

# Sex Origin Determination of Body Fluid and Stain

---

**REFERENCE:** Mashali AA: Sex origin determination of body fluid and stain; *Forensic Sci Rev* 5:129–138; 1993.

**ABSTRACT:** The body fluids most often encountered in connection with criminal investigations are semen and saliva. Urine, perspiration, nasal mucosa, vaginal secretion, and even milk may be seen occasionally. These materials are frequently present as dried stains, and the determination of the sexual origin of these stains may occasionally be needed. The difference between male and female are both genotypic and phenotypic. The genetic differences are evident in somatic tissue as well as the sex chromatin material. The phenotypic differences are, in part, a manifestation of the endocrine differences between male and female. Sex identification of soft tissues, including stains and body fluids, at the cellular level may be categorized into three stages: (a) early trials on finding X or Y chromatin bodies; (b) later accurate assay, especially in relation to bloodstains, of sex hormones; and (c) recent adoption of DNA probing techniques. The forensic applications of these methods are reviewed.

**KEY WORDS:** Body fluids, DNA, sex chromatin, sex determination, sex hormones, stains.

---