



Scottish Biometrics
Commissioner
Coimiseanair
Biometrics na h-Alba

SCOTTISH BIOMETRICS COMMISSIONER

GUIDE TO BIOMETRIC DATA IN SCOTLAND FOR POLICING AND CRIMINAL JUSTICE



Safeguarding our biometric future



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Foreword

The purpose of this short guide is to assist members of the public in Scotland in understanding the main types of biometric data that is acquired, used, retained and destroyed for policing and criminal justice purposes in Scotland.

Whenever someone is arrested by the police in Scotland, the police have the legal authority to capture their photograph, take their fingerprints, and take a saliva swab or other biological sample to enable their DNA to be profiled.

Taking biometric data from people who have been arrested helps the police and the criminal justice system to verify and fix the identity of people arrested by the police, including those against whom criminal proceedings may be initiated.

By storing such data on national policing systems, the police in the UK can also compare biometric data recovered at crime scenes with those held from previous custody episodes to help with the investigation of crime.

There are of course many other circumstances where biometric data can assist the police and the criminal justice system. Examples range from missing person enquiries, to establishing the identity of bodies or body parts, or to child protection enquiries.

As Scottish Biometrics Commissioner, my general function is to support and promote the adoption of lawful, effective and ethical practices in relation to how biometric data and technologies are used for policing and criminal justice purposes in Scotland.

If you are also interested in such matters, then I hope that you find this short guide useful.

Should you wish any further information on anything within this guide, then please contact my office on: Contact@biometricscommissioner.scot and we will be happy to assist.

This guide was updated in October 2025, including figures provided by Police Scotland as of 31 March 2025.



Dr Brian Plastow
Scottish Biometrics Commissioner

Key facts: About biometric data for criminal justice and policing purposes in Scotland on 31 March 2025



641,242 images of 378,749 individuals attached to records held on the Police Scotland Criminal History System and the UK Police National Database (PND)



386,208 Scottish subject DNA profile records and 25,399 unidentified crime scene DNA profiles on the UK National Database (NDNAD)



834,393 fingerprints forms from arrests in Scotland on the UK fingerprints database (IDENT1), relating to 458,989 individuals.

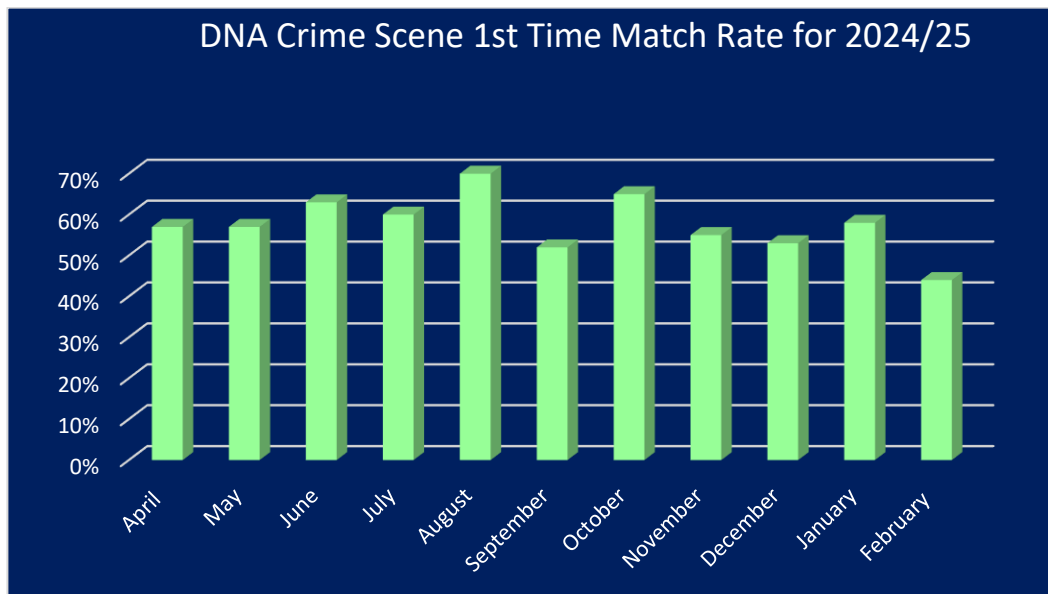


Chart 1. Match rate of a new Crime Scene DNA profile matching an existing CJ Profile for 2024/25. Source Police Scotland and Scottish Police Authority

Strategic context around biometric data and technologies

In the fiscal year 2024/25, there were 101,358 custody episodes at Police Scotland custody facilities throughout Scotland¹. Between 2023/24 and 2024/25 crimes recorded by the police in Scotland decreased by 1%, from 299,790 to 299,111. The recording of crime remains below the position immediately prior to the pandemic (2019/20) and down 51% from its peak in 1991.²

The Criminal Procedure Scotland Act 1995, as amended, is the primary legislation in Scotland which allows the police to capture fingerprints, photographs and DNA from people who have been arrested to verify and fix their identity. The number of people arrested by the police in Scotland has declined consistently over the past three decades in line with falling levels of crime in Scotland³.

