Chapter 1. Background

1.1. Introduction

The Crimes (Forensic Procedures) Act 2000 (the Act) created new police powers to carry out forensic procedures, such as taking DNA from a person’s saliva, hair or blood. Other forensic procedures include external examinations of a person’s body, taking photographs of tattoos or scars, taking fingernail scrapings, swabbing a person’s hands, or taking a dental impression.

The Act sets out the circumstances in which police can conduct forensic procedures. It also sets out how forensic material from those procedures may be used, and when that material must be destroyed. It also provides for a DNA database system to be established, so that DNA profiles from certain people can be matched against DNA obtained from unsolved crime scenes. The Act also outlines the rules for participation by NSW in the National Criminal Identification DNA Database.

The Act commenced on 1 January 2001, but Part 8, which deals with volunteers, did not commence until 1 June 2003.

1.2. Review mechanisms

The Act provides for three different review mechanisms:

- **Inquiry by the Standing Committee on Law and Justice.** The NSW Parliamentary Standing Committee on Law and Justice was required to undertake an inquiry into the operation of the Act, and report to Parliament as soon as possible after 18 months from the Act’s assent.² It reported its findings in February 2002.³ The inquiry focused on the “reliability and effectiveness of DNA evidence, and the legal and social implications of its use in criminal investigations.”⁴

- **Review by the Attorney General.** The Attorney General was required to review the Act to determine whether its policy objectives remain valid, and whether the terms of the Act remain appropriate to securing those objectives. The review was to be undertaken as soon as possible after 18 months from the date of assent, and the Attorney General was required to report to Parliament on the outcome of the review within the following 12 months.⁵ The Criminal Law Review Division of the NSW Attorney General’s Department invited Professor Mark Findlay, Deputy Director of the Institute of Criminology, University of Sydney, to conduct the required review on behalf of the Attorney General. The Findlay report was finalised in April 2003.

- **Monitoring of the operation of the Act by the Ombudsman.** The Act initially required the Ombudsman to keep under scrutiny the exercise of functions conferred on police officers under the Act for two years from the date of assent – that is from 5 July 2000. As Part 8 of the legislation did not commence until 1 June 2003, the review period was extended, requiring the Ombudsman to scrutinise functions conferred on police for 18 months following the commencement of Part 8.⁶ The Ombudsman is required to prepare a report of the work and activities under this section, as soon as practicable after the expiration of the review period. The report is provided to the Attorney General, Minister for Police and Commissioner for Police. The Attorney General must provide a copy of this report to Parliament as soon as practicable after receipt.

1.3. Structure of our review

The Act enables police to conduct forensic procedures on three different categories of people – convicted offenders, suspects and volunteers.

Because the mass testing of inmates and detainees was largely conducted in the first two years of the Act’s operation, and raises considerably different issues from conducting forensic procedures on people suspected of having committed an offence and people who volunteer to undergo a procedure, we conducted our review in two stages.

The first stage of our review focused exclusively on the DNA sampling of people serving a sentence of imprisonment for an offence carrying a maximum penalty of five years imprisonment or more.⁷ Since the Act commenced, NSW Police has attempted to obtain DNA samples from all people who fall within this category, which amounts to approximately 75 per cent of the NSW correctional centre population. We reported to the Attorney General on this aspect of our review in August 2004, in our report, *The Forensic DNA Sampling of Serious Indictable Offenders under...*
Part 7 of the Crimes (Forensic Procedures) Act 2000. We have included a brief update on the implementation of the recommendations made in our 2004 report, in an appendix to this report.

This report deals with the second stage of the review, our scrutiny of police officers conducting forensic procedures on suspects and volunteers. Chapter 2 outlines the key provisions of the NSW Act and Chapter 3 provides an overview of DNA sampling in Australia and overseas. Chapter 4 explains how the Act has been implemented by police and other agencies. Chapter 5 provides a snapshot of the way the legislation is being used, including a statistical analysis of forensic procedures conducted during the review period.

Chapter 6 discusses the provision of information and legal advice to suspects and volunteers. Chapter 7 discusses the various ways forensic procedures can be authorised, and whether forensic procedures are being conducted with appropriate authority. Chapter 8 examines the way forensic procedures are actually conducted, and Chapter 9 discusses the relationship between forensic procedures and other investigative procedures which fall outside the scope of the Act.

Chapter 10 examines the way DNA is analysed at the DNA laboratory and the purposes for which DNA profiles are used, and Chapter 11 looks at the accuracy of information on the DNA database, and on the police computer system.

Chapter 12 discusses DNA and contamination risks. Chapter 13 looks at evidence obtained through forensic procedures in criminal proceedings, and Chapter 14 at the processes in place for ensuring that forensic material is destroyed according to legislative requirements.

Chapter 15 describes the types of complaints and inquiries about forensic procedures the Ombudsman received during the review period, and the action NSW Police and the Ombudsman took to address these issues. The report concludes with a brief discussion of possible future uses of DNA in police investigations in Chapter 16.

There is a glossary at the end of the report.

1.4. DNA and criminal investigations

1.4.1. What is DNA?

DNA stands for ‘deoxyribonucleic acid’. There are two types of DNA: mitochondrial DNA and nuclear DNA.

A person inherits mitochondrial DNA only from his or her biological mother. Mitochondrial DNA will be the same in all people who share the same maternal genetic material. For example, siblings who have the same biological mother will all have the same mitochondrial DNA.\(^8\)

By contrast, nuclear DNA is inherited in different combinations from both biological parents, and therefore more combinations are possible. It is believed that – with the exception of identical twins – the possibility of two people having exactly the same nuclear DNA is extremely unlikely.\(^9\) For this reason, the preferred type of DNA for establishing identity is nuclear DNA. DNA databases use mainly nuclear DNA – DNA obtained from the nucleus of a cell.

Most cells in the human body contain a nucleus. Inside the nucleus are strands of genetic material called chromosomes. Arranged along these chromosomes, like beads on a thread, are nearly 100,000 genes.\(^10\) Each gene is composed of DNA, which is often described as ‘the blueprint of life’.

This genetic or ‘coding’ DNA instructs the body cells to make proteins that determine everything from hair colour to our susceptibility to diseases. There is very little difference in these coding areas of DNA between different people. It has been estimated that 99.9% of a person’s DNA is the same as the DNA in all other human beings.\(^11\)

Some areas of the DNA, found between the coding DNA, are made up of DNA that does not code for physical features or chemical processes. Scientists have not yet identified the function of these non-coding regions, although they have discovered that these areas of DNA vary extensively from person to person. It is this variability that provides the basis for distinguishing between individuals through DNA profiling.

All DNA extracted from the nucleus of any cell from the one person is the same, whether it is taken from white blood cells, hair root cells or cells from the inside of a person’s mouth. A person’s DNA remains the same throughout his or her life. It can be used for a range of purposes, including medical research, determining biological parentage, and the investigation and prosecution of crime.
1.4.2. What is a DNA profile?

The areas of DNA that are non-coding have been labelled ‘junk’ DNA. DNA profiles consist of a list of the variations obtained from certain sites (called loci) on the junk DNA plus the sex gene (XX for female, XY for male). The areas on the junk DNA that are examined are called Short Tandem Repeats (STRs). These are small sections of DNA that are repeated end on end. Different people have a different number of repeats, and therefore have different lengths of DNA.Analysing and measuring the different lengths of DNA at these sites is the basis of DNA profiling.12

DNA laboratories in all Australian jurisdictions use the ‘Profiler Plus’ system of DNA profiling.13 Forensic scientists do not examine the whole DNA, but only a certain number of loci on the DNA. The more loci examined the greater the likelihood that samples with the same profile came from the same person. In New South Wales, the DNA laboratory examines nine loci.

A DNA profile is different from a DNA sample. A sample contains the whole of a person’s DNA, while a profile is a series of numbers and letters derived from only a small portion of a person’s DNA. A DNA sample contains a great deal of information about a person, including predictive health information. While some genetic information can be derived from a DNA profile, including the person’s sex and whether he or she may be related to another person whose profile is known, a profile contains far less genetic information than a DNA sample.

1.4.3. How is DNA used in criminal investigations?

DNA from biological material found at a crime scene can be compared with the DNA police take directly from a person, to determine whether the biological material found at the crime scene is likely to have come from that person.

If police suspect that a person has committed a particular offence, they can take a DNA sample from the person, and send it to the laboratory for comparison with DNA obtained from the crime scene. DNA profiles are extracted from both the person and crime samples. If the profiles match, this may be evidence, in some circumstances, that the person was involved in the crime. Further, the person’s profile will be put on the DNA database, and may link the offender to other unsolved crime scenes.

Police may send forensic material from crime scenes to the laboratory for analysis even where they have not been able to identify a suspect, as it may match a profile on the DNA database from another crime scene, or a suspect or convicted offender whose profile has already been put on the database.

DNA evidence has been used as a tool in many high profile criminal investigations, including the Ivan Milat backpacker murder cases, the investigation of the attempted extortion of Arnotts Biscuits and the investigation into the disappearance of English backpacker, Peter Falconio.

Because DNA is very stable, and can withstand significant environmental impact, DNA profiles can be developed from biological material which is decades old. For this reason the new technology has also enabled police to reopen investigations of old unsolved crimes.

DNA is not only helpful to convict offenders; it can also be used to exclude suspects from police investigations. This can prevent unnecessary investigation and save valuable police resources.

Development of DNA technology has also meant that people can appeal against older convictions, if they can show that DNA taken from the perpetrator at the time of the offence does not match their own DNA.

DNA technology has also been used for identifying disaster victims, including those killed in the 2002 Bali bombings and the 2004 tsunami in south east Asia.

1.4.4. The DNA database

The DNA database is used for identifying links between offenders and crime scenes. It is primarily an intelligence tool. If a link is established between a person and a particular crime scene, this does not mean the person is guilty – it simply means that police have further information which they may be able to use to progress their investigation.

Over 25,000 person samples have been loaded onto the New South Wales DNA database, including about 19,000 samples from convicted offenders, 8,000 from suspects and 800 from volunteers. Over 14,000 crime scene samples have been loaded onto the database.14

It is not possible to say exactly how many people have their DNA on the database, as the Act prohibits profiles taken from suspects to be compared against samples taken from suspects which are already on the database.15 This
means that a significant number of people have had their DNA profile put on the database more than once. Although we can determine the number of profiles which have been put on the database, we cannot determine the number of people who have had their DNA profile put on the database, which will be fewer.

1.4.5. Limitations of DNA evidence

Because DNA is highly discriminating, DNA profiling is a powerful tool in the investigation and prosecution of crime. However, it is by no means a universal remedy. For a start, DNA evidence is only relevant in a small proportion of offences. For example, if a person has been sexually assaulted, DNA evidence would be highly relevant if the identity of the perpetrator is at issue, as DNA from the defendant could be compared with DNA found on the complainant’s body or clothes. However, most sexual assault cases turn on the issue of consent. If the defendant admits having had sex with the complainant, but claims it was by consent, then DNA evidence will probably have no bearing on the trial.

Where a person’s DNA is found at a crime scene, there may be a legitimate reason for it being there. As one legal practitioner has pointed out:

_All that a DNA test does is show that there is a link between a crime scene and a suspect. How that link came about is still a matter for evidence at trial._

For example, the person may have visited the place, and left DNA there, possibly long before the crime was committed. In this situation a DNA match can link the person to the crime scene, but cannot establish whether or not the person committed the offence. It is also possible that a person’s DNA may have been transferred to the scene without the person having physically been there, either deliberately or unintentionally.

As discussed above, DNA analysis can be used to exclude suspects from police investigations. However, while any difference between a sample taken from a suspect and a sample taken from a crime scene proves that the two samples are not from the same person, it does not necessarily follow that the suspect is in fact innocent. For example, there may be multiple offenders involved in a particular offence, such as a home invasion. Just because a particular suspect’s DNA does not match forensic material found at the crime scene does not mean that the suspect was not involved in the crime. By contrast, in the case of an offence where there is only one perpetrator, such as a single sexual assault, the fact that the suspect’s DNA did not match the DNA obtained from the victim would probably be a good basis for excluding the suspect.

Even where there is a DNA match, and the evidence is relevant to the investigation, the evidence will never be entirely conclusive. While any difference between samples at any of the loci examined proves that the samples came from different people, the reverse is not true – if the number of sequences repeated at each of the loci is the same, this means that the two samples could have come from the same person, but it does not prove that they did. For this reason, a “match” between a person’s DNA profile and a DNA profile found at a crime scene really indicates only a chance or probability that the two samples came from the same person. The more loci examined, the greater the likelihood that samples with the same profile came from the same person. By contrast, it is more likely that samples coming from two different people will match if the profiles are partial, or the two people are related.

DNA evidence is only ever ‘circumstantial’ evidence – it is evidence of a fact from which the decision maker is asked to conclude that a further fact existed. Circumstantial evidence is sometimes contrasted with direct evidence, which is evidence given by a person that he or she actually saw, heard or otherwise perceived that a particular fact existed. For this reason, DNA evidence must be considered in the context of the other evidence adduced at trial. It will never be enough for the prosecution to rely on DNA evidence alone.

There have also been difficulties associated with the way DNA evidence is presented in court. While the scientific basis of DNA profiling is now widely accepted, there are a number of different ways of expressing statistical evidence. There has been some criticism of the way DNA evidence is explained to the jury, particularly about the statistical significance of a match and the probability of a match occurring by coincidence. This had led to concerns about juries making improper inferences of guilt.

1.5. Methodology

This report documents our work and activities scrutinising the exercise of police functions under the Act. Our research was guided by the scope of our review powers, as defined by section 121 of the Act. There are some related police functions which we have not examined, as they are not within the scope of our review. For example, taking DNA samples from victims of crime, or photographing their injuries, are not functions of police under the Act. We have, however, included some information about these activities.
In order to conduct a thorough and balanced review, we sought the views of people who have been directly affected by the legislation. This included people in the community who have undergone forensic procedures; police officers who carry out forensic procedures; the Forensic Procedures Implementation Team (FPIT), which coordinates DNA sampling by police officers at a management level; the Division of Analytical Laboratories (DAL), which analyses DNA samples and manages the DNA database. We sought information from a range of sources on the central research question of whether police officers are exercising their functions under the Act in a proper, fair and effective manner. By adopting this method, we also aimed to minimise reliance on any one source of information or research method.

For the first part of this review, of the DNA sampling of serious indictable offenders, we interviewed nearly 200 inmates who had provided a DNA sample under the Act. Through these interviews we were able to obtain information directly from inmates about their experiences of DNA sampling. For this part of our review, which deals with suspects and volunteers, it has been difficult to obtain information directly from people who have undergone forensic procedures. We considered advertising for submissions from people who had undergone forensic procedures but decided against it due to the significant cost involved and the likelihood of receiving a very limited response. We also sought to access the views of these people through legal centres, but without success. We were, however, able to review the responses of people undergoing forensic procedures through watching videos of the procedures, and through reviewing the consent forms filled in by police officers, which provide for the person’s response, if any, to be recorded in writing. Some of our interviews with police officers also gave us an insight into the experience of people undergoing forensic procedures, for example where police raised concerns about the complexity of the information provided to suspects and volunteers.

In some of our activities, time and resources limited us to auditing small samples. The size of the samples examined means it was not always possible to draw conclusions about the way forensic procedures have been conducted throughout New South Wales through the whole of the review period. However, these audits were extremely useful in providing a context for the findings from our other research activities, and enabled us to identify areas of concern.

From time to time during our review, our research pointed to areas of police practice or policy which were of concern. In these situations, we brought the issue to the attention of NSW Police and provided an opportunity for police to respond to our concerns. This approach was consistent with the Ombudsman’s role in assisting agencies to remedy deficiencies and improve service delivery. This report describes the actions taken by NSW Police and other relevant agencies in response to concerns we have raised during the course of our review.

Details of our main research strategies are set out below.

1.5.1. Examining police computer records

We examined information from the NSW Police Computerised Operational Policing System (COPS). COPS provides a structure for police officers to record details of forensic procedures, including the name of the person undergoing the procedure, as well as the date, location and type of procedure.

COPS also contains a ‘narrative’ field, which allows officers to describe an event in their own words, and to record other important features of the incident. We examined information in the ‘narrative’ field for events which resulted in police conducting forensic procedures, to get an idea of the types of circumstances in which police are conducting forensic procedures. Many of the case studies in this report are based on information from COPS narratives.

We discussed the limitations of the COPS system in a previous report, Policing Public Safety. We found similar problems during the current review, the main problems being incorrect or incomplete entries of information about forensic procedures on the COPS database.

In our report on the DNA sampling of serious indictable offenders, we noted that data entry was carried out by small teams of police officers who were responsible for carrying out the mass sampling of inmates, and for this reason there were fewer errors on COPS. By contrast, forensic procedures conducted on suspects and volunteers are carried out by police officers with different levels of skills and experience in police stations across the whole of New South Wales. As expected, inaccurate information on COPS was a more significant problem for this part of our review.

1.5.2. Audit of police local area commands

We audited eight police local area commands, which is ten per cent of the total number of commands in New South Wales. In determining which commands to audit, we decided to select at least one command from each of the five regions of NSW Police; four metropolitan and four regional commands; and some commands which conducted a large number of forensic procedures and some which conducted a small number of forensic procedures, compared to the rest of the state.
The aim of the audit was to observe the implementation of the Act by NSW Police, to identify any problems experienced with the implementation of the Act, to assess the level of compliance with the provisions of the Act by those administering forensic procedures, and to assess the level of compliance with NSW Police policies relating to forensic procedures.

In each of the commands selected, we examined the facilities and equipment used to conduct forensic procedures. We examined the rooms where forensic procedures are conducted, the video facilities for recording procedures, and any training material on hand. We also examined the storage practices at each command, for example where DNA sample kits are kept, where samples are kept before being sent to the DNA laboratory, and where videos of procedures are kept.

We also interviewed each of the eight local area commanders, and other key police officers who are involved in the carrying out of forensic procedures. We asked officers how the Act had been implemented in their command, whether they had encountered any problems with it, and whether they had any good ideas which could be shared with other commands across the state.

We also audited records of individual forensic procedures conducted between 1 January 2001 and 30 April 2004 (the audit period), to assess the level of compliance with the Act, the level of compliance with NSW Police policy, and the accuracy of hard copy data kept at the command. We did this by examining the relevant documentation, including registers established for recording the use of sample kits and video tapes, consent forms, exhibits books, custody management records and video tapes of forensic procedures.

To assist us in conducting the audits, the NSW Police Forensic Procedures Implementation Team (FPIT) provided us with a download from the Computerised Operational Policing System (COPS) of all recorded forensic procedures conducted during the audit period. We checked this information against the hardcopy records held at each command. We also reviewed the event narratives for each procedure audited to establish whether the narrative referred to the procedure being conducted, and whether the person undergoing the procedure was a suspect or a volunteer.

According to the COPS download provided by FPIT, the eight commands conducted a total of 533 forensic procedures during the audit period. Due to time constraints, we did not audit every individual procedure. For those commands which conducted less than 50 forensic procedures during the audit period, we sought to audit every procedure. For those commands which had conducted more than 50 forensic procedures in the audit period, we sought to audit between 50 and 75 procedures.

Some of the procedures we had selected for auditing we were unable to audit, for example because the location recorded on COPS was inaccurate, and the procedure had in fact been conducted at another command, or because the COPS record was a duplicate of another procedure we had already audited. We excluded these, which meant the total number of procedures actually audited was moderately less than anticipated. We sought to audit 451 of the 529 procedures conducted during the audit period. However, 80 procedures were excluded. This resulted in an audit of 371 individual procedures.

We also watched a number of video recordings of forensic procedures. Some videos were selected because something about the procedure was unusual (for example, the person being tested was a child, or an interpreter was present). Some videos were selected because the documentation available was incomplete and it appeared additional information could be obtained by watching the video. Most of the videos, however, were selected at random. We watched a total of 146 videos. We sought to watch approximately 15 videos at each command, or more if time permitted. At some commands this was not possible because some videos had been destroyed, or were kept on the brief of evidence and were not accessible at the time of our audit visit.

In this report, percentages are generally expressed as a proportion of the 371 procedures actually audited. Where the information was obtained through watching videos, percentages are expressed as a proportion of the 146 videos watched.

1.5.3. Discussion Paper

Following our audit of local area commands, we provided NSW Police with a Discussion Paper, which provided an overview of the audit process and our main findings. We identified some areas of concern, and set out our preliminary views and recommendations. We asked that each of the commands audited be given the opportunity to review and comment on the Paper. We met representatives of NSW Police to discuss our preliminary findings and recommendations.
We did not release the Discussion Paper to the broader community as most of the issues discussed related to police procedure, and also because we identified and commented on individual commands and included details of specific forensic procedures which were not appropriate for general disclosure.

1.5.4. Survey of local area commands

We conducted a written survey of all 80 police local area commands. We asked about officer accreditation, the frequency and types of procedures conducted, use of force to conduct procedures, how easy it is for police officers to comply with the Act and the police forensic procedures policy, how DNA links are managed in the command, the effect of delays in DNA analysis on the command, any problems the command may have experienced with the Act, and future directions for the use of DNA in criminal investigations. We received a written response from every command surveyed.

1.5.5. Consultation letter

We wrote to over 70 stakeholders, including government organisations, relevant health and other service providers, Aboriginal organisations, community groups and legal practitioners. We asked whether the Act had had any impact on the organisation, its members or clients, and whether they had identified any problems or concerns about the Act or its operation. We received 19 responses from a range of agencies and many of the issues they raised became the subject of further inquiry.

1.5.6. Survey of magistrates

We conducted a written survey of magistrates about any experience they may have had with the Act. We focused on applications for court orders to conduct forensic procedures, and on the use of DNA evidence in proceedings for an offence. We received six responses from magistrates.

1.5.7. Publicising our review in the Law Society Journal

We published an article in the Law Society Journal, outlining the key provisions of the Act and explaining how legal practitioners may become involved where police wish to conduct a forensic procedure on a suspect or volunteer. We asked about any issues or problems legal practitioners may have encountered through their experience with the Act, and requested comments or submissions.

1.5.8. Statistical analysis of procedures conducted

We have analysed statistical material obtained from NSW Police about the location, frequency and type of forensic procedures conducted during the review period, and some demographic information, including certain characteristics of people who have undergone forensic procedures.

1.5.9. Analysis of complaints and inquiries received by Ombudsman

We analysed all complaints and inquiries about forensic procedures conducted on suspects and volunteers. We were able to identify trends in the kinds of complaints and whether there were any systemic issues which needed to be addressed.

1.5.10. Inquiries into the DNA analysis service provided by the laboratory

NSW Police has entered into a contract with DAL, which is part of the Western Sydney Area Health Service, to analyse DNA samples obtained from people and crime scenes for police, and to operate the DNA database.

We visited the laboratory, to gain an insight into the way it manages, stores and records information about DNA samples taken under the Act.

We also conducted an investigation under Section 18 of the Ombudsman Act 1974 into the handling of DNA samples by DAL. We obtained information about systems and processes for the receipt, analysis and destruction of forensic material obtained under the Act. We also obtained information about the factors which contribute to the length of time taken to analyse DNA samples, and provide analysis results to NSW Police.
We followed up 180 of the 371 forensic procedures we examined during our audit of police local area commands, to assess consistency between data held by police and data held by the laboratory. We also reviewed the amount of time taken to transport samples from police stations to the laboratory and the turnaround times between police submitting DNA samples to the laboratory and the laboratory providing an analysis report to police.

