

# ROLE OF THE CUSTODIAN

## National DNA Database Statistics

The NDNAD contains over 4.5 million sample profile records. Every day thousands of data transactions are executed following receipt of DNA sample profile results. In addition, administrative changes are routinely made which can eliminate profile records from the NDNAD or change them. The NDNAD at any given moment in time is often only possible to provide a "snapshot" of its contents at the current moment in time.

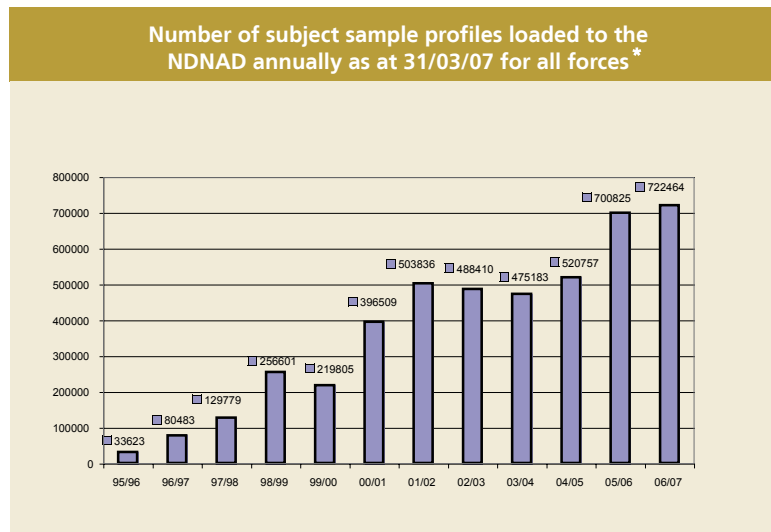
The NDNAD was not designed with the requirement to provide the wide range of statistical data and management information now required and it has limited "in-built" reporting capabilities. Also, the NDNAD does not retain any historic information, so, for example, when a record is deleted from the NDNAD, all information related to that record will be removed from the Database tables as well. There have been several changes and additions made to the NDNAD in previous years to increase the ability to be able to provide more consistent data on the NDNAD and to overcome the problem of only being able to take a snap shot of the current position on the NDNAD.

### Profiles loaded to the National DNA Database

#### Subject samples

Since 1995, 4,543,944 subject sample profiles have been loaded to the NDNAD.

During 2006/07, 722,464 new subject sample records were added to the NDNAD, an increase of 1% on 2005/06. As the graph illustrates the trend in the growth of the NDNAD is slowing down.



\*This chart is slightly different to the one produced last year because the Date Loaded has changed for some records, usually as a result of the records having been removed from the NDNAD and then re-loaded, when the original Date Loaded will have been overwritten with the most recent loaded date, causing historic counts to be reduced.



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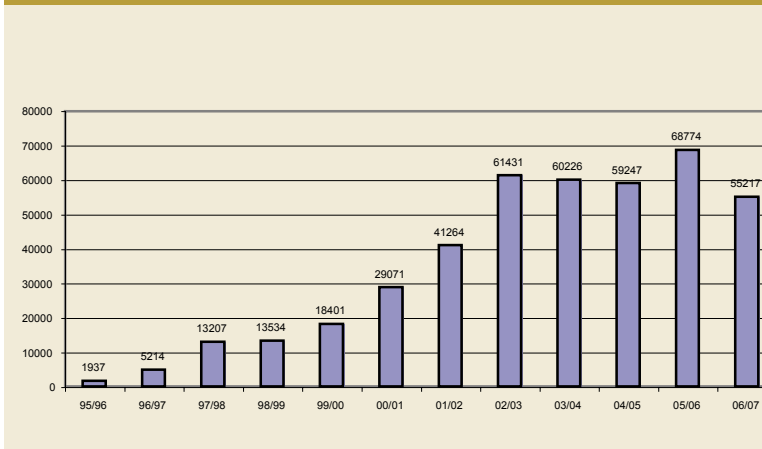
## National DNA Database Statistics

### *Crime scene samples*

Since 1995, 427,437 crime scene sample profiles have been loaded to the NDNAD.

During 2006/07, 55,217 new crime scene sample profiles were added to the NDNAD, a decrease of 20% on 2005/06. The decrease partly reflects the fall in volume crime offences such as 'domestic burglary', 'other burglary' and 'offences against vehicles' over the same period."

