

LONG TERM STORAGE OF BLOODSTAINS ON VARIOUS STORAGE MEDIA

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The National Institute of Standards and Technology has conducted several educational interlaboratory exercises with the forensic community since 1993. Samples remaining from these studies have provided well-characterized materials to study the long-term stability of bloodstains stored on various media: S&S® #903 paper, ISOCODE® PCR DNA SAMPLE ISOLATION DEVICE (Schleicher & Schuell, Keene NH), and FTA® Cards (FITZCO, Inc. Maple Plain MN). We have also examined the effects of storage temperature with some of these bloodstains: -120° C, -80° C, and -20° C, ambient, and 37° C. All bloodstains were sampled with a 2.2 mm punch and the DNA extracted using either the manufacturer's recommendations or protocols optimized at NIST. All samples were amplified with STR multiplex systems. Typeable DNA has been recovered routinely from all storage media and temperature combinations evaluated, including samples prepared in November 1995.