1.5.11. Observation of DNA Advisory Committee meetings

DAL is a division of the Institute of Clinical Pathology and Medical Research. The Institute established a DNA Advisory Committee as a forum for comment, advice and review of the DNA profiling laboratory. Key stakeholders are represented, including DAL, NSW Police, Legal Aid NSW, the Director of Public Prosecutions, Privacy NSW and the Ministry of Police. We attended several of the DNA Advisory Committee meetings as observers to monitor the issues arising for the different agencies in relation to their involvement in the use of DNA profiling.

1.5.12. Court proceedings

We monitored the outcomes of prosecutions involving evidence obtained under the Act, and proceedings where the accused challenged evidence obtained through a forensic procedure.

1.5.13. Media monitoring

We monitored Australian and overseas media throughout the review period for developments in DNA laws, and the use of DNA technology in the investigation and prosecution of criminal offences.

1.5.14. Ombudsman website

Our review was publicised on our website. We asked for comments or submissions from interested organisations or individuals.

1.6. Confidentiality

We have treated the sources of information obtained through the course of our review as confidential. In this report, we have attempted to exclude any information which could be used to identify any individual.

1.7 Recent developments: the Crimes (Forensic Procedures) Amendment Bill 2006

On 28 September 2006, as this report was going to print, the Government introduced into Parliament the Crimes (Forensic Procedures) Amendment Bill. If passed, it would make changes including the following:

- Facilitating New South Wales’ participation in the national DNA database.
- Police will be permitted to take a DNA sample from a person who has previously served a custodial sentence for a serious offence, if the person is charged with another serious offence and the person’s DNA profile is not on the database yet.
- Suspects who are ordered by police to provide a DNA sample will be able to provide it by self-administered buccal swab, rather than having to provide a hair sample. Further, buccal swabs would no longer be a separate category of forensic procedure – they would be considered non-intimate forensic procedures when self-administered, and intimate forensic procedures when administered by somebody else.
- Police would be required to provide better information to volunteers, and forensic procedures could only be conducted on a child volunteer with the informed consent of the child.
- The regulations would specify who the “responsible person” is.
- Time spent conducting a forensic procedure would be considered “time out” for the purpose of calculating any investigation period.
- Police would no longer be required to record non-intimate photographs on video.
- Magistrates would have to consider specific criteria when determining whether to order a suspect to undergo a forensic procedure.
- Several areas of the legislation would be clarified – including what is required where police provide suspects with DNA analysis results, what “destruction” of forensic material means, and when police can request a suspect to undergo a forensic procedure.

Most of these proposals are consistent with the recommendations contained in this report.
Endnotes

2 Crimes (Forensic Procedures) Act 2000 s 123.
3 NSW Legislative Council Standing Committee on Law and Justice, Review of the Crimes (Forensic Procedures) Act 2000 (7 February 2002).
5 Crimes (Forensic Procedures) Act 2000 s 122.
6 Crimes (Forensic Procedures) Act 2000 s 121.
7 Crimes (Forensic Procedures) Act 2000 s 3 and Part 7.
11 Roger Highfield, “DNA survey finds all humans are 99.9% the same”, [http://www.telegraph.co.uk/news](http://www.telegraph.co.uk/news) 20 December 2002.
13 For a more detailed explanation of the profiling process used in the NSW DNA laboratory, see R v Gallagher [2001] NSWSC 462 (Barr J).
15 Crimes (Forensic Procedures) Act 2000 s 93.
17 See R v Gallagher [2001] NSWSC 462 (Barr J) at paragraph 19.
20 Other than functions exercised under Part 7 of the Act, as we have reported on this separately: see NSW Ombudsman, The Forensic DNA Sampling of Serious Indictable Offenders under Part 7 of the Crimes (Forensic Procedures) Act 2000 (August 2004).
24 During the review period, NSW Police was divided into five regions – Inner Metropolitan, Greater Metropolitan, Northern, Southern and Western regions.
Chapter 2. Key provisions of the Act

The Act facilitates the collection of DNA samples and other forensic material by police, and safeguards the rights and interests of people who police wish to undergo forensic procedures. Below we have provided a synopsis of the Act in what we hope is a simple format. The Act is complex and we have summarised relevant portions where appropriate. Corresponding sections have been endnoted for appropriate reference. In addition, relevant provisions are explained in greater detail in relevant parts of the report.

2.1. What is a forensic procedure?

A forensic procedure is a way to obtain evidence that relates to the investigation and prosecution of a crime.

A forensic procedure cannot be conducted for the sole purpose of establishing the identity of the person who provides the sample. For example, police could take a DNA sample from a suspect to compare to DNA found at a crime scene. However, police could not take a DNA sample from a person purely to establish that person’s identity.

The Act authorises three different categories of forensic procedures – buccal swabs, non-intimate forensic procedures and intimate forensic procedures.

2.1.1. Buccal swabs

A buccal swab is taken to obtain a sample of a person’s DNA. It is the most common type of forensic procedure.

A buccal swab is completely painless, and is self-administered. The person providing the sample gently scrapes the inside of his or her mouth with a foam tipped plastic swab, which looks a bit like a cotton bud. The person hands the foam swab to a police officer, who then presses it onto specially treated paper, to transfer saliva and cheek cells from the swab onto the paper. The paper is sealed in a small envelope, identified with a barcode and put with the relevant documentation into a tamper-evident bag. The swab is then given back to the person who has provided the sample. Police send the tamper-evident bag to the DNA laboratory for analysis. This process has changed since we completed our first report on serious indictable offenders. The change has come about as police comply with the requirement to share the sample with the person supplying the forensic material. We discuss this requirement further in section 8.10 of this report.

2.1.2. Non-intimate forensic procedures

Section 3 of the Act authorises the following non-intimate forensic procedures:

(a) an external examination of a part of the body other than:

(i) the genital or anal area or the buttocks, or

(ii) the breasts of a female or a transgender person who identifies as a female, that requires touching of the body or removal of clothing,

(b) the taking of a sample of hair other than pubic hair,

(c) the taking of a sample from a nail or under a nail,

(d) the taking of a sample by swab or washing from any external part of the body other than:

(i) the genital or anal area or the buttocks, or

(ii) the breasts of a female or a transgender person who identifies as a female,

(e) the taking of a sample by vacuum suction, by scraping or by lifting by tape from any external part of the body other than:

(i) the genital or anal area or the buttocks, or

(ii) the breasts of a female or a transgender person who identifies as a female,
(f) the taking of a hand print, finger print, foot print or toe print,

(g) the taking of a photograph of a part of the body other than:
   (i) the genital or anal area or the buttocks, or
   (ii) the breasts of a female or a transgender person who identifies as a female,

(h) the taking of an impression or cast of a wound from a part of the body other than:
   (i) the genital or anal area or the buttocks, or
   (ii) the breasts of a female or a transgender person who identifies as a female,

(i) the taking of physical measurements (whether or not involving marking) for biomechanical analysis of an external part of the body other than:
   (i) the genital or anal area or the buttocks, or
   (ii) the breasts of a female or a transgender person who identifies as a female.  

The hair samples described at (b) above require the police officer taking the sample to only take as much hair as is necessary for analysis of the sample to be carried out. The strands of hair can be taken from the head, arms or legs and are to be extracted using the least painful technique known and available. Police officers in New South Wales have been taught to use the ‘lever arch method’, where the officer grasps a few hairs between the thumb and forefinger, and pulls the hairs out in a rolling motion. The roots of the hair must be included, and the sample should contain at least six plucked hairs. This is the second most common type of DNA forensic procedure conducted by NSW Police.

2.1.3. Intimate forensic procedures

Section 3 of the Act authorises the following “intimate forensic procedures”:

(a) an external examination of:
   (i) the genital or anal area or the buttocks, or
   (ii) the breasts of a female or a transgender person who identifies as a female,

(b) the taking of a sample of blood,

(c) the taking of a sample of saliva (otherwise than by buccal swab),

(d) the taking of a sample of pubic hair,

(e) the taking of a sample by swab or washing from:
   (i) the external genital or anal area or the buttocks, or
   (ii) the breasts of a female or a transgender person who identifies as a female,

(f) the taking of a sample by vacuum suction, by scraping or by lifting by tape from:
   (i) the external genital or anal area or the buttocks, or
   (ii) the breasts of a female or a transgender person who identifies as a female,

(g) the taking of a dental impression,

(h) the taking of a photograph of:
   (i) the genital or anal area or the buttocks, or
   (ii) the breasts of a female or a transgender person who identifies as a female,

(i) the taking of an impression or cast of a wound from:
   (i) the genital or anal area or the buttocks, or
The Act does not authorise any intrusion into a person’s body cavities other than the mouth.\(^{31}\)

**2.2. Who can undergo a forensic procedure?**

The Act enables police to conduct forensic procedures on three categories of people – convicted offenders, suspects and volunteers.

**2.2.1. Convicted offenders**

Part 7 of the Act authorises the carrying out of forensic procedures on most people who are serving a sentence of imprisonment for a serious indictable offence. A “serious indictable offence” is an offence which carries a maximum penalty of five years imprisonment or more.\(^{32}\) People who have been convicted of a serious indictable offence make up approximately 75 per cent of the correctional centre population in New South Wales.

Since the Act commenced in January 2001, NSW Police has attempted to obtain DNA samples from all people who have been convicted of a serious indictable offence, in order to build a substantial archive of profiles for the DNA database. NSW Police anticipated that the mass sampling of these convicted offenders would provide a valuable tool to assist in the investigation of crime.

The Ombudsman has already reported on the DNA sampling of serious indictable offenders.\(^{33}\)

**2.2.2. Suspects**

Parts 2 to 6 of the Act provide for the carrying out of forensic procedures on suspects. A suspect is a person whom a police officer suspects on reasonable grounds has committed an offence, a person who has been charged with an offence, or a person who has been summoned to appear before a court in relation to an offence allegedly committed by the person.\(^{34}\)

Before requesting a suspect to undergo a forensic procedure, police must be satisfied that:

- the person is a suspect
- the person is not a child or incapable person
- there are reasonable grounds to believe that the forensic procedure might produce evidence tending to confirm or disprove that the suspect committed an offence, (or an indictable or prescribed offence for intimate forensic procedures, the taking of a sample by buccal swab or hair sample), and
- the request for consent is justified in all the circumstances.\(^{35}\)

Where the suspect is an adult, police may conduct a forensic procedure with the person’s informed consent. Strict rules apply to ‘informed consent’ under the Act.\(^{36}\) If a suspect does not consent to a forensic procedure (or withdraws consent before or during the carrying out of the procedure), police can only proceed by order of a senior police officer, (that is, an officer at or above the rank of sergeant) or of a magistrate or other authorised justice.\(^{37}\) A senior police officer order will suffice if the suspect is under arrest, and the proposed procedure is a ‘non-intimate’ forensic procedure (including a hair sample, other than pubic hair).\(^{38}\) However, police must obtain an order from a magistrate or other authorised justice if the suspect is not under arrest, or the procedure proposed is an ‘intimate’ forensic procedure or a buccal swab.

Where the suspect is aged between 10 and 18 years, or is an adult who is incapable of understanding the general nature and effect of a forensic procedure or of indicating whether he or she consents to the procedure, police can only proceed to conduct a forensic procedure by order of a magistrate or other authorised justice.\(^{39}\)

Police may use reasonable force to enable a forensic procedure to be carried out on a suspect, or to prevent the loss, destruction or contamination of a sample.\(^{40}\)

**2.2.3. Volunteers**

Part 8 of the Act authorises the carrying out of forensic procedures on volunteers. A volunteer is a person who is not a suspect, who volunteers to undergo a forensic procedure.

\(^{(ii)}\) the breasts of a female or a transgender person who identifies as a female.\(^{30}\)
If the volunteer is a capable adult, police can only conduct a forensic procedure with the person’s informed consent. If the person does not consent, or withdraws consent before or during the forensic procedure, the procedure cannot proceed.41

If the volunteer is a child or incapable person, a forensic procedure can be carried out either with:

- the informed consent of the person’s parent or guardian, or
- by order of a magistrate.42

A magistrate may order a forensic procedure if:

- the consent of the parent or guardian cannot reasonably be obtained
- the magistrate is satisfied the child or incapable person, or the parent or guardian, is a suspect and the forensic procedure is likely to produce evidence tending to confirm or disprove that he or she committed an offence, or
- the parent or guardian consents but subsequently withdraws the consent.43

However, the procedure cannot proceed if the child or incapable person objects to or resists the carrying out of the procedure.44

A person may volunteer to give police a DNA sample because there is good reason for the person’s DNA to be at a crime scene, but the person is not a suspect. This may include, for example, a witness to a crime, or a person who normally resides at the place where a crime has been committed. It would also include the consensual sexual partner of a person who has been sexually assaulted by somebody else. In these cases the volunteer’s DNA can be compared against any forensic material found at the crime scene, which may enable the laboratory to create a DNA profile of the offender.

In a different context, a person may volunteer a DNA sample as part of a mass screening, where police ask all members of a certain group to provide a sample (for example, all men of a certain age who live in a particular town). Police may conduct a mass screening in the hope that the offender will volunteer a sample along with everybody else in the group, or alternatively that by eliminating a large number of people from the investigation, police can focus inquiries on any people who do not volunteer a sample.

2.2.4. Victims of crime and other “excluded volunteers”

The Act does not apply to forensic procedures carried out on people who are “excluded volunteers”.45 This includes victims of offences against the person (under Part 3 of the Crimes Act 1900) and victims of robbery offences (under Subdivision 2 of Division 1 of Part 4 of the Crimes Act). For example, police may wish to photograph a victim’s injuries, to use as evidence in criminal proceedings. Victims may also be sampled for biological material, for example victims of sexual assault may be asked to undergo a genital swab.

Also excluded from the Act are people who volunteer their fingerprints or handprints for elimination purposes in relation to a property offence (under Part 4 of the Crimes Act). For example, police may wish to obtain prints from a person whose house has been broken into, for the purpose of elimination.

NSW Police has developed its own policies for carrying out forensic procedures on victims of crime and other ‘excluded volunteers’. We note that the NSW Police policies for conducting forensic procedures on victims of offences against the person largely mirror the legislative requirements in relation to volunteers.

Because ‘excluded volunteers’ are not covered by the Act, the way police conduct forensic procedures in these circumstances is beyond the scope of this review.

2.3. Who can conduct a forensic procedure?

Depending on the type of procedure, a forensic procedure can be conducted by an appropriately qualified police officer, medical practitioner, nurse, dentist, dental technician or other appropriately qualified person.46 Buccal swabs are self-administered under the supervision of an appropriately qualified police officer or person.47

A suspect is entitled to have a medical practitioner of the suspect’s choice present while any of the following procedures is carried out: an external examination of the person’s genital area, anal area, buttocks or breasts; the taking of blood; the taking of a sample of pubic hair; the taking of a sample by swab or washing, vacuum suction,
scraping or lifting by tape from the person’s genital area, anal area, buttocks or breasts; the taking of a photograph or impression or cast of a wound from the person’s genital area, anal area, buttocks or breasts; or the taking of an impression or cast of a wound from another external part of the body.\footnote{48}

A suspect is entitled to have a dentist of the suspect’s choice present during the making of a dental impression.\footnote{49}

\section*{2.4. What happens after a DNA sample has been taken?}

\subsection*{2.4.1. From police station to laboratory}

The Act is silent on how DNA samples should be stored or transported to the DNA laboratory. However, it is NSW Police policy to store samples in a cool, dry place, and to send DNA samples to the laboratory as soon as possible if the suspect is in custody, and in any event within five days. If the sample is taken in a metropolitan area, it is taken to the laboratory by police, like any other exhibit. If the sample is taken in a regional area, police arrange for it to be collected by TNT Failsafe from the nearest major police station. The courier then takes it to the DNA laboratory.\footnote{50}

The Act provides for a DNA database system, which contains indexes of DNA profiles obtained from crime scenes, suspects, volunteers, convicted offenders, missing persons and unknown deceased persons.\footnote{51} When DNA profiles are put on the database, only certain types of matching are permitted:\footnote{52}

- DNA samples taken from suspects may be matched against the entire crime scene index. This means that where police obtain forensic material from a crime scene, and take a sample from the person suspected of having committed the offence, the laboratory can compare the two samples to see if the DNA profile of the suspect matches the forensic material from the crime scene. Further, the laboratory can compare the suspect’s DNA profile to all the other DNA profiles derived from crime scenes, even though the person may not previously have been identified as a suspect in relation to those matters.

- DNA samples taken from a volunteer may only be used for a purpose permitted by the volunteer. A volunteer may consent to his or her profile being placed on the DNA database for the limited purpose of comparison against forensic material obtained in relation to the particular offence being investigated. Alternatively, a volunteer may consent to his or her profile being placed on the DNA database for unlimited purposes, in which case the sample may be matched against crime scene, missing persons and unknown deceased persons indexes.

- DNA samples taken from convicted offenders may be matched against the entire crime scene index and other indexes (except the volunteers (limited purpose) index).

The Act creates certain offences for the supply of forensic material for prohibited analysis, unauthorised access to information on the DNA database, unauthorised matching of DNA profiles and disclosure or misuse of information obtained from forensic procedures.\footnote{53}

\subsection*{2.4.2. Repeat sampling}

The DNA laboratory may reject certain samples, for example because the tamper-evident bag in which the sample was stored had not been sealed properly, or because police did not provide sufficient forensic material for analysis.

In these circumstances, police may approach the person sampled to seek consent to a further procedure. Where that is not possible, the Act also provides that police may apply to a magistrate for an order authorising a forensic procedure to be carried out on a suspect for a second time, where the forensic material obtained from the first forensic procedure cannot be analysed, provided that repeating the forensic procedure is justified in all the circumstances.\footnote{54}

\section*{2.5. Destruction of forensic material}

The Act provides for the destruction of forensic material in certain circumstances. This means destroying any means of identifying the forensic material or information with the person from whom it was taken or to whom it relates. The physical destruction of the forensic material – the actual saliva or cheek cells or blood cells, for example – is not necessary.\footnote{55}

Forensic material taken from convicted offenders remains on the DNA database, unless the offender’s conviction is quashed, in which case it must be destroyed.\footnote{56}
Forensic material taken from a suspect must be destroyed if the person is found to have committed the offence but no conviction is ordered, or the person is acquitted of the offence, provided no appeal is lodged (or the acquittal is confirmed or the appeal withdrawn), and the suspect is not being investigated for, or has a proceeding against them for another offence. If proceedings have not commenced within 12 months of police taking a suspect’s DNA sample, it must be destroyed, unless a warrant has been issued for the apprehension of the suspect. Police or the Director of Public Prosecutions may also apply to a magistrate to extend the 12 month period. The magistrate may extend the period if there are special reasons for doing so.57

The Act does not specifically provide for the destruction of forensic material taken from volunteers. However, it does provide that any identifying information (that is, information which could be used to discover the identity of the person who provided the DNA sample) relating to a volunteer must be removed from the database as soon as practicable after the agreed retention period ends.58

2.6. Safeguards for people undergoing forensic procedures

The Act contains a number of safeguards, to protect the rights and interests of people on whom police would like to conduct a forensic procedure. The safeguards in the Act focus on protecting the civil liberties of the person undergoing the procedure, by making sure the person is informed about the nature and consequences of the procedure, receives adequate support and is not kept in custody for an unreasonable length of time. In addition to some of the protections offered above the following are provided for:

• Before asking a suspect to consent to a forensic procedure, police must give the suspect reasonable opportunity to communicate in private with a legal practitioner of the suspect’s choice.59 Before asking a volunteer to consent to a forensic procedure, police must inform the volunteer the he or she may consult a legal practitioner of choice before deciding whether or not to consent to the procedure.60

• Police must inform suspects and volunteers of certain matters before asking for consent to conduct a forensic procedure. Police must inform suspects of matters such as the purpose for which the procedure is required, the way it will be carried out, that it may produce evidence against the suspect which might be used in a court of law, that consent may be refused, the consequences of refusing consent, and that information obtained from DNA analysis may be put on the DNA database.61 Police must inform volunteers of matters such as the way the proposed procedure will be carried out, that the volunteer is under no obligation to undergo the procedure, that consent might be withdrawn at any time, that it may produce evidence that may be used in court of law, that information obtained from DNA analysis may be put on the DNA database, and that information put on the database may be retained for such period as the Commissioner of Police and volunteer agree, and then must be removed from the system.62

• Where a police officer believes on reasonable grounds that a suspect is unable to communicate with reasonable fluency, because of inadequate knowledge of English or a physical disability, police must arrange for an interpreter to be present (including by telephone) before taking certain action, including asking for consent to a forensic procedure, ordering a forensic procedure to be carried out, cautioning a suspect or carrying out the forensic procedure.63

• Police must caution a person undergoing a forensic procedure that he or she does not have to say anything while the procedure is carried out, and that anything the person does say may be used in evidence.64

• A forensic procedure cannot be carried out while a suspect is being questioned. If questioning has not been completed before the procedure is conducted, it must be suspended.65

• There are limits on the amount of time a person may be detained for the purpose of undergoing a forensic procedure. If a suspect is under arrest, police must carry out the procedure within two hours of the usual investigation period.66 If a suspect is not under arrest, police must carry out the procedure as quickly as reasonably possible, but in any case within two hours after the suspect presents to the investigating officer.67

• Forensic procedures must be carried out in circumstances affording reasonable privacy to the person undergoing the procedure, and must not be carried out in the presence or view of any person whose presence is not necessary or of a person of the opposite sex.68

• Forensic procedures cannot be carried out in a cruel, inhuman or degrading manner.69

• A person authorised to carry out a forensic procedure may use reasonable force.70

• A suspect is entitled to have a medical practitioner or dentist of choice present when certain procedures are carried out.71
• Some people have the right to have an interview friend with them when they are asked to consent to a forensic procedure, at any hearing for a court order authorising a forensic procedure, and while the procedure is carried out.\textsuperscript{72}

• Police must, if practicable, electronically record the provision of information to a suspect, and the suspect’s response. Police must also electronically record the procedure itself, unless it is not practicable, or the suspect objects to the recording. The suspect must also be informed of the reasons for recording the procedure, including the protection this provides the suspect. Suspects must also be given the opportunity to view any recording made.\textsuperscript{73}

• Following the taking of a sample, where there is sufficient material to share, police must ensure part of the material (sufficient for analysis) is made available to the suspect.\textsuperscript{74} Where the forensic procedure involves taking a photograph of part of a suspect’s body, police must ensure that a copy of the photograph is made available to the suspect.\textsuperscript{75}

• Police must ensure that a copy of the results of DNA analysis is available to a suspect, unless this would prejudice the investigation of an offence.\textsuperscript{76}

The Act provides that evidence obtained through a forensic procedure is inadmissible where there has been any breach or failure to comply with any provision of the Act in relation to a forensic procedure, or the recording or use of the DNA database, unless the person does not object or the court is of the opinion that the desirability of admitting the evidence outweighs the undesirability of admitting the evidence that was not obtained in compliance with the provisions of the Act or the mistake arose out of a mistaken belief as to the age of a child.\textsuperscript{77}

The Act does not specifically prohibit police from taking covert DNA samples, and this type of conduct is essentially unregulated. However, a court may find the evidence inadmissible, if it has been obtained improperly. Further information on covert sampling can be found in section 9.2.

