number)	Office of Crime Statistics and Research; SA Police	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Prisoner Census	Department for Correctional Services	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Treatment Intervention Court Program	Courts Administration Authority of SA	✓	✓ Weekly	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 2 weeks	✓ Postcode, Public Health Units (PHUs)	✓ G, A, I	TBC	✓

Note. *Criterion 1:* Measures drug use, drug market features, or harms occurring directly as a consequence of illicit drug use; *Criterion 2, 4 and 5:* Data collection, collation and access every four months or more frequently; *Criterion 3:* Data custodian provided in-principle or pending approval; *Criterion 6:* Time lag between data collection and access four months or less. *Geo unit:* geographic disaggregation possible; *Gender/Age/Indig:* disaggregation by gender (G), age (A) and identification as an Aboriginal and/or Torres Strait Islander (I) possible; *\$:* data custodian anticipates costs associated with data access requests.

Notations/Abbreviations: ✓ = yes; X = no; TBC = to be confirmed; SA: South Australia; LGA: Local Government Area; SA: Statistical Area; LHD: Local Health District; SEIFA: Socio-Economic Indexes for Areas.

3.7 Tasmania

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Alcohol and Drug Information Service	Turning Point	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1-2 months	✓ Postcode, LGA	X	✓	✓
Alcohol and Other Drug Treatment Services Data	Department of Health and Human Services (DHHS)	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 month	✓ Postcode, SA2, suburb/city, remoteness	✓ G, A, I	✓	✓
Ambulance Collection	DHHS	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 day	✓ Postcode, SA1/2/3/4, LGA, LHD, LAC, Suburb/city, remoteness	✓ G, A	TBC	✓
Communicable Disease Surveillance System	DHHS	Unclear	-	X	-	-	-	-	-	-	-	-	X
Community Mental Health Data Collection	DHHS	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 month	✓ Postcode, SA2, suburb/city, remoteness	✓ G, A, I	✓	✓
Court Mandated Drug Diversion Program	Department of Justice	✓	✓ Weekly	✓	✓	✓	✓ Weekly	X Annually	TBC	✓ Postcode, LGA, suburb/city, court location	✓ G, A	TBC	X
Crime Stoppers Tasmania	Crime Stoppers Tasmania	✓	✓ Daily	✓	✓	X	-	-	-	-	-	-	X
Custody data	Department of Justice	✓	✓ Daily	✓	✓	✓	✓ Daily	✓ Daily	✓ 1 day	X	✓ G, A, I	X	✓
Deaths Register	Registrar of Births, Deaths and Marriages (RBDM)	✓	✓ Daily	✓	✓	✓	X Annually	X Annually	X 1-3 years	✓ SA2, LGA, Suburb/city, SLA	✓ G, A, I	✓	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Drug and Alcohol Clinical Advisory Service	Turning Point	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1-2 months	✓ Postcode, LGA	X	✓	✓
Drugs and Poisons Information System (DAPIS) Online Remote Access (DORA)	DHHS	✓	✓ Daily	✓	✓	X	-	-	-	-	-	-	X
Ecstasy and Related Drugs Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Gay Community Periodic Survey	Centre for Social Research in Health	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Illicit Drug Diversion Initiative	DHHS	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	TBC	✓ Postcode, SA2, Suburb/city, Remoteness	✓ G, A, I	✓	Pending
Illicit Drug Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Magistrates Court Collection	Department of Justice	✓	✓ Weekly	✓	✓	✓	✓ Weekly	X Annually	TBC	✓ Postcode, LGA, suburb/city, court location	✓ G, A	TBC	X
Needle and Syringe Program Collection	DHHS	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 3 months	✓ Agency	✓ G, A	✓	✓
Opioid Pharmacotherapy Program Data	DHHS	✓	X Annually	✓	✓	X	-	-	-	-	-	-	X
Poison Information Centre	NSW Poisons Information Centre	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 2 weeks	✓ Postcode, Suburb/city	✓ G, A	✓	✓

