

DNA PROFILING: COLLECTION, USE AND EFFECTIVENESS AN ISSUES PAPER

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INTRODUCTION

By a reference on 21 November 2001 the Law Reform Committee of the Victorian Parliament was asked to inquire into, consider and report on:

"The collection, use and effectiveness of forensic sampling and the use of DNA databases in criminal investigations, with particular emphasis on identifying areas and procedures which would more effectively utilise forensic sampling and improve investigation and detection of crime."

This document is an Issues Paper which attempts to identify and contextualise issues of concern in the contemporary environment which relate to the collection, use and effectiveness of DNA databases in criminal investigations.

DNA in Context

There can be little doubt that the community sets great store by bringing to justice those who can be proved, to the requisite standard, to be guilty of criminal offences. As the Hon CA Furletti, the member for Templestowe, DNA profiling has an important role in this regard:

"the most successful deterrent to crime is recognised as being the prospect of detection of the offender. The improved and increased effectiveness of forensic sampling will ameliorate the rate of criminal detection and could prove to be a great boon and of great assistance to criminal investigators and criminal investigations."²:

To similar effect, Lord Steyn of the United Kingdom House of Lords, dealing with a potential infraction of procedures in relation to the obtaining of a DNA sample, commented that:

"[I]t must be borne in mind that respect for the privacy of defendant is not the only value life without fear of harm to person or property. And it is in the interests of everyone that serious crime be effectively investigated and prosecuted. There must be

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² Legislative Council of Victoria, Hansard, 21 November 2001.

fairness to all sides. In a criminal case, this requires the court to consider a triangulation of interests. It involves taking into account the position of the accused, the victim and his or her family and the public."³

However, there are more considerations than the purely evidentiary. Bringing offenders to justice is not the only social value to which the community is prepared to have regard in determining what powers investigators should have or the extent of encroachment upon privacy that it can abide. Justice Kirby of the High Court sought to place the debates concerning the use of technology into context in 2000⁴. He specifically drew attention to a range of public interests, arguing that contemporary western society:

"also assigns great importance to other social objectives. These include:

- the control of the power of the state to intervene in the lives of individuals; and
- the imposition on the state of the obligation to prove its case against persons accused and to do so by strongly convincing evidence."

He noted that undoubtedly the incidence of effective criminal investigation could be enhanced by the adoption of a widespread network of paid informers, universal telephonic interception, unrestricted electronic eavesdropping, aggressive inquisitorial procedures and the imposition of draconian punishments. It has not done so. The question in relation to DNA profiling is where the balances are to be placed so as to maintain community confidence both in the efficacy of criminal investigations, police and prosecutors being enabled to avail themselves of technological advances, and in organs of the state not being able to intrude unduly over the rights and privacy interests of the individual.

THE CRIMES (DNA DATABASE) BILL 2001 (VIC)

At the time of writing this Issues Paper, the procedures for obtaining and retaining DNA samples under the Crimes Act 1958 (Vic) had been partially, but significantly, amended by the Crimes (DNA Database) Act 2001 (Vic) which received Royal Assent on 21 May 2002. The main features of the amending legislation can be summarised as:

- Provision for consensual, supervised self-administration of sampling whereas the previous provisions only permitted mouth swabs to be taken by a doctor or a nurse;

³ *Attorney General's Reference No 3 of [1999][2000]* UKHL 63 at [6].

⁴ M Kirby, "DNA Evidence: Proceed with Care" (2000) 12(8) *Judicial Officers Bulletin* 1.

- Expansion upon the range of offences for which a forensic sample can be obtained;
- Provision for Magistrates, County and Supreme Courts to make an order for retention of DNA samples;
- Introduction of new procedures to enable police to obtain a forensic sample from an offender who is not in custody upon court order;
- Provision that, where a person has been ordered to provide a forensic sample, a member of the police force may issue a notice requesting that person to attend at a nominated police station within a specified period of time to provide the forensic sample. If the person fails to comply a member of the police force may apply for a warrant to arrest that person;
- Provision that, if a court orders a forensic sample to be taken from an offender who is not in prison, the court must also order the offender to attend at a police station, or other specified place within a specified period, to allow the forensic procedure to be carried out. If the person fails to comply, a member of the police force may apply for an arrest warrant;
- Facilitation of Victoria's participation in a national DNA database by enabling Victoria to enter into arrangements for the exchange of DNA information among Australian jurisdictions.

The Hon the Attorney-General, Mr Hulls, noted that the DNA database provisions in the Bill were based on the February 2000 draft Model Forensic Procedures Bill ("the Model Bill") developed by the Model Criminal Code Officers Committee under the auspices of the Standing Committee of Attorneys-General. This Bill was developed during 1999 following a period of national consultation. Referring to the Victorian Bill, Mr Hulls stated that:

"The Bill provides an effective and accountable system for the retention and matching of forensic materials on the national database. The privacy of Victorian citizens is also guarded against, because each step in dealing with forensic material is regulated and reinforced by various criminal offences which carry penalties for misuse of the database and DNA information. The amendments contained in this Bill represent this government's firm commitment to effective law enforcement and the promotion of public confidence in the criminal justice system."⁵

⁵ Crimes (DNA Database) Bill 2001, Second Reading Speech, Victorian Legislative Assembly, 29 November 2001.

DNA PROFILING AND POLICE INVESTIGATIONS

DNA profiling has transformed police investigations in many areas allowing inferences to be drawn about the identity of suspects from the smallest identifying traces left at the scene of the crime by offenders⁶ provided the samples are not unduly denatured or degraded. However, DNA profiling is simply one form of evidence. It is not the panacea to dilemmas of criminal investigation and cannot answer questions such as whether sexual intercourse engaged in was consensual or what dynamics characterised a violent confrontation between two or more people which ultimately resulted in a death. As yet, DNA profiling is very rarely used to investigate the commission of property crimes. While it may command a mystique that has the potential to be problematic for the dispassionate evaluation of evidence by jurors, it is only one piece in the evidentiary jigsaw in most trials. As Hunt CJ commented in *Pantoja v The Queen*⁷:

"It is important to emphasize that a match obtained by any blood tests - DNA or otherwise - between the suspect and the offender does not establish that the two are the one and the same person. It establishes no more than the accused could be the offender ..."

Thus, while DNA profiling in its current form is a significant advance in forensic science, it must be viewed in perspective and should be recognised as simply one form of probative evidence, available only for a cross-section of criminal trials.

AUSTRALIA-WIDE SAMPLING LEGISLATION

Fundamental to the utility of DNA profiling is the capacity for investigators to obtain DNA samples from suspects or potential suspects against whose profiles crimes scene samples can be compared.

The intrusiveness of sampling has changed significantly in recent years. In 1996 the principal mode of sample acquisition was via the taking of blood by medical practitioners. This prompted concern from the medical profession and from a cross-section of members of the community concerned about coercive procedures being undertaken without consent⁸.

⁶ See D Concar, "The DNA Police : Could It Be You? What Britain's DNA Testing Laws Will Mean for Innocent People" (5 May 2001) 170 *New Scientist* 10.

⁷ (1996) 88 A Crim R 554 at [19].

⁸ See for instance B McSherry and I Freckelton, "The Model Forensic Procedures Bill" (1996) 12(1) *Liberty* 89 at 93.

However, now the main way in which samples are procured is via buccal swabs which are relatively limited in their intrusion of personal space and can be done by the subject him or herself⁹.

The Model Bill has been very influential in relation to the provisions adopted throughout Australia, although it has to a significant degree been superseded by recent Victorian amending legislation. The New South Wales, Commonwealth and ACT approach to powers to take samples and to create a database has followed the Model Bill provisions closely, while the Victorian, South Australian and Tasmanian legislation has followed it in a number of important respects, the Victorian developing its underlying tenor in 2002 amendments.

The Model Bill

The Model Bill provides for:

- powers to request or require forensic procedures on suspects, convicted persons and volunteers;
- procedures for undertaking forensic procedures, including safeguards for the persons upon whom procedures are undertaken;
- certain evidentiary provisions in relation to the admissibility of improperly obtained forensic procedure evidence;
- the establishment of a DNA database; and a scheme for multi-jurisdictional sample maintenance.

The Bill differentiates between "intimate" and "non-intimate" procedures. "Intimate procedures" are classified as those where there is external examination, photography or the taking of samples from the genital or anal areas, the buttocks or the female breasts, where blood, dental impressions, or saliva by buccal swab is taken, or where pubic hair is sampled. "Non-intimate procedures" are classified as those where there is examination, photography or taking of a sample from non-intimate areas of the body, taking a hair sample (other than a pubic sample), taking a sample from or from under a finger or toe nail and taking a finger, hand, foot or toe print.

The Bill permits a forensic procedure to be performed on both suspects and offenders who provide informed consent or with the order of a judicial officer or police officer. A police officer may request a suspect to consent to a procedure if there is reasonable suspicion that the person committed a "prescribed offence", there are reasonable grounds to believe that the

⁹ Crimes Act 1958 (Vic), s464Z(3A).

procedure is likely to provide evidence of the offence, the person is adult and not under disability, and if the request is justified in all of the circumstances after balancing the public interest in obtaining the evidence against the public interest in maintaining the physical integrity of the suspect.

Under the Bill, a police officer may order a non-intimate procedure even though the person is not consenting, if there are reasonable grounds to believe that the suspect committed a prescribed offence, there are reasonable grounds to believe the procedure is likely to produce evidence of the commission of the offence and the procedure is justified in all of the circumstances when the respective public interests are balanced. However, where an intimate procedure is desired by investigators from a suspect, a magistrate's order is required, as it is on any person who is not an adult or is under a disability, within the meaning of the legislation.

Under the Bill, if an offender declines to consent to a forensic procedure, a police officer may order a non-intimate sample without the offender's consent if it is justified in all the circumstances, taking into account the seriousness of the circumstances surrounding the offence. Otherwise, a magistrate's order is necessary if intimate procedures are to be performed on offenders, the criterion once again being whether the order is justified in all the circumstances, taking into account the seriousness of the offence.