Number of crime scene sample profiles loaded to the NDNAD annually as at 31/03/07 all forces



*\*Again this chart is slightly different to the one produced last year because the Date Loaded has changed for some records, usually as a result of the records having been removed from the NDNAD and then re-loaded, when the original Date Loaded will have been overwritten with the most recent loaded date, causing historic counts to be reduced.*

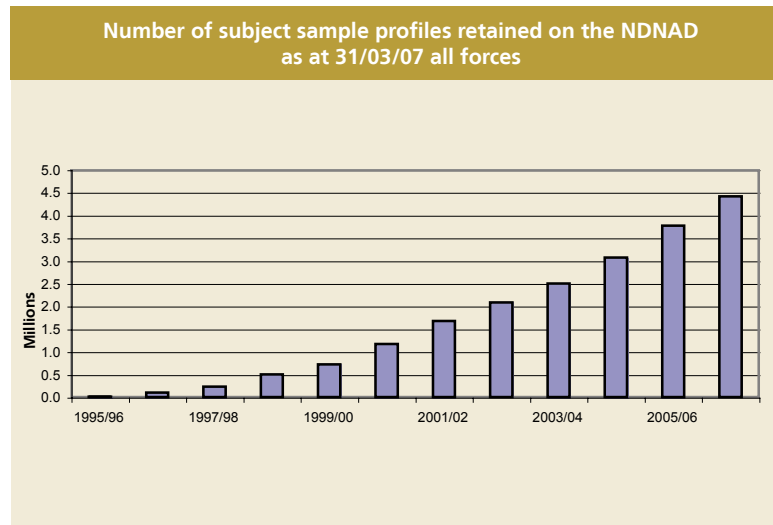


# National DNA Database Statistics

## Profiles retained on the National DNA Database

### *Subject samples*

At 31 March 2007, 4,428,376 subject sample profiles were retained on the National DNA Database.



### *Criminal Justice (CJ) samples*

4,353,003 of the subject sample profiles on the NDNAD relate to CJ samples taken under Police and Criminal Evidence Act. A further 36,165 subject sample profiles relate to those obtained prior to FSNI's accreditation.



# ROLE OF THE CUSTODIAN

## National DNA Database Statistics

### *Volunteer samples*

22,440 of the subject sample profiles relate to volunteer samples. The loading of Scottish Volunteer samples to the NDNAD commenced in March 2007, following agreement with ACPO(S).

Most volunteer samples are obtained from victims, third parties or a member of a population identified for an intelligence-led screen, for elimination purposes in relation to the investigation of a specific offence. Prior to 2001 they could only be used for that purpose and the profiles could not be added to the NDNAD. The CIPA 2001 for England, Wales and Northern Ireland changed that. These profiles can now be added to the NDNAD, but only if the person provides separate written consent, and the consent form explains that once such consent is given it cannot then be withdrawn. Equivalent legislation introduced in Scotland in 2003 differed only in that it allowed volunteers to withdraw their consent.

### *Replicates*

It is estimated that approximately 13.7% of the subject sample profiles held on the NDNAD are replicates, arising from samples being taken from the same subject on more than one occasion. The number of different individuals represented on the NDNAD at 31 March 2007 was approximately 3,874,500.

Some causes of replication are unavoidable or the result of deliberate policy. For example, the existing profile on the Database may be under an alias, or from volunteers. Equally a pre-existing profile on the Database may relate to an individual sampled outside of England and Wales. Samples taken by forces outside of England and Wales cannot be identified through PNC when the police are taking a sample.

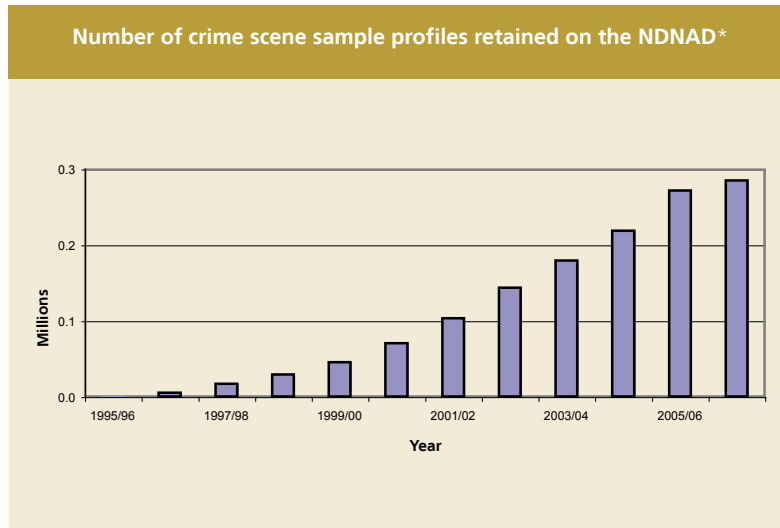
It is important to emphasise, however, that the presence of these replicate profiles on the NDNAD does not impact on the effectiveness and integrity of the Database. Nonetheless, a long term exercise is underway to identify issues associated with the identification and removal of all such redundant replicate profiles.



# National DNA Database Statistics

## Crime scene samples

On 31 March 2007, 285,848 crime scene sample profiles were retained on the NDNAD.



