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FACULTY OF HEALTH SCIENCES  
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# The Medico-Legal Investigation of Deaths in Custody

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A review of cases admitted to the Pretoria  
Medico-Legal Laboratory, 2007-2011

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## **Executive Summary: The Medico-Legal Investigation of Death in Custody – A review of cases admitted to the Pretoria Medico-Legal Laboratory 2007-2011**

Deaths in custody have formed a controversial part of South Africa's past, relating to the apartheid era, before the first democratic elections in 1994, and presently, the problem has not disappeared; rather it has been publicised more often. It is a regular occurrence for these deaths to be highlighted and discussed in the media, most recently with regards to the Marikana strike deaths in Rustenburg.

The organisations which have been established to monitor and combat deaths in custody, the Independent Police Investigative Directorate (Independent Complaints Directorate – pre 01/04/2012) and the Judicial Inspectorate of Correctional Services, have in large failed to curb these deaths, their impartiality, objectivity and quality having been called into question at regular intervals.

A crucial intersection occurs between these two organisations and the medico-legal investigation of death spearheaded by the Forensic Pathology Service. The Forensic Pathology Service itself has major questions over its head surrounding impartiality and quality, which may be related to the era before it became independent from the South African Police Service.

This study aimed to review the medico-legal investigation of deaths in custody, specifically those admitted to the Pretoria Medico-Legal Laboratory from the 1<sup>st</sup> of January 2007 till the 31<sup>st</sup> of December 2011. In doing so, the medico-legal investigation in general was able to be reviewed. It was quite obvious that there are distinct problems in the Forensic Pathology Service occurring at all phases of the medico-legal investigation. It is hoped these problems have been addressed in this dissertation in order for discussion to take place and measures introduced to reduce and eliminate these problems.

There is ultimately no reason why a medico-legal investigative system of international quality in South Africa, which specifically should exist in cases of deaths in custody, that can be used to coordinate with the above-mentioned organisations. The aim would be to identify ways in which the aetiology, manner(s) and statistics

relating to death in custody may be reduced in the future, particularly those occurring within the SAPS holding cells and correctional services facilities. The contribution would be enormous to society at large and the forensic pathology service nationally.

**Key Words:** deaths in custody; forensic; medico-legal examination; independent police investigative directorate; judicial inspectorate of correctional services; forensic pathology service; custody; cause of death; manner of death; mechanism of death

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Abbreviations:

BAC	Blood Alcohol Concentration
COD	Cause of Death
CMSA	Colleges of Medicine of South Africa
DCS	Department of Correctional Services
DR	Death Register
FMP	Forensic Medical Practitioner
FPS	Forensic Pathology Service
GSW	Gunshot wound
HIV/AIDS	Human Immuno-deficiency Virus/Acquired Immune Deficiency Syndrome
HPCSA	Health Professions Council of South Africa
ICD	Independent Complaints Directorate
IJ	Inspecting Judge
IPID	Independent Police Investigative Directorate
JICS	Judicial Inspectorate of Correctional Services
MPS	Municipal Police Service
NDICP	National Deaths in Custody Program
NGO's	Non-governmental organisations
NIMSS	National Injury Mortality Surveillance System
NPA	National Prosecuting Authority
PMI	Post-mortem interval
PMLL	Pretoria Medico-Legal Laboratory
SAPS	South African Police Service
SSA	Statistics South Africa
TB	Tuberculosis

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## Chapter 1: Introduction

### 1. Background

Deaths of individuals in custody represent a controversial part of South Africa's past; it is also forming a controversial part of our current events. This is not a phenomenon unique to South Africa, it is plaguing both developed and developing countries throughout the world, and it remains a problem which requires constant vigilance and scrutiny in society.

The importance of this issue is both sociological and medico-legal. Sociological, as deaths in custody highlight an abuse of power by police forces and correctional facilities as well as a neglect of the wellbeing of individuals in the custody of authority structures despite legislation prohibiting such treatment. Medico-legal, as it magnifies the already blatantly obvious problems concerning the medico-legal investigation of deaths in general. The reason for this "highlighting" and "magnifying" of these issues is due to the fact that, by definition these individuals have had the majority of the freedoms allowed by the constitutions of their respective countries removed. This is thus a vulnerable group, similar to children, the mentally and physically challenged, women and the elderly. Questions have been raised regarding these deaths in detention and the circumstances surrounding them, but they are usually in response to high-profile cases and in the majority of cases no such importance is placed on reviewing them.

The medico-legal significance also involves the evaluation of the medico-legal investigation of deaths in custody, which can be generalisable to deaths in general. The same process used to investigate these deaths is used in all deaths which are admitted to the Pretoria Medico-Legal Laboratory. An evaluation of this system should be performed regularly in order to determine the quality of such a system. In comparison with the benchmark (the United States of America – a developed country) and when compared to other countries of similar standing (in our case other emerging market economies such as Brazil, India, China). The importance of such an evaluation is to ensure that all investigations are objective, impartial and allow for the highest quality possible with the resources at hand. One can identify four

components needed for a medico-legal system to be effective: the medical professional, infrastructure, support and liaison, and appropriate legislation. These components are the basis on which the medico-legal system stands and a weakness or crack in any one can cause the entire system to crumble. What is very worrying is that when these four components are examined in the context of our medico-legal investigation of deaths in custody, it is not that one component is weak; it is that all the components are weak. The basis for this argument is developed in this dissertation, through the introductory chapter, the methodology and study itself, and the discussion of the results of the study, each of which highlight ideas and points which need to be discussed at a forum of peers of the different organisations involved in the medico-legal system. The results of which should be the unequivocal development of a plan to weed out the bad parts and with the remaining foundations develop a system that can be thought of as being of an international standard.

Regarding deaths in custody, the focus should be on the fact that these individuals are “in custody”, that is in the guardianship of another party. The guardians are the South African Police Service and the Department of Correctional Services and their members. The manner in which they treat those that are in custody is not only a sign of how the strong treat the weak, but also of the valuation of human rights; that no life is of lesser significance than another. A system of police and prison custody can either highlight the safety and wellbeing of such individuals, or the deplorable conditions and exploitation of their situation.

The controversy surrounding these deaths is highlighted by the media, especially in the cases of recognised individuals, or already media-friendly events. The most notorious case of a death in custody in South Africa is that of Steve Biko<sup>i</sup> in 1977.

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<sup>i</sup> On August 18th 1977, Stephen Bantu Biko was detained by the security police. He was an outspoken student leader, who had begun studying law via correspondence through the University of South Africa (Unisa). He was 30 years old at the time and after being arrested was taken to Port Elizabeth. The available history indicates that his medical condition required urgent treatment and he was transferred to Pretoria prison hospital. Upon arrival in Pretoria he was placed in a cell and was discovered dead shortly thereafter. On September 12<sup>th</sup>, police said that he had died from a hunger strike. Other sources said he was brutally murdered by police. His death was attributed to “a prison accident”. However evidence during a 15 day inquest showed that a blow in a scuffle with security police had led to him suffering brain damage. Some 8 years later the South African Medical Council held an inquiry into the conduct of the two doctors who treated Steve Biko during his time in Port Elizabeth and found that there was improper and disgraceful conduct on their behalf.

