



**Monash University National Centre for
Coronial Information**

developing and managing

The National Coroners Information System

P R O C E E D I N G S O F T H E
2ND N A T I O N A L
N C I S D R U G S M O D U L E W O R K S H O P

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Executive Summary

The 2nd National NCIS Drugs Module Workshop was held on 27 – 28 July 2000 at the Ai Industry Group Centre in Melbourne. The aim of the workshop was to further the development of the NCIS drugs module by resolving standardisation issues and defining a “drug-related death” to enable definition of the data set. The workshop brought together participants from all Australian States and Territories representing coroners, registrars, police, forensic pathologists, forensic toxicologists, public sector agencies and researchers.

The aim of the drugs module is to facilitate improved data collection and therefore improve accessibility on coronial cases in which death was caused wholly or partly, directly or indirectly, by one or more drugs, poisons and/or alcohol. The module will not constitute a separate database. Enhancements will be incorporated in the NCIS.

Outcomes of the Workshop

► Scope and Method of Identifying Relevant Deaths

The scope of the drugs module was defined as:

- ♦ Any case in which positive toxicology is reported; and
- ♦ Any case in which there is either no or negative toxicology but:
 - ♦ There is a known history of drug/poison/alcohol abuse; or
 - ♦ For any other reason, the pathologist and/or coroner believes the death may have been related to the use of one or more drugs, poisons or alcohol.

Relevant coronial cases could be detected using a set of checklists or a flagging system completed by the toxicologists, pathologist and coroners’ clerks.

► Standardisation

Police Report of Death to the Coroner

The collection of a common minimum data set by police during the investigation of all coronial deaths was deemed both desirable and feasible. A proposed minimum data set for coronial deaths will be prepared by MUNCCI in consultation with stakeholders and police. It will specifically address the need for improved data collection on drug-related deaths and will be based on preliminary surveys undertaken by MUNCCI and the NSW Coroners Support Section of NSW Police. The proposed modifications will be forwarded to the relevant police departments for consideration as soon as possible. Progress will be presented to the Australian Coroners’ Society Conference in November 2000.

Toxicology Analysis

Agreement was reached on a minimum agreed standard for toxicology testing in coronial cases. The agreements include: the preferred samples to be collected for analysis; recording of specimens collected and tested; definitions of full and limited toxicology analysis; and reporting of toxicology results. It was agreed that full toxicology testing should be performed in the following types of cases: homicide, custodial, industrial/work-related, drug-related, transportation drivers, and SIDS. Limited toxicology should be performed on all deaths which fall into the following case types: suicide/intentional self-harm, transportation non-drivers (pedestrians and cyclists), fires, and immersion/drowning. Other cases will be subject to toxicology testing at the discretion of the pathologist/toxicologist. It is acknowledged that some jurisdictions may not have the resources required to meet the agreed standards at this stage and that implementation is subject to the availability of funds to meet resource requirements.

Pathology – Reporting of Cause of Death

In order to assist in interrogating the NCIS for particular drugs involved in the death, pathologists agreed to include a list of the drugs considered to have contributed to the death in brackets after the statement of cause of death. Pathologists also agreed to generate a glossary of terms used to describe cause of death, based on a list to be provided by the Australian Bureau of Statistics.

► Resource Issues

Three groups were identified as being likely to require further resources should the implementation of the drugs module proceed: toxicology, coronial offices, and possibly police. The issues facing each of these groups were discussed. It was agreed that MUNCCI would centrally co-ordinate an approach to seek funding support from relevant agencies across participating jurisdictions.

Toxicology

Resources required to meet the agreed minimum standards for toxicology analysis were deemed to be the most significant. A preliminary estimate of the recurrent funding required for staff and consumables was calculated as \$1 million per year, plus approximately \$1 million in capital costs for additional instrumentation Australia-wide. A uniform approach to seeking funding for additional toxicology testing was considered desirable.

Coronial Offices

The resource impact on coronial offices is dependent upon the final determination of the enhanced data set. With respect to police form data items, each jurisdiction must determine when police form data is to be entered and by whom (police or coroner's clerks). Additional IT and human resources may be required if coroner's clerks are required to enter the data into a database.

Police

The resource impact on police services is likely to be in the form of the costs of design and modification of police forms to incorporate additional data items identified by stakeholders and police as desirable and feasible. In addition, the cost of training police officers to complete the new forms must be considered. If police are required to enter data from the police form into an electronic form for transfer to the NCIS, additional IT resources may be required.

Summary of Action Plans

Item	Due Date	Responsibility
Toxicology Resource Requirements – Accurate Costings	31 Oct 2000	Each toxicology laboratory
Obtain funding to meet agreed standards for toxicology testing	As soon as practicable.	Central coordination by MUNCCI with support from individual organisations.
Glossary of pathologists' terms for cause of death	Unspecified	Peter Ellis & Natasha Redman
Alter pathologists' reporting practices to include list of contributing drugs	Unspecified	Reporting pathologists (to be coordinated by MUNCCI)
Modification of Police Forms <ul style="list-style-type: none"> ♦ Draft Proposed Data Set ♦ Final Proposed Data Set 	mid-Aug 2000 21 Nov 2000	MUNCCI + cooperation of police & stakeholders
Police Data Entry Requirements	Unspecified	Coronial offices & police
Agreement on Definitions and Standards for the Drugs Module	Nov 2000	MUNCCI (DHAC funding agreement deliverable)
Report on Defined Dataset of the Drugs Module	Dec 2000	MUNCCI (DHAC funding agreement deliverable)

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Acknowledgments

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MUNCCI would also like to thank all participants in the workshop for their hard work, contributions and ongoing support of the NCIS and the drugs module. Thank you to all who gave presentations, convened break out sessions, and reported back. Thank you to Professor Arie Freiberg whose skilful and entertaining facilitation helped ensure the success of the workshop.

Endorsement by Standing Committee of Attorneys-General

The development of the NCIS was approved in principle by the Standing Committee of Attorneys-General (SCAG) in March 1997. SCAG approval for this world first initiative was required as Attorneys-General have portfolio responsibility for the coronial system in each State and Territory.

Before MUNCCI could put in place a regime to enable authorised access to the NCIS, we were required to satisfy ministers that a number of policy issues had been addressed. Those issues were privacy, ethics, security and funding.

On 27 July 2000 (day 1 of the workshop) SCAG indicated their approval for MUNCCI to put its proposed access regime in place. The NCIS access regime incorporates NCIS Privacy Protocols, consideration by the Monash University Ethics Committee and a national funding strategy from 1999/2000 to 2001/2002. MUNCCI will now begin to put this access regime in place. Please visit our web site for further information about the application process.

1. Introduction

MUNCCI's vision is to be recognised nationally and internationally as being at the forefront of the timely provision of national coronial data which is comprehensive, reliable and up to date. The National Coroners Information System (NCIS) is the vehicle by which we are working to achieve this vision. Now that the core data set of the NCIS has been established and is almost fully implemented, the focus has expanded to include enhancement of data for certain types of death of particular importance and interest to coroners, researchers and policy makers. The first such data set being developed is the drugs module, which will enable access to enhanced data for deaths relating to drugs, alcohol and poisons. The purpose of this workshop was to further the development of the drugs module.

This 2nd workshop built on the discussions and outcomes of the 1st workshop held in March 1999. The first workshop laid a solid foundation for the development of a framework. The main objectives of the 2nd workshop were to resolve standardisation issues and define the data set. The focus was on decision making.

MUNCCI does not propose that data be collected by coronial investigation agencies that is beyond the scope of the jurisdiction of the respective Coroners Acts. Rather, the focus is on seeking to promote improved data collection and reporting. Standardisation was identified as a key improvement measure.

2. Terminology

It is important that the terminology being used is clearly understood. The following definitions reflect MUNCCI's meaning of some of the core concepts of the NCIS and the drugs module.

“Core Data Set”

A defined set of data items collected and recorded for all deaths reported to participating coroners. The NCIS data set includes: demographics (eg age, sex, usual occupation, marital status, employment status, indigenous status, place of usual residence), incident details (time, location, activity), cause of death (medical and ICD-10 coding), case type (intent), mechanism of death, police narrative of circumstances, and key text reports (toxicology, pathology and Coroner's finding).

“Drug-Related Death”

Based on the outcomes of this workshop, a drug-related death is defined as:

Any death which is caused wholly or partly, directly or indirectly, by one or more drugs, poisons and/or alcohol, being:

- ♦ Any case in which positive toxicology is reported; and
- ♦ Any case in which there is either no or negative toxicology but there is:
 - ♦ A known history of drug/poison/alcohol abuse
 - ♦ Any other reason for the pathologist and/or coroner to believe the death may have been related to one or more drugs, poisons or alcohol.

“Module”

A sub-set of coronial cases for which enhanced data is collected and stored. A module is not a separate database. Enhancements may be in the form of additional data collection by police and/or forensic pathologists and toxicologists and subsequent additional data entry in fields on the database, or it may involve enhanced mechanisms for searching stored data. Enhancements will ultimately form part of the NCIS core data set.

“NCCCI”

The National Co-ordination Committee for Coronial Information (NCCCI) comprises representatives of public sector agencies with an interest in coronial data. The NCCCI was responsible for developing the national policy and funding framework for the NCIS and will have an ongoing role in monitoring and reviewing policy and funding issues.

“Resources”

Human (time, people), technological (eg. computer hardware, software, instrumentation), consumables, space, etc.

“Standardisation”

Standardisation refers to agreed minimum data collection, agreed testing standards, agreed definitions and/or agreed reporting standards. The aims of standardisation are to achieve commonality in the data collected and recorded, the use of complementary language, and collection of comparative information to facilitate the generation of a database of analogous information.

3. Objectives of the 2nd National NCIS Drugs Module Workshop

The specific objectives for the 2nd workshop were to:

- ♦ Encourage the continuing support and participation of key representatives of those groups that produce and use drug related death data – coroners, toxicologists, pathologists, registrars, police, public sector agencies, research organisations and other stakeholders.
- ♦ Achieve consensus on standardisation issues, including:
 - ♦ toxicology requests, specimen collection, testing and reporting;
 - ♦ police initial investigation forms;
 - ♦ possible introduction of a police further investigation form; and
 - ♦ autopsy protocols and reporting of cause of death.
- ♦ Define the scope of the drugs module and decide how to determine which cases should be included in the module.
- ♦ Follow up outcomes and action arising from the 1st Drugs Module Workshop and resolve outstanding issues raised at that workshop, in particular:
 - ♦ routine collection of information regarding prior history (medical, interventions/treatment, psychiatric, drug use, criminal, custodial), drug paraphernalia at the scene, circumstances for 24 hours prior to death;
 - ♦ method for identifying and flagging items which do not meet agreed standards for the database;
 - ♦ whether to use “agreed” or “best” standards; and
 - ♦ differences between rural and urban pathology and investigation.
- ♦ Identify the potential resource impact on participating jurisdictions and agencies of implementing the module.
- ♦ Develop action plans for the ongoing development and implementation of the drugs module.

4. Revised Agenda

Day 1

Facilitator: Professor Arie Freiberg

Aims for the day:

- ♦ To define the scope of the drugs module
- ♦ To agree on a method for selecting drug-related deaths for the module

9:00	Registration and Tea/Coffee	Foyer
9:30	<p>Plenary Session (Welcome and Introduction)</p> <ul style="list-style-type: none"> ♦ Official Opening of the Workshop <i>A/Prof Olaf Drummer, NCIS Drugs Module Project Leader</i> ♦ NCIS Progress Report <i>Jessica Lightfoot, NCIS Project Manager</i> ♦ Context for the workshop <i>Natasha Redman, NCIS Drugs Module Project Officer</i> 	Auditorium
10:30	Morning Tea	
10:50	<p>Plenary Session</p> <p>Aim: To clarify the context in which the Drugs module would operate.</p> <p>Drug-Related Death Data: From Report of Death to Research</p> <ul style="list-style-type: none"> ♦ Modern Role of the Coroner,- <i>Wayne Chivell, SA State Coroner</i> ♦ Role of the Police - <i>Insp Stephen Bills, Coroners Support Section, NSW Police</i> ♦ Role of the Toxicologist - <i>Dr Kathryn Campbell, Forensic Science Service Tasmania</i> ♦ Role of the Pathologist - <i>Prof Stephen Cordner, Victorian Institute of Forensic Medicine</i> ♦ Importance of Coronial Data for Researchers & Public Sector Agencies - <i>Greg Swensen, WA Drug Abuse Strategy Office</i> <p>An Approach to Identifying ‘Drug-Related Deaths’ for Inclusion in the Drugs Module – Checklists</p> <p><i>Natasha Redman, NCIS Drugs Module Project Officer</i></p>	Auditorium
12:30 pm	Lunch	
1:30 pm	<p>Discussion Session – Case Studies</p> <p>Aim: To consider the scope of the Drugs Module by discussion of what is considered to be a ‘drug-related death’.</p>	Auditorium
2:45 pm	Afternoon Tea	
3:00 pm	<p>Break Out Session – 4 Mixed Groups (Scope and Selection Method)</p> <p>Aim: To define the scope of the module, inclusion criteria and method of selection deaths for inclusion - based on consideration of checklists and case studies.</p>	Break Out Rooms
4:00 pm	<p>Discussion Session – Report Back</p> <p>Aim: To report back on outcomes of break out group discussions. To define the limits of the definition of a ‘drug related death’. To obtain agreement on a method of selecting drug related deaths.</p>	Auditorium
4:45 pm	Finish – Free Time until Dinner	
7:00 for 7.30	Drinks and Dinner – Presenters: Dr Robert Ali, Dr Jim Gerostamoulos Royce on St Kilda Road, 379 St Kilda Road, Melbourne	

Day 2

Facilitator: Professor Arie Freiberg

Aims for the day:

- ♦ To resolve standardisation issues
- ♦ To determine method of flagging non-standard items
- ♦ To discuss resource and implementation issues
- ♦ To set action plans

8:45 am	Arrival Tea and Coffee	Foyer
9:00 am	Plenary Session – Clarification of what a “module” is and how it fits in with the NCIS core data set <i>Jessica Lightfoot, NCIS Project Manager</i>	Auditorium
9:30 am	Plenary Session - Standardisation Issues Aim: To introduce standardisation issues and explain the importance of standardisation to the development of the module. <ul style="list-style-type: none"> ♦ Standardisation of toxicology, pathology and police investigations <i>Natasha Redman, NCIS Drugs Module Project Officer</i> ♦ Report on outcomes of Toxicology Special Advisory Group Meeting <i>Dr Peter Felgate, Toxicology SAG Secretary, SA Forensic Science Centre</i> ♦ Challenges for standardisation of autopsy protocols and cause of death terminology <i>Prof Stephen Cordner, Victorian Institute of Forensic Medicine</i> 	Auditorium
10:10 am	Morning Tea	
10:30 am	Break Out Session – 3 Groups (Standardisation Issues) <u>Group 1 – Toxicologists and Pathologists</u> Aim: To agree on toxicology procedures including specimen collection during autopsy, sample labelling, testing performed and reporting in cause of death. <u>Group 2 – Coroners, Police, Researchers and Public Sector Agencies</u> Aim: To agree in principle on police form data items and discuss the possible introduction of a further investigation form. To determine a method for flagging non-standard items. <u>Group 3 – Registrars</u> Aim: To discuss NCIS coding issues.	Rooms 2, 5 and 6
11:30 am	Discussion Session – Report Back Aim: To report back on and discuss outcomes of break out group discussions.	Auditorium
12:30 pm	Lunch	
1:30 pm	Plenary Session – Resource issues Aim: To clarify the funding constraints of implementing the drugs module. <ul style="list-style-type: none"> ♦ Funding Implications for potential NCIS Modules <i>Jessica Lightfoot, NCIS Project Manager</i> 	Auditorium
2:00 pm	Break Out Session – 3 Groups by discipline (Resource Issues) Aim: To identify potential resource issues should standardisation be agreed in principle and should the module be implemented. To identify possible solutions for addressing resource impacts. To set action plans for future development activities.	Rooms 2, 5 and 6
3:00	Afternoon Tea	
3:15	Plenary Session – Report Back Aim: To report back on outcomes of break out group discussions. To share ideas. To identify outstanding issues.	Auditorium
4:00	Closing session – Prof Stephen Cordner & A/Prof Olaf Drummer Summary of workshop outcomes.	Auditorium
4:30	Close	

5. Context (Day 1)

5.1. Background Information – Plenary Presentations

To set the scene for the workshop, MUNCCI gave presentations on the progress of the NCIS to date, the history of the development of the drugs module and how it fits into the coronial process, and the aims and objectives for the two days. Summaries of the presentations given by Jessica Lightfoot and Natasha Redman are provided below.

5.2. NCIS Progress Report Jessica Lightfoot, NCIS Project Manager

What is MUNCCI?

MUNCCI is a consortium of the Victorian Institute of Forensic Medicine, (which is also the Monash University Department of Forensic Medicine), the Monash University Accident Research Centre and the Department of Epidemiology and Preventive Medicine. The MUNCCI Board of Management includes representatives of each of these Departments as well as State and Territory Coroners and the National Injury Surveillance Unit.

MUNCCI's key functions are to:

- ♦ Develop the NCIS;
- ♦ Facilitate the transfer of data from participating local offices to the NCIS;
- ♦ Coordinate the resolution of key funding and policy issues;
- ♦ Manage the application process for access to NCIS data; and
- ♦ Coordinate analysis of feasibility of module development.

Ownership of, and access rights to, coronial data are defined in the Licence Agreements between MUNCCI and each particular jurisdiction. Each Licence specifies that although the NCIS software is owned by MUNCCI, the data contained on the database continues to be owned by the participating jurisdiction.

Access to the data will be managed by MUNCCI in accordance with access rules to be specified by State and Chief Coroners and endorsed by the Standing Committee of Attorneys-General.

NCIS Information Flow

The NCIS comprises a core data set (both fields and text reports) and, potentially, a series of modules of enhanced data for certain types of deaths. A module may be represented by additional data collection, additional variables, additional search tools or a combination of these.

A module is not a separate database, it is a data subset. The drugs module is the first data subset to be considered for enhancement. Other potential modules include suicide/intended self-harm, water-related deaths (currently in initial feasibility phase), work related deaths, firearm deaths and fire related deaths.

Information on coronial deaths is generated in the various jurisdictions by police, forensic pathologists, forensic toxicologists and coroners. This information is then fed into the NCIS, usually via the local coronial office. Although the NCIS stores the data, it remains the responsibility and property of the contributing.

Funding Strategy

Prior to July 1999, capital funding was provided by Monash University (\$165,000) and the Victorian Department of Justice (\$165,000). The Commonwealth Department of Health and Aged Care (DHAC) provided significant initial development funding (\$357, 000).

Core Funding

A national funding strategy was put in place for the period 1 July 1999 to 30 June 2002. Under this strategy a range of public sector organisations from the Commonwealth and all State and Territories provide funding. These agencies will not be charged an access fee for the period in which they contribute funding. Other agencies will be charged on a cost recovery basis.

The funding structure from 1 July 2001 is yet to be determined. It may be that MUNCCI is required to manage access to NCIS data on a self-funding fee for service basis. This will ultimately be a matter for consideration by the NCCCI.

Module Funding

The development of any proposed module will be funded by the relevant stakeholder(s) who require the enhanced data for that type of death. The development work being undertaken by MUNCCI for the drugs module is being funded by DHAC. This funding is for further feasibility, data enhancement and database development work. It does not include funding that may be required for implementation tasks locally.

Current Core Data Set

The current core data set contains the following items:

- ♦ Case demographics (eg. age, sex, place of usual residence, marital status, years in Australia, indigenous identification, usual occupation, employment status);
- ♦ Incident information (time, location, activity);
- ♦ Case classification (natural/unnatural, intent);
- ♦ Cause of death (medical);
- ♦ Police narrative of circumstances;
- ♦ Text reports;
- ♦ pathology/autopsy report;
- ♦ toxicology report; and
- ♦ coroner's finding.

In August 1999, MUNCCI established a Core Data Set Working Group to review NCIS the core data set. In November 1999, the Working Group submitted a report to MUNCCI that recommended a number of modifications. The main recommendations were to:

- ♦ introduce revised codes for mechanism of death;
- ♦ replace circumstances with object or agency;
- ♦ where death is a motor vehicle accident (MVA) add: 'mode of transport', 'counterpart', 'user', 'context';
- ♦ where the death is work related, add 'industry'; and
- ♦ introduce revised coding for occupation, location.

Status of Data Uploads to NCIS

The current status of NCIS data uploads is shown in the following table.

Jurisdiction	Uploading from	Data being uploaded
ACT	1 July 1998	All variables, some police narratives (scanned), toxicology reports, autopsy reports, findings.
NSW	1 November 1998	All variables, police narratives, autopsy report from Glebe (not yet Westmead), partial toxicology report as part of autopsy report, inquest findings.
VIC	1 January 2000	All variables, police narratives, toxicology reports, autopsy reports, findings, inquest findings.
SA	1 July 1999	All variables. Soon to get police narratives, toxicology reports, autopsy reports and inquest findings electronically.
NT	1 July 2000	Data entry on local case management system but not yet uploading to NCIS. Will get all variables, police narratives, toxicology reports, autopsy reports and inquest findings.
WA	1 July 2000	Data entry on local case management system but not yet uploading. Will get all variables, police narratives, toxicology reports, autopsy reports and inquest findings.
TAS	1 July 2000	Yet to commence data entry. Approved in principle to backdate to 01/07/00. Will get all variables, police narratives, toxicology reports, autopsy reports and inquest findings.

Quality Assurance

To ensure that the data stored in the NCIS is as accurate and complete as possible, a quality assurance (QA) framework document has been developed by the NCCCI and referred to the MUNCCI QA sub-committee for implementation. The full QA program is expected to begin in October 2000.

Access to NCIS Data

MUNCCI has generated documents detailing the proposed access arrangements for NCIS Data. The proposed access regime is being considered by the Standing Committee of Attorneys-General (SCAG). (See SCAG Endorsement of Access Regime, page 1).

Application Process

Access to NCIS data will be open to two categories of authorised users: 1). Coroners and death investigation staff; and 2). defined third parties – individuals or public organisations with a role or interest in public health and safety (eg researchers, public policy makers, prevention strategy developers). Third party applications are required to be considered by the Monash University Ethics Committee.

Other individuals or organisations with a personal interest in a particular coronial case (eg relatives or friends of a deceased person or solicitors acting in a current coronial matter, media) must contact the Office of the State or Chief Coroner to which the case was reported. An information sheet on the application process will be posted on the NCIS web site shortly and will also be available directly from MUNCCI. A summary of the application process is as follows:

- Applications for access to NCIS data must be submitted to MUNCCI on the NCIS Application Form (to be available on the NCIS web site). Applications may be lodged electronically, or mailed or faxed to MUNCCI.
- All applications will first be considered by the MUNCCI Research Committee which will form an opinion on the adequacy of each application.
- All applications that are approved by the MUNCCI Research Committee will be forwarded to the Standing Committee on Ethics in Research Involving Humans – Monash University.
- Approved applicants will be required to enter into a written Access Agreement (pro forma to be available on the NCIS web site). This agreement includes provisions relating to the security arrangements in place in the organisation, confidentiality and privacy of data, and reporting requirements.
- Access to the database will be provided on a cost-recovery basis with the exception of applicants from public sector agencies that have contributed to the current funding arrangements for the NCIS.

Action Plan

MUNCCI's key challenges over the next 12 months are to: continue to support all contributing locations; implement revised core data set; commence granting authorised access, implement QA program; develop automated reporting mechanisms; and coordinate further work on module development.

5.3 Context for the Workshop **Natasha Redman, Project Officer, Drugs Module**

The aim of the NCIS drugs module is to enhance the amount, consistency, accessibility and timeliness of data available on the role of drugs in deaths around Australia. For the purposes of the module, “drugs” includes all licit and illicit drugs, including pharmaceutical and over the counter drugs, poisons and alcohol.

The development of the module is funded by DHAC and is consistent with the National Drug Strategic Framework for 1998/99 – 2002/03. The Framework states that “action by health, police and education services to redress drug-related harm should reflect evidence based practice”. The drugs module clearly fits within this framework by facilitating access to comprehensive, consistent and timely information in relation to deaths involving drugs.

The 1st Drugs Module Workshop was held in Melbourne in March 1999 as part of the initial study into the feasibility of developing a data set on drug-related deaths to enhance the core data set of the NCIS. The workshop involved major stakeholder groups and included many of the people who are participating in this 2nd workshop. Agreement was reached at the 1st workshop on the requirement for standardisation of various elements of the coronial investigation: police investigation data items, toxicology issues and autopsy procedures. Workshop participants also identified the need to define a ‘drug-related death’.

On the basis of the 1st workshop and an extensive stakeholder analysis, a feasibility report was produced which concluded that a drugs module was both desirable and feasible (the report is available on the NCIS web site). Funding for the further development of the module was secured and deliverables and milestones were established. Under the funding agreement with DHAC, development has been planned in five general stages:

- Stage 1 - Standardisation and definitions (current stage);
- Stage 2 - Define additional data set by the end of 2000;
- Stage 3 - Identify implementation issues;
- Stage 4 - Computer programming, quality management guidelines and training materials; and
- Stage 5 - Implementation by early December 2001.

During June and July 2000, Natasha visited the coroner's offices, forensic pathology institutions and toxicology laboratories in all participating jurisdictions. Although the NCIS collects and stores similar information from each jurisdiction, there are variations in the way in which the information is generated and transferred.

This 2nd National NCIS Drugs Module Workshop is a key part of Stage 1 of the module's development. The aim of this workshop is to resolve standardisation issues and define a 'drug-related death' to enable the definition of the data set. The focus is on making decisions.

The agenda for day 1 focuses on resolving the scope of module and determining a method for selecting drug-related deaths. The agenda for day 2 will concentrate on standardisation issues, resource issues and the establishment of action plans.

5.4 Drug Related Death Data: From Report of Death to Research Plenary Session

The aim of this plenary session was to clarify the context in which the drugs module would operate. Presentations were made by a representative of each stage of the coronial process, from report of death by police to the Coroner, to toxicology testing, the autopsy and pathology investigation and finally the use of coronial data by researchers and public sector agencies. Emphasis was placed on the fact that each step of the investigation is a necessary step in the coronial investigation process and, as such, is bound by the jurisdiction of the Coroner. South Australia's State Coroner, Mr Wayne Chivell, opened the session by providing an overview of the roles and responsibilities of the Coroner as well as the limits of the Coroner's jurisdiction. Presentations followed on the roles of the various providers of coronial data – the police, the toxicologist, the pathologist – and the users of coronial data. A transcript of each presentation is provided below.

5.4.1 Modern Role of the Coroner Mr Wayne Chivell, State Coroner for South Australia

Often when assessing the role of an agency in modern times, it is useful to compare it historically in order to throw differences into sharper relief.

In 1276 the Statute De Officio Coronatoris provided:

“The coroner should go to the place where any person is slain, or suddenly dead or wounded, or where houses are broken ... to make inquiry upon view of the body; and the coroner and jury should inquire into the manner of killing and all circumstances that occasioned the party's death”.

“Manner” and “circumstances” are still to be found in most modern Coroners Acts.