Endnotes

\textsuperscript{25} Crimes (Forensic Procedures) Act 2000 s 3.
\textsuperscript{26} Crimes (Forensic Procedures) Act 2000 s 58.
\textsuperscript{27} Crimes (Forensic Procedures) Act 2000 s 3.
\textsuperscript{28} Crimes (Forensic Procedures) Act 2000 s 49.
\textsuperscript{29} Memorandum of Understanding between NSW Police and the DNA laboratory.
\textsuperscript{30} Crimes (Forensic Procedures) Act 2000 s 3.
\textsuperscript{31} Crimes (Forensic Procedures) Act 2000 s 3.
\textsuperscript{32} Crimes (Forensic Procedures) Act 2000 s 3.
\textsuperscript{33} NSW Ombudsman, The Forensic DNA Sampling of Serious Indictable Offenders under Part 7 of the Crimes (Forensic Procedures) Act 2000 (August 2004).
\textsuperscript{34} Crimes (Forensic Procedures) Act 2000 s 3.
\textsuperscript{35} Crimes (Forensic Procedures) Act 2000 s 12 and 20.
\textsuperscript{36} Crimes (Forensic Procedures) Act 2000 s 7.
\textsuperscript{37} Crimes (Forensic Procedures) Act 2000 s 14, 17 and 22.
\textsuperscript{38} Crimes (Forensic Procedures) Act 2000 s 17.
\textsuperscript{39} Crimes (Forensic Procedures) Act 2000 s 3, 8 and 23.
\textsuperscript{40} Crimes (Forensic Procedures) Act 2000 s 47(1).
\textsuperscript{41} Crimes (Forensic Procedures) Act 2000 s 79.
\textsuperscript{42} Crimes (Forensic Procedures) Act 2000 s 76.
\textsuperscript{43} Crimes (Forensic Procedures) Act 2000 s 80.
\textsuperscript{44} Crimes (Forensic Procedures) Act 2000 s 76.
\textsuperscript{45} Crimes (Forensic Procedures) Act 2000 s 76A.
\textsuperscript{46} Crimes (Forensic Procedures) Act 2000 s 50.
\textsuperscript{47} Crimes (Forensic Procedures) Act 2000 s 50(4).
DNA sampling and other forensic procedures conducted on suspects and volunteers under the Crimes (Forensic Procedures) Act 2000


Crimes (Forensic Procedures) Act 2000 s 50.

Crimes (Forensic Procedures) Act 2000 s 50.


Crimes (Forensic Procedures) Act 2000 s 90.

Crimes (Forensic Procedures) Act 2000 s 93.

Crimes (Forensic Procedures) Act 2000 s 91 to 94.

Crimes (Forensic Procedures) Act 2000 s 27.

Crimes (Forensic Procedures) Act 2000 s 3(5).

Crimes (Forensic Procedures) Act 2000 s 87.

Crimes (Forensic Procedures) Act 2000 s 88.

Crimes (Forensic Procedures) Act 2000 s 94(2) and 94(4).


Crimes (Forensic Procedures) Act 2000 s 77(1)(e).


Crimes (Forensic Procedures) Act 2000 s 77.

Crimes (Forensic Procedures) Act 2000 s 98.

Crimes (Forensic Procedures) Act 2000 s 46.

Crimes (Forensic Procedures) Act 2000 s 45.

Crimes (Forensic Procedures) Act 2000 s 7, 17 and 42.

Crimes (Forensic Procedures) Act 2000 s 16 and 40.

Crimes (Forensic Procedures) Act 2000 s 44.


Crimes (Forensic Procedures) Act 2000 s 47.

Crimes (Forensic Procedures) Act 2000 s 50.

Crimes (Forensic Procedures) Act 2000 s 10, 30, 33, 54 and 55.

Crimes (Forensic Procedures) Act 2000 s 15, 57 and 100.

Crimes (Forensic Procedures) Act 2000 s 58.

Crimes (Forensic Procedures) Act 2000 s 59.

Crimes (Forensic Procedures) Act 2000 s 60.

Crimes (Forensic Procedures) Act 2000 s 82.
Chapter 3. DNA sampling in Australia and overseas

This chapter takes a brief look at the history of forensic procedures in New South Wales. It then compares our forensic procedure regime with those in other Australian and overseas jurisdictions.

3.1. History of forensic procedures in New South Wales

Since 1924, police officers in New South Wales have had the power to search, photograph, fingerprint or ask a medical practitioner to examine a person in custody who has been charged with an offence. The power to conduct a medical examination has been interpreted quite narrowly. In *Fernando v Commissioner of Police*, the court found that it permits "no more than an external examination by sight or touch." Specifically, it did not authorise police to take a blood sample from an accused without consent.

After the *Fernando* decision, the NSW Parliament amended the *Crimes Act* to provide for medical practitioners to take blood, hair or saliva samples from people in custody who have been charged with an offence. This was intended to be an interim measure until new legislation dealing with this issue was drafted.

In 1999, police officers were given the power to require a driver who refuses to submit to a sobriety assessment, or who police reasonably believe is under the influence of a drug, to provide a blood and urine sample (whether or not the person consents to them being taken) in accordance with the directions of a medical practitioner. In addition, medical practitioners and nurses are under a duty to take blood samples from drivers and certain others involved in road accidents.

In 2000, Parliament passed the *Crimes (Forensic Procedures) Act*, creating specific police powers to carry out forensic procedures on suspects, volunteers and certain convicted offenders. It also specified how material from those procedures may be used, and when that material (or information derived from that material) must be destroyed.

3.1.1. Objectives of the new Act

In his second reading speech, the Hon Paul Whelan MP, then Police Minister, described the forensic procedures bill as "a comprehensive regime regulating the taking and use of forensic material for the purposes of criminal investigation." He stated:

> It will enable law enforcement agencies to identify or exclude suspects by comparing forensic material taken from them with material found at crime scenes. It will link seemingly unrelated crimes by comparing DNA profiles found at different crime scenes. This legislation has the potential to assist victims of crime in New South Wales by encouraging guilty pleas and hence avoiding often traumatic and lengthy court proceedings...this bill will reform policing as we know it in New South Wales. DNA is the fingerprint of the twenty-first century. It will allow police to work smarter using forensically driven intelligence to solve crime.

He also noted that DNA testing and other forensic procedures may be used to eliminate an innocent person from suspicion.

The second reading speech also stressed that DNA testing, while useful, would not replace more traditional forms of police investigation:

> It is important to note that DNA will be only one tool in the police officer’s kit. They will still need to assemble a brief of evidence against the offender; DNA alone will not convict.

Other members of Parliament hailed the Act as "probably the most important legislation to come before the House this session." Many were impressed by the impact the DNA database in the United Kingdom has had on clear-up rates of crimes.

A further objective of the legislation is to deter offenders by increasing the likelihood of apprehension, which is accepted by many as more effective than increasing penalties:
The deterrent to an increased volume of serious crime is not so much heavier sentences as the impression in the minds of those who are persisting in a course of serious crime that detection is likely and punishment will be certain. 88

Since the Act came into operation, the courts have emphasised that it seeks to strike a balance between preserving a citizen’s right not to assist law enforcement authorities, and the public interest in the administration of justice:

The Forensic Procedures Act conferred new and unprecedented powers upon, inter alia, magistrates that would have the result of compelling persons suspected of criminal offences (including those against whom charges have not been laid) to cooperate in the investigation of the crime(s) of which they are suspected, and to provide, from their own bodies, evidence which may be used against them (and which, of course, may also be used to exonerate them). The Parliament was, in my view, seeking to maintain a delicate balance between preserving the traditional rights of citizens and individuals, including those suspected of crime, to decline to participate in investigations or to cooperate with investigating authorities, and the overall interests of the community and of justice in facilitating the investigation of crime, and the administration of justice, in securing the conviction of the guilty and the non-prosecution or acquittal of the not guilty. The Act was a specific response to scientific and technological developments, but in the context of valued traditional civil liberties. 89

### 3.1.2. The need for safeguards

Some people argue that DNA sampling by law enforcement authorities is the modern equivalent of fingerprinting – and as such should be conducted routinely on arrest. However, others argue that it raises significantly different issues than taking a person’s fingerprints. 90

During Parliamentary debates, many members of Parliament expressed concerns about the Act. Some were concerned about the breadth of the legislation, in particular the large number of suspects and volunteers who would be subjected to DNA sampling. 91 Others had qualms about DNA sampling being conducted by NSW Police, and the potential for bias or corruption by police officers, who are responsible for the investigation of crime. 92 Some argued that where a person does not consent to a forensic procedure, only a court (rather than a senior police officer) should be able to authorise police to go ahead and conduct the procedure against the person’s will. 93

Since the Act came into force, concerns have been expressed about the operation of the Act and related issues by legal practitioners, academics, members of Parliament and the media. Concerns have been raised about:

- **The invasiveness of DNA sampling.** A DNA sample can be taken quite painlessly, and with minimal inconvenience to the subject. However, some DNA sampling can be quite invasive (such as a blood or hair sample), as it allows the State to interfere with the liberty and bodily integrity of the individual (in some circumstances against the person’s will and with the use of reasonable force).

- **Protection of genetic information.** Apart from being regarded as a unique identifier, DNA has the capacity to deny or reveal familial relationships, and can be used to predict whether a person is likely to have certain diseases. DNA also contains information about a person’s appearance, such as hair colour, eye colour and height. It may be possible in the future to derive highly personal information from a very small amount of biological material – a spot of blood, a single hair – and there are fears that DNA samples may end up being used for purposes other than those for which they were taken. 96 For example, there is some concern about genetic information being disclosed to employers or insurers.

- **Contamination risks.** DNA evidence can be extremely persuasive. However, there is a risk of contamination at each of the various stages between the commission of the offence and prosecutors presenting the evidence in court. For example, biological material could be left at crime scenes, deliberately or unintentionally, by other criminals or by law enforcement officials. Police could inadvertently contaminate crime scene evidence, by allowing exhibits to come into contact with each other. Staff at the forensic laboratory could inadvertently contaminate evidence by allowing an exhibit from one crime scene to come into contact with an exhibit from another. Any of these incidents could result in a person other than the true offender being implicated in the offence being investigated.

- **Perceived lack of independence of forensic service providers.** While the DNA laboratory is separate from law enforcement authorities, and should not have an interest in the outcome of prosecutions, the fact that it is run by the State and provides the vast bulk of its DNA analysis services to NSW Police raises the question of whether the alliance between police and the laboratory could influence the interpretation of DNA analysis results. A related concern is that where DNA evidence is adduced in criminal proceedings, defendants have limited opportunities to have the evidence against them independently analysed.
• **Security issues.** There are concerns about how to ensure the security of the DNA samples taken by police, and how to prevent unauthorised access to and disclosure of information stored on the DNA database.

• **Use of DNA evidence in court proceedings.** DNA evidence is now widely used in criminal proceedings, and can be extremely persuasive.\(^9\) It involves complex science and statistics, and match probabilities are often expressed in terms of billions, for example, “There is DNA evidence which may be interpreted as establishing that there exists only a one in ten billion chance that the accused was not the assailant.”\(^97\) Given the potentially overwhelming impact of this type of evidence, it is vital that safeguards are applied to the way DNA samples are taken and used. While the scientific basis of DNA profiling is now accepted, there remain concerns about the way in which the evidence is presented in court, in particular about whether juries give appropriate weight to complex statistical evidence. This is discussed further in chapter 13.

• **Inadequacy of legislative safeguards.** The Act contains many safeguards, to protect the rights and interests of people who police want to undergo forensic procedures. For example, police must provide information about the proposed procedure before asking a person to agree to it, cannot question a person while the procedure is being carried out, and must electronically record the procedure. However, concerns have been raised about some legislative safeguards being “more apparent than real.”\(^98\) An example of this is the failure of the Act to prohibit DNA analysis otherwise than in accordance with the Act. Police can take covert DNA samples, for example by sending a cigarette butt or tissue a person has discarded for DNA analysis, instead of taking a sample directly from the person, with the person’s knowledge. This type of activity is outside the scope of the Act and is essentially unregulated. For further information, see section 9.2 for discussion on covert sampling.

• **Erosion of long established rights.** All common law jurisdictions recognise a right to silence when being questioned by police.\(^99\) This right flows from the fundamental principle that the prosecution bears the burden of proving an offence beyond reasonable doubt, without any assistance from the defendant.\(^100\) Allowing police to take DNA samples from a suspect, by force if necessary, reflects a departure from this general position.\(^101\)

• **Complexity of the legislation.** Some commentators have raised concerns about the legislation being unnecessarily complex, and in parts unclear. They argue that the Act impedes rather than facilitates the use of DNA in the investigation and prosecution of crime.\(^102\)

Many of these concerns raise policy considerations which are outside the scope of this review.\(^103\) For this reason, we do not explore these issues in great detail. However, we have taken them into account where they are relevant to our scrutiny of the exercise of functions conferred on police officers under the Act.

### 3.2. Plans for a national DNA database in Australia

In 1998, the federal government committed $50 million to establish CrimTrac, an agency aiming to support Australian police services through the provision of national information systems and investigative tools. One of CrimTrac’s key roles is to coordinate a National Criminal Investigation DNA Database (NCIDD).

In Australia, criminal law is generally a matter for states and territories to govern, rather than the federal government. As a result, there are significant differences in the various criminal laws of the various states and territories.

In order to develop an Australian National DNA Database, it was important to try to ensure that the laws regulating the sharing of database information between the different states and territories were compatible.\(^104\) Since 1991, a national committee consisting of representatives from most Australian jurisdictions has been working on a national criminal code.\(^105\) One of the tasks of the committee was to develop a “model forensic procedures bill” for adoption by all Australian jurisdictions. In 1999, the committee circulated a discussion paper on the “Model Forensic Procedures Bill and Proposed National DNA Database”, following extensive consultation. In February 2000, a final model bill was released, which set out a comprehensive legislative regime dealing with DNA sampling and other forensic procedures.\(^106\)

Uniform adoption of the model bill by states and territories would have ensured consistency in the laws relating to forensic procedures across all Australian jurisdictions. However, through the parliamentary process of law making, all jurisdictions departed from the model bill to some extent. New South Wales is considered to be one of the few jurisdictions in which the forensic procedures legislation is largely consistent with the model bill.\(^107\)

The effect of these legislative variations has stalled the operation of NCIDD. This is because it is not clear whether information obtained from forensic procedures can be legally shared between jurisdictions which have different laws governing the taking of forensic DNA samples.
In mid 2005, Queensland and Western Australia uploaded data onto NCIDD, and can now search each other’s data for possible links. Since the data was amalgamated, over a hundred links have been made.

3.3. DNA sampling in other Australian jurisdictions

There are now laws in every Australian state and territory governing DNA sampling and other types of forensic procedures. While they differ to varying degrees from the model bill, none are vastly different from the New South Wales Act. Rather than provide a comprehensive explanation of each jurisdiction we have outlined the key provisions of the relevant legislation, and noted any significant differences from New South Wales’ position. We also focus on provisions affecting suspects and volunteers, as we have already reported on the DNA sampling of convicted offenders.

Each jurisdiction adopts the distinction between “intimate” and “non-intimate” forensic procedures, but there are some differences in how certain procedures are categorised. For example, some jurisdictions treat buccal swabs as intimate procedures, while others treat them as non-intimate or separately (as in New South Wales). The distinction is important, as there are greater limitations on when intimate procedures can be conducted than when non-intimate procedures can be conducted.

Each jurisdiction’s police service uses a particular laboratory to conduct the bulk of its forensic work, including DNA analysis. About half the laboratories are controlled by the relevant police service, and the other half are part of the state or territory’s health department. As well as the government laboratories, there are also several private and academic forensic service providers.

3.3.1. Commonwealth

Part 1D of the Crimes Act 1914 (Cth) sets out a comprehensive regime for forensic procedures in the federal jurisdiction. It is largely the same as the New South Wales Act, as both closely follow the model bill. The types of forensic procedures covered are the same, and may be carried out on suspects, volunteers and certain convicted offenders. Part 1D sets out how forensic procedures must be carried out, when forensic material must be destroyed, and also provides for the establishment of a DNA database. As in the New South Wales Act, there are specific legislative safeguards for Aboriginal and Torres Strait Islander suspects and volunteers.

There are some differences between the Commonwealth and New South Wales legislation:

- Under the New South Wales Act, police must consider whether requesting or ordering a forensic procedure is “justified in all the circumstances”, before asking for consent or making the order. The Commonwealth legislation goes further, by requiring police to balance the public interest in obtaining evidence against the public interest in upholding the physical integrity of the suspect. It also specifies a number of factors the officer must consider in conducting this balancing exercise, including the seriousness of the offence, the circumstances surrounding its commission, the degree of the suspect’s alleged participation, personal characteristics of the suspect (including age, health, cultural background), whether evidence of the suspect’s involvement in the offence can be gained in a less intrusive way, any reasons given for refusing consent, and other relevant matters. Magistrates hearing applications for orders authorising forensic procedures receive similar guidance under the Commonwealth Act, but not under the New South Wales Act.

- The Commonwealth legislation only provides for forensic procedures to be conducted in relation to indictable offences. Under the New South Wales Act, certain forensic procedures (although generally not DNA sampling) can be conducted in relation to summary offences as well as indictable offences.

- Time limits for conducting forensic procedures are longer under the Commonwealth Act – generally a procedure must be conducted within four hours. Under the New South Wales Act, the time limit is generally two hours.

- Under the Commonwealth legislation, buccal swabs are classified as intimate procedures. Under the New South Wales Act, they are categorised separately.

Part 1D was reviewed in March 2003. The main deficiency identified by the review was that because CrimTrac is not operational, there was very little experience of the operation of Part 1D to review. However, the review emphasised the need for improved accountability arrangements both within and across Australian jurisdictions.
3.3.2. **Australian Capital Territory**

The Crimes (Forensic Procedures) Act 2000 (ACT) is substantially based on the model bill, so is largely the same as the New South Wales Act. There are some differences, however:

- Buccal swabs are classified as non-intimate procedures.119
- Police must balance the public interest in obtaining evidence against the public interest in upholding the physical integrity of the suspect before asking a person to consent to a procedure, or ordering that it be conducted. The factors police must consider are the same as those set out in the Commonwealth legislation.120 Magistrates hearing applications for orders authorising forensic procedures must undertake the same balancing exercise.121
- There are no specific safeguards for Aboriginal and Torres Strait Islander people.

3.3.3. **Victoria**

Forensic procedures in Victoria are governed by Part III, Division 1(30A) of the Crimes Act 1958 (Vic). The legislation was amended in 2002 to allow for self-administered buccal swabs, under police supervision.122 Prior to this, only doctors or nurses could administer buccal swabs. The 2002 amendments also enabled Victoria to enter into arrangements for the exchange of DNA information between jurisdictions, to facilitate Victoria’s participation in the national DNA database.123

The legislation was further amended in 2004, to enable senior police officers to authorise the carrying out of non-intimate forensic procedures, including DNA samples, on suspects.124 Before this, a suspect could only be compelled to undergo a forensic procedure by court order.

Now, the Victorian legislation is not substantially different from the New South Wales legislation. There are, however, some remaining differences:

- Buccal swabs are classified as intimate procedures.125
- There are no specific safeguards for Aboriginal and Torres Strait Islander people.

3.3.4. **South Australia**

Forensic procedures in South Australia are governed by the Criminal Law (Forensic Procedures) Act 1998 (SA), which was substantially revised in 2003.126 The amendments included provisions for conducting forensic procedures on volunteers, and provisions to facilitate South Australia’s participation in the national DNA database.127 The key differences now between the law in South Australia and in New South Wales are:

- There are different understandings of how intrusive various procedures are. In South Australia, buccal swabs and blood samples taken by fingerprick are “non-intrusive” forensic procedures.128 Hair samples are “intrusive”. Hair samples may be taken for the purpose of conducting hair comparison tests, but cannot be taken for the purposes of DNA analysis, unless the person specifically requests that the DNA profile be obtained in this way.129 In New South Wales, blood samples are “intimate”, hair samples are “non-intimate” and buccal swabs are categorised separately. Generally, a hair sample would be taken for DNA analysis if the person is providing a DNA sample under compulsion.130
- South Australia has four categories of procedures, depending on the person’s involvement in the offence being investigated, and whether the person’s profile will be included on the DNA database. Category 1 (“consent”) procedures are procedures conducted on a person who is not under suspicion, where the person’s profile will not be stored on the DNA database.131 Category 2 (“volunteers”) procedures are procedures conducted on a person who is not under suspicion, whose DNA profile will be stored on the DNA database, either on the volunteers (limited purposes) or volunteers (unlimited purposes) index.132 Category 3 (“suspects”) procedures and Category 4 (“offenders”) procedures relate to suspects and convicted offenders, respectively.133
- The South Australian legislation provides for “assimilation orders”, where police or the DPP may apply to a court to have material taken from a volunteer treated as material obtained from a suspect.134 This means that where, as an investigation progresses, a volunteer emerges as a suspect, the person’s DNA profile can be used as if it were taken from a suspect, and may be put on the DNA database. If an assimilation order is made, the person’s DNA profile is transferred from the relevant volunteer index to the suspects index.135 This does not occur in New South Wales.
• In South Australia, before ordering a forensic procedure, the senior police officer or magistrate must be satisfied that the public interest in obtaining the evidence outweighs the public interest in ensuring that private individuals are protected from unwarranted interference, having regard to the seriousness of the offence, the extent to which the procedure is necessary for the proper investigation of the offence, any likely effects on the person’s welfare (taking into account age, health, and cultural and ethnic background), whether the evidence can be obtained in a less intrusive way, and any reasons given for refusing consent.  

• There are no specific safeguards for Aboriginal and Torres Strait Islander people.

3.3.5. Western Australia

DNA sampling in Western Australia is governed by the Criminal Investigation (Identifying People) Act 2002 (WA). The Act has a different focus from the equivalent legislation in other Australian jurisdictions, as it deals exclusively with "identifying" rather than "forensic" procedures. Identifying procedures are procedures where one or more identifying particulars of a person are obtained, such as prints from hands, feet and ears; photographs of any identifying feature (defined as a permanent or semi-permanent physical feature of the person that helps to identify the person, such as a tattoo, scar or birth mark); dental impressions; hair for hair comparison; and DNA profiles.

While many of these procedures are permitted in New South Wales, our Act also provides for procedures which may provide forensic evidence for the investigation of an offence, such as a scraping taken from under a person’s nails or a gun shot residue test. Such procedures must be taken as soon as possible, or the evidence will be lost. Further, the New South Wales Act specifies that “forensic procedure” does not include “the taking of any sample for the sole purpose of establishing the identity of the person from whom the sample is taken.”

The Western Australian legislation differs from the New South Wales legislation in several respects:

• There are separate provisions for volunteers, protected people (children and people who are incapable of consenting to a procedure), deceased people, involved people (people who are not suspects, but who are involved with the offence, such as victims or witnesses), uncharged suspects, charged suspects, and people in the corrections system (including people on remand, serving custodial sentences, on parole or on supervised release orders).

• The Act provides for a system of identifying procedure warrants, known as “IP warrants”. Police may apply to a magistrate for a warrant authorising an identifying procedure, if police suspect that the investigation would be prejudiced if the person was asked to undergo the procedure. Warrants may be sought in relation to suspects or involved protected persons.

• The criteria for requesting a suspect to undergo a procedure are less stringent. In Western Australia, police may ask a charged suspect to consent to an identifying procedure if the officer suspects that WA Police does not already hold all the suspect’s identifying particulars. In New South Wales, by contrast, there must be reasonable grounds to believe the procedure might produce evidence tending to confirm or disprove a suspect committed the offence – the procedure must have some relevance to the progress of the investigation.

