

Montana Department of Justice

Sexual Assault Kit Initiative

Course “Montana Sexual Assault Kit - MT100A”

Intro

Slide 2: Welcome to the course, Montana Sexual Assault Kit.

Slide 3: Disclaimer: This project was supported by Grant No. 2016-AK-BX-K015 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."

This project was also supported by Grant No. 2016-DK01-92037 awarded by the Montana Board of Crime Control (MBCC) through the Office of Justice Programs, US Department of Justice. Points of view in this document are those of the author and do not necessarily represent the official position or policies of the US Department of Justice.

Slide 4: In this course, we will give you a detailed introduction to the new Montana Sexual Assault Kit, what changes have been made to the kit, and how to properly collect and document evidence.

Menu

Slide 5: Menu: select an option below to learn more.

- [Why was the kit redesigned?](#)
- [What changes have been made?](#)
- [The Sex Crime Evidence Collection Kit MT100A](#)
- [Do's and Don'ts](#)
- [Quiz](#) (hidden button – will appear after all sections have been completed.)

Why was the kit redesigned?

Slide 6: The last major modification to the rape kit happened in spring 2006. The biggest change: all liquid blood collection tubes were removed from the kit, so that

- completed kits no longer have to be refrigerated as long as all items are properly air-dried.
- the known DNA standard is collected exclusively as a buccal swab and not liquid blood.
- a separate kit is required for toxicology samples. Toxicology samples are collected if the victim's blood and urine need to be tested for drugs and alcohol.

The most recent redesign in 2018, also facilitated a move towards a y-screening process, which is the screening for male DNA, and the solution to some common issues, such as

- separate envelopes for DNA samples, as well trace and hair samples,

- clearer instructions on envelopes as to how and when items should be collected,
- processing ease for laboratory staff,
- and removing all slides/smears from the kit.

What changes have been made?

Slide 7: Changes On The Box

Slide 8: *Hot Spot learning interaction:* Select a hot spot to learn more.

Slide 9: You can easily see if you are using an older kit or MT100A, the seal of the State of Montana is present on the top of the kit along with MT100A.

Slide 10: Signature for pick-up: the kit includes an area for the collection facility to sign and print their name to indicate what was picked up, for example only the kit or additional items such as clothing. Remember to slow down and write clearly.

Slide 11: *Hot Spot learning interaction:* Select a hot spot to learn more.

Slide 12: The side of the kit provides a barcode as the ID number of the kit and serves as a kit tracking mechanism in the Montana Sexual Assault Kit Tracking System software, KitTrack.

Slide 13: Lot #/Expiration Date: The lot number/expiration date label of the manufacturer is present on the side of the kit. The expiration date applies only to the swabs, which can be exchanged if expired. Be sure not to confuse the barcode for the kit ID Number barcode, which should be entered into the kitTrack software for tracking purposes.

Slide 14: Changes On Forms

Slide 15: All forms provide a space for patient labels, as almost all medical facilities use them. The purpose is to cut down on documentation required during the examination process.

Slide 16: Some of the wording and questions have changed, such as if birth was given previously, which helps differentiate tears and scar tissue; if the victim has had previous consensual sex, which helps the lab decide if they need to request a reference standard for the survivor's consensual sex partner; a question about penetration of external genitals was added; Instead of a simple checkbox for patient clothing, the section was changed to allow nurses to describe the clothing in detail and take photos of the items; etc.

Slide 17: Pictures and Diagrams have been updated.

Slide 18: The inventory check list highlights which envelopes to add to the lab samples envelope and provides more space for medical personnel to write their medical findings, as well as where to put the envelope and clothing.

Slide 19: The Summary/Follow Up Sheet is a new form, specifically added for nurses. This can be used to write assessments of the examination, what was collected, a checklist to make sure everything is completed, and items collected for the law enforcement agency.

Slide 20: Changes Inside The Box

Slide 21: The kit includes 2 Large Envelopes: The laboratory samples envelope and the Trace/non-laboratory envelopes. The laboratory samples envelope is opened by the lab. This envelope should include samples that could have informative DNA, such as genital swabs or stain swabs. The Trace/non-laboratory samples envelope should include all trace type samples, such as hair or catch paper, and non-collected envelopes. The Trace/non-laboratory samples envelope will NOT be opened by the lab personnel.

Slide 22: Another change you may notice is the front of the envelopes. The front of each envelope now details when to collect the sample, and how it should be collected.

Slide 23: The back of the envelopes now has check boxes to indicate why the sample was not collected, etc. A spot for patient labels is available, as well as room to note other information.

Slide 24: You will also find some new envelopes in the kit, some with checkboxes to indicate what sample the envelope contains.