In South Australia the jurisdiction of the Coroner is contained in Section 12 of the Coroners Act 1975. Section 12 states:

“Subject to this Act, an inquest may be held in order to ascertain the cause or circumstances of the following events:

- (a) the death of any person by violent, unusual or unknown cause; or*
- (b) the disappearance (from any place) of any person ordinarily resident within the State; or*
- (c) the death of a person in an aircraft during a flight or on a vessel during a voyage to a place of disembarkation in the State; or*
- (d) the death of any person where there is reason to believe that the death occurred, or the cause of death, or a possible cause of death, arose, or may have arisen, while the person was detained in custody within the State pursuant to an Act or law of the State; or*
- (e) the death of any person where there is reason to believe that the death occurred, or the cause of death, or a possible cause of death, arose, or may have arisen, while the person was accommodated in an institution and that the deceased was suffering from mental illness or intellectual retardation or impairment . . . , or was dependent on the non-therapeutic use of drugs; etc.”*

That’s it - the ‘cause’ or ‘circumstances’ of a death. The powers to:

- ♦ enter and seize body or evidence;
- ♦ exhume;
- ♦ direct post mortems; and
- ♦ direct other tests

are incidental to that jurisdiction - they enable the inquest to take place.

Pursuant to section 13, these powers may only be exercised,

“where the coroner believes on reasonable grounds that it is necessary for the purposes of an inquest or the determination of whether or not an inquest is necessary or desirable”.

Note – the expression “on reasonable grounds”. This requires an objective, rather than subjective reasonable belief. The power to order post mortems, or toxicology, may not be exercised for an extraneous purpose, such as that it might be useful scientifically. The South Australian Full Court recently said:

The coroner has no statutory power to direct the performance of a post mortem examination for any purpose other than those prescribed in Section 13(1)”. Haydon v. Chivell (1999) SASC 315

Further:

“a coroner risks prosecution under the Transplantation and Anatomy Act if he were to direct (a post mortem) for a purpose other than the two purposes prescribed in Section 13(1).”

This interpretation is not peculiar to South Australia. The most recent (and in my view best) piece of coronial legislation is the Coroners Act 1996 (Western Australia) Section 34 of which provides that a coroner may direct a pathologist to perform a post mortem examination, and to remove tissue “in order to investigate the death”.

In earlier times, coroners took upon themselves a wider role. In 1903 in South Australia the City Coroner, William Ramsay Smith, was City Coroner, Director of the Infectious Diseases Unit, Inspector of Anatomy and Chairman of the Central Board of Health.

Who's Who observed:

“perhaps uniquely for Australian coroners Smith made medical statements from the bench which were pedagogical, informed, incisive and objective”.

At that time a major scandal erupted because there were allegations that Smith was trafficking in body parts, removing skulls and entire skeletons without authority, indeed he sent an entire negroid head to a museum as an exhibit!

He was exonerated by a parliamentary board of inquiry on the basis that the bodies were in the lawful custody of the police or hospital, were “friendless”, and that all Dr. Smith’s activities were in pursuit of “scientific knowledge”.

The Attorney-General of the day strongly disagreed, saying:

“No medical man should without the express consent of the relatives, be allowed to remove any part of the body of one of his own patients....”.

To give you an idea of what Dr. Smith was up to, the Adelaide Observer reported that during the inquiry:

“there was a slight stir among the curious attendants when Mr. Desmond mentioned that he once saw Dr. Smith in the Adelaide Hospital Mortuary shooting with a .303 rifle at the head of a body lying on the slab”.

A “slight stir” indeed.

I, like most modern coroners, regard my preventative role as the most important, most useful, most socially beneficial role. This is reflected in the well-known aphorism:

“let the dead speak for the living”.

This role is exercised by making a recommendation, or rider, at the end of a finding, which may “prevent or reduce the likelihood of a similar occurrence” (Section 25(2)).

Unlike what many may think, this does not extend the jurisdiction - this does not give more power than one had to start with.

In another case, WRB Transport v Chivell (1998) SASC 6937, the South Australian Full Court observed:

“Section 25 (the power to make recommendations) does not extend the jurisdiction which is given to the Coroner by Section 12”.

The National Coroners Information System is a valuable resource, one that we all support. It will make use of valuable information that we have gathered in the furtherance of our duties. I am enthusiastic about that. But I caution that this is a matter incidental to our primary jurisdiction, which is to investigate the cause and circumstances of a death.

We may not authorise the collection of information on toxicology or pathology testing that is not necessary for the coronial investigation. We may not authorise the tissue of deceased persons for the furtherance of scientific knowledge unless that is incidental to our primary task. That requires the consent of the next of kin or a legally sanctioned substitute. Dr. Ramsey Smith’s attitudes, well intentioned as they were, no longer prevail.

5.4.2. Role of the Police ***Inspector Stephen Bills, Coroners Support Section, NSW Police***

The role of Police is to investigate deaths on behalf of the Coroner - they are the agents of the Coroner in the field. The investigation begins when police are notified of the death and attend the scene. General duty (uniformed police), detectives, scientific experts, crime scene investigators and other specialist police usually attend. Police determine that life is extinct, (which gives the Coroner jurisdiction over the death); investigate the circumstances surrounding the death (how and why the death occurred); and may also assist the Coroner by making recommendations regarding preventative measures. In NSW, Police also review, assess and check each brief of evidence, make recommendations and assist in Court with the inquest.

Police deal with many intangible elements and aspects of the investigation. For example, is the death drug-related?; is there evidence at the scene to support this?; who is the deceased person?; what drugs are involved; and what are the circumstances?

The police investigation is complicated by the fact that they usually arrive to find the scene not preserved and vital evidence perhaps lost. The scene can be a variety of places - from toilets, back alleys or schoolyards, to your average home. People involved may be of dubious character and often do not want to get involved. Witnesses may not be telling the whole truth or may be non-existent. Witnesses may also leave the scene and might never be found by the Police. Police must determine if the incident is an accidental overdose; a possible suicide or even homicide - and then investigate accordingly. Police must often deal with parents who do not believe that their son/daughter died from a drug overdose - "They don't take drugs".

Police must supply all this information for the coroner and the forensic pathologist conducting the autopsy and then prepare a more complete brief of evidence for the coroner.

The investigation of a drug-related death can vary from incident to incident - from a "classic" case of a body in a back alley with a needle hanging out of the arm to a case that only is known to be drug-related when the toxicology results come back - and by that time the scene is no longer available for examination.

Whereas most other people within the coronial system deal with tangibles, the Police are constantly investigating these intangibles, providing the Coroner and other people with the information necessary for the case to be completed.

5.4.3 Role of the Toxicologist ***Dr Kathryn Campbell, Forensic Science Service Tasmania***

Currently the toxicology report has some uniform components across the country but the role undertaken by the toxicologist may be quite different between states and territories.

The Toxicology Report

Each state and territory's toxicology report lists the drugs identified and the drug concentration determined in the specimen. Of the specimens analysed, blood is always included unless no blood could be obtained at autopsy. Not all reports however, indicate which drugs the laboratory is able to detect and those it cannot identify. Consequently, a report of "no drugs identified" may be difficult to interpret across the country and for the purposes of the database, researchers will have to be clear about what can be identified by the participating laboratories.

Each state and territory's report makes some comment regarding the appropriateness of the specimen analysed as that may impact on the usefulness of the reported drug levels. For example, drug levels determined in a grossly decomposed unpreserved specimen may be less

reliable than those determined in a fresher preserved specimen; peripheral blood better reflects drug levels at the time of death than blood from the heart.

Some states will, in general terms, report the therapeutic use of each individual drug identified and relevant potential or likely side effects. In addition, the toxicology reports from some states will indicate whether the blood level determined for each drug is apparently therapeutic, less than or greater than therapeutic. In some states the toxicologist will provide an opinion regarding the effect those drugs in combination may have had upon the deceased and their potential role in the death; ie the drugs caused or contributed to death.

To summarise, all states provide a chemical analysis reporting the analytes present, how much analyte was there, and the appropriateness of the specimen. In addition, some states provide more than a chemical analysis - they provide an interpretation based on the drug findings. This toxicological interpretation ranges from general information obtained from MIMS to the potential role of those drugs in the death.

Uses of the Toxicology Report – cause of death

For the pathologist, toxicology is just one of many tools available to aid in the determination of the *cause* of death.

In the case of intentional or accidental drug overdoses, the toxicology report becomes the most important tool and confirms a cause of death as drug poisoning. However, more often than not, drugs are not the cause of death. Instead, the drugs present may have had a contributory role in the death. For example:

- ♦ It is possible that in motor vehicle and boating accidents the presence of drugs which have the potential to impair judgement or motor skills precipitated the accident in which the driver was killed.
- ♦ The presence of therapeutic levels of drugs with the capacity to depress the respiratory centre or which act on the cardiovascular system for example may compromise an individual with an underlying disease or disorder which is apparent to the pathologist at autopsy; ie neither the drugs nor the pathology on their own would cause death, but in combination, each may have contributed to the death.
- ♦ In some cases, drug findings are purely incidental, neither causing nor contributing to a death, eg passengers in a bus or train crash. In these cases, the toxicology report simply excludes drugs as having any part to play in the death.

Toxicology Report – manner or circumstances of death

For the police, coroner, and pathologist, the toxicology report is one of the investigative tools available to determine the *manner or circumstances* of a death. For example:

- ♦ For individuals being treated for certain disorders and diseases with prescribed medications, the presence or absence of therapeutic levels of these prescribed drugs provides an insight into a patient's compliance prior to death and whether or not the drug levels would have provided effective control of symptoms, eg both patient compliance and the effective management of a disease with appropriate dosing would be important in the management of epilepsy or of major depression.
- ♦ The identification of a combination of paracetamol and codeine may indicate that prior to death the individual was coping with strong pain - tooth ache, head ache or some muscular pain - although the drugs themselves have little immediate significance, their presence provides circumstantial evidence of an individual who was suffering from pain prior to death, a pain that may have impaired concentration and consequently may have had some contributory role in, for example, an industrial death. Alternatively, the paracetamol and codeine may be no more than incidental findings in such cases.

- ♦ The drugs identified may be unexpected and prompt the coroner and police to investigate in a direction that was not at first apparent. For example with the finding of methadone - was it illicitly obtained, or was the individual participating in an opiate withdrawal program? An apparent accidental drowning of a child in whom medications prescribed to one of the parents was identified - how did they get there?, were they accidentally ingested?, deliberately administered? and so on.

It can be appreciated that the findings in the toxicology report can impact in a variety of ways for those investigating the death, ie. the report has consequences for those who have access to additional information about the individual (such as history) and the circumstances of the death.

Unfortunately, the toxicologist is usually unaware of much of the information available to the coroner, police and pathologist at the time of analysis. This ignorance can impact on the interpretation placed on the drug findings by the toxicologist and the information provided about the drugs found. For the toxicologist, the possibility that the drugs identified in the toxicology report have a contributory role may not always be apparent and this may be reflected in the report.

From a quick perusal of the current toxicology practices presented in Part 7 of the Workshop handbook, it seems that in most states and territories the specimens are received shortly after autopsy and certainly before any pathology report has been written. Most often samples are submitted with the information obtained by the investigating police officer and a request for toxicology from the pathologist that indicates a probable cause of death. Often that cause of death is the same as that suggested by the police, particularly where the cause of death is apparent (eg industrial accident, traumatic injury). However, sometimes the information from the police and pathologist conflict a little, eg the police indicate a probable death due to natural causes while the pathologist indicates that the cause of death is unascertainable on the basis of insufficient gross pathology to account for the death. Sometimes the quality of information or thoroughness of the initial police reports is variable, largely because of differences in police procedure and training within a state about what information to collect.

From information contained in the Workshop handbooks, it seems that only half the toxicology laboratories have input into the type of toxicology conducted. As a result, some laboratories are performing full toxicology on every specimen submitted (including non-drug related, apparently natural cause cases) and other labs are performing an analysis for only the drugs targeted by the pathologist. As a group, toxicologists have agreed on a minimum standard of toxicology investigation based on case type. The agreement followed much discussion as toxicologists want to provide the best tool to determine both the cause and manner of a death while being realistic about the cost in terms of resources against the likely benefits to be gained. The minimum standards will be discussed elsewhere in the workshop (see Section 7.2) but currently some labs are operating below the agreed minimum standard and others well above, particularly in those states where the toxicologist has no input into determining the testing required.

Currently, there are differences between the states and territories as highlighted by the previous workshop in relation to:

- ♦ when toxicology is required,
- ♦ which specimens are routinely analysed and for which drugs,
- ♦ whether the toxicologist offers an interpretation, or
- ♦ whether the interpretation is used by the pathologist.

From within the toxicology group, a minimum standard has been determined regarding the level of toxicology investigation most appropriate for certain types of deaths, and which specimens and drugs the investigation should include. But to maximise the effectiveness of the toxicologist's interpretation and of the toxicology report as an investigative tool, there is a need

to standardise the types of cases sent for toxicology and the quality of information submitted with the specimen (gross pathology, circumstances of the death known so far, previous illness, underlying disease, current medication, and so on). Certainly, if the quality of the information submitted with the specimens (or soon after) was improved, the toxicologist would be in a far better position to evaluate the drug findings. The evaluation would be informed and independent from the pathologist to aid both the pathologist and the coroner in their determinations concerning the cause and manner of a death.

5.4.4. Role of the Pathologist

Professor Stephen Cordner, Director of the Victorian Institute of Forensic Medicine

The formal role of the pathologist under the Coroners Act has various elements: identification of the deceased, determination of the medical cause of death, contributing to establishing how the death occurred (ie. the circumstances), and contributing in a general way to any responsibility the Coroner has to determine the contribution of anyone to the death. This presentation focuses on the medical cause of death and the circumstances of death.

