3. Equipment and Supplies

Recommendations at a glance to ensure proper equipment and supplies are available for exams:

- Consider what equipment and supplies are necessary to conduct a medical forensic exam.
- Address cost barriers to obtaining necessary equipment and supplies.

Examiners should know how to use all equipment and supplies (including medications) properly during the exam. It is important that examiners and other individuals involved in sexual assault cases stay abreast of the latest research on the use of equipment and supplies used in caring for sexual assault patients and/or collecting evidence from them.

Consider what equipment and supplies are necessary to conduct a medical forensic exam. Plan to have the following equipment and supplies readily available for the exam, according to jurisdictional policies:

- A copy of the most current exam protocol used by the jurisdiction.
- Standard exam room equipment and supplies for a physical assessment and pelvic exam. Access for patients with physical disabilities should be taken into account.
- Comfort supplies for patients, even if minimal. Suggested items: clean and ideally new replacement clothing, toiletries, food and drink, and a phone or at least easy access to a phone in as private a location as possible. It is also important during the exam process to help patients obtain items they request related to their spiritual healing. It may be useful for facilities to have items on hand that are commonly requested in that jurisdiction (e.g., things that are used for local tribal traditional healing practices) and policies for their use in the facility.
- Sexual assault evidence collection kits and related supplies. (See B.4. Sexual Assault Evidence Collection Kit for information on minimal kit contents.) Related supplies might include tweezers, tape, nail clippers and scrapers, scissors, collection paper, saline solution or distilled water, extra swabs, sterile containers, envelopes, paper bags, and pens/pencils.
- A method or device to dry evidence. Drying evidence is critical to preventing the growth of mold and bacteria that can destroy an evidentiary sample. With any drying method or device used, ensure minimal contamination of evidence, and maintain the chain of custody. The kit’s design can also aid in the drying process (e.g., by providing clear instructions and supplies to allow drying to occur).
- A camera and related supplies (using the most up-to-date technology possible) for forensic photography during initial and follow-up examinations. Related supplies might include digital media, batteries and/or charger, a flash, a color bar, and a scale ruler for size reference. (Also see C.5. Photography.)
- Testing and treatment supplies needed to evaluate and care for patients medically (follow exam facility policies). Also, testing supplies may be needed that are not included in the evidence collection kit. For example, supplies for toxicology testing are often not in the kit.
- An alternate light source (using the most up-to-date technology possible) can aid in examining patients’ bodies, hair, and clothing. It can be used to scan for evidence, such as dried or moist

132 All the equipment and supplies discussed will not be needed in every exam. What is appropriate in each case will depend on the circumstances of the assault and medical and forensic attention called for, patients’ needs, and patients’ consent to utilize equipment and supplies. Jurisdictional and/or facility policies will also influence what equipment and supplies are used.

133 For example, it would be ideal to have an exam table with a hydraulic lift for persons with mobility impairments. If this exam table is not available, health care personnel must be aware of how to assist patients with physical disabilities onto standard exam tables. If it is determined that a patient can only be examined on an exam table with a hydraulic lift, procedures should be in place to get the patient to a site with such a table with as little loss of evidence as possible.

134 Along with these items, patients may want the opportunity to speak with a trusted religious or spiritual leader, such as a medicine man/woman, a rabbi, a priest, or a pastor, before, during, or after the exam.

135 Involved responders/facilities should be aware of local traditional healing practices and support patients if they wish to use such practices at some point before, during, or after the exam. Keep in mind that each tribe has its own traditional practices to promote healing, but not all Native people follow traditional spiritual paths. Rather, spiritual values and belief systems among Native people are as widely diverse as they are among the general population.
secretions, fluorescent fibers not visible in ambient light, and subtle injury. While the exam can be done without a light source, it is a relatively inexpensive piece of equipment that is commonly used during exams. (Also see C.6. Exam and Evidence Collection Procedures.)

- **An anoscope** may be used in cases involving potential anorectal penetration or anal/rectal trauma. This instrument may be used to assist in visualizing an anal injury, obtaining reliable rectal swabs (if there is a concern about contamination), and identifying and collecting trace evidence. (Also see C.6. Exam and Evidence Collection Procedures.)

- **Written materials for patients.** (For details on this topic, see A.2. Victim-Centered Care.)