The Model Bill establishes a DNA database with a provision that different categories of samples are collected into different indexes: the crime scene index, the missing persons index, an unknown deceased persons index, a serious offenders index (persons convicted of offences carrying a penalty of 5 or more years' imprisonment), a volunteers unlimited purpose index, a volunteers limited purpose index and a suspects index. Protocols are established to permit only limited matching of persons in different indices, with the result that the suspects and offenders indexes are able to be matched against the crime scene index. A variety of protections are established under the Bill to accord those whose samples are recorded on the index with privacy, as well as for videotaping of forensic procedures and same gender sampling, where possible.

The Model Code Officers Committee expressed grave reservations about whether children could consent and acknowledged that "parents and guardians will not always look after the

best interests of the child (for example, the parent may be a suspect in the investigation of an unlawful assault on the child)"¹⁰.

Victoria: Crimes Act 1958 (Vic)

Victoria's legislation classifies the taking of samples within the context of "forensic procedures", which are defined to mean the taking of a sample from any part of the body, whether an intimate or a non-intimate sample, or any other kind of sample or the conduct of any kind of an examination of the body other than the taking of a fingerprint¹¹. The distinction between "intimate" and "non-intimate" samples is important.

An "intimate sample" is defined as:

- (a) a blood sample;
- (b) a sample of public hair, including the root if required;
- (c) a swab, washing or sample taken from the external genital or anal region of a male or a female or from the breast of a female;
- (d) a sample of saliva;
- (e) a scraping taken from the mouth;
- (f) a dental impression."¹²

A "non-intimate sample" is defined as:

- (a) a sample of hair, other than pubic hair, including the root if required;
- (b) a sample of matter taken from under a fingernail or toenail;
- (c) a swab, washing or sample taken from any external part of the body other than the genital or anal region of a male or female or the breast of a female."

Police are able to "request" a suspect to undergo a "forensic procedure" but only if there are reasonable grounds to believe that the procedure would tend to confirm or disprove the involvement of the suspect in the commission of an indictable offence and the person is suspected on reasonable grounds of having committed the offence or been charged or summonsed with it. The procedure can be undertaken if the person gives their informed consent to its being done or if the Magistrates' Court orders it¹³. Such an order may be made if the court is satisfied on the balance of probabilities that:

- (a) the person is a relevant suspect; and

¹⁰ Model Criminal Code Officers Committee of the Standing Committee of Attorneys-General, *Report: Model Forensic Procedures Bill and the Proposed National DNA Database*, AGPS, Canberra, 1999, at p65.

¹¹ Crimes Act 1958 (Vic), s464.

¹² Crimes Act 1958 (Vic), s464.

¹³ Under s464T(3) or s464V(5).

- (b) there are reasonable grounds to believe that the person has committed the offence in respect of which the application is made; and
- (c) in the case of an application for a sample other than referred to in paragraph (d), any of the following applies -
 - (i) material reasonably believed to be from the body of a person who committed the offence has been found -
 - (A) at the scene of the offence; or
 - (B) on the victim of the offence or on anything reasonably believed to have been worn or carried by the victim when the offence was committed; or
 - (C) on an object or person reasonably believed to have been associated with the commission of the offence; or
 - (ii) there are reasonable grounds to believe that, because of the nature of the offence or injuries inflicted during the commission of the offence, material from the body or clothing of the victim is present -
 - (A) on the person who committed the offence or on anything reasonable believed to have been worn or carried by that person when the offence was committed; or
 - (B) on an object reasonably believed to have been associated with the commission of the offence; or
 - (iii) the victim of the offence has not been found, and there are reasonable grounds to believe the material reasonably believed to be from the body of the victim is present on a person suspected of having committed the offence; or
 - (iv) the offence in respect of which the application is made is an offence against a provision of Subdivision (8A), (8B) or (8C) of Division 1 of Part 1 and there are reasonable grounds to believe that the conduct of the procedure on the person may be relevant to determining the paternity of a child that has been conceived allegedly as a result of the offence; and ...
- (f) there are reasonable grounds to believe that the conduct of the procedure on the person may tend to confirm or disprove his or her involvement in the commission of the offence; and
- (g) the person has refused to give consent to a request under s464R(1) or the person is incapable of giving informed consent by reason of mental impairment; and
- (h) in all the circumstances, the making of the order is justified."¹⁴

The circumstances in which the making of an order is justified is not explicated, although various indicia are set out in relation to children¹⁵. Interim orders can be made by the Court if otherwise there is a risk that the sample will be lost or destroyed¹⁶. Non-intimate samples can be taken by authorised members of the police force and force can be utilised if a court has permitted a sample to be compulsorily taken.

¹⁴ Crimes Act 1958 (Vic), s464T(3).

¹⁵ Crimes Act 1958 (Vic), s464U(8).

¹⁶ Crimes Act 1958 (Vic), s464V.

A range of protections is instituted in relation to the testing process. Where there is sufficient of a crime scene sample or from the body of a victim of an indictable offence, a part of the sample sufficient for analysis must be delivered to a person from whom a sample has been taken if they so request¹⁷. Similarly, the reports of forensic procedures must be made available to persons upon whom a forensic procedure has been conducted¹⁸.

Evidence obtained as a result of a forensic procedure conducted on a person or from a sample voluntarily provided is inadmissible if various of the procedural requirements have not been complied with¹⁹ unless the prosecution satisfied the court on the balance of probabilities that the circumstances justify the reception of the evidence or the accused consents to its reception. Thus, the position is one of prima facie inadmissibility, with a set of factors enunciated to guide the exercise of the discretion²⁰.

When a "forensic sample offence" (broadly defined under Schedule 8) has been found to have been committed, a member of the Victoria Police within 6 months of the finding can apply to the court for an order directing the person to undergo a forensic procedure for the taking of a sample from any part of the body²¹. A court hearing such an application must take into account the seriousness of the circumstances of the forensic sample offence and must be satisfied that in all the circumstances the making of the order is justified²².

Where an application is not made within time for a forensic procedure or a court refuses to make an order, the Chief Commissioner of Police must without delay destroy or cause to be destroyed any sample taken and any related material and information²³. However, information properly obtained may be retained and included in a computerised DNA database. Protocols are established for access to the DNA database²⁴ and for permissible matching with various components of the database²⁵. Provision is made for sharing of information from the database amongst jurisdictions²⁶. The difficulties and ramifications of these are discussed below.

17 Crimes Act 1958 (Vic), s464ZC(1)-(2).

18 Crimes Act 1958 (Vic), s464ZD.

19 Crimes Act 1958 (Vic), s464ZE.

20 Crimes Act 1958 (Vic), s464ZE(2A).

21 Crimes Act 1958 (Vic), s464ZF(2).

22 Crimes Act 1958 (Vic), s464ZF(7). See *Lednar v Magistrates' Court* [2000] VSC 549.

23 Crimes Act 1958 (Vic), s464ZFC(1).

24 Crimes Act 1958 (Vic), s464ZGH.

25 Crimes Act 1958 (Vic), s464ZGI.

26 Crimes Act 1958 (Vic), s464ZGL.

Commonwealth: Crimes Amendment (Forensic Procedures) Act 2001 (Cth)

The Commonwealth legislation of 2001 is the closest to the Model Bill. However, a suspect may be requested or required to undergo a forensic procedure if suspected of any indictable offence. There is a requirement in respect of convicted offenders ordered to provide a sample that they be in prison or "under sentence", a provision which stretches out the categories of eligible providers of offenders to include those on parole. Provision is made for a DNA database system²⁷.

Australian Capital Territory: Crimes (Forensic Procedures) Act 2000 (ACT)

The ACT legislation is very similar to that in the Commonwealth Crimes Act 1914 (Cth). Within the definition of a "non-intimate procedure" it includes the taking of buccal swabs. Notably, s86 of the Crimes (Forensic Procedures) Act 2000 (ACT) prescribes that evidence of the results of the analysis of material which the Act prescribes should have been destroyed "is not admissible in any proceedings against the person." Like the Commonwealth legislation, it makes specific provision for the taking of samples from trans-gender persons.

New South Wales: Crimes (Forensic Procedures) Act 2000 (NSW)

Under the New South Wales legislation, similar provisions for the most part apply as under the Model Bill. A significant exception is that a category other than intimate and non-intimate procedures is set out: buccal swabbing, a procedure that for the most part is equated to intimate procedures.

Whereas the Model Bill requires a police officer to believe a procedure to be likely to produce evidence tending to confirm or disprove that the suspect committed the offence being investigated. However, under the New South Wales legislation, the requirements are less onerous - the police officer must simply be satisfied that the procedure might produce evidence to the same effect.

While both the Model Bill and the New South Wales legislation require a request or order to be "justified in all the circumstances", the New South Wales Act does not provide criteria for this to be established, by contrast with the Model Bill. Particular safeguards exist for Aboriginal and Torres Strait Islanders; these are not present in the Commonwealth legislation.

²⁷ Crimes Act 1914 (Cth), s23YDAC-s23YDAG.

Taking of samples from serious offenders is somewhat more limited in New South Wales than under the Model Bill. In New South Wales, samples can only be taken from serious offenders currently serving sentences for the serious offence, whereas samples under the Model Bill can be taken from persons who have served their sentences or who are in prison for other offences.

Under the Model Bill a police officer seeking a procedure must be satisfied that the request is justified in all the circumstances, even before seeking the informed consent of the offender. There is no such requirement under the New South Wales legislation.

While under the Model Bill, when a person does not give informed consent, a police officer or a magistrate granting an order must consider whether the sample could be obtained other than by the making of an order, must take into account the seriousness of the circumstances surrounding the offence and whether the procedure is justified in all of the circumstances. By contrast, in New South Wales, a senior police officer can make the order after considering simply whether the Act would authorise the forensic procedure without the order, a provision that has been described as "meaningless" by a 2002 Review of the Crimes (Forensic Procedures) Act 2000 (NSW) by the Standing Committee on Law and Justice²⁸.

