



Forensic Chemistry Section

Epithelial Touch DNA Evidence Processing Method

1. Scope

This document outlines the methods for screening various items for possible epithelial cells.

2. Safety

- 2.1 Disposable lab coats and disposable gloves will be worn during handling and examination of evidence.
- 2.2 Disposable face masks will be worn as necessary.
- 2.3 Protective goggles will be worn whenever the alternate light source is in use.

3. Method

- 3.1 The alternate light source may be used to visualize or enhance stains on clothes, bedding or other items.
- 3.2 Samples will be removed in a manner deemed appropriate by the examiner i.e., swabbing, cuttings or scrapings.
- 3.3 To swab extract a sample:
 - A sterile cotton swab should be thoroughly wet with reagent water.
 - The substrate will be aggressively swabbed until the surface appears nearly dry.
 - The entire swab head will be used for swabbing.
 - The swab will be air dried prior to packaging, or packaged in a microcentrifuge tube and immediately placed in the appropriate freezer.
- 3.4 The examiner will remove as large a sample as possible to collect the maximum number of cells.
- 3.5 The examiner will determine which samples will be removed and submitted to the Forensic Biology Section of the laboratory for DNA analysis.
- 3.6 Swabbings and cuttings may be combined to obtain an adequate sample, for example, swabbing the entire headband of a baseball cap or combining cuttings from random areas.