

Directive	DNA Evidence	700-3	1 of 7
Effective Date	January 1, 2010		



Wilkesboro Police Department

Electronic Written Directives Document

I. PURPOSE

The Wilkesboro Police Department has a responsibility to provide professional, effective and efficient law enforcement services to the community. The delivery of effective and efficient service to the community requires that the department perform competent and thorough investigations at the scene of a crime or traffic collision, especially in regards to the handling of DNA evidence. Competent investigations require, among other things, that DNA evidence be properly handled and documented. The purpose of this Policy is to establish guidelines for the collection, maintenance, and chain of custody of DNA samples.

II. POLICY

It is the policy of the Wilkesboro Police Department to collect and submit DNA evidence for any crime scene involving death or serious physical harm of a person, or crimes involving significant property loss. It can be collected for other crimes at the discretion of the On-Duty Supervisor and or the Criminal Investigations Supervisor. All Supervisors and Criminal Investigations Division personnel will be trained in DNA evidence collection. Only those Officers who have received training related to the collection and preservation of DNA evidence, either in BLET or other specialized school may collect or submit suspected DNA evidence.

III. DEFINITIONS

DNA: DNA, or deoxyribonucleic acid, is the fundamental building block for an individual's entire genetic makeup. It is a component of virtually every cell in the human body. Further, a person's DNA is the same in every cell and no DNA is alike, except in the case of identical twins. DNA can be found on any biological evidence and when collected from a crime scene can either link a suspect to the evidence or eliminate a suspect, similar to the use of fingerprints.

IV. PROCEDURES

A. FIRST RESPONDERS RESPONSIBILITIES AND PRECAUTIONS

1. Responsibilities – Every person, from the first responding officer to the experienced detective, crime scene investigator, and evidence technician should be aware of important issues involved in the identification, collection, transportation, and storage of DNA evidence. Because

Directive	DNA Evidence	700-3	2 of 7
Effective Date	January 1, 2010		

extremely small samples of DNA can be used as evidence; and due to the possibility of secondary transfer of DNA from one object to another after the alleged incident, greater attention to contamination issues is necessary. Evidence can be contaminated when DNA from another source becomes combined with DNA relevant to the case. This can happen when someone sneezes or coughs over the evidence or touches his or her mouth, nose or other part of the face and then touches the area of the evidence containing the DNA, or through simple contact between items of evidence.

Pursuant to Policy “Evidence Procedures”, the first responders stabilize the incident and assess the crime scene. If it is determined to be a serious crime scene, then the area is to be secured and a supervisor can request an investigator and or State Bureau Investigations for crime scene processing.

2. Precautions – The issue of contamination of physical evidence has painfully brought notoriety to several criminal cases. Webster’s Dictionary defines contamination as; “to make impure, corrupt, by contact, pollute, taint.” Potential contamination of physical evidence can occur at the crime scene, during the collection, packaging, and transportation of the evidence to a secured facility or laboratory, and during evidence analysis and storage.
 - a. While forensic scientists in the laboratory are sensitive to the issue of contamination and have developed protocols to identify and reduce the risk of contamination, law enforcement has been slower to incorporate precautions in contamination prevention.
 - b. Recent advances in forensic DNA technology are making it even more important that law enforcement personnel become more sensitive to the issues of contamination.
3. Crime Scene Contamination – Crime scene contamination usually results through the actions of the personnel at the scene. In general, the greater number of personnel at the scene, the more likely it is that the scene/evidence could become contaminated. Because of the analyst’s ability to analyze very small amounts of DNA from biological evidence, reducing the potential for contamination at crime scenes becomes ever more significant.
4. Pre-Secured Scenes – The potential for evidence (or crime scene) contamination increases as the number of people entering a crime scene also increases. Once a scene has been secured, the risk of contamination is greatly reduced.

Directive	DNA Evidence	700-3	3 of 7
Effective Date	January 1, 2010		

5. Post-Secured Scenes – Once the scene has been secured, the potential for contamination still exists. Only one officer usually secures the scene.
 - a. The risk of contamination in all crime scenes is reduced by thoroughly protecting the scene. Indoor scenes seem easier to protect. Outdoor scenes on the other hand, are more difficult to secure because of the potential contamination by agents such weather conditions and crowds. As a result these types of scenes require more personnel to properly protect it.
 - b. To restrict access to a crime scene greatly reduces contamination risks. Barrier tape is used to identify the outer perimeter of the scene. One officer should be assigned to identify personnel who enter and leave the scene at specific times. This will be accomplished by keeping a log with the date, time and name of each person identified.

B. DNA Evidence

1. Each person's DNA is unique, except for identical twins. Because of that DNA collected from a crime scene can either link a suspect to the evidence or eliminate a suspect, similar to the use of fingerprints. DNA samples can be collected from almost any item that has come in contact with the human body, including:
 - a. Hats, scarves and gloves
 - b. Laundry,
 - c. Toothpicks,
 - d. Bottles, cans, and glasses,
 - e. Baseball bats or similar weapons;
 - f. Tissue paper, Kleenex, or cotton swabs,
 - g. Stamps and envelopes,
 - h. Razors and razorblades,
 - i. Cigarettes,
 - j. Toothbrushes and hair brushes.