\*For an accurate "retained crime scene samples" chart, the information would need to have been recorded at the end of each financial year and it was not. The information has therefore had to be obtained retrospectively and consequently takes no account of deleted and/or reloaded sample records.

## Profiles removed from the National DNA Database

### Subject samples

Between 1 January 1995 and 31 March 2007, it is estimated that the number of subject sample records removed from the National DNA Database at the request of the police is of the order of 368,000.

Year	Records removed from the NDNAD*
1995	675
1996	12,564
1997	21,587
1998	45,710
1999	68,816
2000	66,149
2001**	44,664
2002	14,589
2003	24,173
2004	19,194
2005	21,661
2006	22,164
2007***	6,128



\* The figures relate to calendar years and CJ sample records which have been flagged as removed, or removed and then flagged for reload, but which are not on NDNAD at the moment; they do not include casework reference sample and volunteer sample records.

\*\*The CIPA was implemented in 2001

\*\*\*Total to March 31 2007

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## National DNA Database Statistics

During 2006/07, 23,927 subject sample records were removed from the NDNAD. Of these, 23,439 related to Scottish samples.

The CIPA 2001 in England and Wales, and equivalent legislation in Northern Ireland, removed the obligation on the police to destroy samples and remove their profiles from the NDNAD following a discontinuance or acquittal, but the decision in any particular case on whether the sample should actually be destroyed and its profile removed from the NDNAD or retained is one for the Chief Constable of the force concerned. However, the presumption will always be for retention unless there are 'exceptional circumstances'. Guidance on what constitutes 'exceptional circumstances' is contained within the data retention guidelines for nominal records on PNC. This can be found at:-

[http://www.homeoffice.gov.uk/documents/Bichard\\_Step\\_Model\\_Retention.pdf](http://www.homeoffice.gov.uk/documents/Bichard_Step_Model_Retention.pdf)

Destruction of samples obtained from volunteers with consent for their profiles to be added to the NDNAD, and the removal of their profiles from the NDNAD, is subject to the same consideration as for samples and profiles obtained under PACE, except for Scottish samples where the volunteers can request the police to destroy their samples and removed their profiles from the NDNAD at any time. There are no plans in Scotland to change this approach.

*These figures differ slightly to those given in the 05/06 Annual Report due to the implementation of an enhanced audit trail enabling better recording of changes to records.*

*More accurate figures are not available for the earlier years because of the problems associated with the lack of any audit trail.*



# National DNA Database Statistics

## Crime scene sample profiles

Since 1995, 154,769 crime scene sample profiles have been removed from the NDNAD.

During 2006/07, 33,212 crime scene sample records were removed from the NDNAD.

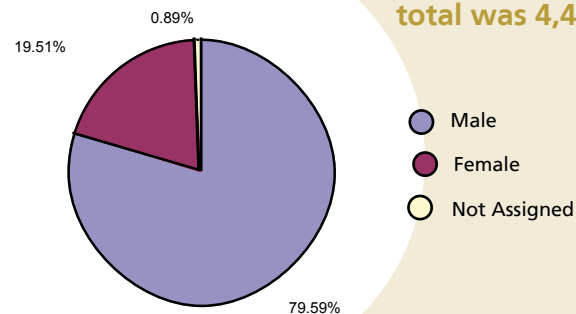
Crime scene sample profiles are removed from the NDNAD at the request of the police following a conviction for the offence or when a decision has been made that it will not be investigated further.

Consideration continues to be given by the NDNAD Strategy Board to whether crime scene profiles should be retained on the Database following a match. Such retention would allow all new subject sample profiles to be checked against them, even if a conviction has been obtained for the offence, and so identify other potential suspects who may not have been previously considered, and consequently the risk of a miscarriage of justice.

## Analysis of profiles retained

### Subject samples By gender

#### The gender of subject sample profiles on the NDNAD

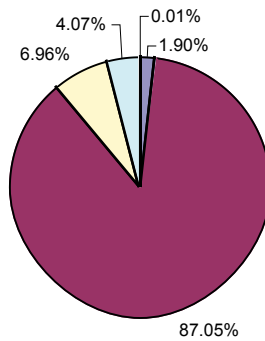


# ROLE OF THE CUSTODIAN

## National DNA Database Statistics

### By country of origin

The breakdown of subject sample profiles loaded to the NDNAD in 2006/07

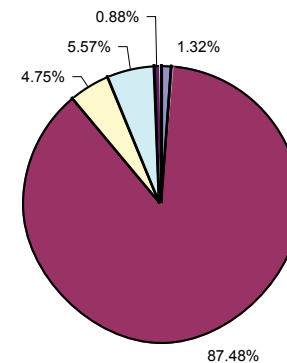


### By country of origin as at 31/03/07

- Other
- England
- Scotland
- Wales
- Northern Ireland

The total was 722,464

The breakdown of the subject sample profiles loaded to the NDNAD by country of origin