Slide 25: The underwear bag is a paper bag and will be included in the kit. If underwear are collected, they should be placed inside the paper bag. Then, instead of placing the collected underwear paper bag inside the kit, the bag follows the kit to FREPP or directly to law enforcement.

Slide 26: The information card is included in the kit. The front of the card gives the survivor detailed instructions how to check on their kit's status online. The back of the card lists the Victim Rights.

The Sex Crime Evidence Collection Kit MT001A

Slide 27: During the exam, you, as the examiner, methodically document physical findings and facilitate the collection of evidence from patients' bodies and clothing. The exam findings and collected evidence often provide information to reconstruct the details about the events in question in an objective and scientific manner. Collect as much evidence from patients as possible, guided by the scope of informed consent, the medical forensic history, exam findings, and instructions in the evidence collection kit. Evidence collection during the exam primarily influences biological and trace evidence of the assault.

Slide 28: The Front Of The Box

Slide 29: Let's take a closer look at the kit. This is the front of the new kit, MT100A, clearly identifiable by the kit type number and the state seal. The top portion marks all identifying information, as well as the date and who examined the patient. You can also mark if other evidence, not collected within the box, such as clothing or a toxicology kit, where picked up and by whom. The middle shows the Chain of

custody information and should be initiated by the person collecting the kit and following all transfers of the item from person to place until it is collected by law enforcement. At the bottom you can find the section for laboratory personnel, as well as the biohazard sticker.

Slide 30: Open The Box

Slide 31: After you cut the seals to open the box, you will find forms and envelopes with detailed instructions. You will find the laboratory samples and trace/non-laboratory samples envelopes inside the kit, which will hold all the collected envelopes after you've finished the 12-step collection process. It is important to note that you should only include items that are listed on the respective envelope. To complete the kit properly, follow the 12 steps included with those forms and envelopes.

Slide 32: The forms include the patient consent form, the narrative, the patient history, and the patient assault history form. Each form will have three carbon copies, the white original sheet of paper, a yellow copy, and a pink copy. Please fill out each form completely and use some pressure when writing, so your information seeps through all 3 copies of the forms. If you type the narrative, please include a copy in the kit. Once filled out, separate the copies from the original form. The white, original copy is the law enforcement copy. Stick it in the envelope attached to the back of the kit. The yellow copy is the crime lab's copy and should be placed inside the kit. The pink copy is the nurse's/medical staff copy and can be kept on file at the facility. Let's take a closer look at each form.

Slide 33: Step 1: Patient Consent Form

Slide 34: Patient Consent Form. It is important to fill this form out completely. Section A of the form consists of the General Information, such as name and address of the patient, age, DOB, Gender, Ethnicity, and Date and Time of arrival. The date and time of arrival are important for the lab to determine the time frame from when the assault occurred to when the kit was collected. Section B is the jurisdiction and identification of the responding officer, if available. Section C explains how the patient information is used. And Section D is the patient consent.

Slide 35: Step 2: Patient Narrative

Slide 36: The patient narrative may be typed or handwritten. The intent is for the narrative to be written in the victim's own words as to what occurred during the assault. It is important to respond to the victim in a trauma-informed, victim-centered approach. For more information about how to respond to victims, visit our course "Victim-Centered Response."

Slide 37: Step 3: Patient History

Slide 38: This is the patient history form.

Section A describes the pertinent *medical* history of the patient.

Section B allows for the pertinent *patient* history, which highlights a few important areas. For example, B1 is critical for the lab. It provides the laboratory with information whether the victim has had consensual intercourse with anyone in the past week unrelated to the assault. B2 and B3 are questions

relating to toxicology samples and if they should be collected. If needed, they are collected in a separate toxicology kit. A toxicology kit can be obtained by contacting the laboratory.

Section C describes the post-assault actions by patients, which can help determine which samples should be collected and which ones may not need to be collected based on the patients post assault activities such as showering.

Section D describes the condition of the patient's clothing during the assault. Pictures may be taken. This information could be useful for law enforcement to ensure they collect the correct evidence if the clothing is not worn by the patient to the exam.

Section E are questions concerning the post assault symptoms, such as injuries, and loss or gaps in memory or consciousness.

Slide 39: Step 4: Patient Assault History form

Slide 40: This is the Patient Assault History form. The information collected on this form directly relates to the activities that occurred during the assault and the assailant's information.

The top left portion is used to document when and where the assault occurred, and information about the assailant.

The second part on the left explores the methods used by the assailant during the assault.

The third part on the left explores whether the assailant was bleeding or injured during the assault. If the patient scratched the assailant, it indicates that fingernail swabs should be taken.

