#### Evidence Packaging: A How-To Guide

Terry Spear, John Rush, Jerry Massetti, Jim Weigand and Mark Traughber

California Department of Justice Bureau of Forensic Services

# Goals of Evidence Packaging

- Protects personnel from possible hazards associated with evidence:
  - Accidental firearm discharge
  - Biohazards
  - Sharp objects
  - Health hazards associated with exposure to mold
    - Wet plant material

## Goals of Evidence Packaging

- Protects evidence against:
  - Loss
  - Contamination
  - Cross-transfer
    - Suspect to victim
    - Victim to suspect
    - Scene to scene
    - Item to item
  - Deterioration

## Goals of Evidence Packaging

- Correctly identifies evidence with respect to:
  - Evidence description: What is it?
  - Evidence source
    - Origin where was evidence when it was collected
    - Custodial Agency
  - Chain of custody
  - Provides a unique identifier so it cannot be confused with any other evidence item
    - Laboratory case and item number

### Packaging

- Can indicate
  - What processing is needed
    - For example: "Fingerprint processing required"
  - Health hazards (e.g. sharp knife)
  - Required or preferred storage conditions
    - "Store at room temperature"
    - "Store frozen"

## Elements of packaging evidence

- Does evidence need to be prepared for packaging?
  - Certain types of evidence may need to be dried before it can be packaged:
    - Wet biological samples
    - Fresh plant material

## What Can Happen When Biological Evidence is Packaged Wet?



Evidence "leaks" through to the exterior of the container

## Elements of packaging evidence

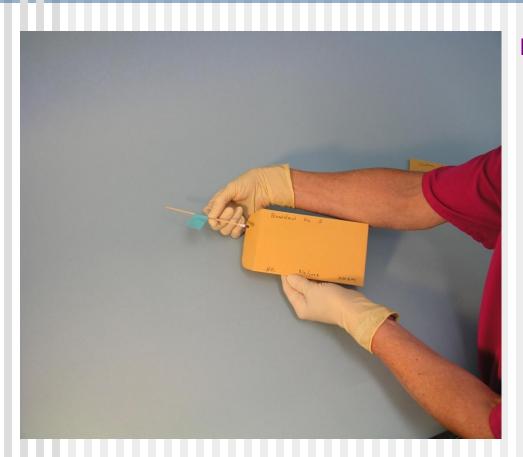
- What type of packaging is optimal?
  - Plastic: What type of plastic?
    - Envelope
    - Bag
  - Paper
    - Envelopes
    - Bag
    - Boxes

## Sometimes **Plastic** Containers are Optimal: Controlled Substances



 Kapak packaging can prevent exposure to potent drugs

## Sometimes **Paper** Containers are Optimal: Biological Samples



Allows a sample that is not completely dry to finish drying and May prevent the deterioration of a biological sample if it is not completely dry when packaged

# What Happens When Biological Evidence is Wet?



Evidence "leaks" through to the exterior of the container, resulting in:

- Sample deterioration
- Sample loss
- Contamination issues

#### Elements of Packaging Evidence

- What type of packaging is optimal?
  - Size of container is important
    - Too small and the packaging is likely to fail over time
    - Too big and evidence can be dispersed throughout container and difficult to recover (e.g. powder, trace evidence)

### Elements of Packaging Evidence

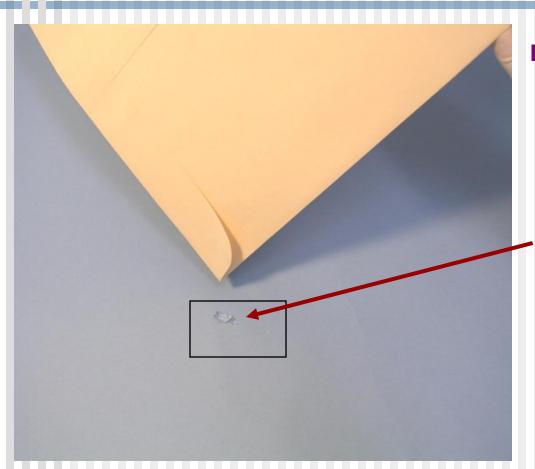


This envelope is too small for the evidence it is holding

#### Elements of Packaging Evidence

- Does evidence require internal packaging?
  - Bindle
  - Box
  - Coin envelope
  - Hold down device
  - Syringe tube/"sharps" container