As at 31/03/07

- Other
- England
- Scotland
- Wales
- Northern Ireland

The total was 4,428,376

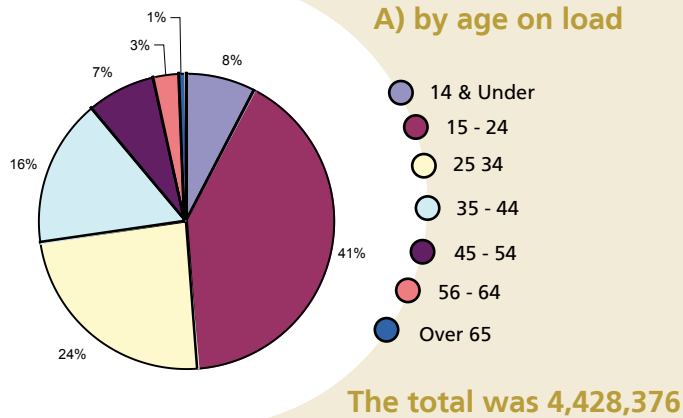




# National DNA Database Statistics

## By age

The age distribution as at 31/03/07  
of subject records held on the NDNAD

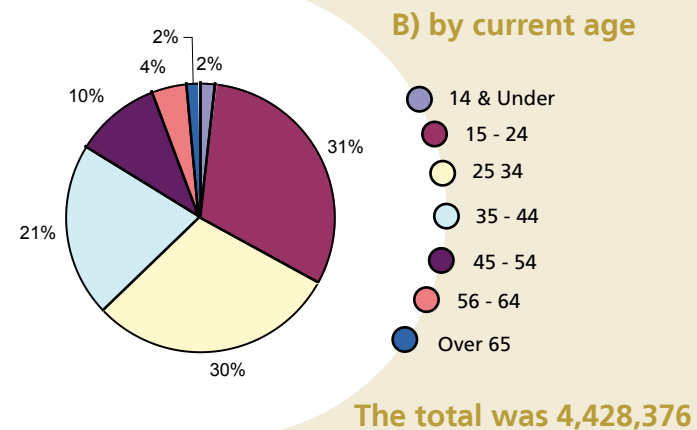


\*The figures represent profiles on the NDNAD, not individuals. There may thus be some duplication, but this should not make any material difference to the breakdown.

PACE does not distinguish between adults and minors in terms of the taking, retention and destruction of DNA samples and profiles.

There are no powers for police in England and Wales to take samples from under 10's without written consent from the parent or legal guardian and for those samples which are volunteer samples there also has to be a second consent given to load the sample to the NDNAD.

The age distribution as at 31/03/07  
of subject records held on the NDNAD

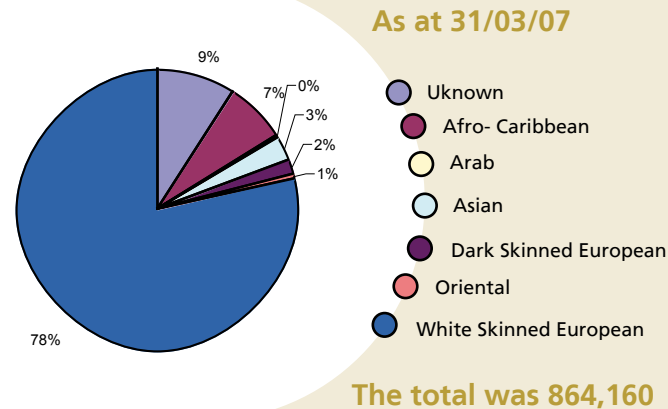


# ROLE OF THE CUSTODIAN

## National DNA Database Statistics

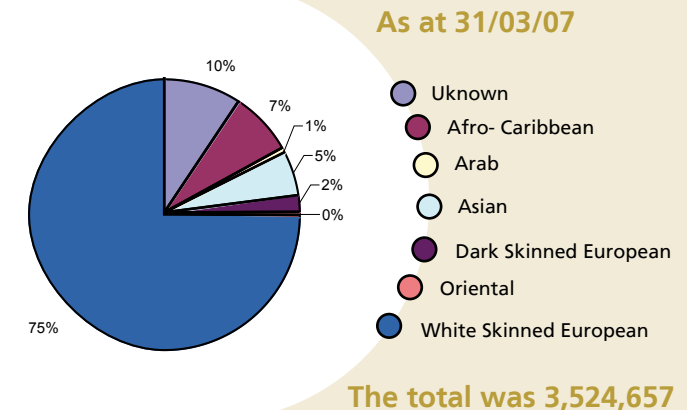
### By ethnic appearance

The ethnic appearance distribution of female sample profile records retained on the NDNAD