In February 2002, the Standing Committee recommended that:

- the New South Wales legislation be amended in conformity with the Model Bill so that a suspect be able to be requested to consent to a forensic procedure if there are reasonable grounds to believe that the forensic procedure is likely to produce evidence tending to confirm or disprove that the suspect committed a prescribed offence;
- the New South Wales legislation be amended in conformity with the Model Bill so that a magistrate or senior police officer could order a forensic procedure if there are reasonable grounds to believe that the forensic procedure is likely to produce evidence tending to confirm or disprove that the suspect committed a prescribed offence;
- the New South Wales legislation be amended to prohibit forensic procedures on suspects unless evidence producing a DNA profile has been found at the crime scene or on the victim;
- the New South Wales legislation be amended to include guidelines, along the lines of those in the Model Bill, to assist police officers.

Tasmania: Forensic Procedures Act 2000 (Tas)

Tasmania's forensic procedures legislation bears many features in common with the Model Bill but differs from it in a few important respects²⁹. It allows those suspected of all indictable as well as some summary offences to be subject to the suspect power and permits such procedures to be undertaken with informed consent where a suspected person or charged person over the age of 15. It provides for police of Inspector rank or higher to order a non-intimate procedure to be performed over a person who has been charged with the requisite offences provided the person is aged over 15 years of age and is in custody. However, even if the person is not in custody, a police officer of the rank of Inspector or above may require a person who has been charged to submit to a non-intimate procedure if there are reasonable grounds to believe that it may yield evidence relevant to the offence. The legislation classifies buccal swabs as non-intimate procedures.

A magistrate may order a suspect (or charged person) to undergo an intimate procedure if satisfied that the procedure is justified in all the circumstances after balancing the public interest in obtaining evidence against the public interest in the person's physical integrity.

Certain prescribed offenders may be ordered to undergo a non-intimate procedure by a police officer for the purposes of the database. While volunteers can undergo forensic procedures, as provided for under conditions comparable to those under the Model Bill, victims are not categorised as volunteers.

South Australia: Criminal Law (Forensic Procedures) Act 1998 (SA)

South Australia's forensic procedures legislation is framed in terms similar to those of the Model Bill but, as well as distinguishing between intimate and non-intimate procedures, it differentiates between "intrusive" and "non-intrusive" procedures. However, there are considerable parallels between intrusive and intimate procedures, intrusive procedures comprehending intimate procedures, the taking of blood and also the taking of buccal swabs³⁰.

Suspects other than "protected persons" (defined as children and persons otherwise incapable of giving informed consent) can be asked to consent to a procedure if reasonably suspected of an indictable offence and there are reasonable grounds to suspect that the procedure will produce evidence of value to the investigation of the offence. Suspects can be required to

²⁹ R Johnson, "Two Steps Forward, One Big Step Back" (2001) 26(5) *Alternative Law Journal* 236.

³⁰ Section 3.

undergo a procedure by an "appropriate authority" which is defined as a Magistrates Court or, if the person is in custody and the procedure is non-intrusive, and the person is not protected, a senior police officer not connected with the investigation. However, the appropriate authority must be satisfied, amongst other things, that there are reasonable grounds to suspect that the procedure will produce evidence of value, and that the public interest in obtaining evidence outweighs the public interest in the physical integrity of the person.

If an offender is convicted of a "major offence" (simply an offence carrying a penalty of 5 or more years imprisonment), he or she may be required to undergo a forensic procedure if the court so orders after taking into account the seriousness of the offence and the propensity of the offender to engage in criminal conduct. As yet, there is no provision in South Australia for a police officer otherwise to order samples from those who have been convicted previously. Nor is there any provision for volunteers. A database is established which contains the samples of suspects subsequently convicted and of persons convicted of major offences after the commencement of the Act. This means that the samples of other persons, in particular those not charged or found not guilty, should not make their way onto the database. While there are no matching rules, destruction of samples is mandated after suspects' acquittal, pardoning or the quashing of a convicted person's conviction³¹.

Queensland: Police Powers and Responsibilities and Other Acts Amendment Act 2000 (Qld)

Under Queensland's forensic procedures legislation a power is provided to take DNA samples. However, it only deals with the power to take buccal swabs and hair samples. They may be taken from any person providing informed consent. Children are able to consent if they are over 14.

A commissioned police officer can approve a sample to be taken from a person who is arrested, summonsed or given a notice to appear for an indictable offence. This can take place upon arrest or via a sample notice issued by a commissioned officer who is satisfied that, having regard to the rights and liberties of the person and the public interest, taking of a buccal or hair sample is necessary in all the circumstances. Similarly, courts may order a sample to be taken from an adult charged with an indictable offence if satisfied that it is reasonably necessary, having regard to the rights and liberties of the person and the public interest. Further, courts can order a sample to be taken from an adult convicted of an indictable offence and persons in prison for an indictable offence are required to provide a

31 Section 49.

sample. Samples can also be taken from children charged with indictable offences if a Children's Court so orders.

Samples must be destroyed if the person is acquitted, if proceedings are discontinued via a nolle prosequi or if charges are withdrawn. The legislation establishes a database for investigative purposes. It can be used by interstate and Commonwealth agencies.

Northern Territory: Police Administration Act (NT)

Under the Northern Territory's forensic procedures legislation there is liberal provision for investigators to obtain DNA samples. A distinction is drawn between intimate and non-intimate samples, with buccal swabs included amongst non-intimate samples.

Intimate samples can be carried out on a person in lawful custody on a criminal charge provided that a police officer believes on reasonable grounds that it may provide evidence of an offence punishable by imprisonment and either the person consents in writing or a magistrate orders it. The provisions for the taking of non-intimate samples give significant scope for investigation. They may be ordered by a Superintendent of Police if he or she reasonably suspects a person of having committed a crime carrying a sentence of imprisonment or if a person has been arrested or charged with such a crime. A Superintendent can also authorise the taking of a non-intimate sample from a person who consents or from a child if his or her parents consent. If a sample is taken by consent for the investigation of an offence, it is only admissible against the person for that offence, unless the offence in respect of which it is used is punishable by a period of 14 or more years of imprisonment.

The Act established a database for investigative purposes. It can be used by interstate and Commonwealth agencies. However, it does not contain provision for removal of DNA samples where persons are found not guilty, charges are not laid or charges are not proceeded with. Under s147C of the Act "The Commissioner may retain a sample for the period that he or she thinks fit" and "A sample may be subjected to any analysis that the Commissioner thinks fit and any information obtained may be recorded in the databases maintained under this Act."

Western Australia

On 4 June 2002 the Criminal Investigation (Identifying People) Bill 2001 (WA) received the Royal Assent. The Act puts in place a system of judicial warrants for taking forensic samples. It allows a court to order a sample to be taken from "involved persons", a category that

includes both victims and witnesses, without their consent. The legislation is complex and utilises different nomenclature than that employed elsewhere in Australia. It links Western Australia into the national database but classifies procedures as "intimate identifying procedures" and "non-intimate identifying procedures"³², including within the latter category buccal swabs. Another distinctive feature of the legislation is the capacity of children to consent as volunteers to their samples being included on the database if "a responsible person" also provides acquiescence. However, there is a provision for "volunteers" to stipulate the usage to which their samples will be put³³.

RELIABILITY OF DNA PROFILING

DNA profiling is currently acknowledged by Australian law as a reliable form of scientific evidence³⁴, the RFLP, PCR and now Profiler Plus techniques each having been accepted by Australian, and overseas, courts as providing to the courts evidence of significant evidentiary soundness³⁵. However, it was apparent in the earlier phases of DNA evidence that the potential for human error and for contamination and degradation of samples leading to erroneous results was significantly under-represented by proponents of the technique³⁶. A number of cases yielded conflicting results which were not readily explicable.

However, the curial focus since 1996 has shifted to subtle aspects of the interpretation of DNA profiling results and the potential for phenomena that might lead to statistically inaccurate results or evaluation of results³⁷. Expert evidence about such matters can be extremely complex - to a point where it is problematic for lay jurors to be able to assimilate the nuances of disagreement within the scientific community and amongst expert statisticians. The fear is that juries may be confused by statistics and by statements framed in terms of high level probabilities³⁸.

32 Section 3,

33 See s62.

34 See eg *R v Pantoja* (1996) 88 A Crim R 554 at 558 finding that the PCR technique and the RFLP procedure had gained general acceptance within their area of scientific endeavour. See also *R v McIntyre* [2001] NSWSC 311 and *R v Karger* [2001] SASC 64 in relation to Profiler Plus.

35 See I Freckelton and H Selby, *Expert Evidence: Law, Practice, Procedure and Advocacy*, 2nd edn, Law Book Co, Sydney, 2002, pp478-547.

36 See eg *Fahey and Fahey*, unreported, Family Court, 3 August 1994; *People v Castro*, 144 Misc 2d 956 (NY 1989).

37 See H Roberts, "Interpretation of DNA Evidence in Courts of Law: A Survey of the Issues" (1998) 30 *Australian Journal of Forensic Sciences* 29.

38 See I Evett, "DNA Profiling: A Discussion of Issues Relating to the Reporting of Very Small Match Probabilities" (2000) *Criminal Law Review* 341; D Balding and P Donnelly, "The Prosecutor's Fallacy and DNA Evidence" (1994) *Criminal Law Review* 711.

Two different approaches have developed, the South Australian Supreme Court under the guidance of Mullighan J declining to withdraw complex and conflicting expert evidence about DNA profiling from juries save in the most extreme of circumstances³⁹ and the Victorian Supreme Court on occasions being prepared to do so⁴⁰.

In the South Australian decision of *R v Karger*⁴¹ Mullighan J was asked to evaluate whether evidence about the new Profiler Plus system for DNA profiling should be regarded as reliable and therefore presented to a jury. In addition, he was asked to consider profoundly conflicting evidence between forensic scientists about the validity of databases for the purposes of interpretation of apparent matches. In rejecting lengthy arguments about admissibility, he repeated the approach he had adopted in *R v Jarrett*⁴², commenting:

"I confess to not being able to imagine a case where relevant scientific evidence would be excluded in the exercise of discretion because of a tendency to mislead, prejudice or confuse a jury. If the prosecution, defence counsel, expert witness and the judge discharge their respective functions adequately and appropriately, juries should be able to understand the relevant matters of science insofar as it is necessary for them to resolve matters in issue."⁴³

In the 2002 decision of *Juric v The Queen*⁴⁴ the Victorian Court of Appeal concluded that Cummins J of the Supreme Court had erred in failing to withdraw DNA evidence from a jury on the basis that the jury could not have intelligently interpreted the results of testing - "there was no underlying basis of fact or science which would enable a reasonable jury to adequately assess the strength of an opinion (given on the faith of such testing) that the accused 'could not be excluded as a contributor of the material tested.' ... the jury must be able to evaluate the strength of that evidence by reference to its factual or scientific basis." The Court found that "there are cases where the simplicity with which the opinion [about a DNA match] is expressed cannot be permitted to obscure the difficulties which have been encountered in the testing process."⁴⁵

39 *R v Jarrett* (1994) 73 A Crim R 160; *R v Karger* [2001] SASC 64; see too *R v Humphrey* (1999) 103 A Crim R 434 at 438 per Bleby J.