The next set of questions to the right indicate specific details of the assault. Was each body part listed penetrated, and if so by what? A space to indicate if any other objects were used, and if ejaculation occurred. If ejaculation did occur, it is valuable for the laboratory to know where ejaculation occurred. If the survivor indicates ejaculation occurred on clothing, bedding, or in a condom, this information would be good to share with law enforcement for evidence collection purposes. It can also alert you to swab other body areas if suspected ejaculate is indicated. For example, if the survivor indicates that the assailant ejaculated on their abdomen, then you would want to make sure you collect swabs of the abdomen.

If the survivor had no recollection of the assault, check the box at the end and all other questions can be omitted. In cases where the survivor has no memory, collect as many samples as possible, including vaginal, external genitals, oral, rectal swabs, and additional swabs as is indicated throughout the exam.

Slide 41: Step 5: Head and Oral Exam

Slide 42: Step 5 includes the Head and Oral Exams form, as well as envelopes 5A for Head Hair Samples and 5B for Oral Swabs. The form shows head and mouth diagrams, as well as a legend with the types of findings at the bottom of the page. If any of the findings in the legend are noted during the exam, you should draw it on the diagram or indicate the location of the material, or the location of the swab. For

example, if the patient suffered a suction injury you should draw it on the diagram and assign it the #1 in the table. The locator number would be #1, the type would be SI, and then enter a description (for example, swab of right neck suction injury).

Slide 43: After filling out form 5, continue to the step 5A envelope to collect the combings and/or taping as indicated in the following video.

Slide 44: VIDEO 5A

Script: Step 5A: Head Hair Samples

If collecting combings:

- 1) Remove comb and folded specimen paper from the collection envelope. Unfold the specimen paper.
- 2) Comb through the patient's head hair so that combings fall onto paper or catch in the comb.
- 3) Place comb on center of specimen paper and refold paper to securely retain comb and combings.

If collecting tape lift:

- 1) Remove tape lift/substrate from collection envelope.
- 2) Hold tab of tape lift and peel tape off of plastic substrate. Discard this plastic substrate as directed by the label.
- 3) Lightly tape lift on the clear, transparent plastic substrate.

Return sample(s) to the Step 5A envelope.

Seal envelope with tape or hospital sticker. Date and initial seal.

Place 5A envelope in large **Trace/Non-Laboratory Samples Envelope** in kit box

Slide 45: If the victim has washed or thoroughly brushed their hair, or a significant amount of time has passed following the assault, it is very unlikely any material from the suspect would be present, so discretion can be used in collecting these samples.

Slide 46: The back of each sample's envelope allows you to enter a bit more information. Take a look at the following video.

Slide 47: VIDEO BACK OF ENVELOPE

- 1) Label the back of each envelope with the patient's name, the date and who collected it. You can use a hospital sticker.
- 2) If you omitted the sample, check the box and the reason why.

Slide 48: The step 5B envelope is for the oral swabs. The oral swabs are used to find semen or seminal fluid in the event an oral assault occurred. Let's take a look at how this sample should be collected in the following video:

Slide 49: VIDEO 5B

Script: Step 5B: Oral Swabs

- 1) Open the packet of swabs provided. Do not moisten swabs.
- 2) Holding the two swabs simultaneously, carefully swab the upper and lower areas between the lips and gums and along the gumline.
- 3) Air-dry swabs and place in swab carton.
- 4) Place swab carton in Step 5B collection envelope.
- 5) Seal envelope with tape or hospital sticker. Date and initial seal.

If collected and semen suspected, place 5B envelope in large **Laboratory Samples Envelope** in kit box.

Slide 50: Please note, this collection is used to collect for possible semen or seminal fluid and is **not** the victim's reference standard, which will be collected later in the exam in step 10. If no oral assault occurred, this sample does not need to be collected. If the assault occurred more than 12 hours prior to evidence collection, due to the nature of oral cavity, it's unlikely that semen or seminal fluid would be detected.

Slide 51 Step 6: Fingernail Swabs

Slide 52: Step 6 is for fingernail swabs. Fingernail swabs are most informative if the victim scratched or injured the suspect to the point of bleeding. However, if the victim was able to scratch the assailant at all, please collect the sample. If scratching was indicated, swab each hand's fingernail with one swab. Take a close look at this video:

Slide 53: VIDEO 6

Script: Step 6: Fingernail Swab

- 1) Open the packet of swabs provided. Moisten one swab.
- 2) Holding swab, carefully swab any visible stains and fingernail area of the left hand. Make sure to get under the fingernail area of the left hand. Make sure to get under the fingernail as much as possible, concentrating the materials at the tip of the swab. (Multiple swabs (two) may be used if excessive material is present.)
- 3) Air-dry swab(s) and place in swab carton. Label carton "Left Hand."
- 4) Repeat swabbing procedure (step2) with additional swab(s) on right hand.
- 5) Air-dry swab(s) and place in swab carton. Label carton "Right Hand."
- 6) Place swab carton(s) in Step 6 collection envelope.
- 7) Seal envelope with tape or hospital sticker. Date and initial seal.

