



Designation: E 2124 – 01

# Standard Practice for the Specification for Equipment and Supplies in Sexual Assault Investigations<sup>1</sup>

This standard is issued under the fixed designation E 2124; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 These specifications describe the basic instruments used for the medical-legal examination of victims and/or suspects 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.

## 2. Referenced Documents

### 2.1 ASTM Standards:

- E 1732 Terminology Relating to Forensic Science<sup>2</sup>
- E 1843 Guide for Sexual Assault Investigation, Examination, and Evidence Collection<sup>2</sup>
- E 2057 Specification for the Preparation of Laboratory Analysis Requests in Sexual Assault Investigations<sup>2</sup>
- E 2123 Practice for the Transmittal of Evidence in Sexual Assault Investigations<sup>2</sup>

## 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:

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 and/or foreign material. 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 capability, either with a 35mm camera attached or with video photography and print capacity.

4.1.2.2.1 Appropriate film and/or other supplies necessary for the type of photographic instrument must also be maintained.

4.1.2.2.2 A good 35mm camera is considered the standard in this area, although larger negative format cameras may be used.

4.1.2.2.3 Cameras incapable of close-up photography, disposable cameras, and/or cameras 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 a greater variety of stains and are valuable in locating subclinical bruising and establishing patterns of injury.

4.1.4 *Anoscope*—When the examiner needs more than an external examination of the anorectal area, a clear plastic disposable anoscope should be available.

4.1.5 *Otoscope and Ophthalmoscope*—These instruments are useful to determine whether injury to the ear(s) and/or eye(s) have occurred.

<sup>1</sup> This practice is under the jurisdiction of ASTM Committee E30 on Forensic Sciences and is the direct responsibility of Subcommittee E30.01 on Criminalistics. Current edition approved Jan. 10, 2001. Published March 2001.

<sup>2</sup> *Annual Book of ASTM Standards*, Vol 14.02.