In addition:

- **A colposcope with photographic capability may be used.** Although some injuries can be detected visually by examiners without the colposcope, the colposcope is an important asset in the identification of microscopic trauma. Photographic equipment, both still and video, can be attached for forensic documentation. (Also see C.6. Exam and Evidence Collection Procedures.)

- **A microscope.** In some jurisdictions, examiners are required to prepare a wet mount slide and immediately examine vaginal/cervical secretions for motile and nonmotile sperm. In these cases, an optically staining microscope is used to highlight cellular material and facilitate the search for sperm. (Also see C.6. Exam and Evidence Collection Procedures.)

- **Toluidine blue dye.** In some jurisdictions, the dye is used to assist in highlighting observed genital and perianal injuries. (Also see C.6. Exam and Evidence Collection Procedures.)

(See C. The Examination Process for more discussion on use of equipment and supplies during the exam.)

Note that some jurisdictions, particularly those in rural and remote areas, are beginning to utilize advanced technology (equipment and methods) such as real-time video consultation, store and forward video consultation, and interactive video consultation to support examiners conducting exams. Using this type of technology, examiners can eliminate the barriers of geography and consult with offsite medical “experts.” (This use of such technology in medicine is sometimes called telemedicine.) Equipment needed to facilitate use of telemedicine may include, but is not limited to, computers, software programs, and the Internet. Jurisdictions that use such technology should consider ways to protect victim confidentiality.

**Address cost barriers to obtaining necessary equipment and supplies.** Obtaining equipment and supplies that can increase the quality and quantity of evidence collected can have a significant impact on case outcomes. However, the costs of equipment and training on equipment use can be prohibitive for some jurisdictions and examiner programs. Some ideas to address cost barriers:

- Seek used or donated equipment or alternative, less-expensive equipment where it exists.

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137 A Wood’s Lamp is perhaps the most commonly used type of light source in sexual assault exams. Examiners should be aware of what the light sources they use will detect and their limitations. For example, many examiners find the Wood’s Lamp useful in helping to detect secretions, stains, and fibers on patients. However, one research study questioned its utility as a screening device for the detection of semen. (K. Santucci, D. Nelson, K. McQuillen, S. Duffy, and J. Linakis, “Wood’s Lamp Utility in the Identification of Semen,” Pediatrics, 104(6), 1999.) Continued research is needed (and being conducted) on the utility of this and other light sources in evidence collection. Ongoing refinement of these instruments is encouraged.
138 The examiner should use discretion in determining whether a case warrants the use of the anoscope for medical and/or forensic purposes, as well as obtain patients’ informed consent for anoscopy. Particularly if a patient has been anorectally penetrated, that patient may be uncomfortable with the use of the anoscope and could possibly even feel revictimized by it. The discomfort this procedure may cause the patient should be weighed against its potential medical or forensic benefits.
139 Wet-mount evaluation of vaginal secretions for infection (e.g., yeast infection and STIs) may be conducted if medically or forensically indicated, whether or not wet-mount evaluation for sperm is done. Hospital lab personnel rather than examiners usually analyze these samples.
140 The most commonly used optically staining instrument by hospital labs is the phase contrast microscope. In jurisdictions that require examiners to do wet-mount evaluations for sperm, an optically staining microscope should be readily available to them at all times. Ideally, due to chain-of-custody issues and the fact that the slide will dry in 5 to 10 minutes, examiners should not have to leave the exam room to evaluate the slide.
141 Keep in mind that telemedicine in sexual assault cases is in its infancy—further research and debate is needed to address concerns related to logistics of use, patients’ consent, confidentiality, and impact; legal implications; affordability; and accessibility.
• Apply for grant or foundation funding for equipment where eligible.\textsuperscript{142}
• Ask for help from community groups in raising funds for one-time equipment or ongoing supply costs;
• Consider sharing costs and equipment with other departments in an exam facility or among other near-by local health care facilities.
• Consider the benefits of a mobile examiner program where costs of equipment, examiner education and clinical preparation, and on-call costs may be shared by multiple exam sites.
• Since the information gathered in the exam is used to investigate and prosecute the offense, ask for assistance from local law enforcement and prosecutor’s offices in obtaining equipment and supplies used specifically for forensic evidence collection.

\textsuperscript{142} Funding under the STOP Violence Against Women Formula Grant Program and the Grants to Indian Tribal Governments Program may be used to cover costs of some equipment. For more information, see \url{http://www.ovw.usdoj.gov}. 