40 *R v Lucas* [1992] 2 VR 109; *Juric v The Queen* [2002] VSCA 77; see also the important early New South Wales decision of *R v Tran* (1990) 50 A Crim R 233 at 242 expressly applied in *Jarrett* at [20].

41 [2001] SASC 64.

42 (1994) 73 A Crim R 160; see generally I Freckelton and H Selby, *Expert Evidence: Law, Practice, Procedure and Advocacy*, 2nd edn, Law Book Co, Sydney, 2002.

43 [2001] SASC 64 at [179].

44 [2002] VSCA 77 at [18].

45 *Ibid* at [20].

The difference between the South Australian and Victorian approaches reduces to the extent of confidence exhibited by the courts in the capacity of jurors to grapple with the subtleties of complex and conflicting expert evidence about the interpretation of DNA profiling. It is a rare case, however, where there is such a level of disagreement in respect of DNA results. For cases falling within the problematic category, the question is how the task of fact-finders can realistically be made manageable and such as to be likely to lead to effective evaluation of complex and conflicting expert evidence about DNA profiling methodology and interpretation.

There has been considerable controversy about the necessary size of databases and the extent to which there needs to be sizable population sub-groups within a database lest certain population sub-groups have a marked over-representation of certain DNA characteristics⁴⁶. For the most part these controversies have been resolved⁴⁷ or have been overtaken by the increasing size of available databases.

What measures need to be adopted to facilitate the ability of fact-finders, particularly jurors, to evaluate effectively DNA evidence where it is particularly complex and the subject of conflict amongst forensic scientists?

However, a number of presentational matters related to the statistical and biological base of DNA profiling results, highlighted by English decisions⁴⁸, continue to be important for the fair presentation of DNA evidence by prosecutors. Often DNA reports are short-form and not easily evaluated, the accessibility of the evidence depending substantially on the oral presentation in court of the scientific evidence. An important issue is whether the guidelines formulated by the Northern Territory Court of Appeal in *Latcha v The Queen*⁴⁹ in 1998 provide sufficient guidance:

- (1) Whenever DNA evidence and statistical evidence based thereon is to be adduced, the Crown should serve on the defence prior to the committal hearing a statement or statements from the expert or experts the Crown intends to call, which provide details of the DNA testing carried out, the nature of the matching DNA characteristics between the DNA in the crime sample and the DNA obtained from the defendant, and details as to how the calculations of the

⁴⁶ *R v Pantoja* (1996) 88 A Crim R 554 at 558-9; *R v Milat* (1996) 87 A Crim R 446 at 449

⁴⁷ See in particular National Research Council, *The Evaluation of Forensic DNA Evidence*, National Academy Press, Washington DC, 1996.

⁴⁸ *Adams v The Queen* [1996] 2 Cr App R 467; *Doheny and Adams v The Queen* [1997] 1 Cr App R 369.

⁴⁹ (1998) 104 A Crim R 390 at 396-397.

likelihood ratios have been carried out which are sufficient for the defence to scrutinise the basis of the calculations.

- (2) Provided that the expert has the necessary data, it may then be appropriate for it to be indicated how many people with the matching characteristics are likely to be found in Australia, or in a more limited relevant sub-group, for instance, the sexually active males in the Darwin area, depending on the circumstances of the case.
- (3) If the Crown intends to supplement or change the DNA evidence or the statistical evidence based thereon, after the committal hearing, it should serve such additional statements as are necessary to comply with guideline (1) in sufficient time prior to the trial for the defence to be able to meet that evidence.
- (4) The forensic section of the Northern Territory Police Department should make available to a defence expert, if requested, the databases on which the calculations have been based (but not information which identifies particular individuals included in the databases). Any failure to do so in time for the defence expert to be available to assist the defence at the trial may lead to the exclusion of any statistical evidence at the trial.
- (5) Wherever possible, sufficient of the crime scene sample should be kept by the forensic section of the Northern Territory Police Department for re-testing, and made available to the defence for that purpose, upon request.
- (6) It is not necessary for the Crown to lead evidence from an expert in population genetics or from another scientific expert as to the statistical validity of the databases kept by the forensic section of the Northern Territory Police Department where the defence notifies the Crown that this is not in issue, or where objection is not taken at the trial.
- (7) A scientist other than a population geneticist or an expert in a statistical discipline may have sufficient qualifications derived from professional experience and personal familiarity with the data on the relevant database and published population statistics to be permitted to give evidence of the likelihood ratios in the relevant population. If the Crown proposes to adduce evidence of this kind from such a scientist, the Crown should serve on the defence in accordance with guidelines (1) or (2) a statement of the scientist's qualifications and experience.
- (8) Disputes as to the admissibility at trial of DNA and statistical evidence, including the qualifications of witnesses, should be determined wherever possible by utilising the procedure provided for in s 26L of the Evidence Act 1939 (NT).
- (9) Experts called to give statistical evidence should be led by the Crown as to any assumptions made in their calculations which, even though widely accepted, are not supported by empirical research, including:
 - (a) Hardy-Weinberg equilibrium;

(b) where the offender is of a racial group or sub-group for which there is no valid database and a general database has been used which does not take that fact into account, that fact.

- (10) Experts should not give evidence as to the likelihood that it was the defendant's DNA found at the crime scene or use terminology suggesting that he or she is expressing such an opinion."

Should protocols for the provision of DNA profiling evidence to juries be formulated within legislation?

An important issue is whether such protocols need to be incorporated into legislation. Much in relation to the presentation of DNA profiling evidence to courts comes down to the level of facility and understanding regarded as possessed by judges, magistrates and legal practitioners about scientific matters⁵⁰. It has been suggested that "Judges and juries may need some form of education or training to consider properly the relevance and weight of the evidence in particular proceedings. Additionally, legal practitioners may need training to competently present DNA evidence and identify any issues regarding reliability or admissibility."⁵¹

How can the limits of DNA profiling effectively be communicated to finders of fact? Is further training of judges, juries and legal practitioners required to facilitate understanding of DNA profiling results?

Potential for Tampering

Another forensic and privacy priority is for the potential for contamination or transposition to be minimised⁵². For instance, Judge Goldring in New South Wales has related the fact that in a case in which he presided the possibility existed by which police could have tampered with DNA samples which were kept in a storeroom but to which a number of members had access⁵³.

⁵⁰ See eg *Velevski v The Queen* [2002] HCA 4 at [182].

⁵¹ Australian Law Reform Commission, *Protection of Human Genetic Information*, Issues paper No 26, ALRC, Sydney, 2001, at 408-409.

⁵² See National Commission on the Future of DNA Evidence, *What Every Law Enforcement Officer Should Know About DNA Evidence*, National Institute of Justice: www.ojp.usdoj.gov/, 23 May 2001; see too J Goldring, "DNA Evidence - the Way Forward" (2000) 12(7) *Judicial Officers' Bulletin* 49.

⁵³ J Goldring, "DNA Evidence - the Way Forward" (2000) 12(7) *Judicial Officers' Bulletin* 49 at 50.

An issue raised more often in the context of DNA profiling than in relation to other areas of scientific evidence⁵⁴ is the ease with which hairs from suspects or cigarette butts or a range of other readily accessible sources of DNA might be able to be "planted" by those of a malevolent disposition, in particular by corrupt members of police forces⁵⁵. Given that on occasions DNA evidence may itself be sufficient to support a conviction, where for instance the presence of DNA at a crime scene is unexplained and inconsistent with innocence⁵⁶, the potential for DNA to be falsely located so as to inculcate a suspect is a matter of the utmost seriousness.

What safeguards can be instituted to reduce the likelihood of DNA samples being planted at crime scenes and other locations to inculcate innocent persons?

USE IN CRIMINAL INVESTIGATIONS

Inculcation Of The Guilty/Innocent

There can be no doubt at all that DNA profiling is a highly effective means of assembling important evidence against suspects. For those crimes in respect of which DNA profiling is a relevant form of scientific evidence, principally sex crimes, crimes of physical violence and, potentially, property crimes⁵⁷, it constitutes a particularly potent means for investigators and courts to ascertain the identity of a person present at the crime scene. Its usage as such is escalating.

Napper⁵⁸ in 2000, for instance, reported that of the 54,000 samples taken in the United Kingdom since 1995, there had been 34,000 hits, most of them cold hits, namely matches as a result of searches. In addition, 29 unsolved murders had been cleared up as a result of DNA profiling. The incidence of matches in the United Kingdom has risen from 2,231 in

⁵⁴ See generally I Freckelton, "A Taxonomy of Error and Deviance" in JF Nijboer and WJM Sprangers (ed), *Harmonisation in Forensic Expertise*, Thela Thesis, Amsterdam, 2000; I Freckelton and H Selby (ed), *Expert Evidence in Criminal Law*, Law Book Co, Sydney, 1999; I Freckelton and H Selby, *Expert Evidence: Law, Practice, Procedure and Advocacy*, 2nd edn, Law Book Co, Sydney, 2002.

⁵⁵ See eg the New South Wales Privacy Commissioner, the Australian Council for Civil Liberties and Justice Action in submissions to Standing Committee on Law and Justice, Legislative Council of New South Wales, *Review of the Crimes (Forensic Procedures) Act 2000*, Report No 18, Parliamentary Paper No 1118, February 2002, at p37.

⁵⁶ See eg *R v Fitzherbert* [2000] QCA 255 at [30].