The medical cause of death is often a source of confusion. What is the cause of something is essentially a philosophical question. Many people think a pathologist at the end of an autopsy can give the cause and circumstances of death without any additional information at all. This simply shows the power of ideas – the persistence of the ancient Egyptian belief in reading the entrails!

When determining the medical cause of death, only a small minority of autopsies (5 – 10 %) have findings that are incompatible with life eg. decapitation or rupture of the heart. In the majority of cases, the findings are compatible with life. The process of determining a medical cause of death in such cases cannot be performed in a vacuum and requires information such as the circumstances surrounding the death and the medical history of the deceased. It is necessarily the pathologist's role to marry the autopsy findings with the available circumstantial information to make conclusions about the cause of death.

The determination of the cause of death by the pathologist is not fact, but an opinion, and hence is variable. The benchmark for the 'correctness' of a cause of death is the opinion of colleagues. But even then, some pathologists will fight to the end for a cause of death that everyone else disagrees with. I do not consider it possible to standardise reporting of causes of death, and I don't believe that standardisation is desirable, even if it were achievable. I do however believe that it would be possible to develop common terminology. By agreeing on the meaning of various words that are used in describing the cause of death we would remove much of what currently appears to be differences in the stated causes of death.

There are a number of issues related to cause of death, particularly with respect to drug-related deaths. In my opinion, the gateway into the drugs module is through toxicology and will be shaped by agreements on the toxicology investigation to be performed in certain agreed circumstances. However there are some cases which may not clearly be classified as drug related. For example, cases which show no drugs or poisons in the toxicology analysis (ie. toxicology negative) but pathological findings indicate that it is a drug death eg. alcoholic cirrhosis, Hepatitis C cirrhosis. I think that such cases should be included in the drugs module, even though toxicology testing was negative. Other ambiguous cases which should be incorporated include traces of morphine in a dead motor vehicle driver and multiple drugs in a woman murdered by strangulation.

In contrast a case of death from 'overlying' in an infant child of acutely intoxicated parents, (although an interesting case), the line has to be drawn somewhere and it would not be relevant for inclusion in the drugs module. In a case of sub dural haemorrhage in an 80 year old on warfarin, whether or not the death should be included would depend on whether toxicology

analysis was requested and whether the pathologist regarded the death as drug related. These cases reflect just a few of the difficulties that will arise in defining the scope of what is considered a 'drug related death'.

Another key role of the pathologist in the coronial investigation is to determine how the death occurred (circumstances). To do this, the pathologist requires information from a variety of sources. When ascertaining whether the mechanism of death was respiratory obstruction or respiratory depression, scene information is vital, preferably with photographs. When trying to determine whether a case is chronic abuse or naïve, the medical and drug taking history of the deceased (with or without an autopsy and toxicology report) is essential, particularly with respect to what drugs had been prescribed, by whom and for what. To determine whether an overdose was a hot shot or accidental, information is required about the scene, the medical history and from the autopsy. When considering whether a death was accidental or suicidal, the pathologist again requires information from the scene as well as the history.

The importance of good quality information to support the pathologist cannot be underestimated. In particular, my personal view is that Coroners, on behalf of community, need access to pharmacy records, including those obtainable from the HIC (eg. PBS records), to properly understand the scope of drug abuse. This information would also assist pathologists in their roles of determining their view as to the cause and circumstances of death.

As mentioned earlier, the gateway through which cases will enter this module is toxicology. This approach will miss some cases so some other entry points are needed. For example, cases of delayed death from global cerebral hypoxia, from medical complications of IV drug abuse (eg. SBE, post Hep C liver failure) or from complications of chronic alcoholism. The module will require a pathology gateway to capture such cases.

Other issues which still require consideration include: adverse drug reaction deaths (generally not reported to Coroners); epilepsy & asthma deaths (are they drug related? - compliance issues, prescription or medical advice issues); haemorrhagic death in patients on warfarin (one per month at VIFM over the last year); deaths related to multiple drug resistant staphaureus (currently not reported because considered a natural death, but are arguably accidental); and the need for records to determine the true dimensions of the problem.

In conclusion, the scope of the module will need clear definition so there is no confusion to coroners, policy makers and researchers about what is in and what is out. The best thing pathologists could do to help the module is to agree on common definitions for words used in drug related deaths. This will reduce to a minimum confusion over different causes of death.

5.4.5. Importance of Coronial Data for Researchers and Public Sector Agencies Greg Swensen, WA Drug Abuse Strategy Office

Note: The WA Drug Abuse Strategy Office provides research information to the WA government to help inform policies for prevention of death and injury associated with drugs.

There are a number of indicators of heroin abuse that can be measured:

- ♦ Heroin purity
- ♦ Ambulance callouts
- ♦ Fatal heroin Ods
- ♦ Telephone calls (ADIS)
- ♦ Methadone programs
- ♦ Heroin seizures
- ♦ Heroin charges

The graphs presented reflect the trends in indicators of heroin abuse in WA in recent years.

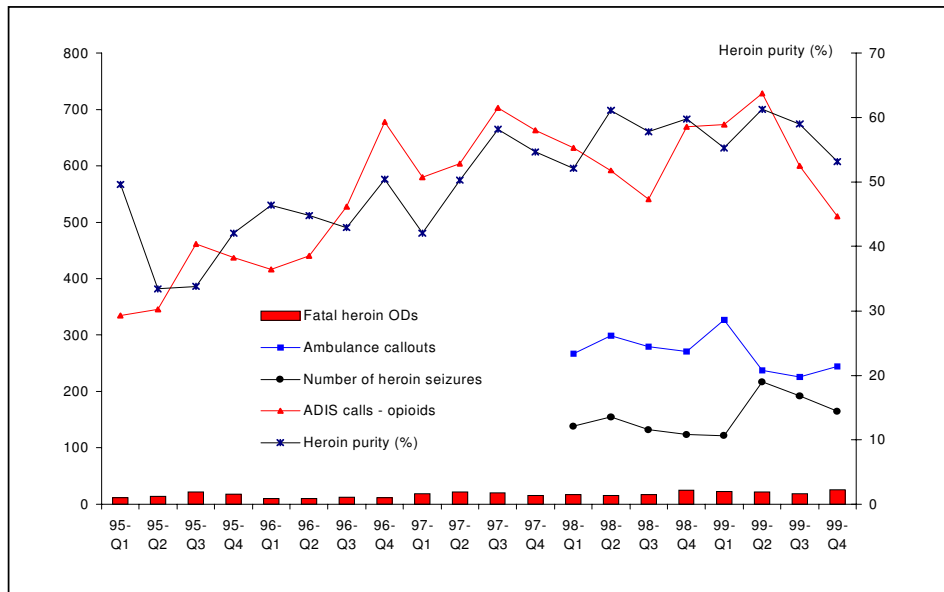


Figure 1. Indicators of Heroin Abuse, 1995 - 1999: ambulance callouts, fatal heroin ODs, heroin seizures, ADIS opioid calls, heroin purity.

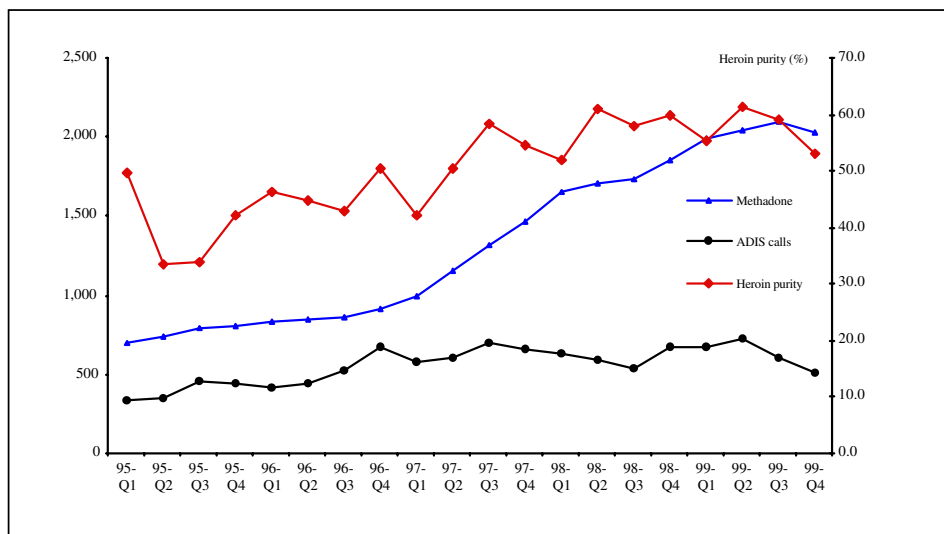


Figure 2. Indicators of Heroin Abuse, 1995 – 1999: methadone treatment programs, heroin purity, ADIS opioid calls.

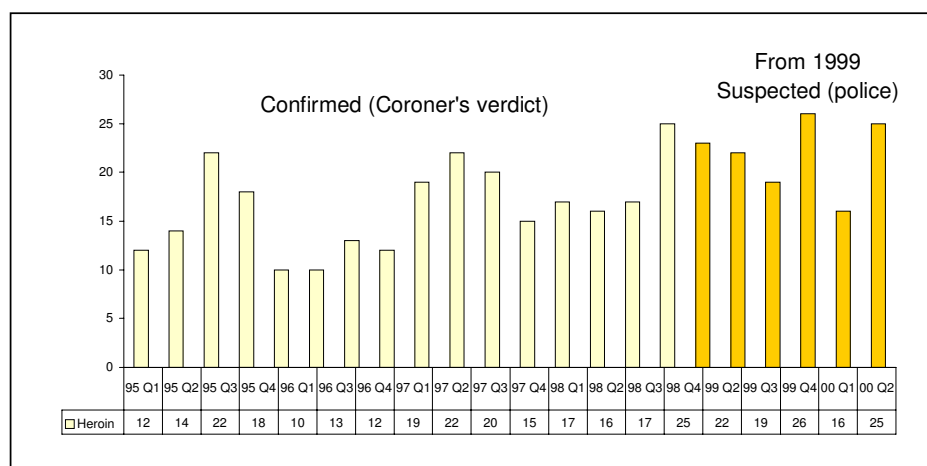


Figure 3. Indicators of Heroin Abuse WA, 1995 – 2000: Accidental Heroin Related Deaths, WA (1995 Q1 - 2000 Q2)

The WA database is an example of the importance of coronial data for research. The database contains toxicology data from 1995 and includes information on 720 drug related deaths from 1995 - 1999. The key drugs are blood alcohol concentrations, tetrahydrocannabinoid (THCA) and opioid related, including whether use is licit or illicit and whether it is confirmed or probable use.

The basic dataset includes: place of incident (dwelling, car park, public toilet, hotel/motel); time of incident; day of week; suburb; age and sex; indigenous or non-English speaking background. Other data collected includes: type of death (suicide, accidental etc); significance of opioids (causative, related, detected, nil); Coroner's finding; cause of death (heroin, morphine, methadone, amphetamine, volatile substance etc); and ICD-9 code (Registrar General's Office data file).

The WA database provides information for various research projects. For example, an analysis of a total of 95 opioid deaths indicated that 87 (or 92%) were illicit and 8 (or 8%) were licit use of opioids. Of the illicit deaths, 79 were heroin related, with 76 accidental and 3 classified as suicide. The other 8 illicit deaths involved drugs other than heroin: morphine, methadone, dextromoramide and propoxyphene. Such research indicates the increasing role of drugs other than heroin in deaths caused by opiates.

In another study, the ICD-9 codes of various deaths were used to classify opioid related and other drug related deaths. This research reflected the variations in coding by different agencies, such as the ABS, and demonstrated the difficulties associated with classifying drug related deaths.

Following extensive consultation between police and researchers, an Initial Report of Suspected Drug Related Death form was introduced for WA Police. This form collects information including: personal details; incident details; contact with criminal justice system; past and recent use of alcohol and other drugs; treatment history (drug, psychiatric); and suspected heroin related death.

6. Scope and Method of Selection (Day 1)

The ‘scope’ of the drugs module refers to the category of cases to be included in the module. The aim of this session was to define the scope and consider methods for identifying which deaths fall within the defined scope.

Natasha presented checklists as a possible approach to identifying drug related deaths. This was followed by the presentation of a number of case studies by Olaf Drummer for discussion. A break out group followed to consider the scope of the module and possible methods for selecting relevant deaths, including discussion of the checklist approach.

6.1 Checklist Approach to Identifying ‘Drug-Related Deaths’ Natasha Redman, Project Officer - Drugs Module

One of the key objectives of the workshop is to establish a method for selecting drug-related deaths for inclusions in the module. MUNCCI has proposed an approach based on a series of checklists which may be a suitable method.

The threshold question is ‘what is a drug death’. There are a number of alternative approaches to solving this problem: a) establish a defining phrase; b) include all deaths with positive toxicology results; or c) develop a method for selecting deaths that have a direct and/or indirect contribution from drugs/poisons/alcohol. The checklist approach proposed by MUNCCI is a category c) approach.

The checklist approach aims to be relatively objective and allows more flexibility than either a defining phrase or simply selecting all toxicology positive cases. The process would involve the completion of a checklist at four stages of the coronial investigation into all deaths. (A copy of the proposed checklists are provided in Section 5 of the workshop papers). These checklists are still in draft stage and, if adopted, would need to be modified to ensure all cases that fall within the defined scope of the module are captured. The four proposed checklist stages and who would complete them are as follows:

- ♦ Stage 1: Initial Investigation – Coroners’ Clerks
- ♦ Stage 2: Post Toxicology Report - Reporting Toxicologist
- ♦ Stage 3: Post Autopsy Report - Reporting Pathologist
- ♦ Stage 4: Case Completion - Coroners’ Clerks

Stage 1: Initial Investigation

The initial checklist would be completed by the Coroner’s Clerks on the basis of the initial report of death to the Coroner by police. Currently, much of the relevant information is included in the police narrative of the circumstances on the report of death form. To make it easier for coroners’ clerks to complete the checklist it would be desirable to include a set of agreed standard data items on the initial police form. This idea will be further explored during discussions on standardisation of police forms.