If collected and blood or skin cells are suspected, place Step 6 envelope in large **Laboratory Samples Envelope** in kit box.

Slide 54: Do not collect this sample if the patient only “pushed” or “touched” the assailant. If semen is suspected on patient’s hands, collect it in an additional swab envelope. Again, the back of the envelope allows you to enter whether you omitted the sample, as well as room for labeling information.

Slide 55: Step 7A & 7B: Catch Paper Envelope/Underwear Bag

Slide 56: Step 7A covers the Catch Paper instructions. If the person has changed since the assault, there is no need to collect the catch paper. Otherwise, follow the instructions on the envelope, covered in this video.

Slide 57: VIDEO 7A

Script: Step 7A: Catch Paper

- 1) Unfold and place a clean hospital bed sheet on the floor.
- 2) Remove catch paper from the collection envelope.
- 3) Unfold the catch paper and place it on the hospital sheet.
- 4) Have patient step out of shoes onto the center of the catch paper.
- 5) After the patient has disrobed, have patient step off of catch paper.
- 6) Refold catch paper to retain contents, and place it in the Step 7A envelope.

Seal envelope with tape or hospital sticker. Date and initial seal.

Place 7A envelope in large **Trace/Non-Laboratory Samples Envelope** in kit box.

Slide 58: Step 7B provides the underwear bag. Only underwear the victim was wearing during or right after the assault should be collected. Follow the instructions on the envelope, covered in this video:

Slide 59: VIDEO 7B

Script: Step 7B: Underwear bag

This bag is for underwear only!

- 1) Hold open the Step 7B Underwear Bag for patients to place underpants in while disrobing.
- 2) Double-fold down the top of the bag. Tape securely closed. Seal and label.

Do not put the Step 7B Underwear Bag or other clothing bags inside the kit!

Slide 60: If pads are encountered during the exam, it would be best to leave them inside the underwear for collection in the underwear bag. These pads should be as dry as possible. Refrigerate the underwear bag if the pad is not fully dried. Since the underwear bag does not go back into the kit but will be given to law enforcement or FREPP, you need to inform law enforcement or FREPP if the underwear and pad are not completely dry and that they need to stay refrigerated.

For additional clothing: A bag to collect the bra is no longer provided. The bra only needs to be collected if the survivor believes that semen can be found on it. If additional clothing is to be collected, it should be packaged, labeled, and sealed **individually** in strong “grocery-style” **paper** bags and submitted in addition to the kit. It is important to package each clothing item in a separate paper bag to prevent cross-contamination.

Slide 61: Step 8: General Physical Examination Form/8A Debris Collection/8B Stain Collection

Slide 62: The General Physical Examination form shows whole body diagrams, as well as a legend with the types of findings at the bottom of the page. Similar to the Step 5A form, you will use the legend to note your exam findings on the diagram and fill out the table appropriately. Document where you collect the swabs from and why. There is also a section for vitals above the diagrams.

Slide 63: Step 8A covers the Debris Collection. Debris can be found in many forms and is typically considered to be foreign material on an item. It can be plant materials, manmade materials, fibers, hairs, etc. Instructions on how to collect debris can be found on the front of the envelope, which is covered in the following video:

Slide 64: VIDEO 8A

Script: Step 8A: Debris Collection

- 1) Remove folded specimen paper from the collection envelope.
- 2) Unfold the specimen paper.
- 3) Place loose debris obtained from the patient’s body on the specimen paper. (Debris may be removed from the patient’s body by “picking” with forceps, “scraping” with a piece of clean paper, or by tape lifting.)
- 4) Refold specimen paper to securely retain debris.
- 5) Place specimen paper fold in the Step 8A Debris Collection envelope.

Return sample(s) to the Step 8A collection envelope.

Seal envelope with tape or hospital sticker. Date and initial seal.

Place 8A envelope in large **Trace/Non-Laboratory Samples Envelope** in kit box.

Slide 65: If there is a possibility for potential DNA on the debris (for example a pubic hair on the exterior genitals of a victim that is shaved, add this information on the kit form and note it on the envelope. Putting the information on the kit forms alerts the laboratory to other potential samples that may be present in the trace/non-laboratory envelope.

Slide 66: Step 8B covers the Stain Swab. Documentation for this type of sample needs to be clear. Complete information about where the sample was collected is critical. Pay attention to this video demonstration.

