

Scottish DNA Database
Statistics 2022/2023

These statistics outline the management and investigative activity around the Scottish DNA Database. Further information on the statistics provided can be found on the 'Further Information' page below.

CJ Profile Retention - This Month

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Yearly Total
CJ Profiles added	1269	1510	1350	1755	1689	1584	1814	1665	1512	1689	1501	1506	18844
CJ Profiles removed	640	630	994	1238	1470	966	855	1217	1011	718	963	1019	11721
CJ Profiles classified as S18A retention	149	75	329	549	584	255	197	248	183	185	261	259	3274
S18A Profiles removed after reaching the end of retention period	142	178	148	131	203	131	207	208	124	161	153	147	1933
S18A Profiles replaced by a convicted DNA Profile	1	2	0	3	9	4	19	40	20	14	7	14	133
CJ Profiles classified as S18B (sex/vio) retention	0	2	0	0	1	4	0	16	7	12	18	5	65
S18B (sex/vio) Profiles removed after reaching the end of retention period	14	14	10	11	10	4	3	9	6	7	11	17	116
S18B (sex/vio) Profiles replaced by a convicted DNA Profile	0	0	0	0	1	0	0	3	0	0	0	0	4
CJ Profiles classified as S18B (non-sex/vio) retention	6	3	7	4	6	23	10	151	49	46	59	36	400
S18B (non-sex/vio) Profiles removed after reaching the end of retention period	27	24	54	18	30	48	64	28	16	13	33	45	400
S18B (non-sex/vio) Profiles replaced by a convicted DNA Profile	0	0	0	2	1	2	4	7	1	4	2	6	29
CJ Profiles classified as S18D retention	8	23	13	9	17	8	10	4	6	12	6	9	125
S18D Profiles removed after reaching the end of retention period	5	7	7	8	7	6	11	7	4	2	4	4	72
S18D Profiles replaced by a convicted DNA Profile	0	0	0	0	0	0	1	1	1	1	3	1	8
CJ Profiles classified as S18E retention	0	1	0	0	0	2	1	3	0	2	1	2	12
S18E Profiles removed after reaching the end of retention period	1	4	0	0	2	0	1	1	0	2	1	2	14
S18E Profiles replaced by a convicted DNA Profile	0	0	0	0	0	0	0	0	0	0	0	0	0