In a contemporary UK policing context, the police and criminal justice use of DNA and fingerprints is well established. Each seeks to establish characteristics of uniqueness and in terms of forensic analysis both are independently validated and accredited to international scientific standards. By contrast, biometric technologies interpreting ‘face’ looks for characteristics of ‘similarity’ and do not adhere to the same stringent standards of accreditation.

DNA in the criminal justice process in Scotland

DNA is Deoxyribonucleic Acid. This is the genetic material which can be found, although not exclusively, in

¹ HMICS Custody Inspection Report - Argyll and West Dunbartonshire, October 2024

² Recorded Crime in Scotland, 2024-25

³ Recorded crime remains at low levels, Scottish Government

the nucleus (centre) of most cells in the body⁴. It contains a person's genetic information – it is a genetic 'code' unique to each of us. We inherit 50% of this DNA from our mother and 50% from our father. Our DNA determines the colour of our eyes, our hair colour, and many other physical characteristics. The DNA in a person's body is the same regardless of which body fluid or cell type it comes from. It is therefore possible to create a DNA profile from samples such as blood, saliva, semen, hair roots, etc.

In forensic science, the process of analysing DNA is referred to as DNA profiling and involves targeting specific parts within the DNA known as Short Tandem Repeats (STRs). DNA profiling in Scotland looks at 24 areas of a person's DNA – a significant step up from the 11 areas that made up previous DNA profiling technology and an advance on the 17 areas used by other UK police forces which is the European standard. A decision taken by SPA Forensic Services and Police Scotland in 2014 not to re-profile DNA samples held on retention to the new DNA24 standard, and not to re-profile recidivist criminals subsequently arrested over the next ten years (including on multiple occasions) to the new standard, means that more than a decade after its introduction, 69.9% of profiles within the Scottish DNA Database have a lower statistical discriminatory power than profiles analysed by GlobalFiler™-DNA24.

This technology makes it possible to compare a DNA profile from a person, known as a reference sample, with a DNA profile from a 'crime' sample, i.e. from the scene of a known crime. If there is a match between the DNA profile from the person and that of the crime sample, it can be stated in terms of probability. For example, the probability of two persons who are not related to each other having an identical DNA profile is more than one in a billion. This explains why DNA has become so important in criminal investigations as it can be used to exclude an individual as a source of DNA or to contribute to establishing presence at a crime scene. A DNA match on its own however, without other evidence would not be enough to establish guilt.

DNA was first used in criminal investigation in the UK in the 1980s following a double rape and murder in Leicestershire. This led to the production of the first DNA profile which showed that both murders had been carried out by the same individual, who was not the prime suspect. Leicestershire Constabulary then conducted the world's first DNA intelligence-led screening. All adult males in three villages – a total of 5,000 men – were asked to volunteer and provide blood or saliva samples. A local baker, Colin Pitchfork, was arrested, and his DNA profile matched with the semen from both murders. In 1988 he was sentenced to life imprisonment for the two murders.

From a data protection law perspective, raw biological material is generally not considered personal data. However, once that material is analysed to produce a DNA profile (for example from a crime scene), it becomes personal data and subject to data protection laws, such as the [UK GDPR](#) and [the Data Protection Act 2018](#).

The Scottish DNA database

The Scottish Police Authority (SPA) Forensic Services and Police Scotland jointly operate and maintain the Scottish DNA Database which is held in Dundee. When a suspect is arrested, the police have the right to take a DNA sample, usually a mouth swab. This is known as a criminal justice sample. All such samples are then

⁴ Commonly referred to as nuclear DNA as distinct from other forms of DNA found in other parts of cells such as mitochondrial DNA. The UK National DNA Database (NDNAD) is a repository of nuclear DNA data

analysed by SPA Forensic Services scientists, and the profiles are then stored on the Scottish database as well as being sent to the UK National DNA Database (NDNAD), set up in 1995 and based in Birmingham. Police Scotland and SPA Forensic Services jointly maintain the Scottish DNA database (SDNAD). The SDNAD was established in 1996, prior to police reform in Scotland. Because the database system is almost 30 years old, it was not designed to produce comprehensive management information to meet modern policing and societal expectations such as recording the ethnicity of data subjects. In the medium to longer term, a new solution will be required to facilitate end-to-end automation for routine transactions, ensuring a more responsive service and delivering greater business efficiency.