\*Ethnic appearance is not normally included in the data submitted from Scotland and accounts for 40% of the 'unknowns'. Until April 2005, the ethnic appearance of volunteers was not recorded; volunteers thus account for a further 16,651 (4%) of the 'unknowns'

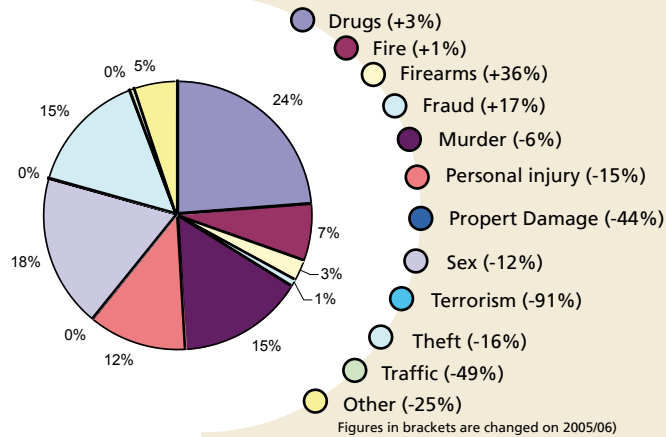
The ethnic appearance distribution of male sample profile records retained on the NDNAD