Crime Scenes - This month

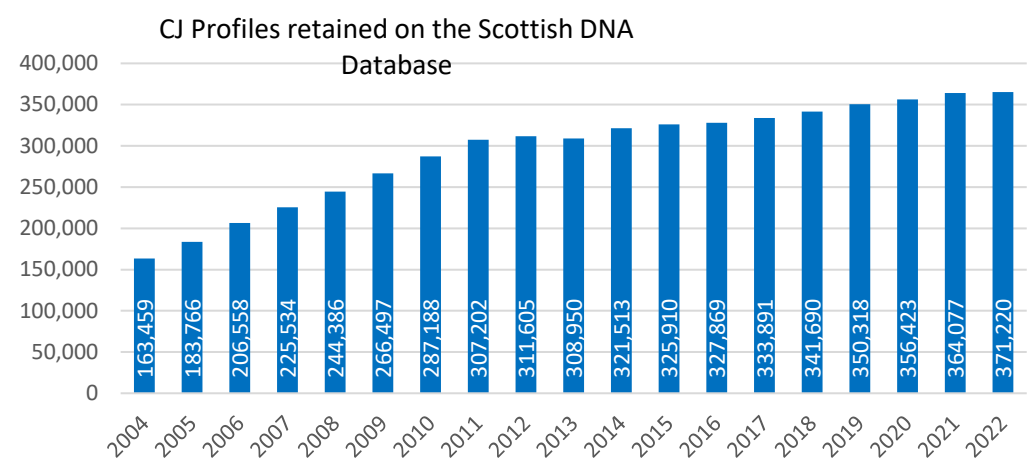
	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Yearly Total
Unidentified profiles from Crime Scenes added	166	267	164	186	160	180	141	173	157	161	134	202	2091
New CJ Profiles added that matched to an existing Crime Scene profile	27	21	24	22	25	14	22	30	12	28	21	25	271
New Crime Scenes profile that matched to an existing CJ Profile	97	159	114	119	87	100	70	100	81	92	84	105	1208
Unidentified Crime Scene profiles matching another unidentified Crime Scene Profile	8	8	3	2	8	8	3	5	7	3	9	8	72
Crime Scene Match Reports issued	132	188	141	143	121	122	95	135	100	123	114	138	1552
Match rate of a new CJ profile matching an existing Crime Scene Profile	2%	1%	2%	1%	1%	1%	1%	2%	1%	2%	1%	2%	1%
Match rate of a new Crime Scene profile matching an existing CJ Profile	58%	60%	70%	64%	54%	56%	50%	58%	52%	57%	63%	52%	58%
Matches against Group 1 Offence Crime Scenes	23	29	26	16	19	18	14	20	27	21	25	24	262
Matches against Group 2 Offence Crime Scenes	2	5	0	4	8	4	0	2	5	2	2	2	36
Matches against Group 3 Offence Crime Scenes	74	105	72	75	52	55	46	70	39	56	47	74	765
Matches against Group 4 Offence Crime Scenes	13	11	19	17	10	11	11	14	9	8	9	14	146
Matches against Group 5 Offence Crime Scenes	11	18	12	17	14	17	10	18	7	24	18	17	183
Matches against Group 6 Offence Crime Scenes	5	16	6	10	8	7	8	6	5	10	5	4	90
Matches against Group 7 Offence Crime Scenes	4	4	6	4	9	10	6	5	8	2	8	3	69
S18A CJ Profiles matching a Crime Scene Profile	1	0	1	1	2	3	0	3	1	1	1	0	14
S18B (sex/vio) CJ Profiles matching a Crime Scene Profile	0	0	0	0	0	0	1	0	0	0	0	0	1
S18B (non sex/vio) CJ Profiles matching a Crime Scene Profile	0	0	0	0	0	1	2	0	0	0	0	0	3
S18D CJ Profiles matching a Crime Scene Profile	0	0	1	0	0	0	0	0	0	0	0	0	1
S18E CJ Profiles matching a Crime Scene Profile	0	0	0	0	0	0	0	0	0	0	0	0	0

Crime Scene Spec Searches undertaken	100	141	107	120	127	130	119	139	122	115	88	164	1472
Crime Scene Spec Search matches	62	85	65	73	81	79	67	70	74	69	50	100	875
Crime Scene Spec Search % matches	62%	60%	61%	61%	64%	61%	56%	50%	61%	60%	57%	61%	714%

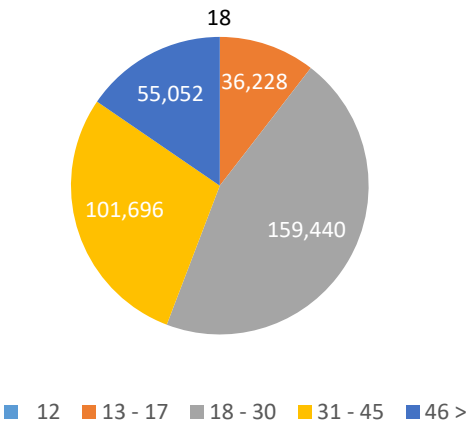
Volunteers - This month

	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Yearly Total
New Intelligence Led Screen (ILS) Operation	0	0	0	0	0	0	0	0	0	0	0	0	0
ILS Profiles added	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Volunteer Profiles Loaded	4	0	0	4	2	0	0	2	3	0	0	0	15
Volunteer Profiles that matched a Crime Scene Profile	0	0	0	0	0	0	0	0	0	0	0	0	0

CJ Profile Retention – Total



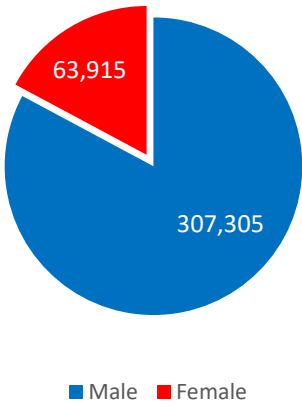
Breakdown on profiles retained by age when the sample was taken



CJ Profile Temporary Retention

S18A Retained	5306
S18B (sex/vio) Retained	236
S18B (non-sex/vio) Retained	630
S18D Retained	176
S18E Retained	19
S18A Extensions Requested	0
S18B (sex/vio) Extensions Requested	0
S18E Extensions Requested	0