• Where an adult does not consent to a procedure, it may be authorised by a senior police officer (if it is a non-intimate procedure) or a justice of the peace (if it is an intimate procedure). A magistrate can authorise, by warrant, a procedure to be conducted on a protected person.

• There are separate provisions for police officers. The Commissioner of Police may require a police officer to undergo an identifying procedure for prescribed forensic purposes. The information must be destroyed if the person leaves WA Police, and requests that it be destroyed.

• DNA samples are taken by buccal swab, hair sample, blood sample or pubic hair sample. The latter cannot be conducted unless it is impracticable to use one of the former.

• Information obtained through an identifying procedure will not be destroyed automatically at the end of the period for which the information may be retained. It will only be destroyed if the person undergoing the procedure (or the person’s guardian or advocate) specifically requests that it be destroyed.

• There are no specific safeguards for Aboriginal and Torres Strait Islander people.
3.3.6. Queensland

Forensic procedures in Queensland are governed by Chapter 8A of the Police Powers and Responsibilities Act 2000 (Qld). There are several significant differences between the Queensland and New South Wales legislation:

- The Queensland Act does not have separate provisions for volunteers. Police can request any person, whether a suspect or not, to undergo a forensic procedure. There are no criteria governing when police may make such a request – any person may be approached and asked to provide a DNA sample.
- There are however criteria for conducting procedures in the absence of consent. Police can only apply for a court order authorising a forensic procedure if the officer is satisfied the procedure may provide evidence of the commission of an indictable offence. The magistrate must consider whether the procedure is justified in all the circumstances, taking into account the rights and liberties of the suspect, the public interest, and the other factors set out in the Commonwealth Act. Where proceedings against a person for an indictable offence have commenced, the person’s DNA can be taken with the approval of a senior police officer rather than a court.
- DNA samples can only be taken by buccal swab or hair sample. However, there are some types of procedures which are permitted in Queensland which are not covered by the New South Wales Act, including cavity searches, removing a substance or thing from a body cavity, taking a blood or urine sample and taking an X-ray.
- Children over the age of 14 and adults with impaired capacity can consent to forensic procedures, provided a support person is present when the relevant information is provided, and the person being asked to consent is given the opportunity to speak to the support person in private.
- The Act provides for a Queensland DNA database. A very broad comparison of profiles is allowed. The Commissioner of Police may transfer information from one index to another, use information in one index for the purposes of another index, compare information within an index and compare information in one index with information in another. There are more restrictive matching rules for comparison of DNA profiles using the CrimTrac database.
- There are no specific safeguards for Aboriginal or Torres Strait Islander people.

3.3.7. Northern Territory

Forensic examinations, including DNA sampling, can be conducted under Division 7 of the Police Administration Act (NT) and the Juvenile Justice Act (NT). Forensic procedures in the Northern Territory are less regulated than anywhere else in Australia, so there is significant disparity between the Northern Territory and New South Wales laws:

- Buccal swabs are classified as non-intimate procedures.
- Any person can undergo a non-intimate procedure by consent. There are no criteria governing when police may make such a request. In the absence of consent, non-intimate procedures can be carried out by order of a senior police officer. It is enough that police reasonably suspect the person has committed a crime, or that the person has been charged with an offence punishable by imprisonment – there is no requirement, for example, that DNA analysis be of some investigative value, or that asking for consent is justified in the circumstances.
- Intimate procedures can be carried out by consent or by order of a magistrate. The person must have been charged with an offence, and police must believe the procedure may provide evidence relating to the offence.
- A magistrate’s approval is required to conduct a procedure on a child aged under 14, but a non-intimate procedure, including a DNA sample, can be conducted on a child aged 14 or above with the approval of a senior police officer. The child must be a suspect or be charged with committing a crime.
- DNA samples are taken by buccal swab only, and can be taken by force if necessary. As in Queensland, a number of procedures are allowed which are not covered by the New South Wales Act, including internal examinations of the body, taking from the body a substance on or in the body, taking a urine sample and taking an X-ray.
- Comparison of DNA profiles is essentially unregulated – the Commissioner of Police may maintain databases of any information obtained from carrying out forensic procedures. Samples can be subject to any analysis the Commissioner thinks fit, and any information obtained can be recorded on the database. There are also provisions for sharing information kept on the database with other jurisdictions.
• There are no special provisions for people incapable of understanding or consenting to a forensic procedure.
• There are no specific safeguards for Aboriginal or Torres Strait Islander people.
• There are no provisions for destruction of forensic material, or requirements that profiles be deleted. Samples can be retained for such period as the Commissioner thinks fit.164

In November 2004 the legislation was amended to allow Northern Territory police to take DNA samples for other police forces, and vice versa. The new legislation also made some minor changes to the way DNA samples taken from volunteers could be used.165 During Parliamentary debates about the amendments, the Minister for Police claimed that the Northern Territory “has the most effective and uncomplicated DNA legislation for law enforcement in Australia”, and that it has “successfully resisted Commonwealth pressure to ‘re-model’ the legislation.”166

Since late 2002, police in the Northern Territory have conducted a number of “Genesweep” operations, which focus on identifying property offenders through fingerprint and DNA analysis. The operations have resulted in a high number of arrests but many prosecutions have failed because of a lack of other evidence.167

3.3.8. Tasmania

The Forensic Procedures Act 2000 (Tas) differs significantly from the New South Wales Act in a number of ways:

• Buccal swabs are categorised as non-intimate forensic procedures. Some types of procedures permitted in Tasmania are not covered by the New South Wales Act, including X-rays and internal examinations of body cavities.168

• There are no criteria governing when police may ask a suspect to consent to a forensic procedure.169 A police officer can order a person in custody who has been charged with a serious offence to undergo a forensic procedure, including a DNA sample by buccal swab. If a suspect is not in custody, police can order a forensic procedure, but only if there are reasonable grounds to suspect the procedure may produce evidence tending to confirm or disprove that the suspect committed a serious offence.170

• Forensic procedures can be conducted on a child under the age of 15 either with the consent of the child and the child’s parent, or by order of a magistrate.171 Children aged 15 and above are treated the same as adults.172

• There are no provisions for people incapable of understanding or consenting to a forensic procedure.
• There are no specific safeguards for Aboriginal and Torres Strait Islander people.
• Where police apply to a court for an order authorising a forensic procedure, the magistrate must be satisfied that carrying out the procedure is justified in all the circumstances, after balancing the public interest in obtaining the evidence against the public interest in upholding the physical integrity of the suspect.173

The permitted matching and destruction provisions are similar to those in New South Wales.

The Tasmanian legislation was amended in 2003 to facilitate the sharing of DNA profiles with other Australian jurisdictions.174

3.4. DNA sampling in other countries

Ten years ago, DNA profiling was still relatively new. Although the validity of DNA evidence was gradually being accepted by the courts, DNA profiling was still only used on a case by case basis, as evidence linking a particular suspect to a particular crime. As the technology has developed, and the use of DNA profiling in the investigation and prosecution of crime has increased, there has been a rapid expansion all over the world of large, centrally coordinated databases of crime scene and convicted offender profiles. The rationale for developing a DNA database is to enable police, by comparing DNA obtained from victims or unsolved crime scenes to the DNA of people who police know or suspect are criminally active, to better target their investigations.

There is much greater variance between DNA databases overseas than those found within Australia. The most significant differences relate to:

• The power to take DNA, or the circumstances in which a person can be compelled to provide a DNA sample to investigating authorities. In some jurisdictions a person must be convicted of a very serious offence before his or her DNA profile can be “banked” on the relevant database. In other jurisdictions, a person may have a DNA sample taken on arrest. Another key difference relating to the DNA sampling of suspects is whether DNA
analysis must be relevant to the offence being investigated, or whether the person’s alleged criminality of itself is enough to warrant taking a sample, for the investigation of other (possibly future) criminal offences.

- **Size, scope and projected growth of the database** – some databases have millions of profiles on them, while others are much smaller. Some databases are regional, some are national, and some are international. Many databases have been rapidly populated through the mass sampling of convicted offenders. There has also been a trend towards expanding the types of offences for which DNA samples can be taken, with many jurisdictions now taking DNA in relation to high volume property offences, like burglary and car theft, as well as for serious offences such as murder and sexual assault. Whether a database continues to expand rapidly may depend on whether suspect samples are retained on the database indefinitely, or are routinely deleted (for example, where a suspect is not ultimately convicted of the offence for which the sample was taken). It is likely that the number of crime scene profiles on databases will continue to expand rapidly.

- **Retention of genetic data** – some systems retain the DNA sample (i.e. the biological material itself), while others retain the DNA profile derived from the sample, and destroy the sample. Most jurisdictions retain DNA profiles of convicted offenders indefinitely, and provide for the destruction of profiles taken from suspects who are ultimately acquitted. Others retain all DNA profiles – whether from convicted offenders, suspects or merely people who have been arrested – on the database indefinitely.

- **Administration of the database** – whether it is by the government, a private company, or a combination. For example, in New South Wales the DNA database is wholly government owned and funded. The laboratory is part of NSW Health. In some places, the database is maintained by the government and private companies are contracted to provide some forensic services (for example, routine DNA analysis). Elsewhere, the database is hosted by a government owned but independent research institute. Others are publicly funded but are otherwise fully privatised.

Some database hosts have their own websites and Annual Reports, and regularly publish statistics on the number of profiles on the database, the percentage of crime scene samples which are linked to profiles already on the database, DNA ‘success stories’, contamination incidents and advances in technology. Other database hosts are less visible, attracting attention only when, for example, problems with funding or backlogs are made public.

We have looked at a selection of other jurisdictions, whose DNA sampling regimes differ significantly from our own.

### 3.4.1. United Kingdom

The United Kingdom was the first country to establish a national DNA database, in 1995. In 2000, the government allocated £182 million to the DNA Expansion Programme, with the aim of collecting DNA samples from all active offenders over a four year period. It also aimed to increase the retrieval of biological material left by offenders in relation to high volume property crime, such as burglary and car theft, rather than limiting DNA profiling to serious crime. A further £58.8 million was allocated for the 2004/2005 financial year and funding is expected to continue, “to ensure that the database remains fully populated with the DNA profiles of all possible offenders coming to police attention.” The database is now the largest of its kind, holding over 3 million DNA profiles taken directly from people, and approximately 250,000 profiles derived from biological material obtained from unsolved crime scenes.

Police powers to take DNA have increased over recent years, and are now extremely broad. Since 2004, police have had the power to take a DNA sample, without consent, from any person “in police detention in consequence of his arrest for a recordable offence” (generally, an offence which carries a penalty of imprisonment). DNA can be taken upon arrest “whether or not the sample is required for the investigation of an offence in which the person is suspected of being involved.” Samples can also be taken from anyone suspected of, charged with, convicted of or cautioned in relation to a recordable offence.

**Case Study 01**

In 1999, police took a DNA sample from a man arrested on a drink driving charge. The man’s DNA profile was put on the national database. His profile linked him to the sexual assault and murder of a teenage boy in 1968. The man pleaded guilty to the offence and was sentenced to life imprisonment.
For each person tested, police take two DNA samples. One is sent to the laboratory for analysis, so a DNA profile can be obtained and loaded onto the database. The other sample is kept in storage as a back-up. The person’s name, date of birth, gender and ethnic appearance are recorded on the database, along with person’s DNA profile.

DNA samples and the information derived from them may be checked against other samples or information held by or on behalf of police or other law enforcement agencies. This is known as a “speculative search”, and people providing a DNA sample must be informed that the sample taken may be used for this purpose. Since the database came into operation, almost 600,000 links between suspects and crime scenes have been made. Approximately 40,000 links between crime scenes have been made. In 80 per cent of matches between person samples and crime scene samples the match related to an offence other than the one in relation to which the DNA sample was taken.

DNA samples and information derived from them can be kept until the person’s death, provided the sample has been lawfully obtained. Previously, samples from people who were acquitted or not prosecuted had to be destroyed. The law changed in 2001 following two high profile cases, one involving rape and one involving murder, where convictions were quashed because the DNA evidence adduced at trial should have been destroyed prior to the link being made. Now, whether profiles should remain on the database is a matter of operational discretion for the police force which takes the original sample. An extra 128,000 DNA profiles have been retained on the database since this amendment came into force.

Use of samples and information derived from them is still limited to the detection, investigation and prosecution of crime.

There have been several challenges to the indefinite retention of a person’s DNA in circumstances where the person has not been convicted of any offence. The House of Lords recently heard two appeals together. The first, , involved an 11 year old boy with no previous convictions, cautions or warnings. He had his fingerprints and DNA taken in relation to an attempted robbery. He was acquitted of the charge, but the relevant police agency retained the prints and samples. The second case, , involved a 38 year old man who was arrested for harassing his partner. Police took his fingerprints and DNA. The matter was ultimately discontinued but again police retained the prints and samples. Both appellants argued that the legislation allowing their DNA profiles to be retained in the absence of conviction for an offence breached Article 8 (which establishes a right to privacy) and Article 14 (which prohibits discrimination) of the European Convention on Human Rights. The validity of the United Kingdom legislation was upheld and the appeals dismissed. In relation to concerns about DNA samples (rather than profiles) being retained, one judge commented that “fears of what may happen in the future in light of the expanding frontiers of science is not relevant in respect of contemporary use of retained samples in connection with the detection and prosecution of crime.”

In the last decade, police in the United Kingdom have conducted almost 300 mass screenings, resulting in over 85,000 DNA samples being processed. Samples taken from volunteers as part of mass screenings are not routinely put on the database. Changes to the legislation in 2001 provided for profiles from volunteers to be kept on the DNA database, with the volunteer’s consent. Once consent is given it cannot be withdrawn – the volunteer’s profile is added to the database and from then until the person’s death it can be searched against profiles obtained from unsolved crime scenes. Retaining profiles of volunteers in mass screenings has been described as “beneficial”, on the basis that it helps increase the number of profiles on the database.

To help identify contamination of DNA samples by police officers, a Police Elimination Database has been established. Over 82,000 police officers have provided DNA samples to be kept on the database for elimination purposes. Providing a sample was voluntary for existing officers but is now a condition of employment for new officers.

Laboratories who process the DNA samples and manufacturers who make the equipment (such as the swabs and the plastic containers they are kept in) have also established databases of staff DNA profiles to help detect contamination. There have been a number of incidences of contamination, including two high profile murder investigations which were erroneously linked. It turned out the common profile came from a person who worked for the supplier of swab tubes, not from the crime scene.

The Forensic Science Service (FSS) maintains the IT infrastructure for the database and, for the first few years of operation, was also the only supplier of DNA profiles. Over time, other organisations sought approval as suppliers, including some regional police laboratories, and a number of private companies. Concerns grew about the FSS being both custodian of the database and the preferred supplier of forensic services, and in 2003 a Home Office review recommended that control of the national database be separated from the FSS. Accordingly, the DNA database is now independently governed by a board comprising the Home Office, Association of Chief Police Officers, Association of Police Authorities and a representative from the Human Genetics Commission. There is also a custodian, within the Home Office, who is responsible for scientific advisory, accreditation and monitoring. The FSS became a government owned company in December 2005 and is still responsible for the day to day running of the database, under contract to the Home Office.
The FSS is still the largest forensic services provider in the United Kingdom, with 77 per cent of the market share of the crime scene and person samples loaded onto the database. The FSS also plays a major role in developing new forensic technology. In November 2004, the FSS reported that it now processes over 40,000 DNA samples a month, using a fully automated system. DNA samples are now processed by machine from beginning to end without human intervention, to speed up the process. In May 2005, the FSS announced the launch of its Forensic Response Vehicle, a mobile laboratory which travels to crime scenes to perform on the spot forensic services. The vehicle is currently being trialled in five regional police services. The FSS explained:

Samples will be fed into the van, analysed, and checked against the National DNA Database and police will have a match report back in approximately eight hours. As well as being at least three times faster than the current DNA turnaround time, this cuts out administration effort as items of evidence have until now been passed along a supply chain which eventually sees them arrive at a laboratory. The advance has been made possible through technological developments allowing the condensing of an entire DNA-processing line (whole building size) into a mobile environment.

Fingerprints and footprints can also be captured digitally, analysed in the van, and compared with prints on relevant databases through satellite links, providing prompt results to police at the crime scene.

3.4.2. New Zealand

New Zealand established its national DNA Databank in 1996 – the second country in the world to do so, after the United Kingdom. The database has 50,000 profiles from suspects and offenders on it, and a further 10,000 profiles from unsolved crime scenes. The database is administered by the Institute of Environmental Science and Research, which is owned by the New Zealand Government, but operates with an independent board of directors.

The power to take people’s DNA and put it on the DNA Databank comes from the Criminal Investigations (Bodily Samples) Act 1995. Police officers can take samples from certain suspects and convicted offenders for comparison against samples obtained from crime scenes.

DNA samples can be taken from suspects by consent. If a suspect does not consent to giving a sample, a commissioned police officer may apply to a court for a “compulsion order” authorising police to take the sample. Unlike the position in New South Wales, there is no mechanism for police officers to compel a suspect to provide a DNA sample. Police officers can compel certain convicted offenders to provide a sample, but there is a mechanism for a hearing if the convicted offender objects to the compulsion notice.

DNA profiles of convicted offenders are stored on the database. Profiles of suspects can only be stored on the database if the suspect is convicted of the offence for which the sample was taken.

The New Zealand legislation was recently amended so that:

- DNA samples could be taken by buccal swab. Previously, if a person’s DNA profile was going to be put on the database, a blood sample had to be taken, either by fingerprick or directly from the vein.
- Compulsory DNA samples could be taken from convicted offenders for a broader range of offences, including burglary.
- Samples could be taken from people currently serving sentences for serious crimes, who were sentenced before the legislation commenced.

There was some consideration of whether police should be able to compel any person to provide a DNA sample on arrest, but this was rejected on the basis that it would be too great a departure from the current regime, which aims to allow police to take DNA samples with minimal infringement on people’s fundamental rights and freedoms.

New Zealand Police is required to publish detailed information about DNA sampling in its Annual Report, including:

- the number of samples taken by consent
- the number of applications for compulsion orders (for suspects and convicted offenders)
- the number of compulsion orders granted and refused (again for suspects and convicted offenders)
- the number of prosecutions where DNA evidence has been adduced and the result of the prosecution
- the number of occasions a police officer has used force to obtain a sample
- the total number of DNA profiles stored on the DNA database during the relevant period (broken down by number taken by consent and number taken by compulsion order)
• the number of links between crime scene and suspect samples, and
• the number of links between crime scene and convicted offender samples.209

People who provide DNA samples to the database are asked to volunteer detailed ethnic information, going back four generations. The Institute of Environmental Science and Research uses this information to compile population data for statistical use in the interpretation of DNA profiling in New Zealand.210

On occasion, police have used very large screenings for serious crimes which remained unsolved for a long time.

**Case Study 02**

An unknown offender was linked to eight different sexual assaults, committed between 1988 and 1996 in New Zealand. Voluntary DNA samples were taken from over 3,000 men. The offender was identified through this process, and was subsequently convicted.211

### 3.4.3. Ireland

Since 1994, DNA casework in Ireland has been conducted by the Forensic Science Laboratory, which is part of the Department of Justice, Equality and Law Reform. The laboratory has a database of about 700 DNA profiles obtained from unsolved crime scenes.212 However, at this stage there is no routine DNA sampling of suspects or convicted offenders the way there is in New South Wales and other jurisdictions.

In 2005, the Law Reform Commission of Ireland published a report on the establishment of a national DNA database. It made a number of recommendations, including the following:213

• A national DNA database should be established, containing DNA profiles of certain convicted offenders and people reasonably suspected of committing a serious crime. Profiles of convicted offenders should be retained indefinitely but profiles of suspects should be destroyed if proceedings have not commenced within 12 months, or the suspect is acquitted.

• DNA samples should only be taken under a clear legislative framework. Analysis of samples beyond the generation of a DNA profile should be prohibited.

• DNA sampling should not occur routinely on arrest. It should be limited to those suspected of having committed a serious offence (which includes the majority of assault, sexual offences, property offences and drug offences, but does not include public order offences). The DNA sample need not be relevant to the offence under investigation; it should be permissible to take a sample for speculative searching on the database, once a person is suspected of having committed a serious offence.

• The explanation for taking samples should be given in ordinary language, in a readily understandable manner.

• DNA samples should be taken by mouth swab, but alternative options should be available should the person providing the sample object to the proposed procedure.

• Mass screenings should have to be authorised in writing by a Chief Superintendent, after considering whether it is necessary for the proper investigation of the offence, and whether the same objectives could be achieved by less intrusive means.

• Biological samples from crime scenes should be retained indefinitely. DNA samples taken from people should be retained under strict security after the person’s DNA profile has been generated and loaded onto the database, but this should be reassessed in five years to see if the retention of samples – in addition to profiles – is actually necessary.

• All police officers and laboratory workers should be required to provide a DNA sample for inclusion on an elimination database. In addition, people working at crime scenes and relevant manufacturing staff should be encouraged to volunteer a sample for inclusion on an elimination database.

• An independent Forensic Science Agency should be created to store samples and manage the database, and should be oversighted by an external oversight commissioner.
The Garda Commissioner (the Irish equivalent of our Commissioner of Police) recently commented that the lack of a DNA database leaves police in Ireland "at a distinct disadvantage in crime investigation." The Director of Public Prosecutions has also backed calls for the establishment of a DNA database.

3.4.4. Canada

A DNA warrant scheme has been in place in Canada, under the Criminal Code, since 1995. Police may apply to a court for a DNA warrant authorising them to take a DNA sample from a person believed to have committed a designated criminal offence. The procedure is ex parte; meaning that police apply to the court in the absence of the person whose DNA is being sought. The application can be made by telephone if it is impractical to appear in person.

The threshold for obtaining a DNA warrant for a suspect is quite high. The court must be satisfied there are reasonable grounds to believe that a designated offence has been committed, there is a sample from the crime scene or victim available for comparison and the suspect was a party to the offence. Further, the court must be satisfied that issuing the warrant is in the best interests of the administration of justice, having regard to matters including the nature of the offence, and the circumstances of its commission.

In 1998, the Canadian government considered whether police should be able to take DNA samples from people on arrest or charge without prior judicial authorisation, but concluded this would be contrary to the Canadian Charter of Rights and Freedoms. It referred to decisions from the Supreme Court of Canada which recognises that there is a heightened expectation of privacy in regard to taking bodily substances, and in particular DNA, and that taking a DNA sample is a very serious intrusion into an individual’s security and privacy.

A national DNA database was established in 2000, under the DNA Identification Act 1998. It has a convicted offenders index and a crime scene index, and is operated by the Royal Canadian Mounted Police.

The Criminal Code was also amended so that a court can make an order authorising a DNA sample to be taken from a convicted offender for inclusion on the national database. If a person is convicted of a “primary designated offence” (such as murder, sexual assault or hijacking), there is a presumption in favour of the person’s DNA profile being stored on the database – the court must make the order, unless the impact on the offender’s privacy would be grossly disproportionate to the public interest in the administration of justice. If a person is convicted of a “secondary designated offence” (such as assault, arson, or break and enter), a DNA sample will be stored on the database only if the Crown applies for it, and the court is satisfied that it is in the best interests of justice to make the order. In these circumstances, the court must consider the person’s criminal record, the nature of the offence and the circumstances surrounding its commission, and the impact that retaining the DNA profile on the database would have on the offender’s privacy.