This is the most highlighted and known example of death in custody in South Africa, but there are many other examples, including Ahmed Timol<sup>ii</sup> and Neil Aggett<sup>iii</sup>. The story of Hector Peterson<sup>iv</sup>, whose death also fits into this category as this death was a result of police action, is equally well known. These deaths all took place during the apartheid times before the first democratic elections of 1994. Democracy may have resulted in new leadership and voting by all South Africans, but the revealing of the true nature of deaths in custody was left to the Truth and Reconciliation Commission. Legislature following 1994 has resulted in independent bodies being formed, their purposes including investigating deaths in custody. How independent and how qualitatively useful they are, is up for debate, but there is definitely work to be done to up the standard to that of organisations formed in first world countries. The same can be argued with respect to non-governmental organisations (NGO's) ensuring that checks and balances are in place, that these deaths are investigated in their entirety, and any cover-ups and problems with the system are revealed and discussed in the public domain. There are no NGO's to speak of that have actively taken up this position in South Africa, the fight mainly being fought by the media and opposition parties. The author will later introduce the United Nations Committee on the Prevention of Torture and the Optional Protocol to the Convention Against Torture, of which South Africa has signed onto but delayed ratifying for almost a decade. This is not what would be expected, especially with such a history as detailed above.

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<sup>ii</sup> Ahmed Timol, 29, was a schoolteacher who was arrested at a roadblock on the 22<sup>nd</sup> October 1971. He had returned from England to establish an underground structure for the South African Communist Party. On the fourth day after his arrest he allegedly jumped from the 10th floor of John Vorster Police Headquarters in Johannesburg. The finding of the inquest was that he committed suicide.

<sup>iii</sup> Neil Aggett, 29, was a medical practitioner who was detained by police on the 27<sup>th</sup> November 1981. He died on 5 February 1982 after being detained for 70 days without a trial. He was alleged to have committed suicide using a scarf. A subsequent inquest returned with an open verdict, and no prosecution was brought forward for his death.

<sup>iv</sup> On June 16, 1976 school children in Soweto, south of Johannesburg, protested with respect to an educational matter. The crowd grew, to what is estimated at about 10 000 and rioting broke out. Two West Rand Administrative Board members were killed, a number of dogs were burnt and buildings associated with both the Transvaal Educational Department and the police were set on fire. The police arrived and in an incident outside the Phefeni Junior Secondary School, the crowd became violent throwing rocks at the police. The police responded with the use of tear gas, and opened fire on the demonstrators. Hector Pieterse (real surname Pitso, with the name Pieterse being a name adopted by his family) was held out by the media as the first child to die on that day. He became an iconic image of the 1976 Soweto uprising, as a result of a news photographer, Sam Nzima, taking a picture of the wounded Hector being carried by another scholar whilst his sister was next to them. This picture became widely published.

We can look to present times and note that with regards the investigation of deaths in custody little has changed. There may be investigative bodies for these deaths, but the functioning of these bodies is not guaranteed to provide the necessary results – allowing for an impartial, objective, quality investigation to take place. Recently, the death of Andries Tatane<sup>v</sup> and the unfortunate deaths at Marikana<sup>vi</sup> gripped the media and sparked discussions about the use of force by the police. These deaths may not be the most common category of death in this country, but these deaths are of a high profile and highlight the insufficiencies in various institutions in this country, including the Department of Correctional Services (DCS), the South African Police Service (SAPS), and the independent bodies which investigate these deaths, the Independent Police Investigative Directorate (IPID) – previously the Independent Complaints Directorate (ICD) - and the Judicial Inspectorate of Correctional Services (JCIS), and finally the Forensic Pathology Service (FPS).

International cases are also plenty, including Sandro Rosa da Nascimento in Brazil, Magomed Yerloyer in Russia, Lee Harvey Oswald and Joe Campos Torres in the United States of America, and Jaswant Singh Khalra in India. Added to this list is the infamous case of Rudolf Hess<sup>vii</sup>. This may be a list of names, but behind each

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<sup>v</sup> Andries Tatane, 33, was a mathematics teacher and community activist. He had left the African National Congress (ANC) and joined the break-away Congress of the People (COPE) in 2008. On the 13th April 2011, in the town of Ficksburg, in the Free State, 4 000 protestors including Andries Tatane marched to the Setsoto Municipal Offices, in a service delivery protest. Police attempted to disperse the crowd and Tatane intervened. TV footage broadcast on the South African Broadcast Commission (SABC) News programs showed that an officer beat Tatane with a baton as he appeared to be trying to flee. A number of police officers then proceeded to kick and beat him. He was then shot twice in the chest with rubber bullets. Tatane collapsed and died on the scene. Six officers have been arrested in connection with the incident. The Independent Police Investigative Directorate and the South African Police Services are both investigating the incident.

<sup>vi</sup> In August 2012, a strike by workers at the Lonmin Mine in Marikana near Rustenburg in the North West Province, turned violent. The problem appeared to have started when a union which was new to the mine, and claiming to represent a number of workers clashed with the existing union. A substantial wage increase was also promised by this new union. Fourteen people, including 2 policemen and 2 security guards, were killed. Subsequently, on the seventeenth of August 2012, a clash between the strikers and the police resulted in the police using live ammunition. Thirty four miners were killed. Police maintained that they had come under attack and others could also have been attacked. Another consideration is that 2 of the police members had been allegedly killed just a few days before by striking mine workers.

<sup>vii</sup> Rudolf Hess was a high-ranking Nazi politician, who was captured by the Allies during World War 2. He was tried at Nuremberg, and incarcerated at Spandau Prison in Germany. In 1987, at the age of 93, he was discovered hanging by an extension cord from a lamp which had been strung over a window latch. Various conspiracy theories arose surrounding his death, including that he was murdered by the British Secret Intelligence Service.

name is a story, many of which are similar in nature and controversy, answers which are still begging to be sought.

This dissertation will highlight the insufficiencies in the system currently present in South Africa to investigate deaths in custody. There will be comparisons in areas between South Africa and international standards. These disparities will be highlighted and answers will be provided to some of the problems inherently present in the current medico-legal system. The applicable definitions, legislation and literature will be reviewed and examined to identify the process prevalent when a death in custody takes place.

## 2. Definition of Deaths in Custody:

The definition of “deaths in custody” is not consistent globally. Consensus exists as to the division of deaths in custody into three categories for the purposes of presenting official data and statistics: (1) deaths as a result of police action – “police action deaths” (2) deaths in police custody – “police custody deaths” (3) deaths in prison custody – “correctional services deaths”.

### Definitions in South Africa:

In South Africa, there is no legal definition of a “death in in custody”. The responsibility has fallen to the individual organisations themselves to define the deaths in custody that fall under their scope of investigation. The Independent Complaints Directorate (ICD) defines a “death as a result of police action” and a “death in police custody”. The Judicial Inspectorate of Correctional Services (JICS) has yet to define a “death in correctional services custody”.