Slide 67: VIDEO 8B

Script: Step 8B: Stain Swabs

- 1) Examine the patient's body for visible (dried and moist) secretions/stains. Record findings on diagram and legend.
- 2) Swab each area using two swabs/area. Swab moist secretions with dry swabs. Swab dried secretions with swabs moistened with distilled water or saline.
- 3) Place each pair of swabs in a separate swab carton. Use additional swabs envelope as needed. Sterile swabs and clean envelopes may be used from the stock as needed. Be sure to seal and label.

Return sample(s) to the Step 8B collection envelope or additional swabs envelope (9D).

Seal envelope with tape or hospital sticker. Date and initial seal.

Indicate with type of secretion/stain suspected: Semen, Saliva, Blood, or Lubricant.

Indicate the location swabbed.

If collected and samples from assailant are suspected, place 8B envelope in large **Laboratory Samples Envelope** in kit box.

Slide 68: Swabs from different body areas should be packaged in different swab cartons and placed in separate envelopes, even if those envelopes are white stock envelopes. As long as the envelope is labeled and sealed, it can be used. Important: Please do not use multiple sets of swabs for the same body area or potential stain. The more swabs you use, the more difficult it is to analyze and obtain a workable DNA profile.

Slide 69: Step 9: Genital Swab

Slide 70: Step 9, the Genital examination consists of five parts, A through E, and is available for either male or female subjects. The forms contain diagrams and a general description on how to perform the exam, as well as more details on each step 9 envelope.

Slide 71: Step 9A – Pubic Hair Samples. The pubic hair samples envelope is very similar to the head hair collection envelope, but of the pubic area. If the patient has bathed or showered, you can omit this step. You are looking for superficial trace evidence. Once collected, this envelope goes into the non-laboratory envelope.

Slide 72: VIDEO 9A

Script: Step 9A: Pubic Hair Samples

If collecting combings:

- 1) Remove comb and folded specimen paper from the collection envelope. Unfold the specimen paper.
- 2) Comb through the patient's pubic hair so that combings fall onto paper or catch in the comb.

- 3) Place comb on center of specimen paper and refold paper to securely retain comb and combings.

If collecting tape lift:

- 1) Remove tape lift/substrate from collection envelope.
- 2) Hold tab of tape lift and peel tape off of plastic substrate. Discard this plastic substrate as directed by the label.
- 3) Lightly tape lift the patient's pubic area by holding tab of tape and applying light pressure to the back of tape.
- 4) Place tape lift on the clear, transparent plastic substrate.

Return sample(s) to the Step 9A collection envelope.

Seal envelope with tape of hospital sticker. Date and initial seal.

Place 9A envelope in large **Trace/Non-Laboratory Samples Envelope** in kit box.

Slide 73: Step 9B – External Genitals. This sample can be useful in “touching” and oral sexual assault cases. There are check boxes to indicate the suspected fluid and/or to indicate if the area was only “touched.” For male subjects, the penile/scrotum swabs can also be collected in Step 9C: Penile/Scrotum swabs, so you may not need to collect this sample.

Slide 74: VIDEO 9B

Script: Step 9B: External Genitals

- 1) Examine the patient's external genitals for visible (dried and moist) secretions/stains. Note any injuries or abnormalities. Record findings on diagrams and legend.
- 2) Swab the external genitals using two swabs. Swab moist secretions with dry swabs. Swab dried secretions with swabs moisten with distilled water or saline.
- 3) Air dry swabs and place in swab carton. *(Marina- there is a more neutral carton in the swab drying and packaging video at around 1:55 – maybe use that?)*

Return swab carton to the Step 9B collection envelope.

Seal envelope with tape or hospital sticker. Date and initial seal.

Mark which type of secretion/stain suspected: Semen, Saliva, Blood, Lubricant, Area touched by assailant (no suspected body fluid).

If collected, place 9B envelope in large **Laboratory Samples Envelope** in kit box.

Slide 75: Step 9C – Vaginal/Cervical or Penile/Scrotal swabs. This purpose of this collection is to recover the assailant's semen, seminal fluid, or spermatozoa in the vagina, or to recover saliva or vaginal fluid from the penis. Pay attention to the following demonstration video:

Slide 76: VIDEO 9C

Script: Step 9C: Vaginal/Cervical

To collect vaginal/cervical swabs:

- 1) Open both packets of swabs in the collection envelope. Do not moisten the swabs.
- 2) Holding all four swabs as a unit, insert them into the vagina. Rotate the swabs around the vagina while twirling to ensure uniform coating and saturation of swabs (~30 seconds). Also, swab cervical area (with the same swabs) unless history indicates prior intercourse with individual other than assailant. In this case, you may collect cervical swabs separately.
- 3) Place air-dried swabs in swab carton(s). Labeled appropriately as needed.