# National DNA Database Statistics

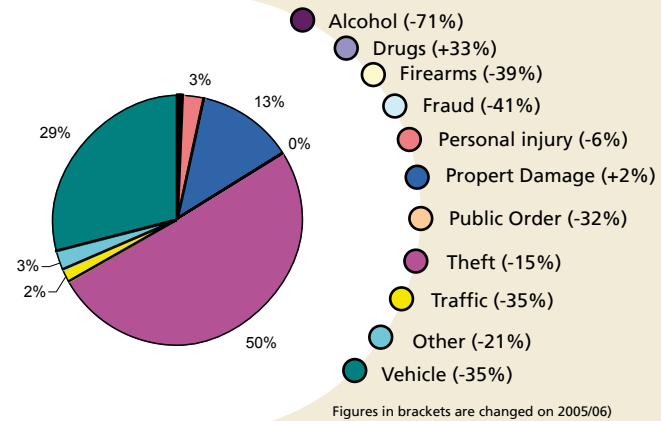
## Crime scene samples

### Serious crime offence profiles loaded to the NDNAD during 2006/07



As at 31/03/07 the total was 5,869

### Volume crime offence profiles loaded to the NDNAD during 2006/07



As at 31/03/07 the total was 49,330

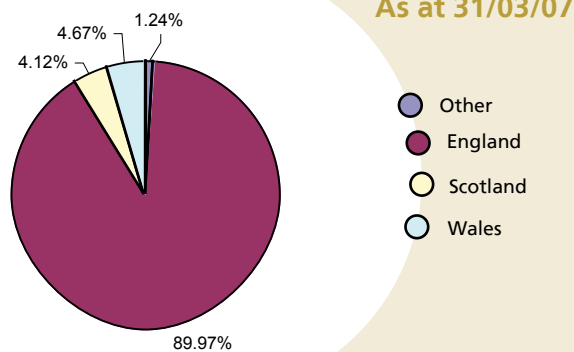


# ROLE OF THE CUSTODIAN

## National DNA Database Statistics

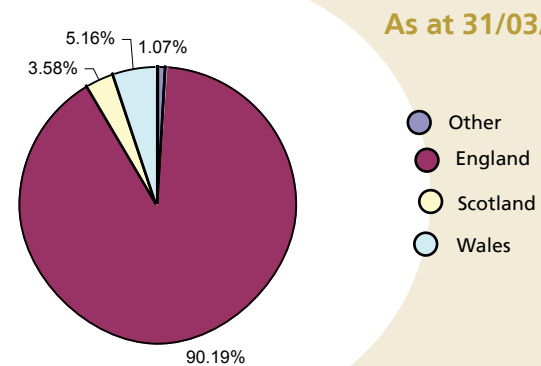
### By country of origin

Crime Scene profiles loaded to the NDNAD during 2006/07 by country of origin

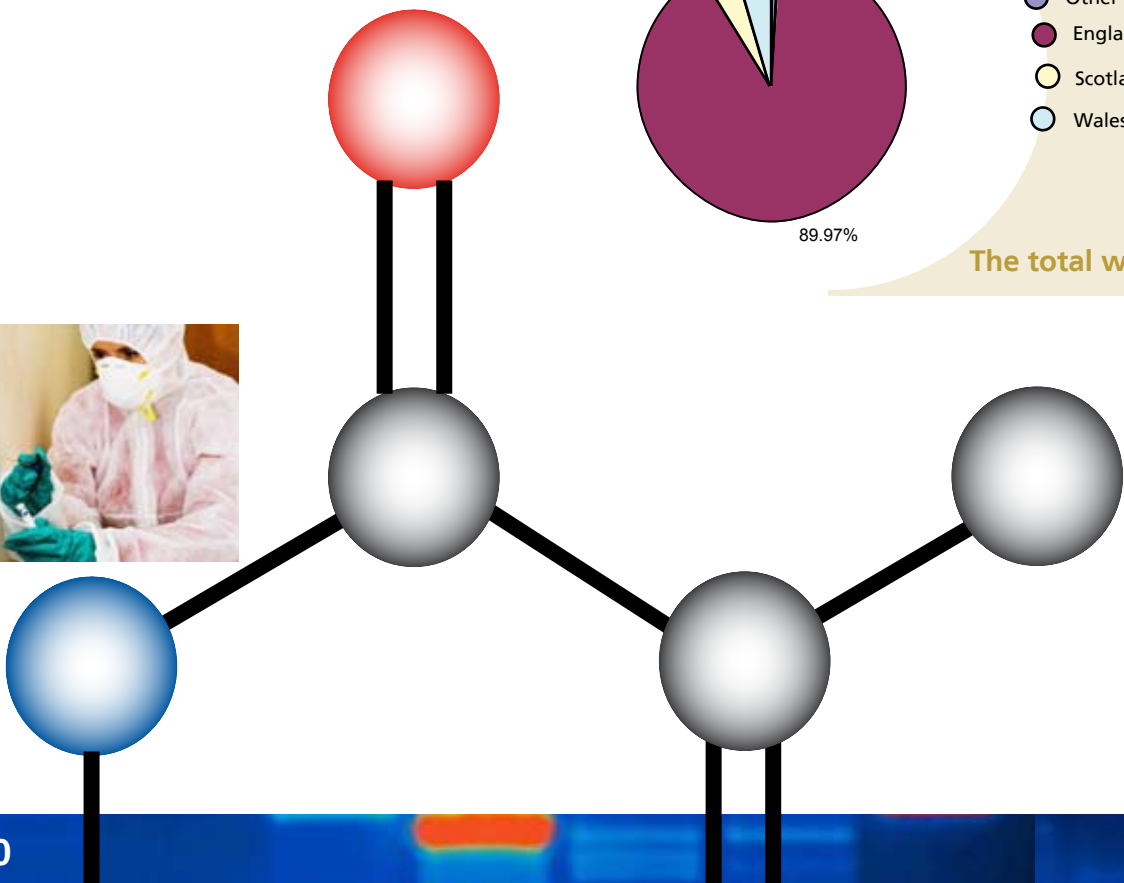


The total was 55,217

Breakdown of crime scene profiles retained on the NDNAD by country of origin



The total was 285,848



# National DNA Database Statistics

## Matches

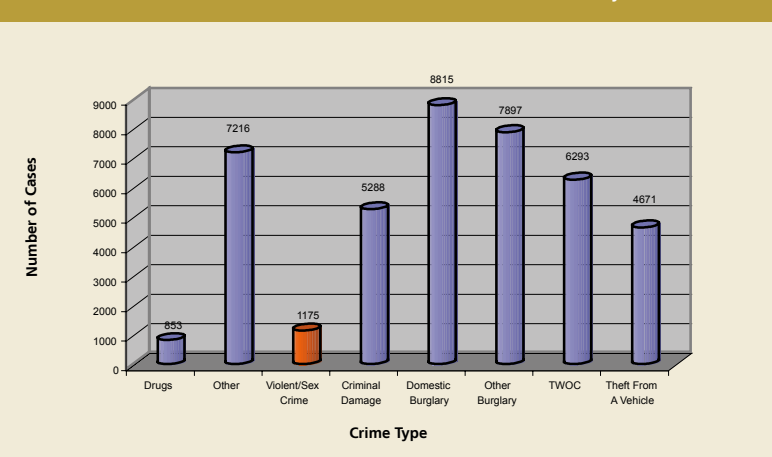
### *Crime scene to subject matches*

Matches between a crime scene and a subject are useful in identifying possible suspects for the offence. Since May 2001, 226,288 crime scene profiles have been involved in 205,122 match groups linking crime scene and subject sample profiles. For 164,438 of the crime scene to subject matches, a single suspect was reported. The identification of more than one potential suspect can be due to the crime scene profile being a partial profile or due to the number of replicate subject profiles held on the Database.

For 2006/07, one or more suspect sample profiles were matched with 44,224 crime scenes samples. The total represents a decrease of 10.2% of the total number of crime scenes for which one or more suspects were nominated in the previous year. The reason for the fall is due to fewer new crime scene sample records being loaded within the period.

Of these matches in 2006/07, 36 related to subjects from Northern Ireland, 1,330 to subjects from Scotland and 912 to crime scenes from Scotland.

