



Designation: E2124 – 10

Standard Practice for Specification for Equipment and Supplies in Sexual Assault Investigations¹

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1. Scope

1.1 This practice describes the basic instruments used for the medical-legal examination of victims or suspects, or both, in sexual assault investigations. These specifications are designed to be used in conjunction with other specifications, guides, and practices associated with sexual assault examinations that are listed in Section 2.

1.2 Additional information can be found in Terminology E1732, Guide E1843, Specification E2057, and Practice E2123.

2. Referenced Documents

- 2.1 *ASTM Standards*:²
 - E1732 Terminology Relating to Forensic Science
 - E1843 Guide for Sexual Assault Investigation, Examination, and Evidence Collection
 - E2057 Specifications for Preparation of Laboratory Analysis Requests in Sexual Assault Investigations
 - E2123 Practice for Transmittal of Evidence in Sexual Assault Investigation

3. Summary of Practice

3.1 These specifications outline considerations when choosing equipment to be used in the medical-legal examination of sexual assaults. The types of equipment listed should be included in any examination facility. Considerations for choosing a variation or optional equipment are also given.

4. Instrumentation and Supplies

4.1 The following instrumentation should be available at examining facilities where sexual assault cases are received:

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

4.1.1 *Speculum*—The speculum is used to view the vaginal walls and cervix. Clear plastic disposable specula are preferred because they allow the examiner to see through them and visualize the vaginal walls. Metal specula do not allow this visibility and also may reflect light when taking photographs. Speculum illuminators which attach to the handle should be considered as an aid (as they assist) in visualizing the vaginal walls and cervical area.

4.1.2 *Colposcope*—The colposcope is used to magnify and provide increased visibility, especially in the vaginal area where structures include many folds and grooves of tissue. The examiner must deliberately examine each structure to determine the presence or absence of injury or foreign material, or both. The use of colposcopy has been shown to be critical in both pediatric and adult sexual assault examinations.

4.1.2.1 There are several varieties of colposcopes manufactured and each program should review numerous types to ascertain the best instrument for their facility in view of existing equipment and physical layout of the examination environment.

4.1.2.2 The colposcope should have photographic or video capability, as well as print capacity. The photographic or video capability should be of sufficient resolution to adequately record and document the detail observed in the examination.

(1) Appropriate film digital storage media, and other supplies necessary for the type of photographic instrument must also be maintained.

(2) Cameras incapable of close-up photography, disposable cameras, or cameras, or a combination thereof, that produce “instant” photographs are generally not of sufficient quality to warrant consideration.

4.1.3 *Alternate Light Sources*—Alternate light sources assist in the location, documentation and collection of dried stains, foreign debris, and subclinical bruising. The ultraviolet light (Wood's lamp) is most often used and is considered basic equipment in a sexual assault physical examination.

4.1.3.1 Recently, alternate light sources specifically designed for use in criminal investigation activities have been developed and have the capability of illuminating surfaces under variable wavelength settings which can help in locating