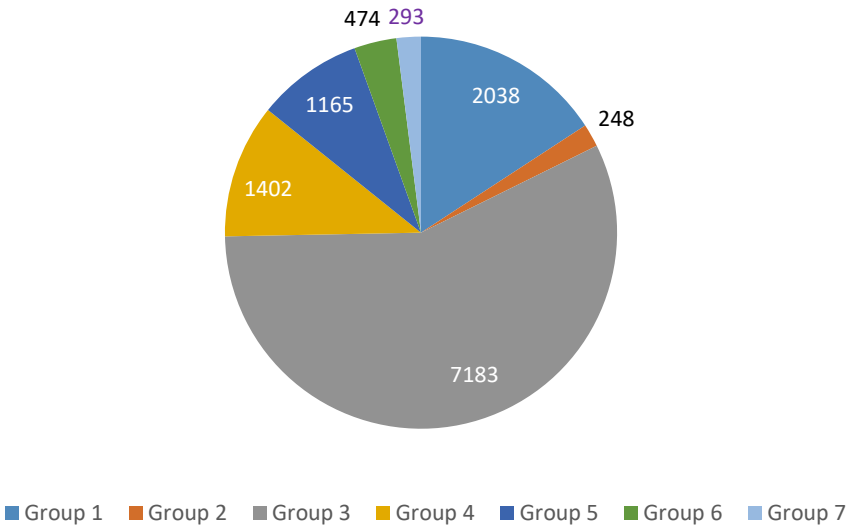
Breakdown on profiles retained by gender



Crime Scenes – Total

Unidentified Crime Scenes Profiles retained	49,107
Crime Scene Match Reports issued	41,156
Crime Scene Match Rate (since April 2011)	57%

Breakdown on crime scene matches by offence group (since 2011)



Volunteers – Total

Number of ILS Profiles Retained	5,010
Number of General Volunteers Retained	410
Total Number of Volunteer Matches	43

Further Information

1. What is a CJ profile?

Section 18 of the Criminal Procedure (Scotland) Act 1995 allows officers to obtain mouth/hair samples from arrested persons, or persons detained under Section 14 of the same act. These are commonly known as Criminal Justice (CJ) samples. From these samples, DNA profiles are extracted.

DNA is exactly the same for every person except for slight variations in the code which are responsible for different physical characteristics such as height, eye colour, skin tone and hair colour, for example. These differences are critical for the use of DNA in forensic science.

SPA Forensic Services profiling does not examine all variations between individuals. Instead, the technique is designed to target areas of DNA that are known to differ widely between individuals.

Other than gender, the areas of DNA targeted by Forensic Services' profiling do not contain information that could be attributed to physical characteristics – such as eye colour– or enable definitive determination of medical conditions.

It is possible to identify a person very precisely but the DNA area used to show a match contains virtually no genetic characteristic information.

The current DNA profiling method used for the Scottish DNA Database –known as DNA24 -analyses 23 areas of a person's DNA and the gender marker. The resulting DNA profile is a series of up to 46 numbers plus the gender marker.

This profile is then retained on the Scottish and National DNA Databases for the duration determined by current legislation. Profiles retained on these databases will routinely be searched against unidentified profiles from unsolved crime scenes.

2. CJ profile retention

The retention of DNA is dependent on the outcome of the case for which it was taken for. Section 18 of the Criminal Procedure (Scotland) Act 1995 governs the retention rules. DNA data can be retained indefinitely upon a court conviction (Section 18) and destroyed for non-findings of guilt. The exceptions to these rules are outlined in Sections 18A-E of the Criminal Procedure (Scotland) Act 1995 which allows DNA to be retained for a short period of time depending on specific criteria.

3. What is S18A?

Section 18A of the Criminal Procedure (Scotland) Act 1995 allows DNA data to be retained from individuals when criminal proceedings were initiated for specific sexual or violent offences but those proceedings end without a conviction. In such cases their DNA data can be retained for 3 years plus possible rolling 2 year extensions which can only be decided by a Court.

4. What is S18B?

As an alternative to prosecuting an individual the Procurator Fiscal can offer a fixed penalty or other relevant offers. These are not classed as convictions. Section 18B of the Criminal Procedure (Scotland) Act 1995 allows DNA data to be retained from individuals who have been issued with and accepted a relevant offer or fixed penalty. In cases relating to specific sexual or violent offences the DNA data can be retained for 3 years plus possible rolling 2 year extensions which can only be decided by a Court. In cases relating to all other offences, DNA data can be retained for 2 years after which it must be destroyed. That period cannot be extended.