Number of cases which have been linked to one or more subjects in 2006/07



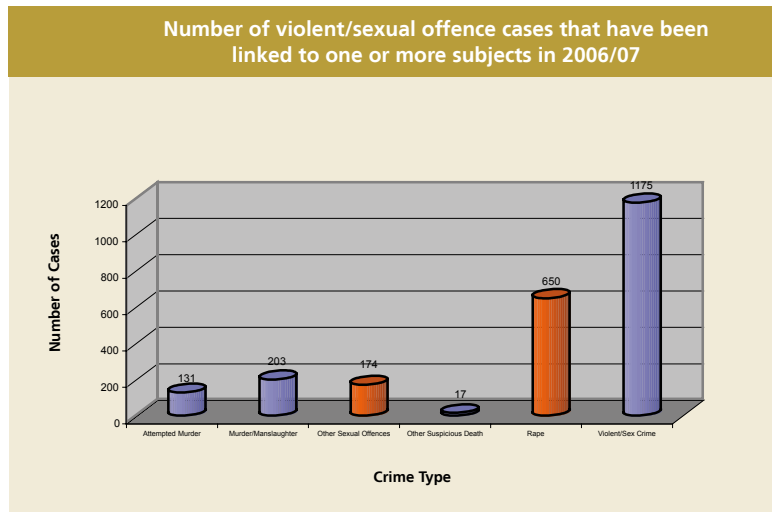
*By offence type*



# ROLE OF THE CUSTODIAN

## National DNA Database Statistics

### By offence type



### Crime scene to volunteer

During 2006/07, 6,430 new volunteer sample profile records were loaded to the National DNA Database. This includes 838 Scottish volunteer profiles; these were loaded to the NDNAD for the first time during 2006/07. These volunteer sample profile records produced 293 immediate matches with crime scene sample profiles, 148 of which were from undetected crime scenes, the remaining 145 matched to crime scenes that had previously been connected to another subject sample profile on the NDNAD. Of these 148 immediate matches 17 were involving Scottish Volunteers.

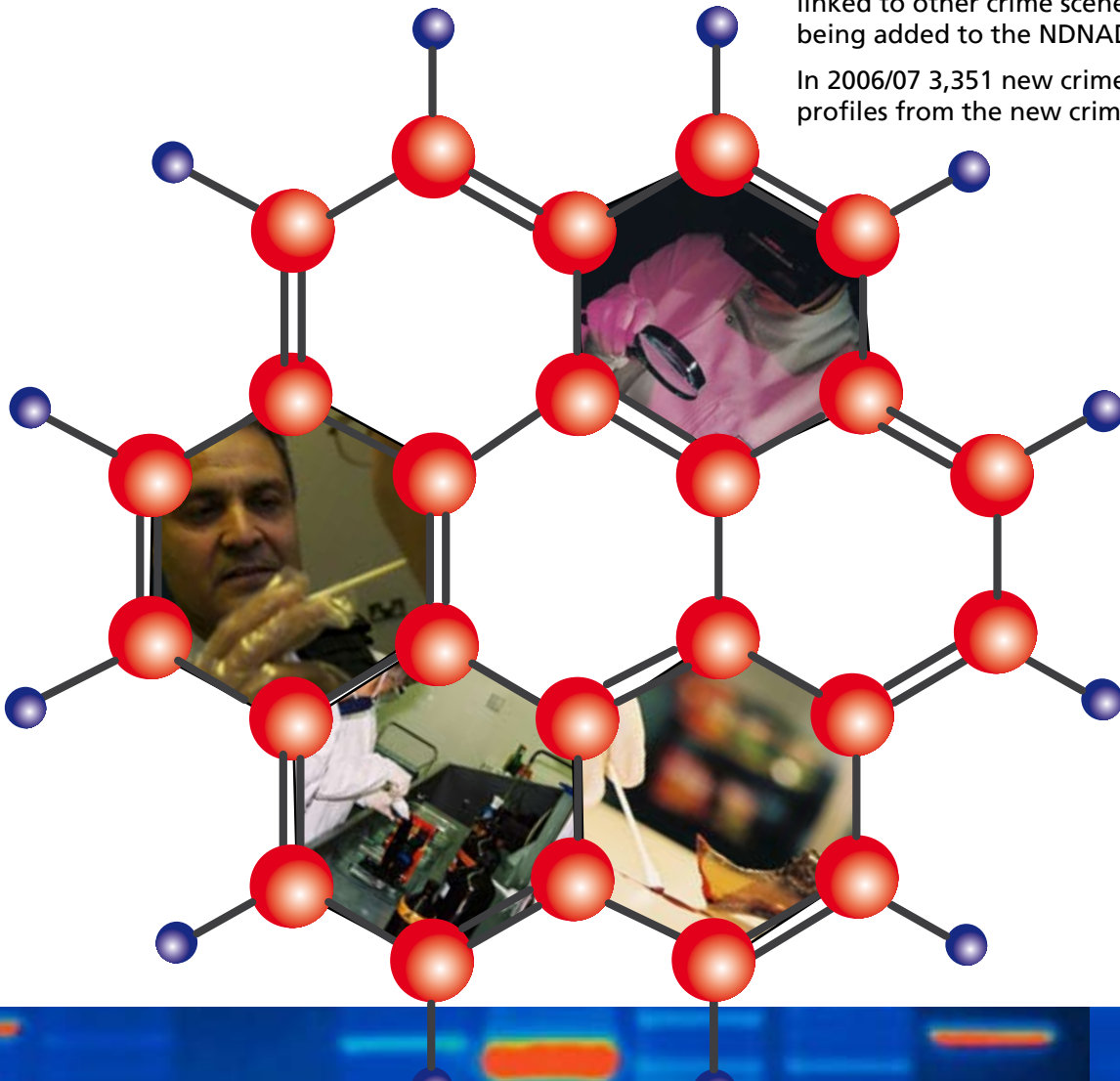
Offence	No. of Matches
Murder/Manslaughter	16
Less Serious Assault	6
Attempted Murder	4
Criminal Damage	4
Supply of Controlled Drugs	1
Rape	12
Other Sexual Offences	5
Burglary in a Dwelling	41
Robbery Serious	4
Robbery Volume	4
Other Burglary	14
Theft inc Handling Stolen Goods	1
Auto-Crime	8
Aggravated Burglary	1
Theft of a Vehicle	11
Wounding/GBH	1
Theft From a Vehicle	1
Abduction and Kidnapping	1
Arson/Fire Investigations	1
Break in Offences	1
Other	11
<b>TOTAL</b>	<b>148</b>

