



# About Us



## Our Laboratories

We have made a significant investment in our own well-equipped, secure, state-of-the-art forensic laboratories. These facilities are amongst the best in the country and include a purpose-built firing range (with test-firing tanks) and a self-contained wet room to enable crime scene reconstruction, including Blood Pattern Analysis. Another of our sites is home to our CCTV/Image Enhancement and Analysis experts.



We have two DNA profiling laboratories on different sites, offering a full suite of routine and specialist DNA services including Peace of Mind and Legal Relationship Testing.

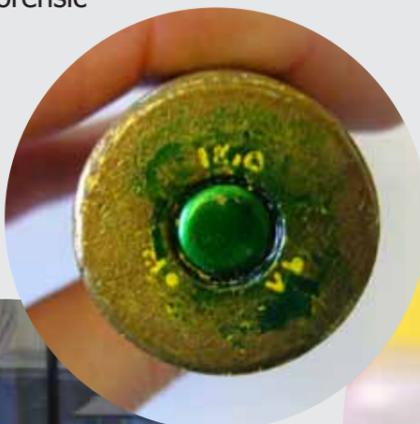
Our laboratory sites have well-equipped search and recovery facilities allowing the detailed examinations of exhibits, using high power microscopy and other techniques to maximise the opportunity to recover evidential material. This is supported by a wide range of analytical techniques used to aid the detection and identification of accelerants, drugs, paint, fibres, glass, for example.

All our laboratories are accredited to the international standard ISO 9001 and ISO 17025 as recommended by the Forensic Science Regulator.

## Our Experts

All of our forensic experts are security-cleared employees and many of them have over 20 years experience as expert witnesses, working on some of the most high profile and complex cases that have come before the courts.

They are all highly respected and the majority are leading experts in their particular field. Our forensic experts are skilled in presenting clear, accurate and meaningful expert testimony in court and are accustomed to challenging assertions made by opposing counsel.





# Our Forensic Services

**We offer a comprehensive range of expert forensic analytical laboratory services plus interpretation and reporting of findings and a peer review service.**

## Blood Alcohol Analysis

We provide a fast, accurate and independent service in the analysis of blood-alcohol samples for private individuals who have been charged with drink-driving.

## Blood Pattern Analysis (BPA)

Blood pattern analysis involves the careful recording and measurement of bloodstains at the scene of crime or on items examined at the laboratory. It may also involve the reconstruction of an incident, to decide between alternative versions of events.

## Body Fluids

During the forensic investigation of an alleged assault or rape, the examination of items for body fluids can provide information to identify the attacker. It can also help to corroborate or refute different versions of events.

The intimate swabs and clothing of the victim and suspect are examined for body fluids that may have been produced and transferred during the incident.

## Chemistry

Instrumental chemical analysis is used to identify and quantify a range of chemicals and materials that may be encountered in a criminal investigation. For example lachrymators (tear-gas) and noxious substances, such as acids and ammonia, are sometimes encountered in assault cases and CS gas is routinely used by Police Forces to help control individuals without the need for lethal force.

## Cold Case Review

We utilise and have access to the latest forensic techniques to examine archived exhibits to obtain additional information which may be useful to a cold case review. For example, the latest DNA specialist services can be used to obtain DNA profiles where this has previously not been possible. We are also able to examine and review original techniques, findings and conclusions in the cold case.

## DNA

We offer a range of forensic DNA testing specialist services designed to be used when conventional DNA profiling has not succeeded in providing a meaningful result. DNA testing provides intelligence and evidential information and by using our sensitive and highly-discriminating profiling techniques we can obtain forensic DNA profiles from minute DNA-bearing sources.

## Drugs

Drugs can be encountered in many forms including vegetation, tablets, granules, capsules, vials, paper tabs and powders. Forensic drugs analysis is used to identify drugs of abuse and to determine weight and drugs purity.