DNA profiling from samples recovered from crime scenes is also undertaken by SPA Forensic Services. Such profiles are then searched against the Scottish DNA database and if a match is found a report is generated to Police Scotland for further action and investigation. If no match is found at that time, then the relevant profile is retained on the Scottish DNA Database and is also placed on NDNAD. This gives all UK police forces the ability to search against crime scene profiles and is helpful when dealing with criminals who travel extensively to evade justice and commit crime in different jurisdictions.

The exception to this, is profiles taken from volunteers for the purpose of intelligence-led screens⁵. These samples are only compared against the crime scene profile in question and destroyed on conclusion of the investigation or, subject to any evidential requirement, if the volunteer withdraws their consent to retention.

In the case of persons arrested in Scotland by UK-wide policing bodies⁶ the biometric data is mainly captured when the subject is processed at a Police Scotland custody facility. However, in these cases the DNA mouth swabs are not sent to the SPA Forensic Services for forensic profiling but instead are sent to accredited scientific laboratories in England. From there, the relevant DNA profile will be uploaded to the UK NDNAD.

In a recent [assurance review report on DNA](#), the Commissioner recommended that Police Scotland and the Scottish Police Authority should (as part of the current review of retention policy) discontinue the practice of retaining the DNA of persons admonished or given an absolute discharge under summary procedure in Scotland (who have no previous convictions) for a period beyond average life expectancy in Scotland.

The DNA sections of the SPA Forensic Service provide four key services to Police Scotland, Police Investigations and Review Commissioner (PIRC), and other law enforcement agencies:

- Casework – These are cases where there is a known accused and comparisons can be made between reference samples and a crime sample
- Undetected cases – These are where the police do not have a suspect and where the Scottish DNA database and UK National DNA Database are used to try to identify matches between a crime sample DNA profile and the profile of a person held on the database
- Criminal paternity testing – in cases of rapes and incest etc.
- Identification of individuals – missing persons, bodies, and body parts⁷

⁵ Colin Pitchfork – The Forensics Library (aboutforensics.co.uk)

⁶ National Crime Agency, British Transport Police, Ministry of Defence Police

⁷ In rare circumstances, to identify a body or body part, the police under the supervision of the Procurator Fiscal may request access to NHS record for example the Scottish newborn baby blood spot test cards. See: [Scottish Newborn Screening Laboratory - NHSGGC](#)

The current DNA profiling method used for the Scottish DNA Database – known as DNA24 – analyses 22 STR loci and 2 sex markers. The resulting DNA profile is a series of up to 46 numbers plus the gender marker. This profile is then retained on the Scottish DNA database (a DNA 17 profile is retained on the UK DNA database) for the duration determined by current legislation and policy. Profiles retained on these databases will be routinely searched against unidentified profiles from unsolved crime scenes.

The UK National DNA Database (NDNAD)

The UK NDNAD was established in 1995. It holds DNA profile records, taken from individuals and crime scenes, and provides the police with matches linking an individual to a crime scene or a crime scene to another crime scene. As of 31 December 2024, there were 6,121,367 DNA profiles. In 2023/24, NDNAD produced 20,881 routine crime scenes to subject DNA profile matches⁸.

DNA profile records

NDNAD holds two types of DNA profile:

Individuals

The police in Scotland can take a ‘DNA sample’ from people that are arrested. This sample consists of their entire genome (the genetic material that every individual has in each of the cells of their body) and is usually taken by swabbing the inside of the cheek to collect some cells. The sample is then sent to a SPA Forensic Services accredited laboratory, which looks at discrete areas of the genome (which represent only a tiny fraction of that individual’s DNA) plus the sex chromosomes (XX for women and XY for men) and use these to produce a ‘subject’ profile consisting of 22 STR loci and 2 sex markers.

The Scottish DNA profile containing 24 genetic markers (DNA 24) is loaded to the Scottish DNA Database (SDNAD) and 17 of these genetic markers are also uploaded to the UK National DNA Database (NDNAD) where it can be searched against DNA profile records recovered from UK crime scenes. Unlike Scotland, the UK NDNAD contains 17 rather than 24 genetic markers, these are 16 genetic markers and a sex marker. Although less advanced than Scotland, DNA17 is a very powerful investigative tool.

Crime scenes

DNA is regularly recovered from crime scenes. Nearly every cell in an individual’s body contains a complete copy of their DNA so there are many ways in which an offender may leave their DNA behind at a crime scene (for example, in blood or skin cells left on clothing or surfaces) even just by touching something. By examining places where the perpetrator of the crime is most likely to have left traces of their DNA behind a crime scene sample may be obtained.

