



Position Statement

DNA Evidence Collection from the Oral Cavity

Statement of Problem: Preserving evidentiary materials following sexual assault is an established component of both Sexual Assault Nurse Examiners and emergency nurses alike¹². While evidence collection is a component of the overall examination and treatment for the acute sexual assault patient, the nurse's primary commitment is to the health, well-being and safety of the patient across the lifespan and in all settings in which health care needs are addressed³.

Standardized evidence collection kits exist that include dental floss as a method of evidence recovery following sexual assault in the living patient. These kits are developed with the input of criminalists and other professionals engaged in responding to sexual assault. This input may or may not include forensically trained nurses. While some state/jurisdictional protocols outline the use of floss as a recommended means to recover evidence following an acute oral assault, there is little information in the scientific literature that this is the only or the best method for such recovery.

Current literature identifies the risk of HIV transmission through oral sex as less of a risk than that of unprotected receptive penile-anal sexual exposure (0.1-3%) or receptive penile-vaginal exposure (0.1-0.2%). While saliva inhibits HIV infectivity⁴ and has been shown to kill up to 90% of HIV infected cells and break apart HIV into noninfectious components,⁵ if HIV cells remain present there is a theoretical possibility of transmission from the cells to the oral mucosa due to flossing and/or any other trauma to the oral mucosa. Additionally, the Centers for Disease Control and Prevention outline several co-factors that may increase the risk of HIV transmission as a result of oral sex, including bleeding gums⁶.

Association Position: Therefore, it is the position of the International Association of Forensic Nurses that:

1. Nurses responsible for evidence collection should be educated in the health safety as well as risks regarding evidence collection;
2. Nurses responsible for evidence collection, particularly forensically trained nurses, should be active participants in discussions surrounding standardized evidence collection kit components to better address patient health and safety issues at the local, state/province and national levels⁷; and
3. Nurses responsible for evidence collection in patients following an acute oral sexual assault should avoid the use of floss due to the potential risk of HIV transmission, and instead employ alternate methods of potential evidence recovery such as oral swabs or mouth rinse (swish) procedures.

References

- ¹ *SANE Education Guidelines*, International Association of Forensic Nurses. 2008.
- ² *Forensic Evidence Collection*. Emergency Nurses Association. 2010.
- ³ *Code of Ethics for Nurses with Interpretive Statements 2001*, American Nurses Association. 2001.
- ⁴ Yeh CK, Handelman B, Fox PC, Baum BJ. Further studies of salivary inhibition of HIV-1 infectivity. *J Acquir Immune Defic Syndr* 1992;5:898-903
- ⁵ Baron S, Poast J, Cloyd MW. (1999). Why is HIV rarely transmitted by oral secretions? Saliva can disrupt orally shed, infected leukocytes. *Arch Intern Med* 159:303-310
- ⁶ *Oral sex and HIV Risk*. Centers for Disease Control and Prevention HIV/AIDS Facts. June 2009. <http://www.cdc.gov/hiv/resources/factsheets/PDF/oralsex.pdf>
- ⁷ United States Department of Justice, & Office on Violence Against Women. (2013). *A National Protocol for Sexual Assault Medical Forensic Examinations: Adults/Adolescents*. Washington, DC: U.S. Dept. of Justice, Office on Violence Against Women.