5. What is S18D?

Police Scotland can offer fixed penalties as an alternative to prosecution for specific offences. These are not classed as convictions. Section 18D of the Criminal Procedure (Scotland) Act 1995 allows DNA data to be retained from individuals who have been issued with and accepted a fixed penalty notice. In such cases their DNA data can be retained for 2 years after which it must be destroyed. That period cannot be extended.

6. What is S18E?

Section 18E of the Criminal Procedure (Scotland) Act 1995 allows DNA data to be retained from children who have been referred to a Children's Hearing. This only applies to those children who are referred for specific violent and sexual offences and either accept these grounds or grounds are established at the hearing. In such cases their DNA data can be retained for 3 years plus possible rolling 2 year extensions which can only be decided by a Court. It applies to children aged 8 years and above, as this is the age of criminal responsibility in Scotland.

7. Why would one profile be replaced by another?

There is no requirement to hold more than one DNA profile per person on the DNA Database therefore once a sample can be retained indefinitely following a court conviction, all other surplus DNA data can be destroyed.

8. Age at date taken

When a DNA sample is taken, the age at the time of the sample being taken is recorded to ensure any DNA data is retained lawfully and information about the range of age groups retained on the DNA Database is available upon request.

9. What is a crime scene profile?

Scene of Crime Officers will attend and obtain production/sample lifts that could be of evidential value left at crime scenes. Forensic laboratory staff obtain DNA profiles from these items if possible and the profiles loaded onto the relevant databases for comparison. These are commonly known as Scene of Crime (SOC) profiles and any matches against subject DNA profiles are then reported to investigating officers.

10. How are profiles compared?

Two profiles are compared using the individual components of a DNA profile known as "alleles". There is a minimum number of components that must be identical to consider the information to be a reliable match

11. What is a match reports?

A match report is issued when two or more profiles loaded to the database have identical DNA profiles. This can be a person's DNA matching a undetected crime scene stain, or two undetected crime scene profiles matching each other.

12. What is a match rate and how is it calculated?

The match rate is provided to highlight how effective DNA can be in detecting unresolved crimes. This figure is representative of the number of crime scene DNA profiles from unsolved crimes that provide an instant match against a subject DNA profile when loaded to the DNA Database.

13. What are offence groups?

Crime in Scotland is recorded in specific categories, known as crime groups, namely:

Group 1 – Non-Sexual Crimes of Violence

This group includes murder, attempted murder, serious assault, robbery, cruelty to children, threats & extortion etc.

Group 2 – Crimes of Indecency

This group includes rape, indecent assault, lewd & libidinous practises, sexual offences, etc

Group 3 – Crimes of Dishonesty

This group includes theft, housebreaking, theft of and from motor vehicles, fraud, etc

Group 4 – Fire and Malicious Damage

This group includes – vandalism, malicious mischief, fire-raising, reckless conduct, etc

Group 5 – Other crimes

This group includes all drug offences, carrying offensive weapon (including knives), bail offences, crime against justice (e.g. perjury), etc

Group 6 – Miscellaneous Offences

This group includes breach of the peace, petty assault, racially aggravated conducted or harassment, alcohol related offences, etc

Group 7 – Road Traffic Offences

This group includes dangerous and careless driving, drink/drug driving, speeding, vehicle defect offences, etc

14. What is a Spec search?

A speculative search of the database is requested when the crime scene profile quality does not meet the national criteria for loading and can be searched as a one-off in the hope of obtaining a match.

15. What is an Intelligence Led Screen?

During major incidents for serious offences Police Scotland can request members of the public to voluntarily supply mouth swab samples in effort to identify the source of a crime scene profile. These operations are called Intelligence Led Screens (ILS). Volunteers can choose to have their DNA profile compared to all outstanding crime scene profiles (A class volunteer) or solely for the operation for which the sample was taken (B class volunteer). These samples are retained until permission is withdrawn (A class) or once the operation is finished (B class).

16. What is a volunteer profile?

Section 56 of the Criminal Justice (Scotland) Act 2003 allows officers to obtain mouth/hair samples from persons willing to voluntarily supply their DNA profile. These profiles are compared to outstanding crime scene profiles and retained until the person withdraws their permission.