⁸ Home Office, [Forensic Information Databases annual report 2023 to 2024](#), updated 11 October 2024

Volumes of Scottish DNA data held

Key Fact:

On 31 March 2025 there were **386,208 Scottish DNA profiles from 382,823 individuals** on the UK National DNA Database. Subject profiles are also known as criminal justice profiles. In other words, subject profiles are mainly derived from previous arrest episodes where a DNA mouth swab has been taken. There were also **25,399 unidentified crime scene DNA profiles** on the database.

Crime Scene DNA Profile match rate to Subject (Criminal Justice) Profile

The SPA Forensic Services publish public information monthly including data on DNA samples added to and removed from the Scottish DNA database. This includes match rates. This has enabled us to contrast and compare Scottish DNA match rates with UK match rates. Police Scotland and SPA Forensic Services produce a quarterly custody Biometric Report which is available at [Biometrics - Police Scotland](#).

Key Fact:

DNA recovered from a crime scene in Scotland **during 2023/24 matched** to an existing criminal justice DNA profile at a **match rate of 57%**.

In 2023/24 the overall DNA match rate, once loaded onto NDNA, matched against a subject DNA profile stored on the NDNAD **was 64.8%**.

Despite Scotland having more advanced DNA interpretation and analysis capability, England and Wales collectively had a significantly higher match rate at 64.8%. The most plausible explanation is simply because the volume of DNA profiles in England and Wales is much higher because of a higher population and higher crime rates and therefore more matches occur. While both match rates are high and demonstrates the value of such technologies to investigators, such high rates do not translate to corresponding levels of crime solvency. There are many reasons why biological materials (and a resultant DNA profile) may be found at a crime scene that are not linked with the perpetrator. It is also important to remember that the presence of DNA at a crime scene, although important, could rarely if ever establish guilt on its own. It may tell part of a story, but under final analysis it is people who solve crimes, not technologies.

An obvious question which readers might ask is why does Scotland use DNA24 when DNA17 seems to achieve the same overall match rate? The answer to that question is one of sensitivity and quality rather than of quantity. Because DNA24 looks for more markers it is a more sensitive technique and is particularly valuable for cold case work even in cases where source biological samples have degraded over decades or become exposed to the elements. Therefore, whilst at a macro level overall match rates are similar, the added value of DNA24 is most obvious in cold case reviews where its results can be spectacular. For further information please see the paragraph on 'DNA time capsules' in an [article](#) written by the Scottish Biometrics Commissioner to an international audience last year in a report published by the Biometrics Institute. For further information, please see our 2025 [Joint Assurance Review of the acquisition, retention, use and](#)

[destruction of DNA for criminal justice and police purposes in Scotland.](#)

The following charts by Police Scotland provides information on Criminal Justice profiles retained on the Scottish DNA database. It should be noted that these are cumulative totals, so although crime and the number of arrests is falling, the overall number of samples on retention increases over time.

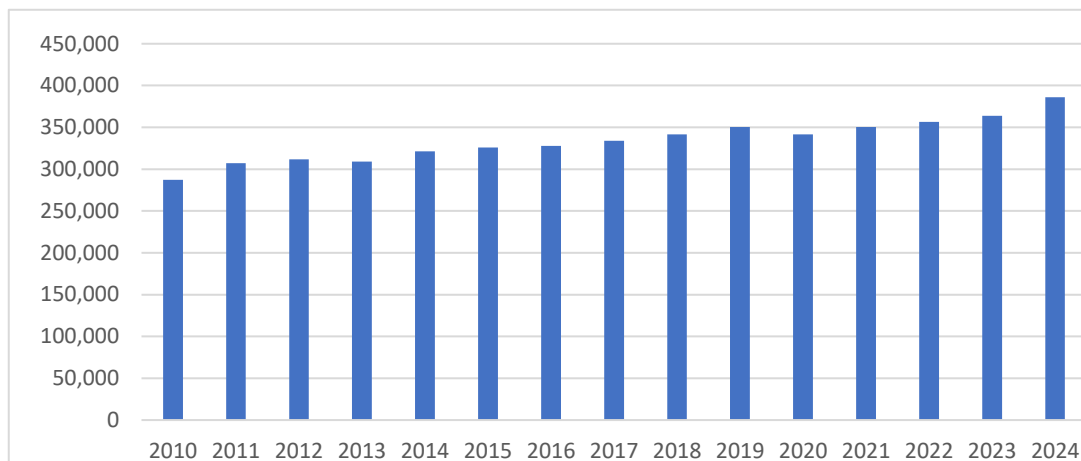


Chart No 2: Number of Criminal Justice Profiles on the Scottish DNA Database by year