The first checklist aims to identify potential drug deaths early in the coronial process and collects information about the scene of death, any relevant known or suspected history, and the “gut feelings” of police (opinion) on whether the death is drug related.

Stage 2: Toxicology

The second checklist would (ideally) be completed by the reporting toxicologist on the basis of the results of the toxicology analysis. It is proposed that this checklist would pose the initial question: ‘Were any drugs, poisons or alcohol detected?’ If the answer is yes, the toxicologist would be asked to provide an opinion on whether it is likely that death was caused (wholly or partly) by certain types of drugs/poisons. It should be noted that the actual toxicology results are stored in the NCIS as a text file and would not be recorded using the checklists.

Stage 3: Pathology

The third proposed checklist would (ideally) be completed by the reporting pathologist on the basis of the results of the pathology investigation and autopsy. This checklist aims to confirm suspected cases (medically), and detect cases that may have been missed by the previous checklists. The proposed checklist poses questions such as: ‘Is the deceased positive for an infectious disease?’ ‘Is there evidence of a history of substance abuse?’ ‘Is there evidence of recent injection or administration of drugs or poisons?’ The checklist would also ask the pathologist’s opinion on whether it is likely that the death was caused (wholly or partly) by certain types of drugs/poisons.

Stage 4: Case Completed

The final proposed checklist would be completed by a coroner’s clerk once the coroner has completed the case. The answers would be based on the coroner’s finding and other information gained through the coronial investigation. This checklist aims to pick up any case not previously detected and perhaps eliminate cases previously thought to be drug related that are not (this function will depend on decisions made at the workshop regarding which checklist or checklists should take priority). The proposed checklist includes an initial question ‘Does the finding (case file) indicate evidence of the involvement of drugs / poisons in the death?’ If the answer is yes, a further series of questions is posed regarding known or suspected history, and whether the cause of death has been determined to be due to particular drugs or poisons, such as alcohol, heroin or other opiates, prescription or over-the-counter drugs, or other poisons.

Pilot Study - VIFM / SCO

A pilot study of the checklist approach was recently carried out at the Victorian Institute of Forensic Medicine and the Victorian State Coroner’s Office. The aims of the pilot were two-fold: 1) to determine whether the checklist approach is effective; and 2) to evaluate the draft checklists and the approach in general.

Twenty completed drug cases were selected for the pilot. The proposed checklists were completed retrospectively with information that would have been available at the time the checklist would have been completed.

The results of the pilot study indicated that the checklist approach is effective for detecting drug deaths, with all 20 cases flagged by at least 1 checklist. One case was determined not to be caused by drugs by the coroner and pathologist, although toxicology results were positive. One case tests the scope of the module (Case Study - Mr P) and is included in the cases for discussion during the plenary and break out sessions on the scope of the module.

Participants in the pilot study were asked to evaluate the checklists, answering a series of questions using a scale of 1 to 5. The responses to these questions indicated that the checklists were generally quick and reasonably easy to complete, participants neither liked nor disliked the approach (average score of 3) and generally considered this approach to be a suitable method. Suggested improvements to the checklists included: clarification of what is a drug / poison; a clearer definition of scope of module; simplification of the Stage 1 checklist to eliminate the need to complete it for natural deaths; specify drug interactions and CO poisoning as additional options in the opinion/determination section; in the history section, include source of evidence;

clarification at Stage 4 that the outcomes of the whole investigation should be considered, not just the coroner's "finding"; define 'use' versus 'abuse', 'adverse reaction' and other terms; are opinion / determination questions mutually exclusive?

The pilot study leaves some issues unresolved. The day 1 break out sessions will discuss this approach further to determine whether the checklists are a suitable approach for identifying drug related deaths and, if adopted, how the questions posed should be modified or clarified. In addition, we must determine which checklists should take priority.

The most suitable method for selecting drug-related deaths for inclusion in the drug related death dataset will depend to some extent on the defined scope of the module. For example, if a simple positive toxicology gateway is deemed desirable, the method will involve identifying all cases with positive toxicology results. Alternately, all cases referred for toxicology may be selected, regardless of the outcome. If further definition of the types of death to be included is required, the checklist approach may be more suitable. Such questions will be the subject of discussion in the break out groups later today.

6.2. Case Studies

The focus of the drugs module, as for the NCIS as a whole, is on using information to *prevent* sudden and unexpected death. Users of the NCIS will have their own specific search criteria that reflect their own research or investigative aims. It is not MUNCCI's intention to constrain criteria but rather to facilitate improved data availability on probable drug related death cases. Therefore the definition of the scope of the module by way of criteria leaves ultimate data analysis to users.

Workshop participants are asked to consider whether the scope of the module should include all cases with positive toxicology results, or all cases with a drug history, or some other criteria. For example, would a case in which a pedestrian was killed by a drunk driver be considered a drug related case? If so, what mechanism might be used to identify this case? These are the types of questions which workshop participants were asked to consider during this session and the following break out groups.

Five drug related death cases were presented by A/Prof Olaf Drummer for consideration and discussion in an open forum. A summary of the circumstances, toxicology and autopsy results and Coroner's finding for each case were provided in the workshop papers (Section 4). Discussion of these cases was designed to encourage consideration of the scope of the module.

The initial consensus of the group was that all of the case studies presented were considered "drug-related" and should be included within the scope of the module. The discussion highlighted the importance of including deaths that had been identified as potentially drug-related by any or all of the toxicologist, pathologist or Coroner.

6.3. Scope of Module and Method of Selection – Break Out Groups

Participants were divided into four mixed discipline groups with the aim of defining the scope of the module, inclusion criteria and method of selecting deaths for inclusion. Discussions included further consideration of the case studies presented in the plenary session.

All groups concluded that the six cases provided (including one which was not presented in the plenary, Ms S) should all be included within the scope of the drugs module.

In addition, each group was provided with a number of scenarios and asked to determine whether or not they should be considered drug-related deaths for the

purposes of the NCIS. The results of examination of the scenarios are presented below (Section 6.3.1).

The method of selecting deaths for inclusion was considered in the context of the desired scope of the module and the checklist approach, presented during the plenary discussion (see Section 6.1). The outcomes of each group, stating the preferred methods, are summarised below (see Section 6.3.3).

Break out group discussions highlighted the importance of availability of information in determining whether a death is drug-related. This supported earlier discussions on the contributions of police, toxicology and autopsy investigations to the coronial process.

6.3.1. Discussion of Scenarios

Following is a list of the scenarios and outcomes.

Scenario	Include?	Comments
Woman on benzodiazepines (therapeutic levels) who falls down stairs and dies.	Maybe.	More information needed.
Bacterial endocarditis in a person who was a heroin addict 5 years ago (but who no longer uses).	?	Query connection to IV drug use. May not be reported to Coroner.
Ischaemic heart disease in a patient with toxic levels of benzodiazepines, an enlarged heart and evidence of coronary atherosclerosis.	Yes	More information needed.
Patient with cardiomyopathy treated with a drug that caused an acute drug induced hypersensitivity myocarditis (inflammation of the heart) from which he died.	Yes	May not be reported to the Coroner although as an adverse drug reaction it should be.
Death from MVA injuries following ingestion of: a) alcohol, b) cannabis, c) amphetamines, d) “magic” mushrooms.	Yes for drivers and passengers	More information needed. (Note: The group assumed all substances had been ingested at one time).
Drunk pedestrian who is killed by a car as he crosses the road.	Yes	
Pedestrian killed when hit by a car driven by a drunk driver.	Yes	Problem of how to capture this type of death as toxicology on the deceased may be negative.
Death from cardiogenic shock (heart failure) after complications arising during cardiac valve replacement surgery in a man with a history of IV drug abuse and several episodes of bacterial endocarditis in the past. (Bacterial endocarditis affects lining of heart and valves).	Yes	This should be identified by pathologist via the history, even if toxicology is negative.

Scenario	Include?	Comments
Death from complications of immunosuppression (septicaemia) following combined radiotherapy and chemotherapy for malignancy where overdosage of radiation and cytotoxic agents occurred due to error in patient's recorded weight.	No	Toxicology would not be done.
Death from mediastinitis (inflammation of tissues around heart and lungs) caused by a potassium tablet being stuck in the oesophagus of a woman with a benign oesophageal stricture and leading to oesophageal perforation.	No	Mechanical effect.
Liver damage caused by long-term alcoholism in a person who died from any of the following: a) hit by a car, b) found drowned, c) heart attack, d) fall off a ladder	No	If the death was reported to the coroner due to an external factor (a, b or d) then alcoholism may be relevant. This could be flagged via history.
90% coronary artery atherosclerosis in a patient with well-above therapeutic levels of propoxyphene / norpropoxyphene, 7-aminoflunitrazepam and diazepam / nordiazepam.	Yes	
Drug user shot by a non-drug user during a pub brawl.	Yes	Toxicology may be positive, so this case may be included anyway.
Non-drug user shot by a drug user during a pub brawl.	No	
Death from septicaemia following repeated urinary tract infections and pyelonephritis (kidney infection) in a man who was paraplegic following a motor vehicle accident caused by his drunken driving.	No	Too remote.
Man who dies of pneumonia 4 weeks after being given morphine (at therapeutic levels) in error on a drug round and suffers an episode of aspiration while sedated.	Yes	
Hanging suicide of a young male who had been a regular ecstasy user in the past.	No	This death may be captured via known history of illicit use of drugs.
Death from liver failure due to accidental ingestion of poisonous mushrooms containing hepatotoxins and psychoactive compounds.	Yes	Positive toxicology.
Death from bronchopneumonia in a woman treated with chemical oblivion for any of the following: intractable pain from disseminated tumour, advanced multiple sclerosis, debilitating pain from fibrous dysplasia of the frontal bone of the skull.	Yes	Positive toxicology. However, may not be reported to coroner.

6.3.2. Scope

Each break out group reported a summary statement on the possible scope of the drugs module:

Group 1: “All cases where drugs may be involved – as verified by a checklist approach. Focus on contributing drugs and present drugs. Deaths caused by the absence of drugs should also be captured”.

Group 2: “All cases with positive toxicology result plus flags for other drug-related factors”.

Group 3: “All cases where toxicology has been performed, irrespective of the drug result”.

Group 4: “All cases where the coroner/pathologist/toxicologist considers that the death was caused, wholly or partly, directly or indirectly, by drugs or poisons.”

6.3.3. Method of Selection

Group 1: Checklist approach with review and modification and some way of translating the checklist answers into a decision. Also, if one checklist indicates that the death is considered to be drug-related then the death should be included. The coroner’s opinion could be given a specific weighting.

Group 2: All cases with positive toxicology results plus a flagging system for other obvious drug related deaths eg. prolonged survival after overdose, old history of illicit use of drugs, other.

Group 3: Checklist approach. Reasons: identification of trends and patterns of drug-related deaths; pathologists use the data for identifying other cases; from a research point of view the retrieval of data would be more effective; role of prevention from a coronial perspective eg nursing home deaths (drug involvement), heroin deaths, doctor shopping, etc; broad based approach useful especially for standardisation of data input; and data integrity may assist in terms of policy outcomes.

Group 4: Checklist approach at all four stages (with modifications). This method provides a standardised approach to selecting deaths for inclusion in the module. It also provides suggestions for information for the police to follow up during the investigation of the death.

6.3.4. Other Comments

Group 1:

- ♦ Toxicology may be performed for completeness or for policy reasons.
- ♦ It would be easier to collect everything and store the data (although this would collect a lot of false positives).
- ♦ With respect to the checklists, the focus is on what comes out of the database. Therefore what should go in is an important question. The Coroner’s jurisdiction is the basis on which all the information is required.

Group 3:

- ♦ The resources required to implement the checklist approach must be considered.

6.3.5. Scope and Method of Selection – Overall Consensus

Following the break out group report back session, MUNCCI's understanding of the consensus of the workshop participants is that the drugs dataset should enable access to enhanced information on:

- ♦ all cases with positive toxicology (ie. at least one drug/poison and/or alcohol detected); and
- ♦ other cases at the discretion of pathologist and/or coroner (eg. cases with no toxicology testing or with negative toxicology but having other indications of drug involvement).

This approach averts the risk of the database making subjective assessments on causation. It was considered unnecessary to include all cases in which toxicology had been requested as this would lead to a large number of cases being included that were not actually drug-related deaths.

The overall consensus of the group, following open forum discussions, was that relevant cases could be detected using a set of checklists or a flagging system which is completed by the pathologist and coroners' clerks. Any case identified by the toxicologist, pathologist or coroner should be included. The checklists may also be useful for collecting specific information on cases to aid searching and classifying deaths eg police form data items, class of drugs detected, drugs considered by the pathologist or coroner to have contributed to death (wholly or partly, directly or indirectly).

This understanding will form the basis for the ongoing development of the enhanced dataset for drug related deaths.

6.3.6. Suggested Modifications of Checklists

During the break out groups participants suggested a number of modifications to the checklist approach as follows.

- ♦ Stage 1 (police form - coroners' clerks) – this checklist should reflect data items on the relevant police forms.
- ♦ Stage 2 (toxicology) – given that this may be a way of searching for deaths caused by particular types of drugs/poisons of public health interest, the opinion questions should reflect the types of deaths that are of most interest to coroners and other users of the data. Ensure that the opinion questions cover all areas of interest so a subset of deaths can be pulled out of the database.
- ♦ Stage 3 (pathology) – questions should enable the identification of cases that may have no toxicology testing or have negative toxicology but which still involve drugs/poisons.
- ♦ Stage 4 (final - coroners' clerks) – questions should enable detection of cases that may be drug-related but are not necessarily detected through toxicology or pathology analysis. Answers should be based on all information gained through the coronial investigation. History questions may need qualification with respect to the source of the evidence.