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Police arrests	Tasmania Police	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Police clandestine laboratory detections	Tasmania Police; Forensic Science Service Tasmania	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug test driving results	Tasmania Police; Forensic Science Service Tasmania	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug price data	Tasmania Police	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug seizure purity	Tasmania Police; Forensic Science Service Tasmania	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	X	X	TBC	Pending
Police drug seizure (weight/number)	Tasmania Police	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	X	X	TBC	Pending
Poppy Advisory and Control Board	Department of Primary Industries, Parks, Water and Environment	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Prisoner Census	Department of Justice	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Prisoner Drug Testing	Department of Justice	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Public Hospital Admitted Patient Collection	DHHS	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1-2 months	✓ Postcode, SA2, Suburb/city	✓ G, A, I	X	✓
Public Hospital Emergency Department Presentations	DHHS	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 week	✓ Postcode, SA2, Suburb/city	✓ G, A, I	X	✓

Note. *Criterion 1:* Measures drug use, drug market features, or harms occurring directly as a consequence of illicit drug use; *Criterion 2, 4 and 5:* Data collection, collation and access every four months or more frequently; *Criterion 3:* Data custodian provided in-principle or pending approval; *Criterion 6:* Time lag between



UNSW
SYDNEY

NDARC
National Drug &
Alcohol Research Centre

data collection and access four months or less. *Geo unit*: geographic disaggregation possible; *Gender/Age/Indig*: disaggregation by gender (G), age (A) and identification as an Aboriginal and/or Torres Strait Islander (I) possible; \$: data custodian anticipates costs associated with data access requests.

Notations/Abbreviations: ✓ = yes; X = no; TBC = to be confirmed; DHHS: Department of Health and Human Services; LGA: Local Government Area; SA: Statistical Area; LHD: Local Health District; SEIFA: Socio-Economic Indexes for Areas.

3.8 Victoria

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Admitted Episodes Dataset	Department of Health and Human Services (DHHS)	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	X 6 months	✓ Postcode, SA2, LGA, Suburb, SLA, remoteness	✓ G, A, I	X	X
Alcohol and Drug Collection	DHHS	✓	✓ Quarterly	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1 month	✓ Postcode, LGA, suburb/city	✓ G, A, I	X	✓
Ambulance Data Set	DHHS	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Cannabis Cautioning Program	Crime Statistics Agency Victoria; Victoria Police	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 11 weeks	✓ Postcode, SA2, LGA, suburb/city	✓ G, A, I	✓	✓
Communicable Disease Surveillance System	DHHS	Unclear	-	X	-	-	-	-	-	-	-	-	X
Court Referral and Evaluation for Drug Intervention and Treatment Program (CREDIT) and the Bail Support Program (BSP)	Department of Justice and Regulation	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Crime Stoppers	Victoria Crime Stoppers	✓	✓ Daily	✓	✓	X	-	-	-	-	-	-	X
Criminal Court data	Department of Justice and Regulation	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Custody data	Department of Justice and Regulation	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Death Index	Registrar of Births, Deaths and Marriages	✓	✓ Daily	✓	✓	✓	✓ As required	✓ As required	✓ 1 week	✓ SA2, SA3, SA4, SLA	✓ G, A, I	TBC	✓ (see note)



Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Direct Line	Turning Point	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1-2 months	✓ Postcode, LGA	X	✓	✓
Drug Court	Department of Justice and Regulation	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Drug Diversion Program	Crime Statistics Agency Victoria; Victoria Police	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 11 weeks	✓ Postcode, SA2, LGA, suburb/city	✓ G, A, I	✓	✓
Drug and Alcohol Clinical Advisory Service	Turning Point	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1-2 months	✓ Postcode, LGA	X	✓	✓
Drugs in Victorian Prisons Report	Department of Justice and Regulation	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Ecstasy and Related Drugs Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Emergency Minimum Dataset	DHHS	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 3-4 months	✓ Postcode, SA2, LGA, Suburb/city, SLA	✓ G, A	X	✓
Family Drug Help	Self Help Addiction Resource Centre	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Gay Community Periodic Survey	Centre for Social Research in Health	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Ice Advice Line	Turning Point	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1-2 months	✓ Postcode, LGA	✓ G, A	✓	✓
Illicit Drug Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Mental Health Triage Minimum Dataset	DHHS	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	X (queried whether