Return swab carton to the Step 9C envelope. Use additional swabs envelope 9D as needed for cervical swabs.

Seal envelope with tape or hospital sticker. Date and initial seal.

If collected, place 9C envelope in large **Laboratory Samples Envelope** in kit.

Slide 77: To collect penile/scrotal swabs:

- 1) Open one packet of swabs. Lightly moisten swabs.
- 2) Collect a total of two lightly moistened swabs from the shaft, glans (including under the foreskin and around the corona), and scrotum unless the history indicates otherwise; be careful to avoid the urethra (which will yield the DNA of the person being swabbed).

Return swab carton to the Step 9C envelope.

Seal envelope with tape or hospital sticker. Date and initial seal.

If collected, place 9C envelope in large **Laboratory Samples Envelope** in kit.

Slide 78: If for some reason the areas need to be collected separately, (i.e. history indicates prior consensual sex partner) be sure to label each swab carton and place the additional swabs in the envelope in Step 9D: Additional Swabs.

Use the additional swabs for:

- Visible stains/secretions
- Additional fluorescent areas
- Areas indicated by patient for suspect saliva/semen (including bite marks)
- Cervix swabs or external genital swabs can go here as well (if you need to collect))
- Two swabs should be used of the area swabbed, concentrating the material on the swab tip if at all possible.

Slide 79: Step 9E – Rectal or Anal/perianal swab. Use this envelope if anal/rectal assault is indicated. These swabs don't always have to be collected, but the perianal area could be swabbed for possible drainage even if no rectal assault occurred. See the following video for instructions:

Slide 80: VIDEO 9E

Script: 9E: Rectal or Anal/Perianal Swabs

To collect rectal swabs

- 1) **DISCLAIMER:** Only use an anoscope if you have been qualified/trained to do so. An anoscope moistened with warm water may be used for this exam. Obtain the samples under direct visualization from above the tip of the instrument.
- 2) Open the packet of swabs in the collection envelope. Do not moisten the swabs.
- 3) Holding the two swabs simultaneously, insert them into the anus. Rotate the swabs to ensure uniform coating. Allow adequate time for saturation – at least 30 seconds.
- 4) Place air-dried swabs in labeled swab box.

To collect anal/perianal swabs:

- 1) Examine the patient's perianal area for visible (dried and moist) secretions/stains. Note any injuries or abnormalities. Record findings on diagrams and legend.
- 2) Swab the perianal area using two swabs. Swab moist secretions with dry swabs. Swab dried secretions with swabs moistened with distilled water or saline.
- 3) Air dry swabs and place in swab carton.

Return swab carton to the Step 9E collection envelope.

Seal envelope with tape or hospital sticker. Date and initial seal.

If collected, place 9E envelope in large **Laboratory Samples Envelope** in kit box.

Slide 81: You should not collect both samples and place them both in the same envelope, but either rectal (which are internal cavity swabs) or anal/perianal swabs (which are the opening and external). If rectal swabs are collected, the perianal area may be swabbed along with the external genitals.

Slide 82: Step 10: Known DNA reference sample

Slide 83: Step 10 – Known DNA Reference Standard Sample. If any DNA samples are collected for the kit, a known DNA reference standard must ALWAYS be collected as well. If an oral assault occurred, and after all possible evidence was collected, have the patient rinse out the oral cavity with water and then collect the reference sample. Follow this video closely for instructions on how to collect a buccal swab.

Slide 84: VIDEO 10

Script: Step 10: Known DNA Reference Sample

Buccal Swab Collection

- 1) Open the packet of swabs provided. Do not moisten swabs.
- 2) Holding the two swabs simultaneously, carefully rub the inside of the cheek for approximately 15-20 seconds. Rotate the swabs to ensure a uniform coating and saturation of the swabs.
- 3) Air-dry swabs and place in swab carton.

Return swab carton to the Step 10 collection envelope.

Seal envelope with tape or hospital sticker. Date and initial seal.

Place Step 10 envelope in large **Laboratory Samples Envelope** in kit box.

Slide 85: There is no reason to collect a reference standard if no other samples for comparison were collected. If the only thing in the kit for DNA is a buccal swab, or if no samples at all were collected, please send the kit to FREPP.

Slide 86: Step 11: Is the Inventory/Check List

Slide 87: Step 11 is the Inventory Checklist. You should document what was collected and what was not collected. This is an important piece of information for the laboratory to decide how to set up a y-screening batch to screen for male DNA.

Section A highlights evidence for the crime lab. Here, the gray highlighted descriptions should be enclosed in the lab samples envelope. The other, non-highlighted descriptions go into the trace/non-lab samples envelope. Or are given directly to Law Enforcement or FREPP.

B describes the other evidence at the medical facility.

In section C you will enter all Photo Documentation Methods.