# Glass Fragments Deposited into Large Envelope



Small glass
 fragments can be
 lost from poorly
 sealed envelopes
 Ideally, these
 fragments would
 be packaged into a
 bindle first

### Sealing Evidence

- Sealing evidence properly is a requirement of most crime labs
  - Issues:
    - Type of seal
    - Need for identifying mark
    - Where seal(s) is to be placed

### Sealing Evidence

- Ways evidence can be sealed
  - Heat seal
  - Tape seal
  - Lock seal
- All seals must be initialed to document the person sealing the evidence and dated to indicate when the evidence was sealed

#### How Not to Seal Evidence



Seal should
 completely seal
 envelope flap

#### How Not to Seal Evidence



Seal should completely seal bag flap

#### How Not to Seal Evidence



Staples are not an appropriate evidence "seal"

#### How to Correctly Seal Evidence



 Tape seal across entire flap of envelope Seal is initialed and dated

#### How to Correctly Seal Evidence



Tape seal across
 entire "flap" of bag
 Seal is initialed
 and dated

## Biological Evidence

# Packaging Biological Evidence

- Insure the sample is dry
  - Do not dry in a heated air stream
- Use paper containers
- Immobilize evidence when necessary
  - "sharps": knifes, broken glass
  - when stain could be dislodged

## Recommendations for Collection of Biological Evidence

- Collect and package stains separately--do not allow separate stains to come into contact with one another
  - Sheets of paper can be used to minimize contact of stains on a bloodstained garment
  - Consider packaging all biological samples separately
    - A bloodstain swab and its control can be separately packed into two coin envelopes and then both envelopes can be placed into the same larger envelope

## Recommendations for Collection of Biological Evidence

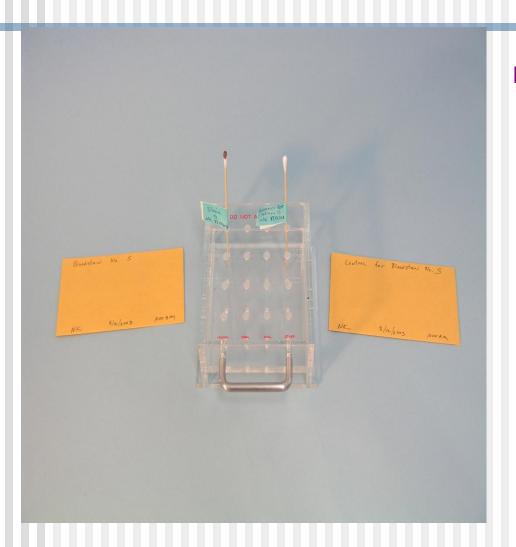


To minimize the chance of cross transfer of adhering evidence; different clothing items should NOT be packaged in the same container

## Recommendations for Handling Biological Evidence

- Attempt to insure that anything that contacts biological samples during collection is free of anything that might contain human DNA
  - Work on clean surfaces
  - Wear cloves and change when necessary

#### Packaging a Wet Bloodstain on a Swab



After samples are dried, package the bloodstain sample and the control into separate coin envelopes

# How **NOT** to Package a Wet Bloodstain



- Do **not** use any packaging device that limits air exchange
  - Biological samples will deteriorate if it takes too long for them to dry

### Packaging a Dry Bloodstain



 Once the sample is dried it can be safely placed into a paper envelope and sealed



 Attempt to allow bloodstains to dry as much as possible Place clothing onto a piece of clean paper



Place paper between stained areas so as to prevent stain transfer



Place paper between stained areas so as to prevent stain transfer



Seal and date
 paper package
 with bloody shirt
 Insert paper
 package into
 larger paper bag

# This is NOT the proper way to package a bloody knife



 Although paper is good packaging for bloodstained evidence

This knife needs to be immobilized because...