⁵⁷ Depending upon whether sufficient resources are made available to enable DNA testing.

⁵⁸ R Napper, "A National DNA Database: the United Kingdom Experience" (2000) 32 *Australian Journal of Forensic Sciences* 65.

1996/1997 to 33,371⁵⁹. It can be expected to continue to rise dramatically and for the rises to be paralleled in Australia.

Australia has constructed a National Criminal Investigation DNA Database ("NCIDD"), administered by the Australian Federal Police which collates and matches DNA samples submitted by forensic laboratories around the country, including from Victoria⁶⁰. This permits inter-jurisdictional comparison of DNA profiles with standardisation of DNA profiling techniques, principally using the Profiler Plus technique⁶¹, which investigates a sample at 10 separate locations. The likely next phases of DNA technology are enhanced and quicker profiling and the utilisation of mitochondrial DNA technology which enables extraction and testing of DNA from samples such as dead hair shafts and fingernails which previously would not have enabled effective testing. This will further hone and expand the investigative powers of DNA profiling.

Forensic DNA technology has changed dramatically over the past 13 years. It is now apparent that early claims for accuracy in relation to RFLP analysis were inflated and that an unacceptable degree of subjectivity of interpretation pervaded results⁶². However, it is generally acknowledged now that the potential for false positive results - erroneous matches - is extremely low. Assessment of reliability and risks in DNA profiling has changed generationally on a number of occasions within the past 13 years⁶³

An important aspect of the investigative and curial utility of DNA profiling is the potential for "cold hits" to constitute matches. This phenomenon refers to a match on a database between a crime scene sample and the sample of a person who had not previously been suspected of involvement in the crime. For obvious reasons, this is a fruitful intelligence tool. However, even though the potential for false matches is very low, with the increasing size of databases the potential for such errors is increasing. At least one such false match from a "cold hit" has occurred in Britain⁶⁴.

59 Standing Committee on Law and Justice, , Legislative Council of New South Wales, *Review of the Crimes (Forensic Procedures) Act 2000*, Report No 18, Parliamentary Paper No 1118, February 2002, at p55.

60 See J Sutton, "DNA Profiling: Present Capabilities and Future Developments" (September 2001) 72 *Platypus* 9.

61 See *R v Karger* [2001] SASC 64.

62 See eg RJ Trent, "DNA and the Courts" (2000) 12(2) *Judicial Officers Bulletin* 52.

63 Compare for instance the analysis made in 1990 by I Freckelton, "DNA Profiling - A legal Perspective" in J Robertson, AM Ross and LA Burgoyne, *DNA in Forensic Science*, Ellis Horwood, New York, 1990 with contemporary treatments of the issues.

64 Standing Committee on Law and Justice, , Legislative Council of New South Wales, *Review of the Crimes (Forensic Procedures) Act 2000*, Report No 18, Parliamentary Paper No 1118, February 2002, at p48-49.

Should controls be exercised or protocols be formulated for the facility for obtaining 'cold hits' in relation to crime scene samples?

Exculpation of the Innocent

The first time that DNA profiling was utilised forensically, it resulted in the clear exculpation of a man who had pleaded guilty to a murder he did not commit (for reasons that have never become apparent)⁶⁵. This first forensic exposure of the technology set a pattern for many subsequent uses⁶⁶.

By April 2000, DNA evidence had been used to obtain the quashing of 64 criminal convictions in the United States⁶⁷ one of them within 9 days of a person's planned execution for an offence which testing showed he had not committed⁶⁸. The Queensland Court of Appeal decision in *Button v The Queen*⁶⁹ emphasised the adverse consequences that can follow when an accurate DNA test is not available to persons wrongly accused of serious criminal conduct.

An option for investigation into convictions wrongly arrived at by reason of, or partially by reason of, DNA profiling is by making available the facility for re-analysis of DNA samples where that remains feasible. Should such new evidence become available, it can be made available to Courts of Appeal. Alternatively, Innocence Panels can be constituted to receive and evaluate such evidence, thereafter liaising with governments about the potential for pardons.

⁶⁵ R Napper, "A National DNA Database: the United Kingdom Experience" (2000) 32 *Australian Journal of Forensic Sciences* 65.

⁶⁶ See further E Connors, T Lundgren, N Miller and T McEwan, *Convicted by Juries, Exonerated by Science: Case Studies in the Use of DNA Evidence to Establish Innocence After Trial*, National Institute of Justice, US Department of Justice, Virginia, 1996. See too National Institute of Justice, National Commission on the Future of DNA Evidence, *The Future of Forensic DNA Testing*, US Department of Justice, Washington DC, 2000.

⁶⁷ See B Saul, "Genetic Profiling: Forensic DNA Testing in New South Wales" (2001) 13(1) *Current Issues in Criminal Justice* 74 at 91.

⁶⁸ Australian Law Reform Commission, *Protection of Human Genetic Information*, Issues Paper No 26, ALRC, Sydney, 2001.

⁶⁹ [2001] QCA 133; see too "Wrongly Convicted Man Relives Prison Nightmare" (12 April 2001) *Courier Mail*, at p176.

Should processes be set in place to review convictions where DNA evidence may verify claims of innocence by persons who have previously been sentenced?

Mass Testing Issues

Mass testing of sectors of the community has taken place in a number of countries, including the United Kingdom, Canada, France, Germany and Australia⁷⁰. One of the first major forensic usages of DNA profiling, in fact, occurred in the investigation into a Leicestershire murder that led to the arrest and prosecution of Colin Pitchfork⁷¹. The issue of mass testing has consistently proved controversial, principally because of the doubt that has existed about the genuineness of the voluntariness with which at least some persons have participated in such exercises.

Another issue that arises in the context of mass screening programmes is where police "fish" for leads by effectively requiring members of a community to exclude themselves from the category of suspects by submitting to testing. The issue goes to the voluntariness of apparently voluntarily provided samples (see below).

A mass screening, particularly where it is accompanied by considerable publicity, places pressure upon persons who are not individually properly to be classified as suspects and calls upon persons to prove their innocence, to a degree thereby qualifying the entitlement of a citizen to decline any form of co-operation with state authorities until such time as they fall within the category of suspects who by law can be compelled to submit to investigative procedures. An example of the oppressiveness of such a reversal of onus was provided by Peterson⁷² who described a police investigation into a serial rapist who was described by one of his victims as six feet tall, light-skinned and Afro-American. The police then asked for samples from a large number of black men not otherwise linked to the crime. If men refused, police obtained warrants to take a sample non-consensually.

⁷⁰ See Human Genetics Commission, *Whose Hands on Your Genes?*, Human Genetics Commission, London, 2000 at p45.

⁷¹ See eg J Gans, "Something to Hide: DNA, Surveillance and Self-Incrimination" (2001) *Current Issues in Criminal Justice* 168; R Napper, "A National DNA Database: the United Kingdom Experience" (2000) 32 *Australian Journal of Forensic Sciences* 65.

⁷² R S Peterson, "DNA Databases: When Fear Goes Too Far" (2000) 37 *American Criminal Law Review* 1219 at 1227.

Moreover, there can be complex social repercussions to mass testing. For instance, the New South Wales Aboriginal Land Council in its submissions to the New South Wales Standing Committee on Law and Justice in its *Review of the Crimes (Forensic Procedures) Act 2000 (NSW)*⁷³ contended that mass testing of entire communities "promotes vigilantism" and "creates the environment for social alienation".

Most recently, in June 2002 Queensland police announced plans to send letters to homes on the north side of Bundaberg asking males from juvenile age to middle age to provide samples. This prompted Queensland Council for Civil Liberties president, Ian Dearden, to call upon residents not to co-operate with the call. He argued that such testing was no substitute for proper police investigation and expressed concern about its use to increase the size and scope of the samples on a national database: "It raises difficult and divisive issues for those who live in the community."⁷⁴ He referred to a mass population screening that took place in the New South Wales town of Wee Waa in April 2000 where most of the 600 men in the town between 18 and 45 years of age volunteered their samples⁷⁵. The Queensland Attorney-General was quoted as saying that the government did not advocate DNA testing en masse, no-one being able to be forced into co-operating in the proposed exercise⁷⁶.

The fruits of modest scale DNA testing have already made their way into Australian courts. For instance in *R v Jarrett*⁷⁷, police investigating the murder of an elderly woman in her home ascertained that 17 men had visited her for various reasons during the period leading up to her murder. They asked each of the men to provide a sample for DNA analysis, the results excluding 16 of the men as her murderer.

There are no guidelines for decision-making by investigating authorities about whether mass screenings should be implemented. This was one of the factors which led the Standing Committee on Law and Justice of the New South Wales Legislative Assembly to recommend that the Attorney-General consider amending New South Wales legislation to require a court order before police can undertake voluntary mass screenings. In addition, the Committee recommended that:

⁷³ Standing Committee on Law and Justice, , Legislative Council of New South Wales, *Review of the Crimes (Forensic Procedures) Act 2000*, Report No 18, Parliamentary Paper No 1118, February 2002, at p95.

⁷⁴ N Todd, "Murder Probe DNA Tests Opposed" (10 June 2002) *The Age* at p6.

⁷⁵ See B Saul, "Genetic Policing: Forensic DNA testing in New South Wales" (2001) 13(1) *Current issues in Criminal Justice* 74 at 75-76.

⁷⁶ Ibid.

⁷⁷ (1994) 73 A Crim R 160.

"In determining an order for a voluntary mass screening, a judicial officer be required to be satisfied that the order is justified in all of the circumstances, taking into account whether a small number of potential suspects could instead be tested, and whether any other less intrusive means are available to further the investigation."⁷⁸

Should criteria be formulated for when mass DNA screenings should take place? Should a judicial authorisation be required and, if so, in what circumstances?

Questions arise as to whether provision of samples by persons in effect under suspicion in the course of a large investigation can be said to be voluntary. An issue that has been identified is a tool that has been described as "DNA request surveillance"⁷⁹ where police investigators observe the response of those asked to consent to a forensic procedure. If their behaviour reveals any sign of disinclination to participate, this may be construed as fear of incrimination, rendering the person immediately a suspect in the investigation. In turn this can constitute evidence for police to contend that the person should be coercively tested under the powers relating to suspects. Thus, hesitation to participate in a mass testing, which might have been caused by any number of factors consistent with innocence, can itself constitute a ground for involuntary testing.