## National DNA Database Statistics

### *Crime scene to crime scene*

Matches between samples from different crime scenes provide valuable intelligence information on repeat offenders. Since May 2001, 20,640 crime scenes have been linked to other crime scenes as a result of a new crime scene sample DNA profile being added to the NDNAD.

In 2006/07 3,351 new crime scenes were linked to other crime scenes when DNA profiles from the new crime scenes were added to the NDNAD.





# ROLE OF THE CUSTODIAN

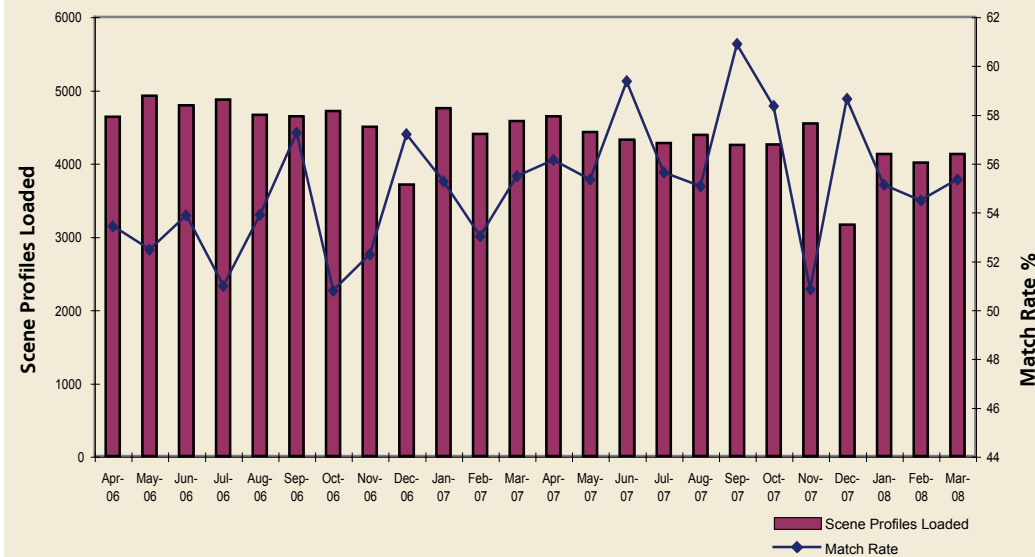
## National DNA Database Statistics

### Match rates

*Following addition of a new crime scene sample profile.*

The graph below shows the match rate when a new crime scene sample profile loaded to the NDNAD immediately matches one or more subject sample profiles already on the NDNAD. As at 31st March 2007, the crime to subject match rate following addition of a crime scene sample profile was 55.5%, an increase of 3.5% on last year.

Crime to subject match rate following addition of a crime scene sample profile April 2006 - March 2008





# National DNA Database Statistics

## Following addition of a new subject sample profile

Where a crime scene sample profile fails to match with a subject sample profile immediately following its loading to the NDNAD, it remains on the NDNAD and is checked against all new subjects sample profiles as they are added to the NDNAD.

The graph below shows the match rate when a new subject sample profile loaded to the NDNAD immediately matches one or more Scene sample profiles already on the NDNAD.