The ICD defines death in custody as: “A death as a result of police action – means the death of any person, including a member of the Service, which was caused, or is reasonably believed to have been caused, by a member of the South African Police Service or Municipal Police Services while acting in his or her capacity as a member of the Service, and shall include by way of illustration, but not limited to, those deaths which occur in connection with:

- (i) An attempt to arrest or to prevent an escape;
- (ii) A member's action taken in self defence or in the defence of another person;
- (iii) A motor vehicle collision involving one or more Service vehicles;
- (iv) Mass action where police were present; and
- (v) Any action or inaction by a member which amounts to a criminal offence or misconduct defined in South African Police Service Disciplinary Regulations.”<sup>1</sup>

The Independent Complaints Directorate further states “A death in police custody – means the death of any person which occurs during a period commencing upon the arrest of such person and ending when the person leaves police custody either legitimately or by escape. In the case of a person who is arrested by someone who is not a member of the Service, the period shall commence at the delivery of such person into police custody.”<sup>1</sup>

The death of an individual in correctional service custody is not specifically defined by the law or by the JICS. I have deduced the following definition. In the Correctional Matters Amendment Act, 5 of 2011<sup>2</sup>, in Section 1 (a) the definition of “inmate” means any person, whether convicted or not, who is detained in custody in any correctional centre or remand detention facility or who is being transferred in custody or is en route from one correctional centre or remand detention facility to another correctional centre or remand detention facility” and for the purposes of other sections of the Correctional Services Act, 111 of 1998<sup>3</sup> – including section 15 which, as described below, details the procedures to occur when an “inmate” dies. From the connection of these terms a death in correctional services custody is a death of an “inmate” as defined in this paragraph.

#### International Definitions:

Internationally deaths in custody have been defined both in legislation and by the organisations performing the statistics of these deaths. The inclusion in the legislation of these definitions is in contrast to South African legislation. The legislative definitions allow for a concrete boundary between the different categories

of deaths as well as the specific circumstances which may be included in these categories. This provides guidance for those organisations investigating these deaths and removes confusion regarding what is and what is not a “death in custody”.

### **Australia:**

The Australian Institute of Criminology defines death in prison custody and death in police custody as follows:

Death in prison custody – “Deaths in prison custody include those deaths that occur in prison or juvenile detention facilities. This also includes the deaths that occur during transfer to or from prison or juvenile detention centres, or in medical facilities following transfer from adult and juvenile detention centres”<sup>4</sup>

Deaths in police custody – “Deaths in police custody are divided into two main categories:

#### Category 1

- 1a Deaths in institutional settings (e.g. police stations or lock-ups, police vehicles, hospitals, during transfer to or from such institutions, or following transfer from an institution).
- 1b Other deaths in police operations where officers were in close contact with the deceased. This includes most deaths linked to police raids and shootings by police. However, it would not include most sieges where a perimeter was established around a premise but officers did not have such close contact with the person to be able to significantly influence or control the person’s behaviour.

#### Category 2

Other deaths during custody-related police operations. This includes most sieges

and cases where officers were attempting to detain a person, for example, during a pursuit. This would cover situations where officers did not have such close contact with the person to be able to significantly influence or control the person's behaviour."<sup>4</sup>

It is obvious that the depth of detail in the Australian definition is considerably greater than the South African definitions in terms of scenarios envisaged to be incorporated within the scope of the definition, as well as those to be excluded. It is unfortunate that there is no official definition for deaths in prison custody in South Africa, as it limits the understanding of the term in the South African context.

### **United States of America:**

A "death in custody" as defined by section 2 of the Death in Custody Reporting Act of 2000<sup>5</sup>, is a death of "any person who is in the process of arrest, is en route to be incarcerated, or is incarcerated at a municipal or county jail, State prison, or other local or State correctional facility (including any juvenile facility)". It is important to note that there is no detail as to police custody between arrest and incarceration, including transport to the police station and interrogation.

### **3. South African Legislation:**

#### **The Constitution of The Republic of South Africa Act 108 of 1996<sup>6</sup>:**

Chapter 2 ("Bill of Rights") section 35 defines the rights of prisoners in South Africa. Subsection 2 states "everyone who is detained, including every sentenced prisoner, has the right .... (e) to conditions of detention consistent with human dignity, including at least exercise and the provision, at state expense, of adequate accommodation, nutrition, reading material, and medical treatment." From this we can see that all prisoners with a medical condition which developed before being incarcerated or who develop a medical condition during incarceration must be treated as equivalent to others in prison. As the Constitution is the highest law in South Africa, and no other law can contravene it, therefore this right can in no way be put at risk by any other law.



### The Inquests Act 58 of 1959<sup>7</sup>:

Section 2 states that all deaths due to “other than natural causes must be reported to a policeman”. Section 3 states that these cases must be investigated, reported to the magistrate of the district concerned, and in subsection 3 (2) “if the body of the person who has allegedly died from other than natural causes is available, it shall be examined by the district surgeon or any other medical practitioner, who may, if he deems it necessary for the purpose of ascertaining with greater certainty the cause of death, make or cause to make an examination of any internal organ or any part or any of the contents of the body, or any other substance or thing.” Additionally, in subsection 3 (3) (a) “any part or internal organ or any of the contents of a body may be removed there from” and in subsection 3 (3) (b) “a body or any part, internal organ, or any part of the contents of a body so removed there from may be removed to any place” for the purposes of an examination mentioned in subsection 3 (2) above. This allows for the removal of tissue, organs and fluids for further examination, e.g. blood tests, histology, etc.

### The South African Police Service Act 68 of 1995<sup>8</sup>:

The Independent Complaints Directorate (ICD) was established on the provision of Chapter 10 of the SAPS Act 68 of 1995 with the principal function of accomplishing that which was set out in Section 222 of the 1993 Interim Constitution:

“There shall be established and regulated by an Act of Parliament an independent mechanism under civilian control, with the object of ensuring that complaints in respect of offences and misconduct allegedly committed by members of the Service are investigated in an effective and efficient manner.”

Section 50 (1) (a) establishes the ICD at national and provincial levels. Subsection (1)(b) allows the Executive Director to determine the date of establishment. Subsection (2) states that the ICD will function independently from the Service.

Subsection (3)(a) states: “No organ of state and no member or employee of an organ of state nor any other person shall interfere with the Executive Director or a

member of the personnel of the directorate in the exercise and performance of his or her powers and functions.” Subsection (3)(b) provides for the punishment of those interfering with those duties.

Section 53 (1)(b) states that the Executive Director is responsible for – (i) the performance of the functions and (ii) the management and administration of the ICD.

Subsection (2) states that the directorate- “(a) may *mero motu* or upon receipt of a complaint, investigate any misconduct or offence allegedly committed by any member, and may, where appropriate, refer such investigation to the Commissioner concerned; (b) shall *mero motu* or upon receipt of a complaint, investigate any death in police custody or as a result of police action; and (c) may investigate any matter referred to the directorate by the Minister or the member of the Executive Council.”

### The Independent Police Investigative Directorate Act 1 of 2011<sup>9</sup>:

In promulgating the IPID Act 1 of 2011 the ICD, established under section 50 of the SAPS Act 68 of 1995 (and started performing its duties in 1997), was replaced by the IPID and Chapter 10 of the SAPS Act was repealed.