7. Standardisation (Day 2)

The aim of this plenary session was to introduce standardisation issues and emphasise the importance of standardisation to the development of the module. Natasha Redman opened the session with an overview of desirable standardisation in the areas of police initial investigation, toxicology reports and pathology/autopsy reports. Peter Felgate then presented the outcomes of the meeting of the Toxicology Special Advisory Group (SAG) of the Senior Managers of Australian and New Zealand Forensic Science Laboratories which was held on 25 – 26 July 2000 at the VIFM. Professor Stephen Cordner, Director of the Victorian Institute of Forensic Medicine then provided an overview of the challenges for standardisation of autopsy protocols and cause of death terminology. A transcript of each presentation is provided below.

7.1. Standardisation of toxicology, pathology and police investigations Natasha Redman

The 1st Drugs Module Workshop last year identified the need for standardisation at various stages of the coronial investigation. One of the main aims of today is to resolve as many of the standardisation issues as possible and identify issues which will need to be followed up after the workshop.

In the context of the NCIS, “standardisation” means the data that is collected, and how it is reported and stored in the database. Consistency will facilitate comparison of data across states and territories. Establishing agreed minimum standards need not result in the lowest common denominator being applied. Any minimum standard would merely represent the minimum set of data that a user of the database could expect to be able to access. In some jurisdictions, the data available already exceeds what is likely to be agreed as a minimum standard. Additional information generated in a case will not be precluded from inclusion of the database. In the event that the information collected in a case does not meet minimum agreed standards, the case may be flagged so that users of the data can easily recognise that some elements of the agreed minimum data set may be missing.

The three key areas in which standardisation has been identified as being desirable are: the initial police report of death to the coroner; various toxicology issues, eg collection of specimens, range of testing and reporting of results; and possible standardisation of pathology reporting of drug related deaths.

Police Investigation Forms

Currently each jurisdiction collects different data for the initial report of death to coroner. Police and other stakeholders have recognised that is desirable and feasible to standardise the police report of death to the coroner to facilitate the collection of consistent and comprehensive information, and increase the value of national data. This type of information will be useful when developing prevention strategies and policies, as well as for research related to drugs, alcohol and poisons.

At the 1st workshop, stakeholders identified a number of additional data items that they would like collected in drug death cases. MUNCCI incorporated these items into a survey which was distributed to Coroners, pathologists, toxicologists, researchers and public health agencies in June this year. Western Australia already has in place a specific form to collect detailed information for drug related deaths and many of those questions were also included. The survey listed 55 data items in total, divided into three sections: circumstances of death, general history, and recent history.

The results of the survey rated two items as “essential”, seven as “very important to essential” and 17 as “very important”. A more comprehensive analysis of the results of the survey is provided in Section 6 of the workshop papers.

The respondents to the survey were divided into two groups, providers of data and users of data.

The questions identified as being most important overall were:

- ♦ Was there evidence of alcohol / drug / substance use at the scene?
- ♦ Was there evidence of drug use / administration on the body of the deceased?
- ♦ Is drug / substance use suspected? If yes, describe.
- ♦ History of drug use, volatile use or alcohol abuse
- ♦ Recently prescribed medication

The next step in the process will be to approach police to determine whether and how this information could be collected. The aim is to establish a set of data items that is incorporated into the process in each jurisdiction. It is not MUNCCI’s intention to seek to alter the way the death investigation is carried out, but rather to encourage a standardised approach to data collection throughout all jurisdictions to enhance the quality of the information available to Coroners, policy makers and researchers. The target date for completion is November 2000.

Toxicology Issues

As well as seeking to standardise the information collected by police, it is desirable to standardise toxicology testing protocols, particularly in the following areas: collection of specimens, testing requested in certain types of cases, range of tests performed, classification and reporting. Any changes in protocol that arise from attempts to standardise will require the support of Coroners, as well as cooperation between pathologists and toxicologists.

The Toxicology SAG has been working for more than 12 months on establishing an agreed minimum standard for coronial toxicology around the country. Their 2000 meeting was held over the last few days and Peter Felgate will update us on the outcomes in a few minutes. It is anticipated that the SAG agreements will form the foundation for determining what toxicology data should be included in the drugs module enhanced data set. Current toxicology practices are summarised in Section 7 of the workshop papers.

The main aims with respect to toxicology standardisation are to establish what “full toxicology” comprises, and what testing should be performed in certain case types such as suicides, drug deaths, motor vehicle accident (MVA) drivers, homicides, and custodial deaths. Toxicologists are also seeking to reach agreement on which samples should be collected and the preferred site of blood collection. In addition, agreement is sought on quantification of drugs (including opiates), uniform units for reporting, and a classification system for attributing the role of the drug(s) in death. These topics will be discussed by toxicologists and pathologists during standardisation break out groups later today.

Pathology Issues

To further improve the consistency and comprehensiveness of NCIS data, standardisation of various pathology issues is also desirable, including: collection and labelling of toxicology specimens; possible standard autopsy protocols; and reporting of cause of death, such as common terminology and/or listing contributing drugs in the cause of death statement. Such initiatives would improve the quality of the information provided by pathologists and would assist in searching the database for particular types of cases. Standardisation would require cooperation with toxicologists as well as the agreement and support of Coroners.

Pathologists at the 1st Drugs Module Workshop identified that agreed protocols for different types of autopsies would enhance their capacity to provide information from the autopsy. This

would, in turn, enhance the role of the coronial process in the prevention of death and injury. An informal survey of pathologists was carried out by MUNCCI in June and July 2000 to identify potential items to include in agreed minimum standard for drug-related death autopsies (see Section 8 of the workshop papers). Pathologists believe that any protocol that may be introduced must remain flexible. If a protocol is deemed desirable, there was general consensus that it should specify that femoral blood and urine should be collected, with other optional samples to include stomach contents, liver, bile and vitreous humour.

Other items that may be included in the protocol include: recording the site of blood collection, and documenting the presence or absence of puncture sites / scarring and petechial haemorrhaging. There are certain items which could be specified for particular types of cases, such as collecting blood by syringe for carbon monoxide poisoning cases, collecting extra samples for cases involving volatile substances, taking hand and/or nasal swabs for suspected heroin deaths, and collecting other samples such as cerebrospinal fluid or hair in certain cases.

Most of these protocols are already being performed during autopsies in drug related cases, but they are not always documented. Establishing a minimum standard protocol may assist in producing autopsy data that can be directly compared between various jurisdictions and between various pathologists within a single jurisdiction. These issues will also be discussed during break out group later today.

7.2. Report on outcomes of Toxicology Special Advisory Group Meeting Peter Felgate, SAG Secretary

Testing in Certain Case Types

Case Type	Testing
MVA Drivers	Full Toxicology
Drug Deaths	Full Toxicology
Homicides	Full Toxicology
Custodial	Full Toxicology
Suicides (non-overdose)	Limited Toxicology

Toxicology Testing

Full Toxicology

- ♦ Basic Screen (including amphetamines, anti-convulsants, benzodiazepines, antidepressants, other prescription drugs)
- ♦ Opiates
- ♦ Alcohol
- ♦ Cannabis
- ♦ Acidic Screen
- ♦ Paracetamol
- ♦ Theophylline
- ♦ NSAID

Limited Toxicology

- ♦ Basic Screen (including amphetamines, benzodiazepines, antidepressants)
- ♦ Opiates

- ♦ Alcohol
- ♦ Cannabis

Specimens and Analysis

In all Toxicology Cases

- ♦ Collect blood – femoral blood is the preferred specimen. If femoral not available, collect another peripheral sample; if peripheral is not available, collect a central sample.
- ♦ Specify site of collection
- ♦ Specify postmortem or antemortem
- ♦ Specify preserved or unpreserved
- ♦ Specify blood, plasma or serum
- ♦ Urine (if available)

Optional samples

- ♦ Liver
- ♦ Bile
- ♦ Stomach contents
- ♦ Vitreous humour

Analysis of Specimens

- ♦ Blood must be analysed (if available).
- ♦ Other specimens at discretion of toxicologist and pathologist depending on case

Morphine Testing

- ♦ Quantify free morphine in blood. Quantification of total morphine is optional.
- ♦ Detect 6-monoacetylmorphine in urine.

THC Testing

- ♦ Report concentrations of THC in blood.

Reporting

Concentrations

- ♦ Reported concentrations must be based on duplicate quantification
- ♦ If quantification is performed on singlets, report “approximate” concentration

Agreed uniform units

- ♦ Liquid specimens: mg/L or mg/kg
- ♦ Solid specimens: mg/kg
- ♦ Stomach contents: mg
- ♦ Alcohol: g/100 mL (or %)

Other agreements

(as documented in the minutes of the Toxicology SAG meetings for 1999 – available from Peter Felgate on request)

- ♦ Classification of drugs
- ♦ Route of administration
- ♦ Labelling of specimens
- ♦ State of sample
- ♦ Specify technique use to detect reported analyte
- ♦ Confirmation technique (different chemical principle)
- ♦ Classification of drug-associated deaths

7.3. Challenges for Standardisation of Autopsy Protocols and Cause of Death Terminology

Professor Stephen Cordner, Director VIFM

The concept of a standard autopsy protocol is a deceptively simple one. There is a danger of encountering the approach “I am a doctor – give me a protocol for making a meringue and all you get is goo”.

The National SIDS Autopsy Protocol is an example of a protocol which has been in place for a number of years. SIDS is the sudden unexpected death of a baby under the age of 12 months in which review of the history, thorough event scene investigation and autopsy fails to reveal an adequate cause. There is a relatively small number of cases of SIDS each year but it is the single most common cause of death from 1 month to 1 year and is an emotive issue. The protocol has the active support of SIDS Australia and obtains funding. Pathologists also support the protocol and can see the point of the database as they contribute the information.

However there are some problems with the SIDS protocol. The protocol sets out a long autopsy procedure and generates a long report. Pathologists are well prepared to carry out the protocol but it may be unfair to expect reliable results from GP pathologists.

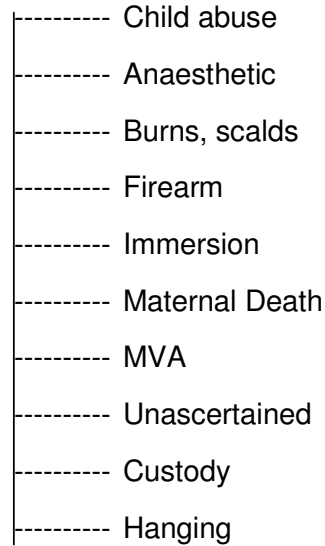
The protocol is effectively a minimum standard but if extra analyses are done, such as toxicology testing, there is a format for reporting it.

The Minnesota Protocol for Deaths in Custody serves as a warning when developing autopsy protocols. This protocol is twice as thick as the workshop papers and is effectively useless as no one can actually use it. The downfall of this protocol is that it tries to deal with everything that the pathologist may see in a death-in-custody case, from natural, to accidental, to suicide, or homicide. It is, in reality, a text book of forensic pathology.

In relation to drug related deaths, there needs to be an agreed Australian minimum standard. However, as can be seen, to be effective, the protocol needs to be part of a comprehensive approach covering all autopsies ie. a minimum standard core for all autopsies, plus minimum standard extras for “drug deaths”.

The VIFM has already established a set of minimum autopsy protocols using this type of approach. Details of the protocols are available on the VIFM web site at www.vifp.monash.edu.au/medical/pathology/protocols/index.html. The structure of the set of protocols is as follows:

Sudden, presumed natural adult death



Elements of a Minimum Standard for “Drug Death” should include the following:

- ♦ Presence (number) / absence of needle marks
- ♦ Hep B, Hep C, HIV serology
- ♦ Samples:
- ♦ Blood (note site(s))
- ♦ Urine
- ♦ Bile, liver, stomach contents, vitreous (optional)
- ♦ Hair (optional)

More importantly, there needs to be some standardisation of cause of death terminology. We need to establish a glossary of terms with agreed definitions rather than trying to constrain or standardise the cause of death itself. Terminology could be defined so that when used in the formulation of a cause of death, certain words have the particular meanings. Some of the words and phrases which should be included in the glossary include: opiate, heroin / morphine, acute narcotism, toxicity, chronic IV drug abuse, overdose, acute on chronic IV drug abuse, mixed drug toxicity.

7.4. Standardisation – Break Out Groups

Following the plenary discussion, participants were divided into discipline-based groups to discuss standardisation issues. Pathologists and toxicologists discussed various issues relating to the standardisation of the medical/scientific investigation. Coroners, police and researchers and public sector agency representatives discussed the establishment of a set of standard data items for inclusion on the police form for report of death to the coroner. Registrars and clerks were guided through a demonstration of the proposed revised core data set of the NCIS. A summary of the discussions and outcomes of each group is presented below.

7.4.1. Pathologists and Toxicologists: Medical / Scientific Investigation – Break Out Group 1

The aim of this group was to agree on toxicology procedures including specimen collection during autopsy, sample labelling, testing performed and reporting of cause of death. The group comprised a toxicologist from each state and territory (except NT, where toxicology is performed in SA) as well as pathologists representing six of the nine national forensic pathology institutions. A summary of current toxicology procedures in each laboratory was provided in Section 7 of the workshop papers. A corrected version of the summary was provided to participants in this group.

The group considered and accepted the standards recommended by the Toxicology SAG (See Section 7.2). The agreements are detailed below.