# This is NOT the proper way to package a bloody knife



- It can easily pierce the paper envelope and endanger anyone who handles this evidence
  - In addition, blood from the blade can be easily lost

# How to **Properly** Package a Bloody Knife



Use a cardboard box (not airtight) Immobilize knife to protect both personnel & the blood sample on blade

#### Packaging Trace Evidence

- Trace evidence is small evidence and can be easily lost
- Examples of trace evidence:
  - Hairs
  - Glass fragments
  - Paint flakes
  - Fibers

### Packaging Trace Evidence

If it is necessary to remove and package trace evidence, its nature and location must be documented before the evidence is altered

#### Packaging Trace Evidence

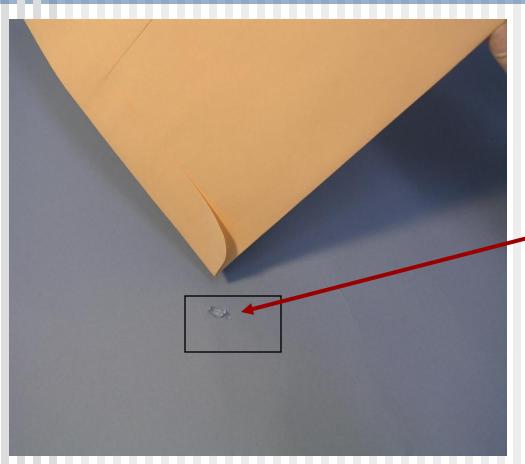
- Items must be visually examined and trace evidence identified
  - Trace evidence can be removed with tweezers and placed into appropriate packaging
  - Trace evidence can also be removed with tape lifts
- Packaging must be appropriately sized & designed so that this small evidence cannot fall out of the container

### Glass Fragments



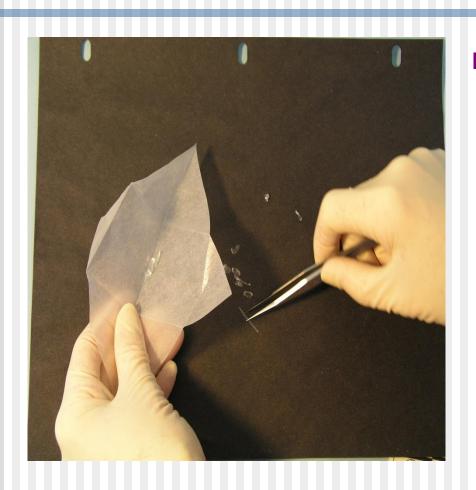
 Glass fragments are small and can be lost from poorly sealed envelopes

# Glass Fragments Deposited into Large Envelope



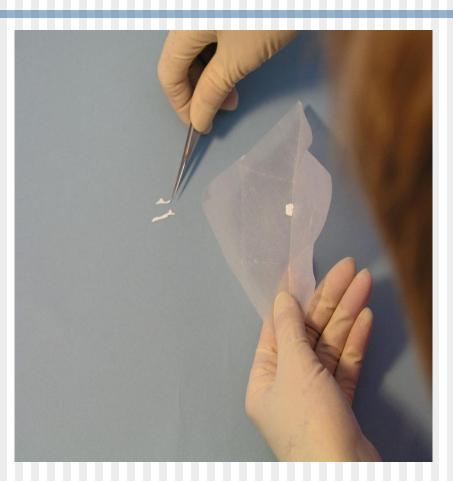
- Small glass fragments can be lost from poorly sealed envelopes
- These fragments
   need to be
   packaged into a
   bindle before being
   placed into
   envelope