The Independent Police Investigative Directorate (IPID) Act 1 of 2011 was promulgated on the 1<sup>st</sup> of April 2012. The IPID is an independent body providing oversight of the South African Police Service (SAPS) and Municipal Police Service (MPS), as well as, “independent and impartial investigation of identified criminal offences allegedly committed by members of the SAPS and MPS ... to enhance accountability and transparency by the SAPS and MPS in accordance with the principles of the Constitution.” Importantly, this “Directorate functions independently from the SAPS” and “Each organ of state must assist the Directorate to maintain its impartiality and to perform its functions effectively.”

The IPID investigators are appointed according to criteria identified in Chapter 6 Section 22 Subsection (2), (3) and (4). “(2) A person appointed as an investigator –

(a) must have at least a grade 12 certificate or a relevant diploma or degree;  
and

(b) must have –

i. knowledge and relevant experience of criminal investigation; or

- ii. any other relevant experience”

Subsections (3) and (4) detail the security screening investigation necessary before appointment of such investigators.

In Chapter 6 Section 28 Subsection (1) the “Type of matters to be investigated” is described and includes:

“(a) any deaths in police custody; (b) deaths as a result of police action” which together inform that 2 of the 3 categories of “Deaths in Custody” are to be investigated by this unit as stated in the IPID Act.

In conjunction with the promulgation of the IPID Act 1 of 2011, the “Regulations for the operation of the Independent Police Investigative Directorate” were set out in the Government Gazette on 10 February 2012.<sup>10</sup> Specifically, Regulation 4 sets out the regulations regarding the “Investigation of deaths in police custody or as a result of police action” as follows:

“(1) The investigation of the death of a person in police custody or the death of a person as a result of police action or omission or both must be done in accordance with this regulation.

(2) The Executive Director or the relevant provincial head, as the case may be, must designate an investigator to investigate the death of a person-

(a) in police custody, irrespective of whether or not such death has occurred as a result of the alleged involvement of a member of the SAPS or the MPS;  
or

(b) who has died as a result of any action or omission or both on the part of a member of the SAPS or MPS.

(3) An investigator designated in terms of sub-regulation (2) must, as soon as is practicable, but within 24 hours of designation-

(a) attend the scene where the death occurred, ensure that the scene is secured in terms of regulation 8, oversee the scene and conduct a preliminary investigation; ...

(d) authorise the removal of the corpse, in consultation with a pathologist if a pathologist is available;

(e) collect, or ensure the collection, by forensic experts, of exhibits for processing by the Forensic Science Laboratory and ensure the proper registration, handling, transportation and disposal of exhibits; ...

(h) attend the post mortem and advise the person conducting the post mortem of observations made at the scene of death as well as areas that should be concentrated on; and

(i) after collecting all evidence, statements and technical or expert reports, if applicable, submit a report on the investigation of the death containing recommendations regarding further action, which may include disciplinary measures to be taken against a member of the SAPS or the MPS or criminal prosecution of such member, to the Executive Director or the relevant provincial head, as the case may be...

(6) An investigation into the death of a person in police custody and the investigation of the death of a person who has died as a result of police action or omission or both must be finalised within a reasonable period, which period may not exceed 90 days after designation, failing which the investigator must give reasons for failure to comply with this period in the report contemplated in sub-regulation (3)(l) ...

(8) In the event of a late notification of a death in police custody or as a result of police action or omission or both, the investigator must, within a reasonable period, which period may not exceed 30 days of designation-

(a) conduct a preliminary investigation or proceed with a full investigation;

(b) attend the post mortem if it has not yet been conducted;...”

These regulations provide a comprehensive and detailed description of the duties of an IPID investigator, and which are necessary to understand from a forensic medicine point of view. This investigator is in charge of all relevant investigations and as such needs to perform the required duties as per the law. Any laxity in completion of these duties should be constituted as negligence and as “obstructing justice”. Such negligence is contemplated in Regulation 13 of the IPID Act: “The Public Service Disciplinary Code applies in the case of disciplinary proceedings initiated against a member of the Directorate as a result of the alleged misconduct of such member or failure to comply with a lawful command, order or instruction.”<sup>6</sup> It is of concern that anyone with the above stated qualifications can become an IPID investigator as the qualifications are lacking in tertiary education and specific investigative training and experience, i.e. it does not specify what kind of

investigative experience; only that it be “relevant”. It is also important to note that according to this act, the IPID investigator is in charge of the scene of death, and it is his duty to perform the necessary actions for a complete investigation to be initiated and completed. It is the duty of the investigator, and not the police officer at the scene, to request for a forensic pathologist to be present at the scene, and therefore an IPID investigator should be present at all scenes without exception, before the forensic pathologist, unless this is impossible due to distance to the scene or not being informed by the SAPS.

### Criminal Procedure Act 51 of 1977<sup>11</sup>:

The Criminal Procedure Act 51 of 1977 provides, in Section 49(2) and amended by the Judicial Matters Second Amendment Act 122 of 1998, for the use of force by an “arrestor” during the arrest of a “suspect” if “the suspect resists the attempt, or flees, or resists the attempt and flees, when it is clear that an attempt to arrest him or her is being made, and the suspect cannot be arrested without the use of force, the arrestor may, in order to effect the arrest, use such force as may be reasonably necessary and proportional in the circumstances to overcome the resistance or to prevent the suspect from fleeing: Provided that the arrestor is justified in terms of this section in using deadly force that is intended or is likely to cause death or grievous bodily harm to a suspect, only if he or she believes on reasonable grounds- (a) that the force is immediately necessary for the purpose of protecting the arrestor, any person lawfully assisting the arrestor or any other person from imminent or future death or grievous bodily harm; (b) that there is substantial risk that the suspect will cause imminent or future death or grievous bodily harm if the arrest is delayed; or (c) that the offence for which the arrest is sought is in progress and is of a forcible and serious nature and involves the use of life threatening violence or a strong likelihood that it will cause grievous bodily harm.”

This Act is in the process of being further amended by the Criminal Procedure Amendment Act, 2010, which is currently in the form of a Bill to be brought before Parliament. The Bill<sup>12</sup> defines “deadly force” in Section 49 (1) (c) as “force that is intended or likely to cause death or serious bodily harm.” There are both additions and deletions to Section 49 (2) in the new Bill, with the major differences being the

removal of the necessity of being “immediately necessary” and that “the suspect is suspected on reasonable grounds of having committed a crime involving the infliction or threatened infliction of serious bodily harm and there are no reasonable means of carrying out the arrest, whether at that time or later.” Section 49 (2) (b) and (c) as they currently are in the Judicial Matters Second Amendment Act 122 of 1998 will be completely repealed.

In recent years, this provision has become controversial due to the strong “shoot to kill” message used by former national Police Commissioner Bheki Cele in response to a surge in police killings making South Africa one of the most dangerous places to be a police officer. Subsequently, this Police Commissioner has been fired, and has denied that he ever encouraged South African Police Service members to “shoot to kill”.