7.4.1.1. Specimen Collection

Specimens that will be collected in every case in which toxicology is required are:

- ♦ Blood
 - ♦ Leg blood is the preferred specimen. If leg blood not available, the next preference is subclavian blood; followed by aortic/heart blood, then other (whatever sample is available).
 - ♦ The site of blood collection must be recorded in both the toxicology and pathology reports.
 - ♦ Femoral blood should be collected by one of the following methods, preventing contamination with central blood. The method of collection used should be recorded:
 - ♦ Femoral puncture
 - ♦ Ilio-femoral blood collected before organs removed
 - ♦ Ilio-femoral blood collected after organs removed
 - ♦ Femoral blood collected with organs intact using tie-off or clamping
 - ♦ If peripheral blood is not available collect liver (if possible).
- ♦ Urine
 - ♦ If urine is not available collect vitreous humour (if possible).
- ♦ Other specimens are optional.

7.4.1.2. Specimen Labelling

The agreed terms for labelling of specimens are as follows:

- ♦ Blood
 - ♦ Specify site of collection
 - ♦ Specify postmortem or antemortem
 - ♦ Specify preserved or unpreserved
 - ♦ Specify blood, plasma or serum
- ♦ Liver
- ♦ Bile
- ♦ Gastric Contents
- ♦ Vitreous humour
- ♦ Kidney
- ♦ Hair
- ♦ CSF
- ♦ Lung
- ♦ Brain
- ♦ Muscle
- ♦ Fat
- ♦ Skin
- ♦ Bone
- ♦ Swabs (Hand, Nasal)
- ♦ Nails
- ♦ Injection site + control site
- ♦ Putrefactive effusion
- ♦ Body parts, list
- ♦ Other, list
- ♦ Urine

7.4.1.3. Toxicology Testing to be Performed in Certain Types of Cases

Full toxicology (as defined in Section 7.2.2) will be performed on all deaths which fall into the following case types:

- ♦ Homicide
- ♦ Custodial
- ♦ Industrial / work-related
- ♦ Drug-related
- ♦ Transportation Drivers
- ♦ SIDS (as per SIDS standard protocol)

Limited toxicology (as defined in Section 7.2.2) will be performed on all deaths which fall into the following case types:

- ♦ Suicides / Intentional Self Harm
- ♦ Transportation non-drivers – pedestrians and cyclists
- ♦ Fires – add carbon monoxide (cyanide optional).
- ♦ Immersion / Drowning

Other cases, including transportation non-drivers – passengers, will be subject to toxicology testing at the discretion of the toxicologist/pathologist depending on the circumstances of the case.

7.4.1.4. *Definition of Full and Limited Toxicology*

Full and limited toxicology were agreed as proposed by the Toxicology SAG and are summarised below:

	Full Toxicology	Limited Toxicology
Basic Screen*	✓	✓
Opiates	✓	✓
Alcohol	✓	✓
Cannabis	✓	✓
Acidic Screen	✓	
Paracetamol	✓	
Theophylline	✓	
NSAID	✓	

*Including amphetamines, anti-convulsants, benzodiazepines, anti-depressants, other prescription drugs.

7.4.1.5. *Reporting of Cause of Death*

In order to assist in searching the data base for drugs involved in the death, pathologists agreed to include in brackets after the statement of cause of death a list of the drugs considered to have contributed to the death. It is undecided at this stage whether this would involve listing the class of drug, the generic name of the drug itself or the name of the branded product.

Pathologists concluded that it is not possible, nor desirable, to standardise the reporting of cause of death. However, to aid understanding and searching of the database, pathologists agreed to generate a glossary of terms used to describe cause of death. During the report back session following the break out groups, Maryann Wood of the Australian Bureau of Statistics agreed to provide a list from their database of all the terms that have been used by pathologists to describe cause of death. Dr Peter Ellis and Natasha Redman agreed to coordinate the generation of a glossary of terms based on this list.

7.4.1.6. *Other Comments*

- ♦ Peripheral blood is the preferred method for quantification because post-mortem redistribution is a real issue. There can be 10 to 20 fold differences in concentrations of drugs between peripheral and non-peripheral blood samples.
- ♦ Mortuary protocols will need to be modified (and existing manuals altered) to reflect agreed standard practices for collection and labelling of specimens.
- ♦ Toxicology request forms may be modified to reflect new agreed standards.
- ♦ Toxicology tests can only be performed within resources. Some laboratories may not be able to meet the agreed standards at this stage but they represent “something to aspire to”. The agreed standards are based on a longer term focus.
- ♦ The scope of testing actually performed for a case will be recorded in the report so users of the database will be able to determine what scope of testing was performed and whether it met the agreed minimum standard. A flagging system may be used

in the database to indicate cases in which the agreed range of testing was not performed.

- ♦ A concern was raised that not meeting the agreed standards may create an opportunity for prosecution. However the agreed standards are for the purposes of enhancing the investigation of the death and the NCIS database. Failure to meet the standards does not indicate that the laboratory has failed to adequately perform its duty.

7.4.2. Coroners, Police, Researchers, Public Sector Agencies: Police Data Items – Break Out Group 2

The aim of this break out group was to agree in principle on police data items to be incorporated into the initial report of death to the coroner. To achieve this, the group focused on the outcomes of the survey of police data items that was conducted by MUNCCI (provided in Section 6 of the workshop papers). In addition, Inspector Stephen Bills of the Coroners Support Section, NSW Police presented a list of data items he collated in consultation with police following the 1st workshop. These two documents will form the basis of the proposed list of drug related data items to be included on police report of death forms. The group considered that the data items identified in both the survey and Stephen Bills' form adequately addressed data needs.

7.4.2.1. Police Form Information

To minimise the impact on police of changes to police forms, it is proposed that this round of changes will incorporate not only enhanced data collection in relation to drug related deaths, but also other types of potentially preventable death of particular interest to coroners and policy makers: water incident / drowning, self-inflicted harm / suicide, product related and work related deaths. The proposed data items have been collated in a draft template form for ease of presentation. The draft form is currently being considered by Coronial police and police drug policy coordinators as part of an extensive consultation process. Once agreement is reached, the final proposed dataset will be submitted to the Police Commissions for endorsement and the appropriate channels for modification in each jurisdiction will be pursued.

It is hoped that each jurisdiction would incorporate all proposed data items into its police report of death along with any other jurisdiction specific information. MUNCCI does not propose to upload police forms in their entirety as they may contain information that is both extraneous and potentially prejudicial (for example name of treating doctor or others present at the scene). MUNCCI recognises that it may not be possible for all data items identified as desirable to actually be collected. However, our aim is on continuous improvement of the data set. MUNCCI anticipates that each jurisdiction may wish to design appropriate forms to meet their own requirements. MUNCCI also acknowledges that the investigative process varies between jurisdictions, and that therefore, the data items may be collected at different stages of the process, perhaps on more than one form. In addition, we recognise that not all jurisdictions may be willing or able to collect all the proposed data items. Thus, MUNCCI's aim is to identify the set of data items which would ideally be collected for coronial deaths in each jurisdiction to maximise the benefit and value of the NCIS in contributing to the prevention of death and injury.

7.4.2.2. *Action Plan for Police Data*

1. Consult with coroners and potential users of coronial data regarding desirable data items;
2. Consult with police about the feasibility of collecting such data items; and
3. Submit final version to police command in participating jurisdictions.

7.4.3. ***Coroners' Clerks (Registrars): Revised Core Data Set Demonstration - Break Out Group 3***

This break out group comprised at least one representative from each of the jurisdictions, with the exception of Queensland.

A summary of the changes proposed by the Core Data Working Group was presented and participants in the group were encouraged to comment and offer further suggestions for improvements to the new core data set. After this discussion, the break out group participants were directed to the three notebook computers in the room which had been set up so that a 'hands on' review of the prototype case management version of the new data set could commence. Each participant was provided with a document guiding them through sample data entry and beside each notebook was a sheet on which they could enter comments on the system and the new core data set.

As a result of the early discussion and the 'hands on' review, comments were noted regarding:

- ♦ 'Recommendations – Text' and the need for a text entry box which could cater for long recommendations. An alternative of entering key words only was considered in the discussion.
- ♦ Ways to improve data entry for cases where post-mortem and police procedures did not result in the production of a document. A checklist approach may be appropriate.
- ♦ The need for terminology in drop down lists (such as Intent) which clerks can easily understand.
- ♦ The double data entry required (ie, both code and text) for the prototype implementation of 'Industry', 'Usual Occupation' and 'Occupation at Incident'.
- ♦ Difficulties encountered with inclusion of Business Centre postcodes rather than those most frequently used.
- ♦ The need for a location code to cater for deaths in police stations or police cells.
- ♦ The need for the 'Unknown' options to appear at the top of drop down lists.
- ♦ Further consideration of the inappropriateness of coding 'Activity' for intentional self-harm (suicide) cases.

As a result of this preliminary review, further input has been sought from selected members of the Core Data Set Working Group and modifications made to the prototype version of the case management system. A document detailing these changes has been produced and sent to each jurisdiction's Coroners' Office for further review and comment. Software for local 'hands on' review has also been offered to each jurisdiction. Final input from this group will be sought before the end of August.

8. Resource Issues (Day 2)

8.1. Funding Issues Jessica Lightfoot

MUNCCI's Funding Policy for Module Development

Various stakeholder groups have expressed interest in the possibility of establishing NCIS modules to collect enhanced data on particular types of deaths. The question arises of how such modules are to be funded. Core funding provided by under the national funding strategy is reserved for development and management of the core data set only. The establishment of any new module requires separate consideration and a detailed feasibility analysis before development can begin.

The feasibility of a proposed module is a pre-condition of its development. Part of the determination of whether a module is feasible is that the scope of the module must not exceed the statutory powers of Coroners. In addition, any resource impact the implementation of a module may have must be able to be met. The implementation of outcomes of any workshop, including this workshop, is not a fait accompli where there are outstanding funding and/or resource implications. Such issues must be satisfactorily resolved before a module is deemed feasible and implementation can proceed.

Drugs Module Feasibility Funding

Funding for the development of the drugs module is being provided by the Commonwealth Department of Health and Aged Care. The first stage of the feasibility analysis was carried out in 1998 and 1999, culminating in the first national workshop in March 1999 and the development of a detailed feasibility report in May 1999. This study concluded that the development of the was both desirable and feasible.

The next stage of development is a two year project that commenced in November 1999 that will involve further assessment of the feasibility of the module and, if deemed feasible, coordination of its implementation in participating jurisdictions.

What Determines Feasibility?

There are a number of factors that are assessed in the determination of feasibility:

- ♦ Enhanced data collection must be both desirable and possible. Data is primarily obtained through the completion of the police forms for report of death to the Coroner.
- ♦ Standardised data reporting must be achieved for toxicology and pathology.
- ♦ There must be adequate resources in each of the following areas:
 - ♦ police;
 - ♦ toxicology;
 - ♦ pathology; and
 - ♦ coronial offices.

What Happens After the Workshop?

The final version of the proposed drugs module enhanced data set will be submitted to the Department of Health and Aged Care and Coroners by the end of May 2001. To achieve this, issues arising from this workshop, such as standardisation and definitions, must be finalised and resource impact issues must be resolved. A detailed computer programming report will also be prepared by the end of March 2001.

Assuming all reports are favourably received, and implementation of the module is deemed feasible, the development of technical programs will commence, quality guidelines will be developed and training provided for full implementation by December 2001.

Resolution of Resource Issues

The resolution of resource impact issues is a challenge for the workshop and beyond. We need to be clear about the realistic impact. We need to identify feasible ways to address any impact. And we need to be assured that any ongoing resource needs will be met. These issues must be resolved before implementation of the drugs module enhanced dataset proceeds.

Jessica invited Steve Vaughan of the Drugs Policy Unit of the Commonwealth Department of Health and Aged Care (DHAC) to contribute to the discussion. Steve advised that there was no guarantee that DHAC would make a financial contribution to the resource requirements of participating jurisdictions. He further advised that committees such as the Inter-Governmental Committee on Drugs (IGCD) do not have a budget. However, the possibility exists of lobbying state and territory governments to contribute to resourcing needs and the Drug Strategy Unit would be willing to provide any co-ordination assistance.

8.2. Resource Issues – Break Out Groups

Workshop participants were divided into three break out groups by discipline: Coroners/registrars/police, toxicologists, and pathologists. The aims of the session were: to identify potential resource issues should standardisation be agreed in principle and should the module be implemented; to identify possible solutions for addressing resource impacts; and to set action plans for future development activities.

8.2.1. Group 1: Coroners / Registrars / Police

This break out group recognised that the possible implementation of the drugs module would have a resource impact on police and on coronial offices. The specific issues may differ between jurisdictions. The resource impact of changes to toxicology testing were raised by a number of group members. Toxicology resource issues were discussed by Break Out Group 2 and are presented in Section 8.2.2.

8.2.1.1. *Comments on the Potential Resource Impact on Police and Coronial Offices*

Stephen Bills made the following points:

1. Although the modification and introduction of an enhanced police form may not have a significant resource impact on police, the need for and value of the modifications must be determined before the modifications proceed. Any modification must be limited to that required for enhancement of the justice and coronial processes.
2. Once this need is established (*achieved during this workshop*), MUNCCI should design a template form with the proposed data items and send it to the necessary police heads in each jurisdiction. If the modification process is successful, an education process may be required to train police in how to complete the new form. Changes to the form should be directed by coroners to ensure the cooperation of police. It was noted that training requirements for police may be significant.

A suggestion was made by South Australian and Victorian representatives that MUNCCI design a screen for data entry of the police form information, then design the police form backwards so that it is compatible. Electronic screens could have pop-up help boxes to assist in completion of the form. Victorian police indicated that entering police form data onto a computer system should not pose a problem. The Victorian Coroner's Office suggested that if they are required to enter the police data it would effectively double the amount of data entry currently required for the NCIS. Staff at the NSW Coroner's Office indicated that additional resources may be required for data entry.