Case Study 03

A man was convicted of assault. The judge ordered him to provide a DNA sample to be stored on the national database. His profile linked him to a fatal stabbing in a convenience store nine years earlier. The man pleaded guilty to murder and was sentenced to life imprisonment.

Convicted offenders who were in a correctional centre at the time the legislation commenced could only have samples taken for the database in limited circumstances – if declared dangerous, if convicted of more than one sexual offence, or convicted of more than one murder. This is much more restrictive than DNA database schemes in other jurisdictions, where people serving custodial sentences for serious crimes are routinely DNA sampled.

DNA profiles from convicted offenders generally stay on the database indefinitely. If the person is found guilty but no conviction is recorded, the person’s profile only stays on the database for a year (or three years, if the person is conditionally discharged), provided the person does not reoffend in that period. A young person who is convicted of an offence has his or her DNA profile deleted if the young person’s criminal record is destroyed. DNA profiles from suspects can only be used in the investigation and prosecution of the offence for which they were taken – they cannot be included on the DNA database. DNA profiles from suspects must be destroyed if the person is excluded as a suspect, or is ultimately acquitted.
The Canadian National DNA Databank website publishes statistics (updated every fortnight) on how many DNA samples have been taken and how many people have been linked to crime scenes. It also gives details of the number of DNA samples rejected by the laboratory, and the reasons for this (for example, the wrong sample kit was used, or the offence for which the sample was not a “designated offence”). The database has over 77,000 DNA profiles on its convicted offender index, and over 21,000 profiles on its crime scene index.

The most recent Annual Report of the DNA database states that its priorities for the coming year are to increase the number of profiles on the database, and to expand the use of automation to boost the volume of samples processed, and the speed at which they are handled. Robotic processing is already used to speed up the analysis of DNA samples.

The Canadian Working Group on the Prevention of Miscarriages of Justice recently made recommendations aiming to ensure the DNA database is used to its full potential. It recommended that forensic materials be made available for independent testing at the request of the defence, that access to post-conviction DNA testing be considered, that education packages be developed for police, crown prosecutors and the judiciary, and that the expansion of the database be considered.

In May 2005, a number of amendments to the DNA legislation were passed, which expanded the types of offences for which compulsory DNA samples can be taken from convicted offenders. It is anticipated that an additional 4,700 convicted offenders will be eligible for compulsory DNA sampling as a result of this legislation.

A Parliamentary review of the DNA database legislation was conducted in late 2005.

### 3.4.5. United States

The United States has had a national DNA database since 1998. It has two indexes, one of convicted offenders (which currently contains over 2.3 million profiles) and one of DNA obtained from crime scenes (which currently contains over 100,000 profiles).

The national database is part of a three tiered Combined DNA Database Index System, known as CODIS. Profiles obtained at a local level can be uploaded onto a state database, and from the state database to the national database. The relevant authorities at the lower tiers decide which profiles will be uploaded to the higher tiers. The higher tiers also decide whether, according to the relevant state and federal legislation, profiles from the lower tiers can be accepted. The legislation governing the DNA database was recently amended to allow states to include profiles of all people “whose DNA samples are collected under applicable legal authorities." However, profiles from people who have a DNA sample taken on arrest who are not subsequently charged, and from people who voluntarily provide a DNA sample for the purpose of elimination, cannot be included on the national DNA database.

Initially, states only collected DNA profiles from people convicted of sexual assault and other violent crimes. Many states have since amended their legislation, to allow for the DNA sampling of a much broader range of convicted offenders. Approximately 70 per cent of states have adopted “all felony” provisions, requiring all convicted felons to provide a DNA sample. Some states require DNA sampling for conviction of “any crime”, which is a broader again. Very few states provide for inclusion of DNA profiles from suspects on the DNA database. Those which do, require the information to be removed from the database if the person is acquitted.

When DNA sampling was implemented widely across the United States, many local and state laboratories did not have the capacity to process the large number of DNA samples taken from convicted offenders and crime scenes. The DNA Analysis Backlog Elimination Act of 2000 set up a federal grant program, to reduce the national backlog. Under the scheme, laboratories could apply for funding to increase their own capacity for DNA analysis, or to outsource forensic services to accredited private laboratories.

In 2000 the Department of Justice created a “Convicted Offender DNA Backlog Reduction Program”, to pay for the processing of DNA samples taken from convicted offenders. At the time the program began, there were about 745,000 convicted offender samples awaiting analysis. The program aimed to accelerate the analysis of convicted offender samples so offender profiles could be uploaded onto the national database. In its first year of operation, approximately 40 per cent of states received grants. While these enabled almost 300,000 convicted offender samples to be analysed, the program did not clear the backlog, as many states were at the same time increasing the list of offences for which DNA samples could be taken. This meant that while more funding was available to process samples, more and more offenders were becoming eligible for DNA sampling. The program was also hampered by significant delays by states in uploading DNA profiles onto the national DNA database.

In 2001 the Department of Justice created a “No Suspect Casework DNA Backlog Reduction Program”, to pay for the analysis of biological material obtained from crime scenes, where no suspect has been identified. In its first year
of operation, 50 per cent of states received grants. However, the program does not appear to have achieved the results anticipated as the allocated funding has not all been drawn, and again there have been significant delays in uploading the relevant profiles onto the national database. In April 2004, it was estimated that over 540,000 criminal cases with biological evidence were awaiting DNA analysis. The Advancing Justice Through DNA Technology Act of 2003 and Justice for All Act of 2004 contained further measures to reduce the national backlog of crime scene and convicted offender samples. They also provided for improved access to post-conviction DNA testing by offenders. Eligibility depends on factors including the gravity of the offence for which the person has been convicted, whether the offender is currently in prison, whether identity was at issue in the trial, whether biological evidence from the crime scene has been maintained and whether there is good reason for it to be retested. Approximately 76 per cent of states have also enacted legislation providing for convicted offenders to apply for DNA testing. Some also provide for compensation for convicted offenders who are exonerated through post-conviction DNA analysis. The federal government has established a grant program where states can apply for funding to help cover the costs of post-conviction DNA testing.

The United States Department of Justice has conducted a number of reviews related to DNA sampling in the criminal justice system, and has found that laboratory practices and protocols were vulnerable to undetected non compliance by laboratory staff, that some unallowable and inaccurate DNA profiles have been uploaded onto the national DNA database, that laboratory backlogs have not been reduced in a timely manner, although funding has been allocated to address the problem, and that many DNA samples have been analysed but have not been uploaded onto the national DNA database.

There is some concern in the United States about the impact television shows about criminal investigations are having on trial outcomes. The so called "CSI effect" contends that juries are more likely to make a finding of guilt if DNA evidence is adduced, regardless of the weight the evidence should be given, and correspondingly that juries are reluctant to convict in the absence of forensic evidence, even if it has little weight or is not relevant in the circumstances.

Case Study 04

A 23 year old man had his DNA profile added to the Texas DNA database after being convicted of burglary. His profile linked him to the sexual assault of a young girl in 2001. The man alleged that his twin brother, who had the same DNA profile, was the perpetrator. After further investigation police alleged that both were involved, and that the first twin drove the car while the second twin sexually assaulted the girl in the back. Both were charged with aggravated sexual assault and aggravated kidnapping. The first twin pleaded guilty and testified against his brother at trial. The second twin was convicted as well.

3.5. International DNA databases

3.5.1. Europe

In 1996, Interpol established a European Working Party on DNA Profiling. Soon afterwards, the working party recommended that all countries in Europe be encouraged to introduce DNA profiling, if they had not already. It also examined the possibility of exchanging DNA profiles between European countries. It looked at two different options – establishing one large database of DNA profiles, or facilitating the exchange of information between national databases.

In 1997, the Council of the European Union (the main decision making body of the European Union) passed a resolution inviting member states to consider establishing national DNA databases, in accordance with the same standards and in a compatible manner. It recommended that further study be conducted with a view to establishing a system for DNA profiles to be exchanged at a European Union level.

In 2001, the Council made a further resolution to facilitate the exchange of DNA analysis results between member states. The Council commented that the exchange of DNA analysis results in Europe is essential to address crime in a systematic way, and stressed that the exchange of DNA analysis results “should only be carried out when there are reasons to believe that such an exchange would provide relevant information in a criminal investigation.”
The resolution established a European standard set of markers, to enable the comparison of samples analysed in different countries.\textsuperscript{254}

Although the exchange of profiles between European countries is encouraged, there is no European DNA database. However, the issue is still being debated. In July 2004 at a European Union meeting of interior ministers, the Home Secretary of the United Kingdom put forward a proposal for the development of a European DNA database.\textsuperscript{255} The proposal largely stemmed from media attention given to the murder of an English school girl in France in 1996. It was not until 2004 that a suspect was identified in the United States by a DNA match and was extradited to France to stand trial. The investigation has brought about changes to the French DNA database, and has prompted further discussion of the merits of a European DNA database.\textsuperscript{256}

In May 2005, seven European countries (Belgium, Germany, Luxembourg, the Netherlands, Austria, France and Spain) announced they would sign an agreement to allow automatic access to each other’s DNA and fingerprint databases. It appears that other European countries may join the arrangement some time in the future.\textsuperscript{257}

\subsection*{3.5.2. A global DNA database?}

In 1998, the Interpol European Working Party on DNA Profiling expanded, so that all continents would be represented.\textsuperscript{258} The group became known as the Interpol DNA Monitoring Expert Group. In 1999, it recommended that an Interpol DNA database be created, so DNA profiles could be exchanged by member countries through Interpol.

In 2001, Interpol indicated that it proposed to establish an international database of DNA profiles, for use by its member states. Member states would be able to submit DNA profiles for addition to the Interpol DNA database, and would be able to search the database, using an Interpol Internet browser. The system would compare profiles added to the database with those already on it, and would notify the member states involved in the event of a match. It would be the responsibility of the member states to act on this information.

Interpol made it clear that the database would be limited to the investigation of crime connected to more than one country:

\begin{quote}
The Interpol database is not intended to be a substitute for countries’ national databases. The only profiles submitted should be those of known criminals operating internationally or those of unknown stains found at crime scenes when it is suspected that the offender might be a foreign national.\textsuperscript{259}
\end{quote}

No biological material would be submitted to Interpol, only the DNA profile, which would be submitted electronically.\textsuperscript{260}

In 2002, the Interpol DNA Unit reported on its global DNA database inquiry. At the time, 179 countries were Interpol member states. The inquiry concluded that 43 per cent of these countries perform forensic DNA analysis, and 23 per cent have a DNA database. A further 15 per cent were planning to install a national DNA database in the near future.\textsuperscript{261} Interpol also reported that as a result of its inquiry, many countries requested Interpol’s assistance to help set up a national DNA database.\textsuperscript{262}

In 2003, a DNA database pilot project was set up at the Interpol General Secretariat. It aimed to provide an additional resource for member countries “to track down and identify those who commit cross border crimes.”\textsuperscript{263} In 2004, the first hit from the database was announced, after a request from Slovenia was matched to a profile previously submitted by Croatia.

\section*{Endnotes}

78\textsuperscript{ }\textsuperscript{ }Crimes Act 1900 s 353A, inserted by Crimes Amendment Act 1924 s 13.

79\textsuperscript{ }\textsuperscript{ }\textsuperscript{Fernando v Commissioner of Police (1995) 36 NSWLR 567 at 593 (Powell JA).}

80\textsuperscript{ }\textsuperscript{ }\textsuperscript{Crimes Act 1900 s 353A(3A) (repealed).}

81\textsuperscript{ }\textsuperscript{ }\textsuperscript{Road Transport (Safety and Traffic Management) Act 1999 s 27.}

82\textsuperscript{ }\textsuperscript{ }\textsuperscript{Road Transport (Safety and Traffic Management) Act 1999 s 20.}

83\textsuperscript{ }\textsuperscript{ }\textsuperscript{NSW Legislative Assembly Hansard, 31 May 2000, Mr P Whelan MP, p. 6293.}

84\textsuperscript{ }\textsuperscript{ }\textsuperscript{NSW Legislative Assembly Hansard, 31 May 2000, Mr P Whelan MP, p. 6293.}

85\textsuperscript{ }\textsuperscript{ }\textsuperscript{NSW Legislative Assembly Hansard, 31 May 2000, Mr P Whelan MP, p. 6293.
For example, NSW Legislative Assembly Hansard, 7 June 2000, Mr M Richardson MP, p. 6736.

For example, NSW Legislative Council Hansard, 21 June 2000, the Hon M J Gallagher MLC, p. 7275.

Griffith v R (1977) 137 CLR 293 at 327 (Jacobs J).

Orban v Bayliss [2004] NSWSC 426 at paragraph 30 (Simpson J).


DNA sampling and other forensic procedures conducted on suspects and volunteers under the Crimes (Forensic Procedures) Act 2000.
DNA sampling and other forensic procedures conducted on suspects and volunteers under the Crimes (Forensic Procedures) Act 2000

150 Police Powers and Responsibilities Act 2000 (Qld) Schedule 4. Note that police officers in New South Wales may search by way of medical imaging a person who is suspected of having internally concealed drugs: Police Powers (Internally Concealed Drugs) Act 2001 (NSW). A review by the Ombudsman found that this legislation is unworkable and has recommended it be repealed: see NSW Ombudsman, Review of the Police Powers (Internally Concealed Drugs) Act 2001, July 2005.

151 Police Powers and Responsibilities Act 2000 (Qld) s 277 and 279.

152 Police Powers and Responsibilities Act 2000 (Qld) s 318L.

153 See Police Powers and Responsibilities Act 2000 (Qld) s 318L(2) and Police Powers and Responsibilities Regulation 2000 cl 8L and Schedule 1.

154 Police Administration Act (NT) s 4.

155 Police Administration Act (NT) s 145B.

156 Police Administration Act (NT) s 145A.

157 Police Administration Act (NT) s 145.

158 Juvenile Justice Act (NT) s 31 and 31B.

159 Police Administration Act (NT) s 145A(4).

160 Police Administration Act (NT) s 4. As noted above, police officers in New South Wales may search by way of medical imaging a person who is suspected of having internally concealed drugs.

161 Police Administration Act (NT) s 147.

162 Police Administration Act (NT) s 147C(2).

163 Police Administration Act (NT) s 147A.

164 Police Administration Act (NT) s 147C(1).

165 See Police Administration Amendment (Forensic Procedures) Act (NT).

166 Northern Territory Legislative Assembly Hansard, 19 August 2004, Mr Henderson, Minister for Police, Fire and Emergency Services, Parliamentary Record No. 21.


168 Forensic Procedures Act 2000 (Tas) s 3. As noted above, police officers in NSW may search by way of medical imaging a person who is suspected of having internally concealed drugs.

169 Forensic Procedures Act 2000 (Tas) s 9.

170 Forensic Procedures Act 2000 (Tas) s 12.

171 Forensic Procedures Act 2000 (Tas) s 8(3).

172 Forensic Procedures Act 2000 (Tas) s 8.

173 Forensic Procedures Act 2000 (Tas) s 17.

174 See Forensic Procedures Amendment Act 2003 (Tas).

175 Laws in the United States, United Kingdom, Canada and New Zealand have been amended in recent years to expand the types of offences for which DNA samples can be taken.


178 Police and Criminal Evidence Act 1984 (UK) s 63(2A) as amended by the Criminal Justice Act 2003 (UK).

179 Explanatory notes to the Criminal Justice Act 2003 (UK) at paragraph 136. Formerly, a DNA sample could only be taken in the absence of consent if the person was suspected of having committed a serious offence, and the sample was likely to prove or disprove the person’s involvement.

180 Police and Criminal Evidence Act 1984 (UK) s 63.


184 Police and Criminal Evidence Act 1984 (UK) s 63A (1).

185 Police and Criminal Evidence Act 1984 (UK) s 63A(8B) and 65.

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188 See Criminal Justice and Police Act 2001 (UK).
192 Police and Criminal Evidence Act 1984 (UK) § 64(1A).
207 "Criminal Investigations (Bodily Samples) Amendment Act 2004 (NZ).
208 Report from the New Zealand Government Law and Order Committee on the Criminal Investigations (Bodily Samples) Amendment Bill, at 6.
209 Criminal Investigations (Bodily Samples) Act 1995 (NZ) s 76.
216 In Canada “peace officers” apply to courts for warrants to take DNA samples. “Peace officer” includes police officers, mayors, wardens, reeves, sheriffs, deputy sheriffs, sheriff’s officers, justices of the peace and others: see Criminal Code (Canada) s 2.
217 Criminal Code (Canada) s 487.05(1).
218 Criminal Code (Canada) s 487.05(3).
219 Criminal Code (Canada) s 487.05(1) and (2).
222 DNA Identification Act 1998 (Canada) s 5.
223 Criminal Code (Canada) s 487.051.
f 1994 (USA).
239 See Advancing Justice Through DNA Technology Act of 2003 (USA) s 103 and Justice For All Act of 2004 (USA) s 203.
241 Congressional Testimony of Dwight Adams, Deputy Assistant Director, Laboratory Division, FBI, before the House Committee on Government Reform, 12 June 2001.
244 See in particular the Justice For All Act of 2004 (USA) s 3600.
247 Justice For All Act of 2004 (USA) s 412.
251 Interpol is the International Criminal Police Organisation.
258 To date, Australia, Argentina, Austria, Belgium, China, France, India, Norway, South Africa, Spain, the United Kingdom and the United States have all been represented. The 2000 meeting of the Interpol DNA Monitoring Expert Group took place in Melbourne.

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Chapter 4. Implementation of the Act

This chapter describes the way the Act is implemented and the roles of each of the main stakeholders. The Attorney General is the minister responsible for the Act, but its implementation is largely split between NSW Police (investigation and sampling) and NSW Health (DNA analysis and database management). Experts who have specific skills or training also play a small role.

4.1. NSW Police at a corporate level

NSW Police implements the Act at a corporate level by maintaining Standard Operating Procedures (SOPs), training officers in forensic procedures, providing specialist forensic services and liaising with NSW Health.

4.1.1. The Forensic Services Group (FSG)

The NSW Police Forensic Services Group (FSG) provides specialist skills in the collection and preservation of physical evidence from crime scenes, suspects, victims and witnesses. Several units within FSG are involved with forensic procedures:

- The Forensic Procedures Implementation Team (FPIT) was created specifically to oversee the implementation and operation of the Act. FPIT maintains a webpage on the police intranet with practical information about forensic procedures, including answers to frequently asked questions and the forms police may need, such as applications for court orders. The site is easy to navigate and has all the relevant NSW Police policies and procedures in the one place. FPIT also runs a 24 hour hotline for officers seeking advice about forensic procedures, and distributes information about cold links to relevant local area commands. It is also responsible for notifying the laboratory when DNA profiles taken from suspects and volunteers are due for destruction. FPIT will also oversee the transference of DNA profiles from the NSW database to CrimTrac, the National DNA database, if it goes ahead.

- The Crime Scene Operations Branch is responsible for attending crime scenes to take photographs and collect physical evidence, including fingerprints and biological samples, like blood stains.

- The Criminal Identification Specialist Branch deals with fingerprints taken as forensic procedures.

- The Disaster Victim Identification Unit obtains DNA samples taken from relatives to help identify disaster victims.

The NSW Government announced in March 2005 that it will provide $26 million for forensic services equipment and personnel. This will be used to create 147 new forensic officer positions, in addition to the existing 345 scene of crime officers. It will also be used to create a new forensic science centre, which will amalgamate a number of existing forensic services within NSW Police into one central branch. It will examine, prioritise and analyse crime scene exhibits. However, it will not conduct DNA analysis – this will still be done by DAL with some analysis work being outsourced to a private laboratory.

4.1.2. Standard Operating Procedures (SOPs)

FPIT developed SOPs for police officers to use when conducting forensic procedures. There are 18 different SOPs, depending on the type of procedure and the attributes and circumstances of the person being tested, such as whether:

- the person is a suspect, volunteer or victim
- the person is an adult, child or incapable person
- the person is under arrest
- the person is Aboriginal or Torres Strait Islander
- the procedure is intimate or non-intimate, and
- the procedure is conducted by consent, court order or senior police officer order.
While some officers find this confusing, the idea is that once an officer has selected the appropriate SOP, he or she will be prompted at each step of the way, which makes it much easier for the officer to fulfill all the legislative requirements.

4.1.3. Training and accreditation

When the Act commenced, FPIT developed a training course so police officers could become appropriately qualified to conduct forensic procedures. The Act defines “appropriately qualified” as having suitable professional qualifications or experience to conduct the procedure.265

Training is usually conducted by FPIT or by a local area command’s education and development officer. The training course provides a comprehensive introduction to the Act, explaining police powers and responsibilities and giving an overview of the types of circumstances in which police can conduct forensic procedures. Ombudsman officers attended one of the forensic procedures training days run by FPIT and found the information relevant and appropriate.

Almost 7,000 officers have been trained in forensic procedures since the Act came into force. As figure 1 shows, the bulk of these were in the first year.

During the training session, police officers get hands on experience in how to take DNA by buccal swab and hair sample. The training does not cover how to take photographs or fingerprints, as police officers routinely take these at the time of charging. It does however cover the circumstances in which police can take photos or finger, hand, toe or foot prints as forensic procedures.

After completing the initial training course, there are no further assessment or training requirements. Officers remain accredited whether they conduct any procedures or not. However, FPIT still runs training continuously, for new officers and for officers who may already be accredited but would benefit from a refresher course. Some of the larger commands run forensic procedures training up to four times a year. FPIT also constantly monitors which ten commands are conducting the least training, and organises training for those commands. The Police Association of NSW suggested that forensic procedures training should be mandatory each year.266
Separate training courses are run for scene of crime officers, forensic service group officers and forensic investigators. These cover the collection of crime scene samples and specialist forensic procedures that require additional skills, such as gunshot residue tests, scrapings or lifting by tape, technical photographs and swabbing for trace DNA. NSW Police was unable to advise how many officers are accredited to conduct these types of procedures.

4.1.4. Publications

Since 2000, NSW Police has published 58 articles about forensic procedures in the Police Weekly magazine. This magazine is distributed to every police station and is also available on the police intranet so that every police officer has access to it. Articles advise officers of changes to legislation and policy, promote success stories where forensic procedures have produced good results, and discuss scenarios where the use of forensic procedure powers may be problematic.

Issues which have been covered include:

- compliance with court orders
- changes to procedures for submitting exhibits for DNA analysis
- picture identification; obtaining evidence from discarded items
- conducting forensic procedures on children and young people
- sharing forensic material with suspects
- recording forensic procedures on the custody management system
- the need to take a confirmation sample from a suspect identified through a cold link
- conducting forensic procedures on volunteers
- destruction of DNA samples taken through mass screenings, and
- police access to Guthrie cards (blood samples taken from babies at birth by heel prick).

These articles show that NSW Police and FPIT in particular have made a considerable effort throughout the review period to ensure officers are aware of their obligations under the Act, and are using their powers to conduct forensic procedures effectively and appropriately.

4.1.5. Monitoring by NSW Police

FPIT monitors implementation of the Act in many ways, such as keeping statistics of the number of forensic procedures conducted and outcomes for cold links, checking that forensic procedures have been recorded on COPS properly, and requesting the laboratory to destroy DNA samples which can no longer be retained.

