Montana Department of Justice

Sexual Assault Kit Initiative

Course “Evidence Collection”
Intro

Slide 2: Welcome to the course: Evidence Collection.

Slide 3: Content Warning: We will be talking about sexual violence which may trigger personal feelings. Please remember to take care of yourself and do what you need to help yourself.

Slide 4: Disclaimer: This project was supported by Grant No. 2017-AK-BX-0022 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Department of Justice’s Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.”

Slide 5: Objectives: In this course, you will learn about how to properly and safely collect different types of evidence, as suggested by the Montana state crime lab.

Slide 6: The following evidence collection guidelines have been established to improve efficiency and promote analysis of evidence that is most likely to yield informative results. These guidelines will help reduce backlogs and provide timely investigative information.

Slide 7: Menu

- General Information
- DNA Evidence
- Requesting DNA/Serology Testing
- Toxicology Kit and Refrigeration

Select each item to learn more.

General Information

Slide 8: Here are some general instructions for handling evidence.

- Always wear gloves when handling potential biological evidence and change them frequently to avoid cross contamination.
- Air-dry samples before submitting them. Wet or moist items will be subject to bacterial action and mold, destroying their value as evidence.
- Wrap and seal each item separately to avoid contamination. Multiple items of clothing and bedding should have their own packaging.
- Place the evidence in a clean, dry, and unused container. Paper bags, envelopes, and boxes are appropriate containers. DO NOT USE PLASTIC.
- Don’t package objects too tightly: Because resealing generally uses up some of the volume in a bag, leave some room so the packages can be resealed after examination. Do not submit overly large items to the laboratory without prior approval.
- Label each item with a case number, item number, date, item description, source, and location.
• Package sharp and hazardous items in appropriate containers with proper labels, such as BIOHAZARD or SHARPS.
• Evidence tape or other non-removable tape should seal any openings. Initial and date across the tape. Seal any openings to ensure that small particles are not lost. Do not lick envelopes to seal them.
• Include the submission form and all requested case information.
• Dry items may be stored at room temperature until submitted to the laboratory. Avoid excessive heat. Liquids should be refrigerated. Diapers, food items, and other perishable evidence should be frozen and submitted to the laboratory as such. If freezing is not an option, biological evidence should be stored in cool, dark, and dry places.

If you collect more than five items, call the serology/DNA section prior to submitting the case.

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DNA Evidence

Slide 9: There are generally three methods of collection recommended by the Serology/DNA section:

1) Collecting the Entire Item: Often the best way to collect an item of biological evidence is to collect the entire item. This primarily applies to smaller items, such as clothing, weapons, or bedding.

2) Collecting a Portion of the Item: If the entire item cannot be collected because of its size (such as walls, concrete, or flooring), a portion of the entire item may be removed, such as this portion of a car seat. A large enough area around the stain/pattern should be taken to avoid having the cutting instrument come in close contact with the biological material.

3) Removing the Biological Material: A general swabbing technique may be used to collect many types of suspected DNA evidence. This method should be employed when it is impractical or impossible to send the item into the laboratory.

Slide 10: The following general techniques should be used when collecting swabs:

• If you are collecting visible stains, moisten a sterile cotton swab with clean (preferably sterile) water. You do not want the swab to be dripping wet, just moist enough to dissolve the stain. If the stain is small, concentrate it on the tip of the swab. You may use a dry swab afterward to collect any remaining residue. This technique is referred to as the “wet/dry technique.”
• If you are collecting non-visible stains or cellular/contact material, the area may also be swabbed. Be sure to use a dry swab after swabbing with a moistened swab to collect any remaining residue.
• If the suspected stain is liquid or wet there is no need to moisten the swab before swabbing.
• After letting any moist swabs air-dry, use clean swab cartons, paper bags, envelopes, cardboard boxes, or some other breathable packaging material to package evidence to avoid the accumulation of moisture inside the package. Again, DO NOT USE PLASTIC BAGS OR CONTAINERS. The presence of moisture enhances the growth of bacteria and
mold, which can degrade DNA.

- Multiple swabs of the same stain or area may be packaged together. Swabs of different stains or areas should be packaged separately. For example, wet and dry swabs of the suspected blood stain should be packaged together while swabs of suspected blood on the door and the floor should be packaged separately.

**Slide 11: Suspected Blood:**

- Absorb liquid blood onto a sterile cotton swab. For large stains, use multiple swabs. For small stains, concentrate the staining on the tip of a swab.
- If the stain is dry, absorb onto a sterile swab moistened with sterile water. We prefer deionized, distilled water, but saline or bottled water will work.
- Air-dry all moist swabs and pack all swabs in an envelope, a paper bag, or a swab carton.
- Air-dry wet bloodstained garments or small, wet bloodstained objects. You may wrap the dried bloodstained garments in clean paper. Do not place wet or dried garments in plastic or airtight containers.

**Slide 12: Suspected Semen:**

- Absorb liquid semen onto a sterile swab. For large stains, use multiple swabs. For small stains, concentrate the staining on the tip of a swab. Use moistened sterile swabs for dried stains.
- Air-dry all moist swabs and place swabs in clean paper, an envelope, or a swab carton.
- Air-dry wet garments. DO NOT package multiple garments together. This will help avoid contaminating the items and avoid the transfer of trace materials. You may wrap the dried garments in clean paper. Do not place wet or dried garments in plastic or airtight containers. Use paper bags or boxes to submit large items. Envelopes may be used for smaller items. If needed, cut a large sample of semen stain from large and/or immovable objects (mattresses, carpet, car seats, couches) with a clean, sharp instrument.