# First Step: Placing Glass Evidence into a Bindle



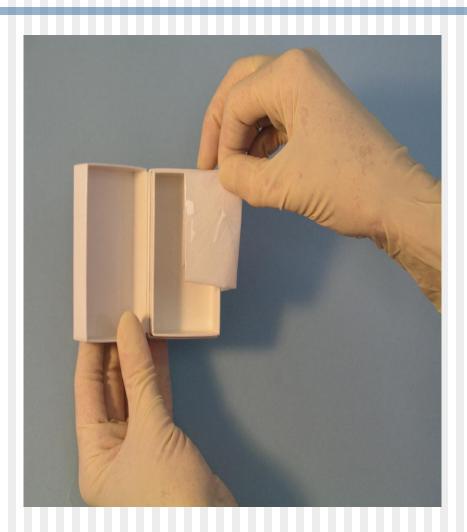
The glass is collected and placed into a paper bindle The bindle is then sealed before it is inserted into an envelope

# Packaging Paint Fragments



Bindles can also be used to package paint fragments

# Packaging Paint Fragments



 Rigid boxes can then be used to hold paper bindle with fragile paint fragments Box is then placed into paper evidence envelope

#### Firearms Evidence

### Packaging Firearms Evidence

- Record all necessary information about condition of firearm:
  - Position of hammer, safety, & other controls
  - Number and location of fired and unfired cartridges
  - Presence of powder residue "halos" on revolver cylinder face
  - Blood or trace evidence visible on gun exterior



- This weapon is loaded and ready to fire
- NEVER PACKAGE A
   LOADED WEAPON
  - Remove the magazine & make sure chamber is empty



Firearms **can** be handled by any surface which does not take fingerprints

Serrations on slide

Checkered stocks

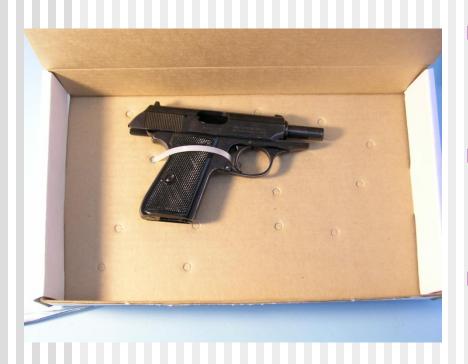
# How NOT to Handle Firearms Evidence



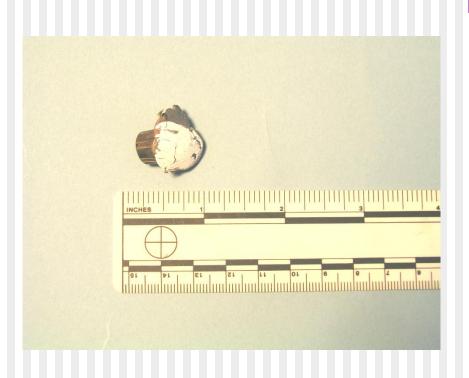
- Do NOT insert anything into the barrel
  - EXTREMELY UNSAFE!
  - Could alter the firearm
  - Could remove blood or trace evidence



- Once the firearm has been rendered safe, it can be placed into a cardboard box and
- Immobilized with a plastic tie
  - Make sure the tie goes BEHIND the trigger



- This packaging will permit fingerprint, blood and trace evidence to be recovered
- The evidence now needs to be appropriately labeled and sealed
- Write "Unloaded" notification on outside of container



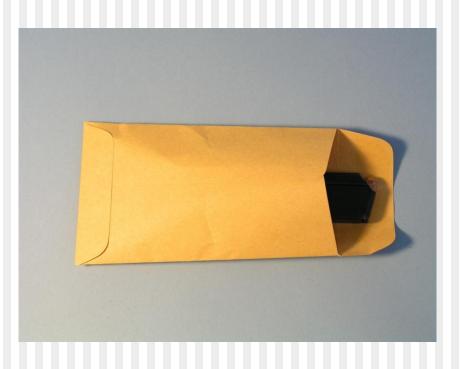
- Fired bullets need to be carefully handled to protect critical markings on the bullet surface and any adhering trace evidence
  - Do NOT mark bullet