The NSW Police Audit Group monitors the implementation of the Act through its audits of local area and specialist commands. Auditors examine the records and systems of individual commands to assess compliance with various legislative, procedural and policy requirements. The forensic procedures component of the audit involves selecting five DNA samples and checking that:

- the procedure was electronically recorded, was taken for an indictable offence and was taken by an appropriately qualified person
- the DNA sample was properly handled, by reviewing exhibit book entries, storage facilities (including temperature and security) and how long police took to send the sample to DAL, and
- police have taken appropriate action after receiving the DNA analysis results.

The auditors also examine the DNA kit register to account for the kits which have been used, and those which are still on hand.

It is positive to see that NSW Police is monitoring the systems and practices in individual commands to assess compliance with the legislative and policy requirements relating to forensic procedures. However, there are some aspects of the audit which in our view could be improved.

First, the current audit practice only deals with DNA samples. As discussed throughout this report, the Act provides for a variety of forensic procedures. Given that the majority of forensic procedures are DNA samples, it is appropriate
that the audit focuses on DNA sampling. However, there would be some merit in assessing records and systems relating to other types of forensic procedures as well.

Second, the audit does not appear to check the authority for conducting procedures. In our audit of local area commands, we found it difficult locating consent forms, senior police officer orders and court orders. Those which could be found were sometimes inaccurate. In our view, checking that procedures have been properly authorised should be a crucial part of the audit process.

Third, we gained an enormous amount of information through watching videos of forensic procedures. We saw whether the person undergoing the procedure had been provided with the right information, whether the person was cautioned, whether the procedure itself was conducted properly and whether the testing officer was sufficiently prepared. There would be considerable merit in the Audit Group watching the videos for the five procedures selected for auditing. We found that forensic procedures took an average of 23 minutes, so we estimate this would take approximately two hours. The length of time taken to conduct forensic procedures is discussed in section 8.3.2.

**Recommendation 01**

Audits of local area commands include a review of records and systems relating to other types of forensic procedures, as well as DNA samples.

NSW Police supports this recommendation. It also advised that Organisational Review and Support Teams, which perform functions previously performed by the Audit Group, currently audit fingerprint as well as DNA forensic procedures.

**Recommendation 02**

For each of the procedures selected for auditing, the auditor reviews the authority for the procedure (consent form, senior police order or court order) and watches the video of the procedure.

NSW Police does not agree that for each of the procedures selected for auditing, the auditor should watch the video of the procedure. Rather, videos should be viewed according to the level of risk determined during the review. According to NSW Police, mandatory viewing of forensic procedure videos “would have considerable resource implications and risk assessment issues.”

While we recognise that watching videos requires some time, we found watching videos of forensic procedures enormously beneficial for our review, especially for identifying good and poor practice, and urge NSW Police to give this recommendation further consideration.

### 4.2. NSW Police at a local level

NSW Police implements the Act at a local level through its local area and specialist commands. We surveyed all 80 local area commands about how they use their powers under the Act, and any difficulties they have identified. We also audited eight local area commands (four metropolitan and four regional) to see whether police at a local level are complying with their legislative obligations.

We found that most of the forensic procedures we audited had been conducted in a professional and competent manner. Some commands had developed good systems and processes and had clear strategies in place for the management of forensic procedures. However, we did identify some areas of concern.

We set out our observations and preliminary recommendations in a Discussion Paper, which we provided to NSW Police at a corporate level and to each of the local area commands we audited. We met representatives from FPIT, FSG and the Audit Group to discuss our preliminary findings and recommendations.
4.2.1. How easy is it for police officers to comply with the Act and SOPs?

In our survey, we asked local area commands how easy it is to comply with the legislation and SOPs. About half the commands said it was easy, and about half said it was difficult. Only three commands said it was very easy, and only one said it was very difficult.

Commands which had difficulty complying with the SOPs generally said there are too many to choose from. As discussed above, there are 18 different SOPs, depending on the type of procedure and attributes and circumstances of the person being tested. While this may appear daunting for officers, we note that the SOPs have been designed to maximise compliance with the legislation. To assist officers in selecting the correct SOPs, FPIT have included on their intranet site separate flowcharts on how to select appropriate SOPs. Separate flowcharts have been established for suspects, volunteers and procedures conducted in accordance with a court order. Once the appropriate flowchart has been selected, the officer can then use this to select the SOPs suitable to the status of the individual undergoing the procedure. The SOPs then take the officer through the process of conducting the forensic procedure and provide prompts at each step within the process. In our view, this is the best way to ensure officers who are not familiar with the Act meet their legislative obligations.

Over half of local area commands advised they had experienced problems with the Act. These related to:

- the complexity of the legislation
- difficulty arranging interview friends and independent persons for suspects and volunteers
- having to obtain court orders to conduct forensic procedures on children and the length of time it takes to obtain an order
- the length and complexity of the information sheet
- having to record forensic procedures on video
- sharing samples with suspects
- conducting procedures within the time limits specified in the Act
- difficulty transporting DNA samples to the lab for analysis (both metropolitan and regional commands made this comment)
- delays in obtaining DNA analysis results, and
- difficulty of obtaining DNA information from interstate.

We have addressed these issues in detail in the relevant parts of this report.

4.2.2. Impact of forensic procedure powers on police practice

The power to conduct forensic procedures has had a significant impact on the way police investigate and prosecute crime. Forensic procedures are conducted in every local area command in New South Wales, and some specialist commands as well, in relation to offences ranging from minor property offences through to the most serious types of crime. Police officers regard the power to conduct forensic procedures as extremely useful:

“it’s a fantastic investigative tool – it’s already had a huge impact, it’s the greatest step forward in investigation since finger printing.”

“It’s a great power, which police should have had ages ago.”

Some officers advised they consider using their power to conduct forensic procedures as a matter of course:

“Generally I refer, consider or use the Forensic Procedures Act with every arrest and/or investigation I undertake.”

Instead of asking, ‘Why should I do this procedure?’, police should be asking themselves, ‘Why shouldn’t I do this procedure?… Buccal swabs should be part and parcel of the charge process… We’re getting everyone accredited and trying to encourage officers to take a buccal swab where they can.”
Many officers emphasised that forensic analysis is a useful investigative tool, but that it cannot replace other avenues of investigation:

> DNA evidence is not the “ultimate” evidence. We hear that it is not an exact science. I have always been of the opinion, “Try and not go to court with only DNA.” However, in saying that, I am aware that we could not justify a lack of action just because DNA evidence is the only evidence. Investigators need to be aware that DNA evidence should only be used (where possible) as a supplement to the prosecution case.276

> DNA puts the person at the scene of the crime but does not put them there when the crime occurred. Therefore it is a good investigative tool but investigators still need to fully investigate all aspects of the matter.277

Interestingly, about a quarter of the local area commands we surveyed expressed concern about police officers becoming increasingly reliant on forensic analysis and losing traditional investigative skills:

> Police may place too much reliance on DNA evidence and may neglect other more traditional methods of investigation and corroboration rather than using DNA matching as one of a number of tools available to them.278

> Other investigative tools or methods may be overlooked or discounted. Investigations may be delayed whilst awaiting DNA results, risking the loss of other valuable evidence. There may be a loss of basic investigative skills amongst practitioners who rely too heavily on DNA or other similar procedures.280

Some officers also commented that they anticipate offenders will change the way they operate as DNA analysis becomes more routine:

> Offenders will go to further lengths to avoid leaving DNA evidence at a crime scene.281

> People will stop smoking.282

> Criminals will realise the useful technique of gathering DNA and will become more careful i.e. wearing gloves.283

### 4.2.3. Reluctance to conduct forensic procedures

Despite the significant impact forensic procedure powers have had on policing, we found that many officers are extremely reluctant to conduct the procedures. This is due to a number of factors. First, many officers commented that the legislation was too complex, and that there is too much to remember for people who do not conduct forensic procedures very often. One commented, “The complexity of procedures not only confuses the suspects, it actually confuses police... They made something which should be simple into something really complicated.”284 Another commented, “If you ever want to clear a room, just ask who wants to do a forensic procedure.”285 Another officer, who demonstrated a thorough understanding of the Act himself, said that others “avoid it like the plague.”286

Second, a large number of officers had been trained in forensic procedures but had no actual experience in conducting them. One officer told us it was two years since he had been trained, but at the time of the audit he had never conducted a forensic procedure. He indicated there would be many other officers in the same position. Another officer saw his name on a list of accredited officers and exclaimed, “What, am I accredited?” Another said of the other officers in his command, “Most of them are trained, but won’t admit it,” because they do not want to be asked to conduct a forensic procedure.

Some of the videos we watched showed officers who were ill prepared, the officer conducting the procedure spending a long time sifting through documentation, and sometimes reading out information which was not relevant in the circumstances.

Third, some officers objected to the length of time taken to conduct a forensic procedure. One officer said, “You have a five minute procedure but it takes two hours,” and commented that this was unfair and inconvenient for the suspect, as well as being impractical for police. Another officer commented that youth crime was a significant problem in the area, and that it was cumbersome having to obtain a court order to conduct a forensic procedure on a young person.

Some officers indicated they were reluctant to carry out procedures for fear of doing something wrong, which could lead to the evidence being excluded and the accused being acquitted:

> Who wants to shoulder this responsibility if you took the DNA for the Inner West rapist or a serial killer?287
Given the widespread reluctance to conduct forensic procedures, some commands end up relying on one or two officers to conduct all their forensic procedure work. Some officers resent this:

I’m sick of having to drop everything I do and go to another station (a custody station) and obtain the sample and then enter it up in the exhibits register.\(^{288}\)

In some areas, reluctance to conduct forensic procedures has contributed to a low level of use of the powers available under the Act. One commander we interviewed said that in his command, there had so far been only one DNA match, and no eliminations, despite the Act having been in force for several years. He realised that officers were hardly conducting any forensic procedures, even though there were many occasions where suspects fit the criteria. He attributed this to a lack of confidence among officers and the perceived length of time it takes to conduct a procedure.

The commands we audited had generally recognised this problem, and some had taken steps to address it.

### 4.2.4. Education and refresher training

We asked commands in our survey how often they ran forensic procedures training with 28 commands advising they conducted training at least once a year. Another 28 commands indicated they conducted training as the need arose. Some commands had not conducted any since the initial training when the Act came into force. In our view, officers should be required to complete refresher training in forensic procedures in order to remain accredited. It is clear that many officers have conducted very few, if any procedures, yet remain accredited.

One command we audited, which had identified that it was conducting very few forensic procedures, focused on education and training as a way of encouraging officers to conduct procedures more frequently. It promoted examples of successful investigations involving forensic procedures, and publicised information about forensic procedures internally.

Some officers we spoke to also suggested that videos of forensic procedures could be shown to the command so officers can see how procedures are conducted. Inexperienced officers could also start by getting involved in an easier role, like operating the camera, which may improve their confidence when it comes to conducting an actual procedure for the first time.

### 4.2.5. Specialist forensic procedure units

Another way of addressing widespread reluctance to conduct forensic procedures is to have a smaller group of officers who specialise in DNA and other forensic procedures. One command we audited had established a small team of officers who follow up links, investigate offences and interview suspects in relation to DNA. The command said this worked well, as these officers developed strong skills and experience in the area. Another command was canvassing the idea of having a specialist DNA unit within the command, but at the time of the audit, it was not clear whether this was possible given resource constraints.

We support the idea of having a smaller group of specialist officers conducting forensic procedures. In most commands, we found that this was happening in practice anyway, as the command tended to rely on a small group of officers who were competent and confident to conduct forensic procedures, while large numbers of accredited officers were not conducting any.

We also noted that in commands where a small group of officers conducted procedures on a regular basis and a senior officer had been appointed to oversee the process, there was greater compliance with the legislation. These commands also had clear policies that the staff were familiar with. Rather than avoid forensic procedures “like the plague,” we found the officers who routinely conducted forensic procedures demonstrated a good understanding of the legislation when interviewed and appeared confident and professional in the videos we watched. Several officers said they are comfortable with the legislation now, although it had been daunting at first:

I don’t have any problems with it. I love it. It’s a hassle to do it, yeah the paperwork’s annoying, but it’s part of the legislation. You should use it.\(^{289}\)

There is often criticism of the procedures by those who are not au fait with the SOPs. When an officer conducts a procedure it quickly becomes apparent that the actual procedure is straightforward.\(^{290}\)

In our view, having a smaller group of officers who are specially trained in forensic procedures would promote consistency and would be of benefit both to police and the people undergoing forensic procedures. The officers
conducting procedures would be more familiar with the equipment, processes and legislative requirements, and this would in turn minimise mistakes due to inexperience or nerves. The Police Association of NSW indicated in its submission that it would prefer forensic procedures to be conducted by a smaller group of specialists rather than by all general duties police officers.\textsuperscript{291}

We understand that NSW Police may not support this proposal, although we have never been formally advised of this. While no reasons have been provided, it appears that NSW Police prefers mass training and accreditation so that rostering and staff movements do not have to take into account who is accredited in forensic procedures. While NSW Police may not support the creation of specialist forensic procedures units across the board, it appears that this may suit some commands. In any case, as we have already found, this is what tends to happen in practice.

### 4.2.6. Creating a specialist forensic procedures portfolio

Several commands we surveyed indicated they had assigned responsibility for forensic procedures to the station manager, or some other person within the command. Others had gone further and created a specialist forensic procedures position within their command management framework. One commander we interviewed who had done this commented that “forensic procedures has basically become an industry of its own,” and saw the need for a specialist position, like the youth liaison officer, domestic violence liaison officer and crime manager positions.\textsuperscript{292}

The introduction of a dedicated forensic procedures officer might also address many of the concerns identified during our audits. These concerns include:

- consent issues – ensuring records of consent are centrally maintained within the command and easily accessible
- senior police officer orders – ensuring these are centrally recorded within the command and that the senior officer is independent to the investigation
- court orders – establishing a record of court orders sought and granted within the command, especially those relating to extension of the retention period for DNA profiles
- forensic procedures records – establishing systems within the command to record all types of forensic procedures conducted, not just DNA procedures
- electronic recordings – maintaining the video recordings of forensic procedures, and
- accountable items – regularly auditing the accountable items relating to forensic procedures, such as the sample kits, consent and exhibit books.

A dedicated forensic procedures officer could also be held accountable for maintaining good record keeping systems, ensuring all forensic procedures equipment is operating correctly, reviewing videos to assess compliance with the legislation and SOPs, identifying training needs in the command and auditing accountable items. He or she could also manage the way forensic procedures are used in the command to see whether they are effective in the investigation and prosecution of crime – something which we found does not generally occur.

Creating a forensic procedures portfolio would also give other stakeholders – including FPIT, FSG and DAL – a central point of contact within each command, which they have indicated would be enormously helpful.\textsuperscript{293} It would create a forensic procedures network, which does not exist at the moment. Officers from all over the state contact FPIT if they have problem, but there is no way FPIT can get in touch with commands easily. At the moment, FPIT is limited to publishing information on the intranet or in the Police Weekly, but this largely relies on individual officers seeking out the information. Having a designated forensic procedures officer in each command would ensure key information about forensic procedures actually reaches its audience.

Having a designated forensic procedures officer in every command is a good initiative, and seems like it may be more achievable than setting up specialist forensic procedures units.
Recommendation 03

NSW Police ensure officers conducting forensic procedures have appropriate training and experience. In particular, NSW Police consider implementing the following reforms.

a. NSW Police develop a forensic procedures portfolio in each local area or specialist command, with a designated and fully trained forensic procedures officer responsible for the portfolio.

b. Individual commands consider developing a small team of officers with forensic procedures expertise who will primarily be responsible for conducting forensic procedures in those commands.

c. Accreditation for a police officer to conduct any forensic procedure be conditional upon annual training.

In its response to the draft report, NSW Police stated that it supports recommendation 3(a) and "will determine the appropriate area to undertake its implementation." With regard to recommendation 3(b) which received in principle support, NSW Police agreed that better control and management of forensic procedures is required and advised that it is assessing methods for improvement in this area.

NSW Police did not support recommendation 3(c) and stated that it will review this area to ensure issues concerning adequate training are addressed. However, NSW Police does not believe that annual retraining of police officers in conducting forensic procedures is appropriate.

4.2.7. Posters, quick guides and access to reference material

We were pleased to see that many of the commands we audited kept hardcopies of information sheets to be given to people undergoing forensic procedures, lists of accredited officers, names of acceptable persons from local community groups to act as interview friends and instructions on how to conduct forensic procedures. However, the information at some commands was out of date.

Some commands had put together their own comprehensive forensic procedure information kit, which included copies of all the relevant SOPs, information sheets, application forms for orders and instructions on how to use video cameras. Some also included information specific to the command, such as contact details for independent persons and interview friends. Most commands had dedicated storage areas for all the equipment and police policies relating to forensic procedures next to or in the testing area. This was fairly standard across the eight commands we audited.

4.2.7.1. Electronic or hardcopy SOPs?

Most of the commands we audited kept hardcopies of the SOPs with the rest of their forensic procedures equipment, although some had only printed out copies of the SOPs most frequently used, usually those for taking buccal swabs and hair samples from adult suspects.

Representatives from FPIT and the NSW Police Audit Group have indicated a preference for police officers to use electronic rather than hardcopy versions of the SOPs, as this ensures they are always relying on the most complete and up to date version. Although the SOPs are easily accessible on the FPIT intranet site, many officers prefer a hardcopy, especially if they need the SOPs in front of them while conducting the procedure (forensic procedures are usually conducted in an interview room, with no intranet access). We also note that 94 per cent of commands have printed a hardcopy of the SOPs to keep on hand – so this is clearly what happens in practice.

If each command had a designated forensic procedures officer, as we recommend, this person could be responsible for ensuring the hardcopy SOPs are complete and up to date.

In addition, and so that NSW Police supports the preferred practice of its officers, FPIT could establish a hard copy manual as well as electronic material and provide updates as they occur.

4.2.8. Recording forensic procedures

Most of the problems we identified through our survey and audits stemmed from incomplete or inaccessible records, rather than the forensic procedures themselves. Indeed, we found records management systems and practices varied considerably between commands, and sometimes within a single command. This means that officers have to learn different processes each time they move within the organisation. Not only is this inefficient, it poses a risk to NSW
Police, if it means accurate records are not being kept. As one officer explained, “The mechanics fall over, because there are so many different people doing it so many different ways.”

Many of the officers we interviewed indicated they would like to receive advice and support from a corporate level about how to manage documentation relating to forensic procedures. As one officer commented, “The emphasis has been on taking samples, not on what to do with them afterwards.”

Most of the commands we surveyed were unable to provide all the information we requested, either because it had not been kept, or because it was not accessible on COPS. This included fairly basic information, such as:

- the number and type of DNA forensic procedures conducted in the command
- the number of non-DNA forensic procedures conducted in the command (in some cases, commands were unable to advise if any non-DNA procedures had been conducted), and
- the number of applications made for court orders for juveniles or incapable persons, and whether any of these applications were refused by magistrates.

4.2.8.1. Forensic procedure records on COPS

We found significant problems with the way forensic procedures are recorded on the police computer system, COPS. Records varied greatly – some detailed the bag and/or barcode numbers for DNA samples, and others only included exhibit references. Records relating to non-DNA forensic procedures often had even less information recorded. We also found a number of duplicate entries for forensic procedures where it was unclear if the same procedure had been recorded more than once by mistake, or whether police had in fact conducted more than one procedure.

Dates were often inaccurate, because the information had been recorded some time after the procedure had been conducted, or because the date had been changed to reflect when the DNA analysis results were received. This is of particular concern given the legal requirement that samples may have to be destroyed after 12 months. If the date is not recorded correctly, FPIT will not be alerted if the sample is due for destruction.

Locations were often incorrect too. This could be because the COPS record referred to the location of the offence rather than the location where the procedure had been conducted. Sometimes the officer who had conducted the procedure had moved to another command and the COPS record showed the officer’s current location, instead of where the procedure was conducted. In many cases the location record was correct, but the documentation relating to the procedure had been taken to another command which was investigating the offence.

We also had difficulty interrogating COPS for information about procedures conducted by order of a court or senior police officer. In some cases it was recorded in the event narrative that police had applied for an order, but it would be better for this to be recorded in the specific forensic procedures record.

The reason for this is that, each week, FPIT compares the records of DNA samples submitted to DAL against the relevant forensic procedure record on COPS. FPIT checks that a COPS entry has been made, and checks that the bag identification number and sample barcodes are the same in the police and DAL records. FPIT acknowledges that, contrary to police policy, not all officers are recording forensic procedures properly. FPIT has put instructions about how to record a forensic procedure on COPS on its website.

4.2.8.2. Recording forensic procedures in the custody management system

Forensic procedures can also be recorded in the custody management system, which is also part of COPS. Custody records include such information as when the procedure was conducted and how long it took, whether the person resisted the procedure, whether the person is Aboriginal or Torres Strait Islander and whether police have assessed the person to determine if they are capable of understanding the general nature and effect of the procedure.

We examined the custody records relating to each of the forensic procedures we audited. Very few had complete records. Some did not refer to the forensic procedure at all; although it was clear from other documentation that one had been conducted. Others referred to it in one of the other fields – such as the record of the suspect’s movements or communication – rather than in the designated forensic procedure field.

Since the Act came into force, officers have been able to record the forensic procedures either as separate ‘forensic procedure’ incidents on COPS, or in the custody management system. NSW Police is considering whether to change this so that all forensic procedures conducted on volunteers and convicted offenders would be recorded as ‘forensic procedure’ incidents on COPS, while all forensic procedures conducted on suspects would be recorded in the custody management system.
NSW Police has long term plans to replace its computer mainframe and for this reason is reluctant to make significant changes to the current capabilities of COPS, such as including prompts to remind officers of the information which needs to be included in the electronic record. Clearly, NSW Police should take into account the current difficulties in recording forensic procedures in its development of the new computer system. In the meantime, efforts should be focussed on ensuring officers make appropriate records of forensic procedures. We again note that having a small number of specialist officers in each command would facilitate this outcome.

4.2.8.3. Proposed forensic procedures register

We note that NSW Police is in the process of reviewing the way commands keep records of forensic procedures. The Audit Group is developing a single book where all the relevant information can be recorded – the DNA kit register, the exhibit book, the tape register, and a copy of the source of authority for the procedure (i.e. the consent form, senior police officer order or court order).

A standardised forensic procedure book would mean that every command has an easily accessible central record of information relating to forensic procedures. At the moment, this information is scattered across a variety of sources, if it is recorded at all. As one officer commented:

There are problems in the recording of forensic procedures and the data this report requires cannot accurately be ascertained from the records currently kept. There are too many books... There needs to be one book for all procedures. 308

Having a single register would streamline the paperwork associated with forensic procedures, which is currently repetitive and time consuming. In our survey, many officers complained about there being too many different forms and books to fill in, which can be confusing. In the videos we watched, it was not unusual for police to ask a suspect or volunteer for the same information several times – once when the information was being provided, again when filling in the consent form, and a third time when completing the form in the DNA sample kit. As one officer commented:

By the time people have come around to have the forensic procedure conducted, they’ve gone through the custody process, the ERISP [Electronic Recorded Interview of Suspected Person]... Sometimes they’re asked the same question, like “Are you Aboriginal?” four or five times. It’s like, don’t you blokes listen? 307

The new register should reduce this replication wherever possible.

The new register should also make it clear that the person undergoing the procedure is either a suspect or a volunteer, and cannot be both. We found many instances where officers did not understand this distinction. This is discussed further in section 7.1.