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
													have AOD data)
Needle and Syringe Program Information System	DHHS	✓	✓ Quarterly	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1 month	✓ Postcode, suburb/city	✓ G, A	X	✓
Pharmacist Yearly Census	DHHS	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Poison Information Centre	Austin Hospital Pharmacy Department	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 1 week	TBC	TBC	TBC	✓
Police arrests	Crime Statistics Agency Victoria; Victoria Police	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 11 weeks	✓ Postcode, SA2, LGA, suburb/city	✓ G, A, I	✓	✓
Police clandestine laboratory detections	Victoria Police	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug test results	Victoria Police	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug price data	Victoria Police	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug seizure purity	Victoria Police	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	X	X	TBC	Pending
Police drug seizure (weight/number)	Victoria Police	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	X	X	TBC	Pending
Prisoner Census	Department of Justice and Regulation	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Scheduled Drug Permit Database	DHHS	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	X (not sensitive to trends)
Syringe Disposal Helpline	DHHS	X	-	X	-	-	-	-	-	-	-	-	X
The Ambo Project: Alcohol and Drug Related	Turning Point	✓	✓ Daily	✓	✓	✓	✓ Quarterly	✓ Quarterly	X 5 months	TBC	TBC	✓	X



Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Ambulance Attendances													

Note. *Criterion 1:* Measures drug use, drug market features, or harms occurring directly as a consequence of illicit drug use; *Criterion 2, 4 and 5:* Data collection, collation and access every four months or more frequently; *Criterion 3:* Data custodian provided in-principle or pending approval; *Criterion 6:* Time lag between data collection and access four months or less. *Geo unit:* geographic disaggregation possible; *Gender/Age/Indig:* disaggregation by gender (G), age (A) and identification as an Aboriginal and/or Torres Strait Islander (I) possible; *\$:* data custodian anticipates costs associated with data access requests. Note that feasible data sources with the comment '*note*' require programming of free-text search queries to access data; drug-related cases are not currently identified.

Notations/Abbreviations: ✓ = yes; X = no; TBC = to be confirmed; DHHS: Department of Health and Human Services; LGA: Local Government Area; SA: Statistical Area; LHD: Local Health District; SEIFA: Socio-Economic Indexes for Areas.

3.9 Western Australia

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Alcohol and Drug Support Line	Mental Health Commission	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Alcohol and other Drug Treatment Services Data	Mental Health Commission	✓	X Annually	✓	✓	✓	X Annually	X Annually	X 6 months	✓ Postcode, SA2	✓ G, A, I	X	X
Ambulance Collection	St John Ambulance WA	✓	✓ Daily	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Cannabis Intervention Requirement	Western Australia Police	✓	✓ Daily	✓	✓	X	-	-	-	-	-	-	X
Clinical Advisory Service	Mental Health Commission	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Crime Stoppers	Crime Stoppers WA	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 day	TBC	X	✓	✓
Criminal Court data	Department of Justice	✓	✓ Daily	✓	✓	✓	✓ Daily	✓ Daily	✓ 1 day	✓ Postcode, suburb/city	✓ G, A, I	TBC	✓
Custody data	Department of Justice	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 month	✓ Postcode, LGA, suburb/city, Statistical Division	✓ G, A, I	TBC	✓
Deaths Registry	Registrar of Births, Deaths and Marriages	✓	✓	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 3-4 weeks	✓ Postcode, SA1, SA2, LGA, suburb/city, remoteness, SLA, SEIFA	✓ G, A, I	✓	✓ (see note)
Drug Court	Department of Justice	✓	✓ Daily	✓	✓	✓	✓ Daily	✓ Daily	✓ 1 day	✓ Postcode, suburb/city	✓ G, A, I	TBC	✓
Drug Monitoring in Australia	Australian Institute of Criminology	✓	✓ Quarterly	✓	✓	✓	✓ Quarterly	✓ Quarterly	X 6 months	✓ Suburb/city	✓ G, A, I	X	X
Ecstasy and Related Drugs	National Drug and Alcohol	✓	X Annual	X	-	-	-	-	-	-	-	-	X

