**FORENSIC NURSING**

**TITLE: FORENSIC TEAM MEMBERS AND THEIR ROLES**

**INTRODUCTION:**

 In a coordinated approach of the crime scene, several specialists will attend the crime scene, each with their specific role and responsibility. The exact titles, roles and responsibilities may vary per country.

The common team members and their roles are mentioned below

***FIRST OFFICER ATTENDING:*** The action of the first officer attending the crime scene is crucial to its subsequent successful examination and the recovery of all available evidence. It is therefore essential that all officers are aware of the importance of scene preservation and the actions they need to take to ensure that any subsequent scene examinations are not compromised. The first officer attending is responsible for all initial measures at the scene of a crime.

A summary of their responsibilities is provided in the table below.

|  |  |
| --- | --- |
| Assess the scene | * Primary function: Preservation of life
* Considering and recording contamination risks
* Taking notes of the names of all persons at the scene
 |
| Protect the scene | * Identifying the extent of the scene and setting cordons
* Preventing access by any other persons
* Protecting the scene if there is a likelihood of a loss or damage to evidence by adverse weather, etc.
 |
| Communicate the situation at the scene | * Inform control of the full situation
* Request specialist support and a supervisor
 |
| Commence log of scene | * Recording of all persons, police and other agencies from outside the cordon, together with vehicles attending the scene. Date and time of arrival and departure, and reason for visit are recorded as well.
* Recording of any initial actions taken to preserve the integrity of evidence.
 |

**FIRST POLICE SUPERVISOR**

The first police supervisor is usually the highest-ranking officer present at the scene. The responsibilities of this person are summarized in the table below.

|  |  |
| --- | --- |
|  **Task** | **Activities** |
| Ensure that the above actions have been completed | * The actions mentioned in the previous paragraph, allocated to the first attending officer, have to be completed
 |
| Review and/or implement appropriate cordons | * It is better that cordons are set too large than too small: they can always be reduced later.
 |
| Protect the scene | * Where there is likelihood that physical evidence may be damaged or destroyed by weather conditions or other means, undertake appropriate emergency preservation.
 |
| Establish a rendezvous point | * A rendezvous point should be established at the outer cordon
* The rendezvous point should be communicated to all staff so that they can report to the officer responsible for the Crime Scene Entry Logon arrival at the scene.
 |

**CRIME SCENE EXAMINER :** Following the actions taken by the first officer and supervisor at the scene, a Scene of Crime Examiner (SCE) will attend and make an early assessment, taking any actions necessary to further preserve the scene prior to starting the examination. In the case of serious and major crime the SCE may wait for the Crime Scene Manager (or equivalent) before commencing the examination. In these cases, the Senior Investigator, in consultation with the Crime Scene Manager, will agree a scene examination plan based upon this early assessment and the overarching forensic strategy. Most often a multi-disciplinary team including SCE's and forensic specialists / experts participate in this strategy setting along with the CSM and SIO.

Apart from the assessment, it is the responsibility of the Scene Examiner to locate and gather photographic, video, forensic and fingerprint evidence, using a variety of techniques. He/she should also document all actions carried out with regard to the preservation and recovery of evidence.

The responsibilities of this person are summarized in the table below:

|  |  |
| --- | --- |
| **Task** | **Activities** |
| Examination at the scene | * On arrival, review and revise the scene protection afforded by a properly managed cordon
* Initiate a Scene Examination Log of all evidence gathering activities undertaken.
* Establish what police action has already taken place at the scene.
* Identify, search and secure a Common Approach Path to the scene or deceased and ensure that this is identified by the use of crime scene tape.
* Undertake an initial assessment of the scene and communicate the findings to the Crime Scene Manager
* Documentation of the initial scene by use of video, photographic equipment and/or sketch plans.
* Take any necessary actions to secure and preserve physical evidence
* Prior to removal of the deceased record its position by suitable means
* Search for, identify, preserve and recover all types of contact trace evidence
* Provide specialist support to Forensic Scientists and other Scientific Support personnel at the scene
* Ensure the integrity and security of evidence recovered from the scene
* Provide appropriate documentation of all actions taken to the Crime Scene Manager
* An indexed album of all photographs taken should be available for the Crime Scene Manager and passed to the Investigative Authority, if needed
* Provide consultancy regarding the submission of forensic evidence for examination
 |
| Post-mortem examination | * Photograph the deceased to assist with identification.
* Photograph the deceased to show injuries, using scales and other indicators as necessary
* Receive samples taken from the deceased by the forensic pathologist and assist in packaging, exhibiting and storing these
* Package and exhibit deceased’s clothing in liaison with the Exhibits Officer
* Take fingerprints and palm prints of the deceased at the conclusion of the post-mortem and footprints where it may assist the investigation. Consider the use of other forensic specialists in the identification process (e.g. Forensic Odontologists)
* Attend any subsequent Pathologist’s examination of the body, whether it be for the Defence or Prosecution, taking any further forensic samples and photographs as required
* Ensure that any weapon taken to a post-mortem is packaged in a way that the Pathologist can view it without the exhibit being opened
 |