#### Correctional Services Act 111 of 1998<sup>3</sup>:

The Correctional Services Act 111 of 1998 was assented to on 19 November 1998 and commenced only on 31 July 2004. It was amended by the Correctional Services Amendment Act 32 of 2001, Institution of Legal Proceedings against certain Organs of State Act 40 of 2002, Judicial Matters Amendment Act 55 of 2002, Correctional Services Amendment Act 25 of 2008, and the Child Justice Act 75 of 2008. The aim of this Act included the formation of the Judicial Inspectorate of Correctional Services.

When a death occurs in a correctional centre Section 15 “Death in correctional centre”, takes effect:

“(1) Where an inmate dies and a medical practitioner cannot certify that the death was due to natural causes, the Head of the Correctional Centre must in terms of section 2 of the Inquests Act, 1959 (Act 58 of 1959), report such a death.

(2) Any death in correctional centre must be reported forthwith to the Inspecting Judge who may carry out or instruct the National Commissioner to conduct any enquiry.

(3) The Head of the Correctional Centre must forthwith inform the next of kin of the inmate who has died or, if the next of kin are unknown, any other relative.”

Chapter 15 details the structure and function and the Judicial Inspectorate, which was created on 19 February 1999 as follows:

“ Section 85 Establishment of Judicial Inspectorate for Correctional Services

- (1) The Judicial Inspectorate for Correctional Services is an independent office under the control of the Inspecting Judge.
- (2) The object of the Judicial Inspectorate for Correctional Services is to facilitate the inspection of correctional centres in order that the Inspecting Judge may report on the treatment of inmates in correctional centres and on conditions in correctional centres.

Section 86 Inspecting Judge

- (1) The President must appoint the Inspecting Judge who must be-
  - (a) a judge of the High Court who is in active service ....; or
  - (b) a judge who has been discharged from active service ...”

No specific investigation or enquiry details are put forth in the Correctional Services Act, in comparison to the IPID Act which comprehensively details the components of an investigation into the deaths of those due to police action or omission or both, or in police custody. This 3<sup>rd</sup> category of deaths in custody, deaths in correctional centres, therefore involves a more robust investigation, at the discretion of the Inspecting Judge. Section 134 Sub-section (n) does provide for the future implementation of regulations regarding “the procedure to be followed on the death of an inmate.”<sup>8</sup>

### Correctional Services Regulations<sup>13</sup>:

The Correctional Services Regulations, which were amended on 1 March 2012, serve to provide a detailed explanation of the Correctional Services Act, 1998.

Chapter II Section 2 contains information important to the procedure upon admission of an inmate or cared-for-child. Subsection 3 provides for a health status examination – defined as “the assessment of the health of a person in terms of the absence of disease or disability and also of personal health habits, family history, occupational and environmental conditions and influences or a combination thereof

which affect long-term health” - to be performed within 24 hours of admission and before mixing with the general correctional centre population. This examination must be performed by a medical practitioner or registered nurse who must record the health status of each individual and confirm any medical history when necessary. If the examination was performed by a registered nurse, the inmate or cared-for-child must be referred to a medical practitioner if any of the following is identified:

- (1) On admission, the inmate or cared-for-child is injured, ill, or complains of being injured or ill
- (2) The inmate or cared-for-child is receiving prescribed medication or medical treatment
- (3) The inmate or cared-for-child is receiving continued or ancillary medical treatment
- (4) Pregnancy
- (5) A medical practitioner is required to issue the admission report

The examination must also include screening for communicable, contagious or obscure diseases and the presence or absence of these diseases must be recorded.

Further to the examination Subsection 4 provides for medical devices in the possession of inmates on admission to be kept as such unless written instruction from the attending medical practitioner is received.

All medicines in the possession of inmates must be handed to the registered nurse (Subsection 5). An emergency identification item must be identified by the registered nurse and may only be removed if deemed a security risk (Subsection 6).

The admission procedure is necessary for the inmate and cared-for-child in order to allow for the adequate care of any health status problems while in the custody of the correctional centre.

Section 3, Subsection (2) (i) states: “inmates suffering from a mental or chronic illness or whose health status will be affected detrimentally or whose health status poses a threat to other inmates if detained in a communal cell, must be detained separately on request of the Correctional Medical Practitioner.” This importantly allows for the separation of inmates with contagious diseases, e.g. tuberculosis, from



the general prison population to prevent the spread of these diseases to others inside the prison, and as importantly to relatives or other individuals outside the prison.

Section 7 specifies the level of healthcare to be required at all correctional centres. Primary healthcare must be available at least at the same level available to all members of the community as provided by the State. A Correctional Medical Practitioner and dental practitioner must be available. A registered nurse must see all sick inmates and remand individuals, including those pregnant and those mentally ill, at least once daily. An inmate may be attended to by a medical practitioner of his own choice, who must then submit a report to the Correctional Medical Practitioner.

Births and Deaths Registration Act 51 of 1992<sup>14</sup>:

The relevance of this Act is in the issuing of death certificates upon the death of individuals, which should not be any different when the context is that of police or correctional services custody.

Section 15 states:

“(1) Where a medical practitioner is satisfied that the death of any person who was attended before his death by the medical practitioner was due to natural causes, he shall issue a prescribed certificate stating the cause of death.

(2) A medical practitioner who did not attend any person before his death but after the death of the person examined the corpse and is satisfied that the death was due to natural causes, may issue a prescribed certificate to that effect.

(3) If a medical practitioner is of the opinion that the death was due to other natural causes, he shall not issue a certificate mentioned in subsection (1) or (2) and shall inform a police officer as to his opinion in that regard.”

According to this legislation it is acceptable for a medical practitioner who had seen the patient in correctional services or in the police cells before his/her death to complete a notification of death by natural causes if the medical practitioner is of the opinion that based on his/her previous or current examinations of the deceased that death was by natural causes. Furthermore, a medical practitioner that is called to the

scene of death and is of the opinion that death was due to natural causes may complete a certificate of death by natural causes and no further investigation could occur. The author is of the opinion that this practice should be reviewed and that all deaths in custody referred to an FMP.

National Code of Guidelines for Forensic Pathology Practice in South Africa<sup>15</sup>:

This National Code was drafted in terms of the Regulations of the National Health Act 61 of 2003 regarding the “Rendering of Forensic Pathology Service”.

In Chapter 3 of this Code under “Deaths of persons in custody” the definition of “custody” is given as “the period starting from detention/arrest by a law enforcement agency, until release or conviction, which includes, e.g. the ‘awaiting trial’ detainee in SAPS cells, interview rooms or whilst being transported”. The inclusion of deaths of those persons dying as a result of police action is envisioned to be included in this definition. However, a slightly different definition is provided in the glossary section of the Code: “ ‘deaths in custody’ means deaths of persons that occur during arrests and deaths that occur within the SAPS holding cells. Deaths of prisoners within the South African Correctional Services and psychiatric institutions are excluded because prisoners in these institutions are not under the SAPS custody.” This definition is contrary to the definitions given by international authorities and implies that a death in custody within the context of the Forensic Pathology Service only refers to deaths under SAPS custody and not within correctional services custody. These individuals who are in correctional services custody are also in custody as they are legally mandated to remain under their supervision and may not leave the relevant correctional services institutions unless mandated. A death in correctional services custody would therefore not be seen to be a “death in custody” and would lead to incorrect statistical collection and analysis. This definition therefore needs to be corrected in the Code. As previously recommended a legal definition of “deaths in custody” would remove such confusion between the different parties investigating these deaths.