4.2.8.4. Recording forensic procedures on video

The Act provides that an electronic recording of a forensic procedure which is no longer required for investigative or evidentiary purposes may be retained for such other purposes, and for such period, as the Commissioner of Police directs. It must be stored in a way that protects it from any unauthorised access or use. 308 We understand it is current police policy to keep all forensic procedure videos indefinitely.

We found that most commands kept forensic procedure videos centrally, in the exhibits room or a locked cupboard, although some kept the tape on the relevant brief of evidence or at another location, in storage. Some commands had a clear system for identifying individual forensic procedure videos, while others had them all in a box, with no way of finding a particular tape.

Many commands keep tapes indefinitely, while others keep them for a specified number of years. Some destroy tapes when the case is finalised, or when the sample taken is due for destruction. Some indicated they kept tapes of procedures taken in relation to serious crimes, otherwise they destroyed them after the matter went to court. Some officers requested clearer guidance on how long videos should be kept. 309

It is not clear for what purpose forensic procedure videos are kept, especially if the matter has gone to court, or the sample itself has been destroyed. This is something which should be clarified by NSW Police and communicated in relevant SOPs and training.
Recommendation 04

NSW Police finalise, as a matter of priority, a single forensic procedures register for use in commands.

Recommendation 05

NSW Police review present electronic (COPS and custody management) recording of procedures to ensure a standard process which enables meeting legal requirements including detention requirements.

Recommendation 06

NSW Police consider the development of a hard copy forensic procedures manual.

Recommendation 07

NSW Police take into account problems with recording forensic procedures demonstrated in this review in its mainframe replacement program.

Recommendation 08

NSW Police clarify in SOPs for how long and in what circumstances electronic recordings of forensic procedures (video tapes) should be kept, and provide this advice to commands.

NSW Police is largely supportive of these recommendations. It supports recommendations 4, 5, 7 and 8 in full. Recommendation 4 has already been partially implemented, and a project to address recommendation 5 is currently being undertaken. In response to recommendation 6, NSW Police has advised that it will “assess the way it delivers SOPs to officers including ease of access to printed material and methods to ensure currency of information”.310

NSW Police has also recently advised that it has applied for funding for a new forensic information management system.311

4.2.9. Auditing at a local level

The Audit Group advised that commands should be auditing forensic procedures as part of the command management framework (CMF), the NSW Police mandatory risk based compliance system. Conducted at a local level by command officers, CMF audits include checking procedural requirements have been met, the quality of records, security and disposal of exhibits.312 The Audit Group visits commands to check that audits are being conducted properly.

Through our survey and audits of local area commands, we found that some commands were conducting regular audits of consent books, DNA sample kits and forensic procedure exhibit records. Some had also reviewed a proportion of forensic procedure videos to assess compliance with the Act and identify areas which could be improved. However, there was little consistency between commands in the frequency and thoroughness of audits, and it was clear that commands would benefit from more specific guidance on this.
The Audit Group has advised that it has recently revised the audit tool, and that the new tool, and the new forensic procedures register, should make it easier for commands to comply with forensic procedure auditing requirements. The proposed forensic procedures portfolio and designated officer could support this process by reviewing the electronic recording of procedures on COPS and in custody management records.

4.3. NSW Health and the Division of Analytical Laboratories (DAL)

The Division of Analytical Laboratories (DAL) in Lidcombe is responsible for analysing DNA and maintaining the DNA database.

DAL is part of NSW Health, and provides services to a number of government agencies, including NSW Police, the Coroner, the Director of Public Prosecutions, Corrective Services and the Defence Force. DAL provides laboratory services other than DNA analysis, such as toxicology and drug analysis. DAL also gives expert evidence in court proceedings.

To gain an understanding of how the DNA analysis process works and the interaction between DAL and NSW Police, we conducted an investigation into the services provided by DAL. The information obtained during our investigation is used throughout this report.

4.3.1. Arrangements for the DNA analysis service

In December 2000, DAL and NSW Police entered a Deed of Agreement for the provision of DNA analysis services in accordance with the Act. DAL agreed to carry out DNA testing, provide reports to NSW Police, give evidence in court and create and maintain the DNA database system. The Deed of Agreement commenced on the day the Act came into force, and expired at the end of 2003. The original Deed of Agreement has been extended as an interim measure, while DAL and NSW Police discuss the terms of a new agreement.

DAL’s provision of DNA analysis services to NSW Police is oversighted by the DNA Advisory Committee, which has representatives from DAL, NSW Police, Legal Aid, NSW Privacy, the Director of Public Prosecutions and the National Institute of Forensic Science.

DAL currently uses the “Profiler Plus” system of DNA analysis. For a detailed explanation of this system, see R v Gallagher [2001].

4.3.2. Accreditation

DAL is reviewed every two years by the National Association of Testing Authorities (NATA), and was most recently reaccredited in July 2004. NATA reported that the laboratory “demonstrated a good level of compliance with NATA’s accreditation requirements,” and commented that DAL staff “demonstrated a good level of knowledge and sound judgment in their areas of expertise.” However, it also commented that DAL has a significant backlog, which “is having an impact on staff morale,” and recommended “that a case be made to address the resource workload imbalance that is apparent.” NATA reviewed a number of areas, including DAL’s document control and internal auditing, as well as technical requirements. It made some observations and recommendations, which DAL has since addressed to NATA’s satisfaction. DAL’s continued accreditation is also contingent on meeting NATA’s research and development requirements. DAL has expressed concern that it does not receive funding for research and development. DNA technology is changing rapidly, and new methods need to be tested before they can be introduced at DAL.

Until recently, DAL was the only laboratory accredited to conduct DNA analysis for NSW Police. However, NSW Police is currently conducting a three month trial (from May to August 2006) outsourcing some DNA analysis to a private laboratory.

4.3.3. Costs of the DNA analysis service

The NSW Treasury provided the initial funding required to set up the DNA analysis service at DAL. Since then, DAL has been funded in part by NSW Health (approximately $0.9m) and in part by NSW Police (approximately $4.1m). NSW Police pays for the DNA analysis on a lump sum basis rather than fee for service model.

In 2002, the Public Accounts Committee’s inquiry into court waiting times recommended, as an immediate measure to improve the effectiveness and efficiency of exhibit analysis, that the Deed of Agreement between NSW Police and
NSW Ombudsman

DNA sampling and other forensic procedures conducted on suspects and volunteers under the Crimes (Forensic Procedures) Act 2000

DAL be reviewed, and that consideration be given to a fee for service payment system and the devolution of the Forensic Service Group budget to local area commands and crime agencies. We understand that there has been some discussion about developing a fee for service costing model, but this has been difficult due to a number of factors, including how to charge for additional work, such as report writing and further analysis of complex samples, and whether to charge a premium for urgent cases requiring immediate turnaround. We understand that DAL continues to send NSW Police an invoice for forensic services each month, which is not based on the number of samples processed.

DAL has reviewed the funding provided to other laboratories in Australia, and found that New South Wales spent 79c per resident on DNA analysis last year, which is less per capita than Victoria ($1.08), Queensland ($1.70), South Australia ($3), Northern Territory ($3.65) or the United Kingdom ($8.75). In addition, New South Wales has a higher crime rate than some of these jurisdictions.

4.3.4. Benchmarking

The Public Accounts Committee’s Inquiry into court waiting times recommended in 2002 that DAL review best practice in other Australian states and territories (and overseas where relevant) both in terms of funding and laboratory operation for all forms of criminal exhibit analysis undertaken. As well as reviewing funding, we understand DAL has also examined the output of other laboratories, their turnaround times, and the development of new technologies, including robotics.

4.3.5. Difficulties at DAL

It is clear that DAL experiences significant difficulties in providing its DNA analysis services to NSW Police. DAL receives more crime scene samples for analysis than it has the capacity to process, which results in a growing backlog of unexamined crime scene samples. While DAL is generally able to meet urgent requests on an ad hoc basis, it is unable to meet the turnaround times set out in the initial agreement between NSW Police and DAL. DAL is also concerned about staff shortages, lack of space and ageing infrastructure at the laboratory. We found that DAL has made great efforts to address the problems it faces, and where possible has implemented strategies to improve its service delivery. However, it appears that DAL cannot significantly improve its DNA analysis service without additional resources.

In September 2004, NSW Police set up a DNA Liaison Unit on the premises at DAL. The purpose of the unit was twofold – first, to remove unnecessary casework from the system, by culling exhibits no longer requiring analysis; and second, by screening casework coming in, to ensure that only suitable items were submitted. The Liaison Unit was initially set up as a trial but NSW Police has recently advised that it has made an ongoing commitment with DAL to continue to staff this unit.

As outlined above, the NSW Government announced in March 2005 that it would provide $26 million for a new police forensic science centre, and 147 additional forensic officer positions, which means more forensic evidence will be collected for use in the investigation and prosecution of crime. However, DAL will still conduct most of the DNA analysis, and has not at this stage received any extra funding. NSW Police anticipates that DAL will benefit indirectly from the new arrangement, as the proposed forensic science centre in NSW Police will assess all casework being submitted to DAL for analysis and filter out any unnecessary work. It is not clear at this stage whether this will actually reduce the amount of casework DAL ultimately has to examine.

The role of DAL and the difficulties outlined above are discussed in more detail in chapter 10 on DNA analysis and permitted matching and chapter 14 on destruction of forensic material.

4.3.6. Other health professionals

Doctors, nurses, dentists and dental technicians may be asked to carry out certain types of forensic procedures, like blood samples, genital swabs, pubic hair samples and dental impressions. However, there is no obligation on health professionals to carry out forensic procedures. Suspects are also entitled to have a medical practitioner or dentist of choice present while a forensic procedure of this type is carried out.

We note that in 2000, NSW Health issued a circular outlining its position on the carrying out of forensic procedures. It notes that medical staff are not required to carry out forensic procedures and that “NSW Health does not regard
the carrying out of these forensic procedures to be a part of its overall functions and health service staff will not be expected to perform the functions.\textsuperscript{324}

The Australian Dental Association advised that it is not aware of any problems relating to the Act and that it was satisfied the interests of dentists have been taken into consideration.\textsuperscript{325}

4.4. Who is responsible for the DNA database?

The Act provides for a “responsible person” to be responsible for the care, control and management of the DNA database system. The key responsibilities of this person are:

- To determine who may access information stored on the DNA database. Only people who have been authorised by the responsible person may access this information.\textsuperscript{326}
- To ensure forensic material is destroyed, as required by the Act.\textsuperscript{327} It is an offence to cause any identifying information about a person obtained from forensic material taken from the person under the Act to be retained on the database at any time after the Act requires it to be destroyed. This includes being reckless as to the recording or retention of information after the required destruction date.\textsuperscript{328}

Although these responsibilities are crucial to the operation and security of the DNA database, the legislation does not specify who the “responsible person” is. Our investigation of services provided by DAL demonstrated that this may be directly impacting on compliance with relevant legal obligations. DAL sought legal advice on this issue, and was advised that it is not clear who the “responsible person” is. For the avoidance of doubt, the Commissioner of Police and Chief Executive Officers of Western Sydney Area Health Service and ICPMR/DAL signed a minute of authorisation in January 2005, authorising appropriate senior scientists to access information on the database.\textsuperscript{329} We understand DAL has requested that this issue be clarified by a working group run by the Criminal Law Review Division of the Attorney General’s Department.\textsuperscript{330} In our view, this is a matter that requires speedy resolution and absolute clarity.

**Recommendation 09**

The Attorney General clarify who is the “responsible person” for the purposes of the *Crimes (Forensic Procedures) Act 2000*.

In its response to our draft report, the Attorney General’s Department advised it is “currently instructing in the preparation of a Bill that will allow the responsible person for the DNA database to be more readily identified.”\textsuperscript{331}

NSW Police supports the recommendation.\textsuperscript{332}

**Endnotes**


\textsuperscript{265} Or is qualified under the regulations: *Crimes (Forensic Procedures) Act 2000* s 3.

\textsuperscript{266} Police Association of NSW submission, March 2005.

\textsuperscript{267} NSW Police advice received 22 June 2005.

\textsuperscript{268} Audit tool used by the NSW Police Audit Group, accessed on the NSW Police intranet in May 2005.

\textsuperscript{269} NSW Police response to Ombudsman draft report, 2 June 2006.

\textsuperscript{270} NSW Police response to Ombudsman draft report, 2 June 2006.

\textsuperscript{271} 38 commands said it was easy and 35 said it was difficult, three commands did not answer the question.

\textsuperscript{272} Ombudsman audit of local area commands, confidential interview with police officer, 27 September 2004.

\textsuperscript{273} Ombudsman audit of local area commands, confidential interview with police officer, 27 September 2004.

\textsuperscript{274} Police Association of NSW submission, March 2005.

\textsuperscript{275} Ombudsman audit of local area commands, confidential interview with local area commander, 6 September 2004.

\textsuperscript{276} Confidential LAC survey response.
DNA sampling and other forensic procedures conducted on suspects and volunteers under the Crimes (Forensic Procedures) Act 2000

277 Confidential LAC survey response.
278 Confidential LAC survey response.
279 Confidential LAC survey response.
280 Confidential LAC survey response.
281 Confidential LAC survey response.
283 Confidential LAC survey response.
284 Ombudsman audit of local area commands, confidential interview with police officer, 6 September 2004.
286 Ombudsman audit of local area commands, confidential interview with police officer, 29 September 2004.
289 Police Association of NSW submission, March 2005.
290 Ombudsman audit of local area commands, confidential interview with police officer, 8 September 2004.
291 Confidential LAC survey response.
293 Ombudsman audit of local area commands, confidential interview with police officer, 6 September 2004.
295 NSW Police response to Ombudsman draft report, 2 June 2006.
296 Responses to Ombudsman LAC survey.
298 Ombudsman audit of local area commands, confidential interview with police officer, 6 September 2004.
299 Information obtained through Ombudsman review of COPS records.
300 Information obtained through Ombudsman review of COPS records.
301 Information obtained through Ombudsman review of COPS records.
302 Information obtained through Ombudsman review of COPS records.
304 See further discussion of custody management records in section 8.3.2.1.
305 NSW Police response to Ombudsman draft report, 2 June 2006 and further advice from FPIT, 30 June 2006.
306 Confidential LAC survey response.
307 Ombudsman audit of local area commands, confidential interview with police officer, 3 August 2004.
308 Crimes (Forensic Procedures) Act 2000 s 10.
309 Responses to Ombudsman LAC survey.
310 NSW Police response to Ombudsman draft report, 2 June 2006.
311 NSW Police further response to Ombudsman draft report, 28 July 2006.
312 NSW Police Command Management Framework auditing tool for DNA exhibits, provided 2 June 2006.
316 Fax from DAL, 15 August 2005.
317 Legislative Assembly Hansard, 18 October 2005, the Hon Carl Scully MP, Minister for Police and Minister for Utilities; and Attorney General’s Department response to Ombudsman draft report, 5 May 2006.
318 DAL comments on Ombudsman statement of provisional findings, 17 October 2005.
319 Public Accounts Committee Inquiry into Court waiting times Report June 2002 at p. 23 to 24.
320 Public Accounts Committee Inquiry into Court waiting times Report, June 2002 at 23 to 24.
We received a complaint regarding a blood sample which was taken from a suspect just after the Act commenced. This complaint is discussed in detail in section 15.3.4, see complaint number 5. The requirements for taking blood samples are detailed in section 8.6.3.

**Crimes (Forensic Procedures) Act 2000** s 50 and 108.


**Chris Wilson, President, Australian Dental Association, advice received 16 February 2005.**

**Crimes (Forensic Procedures) Act 2000** s 92.

**Crimes (Forensic Procedures) Act 2000** Part 10 and s 94.

**Crimes (Forensic Procedures) Act 2000** s 94(1).

**DAL is a division of the Institute of Clinical Pathology and Medical Research, which is part of the Western Sydney Area Health Service.**

**Professor Mark Findlay, in the Independent Report of the Crimes (Forensic Procedures) Act 2000, University of Sydney, 2003 recommended that resolution of this issue lies in the redefinition of ‘responsible person’ p. 27.**

**Attorney General’s Department response to Ombudsman draft report, 5 May 2006.**

**NSW Police response to Ombudsman draft report, 2 June 2006.**
Chapter 5: A snapshot of forensic procedures

This chapter provides an overview of how forensic procedures are used by NSW Police. In it we look at who forensic procedures are being conducted on and the types of crimes where forensic procedures are used. We also consider the geographic spread of forensic procedures across the state to see whether there are any differences in the way the forensic procedures legislation is used in metropolitan and regional areas. We found that the most common type of forensic procedure is a DNA sample conducted by buccal swab on a male suspect in a metropolitan area.

Our review period began when the Act commenced, on 1 January 2001, and finished on 30 November 2004. In this chapter, we have included data up to 31 December 2004, so we have four complete years of data.

5.1. How many forensic procedures have police conducted?

In the first four years after the Act came into force, police conducted over 10,000 forensic procedures on suspects and volunteers.

5.1.1. How many of these were DNA samples?

Table 1 shows the total number of forensic procedures conducted on suspects and volunteers between 1 January 2001 and 31 December 2004, by procedure type.

Table 01: Total number of forensic procedures conducted.

<table>
<thead>
<tr>
<th></th>
<th>DNA</th>
<th>Photo</th>
<th>Prints</th>
<th>Other</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspects</td>
<td>7,309</td>
<td>1,719</td>
<td>120</td>
<td>307</td>
<td>9,455</td>
</tr>
<tr>
<td>Volunteers</td>
<td>814</td>
<td>39</td>
<td>29</td>
<td>11</td>
<td>893</td>
</tr>
<tr>
<td>TOTAL</td>
<td>8,123</td>
<td>1,758</td>
<td>149</td>
<td>318</td>
<td>10,348</td>
</tr>
</tbody>
</table>

Source: COPS download data provided by FPIT on 15 July 2005.

This shows that that the vast majority of forensic procedures conducted during the review period were DNA samples. In particular:

- 77 per cent of the forensic procedures conducted on suspects were DNA samples. Photographs were the second most common procedure, at 18 per cent.
- 91 per cent of the forensic procedures conducted on volunteers were DNA samples.

However, we found it difficult to ascertain the exact number of DNA samples taken from suspects and volunteers during the review period, as the information we received from NSW Police and DAL was inconsistent.

FPIT provided COPS records which indicated that of the 10,348 forensic procedures conducted on suspects and volunteers, 8,123 were DNA samples. We also asked NSW Police how many DNA samples it had submitted to DAL for analysis during the same period, expecting it would be the same number. However, NSW Police advised that it had submitted 9,618 DNA samples taken from suspects and volunteers for analysis – almost 1,500 more than had been recorded on COPS.

We also asked DAL how many DNA samples from suspects and volunteers it had received from NSW Police during the same period. It advised that it had received a total of 9,797 samples, which is closer to the second figure provided by NSW Police.
We asked NSW Police why there is such a significant discrepancy in its records, and were advised it is largely due to recording errors on COPS. FPIT tries to correct these, by monitoring samples submitted to DAL for analysis, and checking them against the relevant COPS entries.\textsuperscript{336}

It is not clear why there are discrepancies between police and DAL records as to the number of DNA samples submitted for analysis. However, this discrepancy is much smaller.

### 5.1.2. The numbers are going up

Figure 2 shows the annual number of DNA samples submitted by NSW Police to DAL for each of the years since the Act came into force.

![Figure 02: Annual number of samples submitted by NSW Police to DAL.](image)

Source: Information provided by NSW Police on 22 June 2005. (n = 9,618)

Despite the discrepancies in records of forensic procedures, it is clear that more and more forensic procedures are being conducted each year. Figure 2 shows that the number of DNA samples taken from suspects rose significantly for each year of the review period. The number of samples taken from volunteers has also increased significantly.

### 5.1.3. How many profiles are on the DNA database?

During the review period, DAL loaded over 25,000 DNA profiles from people onto the DNA database, including 8,699 from suspects and 831 from volunteers.\textsuperscript{337} We understand the rest were from serious indictable offenders.

DAL has also loaded over 14,000 DNA profiles derived from crime scene samples onto the database.\textsuperscript{338}

### 5.1.4. ‘Other’ forensic procedures

‘Other’ procedures include hand swabs (including swabs taken for gunshot residue tests); samples taken by scraping, vacuum suction or lifting by tape; physical measurements taken for biomechanical analysis; dental impressions; and impressions of wounds.

COPS records indicate that 318 ‘other’ procedures were conducted. However, there is no further information about the type of procedure.

In our survey, we asked all 80 local area commands which of these procedures they had used. 20 commands (25 per cent) advised they had conducted gun shot residue tests. The other procedures were conducted even less frequently; eight commands (10 per cent) had taken samples by scraping, vacuum suction or lifting by tape, and five (6 per
cent) had taken physical measurements for biomechanical analysis. None had any records of having taken dental impressions.339

5.2. Where are forensic procedures being conducted?

During the time of our review, New South Wales was divided into five policing regions, each of which was further divided into a number of local area commands. Depending on its size, a local area command may have more than one police station in it. The five regions were:

- Inner Metropolitan – which has 47 police stations (including 2 shopfronts) across 23 commands
- Greater Metropolitan – which has 52 police stations (including 3 shopfronts) across 24 commands
- Southern – which has 130 police stations across 11 commands
- Northern – which has 107 police stations across 11 commands
- Western – which has 119 police stations across 11 commands

Not all police stations have facilities for charging suspects. Forensic procedures are only conducted in stations with suitable charge facilities.

![Figure 03: Regional Commands Map.](source: NSW Police Intranet.)
Table 2 shows the rate at which forensic procedures were conducted in each region during the first four years of the Act’s operation.

**Table 02: Procedures conducted on suspects and volunteers by region.**

<table>
<thead>
<tr>
<th>Region</th>
<th>Population of region*</th>
<th>Procedures conducted on suspects and volunteers**</th>
<th>Rate of forensic procedures conducted per 100,000 of the region population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Metropolitan</td>
<td>1,584,297</td>
<td>2,971</td>
<td>188</td>
</tr>
<tr>
<td>Greater Metropolitan</td>
<td>2,108,993</td>
<td>3,326</td>
<td>158</td>
</tr>
<tr>
<td>Southern</td>
<td>1,938,394</td>
<td>1,046</td>
<td>54</td>
</tr>
<tr>
<td>Northern</td>
<td>1,014,010</td>
<td>1,597</td>
<td>157</td>
</tr>
<tr>
<td>Western</td>
<td>477,364</td>
<td>880</td>
<td>184</td>
</tr>
</tbody>
</table>

* Region population is the total of the relevant local area command populations, according to NSW Police. NSW Police based its figures on the 2001 census data.

** Procedures conducted on suspects and volunteers reflects the total number of forensic procedures conducted on suspects and volunteers between 1 January 2001 and 31 December 2004. These figures represent the total number of forensic procedures conducted and not the number of individual persons undergoing forensic procedures. They do not include forensic procedures conducted by specialist commands.

Source: NSW Police Intranet as at 16 February 2005.

Table 2 shows that, as expected, a very small proportion of the population in each region underwent a forensic procedure during the review period. Southern Region conducted significantly fewer forensic procedures per capita (54 per 100,000) than the other regions (between 157 and 188 per 100,000).340

NSW Police also has a number of specialist commands, which are not attached to a particular geographic area. Some of these conduct forensic procedures, for example the State Crime Command (which focuses on organised crime, fraud, child protection and sex crimes, homicides and other operations), the Forensic Services Group, the Counter Terrorism Command, the Firearms Registry and the Professional Standards Command. We have included forensic procedures conducted by specialist commands in our overall statistical analysis, but not in the regional analysis.