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Reporting System	Research Centre												
Emergency Department Data Collection	WA Department of Health	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 week	✓ Postcode, suburb/city	✓ G, A, I	✓	✓
Gay Community Periodic Survey	Centre for Social Research in Health	✓	X Annual	X	-	-	-	-	-	-	-	-	X
HIV/AIDS Database	WA Department of Health	Unclear	-	X	-	-	-	-	-	-	-	-	X
Hospital Morbidity Data System	WA Department of Health	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 4 months	✓ Postcode, hospital region	✓ G, A, I	✓	✓
Illicit Drug Reporting System	National Drug and Alcohol Research Centre	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Mental Health Information System	WA Department of Health	✓	✓ Daily	✓	✓	TBC	TBC	TBC	✓ 2 months	X	✓ G, A, I	✓	Pending
Meth Helpline	Mental Health Commission	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Monitoring of Drugs Dependence System	WA Department of Health	✓	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Needle and Syringe Program	WA Department of Health	✓	✓ Monthly	✓	✓	✓	✓ Quarterly	✓ Quarterly	✓ 3 months	✓ DoH health region	X	X	✓
Notifiable Infectious Diseases Database	WA Department of Health	Unclear	-	X	-	-	-	-	-	-	-	-	X
Other Drug Intervention Requirement	WA Police	✓	✓ Daily	✓	✓	X	-	-	-	-	-	-	X
Parent and Family Drug Support Line	Mental Health Commission	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	Pending

Data Source	Custodian	Criterion 1: Related Outcome	Criterion 2: Freq. Collect	Contacted	Response	Criterion 3: Available for Inclusion	Criterion 4: Collation	Criterion 5: Access	Criterion 6: Time Lag	Geo Unit.	Gender (G) Age (A) Indig (I)	\$	Feasibility
Poison Information Centre	Sir Charles Gairdner Hospital	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 month	✓ Postcode, suburb/city, hospital	✓ G, A	X	✓
Police arrests	WA Police	✓	✓ Daily	✓	✓	X	-	-	-	-	-	-	X
Police clandestine laboratory detections	WA Police; ChemCentre	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug driving test data	WA Police	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police drug price data	WA Police	✓	X Irregular	X	-	-	-	-	-	-	-	-	X
Police seizure purity data	WA Police; ChemCentre	✓	✓ Daily	✓	✓	✓	✓ Monthly	✓ Monthly	✓ 1 month	✓ Postcode, suburb/city	X	✓	X (no ongoing case data)
Police drug seizure (weight/number)	WA Police	✓	✓ Daily	✓	✓	X	-	-	-	-	-	-	X
Pre-Sentence Opportunity Program	Department of Justice	✓	✓ Daily	✓	✓	✓	✓ Daily	✓ Daily	✓ 1 day	✓ Postcode, suburb/city	✓ G, A, I	TBC	✓
Prisoner Census	Department of Corrective Services	✓	X Annual	X	-	-	-	-	-	-	-	-	X
Supervised Treatment Intervention Regime	Department of Justice	✓	✓ Daily	✓	✓	✓	✓ Daily	✓ Daily	✓ 1 day	✓ Postcode, suburb/city	✓ G, A, I	TBC	✓
Working Away Alcohol and Drug Support Line	Mental Health Commission	✓	✓ Daily	✓	✓	✓	TBC	TBC	TBC	TBC	TBC	TBC	Pending
Women's Western Australian Sexual Health Survey	Centre for Health Promotion Research	✓	X Annual	X	-	-	-	-	-	-	-	-	X

Note. *Criterion 1:* Measures drug use, drug market features, or harms occurring directly as a consequence of illicit drug use; *Criterion 2, 4 and 5:* Data collection, collation and access every four months or more frequently; *Criterion 3:* Data custodian provided in-principle or pending approval; *Criterion 6:* Time lag between data collection and access four months or less. *Geo unit:* geographic disaggregation possible; *Gender/Age/Indig:* disaggregation by gender (G), age (A) and



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identification as an Aboriginal and/or Torres Strait Islander (I) possible; \$: data custodian anticipates costs associated with data access requests. Note that feasible data sources with the comment '*note*' require programming of free-text search queries to access data; drug-related cases are not currently identified.

Notations/Abbreviations: ✓ = yes; X = no; TBC = to be confirmed; WA: Western Australia; LGA: Local Government Area; SA: Statistical Area; LHD: Local Health District; SEIFA: Socio-Economic Indexes for Areas.