Forensic links between samples of drugs from different locations are investigated using both chemical techniques and physical methods, such as packaging comparison

## Damage

Damage to clothing and other items may provide evidence to support or refute a particular sequence of events.

The examination involves the careful recording and measurement of the damage. It may also involve the reconstruction of an incident, to decide between alternative versions of events.

## Fibres

Forensic fibre analysis can provide information about whether there has been physical contact between people, or whether someone was present at the crime scene.

Fibres from someone's clothing may be left at a crime scene, for example adhering to woodwork or glass at the point of entry in a burglary.

## Firearms

Our forensic firearms experts have a wealth of expertise and specialise in supporting the forensic investigation of gun crime. Complementing this is a range of professional facilities at our disposal, comprising a forensic firing range with water tank, full firearms forensics workshop facilities and an impressive microscopy unit.

## Fire Investigation

Forensic fire investigation is a specialist branch of forensic science and involves determining where, when and how a fire started by examining the scene of a fire, reviewing the physical evidence and taking into account background information from witnesses and emergency service personnel.

## Footwear

Forensic footwear marks analysis has the potential to link an item of footwear with a forensic footwear mark recovered from a crime scene or from the skin of a victim.

Forensic footprint analysis includes the comparison of crime scene footprints with control marks made by footwear taken from the suspect. This can uniquely link or eliminate a suspect, or provide supporting forensic evidence where a categorical opinion is not possible.

## Glass

A window may often be broken at the point of entry in a burglary, or as a result of criminal damage. Similarly, glass objects may be broken during an assault. If someone is close to breaking glass then tiny fragments of glass are transferred onto their skin, hair and clothing.

## Gunshot Residue (GSR) also known as Firearms Discharge Residue (FDR)

When a gun is fired, microscopic particles of material from the ammunition are ejected from the gun and these may be deposited on the firer or anyone in the close vicinity.

This gunshot residue (also known as firearm discharge residue) can be recovered and identified in the laboratory using sensitive analytical chemistry techniques.

## Hairs

Physical contact between people may result in hairs (head, body or pubic hair) being transferred from one person to another. Hairs may also be found at a crime scene, for example adhering to woodwork or glass at the point of entry in a burglary.

## Handwriting and Signature Examination

Questioned Document examinations carried out by a handwriting analyst generally involve the comparison of a handwriting specimen (provable) against questioned handwriting (handwriting forgery) in order to determine authorship.

## Image and Video Analysis

The Forensic Analysis of Imagery and Video can aid in the identification of individuals, vehicles and objects and can also help determine the sequence of events during an incident.

## Instrument Marks

This involves the testing of marks and impressions for physical fit, manufacturing marks, defects, damage etc. and comparison of the instrument marks to a crime scene or recovered object.

## Noxious Substances

Noxious Substances typically comprise of incapacitants/lachrymators such as CS, CN or pepper spray.

Corrosive or harmful substances such as acids, alkalis, bleach or ammonia solution are also encountered, as are a wide range of solvents and flammable liquids and they are all analysed and investigated by our specialist forensic noxious substances teams.

## Particulates

Minute fragments of paint, plastic or other building materials may be recovered from the clothing or tools of someone who has forced entry into a building or vehicle.

The layer sequence of fragments of recovered paint can be determined by microscopy and compared to that of the control sample from the scene. In addition, the physical and chemical properties of particulates can be measured and compared to the control materials from the scene.

## Relationship Testing

Key Forensic Services offers Peace of Mind and Legal (a test ordered by the courts) DNA tests for people requiring confirmation about their family relationships. Tests are straightforward and are undertaken to establish the parentage of a child or children.

## Questioned Documents

A comprehensive range of forensic questioned document and handwriting analysis services, designed to support the investigation of criminal and civil offences. Our document examiners provide handwriting comparisons, signature analysis and the examination of counterfeit documents.

## Toolmarks

This involves the testing of marks and impressions for physical fit, manufacturing marks, defects, damage etc. and comparison of the instrument marks to a crime scene or recovered object.