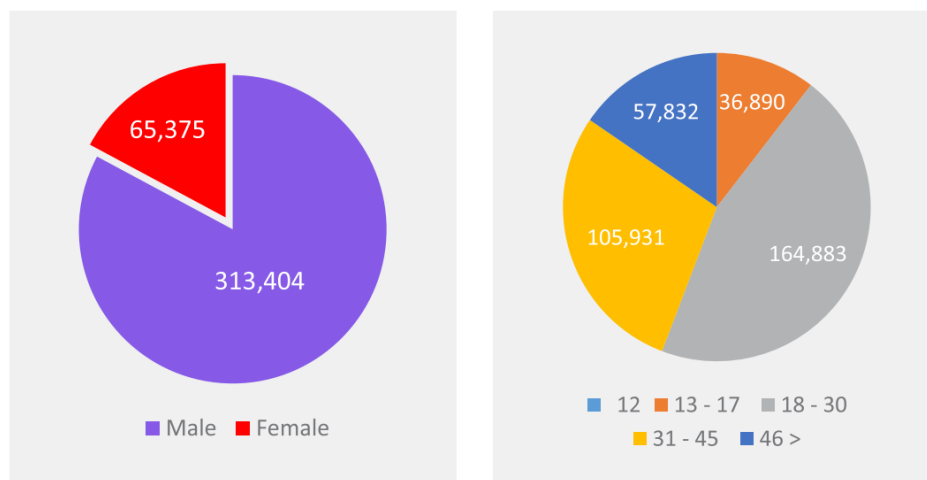


Chart No 3: Sex of criminal Justice profiles on SDNAD as of 31 December 2023 (82.75% male)
Source: Police Scotland

Chart No 4: Age of persons on SDNAD at the time DNA taken as of 31 December 2023 Source: Police Scotland

As Scottish Biometrics Commissioner, it is my professional opinion that the SPA Forensic Services provides a world leading DNA interpretation and analysis capability to Police Scotland, the PIRC and to the wider criminal justice system in Scotland. As a small country, this is something we should be proud of. In addition to DNA24, the team of scientists also use many other cutting-edge technologies in relation to biological material found at crime scenes which can subsequently be profiled for DNA. Examples include laser microdissection which enables forensics teams to identify sex attackers from a single sperm cell, or Rapid DNA which can potentially identify a suspect within 90 minutes, and which is vital in kidnap or child abduction cases.

Towards a UK (male only) Y-STR Database

As mentioned, UK policing relies on DNA-17 profiling, an advanced form of Short Tandem Repeat (STR) analysis. This technique evaluates 16 specific non-coding regions of DNA plus a sex marker, generating a unique numerical code (except for identical twins) to match suspects with samples from the UK National DNA Database (NDNAD). In Scotland, the SPA Forensic Services uses DNA-24 which is more powerful. In both cases, the profiles of male and female subjects are held on the same database.

Most crime in the UK is committed by males and around 80% of DNA profiles relate to persons who are biologically male. Furthermore, most rapes and serious sexual assaults are committed by men against women or girls. Therefore, because only people who are biologically male carry the Y-chromosome, Y-STR testing (as opposed to generic STR testing) offers better investigative opportunities in cases where the suspect is known to be male.

In the UK, police and forensic scientists currently rely on the [worldwide Y-Chromosome Haplotype Reference Database \(YHRD\)](#) to estimate the rarity of Y-STR DNA profiles in sexual assault cases. Previously there was no 'UK specific' Y-STR reference database. Therefore, to improve statistical accuracy, UK policing and the Home Office are developing a UK-specific Y-STR database. This helps investigators in matching mixed-DNA crime stains to suspects and to resolve cold cases.

The delivery mechanism is the [‘Swab out Crime’ Project](#) which aims to collect 10,000 anonymous samples from adult males across the UK. Once completed, this UK-wide reference database will give forensic scientists more exact statistical probability weights in court, rather than relying on European or global datasets.

Fingerprints in the criminal justice process in Scotland

Scotland does not have its own fingerprint database but instead uses the single UK unified **IDENT1** system. This 'system' includes the use of front-end equipment (FEE) such as Livescan fingerprint terminals which enable the automated capture and comparison of data.



Image No 1: a Livescan optical fingerprint scanner

However, some rural policing locations in Scotland do not have access to an IDENT1 Livescan machine, and so sometimes it is necessary for fingerprint data to be captured for criminal justice purposes using traditional ink methods before scanning those images onto IDENT1. In addition, crime-scene fingerprint marks are lifted with powder by trained staff onto acetate and are then scanned onto IDENT1 via an imaging photograph. Each of these distinct processes raise data quality and data degradation issues.