In paragraph 26 of the Code it states that the “medico-legal investigation of unnatural or suspicious deaths in custody should be carefully managed. In cases of death, apparently due to unnatural causes of persons in custody, the Chief Specialist or his/her designate in forensic pathology of the region where he acts as consultant must be informed without delay, whereupon he will advise about the further management of the case, which may include designating another specialist or forensic medical officer to do the medico-legal investigation of death. This should preferably include attendance of the scene of death by a medical practitioner.” According to this the Chief Specialist is in charge of the medico-legal investigation of such cases, but such person may delegate the medico-legal investigation to another forensic medical practitioner (FMP) if necessary, for further management. It is recommended that following the medico-legal investigation by another FMP, a report-back is given in order to assess the medico-legal investigation performed and highlight any areas where there can be future improvement. In paragraph 27 of the Code it states “the post mortem examination should only be performed once the forensic medical practitioner has been adequately informed about the relevant history and circumstances of death. In addition, the next of kin of the deceased should be informed of the death before the autopsy, provided that there is no undue delay in the performance of the autopsy.” No mention is made whose responsibility it is to inform the next of kin.

No protocol is mentioned in this guideline, nor is the possible future construction of a protocol for the medico-legal investigation of these deaths.

It is important to understand that the National Code does not have the legal standing that the National Health Act and the Regulations regarding the rendering of a forensic pathology service, mentioned above, have. It is a guideline and cannot probably be strictly enforced. This can be seen from the preamble, as it states that this document “serves to describe, direct and standardise the general and specific aspects”<sup>15</sup> of the Forensic Pathology Service. There are no penalties or crimes outlined in the guide for failure to adhere to procedures, etc. mentioned in the guide, such as the writing up of medico-legal reports or the specific manner of performing an autopsy. Perhaps if this document had more legislative clout, there would be an increased quality inherent in the Forensic Pathology Service and the manner in

which its members carried out their duties, as there would be a cloud of possible punishment hanging over their heads.

#### 4. South African Literature:

Statistics South Africa (SSA) releases annual reports detailing the changes in population dynamics. The 2010 annual report stated that during 2008 there were 592 073 deaths in South Africa. Of these, there were 52 950 unnatural deaths (approximately 9%).<sup>16</sup> This number is consistent from year to year, and indicates the minimum case load of the Forensic Pathology Service (FPS) in South Africa. In addition, many other, not “unnatural”, deaths are also admitted to the medico-legal laboratories spread out across South Africa. A medical practitioner at the Pretoria Medico-Legal Laboratory (PMLL) performs an average of 400 post mortem examinations per year, which is relatively large considering the scope of the medico-legal investigation performed, and does not compare favourably with the numbers performed in developed countries.

It is important to note the difference in the registering of deaths between individuals who die from natural causes and those that die from “other than natural causes”. In section 15 (1) of the Births and Deaths Registration Act, 51 of 1992, it states: “Where a medical practitioner is satisfied that the death of any person who was attended before his death by the medical practitioner was due to natural causes, he shall issue a prescribed certificate stating the cause of death” Furthermore, section 15(2) states: “A medical practitioner who did not attend any person before his death but after the death of the person examined the corpse and is satisfied that the death was due to natural causes, may issue a prescribed certificate to that effect.”<sup>14</sup> This has the effect of giving any medical practitioner the ability to declare any person that has died to have died from “natural causes”. This should be a concern especially when the medical practitioner has not attended to the deceased before death and declares a death from natural causes based on his examination of the corpse. A medical practitioner not trained in examining a corpse for signs that the death was due to “other than natural causes” would be hard done by in differentiating between natural and “other than natural” deaths.

If the death is suspected or known to have been due to “other than natural causes” a policeman is notified. An inquest docket is opened and an inquest is performed, the findings of which are presented before an inquest magistrate who will determine the primary medical cause of death as well as the manner of death. The inquest magistrate will issue the death certificate.<sup>7</sup> In cases of deaths in correctional services custody the same “natural death” requirements are allowed. This should not be the case as cases of “other than natural causes” deaths can be wrongly classified as “natural causes”, even if cases of negligence in medical treatment occurred. If all deaths in correctional services custody were required to undergo an inquest, more cases of negligent medical treatment or “other than natural causes” deaths could possibly be discovered.

An unnatural death as defined by the Regulations Regarding the Rendering of Forensic Pathology Service<sup>41</sup> is:

- (1) “any death due to physical or chemical influence, direct or indirect, or related complications”
- (2) “any death, including those deaths which would normally be considered to be a death due to natural causes, which in the opinion of a medical practitioner, has been the result of an act of commission or omission which may be criminal in nature”
- (3) “where the death is sudden and unexpected, or unexplained, or where the cause of death is not apparent.”

Subsequent to the definition given above the Health Professions Amendment Act, 29 of 2007<sup>46</sup>, identified a fourth category of unnatural deaths: “The death of a person undergoing, or as a result of, a procedure of a therapeutic, diagnostic or palliative nature, or of which any aspect of such a procedure has been a contributory cause, shall not be deemed to be a death from natural causes as contemplated in the Inquests Act, 1959 (Act No. 58 of 1959), or the Births, Marriages and Deaths Registration Act, [1963 (Act No. 81 of 1963)] 1992 (Act No. 51 of 1992).”.

The subcategories of unnatural death are: homicide, suicide, and accidental. If the specific manner of death cannot be determined, although it may be suspected as unnatural, the term “undetermined” is used as the manner of death. Under South

African law it is not the responsibility of the medical practitioner to determine which category of “manner of death” is relevant to the specific decedent. This is another function of the courts. Medical practitioners can assist the court in the determination of “manner of death” by expressing their opinions based on their findings.

### ICD Annual Report

The ICD’s annual report<sup>1</sup> paints a picture of the inconsistency in data collection and analysis performed by this independent, yet critical, investigative authority. The total number of deaths per year in South Africa over the review period is illustrated in table 1. The numbers fluctuate substantially from year-to-year with an increase of more than 10% from 2007/08 to 2008/09 and then a 5% reduction per year from then to 2010/11, with 2011/12 statistics not currently available. The numbers per category of death (“police action” vs. “police custody”) show a roughly 2:1 split, which is consistent among the years under review. That is also true for the Gauteng Province where the number and proportion of the total deaths are stagnant, with a slight decrease between 2008/09 and 2010/11. Only one year of the 4 available included detailed statistics into the cause of death (2009/10). The statistics reflect that over half of all deaths in custody are due to gunshot wounds (GSW) with assault, hanging and natural causes obtaining a similar proportion amongst them. The number of deaths in police custody according to “Description” shows that natural causes are the most common “descriptor” with a figure varying from 32 to 44%. Suicides formed a large proportion (2<sup>nd</sup> largest) when isolated, but from 2009/10, they have been redistributed to “in custody” or “prior to custody”, increasing those figures by 100-200%. Reviewing this table, currently natural causes is the most common followed by “prior to custody” and “in custody”, which indicates that injuries in custody are the least common cause of death. However, natural causes must be looked at carefully as these are perhaps preventable deaths if the correct treatment had been available. This area must be carefully surveyed for the exact causes of death to identify the most common causes and provide medication for these individuals to prevent unnecessary deaths and reduce the total number of deaths as clearly stated in section 35 of the Constitution and described above.