**FORENSIC PATHOLOGIST:** The tasks carried out by the forensic pathologist are summarized in the table below.

|  |  |
| --- | --- |
| **Task** | **Activities** |
| Attend the scene | * Give an estimate of the time of death
* Assist in the interpretation of the scene with reference to general disposition of the body and its surroundings
* Identify the remains as human, its gender and approximate age. On occasion, the movement of a body from the scene may hamper the findings at a subsequent post-mortem examination. The examination of the body in situ, by a Pathologist, may prove invaluable.
 |
| Carry out the post mortem examination | * Determine the cause of death
* Comment on how death occurred and give a scientific/medical evaluation as to the time of death
* Produce a body plan of the deceased, recording every injury
* Examine all injuries to the deceased, giving indications as to the sequence of the attack, nature of weapons used and degree of force used
* Provide comparison between any recovered weapons and injuries sustained
* Take anatomic samples for further analysis
 |

**CRIME SCENE MANAGER:** The central role of the Crime Scene Manager is to supervise the scene examination in a way that facilitates the input of specialists so that the maximum evidence and information is extracted from the scene. The Crime Scene Manager will be directly responsible to the Senior Investigator and the Scientific Support Co-ordinator for the management of the crime scene. Scene examination should be driven by any available intelligence and directed pro-actively to solve investigative problems. This will be achieved by attention to the following points:

* Assess, prioritise and advise the Scientific Support Co-ordinator (if appointed) on the requirement for Scientific Support services
* Provide for a structured approach, co-ordinate resources and disseminate information concerning scene examinations, briefing Scene Examiners accordingly
* Ensure all persons entering the scene wear protective clothing, overshoes, face masks and gloves and that they are exhibited
* Provide advice and quality assurance on all scientific matters, including the storage and packaging of exhibits and release of the scene
* Recording of all actions and policy decisions within an appropriately designed Crime Scene Manager’s Log Book
* To receive actions from the Scientific Support Co-ordinator (if appointed) in relation to scene examinations, forensic and other scientific support matters
* Ensure compliance with Health and Safety legislation and regulations
* Brief the Scientific Support Co-ordinator and Senior Investigator on completion of the scene examination prior to its release
* Ensure the welfare needs of those attending the scene are met
* If not appointed, carry out the duties of the Scientific Support Co-ordinator
* Take responsibility for receipt and co-ordination of all scene examination documents created during and subsequent to the scene examination
* Take responsibility for all photographic albums produced
* In complex cases such as those involving multiple scenes it may be necessary to appoint a number of Crime Scene Managers, one for each crime scene. In consequence, a contamination log should be kept in such cases in order that no problems arise in this area. In such cases it is recommended that a Crime Scene Manager be appointed for each scene to ensure that no contamination occurs
* In cases of multiple offenders, it is recommended that a different Scene Examiner is used for each individual

**SCIENTIFIC SUPPORT COORDINATOR**: The role of the Scientific Support Coordinator (or Crime Scene Coordinator) within the major incident management team is to ensure:

* All aspects of the scene examination are conducted in a coordinated manner
* A full range of Scientific Support techniques are made available
* Effective and efficient communication channels between Scene of Crime Examiners and the investigation team are essential in every case
* The optimum use of forensic, photographic and fingerprint evidence
* The Senior Investigator is fully informed and properly advised
* The provision of accurate briefings to all agencies involved in the investigation
* Minimum risk to Investigating Officers from any health hazards
* Quality assurance of scene examination and subsequent forensic submissions
* Through liaison, a structure and priority for any subsequent examination of forensic submissions
* A full debrief on completion to consider items of good practice/strategy for future use, health and safety and risk assessment.