The absence of a Scottish fingerprints database means that both the front-end equipment and technical database infrastructures used for Scottish policing and law enforcement purposes are reliant on shared UK arrangements hosted and funded by the Home Office, albeit that Police Scotland and the Scottish Police Authority make revenue contributions towards all UK policing databases.

The National UK Fingerprint Database and National Automated Fingerprint Identification System (NAFIS), now collectively referred to as IDENT1, was established in 1999 and holds fingerprint images obtained from persons and crime scenes by law enforcement agencies of the United Kingdom. It provides the ability to electronically store and search fingerprint images to manage person identity and compare fingerprints from individuals with finger-marks from unsolved crimes. The Livescan terminal also enables the police to conduct a non-verified live search of fingerprints taken on the machine with UK police records and additionally with the 91.9 million fingerprints and images held on the Home Office Immigration and Asylum Biometrics System (IABS).

Fingerprint records

The skin surface found on the underside of the fingers; palms of the hands and soles of the feet is different to skin on any other part of the body. It is made up of a series of lines known as ridges and furrows and this is called friction ridge detail.⁹

The ridges and furrows are created during foetal development in the womb and even in identical siblings (twins, triplets) the friction ridge development is different. It is generally accepted that friction ridge detail is unique to every individual, although this cannot be definitively proved.¹⁰

Located at intervals along the top of the ridges are pores which secrete sweat. When an area of friction ridge detail encounters a receptive surface, an impression of the friction ridge detail, formed by sweat residue, may be deposited on that surface.¹¹

These impressions are often not visible in their natural form and require the application of an appropriate powder or chemical treatment to allow the impression to be developed (made visible) and subsequently lifted and/or photographed for fingerprint examination.¹²

Visible impressions may also be made by contact of friction ridge skin with contaminants such as paint, blood, ink, or grease. The analysis of friction ridge detail is commonly known as fingerprint examination.

Friction ridge detail persists throughout the life of the individual without change, unless affected by an injury causing permanent damage to the regenerative layer of the skin (dermis) for example, a scar. The high degree of variability between individuals coupled with the persistence of the friction ridge detail throughout life allows it to be used for identification purposes and provides a basis for fingerprint comparison as evidence.¹³ The national fingerprint database holds two types of fingerprint record:

⁹ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.4.1

¹⁰ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.4.2

¹¹ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.4.3

¹² Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.4.4

¹³ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.5.1

Individuals

UK Law Enforcement Agencies routinely take a set of fingerprints from persons they arrest.

Fingerprints are usually obtained electronically on a fingerprint scanning device but are occasionally obtained by applying a black ink to the friction ridge skin and an impression recorded on a paper fingerprint form.

A set of fingerprints is known as a Tenprint and comprises:

- impressions of the fingertips taken by rolling each finger from edge to edge
- an impression of all four fingers taken simultaneously for each hand and both thumbs
- impressions of the ridge detail present on both palms

Crime scenes

Crime Scene Investigators examine surfaces which the perpetrator of the crime is most likely to have touched and use a range of techniques to develop latent finger-marks to make them visible. Finger-marks developed and recovered from crime scenes are searched against the Tenprints obtained from arrested persons to identify who touched the surface the finger-marks were recovered from. Latent marks can also be developed by subjecting items potentially touched by the perpetrator (exhibits) through a series of chemical processes in an accredited laboratory by sufficiently trained and competent laboratory staff.

Fingerprint Matches

Fingerprint examination is a long-established forensic discipline and has been used within the Criminal Justice System in Britain since 1902. It is based on the comparison of friction ridge detail of the skin from fingers and palms.¹⁴

The comparison of fingerprints is a cognitive process that relies on the competence of the practitioners to perform examinations and form conclusions based on their observations and findings. The results following an examination are communicated in the form of opinion and not a statement of fact.¹⁵

i. Fingerprint examination

The purpose of fingerprint examination is to compare two areas of friction ridge detail to determine whether they were made by the same person or not.¹⁶

The comparison process is subjective in nature, and the declared outcomes rely on the observations and evaluation of a competent fingerprint practitioner. The practitioner gives an opinion based on their observations, it is not a statement of fact, nor is it dependent upon the number of matching ridge characteristics.¹⁷

¹⁴ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.3.1

¹⁵ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.3.2

¹⁶ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.6.1

¹⁷ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.6.4

The fingerprint examination process consists of stages referred to as Analysis, Comparison, and Evaluation, known as ACE. These stages are descriptors of the process undertaken by the practitioners in determining their conclusions. Although the process sets out the stages sequentially, it is not a strictly linear process. ACE can be followed by a verification stage. Verification is conducted by another practitioner (independent examiner) using the ACE examination process to review the original conclusion and the examination records made by a previous examiner.¹⁸