**Slide 13: Condoms:**

Allow condoms with a small amount of liquid to dry before packaging. If the liquid cannot be dried, the condom should be packaged so that the liquid cannot spill. A new or sterile twist tie or clamp may be used so biological material from the inside of the condom is not mixed with the biological material on the outside of the condom. Package in paper bags or boxes and refrigerate if liquid is present.

**Slide 14: Bedding:**

- Air-dry any wet staining. Package each item separately in paper bags or boxes. Do not pack multiple bedding items together. Your initial submission should only include the item where ejaculation was reported to have occurred. For example, if the suspect ejaculated on the comforter, please only submit the comforter. If the victim was lying on the fitted sheet during the assault, please only submit the fitted sheet.
- Indicate directionality (top, front, etc.) on the item, should the case circumstances and item dictate. This should be done prior to collection and is especially helpful for items like bedding.
Slide 15: Buccal:
- Use sterile, cotton swabs. Rub the inside surfaces of the cheeks thoroughly. You do not need to swab left and right cheeks separately.
- Air-dry the swabs and place in clean paper, an envelope, or a swab carton. Buccal samples do not need to be refrigerated.
- Package buccal samples from different individuals separately. Multiple swabs from the same individual may be packaged together.
- Identify each sample with the date, time, person’s name, location, collector’s name, case number, and evidence number on the evidence label and submission form.

Requesting DNA/Serology Testing
Slide 16: When submitting evidence for serology/DNA analysis, please be sure to fill out the submission form completely. Be sure to send reference standards from the survivor (if one is not present in the sexual assault kit) and the suspect (if known). It is important to have both reference standards to make informative DNA interpretations. A police report for CODIS purposes is also necessary.

Toxicology Kit and Urine Samples and Refrigeration
Slide 17: The toxicology kit will be collected by a sexual assault nurse. The kit should be refrigerated until a law enforcement officer can accompany it or send it to the laboratory.

Slide 18: Let’s test what you’ve learned. Take the quiz on the following pages to test your knowledge.

Slide 19: Correct or Incorrect: Always wear gloves when handling potential biological evidence and change them frequently to avoid cross contamination.

- A) Correct
- B) Incorrect

Correct Answer: That’s true. You should always wear gloves when handling potential biological evidence and change them frequently to avoid cross contamination. Select anywhere to continue.

Incorrect Answer: That’s incorrect. You should always wear gloves when handling potential biological evidence and change them frequently to avoid cross contamination. Select anywhere to continue.

Slide 20: Multiple Choice: How should you package evidence? (Mark all that apply.)
Correct Answer: You’re right, good job! Before submitting items, air-dry all wet or moist samples to avoid bacterial action and mold. Wrap and seal each item separately to avoid contamination. Place evidence in a clean, dry, and unused container. Paper bags, envelopes, and boxes are appropriate containers. DO NOT USE PLASTIC! And don’t package objects tightly, because resealing generally uses up some of the volume in a bag. Click anywhere to continue.

Incorrect Answer: No, that’s not right. Before submitting items, air-dry all wet or moist samples to avoid bacterial action and mold. Wrap and seal each item separately to avoid contamination. Place evidence in a clean, dry, and unused container. Paper bags, envelopes, and boxes are appropriate containers. DO NOT USE PLASTIC! And don’t package objects tightly, because resealing generally uses up some of the volume in a bag. Click anywhere to continue.

**Slide 21:** How should you label each item? (Mark all that apply)

- ✓ A) Case number
- ✓ B) Item number
- ✓ C) Date
- ✓ D) Item Description
- ✓ E) Source
- ✓ F) Location
- □ G) Survivor’s or suspect’s identifying information

Correct Answer: You’re correct! Label each item with a case number, item number, date, item description, source, and location. You should NOT include the survivor’s or suspect’s identifying information on a label. Click anywhere to continue.

Incorrect Answer: No, you’re incorrect. Label each item with a case number, item number, date, item description, source, and location. You should NOT include the survivor’s or suspect’s identifying information on a label. Click anywhere to continue.

**Slide 22:** Correct or Incorrect: Dry items should be stored at room temperature until submitted to the laboratory.

- ✓ A) Correct
- □ B) Incorrect

Correct Answer: Yes, that’s right. Dry items should be stored at room temperature until submitted to the laboratory. Avoid excessive heat. Click anywhere to continue.
Incorrect Answer: No, that’s not right. Dry items should be stored at room temperature until submitted to the laboratory. Avoid excessive heat. Click anywhere to continue.

**Slide 23:** Correct or Incorrect: Liquids should be frozen.

- [ ] A) Correct
- [x] B) Incorrect

Correct Answer: You’re right. Liquids should be refrigerated, not frozen. Click anywhere to continue.

Incorrect Answer: No, that’s not quite right. Liquids should be refrigerated, not frozen. Click anywhere to continue.

**Slide 24:** Correct or Incorrect: Diapers, food items, and other perishable evidence should be frozen and submitted to the laboratory as such.

- [x] A) Correct
- [ ] B) Incorrect

Correct Answer: That is correct. Diapers, food items, and other perishable evidence should be frozen and submitted to the laboratory as such. If freezing is not an option, biological evidence should be stored in a cool, dark, and dry place. Click anywhere to continue.

Incorrect Answer: No, that’s false. Diapers, food items, and other perishable evidence should be frozen and submitted to the laboratory as such. If freezing is not an option, biological evidence should be stored in a cool, dark, and dry place. Click anywhere to continue.

**Slide 25:** Quiz Results

**Slide 26:** In this course, you have learned about how to properly and safely collect evidence.

**Slide 27:** Thank you for completing this course. Select “Close” to exit.

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