Should judicial warning be formulated to reduce the likelihood of erroneous inferences being drawn by jurors about people's hesitation to participate in DNA profiling?

IMPACT ON CRIMINAL TRIALS

The impact of DNA technology upon criminal trials is not easily measured. The Queensland Police Service's *Environmental Scan* of June 2000 contended that "the conclusive nature of DNA will also cause a greater proportion of guilty pleas resulting in savings throughout the criminal justice system."⁸⁰ To a similar effect CrimTrac, the Australian government organisation auspicing the DNA databases has maintained: "When confronted with DNA

⁷⁸ Standing Committee on Law and Justice, , Legislative Council of New South Wales, *Review of the Crimes (Forensic Procedures) Act 2000*, Report No 18, Parliamentary Paper No 1118, February 2002, at p98.

⁷⁹ See Australian Law Reform Commission, *Protection of Human Genetic Information*, Issues Paper No 26, ALRC, Sydney, 2001, at p384.

⁸⁰ Queensland Police Service, 2000: http://www.qldpol/qupid/ooc/policy/env_scan/enciscan.htm

evidence, guilty suspects may be more likely to confess and plead guilty, saving police time and court costs."⁸¹

However, there are few statistical indications that these claims are evidence-based as yet. DNA profiling is predominantly utilised in Australia at this stage in sexual assault cases. Frequently, it is consent, rather than the identity of the sexual partner, which is in issue. DNA evidence may resolve one issue needing to be proved by the prosecution but it leaves many others to be addressed by other forms of evidence. Similarly, it is only a modest cross-section of homicides where the accused maintains that he or she was not at any stage present at the scene of the crime. The issue in actual contest is frequently whether the accused acted in self-defence or under provocation. DNA evidence generally has little to contribute in this regard. Further research is needed to gauge reliably the effect that the availability of DNA evidence is having upon the criminal trial process.

How effective has DNA evidence proved to be in terms of eliciting additional pleas of guilty or in reducing issues in forensic dispute?

The most contentious part of the Crimes Amendment (Forensic Procedures) Bill 2000 (Cth) was said by the Senate Legal and Constitutional Legislation Committee to be the diverse provisions around Australia for sharing of DNA profiling information⁸². It quoted the New South Wales Privacy Commissioner's submission:

"The effect of this section appears to be to allow the Commonwealth or any State or Territory agency to avoid the restrictions on access or use if this is authorised by legislation in the jurisdiction placing the data on the national Database. It would also allow agencies of a State or Territory to access or use any information on the National Database as authorised by its own legislation. This might not be a problem if all State and Territories passed laws that were consistent with the model code provisions. In fact there has been something of a bidding war between some State and Territories, encouraged by their Police Commissioners and by a desire to appear 'tough on crime', to minimise and downgrade the recommended protective provisions."⁸³

A particular issue in this regard is the consistency on legislation Australia-wide in relation to both the circumstances in which samples from suspects, remandees, prisoners and volunteers can be taken and then the circumstances in which matches can be made amongst different

81 [Http://www.crimtrac.gov.au/dna.htm](http://www.crimtrac.gov.au/dna.htm)

82 Senate Legal and Constitutional Legislation Committee, *Inquiry into Provisions of the Crimes Amendment (Forensic Procedures) Bill 2000*, AGPS, Canberra, 2000, para 3.57.

83 Privacy New South Wales, Submission to the Senate Legal and Constitutional Legislation Committee, *Inquiry into Provisions of the Crimes Amendment (Forensic Procedures) Bill 2000*, AGPS, Canberra, 2000, 7 November 2000, 4.

categories of persons on the databases. This is a good argument for consistency of DNA legislation.

How problematic for Victoria's criminal investigators and prosecutors is the diversity of Australia's DNA database legislation, particularly in relation to circumstances when matches can be undertaken between different categories of samples?

IMPACT ON CRIME RATES

The deterrent effect of the increasing reliability and resort by investigators to DNA profiling is also unclear. Relatively few violent offenders, either those employing overt violence to assault physically their victims or to sexually assault their victims, are likely to be discouraged from their conduct by the potential for body tissues to be found by DNA profiling. Criminal offending of these kinds is rarely so premeditated or reasoned. Ironically, such a realisation has the potential to induce further violence on rare occasions to hide the crime and the likelihood for its being discovered.

The Model Criminal Code Officers Committee acknowledged the deterrent value of DNA profiling as "hidden and impossible to assess", commenting:

"Greater awareness of [DNA profiling] should deter criminals from highly physical criminal activity such as burglary and serious assaults where it is likely evidence that can be examined for DNA will be left at the scene of the crime. It is therefore hoped that the database will in that way work to reduce some of the more frightening and invasive crimes."

However, the reality for such an aspiration is open to doubt.

How useful has DNA proved to be in leading to arrests, prosecutions or convictions and to what extent is any reduction in the incidence of particular crimes or a reduction in their rate of growth attributable to DNA profiling?

PRIVACY ISSUES

DNA profiling is the ultimate means of identifying a person. It not only can establish a match between a designated individual and a sample found at a crime scene or in an incriminating place; it can also provide extremely personal medical and other information about the person

and about their relatives. The value of privacy is that it acknowledges the importance of freedom from intrusion, surveillance and interference with matters that are personal - matters that we may well not wish to have known by others⁸⁴.

The New South Wales Privacy Commissioner characterised the privacy issue in relation to DNA profiling in this way:

"DNA is qualitatively different from most of the other forms of identification, whether it happens to be photographic identification, voice recognition or fingerprints. DNA potentially tells you a great deal not simply about the person from whom the DNA is taken but also about all of his or her relatives."⁸⁵

It is frequently asserted at this stage that it is "junk DNA" upon which profiling is conducted. For instance, the Queensland Court of Appeal in *R v Fitzherbert*⁸⁶ found that:

"A small part of the DNA "codes for" - i.e. determines the composition of - molecules from which the body is made up; but most of it is "junk DNA", which may have some function but does not appear to "code for" any bodily molecules. It is this "junk DNA" on which the profiling is done and the reason for that is that such DNA can be quite variable from person to person, whereas the "coding" DNA is extremely similar from person to person. To put this another way, the "junk DNA" is profiled because it is distinctive of a particular individual."

An important issue that cannot as yet be definitively answered, is whether "junk DNA" in fact codes for purposes other than its distinctiveness for particular individuals. If so, the information retained not so much by the profile but by the sample itself has an unparalleled potency in terms of its personalising potential.

Given the scientific uncertainty in relation to the issue, a number of ramifications exist in relation to the categories of persons whose samples should be incorporated on a DNA database and whose samples should be retained.

Are the controls currently in place under Victorian legislation sufficient to guard against collateral subsequent usage of DNA profiles?

84 Australian Law Reform Commission, *Privacy*, ALRC 22, AGPS, Canberra, 1983.

85 Standing Committee on Law and Justice, Legislative Council of New South Wales, *Review of the Crimes (Forensic Procedures) Act 2000*, Report No 18, Parliamentary Paper No 1118, February 2002, at p64.

86 [2000] QCA 255 at [7].

A further risk in relation to DNA profiling is that samples or profiles will become subject to collateral usage. This has two forms - usage by those who ought not to have access to such private information and usage by those who have rights of access but are prepared to exercise the rights for illegitimate ends. The phenomenon has been described as "function creep". The New South Wales Privacy Commissioner has given the following examples :

"Much of the concern which people have expressed over the use of DNA for forensic purposes can be related to the longstanding fears associated with a centralised form of identification such as a national identity card. ... there has already been a call by one member of the Federal Parliament for the establishment of a national DNA database on the basis of testing everybody or recording everybody in Australia.

... overseas experience in a very like jurisdiction, the United Kingdom, concerns me. There is evidence that the British police have on file approximately 80,000 DNA samples which have been taken unlawfully or not in accordance with the provisions of UK legislation and with no attempt by the authorities to clean that up. In fact the British government has indicated that it wants the police to treble the number of DNA samples that it takes over the next three years which would result in a British register of DNA samples of one in 15 of the population."⁸⁷

He argued that there is an obligation upon the legislature to establish ongoing limits, and to continue to monitor compliance with those limits, so that "function creep" in relation to DNA does not undermine people's right to privacy.

Do specific measures need to be adopted legislatively to reduce the potential for function creep in relation to DNA profiles?

An interesting aspect of the potential use of DNA profiling in an unexpected way arises by virtue of the operation or neonatal screening programmes conducted for phenylketonuria, congenital hypothyroidism and cystic fibrosis between three and five days after birth. These are overseen by the Human Genetics Society of Australia. Police might endeavour to obtain the "Guthrie card" from the Victorian State Screening Laboratory at the Royal Children's Hospital by virtue of an application to a magistrate for a search warrant on the basis of there being "reasonable ground to believe [that the card] will afford evidence as to the commission of an [indictable] offence. Probably a further warrant would be needed to test the DNA on the card"⁸⁸. Such an application appears plausible and constitutes a further example of usage of DNA samples that only a few years ago was not even contemplated.

⁸⁷ Standing Committee on Law and Justice, Legislative Council of New South Wales, *Review of the Crimes (Forensic Procedures) Act 2000*, Report No 18, Parliamentary Paper No 1118, February 2002, at p137.

⁸⁸ See L Skene, "Access to and Ownership of Blood Samples for Genetic Tests: Guthrie Spots" (1997) 5 *Journal of Law and Medicine* 137.

Should legislative or other measures be introduced to regulate usage of DNA samples currently stored other than on forensic databases?

Destruction of Samples

Justice Kirby has argued that one of the protections in face of the potency of DNA profiles to identify persons and personal characteristics of persons, as well as to interfere with people's rights to privacy, is that the systems in place to collect samples, maintain them in storage, limit access to them and to destroy them where mandated by legislation, should regularly be independently audited and monitored⁸⁹.

Are suitable oversight arrangements in place in Victoria to ensure that the DNA database system is audited and monitored?