There are four possible outcomes that will be reported from a fingerprint examination *insufficient, identified, excluded, or inconclusive*.¹⁹

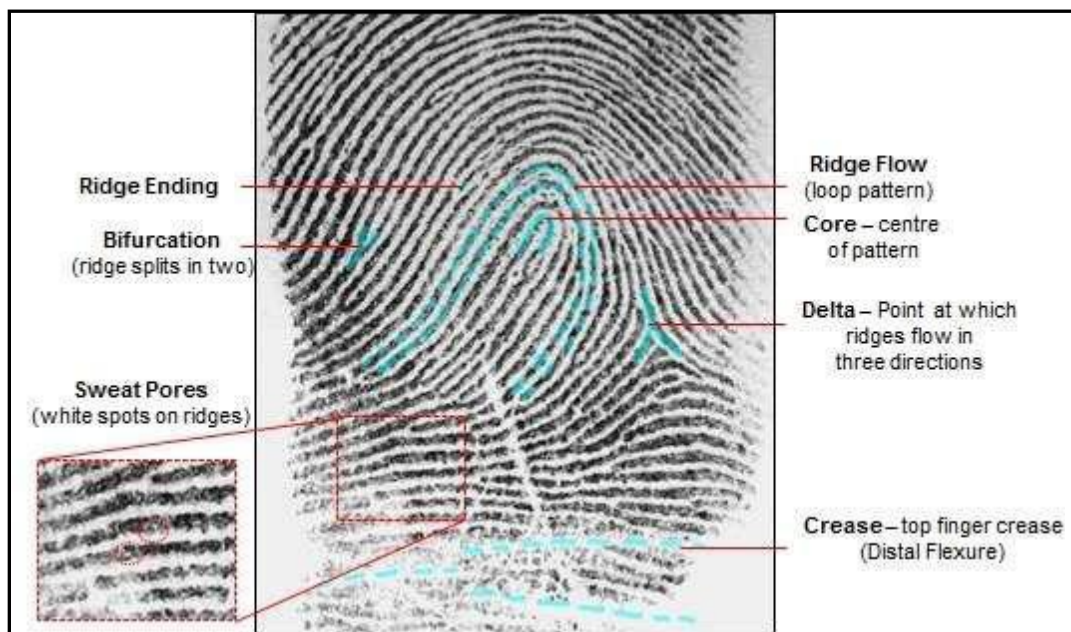


Image No 2: Courtesy of Metropolitan Police Forensic Science Services

The above image shows friction ridge detail observable at the top of a finger. The black lines are the ridges, and the white spaces are the furrows. The ridges flow to form shapes or patterns. This is an example of a loop pattern exiting to the left. There are natural deviations within the ridge flow known as characteristics such as ridge endings or forks/bifurcation. There are white spots along the tops of the ridges known as pores and there are other features present for example creases, which are normally observed as white lines.²⁰

Outcomes using fingerprints

Within IDENT1 it is possible to search Tenprints and marks to investigate links between a person and unidentified scene of crime marks.

¹⁸ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.7.1

¹⁹ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.7.2

²⁰ Cited from Forensic Science Regulator Codes – Fingerprint Comparison FSR-C-128 25.7.3

During the period 2023/24 there were 417,743 scene of crime fingermark to Tenprint searches resulting in 12,866 matches.²¹ These matches can be crucial for identifying suspects and advancing criminal investigation. For all Tenprint records obtained from persons arrested in the UK there is a search of the arrestee Tenprint collection to confirm whether a person has a previously obtained print set on the database. This search confirms a person's identity and is linked to the person's arrest event and biometrically validating a person's arrest history.

Volumes of Scottish fingerprint records held

It is important to note that sometimes more than one set of criminal justice fingerprints will be held relating to the same individual including cases such as travelling criminals who offend throughout the UK.²²

Key Fact:

On 31 March 2025 there were **834,393 sets of Scottish fingerprints** in the UK IDENT1. These are mainly obtained from previous arrest episodes in Scotland where fingerprints have been taken. These forms **related to 458,989 individuals**.

Criminal History System (CHS) photographs in the Criminal Justice Process in Scotland and the Police National Database (PND)

Police Scotland maintains a Criminal History System (CHS), where all records and images of charged and convicted persons are stored. The criminal history images within these records are obtained from photographic images relating to a custody episode when an arrested person is brought into police custody.