Section D is for information on Record Exam Methods.

Section E is for any Lab results.

And section F shows information and checkboxes for a follow up by the SANE or Collector.

Slide 88: Step 12: Summary/Follow Up

Slide 89: Step 12 is the Summary/Follow Up. This form is a checklist sheet to ensure that everything is completed. This is not a mandatory form. However, this form will help you ensure that everything that needs to be included in the kit is now included.

Slide 90: Quick Recap

Slide 91: Let's quickly recap which samples we want to add to the Laboratory envelope, and which samples we want to enclose in the Trace/Non-Laboratory envelope.

If you suspect DNA can be found and you collect the following sample envelopes, place them, sealed, inside this laboratory samples envelope:

- Step 5B Oral Swabs Envelope
- Step 6 Fingernail Swabs Envelope
- Step 8B Stain Swabs Envelope
- Step 9B External Genitals Envelope
- Step 9C Vaginal/Cervical or Penile/Scrotal Swabs Envelope
- Step 9D Additional Swabs Envelope
- Step 9E Rectal or Anal/Perianal Swabs Envelope
- Step 10 Known DNA Reference Standard Envelope.

The following sample envelopes should be placed inside this Trace/Non-laboratory samples envelope.

- Step 5A Head Hair Samples Envelope
- Step 7A Catch Paper
- Step 8A Debris Collection Envelope
- Step 9A Pubic Hair Samples Envelope

In addition, place any non-collected samples envelopes inside the Trace/Non-laboratory samples envelope as well.

Slide 92: Complete and seal the kit

Slide 93: Place all sealed envelopes in their respective larger envelopes.

- 1) Seal larger envelopes with tape or hospital sticker. Date and initial seal.
- 2) Once both large envelopes are sealed, place them inside the kit box.
- 3) Separate and sort the completed forms.
- 4) Pink copies are for your hospital records.
- 5) Yellow copies are laboratory copies and belong inside the kit.
- 6) White copies are law enforcement copies and need to be placed inside the large envelope on the bottom of the kit.
- 7) Seal and initial the law enforcement envelope.
- 8) Now seal and initial the kit box.
- 9) Fill out the information on the outside of the box.

Make sure to take your time and write clearly!

Do's and Don'ts

Slide 94: Please Do

Slide 95: Documentation: Please, always fill out the paperwork as best as you can. The information is used throughout the process. Also, if items are mislabeled or not labeled at all, it could lead to problems

at the laboratory or in court and perhaps to the wrong tests being performed. Remember, slow down and write clearly!

Slide 96: Collect a Reference Standard: If the laboratory does not have the reference standard of the survivor, they will not be able to perform meaningful DNA comparisons.

Slide 97: Air dry all items (be sure to avoid cross contamination when drying). If the item can't be dried completely, place it in a paper bag and inform the law enforcement agency.

Slide 98: Keep away from heat, sun, rain, and chemicals

Slide 99: Package each clothing item separately in paper products

Slide 100: Seal and label all items. Don't lick the envelopes! Use clear tape, evidence tape, or patient labels.

Slide 101: Use the correct envelopes: Items packaged in the wrong envelope are difficult to assess and take extra time in the process.

Slide 102: Salivary Contact Swabbing: When swabbing an area for saliva or a bite mark, national guidelines are suggesting two moist swabs

- Good rule of thumb is moist swabs for dry secretions, dry swabs for moist secretions
- Both the wet and dry swabs should be packaged together in the same carton and do not need to be labeled with which one is wet and which is dry.
- Always concentrate the material collected on the tip of the swab

Slide 103: Tampons:

- Remove and dry as much as possible
- Refrigerate the tampon if it is not fully dried and inform law enforcement that the item needs to stay refrigerated.
- Don't seal in plastic please, but you can place the tampon in an OPEN specimen cup and then a paper bag. Leave upright, label, and hand over to law enforcement. Don't add the bag to the kit.
- This collection method would apply to any intravaginal objects

Slide 104: Contact the laboratory to ask questions about collections if you are unsure. Call the general lab number at 406-728-4970 or email the DNA section at dojdna@mt.gov.

Slide 105: Please Don't

Slide 106: Collect too many or too few swabs: The process used to analyze DNA samples is optimized for a certain amount of material. Having too many swabs can cause the laboratory to perform a multi-tube extraction, in which they would have to combine the samples. DNA can be lost during the process, and if

the sample already has limited DNA, enough can be lost that they would not be able to generate an informative profile.

Slide 107: Use a Disposable Swab Drying Rack: The use of a disposable swab drying rack is not advised. The flimsy construction of the rack and unsecured swab sticks could lead to contamination. You can use a swab drying machine, but you may want to dry one set of swabs at a time.