The provisions in jurisdictions such as New South Wales for destruction of DNA profiles relate principally to the results obtained from the testing process, at present the Profiler Plus testing kit. More important though is the actual sample of blood other DNA bearing sample. It is this that can later be re-accessed for collateral and improper purposes. Yet it is standard for crime samples to be retained, sometimes for decades. The question arises as to whether special or additional measures need to be constructed to ensure that such samples are either not retained or are not illegitimately utilised.

Under s464ZFC of the Crimes Act 1958 (Vic) an attempt is made to address this issue. If a member of the police force does not formally make an application for retention of a DNA sample and associated information after a finding of guilt, the Chief Commissioner "must without delay destroy, or cause to be destroyed, any sample taken and any related material and information." Section 464ZFC(3) makes it an offence "knowingly" to fail to destroy or use a sample that should have been destroyed.

Similarly under s464ZG if a forensic procedure has been undertaken and a person has not been charged within 12 months or the charge has not been proceeded with or the person has been found not guilty, the Chief Commissioner once again is under an obligation to destroy, or caused to be destroyed, the sample and any related material and information. Once more, it is a criminal offence knowingly to fail to destroy or use a sample that should have been destroyed.

⁸⁹ M Kirby, "DNA Evidence: Proceed with Care" (2000) 12(8) *Judicial Officers' Bulletin* 1.

Both provisions, however, are expressed to be subject to an entitlement to retain de-identified information:

"S464ZFD(2): Information (other than information which may identify the person on whom a forensic procedure was conducted) obtained from the analysis of samples taken or procedures conducted in accordance with this Subdivision may be retained and included in a DNA database for statistical purposes."

The purpose of this provision, which is an important underpinning of the database, is to ensure that the repository of DNA profiles is as representative as possible of all sectors of the Australian population. Hence, the impetus toward acquisition of a large number of profiles. However, with the escalating sophistication of DNA profiles, the question arises whether this is sufficient in terms of privacy protection. As the New South Wales Privacy Commissioner has commented:

"While there is talk about eventually de-identifying material that is on the database, it is my view that almost any material can, at some stage, be re-identified in terms of a new sample that is taken that is matched against something that was allegedly de-identified, but is clearly now re-identified."

The problematic components of the "de-identified" database are those consisting of persons who have not been charged, whose charges have not been proceeded with, who have voluntarily supplied samples and who have been found not guilty of criminal offences. The question is whether the de-identification process is meaningful and whether an arm of the state should be permitted to retain such potentially identifying information about members of the community against whom no adverse finding has been made. The issue becomes the more stark in light of situations in which information held by policing authorities has been retained contrary to protocols, the issue being whether compliance with even legislative measures would take place when the temptations to breach them may be very significant.

Should the entitlement to retain on a DNA database 'de-identified information' arising from profiling of persons not charged, whose charges have not proceeded, those who have volunteered and those who have been found not guilty be changed?

SELF-INCRIMINATION ISSUES

The privilege against self-incrimination prevents investigators from coercing suspects into submitting to procedures which may inculcate them, unless the law has given them express

powers to exercise such powers⁹⁰. Old authority established that police had no powers to compel a person a suspect to cooperate even in provision of a fingerprint. However, current judicial consensus is that the privilege extends to "testimonial evidence", not to "real evidence" such as the results of DNA profiling⁹¹. Compulsory DNA profile surveillance (coercively gathering genetic material from a person for potential use in incriminating the person) does not of itself infringe the privilege⁹². The difficulty arises with DNA request surveillance where persons who are disinclined to comply with testing thereby reveal something which might be construed as guilt⁹³. The divulging of their reluctance can be construed as self-incriminatory because it may be regarded as consciousness on the part of people guilty of crimes that their guilt may be exposed through use of DNA technology. Gans has argued that "The potential for DNA request surveillance to breach the privilege against self-incrimination in unprecedented ways is clearest in its unique ability to prompt self-incrimination by non-suspects."⁹⁴

Do steps need to be taken to preclude the drawing of inappropriate adverse inferences from suspects' manifested disinclination to submit to DNA profiling?

In the context of DNA profiling, however, the technology and the comparatively ready availability of DNA containing material requires a contemporary reconceptualisation of rights and liberties. While until only recently DNA profiling required blood or semen or some other significant and intrusively obtained form of tissue, this is no longer the case. Just as it is possible, with a little innovation, to obtain a fingerprint from a suspect without voluntary submission by the subject, so too is it straightforward for investigators to obtain DNA samples from hair, skin brushings or saliva (eg from cigarette butts or from spoons and forks). This capacity to procure access to a person's ultimate DNA identification arguably introduces a range of needs to protect people's privacy and investigator's access to such information.

90 See generally S McNicol, *The Law of Privilege*, Law Book Co, Sydney, 1992.

91 See though *Lednar v Magistrates Court* [2000] VSC 549 at [283].

92 See eg B Hocking et al, "DNA Human Rights and the Criminal Justice System" (1997) 3(2) *Australian Journal of Human Rights*

93 See above.

94 J Gans, "Something to Hide: DNA, Surveillance and Self-Incrimination" (2001) *Current Issues in Criminal Justice* 168 at 178.

Do legislative measures need to be introduced to limit investigator's capacity to gain access without consent to suspects' or others' DNA?

Safeguards

One of the weaknesses of scientific evidence in the past has been the facility for malign police and others to "plant" evidence and thereby to inculcate innocent people or at least persons against whom otherwise there was not sufficient information to prefer charges. Given the potency of DNA profiling evidence, it is all the more important that the integrity of samples be adequately secured and that all possible steps be put in place to ensure that samples cannot be interfered with or planted by investigators, perpetrators of crime or others with an interest in contaminating the processes of justice ⁹⁵.

Are those procedures currently in place in Victoria to minimise the risk of planting or fabrication of DNA evidence sufficient? Are there further steps which could/should be taken?

A further important issue in relation to DNA profiling accountability is the facility for defendants to obtain an independent scientific re-analysis of testing. This issue was raised by Kirby K extra-judicially:

"Effective facilities [should be] provided to suspects to permit them a secure independent scientific scrutiny of DNA samples alleged to relate to them. It is important that the relevant experts should not be entirely within the employ of the state. Just because a result is produced by an expert or a machine is no reason to accept it without further questioning, or the right to question, the applicability, accuracy and reliability of such a result. An abiding difficulty of the present age is the unwillingness of many to accept that experts and machines sometimes err."⁹⁶

However, the reality in Victoria, as in many other jurisdictions, is that the pool of available experts in DNA profiling is shallow and almost exclusively to be found within the state facility (in Victoria part of the police force) that undertakes the overwhelming majority of

⁹⁵ M Kirby, "DNA Evidence: Proceed with Care" (2000) 12(8) *Judicial Officers Bulletin* 1 at 3; see too C Puplick, "Sirens Sound Over Privacy" (13 April 2000) *Sydney Morning Herald*, at p17.

⁹⁶ M Kirby, "DNA Evidence: Proceed with Care" (2001) 33 *Australian Journal of Forensic Sciences* 9. See too I Freckelton, "Institutionalisation of Forensic Expertise" in JF Nijboer and WJMM Sprangers (ed), *Harmonisation in Forensic Expertise*, Thela Thesis, Amsterdam, 2000.

forensic science work⁹⁷. For defendants who wish a re-analysis they have had little option but to seek assistance from one scientist who formerly worked at the Forensic Science Centre and currently is employed at the Victorian Institute of Forensic Medicine or to seek advice interstate, most often in South Australia. For a range of reasons, this can be logistically and financially problematic.

Are sufficient facilities available for defendants to have DNA samples re-analysed at a reasonable cost? If not, what measures need to be introduced?

Suspects

In Victoria the threshold for compulsory DNA testing of suspects is low. A police officer can apply to a Magistrates Court for an order directing a person to undergo a "compulsory procedure" where a person has refused to undergo a "forensic procedure", the sample can be obtained by such a procedure, the person is a relevant suspect and "a member of the police force believes on reasonable grounds that the person has committed the offence in respect of which the procedure was requested." (See above)⁹⁸ A Magistrate may make an order if satisfied on the balance of probabilities that:

- the person is a relevant suspect; and
- there are reasonable grounds to believe that the person has committed the offence in respect of which the application is made.

However, if the police officer does not believe on reasonable grounds that the person has committed the offence in respect of which the procedure was requested - for instance if there is not sufficient evidence to reach such belief - the court must be satisfied also of a variety of matters and that "in all the circumstances the making of the order is justified."

No explication of this criterion is provided by the legislation, although in 464U(8) an explanation is given in respect of procedures involving children, the court being mandated to take into account "amongst other things - (a) the seriousness of the circumstances surrounding the commission of the offence; and (b) the alleged degree of participation by the child in the commission of the offence; and (c) the age of the child."⁹⁹

⁹⁷ See generally I Freckelton, P Reddy and H Selby, *Australian Judicial Attitudes Toward Expert Evidence: An Empirical Study*, AIJA, Melbourne, 1999.

⁹⁸ Crimes Act 1958 (Vic), s464T(1).

⁹⁹ Crimes Act 1958 (Vic), s464U(8)(a)-(c).

Should clearer considerations be articulated for the circumstances in which a court order should be made against adults to undergo a compulsory procedure?

Offenders

Under s464ZF(1) a member of the police force within 6 months of the finding of guilt in relation to an offence listed in Schedule 8 of the Act may apply to a court for an order directing the person to undergo a forensic procedure¹⁰⁰. The categories of offences within Schedule 8 now encompass not only crimes of violence and sex crimes, but also burglaries, trafficking of a drug of dependence, arson offences and cultivation of a narcotic plant.

Given the purposes of securing samples from offenders, the question needs to be posed whether the categories of crimes within Schedule 8 are broad enough or too broad. A balance needs to be found in respect of the categories of offences which are likely to be useful in terms of the investigation of future offences and keeping to a minimum the encroachment on people's liberties constituted by being placed upon a DNA database. It is relatively unusual for a person to commit a serious offence without having previously committed a minor offence. However, the majority of minor offenders never graduate to major offending.

Should criteria for determining when the making of a retention order is justified, in respect of samples previously taken from a suspect who has subsequently been found guilty of an offence?