**SENIOR INVESTIGATOR :** The Senior Investigator is the law enforcement officer in charge, and therefore has overall responsibility for the management of the investigation, including the scene examination. The Senior Investigator acts as the interface between investigators and crime scene officers, forensics scientists, experts and the justice and prosecution services. The duties of the Senior Investigator also include conferring with the court or prosecution service with regard to further measures following consultation with the crime scene officers and investigators, forensic scientists and other experts.

**FORENSIC SCIENTIST:** A forensic scientist can enhance the scene examination, possibly increasing the value of the recovered evidence in the criminal justice chain. The decision as to whether or not a Forensic Scientist attends the scene should normally be made by the Scientific Support Co-ordinator following consultation with the Senior Investigator.

The presence of a Forensic Scientist can enhance the scene examination in the following ways:

* Advising on the most appropriate items/samples to be taken to further advance the investigation
* Examination and interpretation of the scene to establish the sequence of events leading up to an incident
* Giving an opinion on whether the information provided by witnesses is supported by the scientific evidence
* Applying techniques not available to scientific support staff to locate or enhance scientific evidence
* On completion of the scene examinations to fully brief the Senior Investigator and provide a preliminary, written, scene examination report outlining all the main observations

**OTHER EXPERTS**: The Scientific Support Co-ordinator will decide whether the attendance of other specialists is required at the crime scene in consultation with the Senior Investigator. The scene of any crime involving the loss of life warrants the deployment of a scientific support coordinator or a designated crime scene manager. However, the level of response needs to be tailored to the nature and complexity of the offence being investigated.

**FORENSIC MEDICAL EXAMINER :** It is the role of the forensic medical examiner (where appropriate) to certify the death of the deceased, to record the time this was done and to give the Senior Investigator an estimate of the time of death and any opinion as to the cause.

**FIREARMS/BALLISTIC EXPERTS:** In cases involving the use of firearm or explosive device, it should be ensured that an appropriate Forensic Scientist attends the scene to direct and advice on the recovery of all available evidence if needed.

**PLAN DRAWER:** It is the responsibility of the plan drawer to record the crime scene. First, the crime scene is drawn as it is initially found. As the search progresses, the plan drawer records the finding of any items which may be relevant. In some circumstances the Plan Drawer prepares a plan of the scene showing the zoning for the search.

**EXHIBITS OFFICER:** The exhibits officer has a responsibility throughout any major enquiry for the receipt, control, security, continuity and co-ordination of all exhibits and their subsequent movements. This will culminate in the provision of an accurate recorded exhibits and the availability of all exhibits required throughout the criminal justice process. In certain instances, it may be necessary to appoint more than one Exhibits Officer to prevent contamination of evidence.

The primary duties of the Exhibits Officer are:

* Maintain a continuous liaison with the Crime Scene Manager to facilitate all actions relating to physical evidence packaging
* To receive all exhibits coming into Police possession during the course of the investigation
* If required by the Senior Investigator, to attend all post-mortem examinations and receive all exhibits taken by the Forensic Pathologist or Scene Examiner
* Ensure all exhibits have been recorded and suitably described prior to receipt and to bring all relevant evidence to the notice of the Senior Investigator at the earliest opportunity
* To ensure appropriate storage and security of all exhibits, throughout the investigation
* Ensure that all items are correctly packaged, presented and labelled with full proof of continuity
* Compile a complete and contemporaneous master record of all exhibits and their subsequent movement.
* Obtain full statements from all officers submitting exhibits or responsible for their movement, to ensure proof of continuity
* In consultation with the Scene Examiner and the Crime Scene Manager, prepare and forward all forensic, fingerprint and other items to the appropriate department or agency for examination, identifying exactly the scientific examination required
* Provide a photocopy of all appropriate documentary exhibits for the Senior Investigator and investigation teams

**CORONER’S OFFICER:** In case a body is present, a Coroner’s Officer may be present at the crime scene as well. The coroner must enquire into all cases of sudden or unnatural death within his or her jurisdiction. The coroner’s officer performs duties on behalf of the coroner. The role is as follows:

* To liaise with the Senior Investigator and the Coroner to obtain permission to use a forensic pathologist
* To liaise with the mortuary to arrange facilities and staff who will assist the pathologist to perform the post-mortem examination
* Provide continuity of identity of the deceased

**FORENSIC ACCOUNTING / AUDITING :** A forensic accounting investigation aids the victims of fraud or financial crimes, Also known as financial investigation, this kind of analysis uses intelligence-gathering techniques, accounting, business and communication skills to provide evidence to attorneys involved in criminal and civil investigations. They investigate by combing through a large amount of relevant figures, searching for irregularities or illegal financial practices. Crimes can vary from tax evasion to theft of company assets. They also look into insurance claims and high pay-outs.