Slide 108: Use plastic bags: Plastic should never be used/sealed to package evidence for DNA. It can easily lead to mold, which is detrimental to DNA.

Slide 109: Staples: Staples are a hazard

Slide 110: Tape on swabs: Please don't add tape to the sticks of swabs to identify them or tape them together. It is unnecessary, as the cartons themselves should be labeled, and all swabs in the carton should be from the same area. Most importantly, it makes it extremely difficult to remove the swabs from the carton and process them.

Slide 111: Lick Envelopes: Licking envelopes can contaminate the samples with your DNA.

Slide 112: Package multiple items together: it can cause cross-contamination

Quiz

Slide 113: QUIZ: Let's test what you've learned. Take the quiz on the following pages to test your knowledge.

Slide 114: Multiple Choice: If collected, which samples should be included in the laboratory samples envelope? (mark all that apply – multiple answers possible!)

- A) Step 7A Catch Paper envelope
- B) Step 5A Head Hair samples envelope
- C) Step 5B Oral Swabs samples envelope
- D) Step 10 Known DNA Reference samples envelope
- E) Step 8A Debris Collection envelope
- F) Step 6 Fingernail Swabs envelope
- G) Step 9B External Genitals Envelope
- H) Step 9C Vaginal/Cervical or Penile/Scrotal Swabs Envelope

Correct Answer: That's right, good job! The head hair samples, catch paper, and debris collection envelopes should all go into the Trace/Non-Laboratory Samples envelope instead. Click anywhere to continue.

Incorrect Answer: No, that's not right. The following samples go into the Laboratory Samples envelope: Step 5B Oral Swabs, Step 6 Fingernail Swabs, Step 9B External Genitals, Step 9C Vaginal/Cervical or Penile/Scrotal Swabs, Step 10 Known DNA Reference Sample.

The other envelopes should be included in the Trace/Non-Laboratory Samples envelope: Step 7A Catch Paper, Step 5A Head Hair Samples, Step 8A Debris Collection.

Slide 115: Correct or Incorrect: You should collect fingernail swabs if the victim indicated scratching the assailant.

- Correct
- Incorrect

Correct Answer: Yes! Fingernail swabs are most informative if the victim scratched or injured the assailant to the point of bleeding. However, if the victim was able to scratch the assailant at all, please collect the sample. Click anywhere to continue.

Incorrect Answer: No, that's incorrect. If the victim was able to scratch the assailant at all, please collect the sample. Fingernail swabs are most informative if the victim scratched or injured the assailant to the point of bleeding, but if the victim indicated scratching the assailant, it's best to collect a sample. Click anywhere to continue.

Slide 116: Correct or incorrect: It is important to package all clothing items in as few bags as possible, stacking them on top of each other if necessary.

- Correct
- Incorrect

Correct Answer: Correct, you paid attention! It is very important to package each clothing item in a separate paper bag to prevent cross-contamination. Click anywhere to continue.

Incorrect Answer: Oh, no. We hope that's not something you would do. It is very important to package **each clothing item in a separate paper bag** to prevent cross-contamination. Click anywhere to continue.

Slide 117: Yes or No: To better identify the swab samples, you should either add tape around each swab stick or tape a bunch of swabs together with one identifiable tape.

- Yes
- No

Correct Answer: Yes, very good! It is unnecessary to put any tape on swabs since you've already inserted them into their respective swab carton and envelope. Good job! Click anywhere to continue.

Incorrect Answer: No, please do not do this. It is completely unnecessary to put any tape on swabs since they should be inserted into their respective swab carton. Any information you need to add, you can add it on the swab carton or accompanying envelope. Click anywhere to continue.

Slide 118: Multiple Choice: The 5B Oral Swabs Sample can be used for the collection of the following samples:

- Known DNA Reference Standard
- Semen or Seminal Fluid
- All of the above

Correct Answer: That's right, good job. The 5B Oral Swabs sample should only be used for the collection of semen or seminal fluid in the event an oral assault occurred. Click anywhere to continue.

Incorrect Answer: No, that's not right. The 5B Oral Swabs sample should only be used for the collection of semen or seminal fluid in the event an oral assault occurred. The Step 10 Known DNA Reference Sample is used for the victim's identifying DNA sample. If collecting both samples, collect the 5B Oral Swabs sample for semen or seminal fluid first. Then, let the victim rinse their mouth and swab for step 10, the Known DNA Reference Standard. Click anywhere to continue.

Slide 119: Feedback: Enter your feedback in the box below.

Slide 120: Quiz Results

Slide 121: Objectives: In this course, you have worked through the Montana MT100A kit and have learned how to properly collect and document evidence.

Slide 122: Exit: Thank you for completing this course. Select "Close" to exit.