The criminal history records and images of persons charged with, or convicted of, a common law crime or statutory offence in Scotland on CHS are uploaded automatically to a UK policing intelligence sharing system known as the Police National Database (PND), so that other UK forces can search the PND to help identify and prosecute criminals. In the event of acquittal, the Scottish records and images are removed from CHS and PND by Police Scotland once notified of non-conviction or absolute discharge by the Crown Office and Procurator Fiscal Service (COPFS). If a child is referred to the Children's Hearings system, images are destroyed. It is important to note that indefinite retention without periodic review is not permitted by the UK Data Protection Act 2018. In October 2024, the Commissioner and Scottish Government published a [joint Review of the Laws of Retention](#), which included a recommendation for Police Scotland to complete a review of retention policies by October 2025.

The current national custody application used by Police Scotland has the technical means to automatically delete custody images in no proceedings and non-conviction scenarios to ensure that images of persons not proceeded against are not retained. However, Police Scotland does not have an automated solution to enable the identification and deletion of images retained on legacy databases²³ in such circumstances. In England and Wales, there is no automated solution for custody image management in either current or

²¹ [Home Office, Forensic Information Databases annual report 2023 to 2024](#), updated 11 October 2024

²² Figures as of 31 March 2025, sourced by Police Scotland

²³ Retained on the individual custody database of the former eight police forces in Scotland

legacy applications.²⁴

Police Scotland applies a common policy to the retention and weeding of photographs on CHS as exists for fingerprints and DNA. This means that images of persons not subsequently convicted (and who have no previous conviction) are removed from CHS and PND by Police Scotland in no proceedings and non-conviction scenarios, subject of course to the three-year retention periods permitted for certain sexual and violent offences as defined in [Section 48](#) of the Crime and Punishment (Scotland) Act 1997.

This was acknowledged as effective practice by HMICS in 2016 and contrasted favourably with the position in other parts of the UK where many forces in England and Wales have been criticised for retaining custody images of innocent people on the Police National Database (PND) despite the 2012 ruling by the High Court in England that this was unlawful.²⁵

Unlike DNA and fingerprints, the physical appearance of a person will change over time, through ageing, injury or otherwise, and indeed is sometimes changed intentionally to evade identification and detection. Therefore, the police will often hold multiple images of offenders who have multiple criminal convictions. On 31 March 2025, there were 641,242 images held in CHS from 378,749 individuals. This number reflect custody episodes.

Whenever a person is detained or arrested by the police and is brought into the custody environment, a computerised record is created. Included within each record is at least one digital image/photograph of the subject. A CHS image is only created after a person has been cautioned **and** charged with a relevant offence. It is also at this point that other criminal justice samples such as DNA and fingerprints are taken.

Police custody images in Scotland are only uploaded to CHS and PND if the subject has been charged with a crime or offence. This differs from the position in England and Wales where most forces upload all custody images directly to PND due to the absence of images on the Police National Computer (PNC) (the PNC holds a reference to the image held locally within each force) or any statutory controls or guidance to the contrary.

More broadly, the UK Police National Database (PND) contains over 19 million custody images, and 16 million of these have been enrolled in the facial recognition gallery making them searchable using retrospective facial searching software.²⁶

In 2024, SBC produced an assurance review for the Scottish parliament on the acquisition, use and retention of [images and photographs](#) and in 2025 we published a joint assurance review with HMICS on the use of [retrospective facial search](#) technologies for criminal justice and police purposes in Scotland.

²⁴ [Letter to chair of the Commons Science and Technology Committee](#), 3 September 2021

²⁵ The Queen, on the application of (1) RMC and (2) FJ – and – Commissioner of Police of the Metropolis, High Court, London, 2012

²⁶ [Review of the Use and Retention of Custody Images](#), Home Office, Policy Paper 2017

Key Fact:

On 31 March 2025 there were **641,242 images held from 378,749 individuals** within the Police Scotland Criminal History System. This data is replicated onto the UK Police National Database (PND) so there were also 641,242 Scottish images relating to 378,749 people on PND.

Other images held for policing and Criminal Justice purposes in Scotland

Unlike DNA and fingerprints which are hosted in distinct and automatically searchable databases, the police and others in the criminal justice system hold a range of different images for a range of different purposes. These other images are not held on databases with automated biometric searching capabilities. Examples include:

- images held in connection with the management of sex offender(s)
- images of persons wanted on warrant
- images held for intelligence purposes
- images held as evidence as part of an investigation
- images held for virtual identification parades, legacy databases and so on

Such data is held on a range of primary, secondary, or tertiary databases and a particular image may also feature on multiple databases. In addition, images may be held in an individual case file by an officer as part of an ongoing investigation either physically or perhaps in digital format on a PDA network such as Pronto.

At the time of the report of the Independent Advisory Group on Biometric Data in Scotland in 2018 it was noted that Police Scotland held more than one million custody images on retention. There is no means of easily establishing how many images of all types that are currently held for policing and criminal justice in Scotland. The Commissioner estimates that Police Scotland holds more than 3 million images.