Under s464ZFB(1), if, after the commencement of s26 of the Crimes (Amendment) Act 1997, a forensic procedure is carried out and a court finds the person guilty of the offence in respect of which the forensic procedure was conducted, or any other offence arising out of the same circumstances, or any other offence in respect of which evidence obtained as a result of the forensic procedure had probative value, a police officer can make application to a court for the sample and any related material or information to be retained. A court hearing such an application is obliged to take into account the seriousness of the offence and must be satisfied that, in all the circumstances, the making of the order is justified¹⁰¹.

No criteria are set out for determining whether the making of a retention order is justified.

¹⁰⁰ See generally *Lednar v Magistrates Court* [2000] VSC 549.

¹⁰¹ Crimes Act 1958 (Vic), s464ZFB(2).

Should criteria for determining when the making of a retention order is justified in respect of samples previously taken from a suspect who has subsequently been found guilty of an offence?

It has been held that it is necessary that the decision by a magistrate about whether samples should be ordered against a prisoner must be conducted fairly¹⁰². However, given the limited facility for arguments to be put by the prisoner, and the limitations upon the adducing and testing of evidence, the parameters of this protection are unclear¹⁰³.

Are the protections of fairness applicable to determinations by magistrates about ordering prisoners to undergo compulsory procedures sufficient or meaningful?

Volunteers

Under s464ZGB of the Crimes Act 1958 (Vic) a person of or above the age of 17 can volunteer to give an intimate or a non-intimate sample to a member of the police force. A person is stipulated to consent only if, in the presence of a person who is independent, he or she consents after receiving a variety of categories of information from a member of the police force, that information being provided in language likely to be understood by the person:

- that the sample that is given will be analysed;
- that the information obtained from the analysis will be placed on a DNA database and may be used for the purpose of a criminal investigation or any other purpose for which the DNA database may be used under this Subdivision or under a corresponding law of a participating jurisdiction;
- that the person may choose whether the information obtained from analysis of the sample may be used -
 - only for a limited purpose to be specified by the volunteer; or
 - for the purpose of a criminal investigation or any other purpose for which the DNA database may be used under this Subdivision or under a corresponding law of a participating jurisdiction;
 - that the information obtained from the analysis could produce evidence to be used in a court;
 - that the person is under no obligation to give a sample;

102 *Lednar v Magistrates Court* [2000] VSC 549 at [284].

103 See too *Loughnan v Magistrates' Court of Victoria* [1993] 1 VR 685.

- that if the person consents to give a sample, he or she may at any time before the sample is taken, withdraw that consent;
- that the person may consult a legal practitioner before deciding whether or not to consent to give a sample;
- that the person may at any time (including after he or she has been charged with an offence) withdraw his or her consent to the retention of the sample;
- that where the person withdraws his or her consent to the retention of the sample, a member of the police force may nonetheless apply to a court for an order to retain the sample and any related material and information;
- that the person may request that the sample be taken by or in the presence of a medical practitioner, nurse or dentist of his or her choice.

Does the obligation to provide stipulated information to a person contemplating volunteering to undergo a DNA test, achieve its objective of providing sufficient information to the person to enable them to make an informed decision?

Informed Consent

The provisions in the Crimes Act 1958 (Vic) provide that a person must be given an opportunity to consult with his or her lawyer before providing or refusing consent to a forensic procedure. However, it is common for lawyers not to be available at night, for requests to be made after ordinary working hours and for persons to be under considerable, subtle pressure to co-operate with police. This brings into question the reality of this provision as a protection.

A key aspect of protection in respect of "voluntary" submission to DNA profiling is the s464S definition of informed consent:

"A person gives informed consent to a request to undergo a forensic procedure if he or she consents to the request after a member of the police force informs the person in language likely to be understood by the person -

- (a) of the purpose for which the procedure is required; and
- (b) of the nature of the procedure sought to be conducted; and
- (c) that the person may request that the procedure be conducted by or in the presence of a medical practitioner or nurse of his or her own choice or, where the procedure is the taking of a dental impression, a dentist of his or her choice; and
- (d) of the offence which the person is suspected of having committed or with which the person has been charged or for which the person has been summonsed to answer to a charge; and
- (e) that the procedure could produce evidence to be used in a court; and
- (f) that the person may refuse to undergo the procedure; and

- (g) where the sample or examination sought may be obtained by a compulsory procedure and the person refuses to undergo the procedure, that an application may be made to the Magistrates' Court for an order authorising the conduct of the procedure.

How realistic in practice is the requirement that persons submitting voluntarily to DNA profiling provide informed consent to the process?

An issue arises as to whether prisoners' consent is truly free. This was raised in a number of submissions to the New South Wales Standing Committee on Law and Justice¹⁰⁴, Justice Action maintaining that a number of prisoners had been subject to threats and intimidation during the process and the Council for Civil Liberties informing the Inquiry that it had received complaints from prisoners about pressure to furnish consent. This led to the Committee recommending the establishment and funding of a 24-hour telephone legal advice hotline, run by the Legal Aid Commission, for access by persons requested to consent to a forensic procedure.

Does there need to be access to a 24-hour telephone legal advice hotline for persons requested to consent to a forensic procedure?

¹⁰⁴ Standing Committee on Law and Justice, Legislative Council of New South Wales, *Review of the Crimes (Forensic Procedures) Act 2000*, Report No 18, Parliamentary Paper No 1118, February 2002, at p37.

Status of Buccal Swabs

In Victoria a sample of saliva and a scraping taken from the mouth are classified as "intimate samples". Different classification patterns are adopted in other jurisdictions. Given the degree of intrusiveness in a buccal swab, the question needs to be asked, bearing in mind the consequences attaching to the dichotomy between "intimate" and "non-intimate" sampling, whether buccal swabs should be classified as a form of intimate sampling.

Should there be legislative provision for samples to be taken in the least intrusive, embarrassing and time-consuming way that is reasonably practicable?

The facility exists for samples to be taken in the form of self-administered buccal swabbing. It may be that a presumption should be articulated that samples should be taken in this or another minimally intrusive way, rather than by more intrusive modes.

Protections for Vulnerable People

Particular issues arise in the context of persons whose consent to forensic procedures may be ill-informed by reason of cultural factors, limited facility with the English language or psychiatric or intellectual disabilities. The decision to submit one's sample onto a national database is a significant decision that is potentially against interest.

Do the existing Victorian safeguards adequately protect the rights of vulnerable persons? If not, how might the safeguards be improved?

A particular further issue arises in relation to the taking of samples from children.

Do Victoria's provisions relating to the taking of forensic samples from children adequately protect their rights and liberties?

Database Restrictions

The attempted matching of DNA profiles on the various indexes (crime scene, offenders, suspects, volunteers (limited purposes) and volunteers (unlimited purposes) is restricted under s464ZGI of the Act¹⁰⁵:

Profile to be matched	Is matching permitted?						
	Column 2 Crime scene	Column 3 Suspects	Column 4 Volunteers (limited)	Column 5 Volunteers (unlimited)	Column 6 Serious offenders	Column 7 Missing Persons	Column 8 Unknown deceased persons
1. Crime scene	Yes	Yes	No	Yes	Yes	Yes	Yes
2. Suspects	Yes	No	No	No	Yes	No	Yes
3. Volunteers (limited)	Only if within purpose	No	No	No	Only if within purpose	Only if within purpose	Only if within purpose
4. Volunteers (unlimited)	Yes	No	No	No	Yes	Yes	Yes
5. Serious offenders	Yes	Yes	No	No	Yes	Yes	Yes
6. Missing persons	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7. Unknown deceased persons	Yes	Yes	Yes	Yes	Yes	Yes	Yes

A contentious issue is whether the matching of suspects against all scenes is appropriate or whether suspects should only be matched against the crime or crimes for which they are being investigated, thereby reducing the potential for "cold hits".

In addition, as the missing persons index may include profiles from both missing persons and volunteering blood relatives, the profiles of such blood relatives can be matched against all other indexes. In New South Wales, Justice Action has argued that it is inappropriate

"Families of missing persons will have their DNA profiles matched against the crime scene index. This is likely to make people who may have committed an offence at

¹⁰⁵ By contrast with New South Wales there are no "missing persons" or "unknown deceased persons" indexes.

some time in the past very reluctant to provide a sample or perhaps even to report a missing family member."¹⁰⁶

Should alterations be made to the circumstances in which matching on the DNA database is permitted in Victoria?

Admissibility of Improper DNA Evidence

Section 464ZE prescribes that evidence of a forensic procedure is inadmissible if various of the provisions of the Act have not been complied with. However, the evidence may still be admitted if the prosecution satisfies the court on the balance of probabilities that the circumstances justify the reception of the evidence or if the accused consents to its admission. In determining whether the circumstances justify the admission of the evidence, the court is able to have regard to:

- the probative value of the evidence, including whether equivalent evidence or evidence of equivalent probative value could have been obtained by other means;
- the reasons given for the failure to comply with the provisions of the Act;
- the gravity of the failure and whether it deprived the accused of a significant protection given by the Act;
- whether the failure was intentional or reckless;
- the nature of the requirement that was not complied with;
- the nature of the offence alleged against the person and the subject-matter of the proceedings;
- whether the reception of the evidence would seriously undermine the protection given to persons under the Act;
- any other matters the court considers appropriate.

The result of the current drafting is that the complex inquiries and balancing must be undertaken in respect of all breaches of the Act - both the serious and the technical.

It may be that the exercise should only be necessary where serious breaches are established.

¹⁰⁶ Standing Committee on Law and Justice, Legislative Council of New South Wales, *Review of the Crimes (Forensic Procedures) Act 2000*, Report No 18, Parliamentary Paper No 1118, February 2002, at p140.

However, a tendency has existed in many contexts for illegally and improperly obtained evidence generally to be admitted in spite of the impropriety attaching to how it was procured. It may be that, given the uniqueness of DNA profiling evidence, and the important privacy and other considerations relevant to samples being taken, analysed and stored, special measures need to be put in place to provide for its inadmissibility unless all relevant legislative protocols have been adhered to - to the letter.

Are the admissibility rules for DNA profiling adequate? Should the balancing test only apply where contraventions of the provisions of the Act are minor?