

THE MEANING OF LINKING INTERPRETATION & FORENSIC EVIDENCE

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Worldwide DNA technologies for forensic DNA typing are becoming more sensitive. The introduction of more sensitive next generation STR DNA testing kits and advances with DNA interpretation software means that the issues surrounding the relevance of DNA profiling results will become more pertinent.

In many sexual assaults the defendant is known to the complainant and may either reside or have legitimate contact with them or their home prior to the alleged incident. A common example is assessing the relevance of detecting traces of male DNA on a child's genital samples. Would we expect to find such DNA from legitimate activities by people who live with or have contact with the child? And if so at what level would this DNA be detected?

There is extensive research investigating the transfer and persistence of DNA using existing autosomal STR multiplex kits that target both male and female DNA, but little data exists for the male specific Y STR multiplexes which are also routinely used in ESR's forensic casework. Very little, if any, work in this field has been directed towards the more sensitive and more discriminating next generation DNA testing kits.