**Evaluation of scene of crime**-

The crime scene assessment allows for the development of a plan for the coordinated identification, collection, and preservation of physical evidence and identification of witnesses.

**crime scene, search warrants-**

Common search patterns include the spiral, strip/line, grid, zone/quadrant, and pie/ wheel. The spiral search is used most often for outdoor crime scenes, is conducted by one person, and is done by walking in a circle from the outermost point of the inner perimeter toward the center of the circle. The strip/line search is done by dividing the crime scene into a series of lanes in which personnel search up and down the lanes until the scene is completely searched. A grid search is similar to a strip/line search but is also divided into lanes perpendicularly, thereby constituting a more systematically thorough search from multiple perspectives. A zone/quadrant search is one in which the crime scene is divided into four quadrants and searched using another method, such as a strip or line search. In a pie/wheel search, the crime scene is divided into a large circle with numerous sectors, and searched using another method, such as a strip/line search. Practically speaking, a strip/line or grid search is used most often (Swanson, Chamelin, and Territo 2003).

Careful instruction of personnel, when more than one officer is involved, is of the utmost importance. When numerous individuals are involved in searching a crime scene, it is imperative to delineate responsibilities to provide for a thorough, systematic search, but also to ensure that efforts are not duplicated. Additionally, continuous coordination of tasks may provide for effective and efficient completion of searches, regardless of how many people are involved. Comprehensive instruction and coordination of crime scene search efforts result in optimal conditions for the identification and collection of evidence, which can ultimately lead to a successful prosecution.

**Evidence Collection**

The type of evidence officers look for will typically be determined by the circumstances surrounding the crime. Physical evidence may be visible and easily identified in some cases, and in other cases evidence may be invisible and only detected using advanced technologies. While evidence is typically searched for at a crime scene, evidence may also be found in other places, such as on a suspect or victim, or at a morgue or laboratory. Therefore, it is extremely important to examine less obvious places and/or items that might contain potential evidence, such as a vehicle or a victim’s clothing (Saferstein 2004).

**Physical evidence** may be collected so that it is not altered from the time it is removed from the scene or other receptacle, until it is transferred to the crime laboratory. However, changes in the state of the evidence may occur due to contamination, breakage, evaporation, scratching, bending, or improper packaging. Also critical to the evidence collection process is the proper packaging of evidence, which means that each item must be collected and placed in a separate container to prevent damage and maintain the integrity of the evidence (Saferstein 2004).

Although digital evidence is a form of physical evidence and is commonplace in many crime scenes today, the identification and collection of digital evidence presents unique challenges for law enforcement. Digital evidence, or electronic evidence, is ”any data stored or transmitted using a computer that support or refute a theory of how an offense occurred or that address critical elements of the offense such as intent or alibi” (adapted from Chisum 1999, as cited in Casey 2004). Digital data is the binary numerical representation of information such as text, images, audio, or video. Digital evidence is typically the product of crimes such as fraud, child pornography, and computer intrusions.

Even though digital evidence is prevalent today, many police organizations have limited capabilities when it comes to not only handling, but simply identifying digital evidence. Particular challenges regarding digital evidence include but are not limited to these: (1) Digital evidence is difficult to handle, (2) digital evidence represents only an abstraction or part of what occurred during the criminal activity, and (3) digital evidence is easily manipulated (Casey 2004). With technology advancements occurring every day, it is likely that handling digital evidence will increasingly become a major part of crime scenes in the future.

Another important consideration when collecting evidence and subsequently transferring it to the crime laboratory is chain of custody, which means ”continuity of possession” (Saferstein 2004, 45). Practically speaking what this means is that all personnel who have handled the evidence must have maintained its integrity and provided no means through which the evidence could have been altered. When evidence is finally presented in court, if the chain of custody cannot be established, then the evidence will probably not be allowed to support the prosecution’s case.

Following identification and collection, evidence is submitted to a crime laboratory for analysis. Transferring of the evidence may take place by personnel delivering the evidence themselves or, in some cases, transferring may occur by mail or other means of shipment. Regardless of the method of transferring the evidence to the crime laboratory, the chain of custody must be maintained throughout the process.

Crime scene searches and evidence collection constitute a vital part of the duties of law enforcement. Strict adherence to policy and procedure, as well as thoughtfulness and common sense, contribute significantly to not only a successful prosecution, but also to the effectiveness and efficiency of police operations.