5.2.1. Difference between metropolitan and regional areas

Metropolitan police are conducting significantly more forensic procedures than regional police. This would be expected, given there are more people and higher levels of crime incidents recorded in metropolitan areas. However, it also appears that distance and a lack of appropriate facilities in some regional police stations may contribute to lower numbers of forensic procedures. We also found that some regional commands may prefer to rely on more traditional policing methods, rather than wait for long periods for DNA analysis results which constitute the vast majority of forensic samples.341

We also found that many police officers are quite reluctant to conduct forensic procedures, which in some areas has contributed to a low level of use of the powers available under the Act. For example, one commander we interviewed said that in his command, which is in a rural area, there had so far been only one DNA match, and no eliminations, despite the Act having been in force for several years. He realised that officers were conducting very few forensic procedures, even though there were many occasions where suspects fit the criteria. He attributed this to a lack of confidence among officers and the length of time it takes to conduct a procedure.342 We found this reluctance to conduct forensic procedures in both metropolitan and regional areas, but it appears that its effect is less pronounced in metropolitan areas as there are generally more officers who are willing to conduct procedures.
5.3. Who are police conducting forensic procedures on?

Figure 4 shows the number of forensic procedures conducted on suspects and volunteers, by region.

Figure 04: Forensic procedures conducted on suspects and volunteers by region.

![Bar chart showing the number of forensic procedures conducted on suspects and volunteers by region.]

Source: COPS download data provided by FPIT on 15 July 2005 (n = 10,348). Number of forensic procedures indicates the number of procedures conducted between 1 January 2001 and 31 December 2004, as recorded on COPS.

Figure 4 shows that police conduct many more forensic procedures on suspects than on volunteers. In the five regions, police conducted between six and 11 per cent of their forensic procedures on volunteers.343 However, specialist commands conducted a higher proportion of their forensic procedures on volunteers – 28 per cent.344

5.3.1. Procedures by gender

Figure 5 compares the number of forensic procedures conducted on male and female suspects in each region.

Figure 05: Forensic procedures conducted on suspects by gender.

![Bar chart showing the number of forensic procedures conducted on male and female suspects by region.]

Source: COPS download data provided by FPIT on 15 July 2005 (n = 9,455)
Figure 5 shows that, of the forensic procedures police conducted on suspects, 93 per cent were on men and seven per cent were on women. This was fairly constant across the five regions and the specialist commands, ranging from six per cent of procedures being conducted on women (in Northern region) to nine per cent of procedures being conducted on women (in Western region).

Figure 6 compares the number of forensic procedures conducted on male and female volunteers in each region.

![Figure 6: Forensic procedures conducted on volunteers by gender](image)

Source: COPS download data provided by FPIT on 15 July 2005 (n = 893)

Figure 6 shows that, of the forensic procedures police conducted on volunteers, 81 per cent were on men and 19 per cent were on women. It is not clear why there are so many more male than female forensic procedure volunteers. Volunteers are typically people who have a legitimate reason for leaving their DNA at a crime scene or on a victim. For this reason we would expect that the number of forensic procedures conducted on male and female volunteers would be more representative of the general population.

5.3.2. Procedures conducted on children and young people

Police conducted less than 500 forensic procedures on children and young people in the four years since the Act commenced (450 on child suspects and 27 on child volunteers). Again, DNA samples were the most common type of procedure conducted on children, and photographs were the next most common.

We found that forensic procedures were conducted in the child population at a much lower rate than in the adult population, at 67 per 100,000, compared to 206 per 100,000.
Figure 7 shows the number of forensic procedures conducted on child suspects, by the age of the child.

Figure 07: Age of child suspects undergoing forensic procedures.

![Bar chart showing the number of forensic procedures conducted on child suspects by age.](chart)

Source: COPS download data provided by FPIT on 15 July 2005. (n = 450).

Figure 7 shows that most forensic procedures conducted on child suspects (70 per cent) were conducted on children aged 16 or over.349

About half of the 27 forensic procedures conducted on child volunteers were conducted on children over 16.350

Police conducted only slightly fewer forensic procedures on children in regional areas than they did on children in metropolitan areas. By contrast, they conducted only about half as many forensic procedures on adults in regional areas as they did on adults in metropolitan areas.351

Of the forensic procedures police conducted on child suspects, 96 per cent were on boys and only four per cent were on girls. This imbalance is slightly more pronounced than the overall figure, of 93 per cent on male suspects and seven per cent on female suspects.352

By contrast, 44 per cent of child volunteers were male and 56 per cent were female. This is closer to the general population than the overall figures for forensic procedure volunteers, 81 per cent of whom were male and 19 per cent were female.353

5.3.3. Procedures conducted on Aboriginal and Torres Strait Islanders

Of the procedures conducted on suspects six per cent involved people police identified as Aboriginal or Torres Strait Islander. This was higher in some regions (14 per cent in Western Region, and eight per cent in Northern Region) and lower in others (three per cent in Southern Region, and four per cent in the metropolitan regions). However, the proportion of procedures conducted on Aboriginal or Torres Strait Islander suspects is likely to be higher than these figures suggest as for almost 6,000 procedures (or 61 per cent of procedures conducted on suspects) police recorded the person’s Aboriginal or Torres Strait Islander status as unknown.354 It is of significant concern that the Aboriginal or Torres Strait Islander status was unknown for such a large proportion of suspects undergoing forensic procedures.
For procedures conducted on child suspects, nine per cent of procedures involved children police identified as Aboriginal or Torres Strait Islander. We note this is higher than the overall proportion of Aboriginal or Torres Strait Islander suspects, which is six per cent.

Of the forensic procedures conducted on Aboriginal or Torres Strait Islander suspects, 90 per cent were conducted on men and 10 per cent on women. This indicates the proportion of forensic procedures conducted on women was slightly higher for Aboriginal and Torres Strait Islander suspects than in the general population.

NSW Police did not record Aboriginal or Torres Strait Islander status for volunteers. We understand this is because the status is recorded in the custody management system, and volunteers are generally not in police custody when undergoing forensic procedures.

### 5.3.4. Procedures on identical twins and triplets

DNA evidence is compelling because it is generally regarded as a unique identifier. However, identical twins have the same DNA profile. This can be a problem where DNA evidence has implicated a twin, but there is no evidence indicating which twin committed the offence.

We are aware of one instance where this has occurred in New South Wales. Police investigating a break and enter offence obtained a blood sample from clothing and bed sheets at the crime scene. A profile derived from the bloodstain matched the profile of a convicted offender on the DNA database. This person was one of three triplets, each of whom had an extensive criminal record. Two of the brothers were identical, and shared the same DNA profile, while the third had a different profile. The identical brothers were both interviewed in relation to the offence and neither made any admissions. DNA obtained from various other crime scenes implicated one or both of the brothers. We understand these matters are still under investigation but without any further evidence, it is unlikely the investigations will progress.

### 5.3.5. Procedures on incapable persons

We were unable to comment on the number of forensic procedures conducted on incapable persons. The information provided from COPS does not include information on procedures conducted on incapable persons nor are any accurate records maintained of applications for court orders.

### 5.4. Outcomes

Police conduct forensic procedures in relation to all sorts of offences, ranging from the less serious “volume crime” offences (typically property crimes such as break, enter and steal, and steal motor vehicle) through to the most serious types of offences (murder, manslaughter and sexual assault). The following discussion briefly examines outcomes from DNA sampling of suspects. The distinctions between warm and cold links, and DNA sampling outcomes, are detailed in section 10.6 of this report.

#### 5.4.1. Warm links

A “warm link” occurs where police take a DNA sample from a person because they suspect it will link the person to DNA obtained from the crime scene or victim, and it does. NSW Police does not keep any central record of warm links, so it is not possible to state in how many cases a DNA sample taken from a suspect resulted in the suspect being linked to the crime scene. However, DAL estimates that about 3,170 warm links were made during the review period. This suggests that suspects have been positively linked to crime scenes in about a third of the DNA samples police have submitted for analysis. However there is no accurate way to review the number of convictions resulting from warm link, as this information is not collected.

We have made a number of recommendations regarding the recording of database links in chapter 10.

#### 5.4.2. Cold links

When DAL puts a suspect’s DNA profile on the database, and it matches a profile obtained from some other unsolved crime scene, this is called a “cold link”. Cold links can also be made between profiles obtained from crime scenes. While this does not identify an individual, it does indicate the same unidentified person may have been present at both
crimes scenes and therefore it may provide valuable intelligence information to investigating police. Both NSW Police and DAL keep records of cold links.\textsuperscript{360} DAL advised it made over 4,000 cold links during the review period. The majority of these were for high volume offences, including break, enter and steal (2,884), stolen motor vehicle (585), steal from vehicle (245) and malicious damage (47). However, a significant number were for serious offences, including murder and manslaughter (13), sexual assault (68), robbery (267) and assault (25).\textsuperscript{361} These results are very good – they demonstrate that DNA analysis is providing further evidence in unsolved crimes, including the most serious types of offences.

DNA profiling may link an offender to more than one crime scene. DAL advised that during the review period, 124 people were each linked to between five and ten crime scenes, and 17 people were linked to more than 10 crime scenes (including one person who was linked to 25 different crime scenes). In total, 2,251 people have been linked to crime scenes through cold links. These results demonstrate that DNA analysis has been useful in identifying patterns of possible repeated criminal conduct.\textsuperscript{362}

5.4.3. Convictions

We sought to assess how often DNA analysis results in a suspect being prosecuted for or convicted of an offence. Looking at the number of convictions stemming from cold links is a limited way of measuring the effectiveness of forensic procedures.\textsuperscript{363} However, it appears that neither DAL nor NSW Police keep complete records relating to criminal proceedings stemming from all DNA links.

FPIT has kept records of convictions stemming from cold links since the New South Wales DNA database commenced operation in late 2001.\textsuperscript{364} Table 3 shows the number of suspects identified through cold links and any convictions recorded, from January 2002 to December 2004, for some categories of crime.

In this table, identifications are recorded by FPIT as the number of instances that a person is ‘cold’ linked to a crime scene. Included in this figure will be persons counted more than once when they have had multiple links. The number of convictions recorded represents the number of offences that have been finalised in court, not necessarily the number of people convicted. This is because one person may be convicted of multiple offences.\textsuperscript{365}

### Table 03: Results of cold links by offence type 2002 to 2004

<table>
<thead>
<tr>
<th>Offence</th>
<th>No. of person identifications</th>
<th>No. of convictions recorded*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murder</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Attempted murder</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Armed robbery</td>
<td>200</td>
<td>32</td>
</tr>
<tr>
<td>Aggravated robbery</td>
<td>55</td>
<td>3</td>
</tr>
<tr>
<td>Sexual assault</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>Aggravated sexual assault</td>
<td>35</td>
<td>18</td>
</tr>
<tr>
<td>Assault</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Aggravated assault</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Home invasion</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Break enter and steal</td>
<td>2,917</td>
<td>1,512</td>
</tr>
<tr>
<td>Aggravated break enter and steal</td>
<td>73</td>
<td>27</td>
</tr>
<tr>
<td>Steal motor vehicle</td>
<td>589</td>
<td>229</td>
</tr>
<tr>
<td>Malicious damage</td>
<td>50</td>
<td>17</td>
</tr>
<tr>
<td>Steal from motor vehicle</td>
<td>286</td>
<td>166</td>
</tr>
<tr>
<td>Stealing</td>
<td>50</td>
<td>27</td>
</tr>
</tbody>
</table>

* Convictions are recorded against the period in which the identification occurred. The number of convictions may be higher than the number of identifications because a person may be identified for one type of offence but convicted for another.

Source: Information supplied by FPIT on 22 June 2005.
These figures show that the number of identifications and convictions stemming from cold links are much higher for less serious types of crime than for more serious types of crime. This may be expected given that police would put considerably more resources into the investigation of serious crime at the time, rather than waiting for a suspect to be identified through a cold link, which may occur some time later. Also, by definition, volume crime offences are significantly more common.

Figure 8 shows the trends for the volume crime of break, enter and steal.

Figure 08: Cold links for offence of break, enter and steal between January 2002 and December 2004

<table>
<thead>
<tr>
<th></th>
<th>January to June 2002</th>
<th>July to December 2002</th>
<th>January to June 2003</th>
<th>July to December 2003</th>
<th>January to June 2004</th>
<th>July to December 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification</td>
<td>210</td>
<td>566</td>
<td>471</td>
<td>619</td>
<td>468</td>
<td>593</td>
</tr>
<tr>
<td>Charges</td>
<td>162</td>
<td>416</td>
<td>370</td>
<td>467</td>
<td>362</td>
<td>364</td>
</tr>
<tr>
<td>Offences</td>
<td>213</td>
<td>452</td>
<td>398</td>
<td>484</td>
<td>381</td>
<td>382</td>
</tr>
<tr>
<td>Convictions</td>
<td>172</td>
<td>368</td>
<td>324</td>
<td>354</td>
<td>195</td>
<td>99</td>
</tr>
</tbody>
</table>

Source: Information provided by FPIT on 22 June 2005. Convictions are recorded against the period in which the identification occurred.
Figure 9 illustrates similar trends for steal motor vehicle offences.

In figures 8 and 9, the differences between identifications, charges, offences and convictions result because identifications relate to the number of persons identified by a cold link (persons linked to multiple crime scenes are counted more than once), the charges relate to the number of persons charged (not the number of offences they are charged with as offences are listed separately) and the convictions are the number of offences that have been finalised by a court. In looking at the convictions, less convictions are recorded for more recent identifications/charges as more of these matters have not, as yet, been finalised in court hearings. In addition, as more profiles are placed on the DNA database, more identifications have occurred over time.

5.4.4. Eliminations

DAL advised that it is not possible to report on the number of people eliminated from police investigations through DNA analysis, but estimates that about 480 suspects have been eliminated since the Act commenced.

The fact that no warm link is made does not necessarily exclude a suspect from investigation. For example, it could be that no DNA was found on the item submitted for analysis, or that somebody else’s DNA was on the item. This does not mean the suspect was not involved. This is especially so in cases where there are multiple offenders.

The estimates provided by DAL suggest that for every elimination, there are between six and seven warm links. Expressed another way, of all the cases where DNA analysis results in either a warm link or an elimination, 87 per
cent result in a warm link and 13 per cent result in an elimination. We note that this does not include the significant number of cases where there is no warm link but the suspect could not be eliminated either. However, it does suggest that DNA analysis is, in the majority of cases, used to produce evidence tending to confirm, rather than disprove, a suspect committed an offence. Given that police must suspect on reasonable grounds that a person has committed an offence before asking the person to provide a DNA sample, we would expect that DNA analysis is used in the majority of cases to implicate rather than exculpate suspects.

5.4.5. Cases pending analysis

In August 2004, there were over 7,000 cases awaiting analysis at DAL. A case may involve single or multiple items of crime scene evidence requiring analysis. Analysis had been started in about half of these cases. Most of the cases in the backlog are less serious, high volume offences, such as break, enter and steal (2,633 cases), stolen motor vehicle (1,188), steal from vehicle (279) and malicious damage (169). However, there are also a significant number of serious offences, including murder and manslaughter (116), attempted murder (42), sexual assault (504), robbery (903), assault (219) and home invasion (40).

5.4.6. DNA and the reinvestigation of old cases

DAL advised that there are crime scene samples from about 1,500 criminal offences committed between years 1986 and 2000 which are being held in storage. DAL has examined samples relating to 164 of these cases, most of which were unsolved sexual assaults. DNA testing has been completed in relation to 100 of these, and DNA profiles were obtained from 84. Half of these matched profiles already on the database – 33 to convicted offender profiles and the rest to other cases.

Case Study 05

21 year old Natalie Henderson was murdered in her home in 1990. Her clothes had been removed and she had been strangled with a football sock. Police were unable to identify the offender, but retained a blood stained pillowcase and shirt which had been found at the scene. In 2002, DAL retrieved the items from the freezer, for forensic analysis. DAL obtained a DNA profile from the items, which implicated Peter Stone, a convicted offender whose profile had been put on database while he was serving a custodial sentence between 1998 to 2001 for threatening to inflict actual bodily harm on his partner’s daughter. Stone pleaded guilty to the offence and was sentenced to 21 years imprisonment. This was the first murder conviction in New South Wales where the offender was identified through a cold link.

Case Study 06

24 year old Johanne Hatty was murdered in a reserve near her house in 1984. She had been strangled with a rope and then sexually assaulted. Police were unable to identify the offender at the time, but reopened the case in 2004. DAL obtained a DNA profile from sperm left on the deceased’s clothes and body. Police obtained DNA profiles from a number of people who had been under investigation for the offence when it was first investigated, including David Fleming, who had since moved to Victoria. Fleming’s profile matched the profile obtained from the crime scene, and he was extradited to Sydney for the court proceedings.

DAL is of the view that many more old unsolved crimes, particularly sexual assaults, could be resolved if it had the resources to analyse all the crime scene samples in storage.

5.4.7. Outcomes for procedures other than DNA sampling

NSW Police does not keep central records on outcomes for other types of forensic procedures, so it is difficult to gauge how effectively these powers are being used. This is especially so for the procedures other than prints and photographs, where the type of procedure is not even recorded on COPS. It appears that with improved record keeping, NSW Police would be in a better position to assess whether it is using its powers to conduct forensic procedures effectively, which would be beneficial both to NSW Police and the broader community. We note that we have made recommendations to this effect in chapter 4.
Endnotes

333 Crimes (Forensic Procedures) Act 2000 s 121.

334 We asked FPIT for details of all forensic procedures recorded on COPS between the commencement of the Act and 31 December 2004, for all suspects and volunteers. FPIT advised that 10,553 forensic procedures had been conducted. We reviewed this information and found that 205 procedures should not have been included, because the procedures related to victims (196), convicted offenders (3) or were samples taken from crime scenes, rather than forensic procedures conducted on people. We have reported on the DNA sampling of convicted offenders separately: see NSW Ombudsman, The Forensic DNA Sampling of Serious Indictable Offenders under Part 7 of the Crimes (Forensic Procedures) Act 2000 (August 2004), and victims are excluded from the Act. We excluded these 205 procedures from our statistics, which left 10,348 forensic procedures conducted on suspects and volunteers.

335 DAL response to Ombudsman investigation notice, 24 February 2005.

336 FPIT further explained: “Where samples are taken in conjunction with another forensic procedure (such as a hand-swab) where the officer had recorded both samples as DNA samples with the same barcode for example; or where two officers involved in an investigation have entered the same procedure (with one of them having to ‘dummy’ the barcode to get it into the system). What this means is that a total download of forensic procedures (rather than Buccal/Hair/Blood) will produce a level of incorrect or duplicate entries which are sometimes difficult to distinguish in a report from ‘correct’ entries. This does not pose a great problem on a case-by-case basis when one persons record is being assessed, as the record of the valid sample is normally apparent”: Advice from FPIT received on 1 September 2005.

337 DAL response to Ombudsman investigation notice, 24 February 2005. This includes profiles taken from 421 volunteers after Part 8 of the Act commenced and 410 prior to Part 8 commencing. This is the number of profiles which have been put on the database, not the number of people whose profile is on the database.


339 Responses to Ombudsman LAC survey.

340 Forensic procedures conducted on correctional centre inmates who are being investigated for further offences are included in the number of forensic procedures conducted on suspects. For this reason, it is expected that regions with higher prison populations would have a higher rate of forensic procedures conducted per capita.

341 Responses to Ombudsman LAC survey.

342 Ombudsman audit of local area commands, confidential interview with local area commander, 6 September 2004.

343 Proportion of forensic procedures conducted on volunteers for each region was 6 per cent for Northern region, 7 per cent for both metropolitan regions, and 11 per cent for Southern and Western regions: COPS download data provided by FPIT on 15 July 2005.

344 COPS download data provided by FPIT on 15 July 2005.

345 COPS download data provided by FPIT on 15 July 2005. Note that COPS records indicate the number of forensic procedures conducted, not the number of people who have undergone procedures. People who have undergone more than one procedure should be counted each time. We also note that gender was not recorded for 85 forensic procedures. We determined gender for each of these by reviewing the COPS narrative.

346 This figure reflects the forensic procedures conducted on children aged between 10 and 17. It does not include forensic procedures conducted on children under 10, who are not covered by the Act. These are discussed separately at 9.5.

347 277 DNA samples were taken from child suspects and 21 from child volunteers. 128 photographs were taken of child suspects, but only 4 of child volunteers: COPS download data provided by FPIT on 15 July 2005.


349 The number of 17 year olds includes some suspects police recorded as being under 18, although the procedure date indicates they would have been 18 or 19. We found that procedure dates on COPS are often incorrect so we have included these procedures, as police treated the person as a child for the purposes of the Act.

350 Of the 27 procedures conducted on child volunteers, 4 were conducted on children aged 12 and 13; 9 on children aged 14 and 15; and 14 on children aged 16 and 17.

351 Police conducted 243 forensic procedures on children in metropolitan areas and 201 on children in regional areas. They conducted 6,050 procedures on adults in metropolitan areas and 3,316 on adults in regional areas. These figures do not include forensic procedures conducted by specialist commands (33 on children and 486 on adults): COPS download data provided by FPIT on 15 July 2005.

352 Of the 450 child suspects, 431 were male and 19 were female. COPS download data provided by FPIT on 15 July 2005.

353 Of the 27 child volunteers, 12 were male and 15 were female. COPS download data provided by FPIT on 15 July 2005.

354 Of the 9,455 forensic procedures conducted on suspects, Aboriginal or Torres Strait Islander status was recorded as “yes” for 523 procedures, “no” for 3,197 procedures and “unknown” for 5,735 procedures: COPS download data provided by FPIT on 15 July 2005.
The crimes (Forensic Procedures) Act 2000

355 40 out of 450 child suspects: COPS download data provided by FPIT on 15 July 2005.

356 COPS download data provided by FPIT on 15 July 2005. As indicated above, seven per cent of forensic procedures conducted on suspects were conducted on women.

357 Information obtained through Ombudsman review of COPS records.


359 Based on COPS download data provided by FPIT on 15 July 2005, which indicates that NSW Police that conducted 9,455 DNA samples on suspects during the review period.

360 These include DNA samples taken from suspects and convicted offenders.

361 DAL response to Ombudsman investigation notice, 24 February 2005.

362 DAL response to Ombudsman investigation notice, 24 February 2005. DAL advised it made 4,207 cold links during the review period.

363 We received one complaint where the prosecution case almost failed when a victim sample was not provided to the laboratory and no comparison could be made with biological material taken from the suspect’s shoes. The DNA analysis was essential to a successful conviction as there were no independent witnesses to the incident. This is complaint number 3, discussed at 15.3.3.

364 Email advice from FPIT received 14 December 2005.

365 Email advice from FPIT received 14 December and 15 December 2005.


367 Based on the estimates that during the review period, DAL made 3,170 warm links and 480 eliminations: DAL response to Ombudsman investigation notice, 24 February 2005 and Draft Business Case, January 2005.

368 Crimes (Forensic Procedures) Act 2000 s 3, 12(a) and 20(c).

369 We understand that the term “backlog” includes all cases which DAL has not finalised, rather than a distinct set of matters which DAL has consciously decided should be allocated backlog status.

370 Minutes of the DNA Advisory Committee, 6 August 2004.

371 Advice provided by DAL, 2 August 2004.