Concern was voiced about the possibility of more and more data items being added to the form. This may further increase the impact on police and coronial offices. (*Note from MUNCCI: the proposed police form data set as at 31 August 2000 includes all data items that are likely to be required in the foreseeable future, including specific data on deaths relating to drugs, products, work, water and suspected suicide*).

8.2.1.2. Resource Impact on Police

During the report back session, the group identified the following items as having a potential resource impact on police:

- ♦ Modified police form – design and education costs
- ♦ Training
- ♦ Toxicology Testing (although this is not funded by police in most jurisdictions)
- ♦ IT costs for data entry – difficult to quantify

8.2.1.3. Resource Impact on Coronial Offices

During the report back session, the group identified the following items as having a likely resource impact on coronial offices:

- ♦ Input of information / data;
- ♦ Additional staff;
- ♦ IT; and
- ♦ Toxicology testing (where directly funded by Coroner's Office).

8.2.1.4. Possible Solutions to Resource Issues for Police and Coroner's Offices

- ♦ Savings from MUNCCI handling most requests for access to information must be considered.
- ♦ Suggestion that some of the funds received by MUNCCI for fees for access to the NCIS could perhaps be funnelled back into the offices that collect and enter the data.
- ♦ Commonwealth Government funding.
- ♦ MUNCCI to coordinate funding requests/lobbying with the support of a Central Coordination Committee of senior people. Issues should be dealt with on a jurisdiction by jurisdiction basis.
- ♦ The NCCCI could be involved as it is part of their role to seek funds.
- ♦ IT – electronic systems for police forms may assist
- ♦ Researchers may be able to provide lists of groups with funds available.

- ♦ There was an underlying concern that no money is available for additional funding to meet resource impacts of the possible implementation of the drugs module.

8.2.1.5. *Action Plan for Coroners/Registrars/Police*

- ♦ Police form data set to be circulated to stakeholders by mid-August 2000. The final version of the proposed police form data set should be ready for presentation to the next Coroners' Conference on 21 November 2000. It was noted that changes to the police form may take 2 – 3 months to move up through the hierarchy.
- ♦ When the police form data is to be entered and by whom must be determined for each jurisdiction.

8.2.2. **Group 2: Toxicologists**

Toxicology is the area in which the most significant resource impact is anticipated. This impact will result from increases in the scope and volume of toxicology testing required for laboratories to meet the agreed minimum standards.

8.2.2.1. *Resource Impact on Toxicology*

A quick assessment of the likely resource impact during the break out discussion identified two main areas: 1) staff and instrumentation to meet minimum standards; and 2) technical issues relating to data entry in laboratories and linking programs should toxicology information be required directly from the laboratories. The following specific requirements were identified in the various state and territory laboratories:

Jurisdiction	Resource Impact
Australian Capital Territory	Around 50% of cases currently receive full toxicology analysis, and 50% targeted toxicology. Anticipate that one additional staff member and screening instrumentation would be required (eg. immunoassay). No IT support would be required.
New South Wales	Around 50 – 75% of cases currently receive full toxicology, including all cases which require full toxicology under the agreed standards. To increase all testing to meet the agreed minimum standards may require significant resources, including perhaps four or five staff members and several instruments. (It was agreed that this may be an overestimate). A part-time staff member may be required to manage data transfer aspects if direct upload from laboratories is adopted.
Northern Territory	Very limited toxicology testing is currently being performed on most cases. NT pays SA for toxicology testing on a case by case basis. Increasing testing to meet the agreed minimum standards would potentially have a huge impact on the NT budget as well as extra demands on SA (according to Peter Felgate).

Queensland	Approximately 60% of cases would currently fit the criteria for minimum toxicology. Around 850 samples are analysed with full toxicology, around 1400 have less than a full toxicology analysis. Therefore, to meet minimum standards would require approximately a 30% increase in the amount of full toxicology testing performed. This would potentially require three additional staff and one instrument (GC-MS?). Gary Golding queried whether their current database, Auslab, could be linked to the NCIS if direct data transfer from laboratories is deemed desirable.
South Australia	Around 60 – 70% of cases currently receive full toxicology analysis. To meet the agreed minimum standards it is estimated that two additional staff members would be required (one of these being for the increase in workload from NT cases). An additional instrument has already been funded. IT support may be required to set up initial transfer arrangements if data is collected directly from laboratories.
Tasmania	They are currently doing pretty much what needs to be done under the agreements but may need an additional person to perform additional quantifications and THC analysis etc. If data entry is required, they may require IT support for set up but could absorb ongoing data entry requirements. An extra instrument (GC) may be required for quantifications.
Victoria	Either two additional laboratory staff or one staff member plus a new LC-MS would probably be required. Testing THC in blood, testing morphine and increasing the number of full toxicology cases would mean a significant amount of additional work. If data entry is required, they may need IT support on a part-time basis.
Western Australia	Analytical issues are not a problem because the minimum standards are already being met. IT support may be required on a part time basis if toxicologists are required to enter data into the NCIS. Suggestion that IT support could be shared between toxicology, pathology and the coroners office.

It was noted that an improvement in the technology used for testing, such as the acquisition of more advanced instrumentation, may reduce the requirement for additional staff. Thus, technical solutions must be considered as well as just looking to employ additional staff to use the current methods. In addition, economies of scale may be realised through performing more of the same types of testing.

Consumable costs were also identified as a potential resource impact as they will increase in direct proportion to the amount of additional testing required. This was estimated to result in a further increase of approximately 20 – 30% of the additional salary budget.

If laboratories are required to enter data into the NCIS, the need for ongoing IT support should not be underestimated. The initial set up costs could be substantial. In addition, each laboratory would potentially require IT resources to perform data entry on an ongoing basis.

8.2.2.2. Summary of Potential Resource Impact on Toxicology Laboratories

Jurisdiction	Additional Full Time Toxicologists	Instrumentation (GC-MS or LC-MS)	Consumables	IT Support
ACT	1	1	<i>Increase in consumables budget @ 20-30% of additional salary budget.</i>	<i>If Toxicologists required to enter data on to NCIS screens – initial training costs. Ongoing costs absorbed by additional staffing.</i>
NSW	4-5	2-3		
NT	0 (performed in SA)	0		
QLD	3	1		
SA	2 (1 for NT case load)	0		
TAS	1	1?		
VIC	1	1		
WA	0	0		
TOTAL COST	<i>~ 12 @ ~ \$60,000 pa (salary + oncosts) = \$720,000 pa recurrent</i>	<i>5-6 @ \$200,000 each = ~\$1million capital cost</i>	<i>~\$250,000 pa recurrent</i>	<i>~\$500,000 capital cost.</i>

Total Capital Cost ~\$1.5 million

Total Recurrent Cost ~\$0.97 million

8.2.2.3. Possible Solutions to Resource Issues for Toxicology

The following suggestions were made by group members with respect to possible solutions to funding issues

Agencies to approach

- ♦ Commonwealth Department of Health and Aged Care (DHAC) for funding for additional toxicology testing, in light of their support of the drugs module to date. DHAC could also be asked to send letters of support to the appropriate people for lobbying.
- ♦ State and Territory representatives of the Inter-governmental Committee of Drugs (IGCD).
- ♦ Ministerial Council on Drug Strategies (MCDS) already has State/Commonwealth agreements, eg. a database on police assault data. The MCDS has a high level of influence - if the MCDS wants something done, it gets done.

- ♦ The National Law Enforcement Research Fund has a committee that decides on priority areas and overlaps with the IGCD. This may be another body to target for lobbying.
- ♦ The Asset Forfeiture Fund was suggested as another possible source of funding.
- ♦ *Note from Stephen Vaughan (DHAC) – the IGCD and MCDS have no funds to distribute and the Asset Forfeiture Fund is now consolidated into the government 'honey-pot' and would not be available as a source of funds. The National Injury Surveillance Unit or the "Good use of medicine" group may be alternative sources of funding.*

Strategies

- ♦ Central coordination of lobbying would be desirable. For example, letters or template submissions could be generated by MUNCCI so that the underlying principles, background and arguments from each jurisdiction are consistent. This template could include a broad description of the project and its support at the highest levels of government, state-level issues, deficiencies of current system, harm minimisation strategies and resources required to meet the agreed standards. The format could be: preamble, framework, background, who agreed to the standards and the value/benefits of the NCIS. Support must come from the top down.
- ♦ Lobbying should be on a jurisdictional basis with submissions to individual departments. The submission could be in the form of a proposal that in order to provide the agreed level of service, an identified level of resources is required. Support of Attorneys-General could be leveraged. The problem is how to meet the standard that has been agreed.
- ♦ Kathryn Campbell (Tas) suggested that lobbying in each jurisdiction could be on the basis of certain problems specific to that jurisdiction.
- ♦ Could MUNCCI help coordinate some central funding for distribution to the various laboratories?
- ♦ Lobbying to government could come via the coroners' offices or by direct cabinet submission (a method that has succeeded in the past in Qld).
- ♦ Suggestion of the possibility of dollar-for-dollar funding from the State/Territory and Commonwealth Governments.

Notes

- ♦ Toxicology is funded by different sources in different jurisdictions. Not all laboratories are funded by the coroner's office. Need to be careful to ensure that money does not end up in consolidated revenue. It could perhaps be secured as part of a service level agreement where the money is set against required outcomes which are reviewed on a regular basis.
- ♦ A comment was made (KC) that coroners have been getting some degree of toxicology testing for the current level of funding. A good explanation will be required to justify the requirement for an increase in funding for the additional testing.

Alternative

- ♦ A central body could be funded to carry out some the toxicology analysis, eg. a National Institute of Forensic Toxicology.
- ♦ This suggestion was considered by the group but the consensus was that it would not be cost effective due to the need to transport samples in accordance with standards, which is very expensive. Queensland noted that they already transport samples relatively easily and inexpensively.
- ♦ Overall, the group concluded that political considerations were likely to preclude this approach.

8.2.2.4. Action Plan for Toxicologists

- ♦ Each laboratory will prepare an accurate costing on what resources would be required to increase the current level of testing to the agreed minimum standard. This should include additional staff (scientific and/or technical), instrumentation and consumables. IT issues should be disregarded at this stage until it is determined whether laboratories will be asked to perform any additional data entry (*Note: this possibility appears unlikely at this stage*).

Due date: 31 October 2000, submit to Natasha Redman, MUNCCI

- ♦ MUNCCI to coordinate a unified approach to obtaining the necessary funds from the top down. State/Territory laboratories will coordinate lobbying from the individual organisations.

8.2.3. Group 3: Pathologists

Pathologists determined that there were no resource issues that would directly affect them as a result of implementing the agreed standards. Agreement of a Glossary of Terms would have no cost impact.

8.2.4. Overall Conclusions on Resource Issues

- ♦ Toxicology laboratories to complete and submit to MUNCCI an accurate costing of the resource impact by 31 October 2000.
- ♦ A uniform approach to seeking funding for additional toxicology testing is desirable. Individual laboratories/organisations to lobby government agencies with the support of central coordination by MUNCCI, including preparation of documentation.
- ♦ The proposed police form data set should be circulated to stakeholders by mid-August 2000. The final version of the proposed police form data set should be ready for presentation to the next Coroners' Conference on 21 November 2000.
- ♦ When police form data is to be entered and by whom must be determined for each jurisdiction.

9. Action Plans - Summary

9.1. Police Forms

- ♦ The proposed police form data set should be circulated to stakeholders. MUNCCI to prepare draft template form.

DUE DATE: mid-August 2000.

- ♦ MUNCCI to coordinate agreement on police form data set by stakeholders and police. The final version of the proposed police form data set should be ready for presentation to the next Australian Coroners' Society Conference.

DUE DATE: 21 November 2000.

9.2. Coronial Offices and Police

- ♦ Coronial offices and police in each jurisdiction must determine when police form data is to be entered and by whom.

DUE DATE: unspecified.

9.3. Toxicologists

- ♦ Each laboratory will prepare an accurate costing on what resources would be required to increase the current level of testing to the agreed minimum standard. This should include additional staff (scientific and/or technical), instrumentation and consumables. IT issues should be disregarded at this stage until it is determined whether laboratories will be asked to perform any additional data entry.

DUE DATE: 31 October 2000, submit to Natasha Redman, MUNCCI.

9.4. Pathologists

- ♦ Peter Ellis and Natasha Redman to generate a glossary of terms for describing cause of death, based on a list to be provided by the Australian Bureau of Statistics.

DUE DATE: unspecified.

- ♦ Alter reporting practices to include a list of contributing drugs in brackets immediately after the cause of death. There is a question of how this information will be captured in the database. Coronial clerks currently re-enter the cause of death manually – this may result in a high rate of transcription errors for drugs. Also, we still need to determine in what format the drugs will be listed – chemical name, brand name, class of drug, etc.

DUE DATE: unspecified (decision required on how to list contributing drugs).

9.5. Resources

- ♦ MUNCCI to centrally co-ordinate an approach to funding issues from the top down. State/Territory laboratories will coordinate lobbying from the individual organisations.

DUE DATE: as soon as possible.

9.6. Future Work by MUNCCI

Under MUNCCI's funding agreement with DHAC, the following deliverables have been established for the further development of the drugs module:

Milestones	Completion Date
Workshop Proceedings Report (6 weeks post-workshop)	mid-September 2000
Agreement on Definitions and Standards	November 2000
Report on Defined Dataset	December 2000
Report on Computer Programming Assessment	end March 2001
Report on Implementation Requirements	May 2001
<i>Subject to implementation being agreed</i>	
Computer Programming of Database Enhancements	end October 2001
Quality Management Guidelines	end November 2001
Training Materials	end November 2001