Forensic accounting services can include:

* Searching for hidden assets
* Calculating lost wages
* Tracing misappropriated funds
* A Performing fraud investigations

**FORENSIC COMPUTER OR CYBER FORENSICS:** Computer investigations are similar to electronic discovery (or re-discovery). These forensic investigations recover data from computers sand hard drives to solve a crime or find evidence of misconduct. Computer investigators can uncover things like sale of black-market goods, fraud, and sex trafficking, Some Common situations that call for computer: investigation are divorce, wrongful termination, employee internet abuse, unauthorized disclosure of corporate information, and other illegal internet activity. Forensic computer investigations can find information on cell phones and hard drives including emails, browsing history, downloaded files, and even deleted data. One of the first cases in which computer forensics led to a conviction involved the messages exchanged in an online chart room.

**CRIME SCENE FORENSICS:** Crime scene investigations document and gather any physical evidence found at a data crime scene in order to solve a crime or determine whether a crime has taken place. This kind of investigation also includes the analysis of what investigators collect to ensure the evidence is credible and relevant. There is a wide range of crime scene investigators like ballistics experts, who study the trajectory of ammunition and match bullets to potential firearms, and odontologists, who specialize in teeth and bite-marks to identify missing persons or victims of mass disaster.

**FORENSIC ARCHAEOLOGY:** Forensic archaeology focuses on human remains that are severely de composed. They mainly focus on clues they can glean from the bones, including carbon dating to determine their age. From these clues, they can sometimes establish the cause of death. If a mass grave is discovered or in the event of large casualties, forensic archaeologists can identify the victims using facial reconstruction software.

**FORENSIC DENTISTRY:** Forensic dentists are vital when a victim can't be identified by any other means or when a culprit bites a victim. Since teeth have distinct patterns the marks left behind can identify a suspect or victim. The shape of the jaw can also indicate teeth like with age, gender, and DNA can be extrapolated from bone marrow and hair. Even if the victim wasn't bitten, physical evidence found at a crime scene may still be useful for forensic dentists. For example, a pencil with bite marks or a half-eaten might apple might have deep enough impressions to reveal someone's identity.

**FORENSIC ENTOMOLOGY:** Forensic entomology is the study of any insects found at a crime scene. Alive or dead, these bugs can reveal where a crime took place, whether the victim had been given drugs, and the time of death. Some insects are found in specific areas so finding them on a body can suggest whether a body was moved. The presence of larvae in a body can also suggest how long a victim has been dead. If the crime isn’t a murder, insects will still occupy untreated wounds in abuse cases or identify the origin of illegally imported goods, like cannabis.

**FORENSIC GRAPHOLOGY:** Forensic graphologists study the handwriting on ransom notes, poison pen letters, suicide notes, and blackmail demands. Though age and gender cannot be determined by handwriting alone, it can indicate the writer's state of mind at the time the note was penned. Handwriting can give insights about:

* 1. Mood
	2. Motivation
	3. Integrity
	4. Intelligence
	5. Emotional stability

Slant, size of writing, and the weight of the hand all reflect information about the writer. The phrases and slang the writer uses can also say a lot about location and motive. Forensic graphologists are also used for verifying the validity of documents such as insurance claims or police statements.

**FORENSIC PATHOLOGY:** Ultimately, it is the forensic pathologist’s job to find out the cause of death, especially when it is suspected that the death was not due to natural causes. They perform an autopsy which involves observing both the outside and inside of the victim. On the outside there may be signs of blows, bruises, bullet entry points, or asphyxia. On the inside, of the pathologist will look at things like the organs and stomach contents. By observing these things a pathologists can determine whether the death was a suicide, murder or due to natural causes.