Deaths	2007/08	2008/09	2009/10	2010/11	2011/12
Police Action	490 (62%)	612 (67%)	566 (66%)	540 (68%)	Not in 2011/12 report
Police Custody	302 (38%)	300 (33%)	294 (34%)	257 (32%)	Not in 2011/12 report
Total	792 (100%)	912 (100%)	860 (100%)	797 (100%)	720 (100%)

Table 1. Deaths as a result of police action and in police custody.

The only study published in the literature and made available by a forensic pathologist, who analysed deaths in custody in South Africa, was published by Bhana<sup>17</sup>. The study only analysed those deaths occurring as a result of police action and in police custody. The study found that over the 3 years following the institution of the ICD (1998-2000) the numbers of deaths (at the Gale Street mortuary in Durban, Kwazulu Natal) had decreased by almost half from 53 in 1998 to 30 in 2000. All were males, 91.5% were black, and there was a mean age of 28.6 years (range of 10-60 years). The percentage in “police action” circumstances was 87.18% (with 75% due to gunshot wounds and 10% due to assault) and 12.82% occurred in “police custody” (50% due to suicide and 25% undetermined). The percentage of police shootings had increased from 60.38% to 76.47% to 83.33% of total cases (although the total number of cases decreased). Most of these cases sustained more than 1 gunshot wound (GSW) with 42% receiving multiple (>2) GSW’s. The body regions predominantly affected were the head, chest, and abdomen. The suicides included 7 hangings with no predominant race pattern. The study was sufficient in identifying certain patterns in the immediate years following the establishment of the ICD and analysed the demographics of the cases but the scope of the study did not include any detailed discussion about the actual medico-legal investigation of deaths in custody.<sup>17</sup>

## Judicial Inspectorate Reports<sup>18</sup>

The Office of the Judicial Inspectorate publishes an annual report as per statutory requirements [Correctional Services Act 111 of 1998 Section 90(4)(a)] which includes a review of “Deaths in Custody”. This report describes that the Heads of Prisons report all deaths in order to: (1) ensure that there is an enquiry into all deaths, and (2) provide the Inspecting Judge (IJ) with an initial report upon which the IJ may request an enquiry or instruct the Commissioner to conduct an enquiry (Annual Report 2007-2008). These reports have identified several vitally important issues, which need to be addressed in order to rectify the current controversies arising with deaths occurring in correctional centres.

### Classification of Deaths:

A correctional centre has an obligation with regard to all inmates being admitted to ensure that he or she undergoes a health assessment, including tests for communicable diseases, in order to (1) diagnose any diseases pertaining to the individual, and (2) prevent outbreaks of any contagious airborne diseases.

It has been reported<sup>18</sup> that many awaiting-trial detainees do not receive such an assessment, neither immediately on arrival, nor at a time thereafter, unless specific health complaints are made personally. This appears to contravene section 6(5)(b) of the Correctional Services Act, and furthermore allows for the possible future spread of communicable diseases, including tuberculosis (TB) and Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS), the double medical scourge of South Africa. In addition, studies analysing the death reporting forms in correctional centres revealed that the cause of death (COD) and contributing factors are infrequently completed by the certifying medical officer. There is thus a lack of insight into the deceased’s physical and mental health conditions, which may have allowed for unnatural deaths to fall through the cracks in this reporting system.

In fact, the 2009-2010 Annual Report of the JICS raises the notion of all custodial deaths receiving a full medico-legal investigation. The approval of this notion would



allow for full post mortem investigations to be done, including autopsies and specific ancillary investigations, necessary in determining the specific COD of the deceased. This prevents the unnatural deaths from being wrongfully classified as natural, and allows for the necessary police investigations to be completed if a crime has been committed. Also, it would assist the Department of Correctional Services in determining the deficiencies in their specific health care system in order to rectify and enhance the system. This report also asked for the amendment of the Inquests Act 58 of 1959 to include “natural” deaths, where those deaths occurred in correctional centres, so that a full public inquest should be held where all parties with a vested interest are able to make representations so that a full examination does occur. This would serve public health and justice, as well as the family and next-of-kin of the deceased.

As of 31 March 2011, there were a total of 160 545 inmates in South African correctional centres. The joint capacity of all such centres is only 118 154, indicating an overcrowding level of 135.87%, which was actually an improvement on the previous year’s 139%. The highest level of overcrowding was in Gauteng, at 172.65%. The number includes sentenced inmates (70%) as well as awaiting trial detainees (30%). The number of deaths in correctional centres, according to JICS data ranged from 1 136 in 2007, to 1 048 in 2008, and 1 047 in 2009. The number of deaths is decreasing, especially when natural and unnatural deaths are reviewed separately. The number of unnatural deaths has decreased from 80 in 2007 to 55 in 2009 – just over 30%. The decrease in natural deaths has not been as steep with the number decreasing from 1056 in 2007 to 992 in 2009 – approximately 5%. The most frequently reported cause of death in correctional centres is tuberculosis (TB), followed by pneumonia and HIV-related deaths. In larger correctional centres (with an increased inmate population) the natural death rate (per 1000) ranges from 3 to 10 per 1000. In smaller centres, owing to small numbers of inmates, the deaths rate increases to as much as 27 per 1 000. The 2007-2008 report identifies the death rate of inmates in South African correctional services centres to have been 8.7 per 1 000 inmates in 2006 and 7.0 per 1 000 inmates in 2007. Subsequent reports do not include such death rates. In the 2010/2011 report, an analysis of over half of the deaths revealed that approximately 55% of natural deaths occur within the first year of incarceration.<sup>18</sup> This could be as a result of pre-existing illnesses or conditions not

being adequately “identified, dealt with or treated by the Department (of Correctional Services)” on incarceration. A similar analysis should be done with respect to unnatural deaths as has been performed in similar studies internationally.

### Reporting of Deaths

Section 15(2) of the Correctional Services Act<sup>3</sup> requires the head of a correctional centre to include the following when reporting a death: (1) report the incident (2) classify or categorise it (3) provide adequate medical reasons for it (4) comment on the facts and circumstances surrounding it. The underlying reasoning behind this is the following: in order for an enquiry to be conducted or requested by the Inspecting Judge, sufficient information has to be provided necessitating such an investigation, due to the limited resources available. On reviewing death reports, the Annual Report found that in many instances not even “*prima facie*” evidence would be provided. This could possibly be due to the delegation of such tasks to administrative subordinates with little or no experience in such matters, and no insight into such investigations, who view such tasks as purely administrative. The reporting of deaths by heads of such institutions should be seen as representative of the institution under their management and any shortcomings in reporting deaths should be seen as misconduct.

### 5. International Legislation:

#### Australian Legislation:

In Australia, as in the United States of America, there are different states each with their own laws. However, the laws have a common basis, and the laws from one state to the next are not dissimilar. The example given below is from the state of New South Wales in Australia.