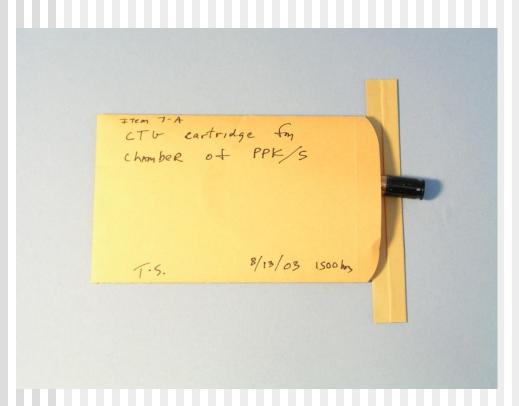
- This type of evidence requires some internal packaging
  - Paper bindles or soft tissue can be used



- The wrapped bullet can now be placed into an appropriate size container
  - This container must be labeled and then
    - Placed into a large evidence container



- No need to remove cartridges from the magazine at scene
- The magazine with cartridges can be placed into an appropriate sized paper envelope



 Package loose cartridges in paper envelopes

# Drug Evidence

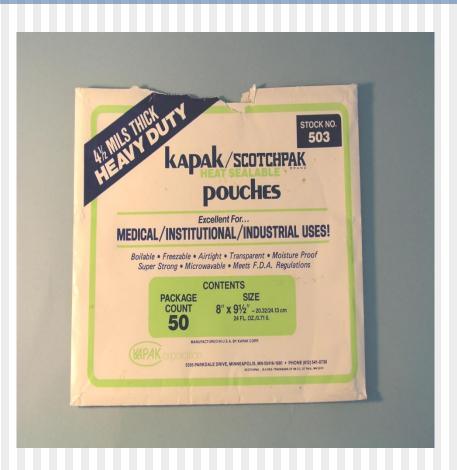
# Packaging Drug Evidence

- Drug Evidence Packaging needs to accommodate:
  - Health hazards associated with certain drug items
    - Syringes
    - Evidence carried in body cavities

# Packaging Drug Evidence

- Drug Evidence Packaging needs to accommodate:
  - Variable characteristics of drug evidence:
    - Different drugs have different possible health hazards to personnel handling exhibits
      - Some drugs are very potent in small amounts
      - Liquid samples
      - Sharps
  - Multiple forms
    - Powders, sticky tar, residues, plant material

# Appropriate Packaging Materials for Some Drug Evidence



- Kapak pouches
  - Safely contain most drug evidence & protect personnel against unnecessary exposure
  - Need to be heat sealed
- Airtight
  - Not good for fresh plant material

# Appropriate Packaging Materials for Some Drug Evidence



Sealed Kapak
 pouches can safely
 contain potent drug
 evidence & protect
 personnel against
 unnecessary
 exposure

### Sealing Kapak pouches



Heat sealers

 Obtain one large enough to accommodate opening of Kapak pouches being used

#### Poorly Sealed Drug Evidence



 Seals placed too close to evidence make it difficult for the analyst to reseal evidence after analysis

# Properly Sealed Drug Evidence



 Seals are placed far enough away from evidence to allow re-sealing this item after analysis

# Appropriate Packaging Materials



 Suitable plastic bag purchased with label and seal Plastic containers should be impervious to chemical solvents (e.g. Kapak pouches)

# Choose an Appropriate Sized Container



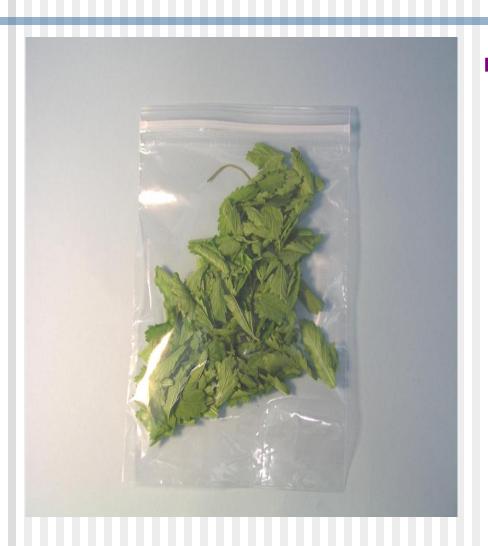
- Do **not** place a small amount of powder in container that is too big
  - Powder is difficult to recover because electrostatic charge causes it to disperse and cling to plastic surfaces

