

Abstract 47

EXAMINATION OF CONTACT CLOTHING AS AN ALTERNATIVE SOURCE OF DNA IN ORAL SEXUAL ASSAULTS

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Over 30% of all cases submitted for DNA analysis by the Tucson Police Department originate from sexual assaults. In about 1 in 4 of these cases, the complainants detail instances of oral contact, such as licking of the breast or other areas of the body. These circumstances result in collection of swabs from affected areas of the body during the sexual assault kit collection. The need for DNA analysis of these swabs is largely determined on a case by case basis and as requested by a case detective.

A survey of sexual assault cases processed by the Tucson Police Department Crime Laboratory in FY 2006 demonstrates that in about 50% of cases these swabs yield no DNA information about the perpetrator of the crime. We show that in these instances, clothing that was immediately placed over the affected area, such as bras or tank tops in the example of oral contact with the breast, may provide an alternative source of DNA. This clothing essentially acts as a primary swab and may absorb a large amount of biological material from the affected area. Swabbing of the insides of bra cups or tank tops has been successfully demonstrated in a number of cases. We detail the results of our survey and several landmark cases.