Directive	DNA Evidence	700-3	4 of 7
Effective Date	January 1, 2010		

2. DNA can be found on evidence that is decades old but several factors can affect the DNA left at a crime scene, including environmental factors (e.g. heat, sunlight, moisture, bacteria, and mold.)
3. Because extremely small samples of DNA can be used as evidence, greater attention to contamination issues is necessary when identifying, collecting, and preserving DNA evidence. DNA evidence can be contaminated when DNA from another source gets mixed with DNA relevant to the case.
4. As with other evidence, the effective use of DNA may require the collection and analysis of elimination samples.
5. The Criminal Investigations Section Supervisor may exercise his/her discretion to summon the State Bureau of Investigation (SBI), the Federal Bureau of Investigation (FBI), or other appropriate agency for technical assistance in collecting DNA evidence in serious cases.

C. Guidelines for Collection

1. To avoid contamination of evidence that may contain DNA, always take the following precautions:
 - a. Wear gloves, change them often.
 - b. Use disposable instruments or clean them thoroughly before and after handling each sample.
 - c. Avoid touching the area where you believe DNA may exist.
 - d. Avoid talking, sneezing, and coughing over evidence.
 - e. Avoid touching your face, nose, and mouth when collecting and packaging evidence.
 - f. Absorb bodily fluids into a sterile cotton swab.
 - g. Air-dry evidence thoroughly before packaging.
 - h. Put evidence into new paper bags or envelopes, not into plastic bags. Do not use staples.
 - i. It is important to keep DNA evidence dry and at room temperature.

Directive	DNA Evidence	700-3	5 of 7
Effective Date	January 1, 2010		

D. Guidelines for Packaging

1. Biological samples will be packaged in cardboard or paper. Extremely wet items may be transported from the scene in plastic bags or containers and allowed to dry in a secure area. Bloody items must be air dried before they are packaged. A paper placed beneath wet items will collect trace evidence and once dried may be packaged and sent as evidence. Package each sample separately to avoid cross sample contamination. Do not package wet items or bloody items in plastic bags. Use only paper bags or cardboard boxes. Packaging items in plastic that are bloody or wet will cause mold to develop on the item and destroy the evidence.
2. DNA evidence will be transported and stored in packaging designed to prevent contamination and damage from adverse environmental conditions.
3. Further clarification and procedures for collection, storage, packaging and submission of DNA evidence can be found in the SBI Physical Evidence Collection Manual.

E. Submitting DNA Evidence to Forensics Laboratory

1. Responsibility - It will be the investigating officer's responsibility to request laboratory examination of evidence. Evidence custodians/technicians can assist officers in packaging and filling out the submission form if needed.
2. Transmittal of Evidence to the Lab - If evidence is small enough, it will be sent to the Lab via First Class Mail. If the evidence is too bulky to be sent by mail, the investigating officer must make arrangements for it to be hand carried to the Lab Monday through Friday 0800-1700 Hrs. The evidence custodian may also assist the investigating officer with evidence submission, but this process is not entirely left up to the evidence custodian.
3. Perishable Evidence – Evidence such as blood and bloodstained objects should be submitted to the lab within one week of the liquid being collected.
4. Packaging of Evidence to be Submitted - officers should package all evidence as defined in sections D. of this policy and place same in large manila envelopes or boxes, and properly sealed before sending through the mail. Postage should be placed on the evidence package as well as the evidence submission envelope attached to the outside of the package. In

Directive	DNA Evidence	700-3	6 of 7
Effective Date	January 1, 2010		

the event that one becomes separated from the other, both items will reach their destination.

5. Documentation – All documents are to accompany evidence to be admitted to the Lab. The requesting officer must properly complete the S.B.I. "Request for Examination of Physical Evidence" form. Any other information the officer believes would be of value to the analyst may be supplied on the back of the form or on a separate sheet of paper.

6. Receipts to Insure Chain of Custody

- a. The "Chain of Custody" on the property form shall always be signed, dated, and given a reason for transfer of evidence each time the evidence comes into someone else's control. If evidence is sent to the Lab, the property form must indicate that reason. Upon receipt of the evidence returning from the Lab, the officer shall indicate on the property form that it was received by him from the lab on that particular date. The evidence shall then be placed in the evidence room to await disposition.
- b. The S.B.I. "Request for Examination of Physical Evidence" form, has a chain of custody provided on it for Lab personnel.

7. Written Report of Laboratory Findings

When the laboratory being used is part of the agency, a written report of the findings will be provided to the investigating officer by lab personnel. When the Lab being used is not part of the agency, a transmittal letter or written request as part of the evidence transmittal form should be used to request a written report of the findings.

8. Instructions and Obtaining Help with Evidence

If any officer should have any questions pertaining to the collection, preservation, packaging, labeling, transmittal, or filling out of the Evidence submission form that is not answered in this policy, he/she should refer to the "SBI Evidence Manual" located in the squad room or call the S.B.I. Lab for assistance.

- F. Forensic Examinations

The North Carolina State Bureau of Investigation, the Charlotte Mecklenburg Police Department and the Federal Bureau of Investigation Crime Laboratories are accredited by the American Society of Crime Laboratory

Directive	DNA Evidence	700-3	7 of 7
Effective Date	January 1, 2010		

Directors/Laboratory Accreditation Board. It is the policy of this Department that DNA evidence may only be submitted to an agency so accredited.

V. REFERENCES

CALEA 83.2.7