# Inappropriate Packaging for Drug Evidence



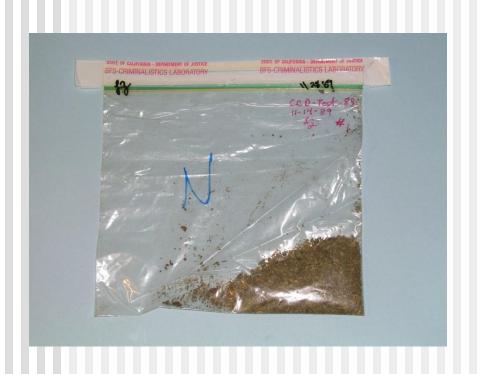
A paper envelope & paper bindles are not by themselves
 sufficient packaging for bindles containing drug evidence

# Inappropriate Packaging Materials



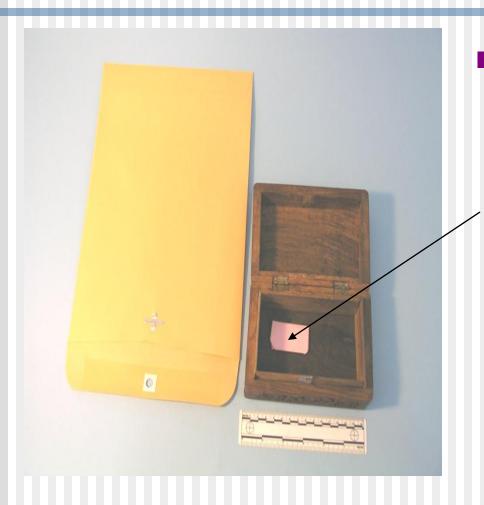
Do not use sealed plastic containers to package fresh or wet plant material - Evidence can get moldy Use paper envelopes or bags— They allow fresh plant material to dry

### Appropriate Packaging Materials



Plastic containers can be used if plant material is completely dry

#### Minimize Items Submitted



Package the pink bindle and wooden box separately Submit only the bindle to the laboratory for drug analysis Avoid submitting paraphernalia

# Packaging Drug Evidence



The bindle can be sealed in a Kapak pouch and then placed into large paper envelope

### Syringes May Not Always be Accepted into Crime Labs



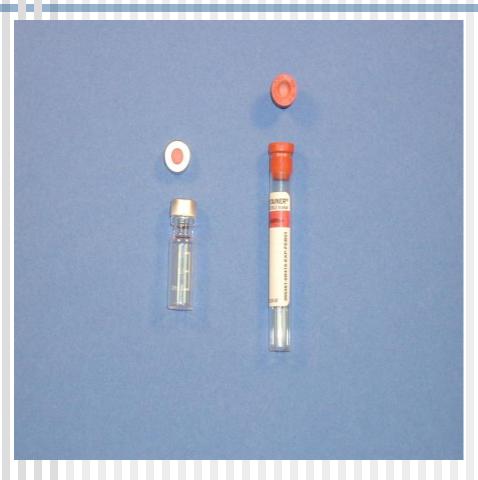
 Consult your laboratory as to their acceptance criteria and specific packaging requirements

#### Syringes



- Syringes can be a significant biohazard and need to be handled and packaged very carefully
  - Use a "one handed" technique when handling syringes

### Instead of Submitting Syringe:



 When possible, transfer liquid contents of syringe to a suitable container and submit this container only

# Packaging Syringes



If it is necessary to submit a syringe, package it in a puncture-proof container designed

for packing syringes