**FORENSIC PSYCHOLOGY**: Forensic psychology studies the thoughts behind an attacker's actions. Before thinking about how to catch a suspect, forensic psychologists consider why the act was committed. They look at sources of extreme stress in the perpetrators life that might push them to act violently. They also observe the scene of the crime which can tell them whether the act was done out of a burst of emotion or was predetermined. Once a suspect is caught a forensic psychologist can determine whether they are of sound mind. Even in cases of suspected suicide, investigators can examine the life of the victim and conclude whether the act was purposeful or an accident.

**FORENSIC SCIENCE:** Forensic science is the general term used for all of the scientific processes involved in solving a crime. Some types of forensic science include:

* DNA coding
* Toxicology (drugs and the effects)
* Serology (Bodily Fluids)
* Ballistics (everything related to firearms) extreme violently.

A big part of forensic science is the collection, storage, and analysis of fibres, DNA, bodily fluids, and other physical evidence. The roles of forensic scientists have become vital to the sentencing of criminals due to the reliability and accuracy of the evidence they provide. It is also a section of forensics that is constantly growing and chang1ng a technology advances.

**FORENSIC TOXICOLOGY** studies toxic substances, environmental chemicals, and poison. The drug tests needed for certain job applications are an example of the most basic forensic toxicology.

Today, a large part of a forensic toxicologist’s job studying both illegal and legal drugs. Using urine, blood or hair, they look at the way these substances are absorbed, distributed and eliminated by the body. They will also look at their effects. For a murder, substance use shows itself in the brain, liver and spleen.

**FORENSIC NURSING – ROLES AND RESPONSIBILITIES**

1. The safety of the living victim and the deceased victims body remains first priority
2. Collecting and preserving evidence from the victim should never compromise with the: safety or integrity of the body.
3. The forensic nurse performs a forensic examination:
* The purpose is to identify and collect evidence that has transferred from the perpetrator to the victim.
* Law enforcement personnel may collect evidence from the crime scene; however, forensic nurses and other health care providers collect evidence from the victim.
1. Evidence must be collected in an organized and comprehensive manner :
* Without bias and without inducing any physical or psychological harm to the victim.
* Without bias and without producing any physical injury or damage to the deceased victim.
* Examination and evidence identification and collection require a careful search of the entire body.
* Meticulous documentation requires identification of all evidence, preservation method, and retention (chain of custody).
1. The forensic nurse must develop interviewing techniques:
* To interview the victim
* To interview the suspected perpetrator
* To interview the convicted perpetrator
* To interview family, friends, and all those who may add to the investigation
1. Evidence includes the following :
* All clothing
* All jewellery
* Any items in pockets
* Any items removed from the body
* Dirt (physical evidence)
* Saliva (biological evidence)
* Paint chips (physical evidence)
* Semen (biological evidence)
* Insects (biological evidence)
* Plant material (biological evidence)
* Dried or fresh blood (biological evidence)
* Fabric (physical material)
* Additional physical and biological material on the type of material
1. Preservation of evidence is dependent on the type of material whether physical or biological
2. Documentation
* Documentation should be objective, legible, clear, time and descriptive.
* Documentation does not provide a diagnosis (e.g., blunt, force, sharp force, entry wound, exit wound, and cause of death).
* State boards of nursing scope and standards of nursing practice outline and define nursing practice based on the individual nurse's status as an advanced practice practitioner, advanced practice status is defined in the individual state nurse practice act

***REFERENCES***

1. “Forensic Nurses’ Medico-Legal Skill Sets: Observation, Documentation, Photography, and Evidence Collection.” *Forensic Nursing*, 2006, pp. 97–112, https://doi.org/10.1201/ebk0849335402-9.
2. J Forensic Nurs. 2019 Oct/Dec;15(4):199-205. doi: 10.1097/JFN.0000000000000264.PMID: 31764523
3. J Psychiatr Ment Health Nurs. 2011 Apr;18(3):236-46. doi: 10.1111/j.1365-2850.2010.01667.x. Epub 2010 Nov 22.PMID: 21395915 Review.
4. J Adv Nurs. 2017 Oct;73(10):2407-2419. doi: 10.1111/jan.13296. Epub 2017 May 19.PMID: 28295539
5. Forensic Sci Int. 2007 Jan 17;165(2-3):115-28. doi: 10.1016/j.forsciint.2006.05.013. Epub 2006 Jun 19.PMID: 16784827 Review.