## Toxicology

Within our Toxicology services we offer a blood alcohol calculation service to determine the proportion of alcohol present in blood, urine or beverage samples, for example in a case of drink and/or drug driving. We also provide toxicology calculations and assessments relating to drinking patterns and changes in blood, breath and/or urine alcohol levels over time. We are accustomed to dealing with the Hip flask defence.

## Training and Consultancy

We offer training in a wide range of forensic subjects. We encourage customers to allow us to carry out an initial Forensic Training Needs Analysis so that we can fully capture forensic training requirements and objectives, allowing us to tailor delivery of the training precisely to the customer's needs. All forensic training is instructor-led by forensic professionals and supported with course material and certificates.

**In addition, our experts provide up to date advice on all aspects of cases, including utilising the most advantageous and latest scientific techniques, validity of prosecution test results, alternative lines of enquiry and suggested additional scientific tests.**

**Our experts also offer clear, concise reports, pre-trial advice and professional testimony.**



# Forensic Experts Present to Chambers

**Last October saw us deliver a number of presentations to Barristers' Chambers on a variety of specialist forensic subjects. Some of our leading expert witnesses were persuaded to leave the laboratory and provide an informative and enjoyable presentation on subjects ranging from The role of the Forensic Scientist in Major Investigations to the Legal Position on the Use and Possession of Antique Firearms.**

Amongst those Chambers welcoming us into their domain were Bank House Chambers in Sheffield, where we delivered seminars on Antique Firearms and the Law; and Questioned Documents evidence. Commenting on the event, **Chambers Administrator Karen Davis** said:

'Key Forensic provided us with two highly informative and captivating seminars relating to specific forensic subjects. Their forensic experts are obviously highly-experienced in their fields, and engaged well with their target audience which were a mixture of solicitors and barristers. They shared their expert knowledge clearly and in an interesting way, and I look forward to working with them again in the future.'

We have also provided seminars for Citadel Chambers in Birmingham and KBG Chambers in Plymouth.

"Key Forensic attended Citadel Chambers (Birmingham) in October to give a presentation on Forensic Evidence in Major Crime Cases. This was a fantastic lecture which was well received by all of our solicitors who attended. Not only was the lecture informative but the comments that I have received are very positive. I would be pleased to welcome them back to Chambers again!!"

**Stefan Gates, Clerk to Chambers**

If you would like us to give a seminar/presentation on a forensic topic to your Chambers or Solicitors' Practice, please give Marketing Manager Paul Whitehouse a call on

07792 268525 or email paul.whitehouse@keyforensic.co.uk

**Please note: there is absolutely NO CHARGE for this and we will even throw in a champagne raffle for your guests!**



Account Manager Profile

## Lisa Doxey

Lisa is the Account Manager for our Non-Police customers.

With over 20 years experience in various customer-focused roles, 10 years of which were with the Forensic Science Service, working with the executive board, Lisa has a passion for delivering only the very best in customer service and believes that customers have a right to expect the very highest levels of service at every stage of their interactions. Before joining KFS in 2011, Lisa worked for an HR Consultancy where she gained valuable experience in a customer facing role, managing outplacement programmes to a wide range of organisations including: Severn Trent Water, Royal Mail, Richard Burbidge, Amtico, and National Express.



## LAW 2013 BIRMINGHAM

Key Forensic exhibited recently at Law Birmingham, 2013, held at The National Exhibition Centre. Legal practitioners visiting our stand were able to speak with some of our forensic experts to get first-hand advice on particular cases.

One example of which was an interesting enquiry directed to one of our handwriting experts, asking whether we were able to forensically examine Mandarin script written on an ancient piece of rice paper!



## Get in touch!

For Further information please contact our Account Manager Lisa Doxey on 02476 323374 or email [sales@keyforensic.co.uk](mailto:sales@keyforensic.co.uk)

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