#### Coroner’s Act 2009<sup>19</sup>:

In Chapter 3 “Coronial Jurisdiction” Section 23 the “Jurisdiction concerning deaths in custody or as a result of police operation” is described. In terms of this

Section “A senior coroner has jurisdiction to hold an inquest concerning the death or suspected death of a person if it appears to the coroner that the person has died (or that there is reasonable cause to suspect that the person has died):

- (a) while in the custody of a police officer or in other lawful custody, or
- (b) while escaping, or attempting to escape, from the custody of a police officer or other lawful custody, or
- (c) as a result of, or in the course of, police operations, or
- (d) while in, or temporarily absent from, any of the following institutions or places of which the person was an inmate:
  - (i) a detention centre within the meaning of the Children (Detention Centres) Act 1987,
  - (ii) a correctional centre within the meaning of the Crimes (Administration of Sentences) Act 1999,
  - (iii) a lock up, or
- (e) while proceeding to an institution or place referred to in paragraph (d), for the purpose of being admitted as an inmate of the institution or place and while in the company of a police officer or other official charged with the person’s care or custody.”

This legislation provides a clear picture of the jurisdiction of the coroner as well as the procedure to occur once a death in custody has been reported.

#### U.K. Legislation:

In the U.K. the corresponding act involving investigation of unnatural death is the Coroners and Justice Act of 2009.<sup>20</sup> In Chapter 1 Section 1.1 it states “A senior coroner who is made aware that the body of a deceased person is within that coroner’s area must as soon as practicable conduct an investigation into the person’s death if subsection (2) applies.” Section 1.2 further states “This subsection applies if the coroner has reason to suspect that — (a) the deceased died a violent or unnatural death, (b) the cause of death is unknown, or (c) the deceased died while in custody or otherwise in state detention.” Section 6 adds that investigations done above must have an inquest performed as part of the investigation.

Furthermore, Prison Order 2710 “Follow Up To Death in Custody” states that all deaths in prison custody are subject to (a) a police investigation, (b) an investigation

by the Prisons and Probation Ombudsman, and (c) a Coroner's inquest before a jury.<sup>21</sup>

### U.S.A Legislation:

In the Death in Custody Reporting Act of 2000<sup>5</sup> Section 2.4.2 states that “such State has provided assurances that it will follow guidelines established by the Attorney General in reporting, on a quarterly basis, information regarding the death of any person who is in the process of arrest, is en route to be incarcerated, or is incarcerated at a municipal or county jail, State prison, or other local or State correctional facility (including any juvenile facility) that, at a minimum, includes— (a) the name, gender, race, ethnicity, and age of the deceased; (b) the date, time, and location of death; and (c) a brief description of the circumstances surrounding the death.” An amended and extended version of this act has since been attempted to be passed but has never passed before the senate and each time it has failed at this point. This extended “Death in Custody Reporting Act, 2011<sup>22</sup>” includes additional institutions in which a death in custody can occur as well as penalties for states failing to supply a report within 120 days of the reporting period ending. Further, it details that a study shall be performed by the attorney general of the information reported to – “(A) determine means by which such information can be used to reduce the number of such deaths; and (B) examine the relationship, if any, between the number of such deaths and the actions of management of such jails, prisons, and other specified facilities relating to such deaths.” This study should be submitted to Congress not later than 2 years following the promulgation of the Act. The latest attempt began last year and is now waiting to go before the senate, but with the presidential election campaign, the continuing economic recession and the control of the Republicans of the Senate, the possibility of this Act being approved is weak at best.

### 6. International Literature (Findings of Studies)

In the UK, it was identified that the most common cause of natural deaths in the prison setting is cardiovascular-related illnesses (53% of natural deaths), followed by respiratory disorders (16%).<sup>23</sup> It was also found that natural deaths are less common

than in the general population. The most susceptible groups were found to be pregnant females (prenatal care), juvenile (alcohol abuse, violence and high-risk sexual behaviours), and those older than 55 years (due to higher rates of major illnesses and physical impairments).

Infectious diseases are rife in prisons, the most important being HIV/AIDS, Hepatitis B and C and Tuberculosis (TB)<sup>24</sup>. The prevalence of HIV has been determined to be exceeding 10% in several countries, with female prisoners reported as having higher prevalence rates than their male counterparts. A number of countries report a decreasing prevalence rate in prisoners and attribute this to a decreasing HIV population entering prisons, decreased HIV positive intravenous drug users, and the use of treatment plans for discharged HIV positive prisoners. The prevalence of hepatitis B is common, with wide variations reported between countries with HBsAg seroprevalence ranging from 1.3% in France<sup>25</sup> to 25.5% in Ghana<sup>26</sup>. Again, female prisoners report to have a higher seroprevalence rate. Hepatitis C in prisoners is a worldwide concern with reported prevalence rates of 30-40% of prisoners. The individual countries rates vary widely depending on the proportion of intravenous drug users in the population. In the USA the prevalence is approximately 20-30%. The TB prevalence is also higher than the general population. In the USA, there is approximately a fourfold increase in TB cases per 100,000 people. In other studies the rate per 100,000 prisoners ranges from 363 in Thailand<sup>27</sup> to 17808 in Kazakhstan<sup>28</sup>. The reportedly high rates are attributed to the increased number of risk factors of incoming prisoners, including “HIV infection, a history of intravenous drug use, low socioeconomic status, malnutrition, homelessness, and inability to access community-health care.” Additionally, overcrowding and poor prison ventilation, promote swift epidemics in prisons, including the emergence of multi-drug and extreme-drug resistant TB. Not only are they an internal reservoir of the disease, but on release can provide the vector for transmission into their home communities.<sup>24</sup>

Chronic diseases are reported as being more prevalent among the prison population than the general population. Cancer rates are similar to the general population rates. The most common cancers in prisoners are skin cancer in males and cervical cancer in females.<sup>23</sup>

In an early study of Atlanta City Jail and Fulton County Jail, most deaths were found to be of natural causes, but a quarter were found to be suicides of which all were in the form of hangings.<sup>29</sup> This finding has been reduplicated throughout several similar studies across Europe, America, Africa and Australia, and has been a major research topic, especially in the USA. In a similar study by Copeland<sup>30</sup> in the Metropolitan Dade County, the study also found natural diseases, especially cerebro- and cardiovascular and alcohol-related diseases, to be the cause of death in the majority, with suicide and homicide to a lesser degree. Older detainees more commonly died of natural causes and younger detainees committed suicide. The majority of deaths in these studies were of Caucasian individuals.<sup>29</sup> The findings were similar in other studies in Maryland State Prison, Shelby County, and Cleveland summarised succinctly in Reay's Forensic Pathology article in Clinics in Laboratory Medicine<sup>31</sup>.

Felthous<sup>32</sup> reviewed suicides in US prisons by comparing the findings from 2 nationwide studies of jail suicides in the USA conducted by Hayes<sup>33,34</sup> through the National Centre of Institutions and Alternatives in the 1970's and 1980's with the 2008 meta-analysis, performed by Fazel et al<sup>35</sup>, of controlled studies in correctional facilities over an approximately 50 year time span. The results of the studies were compared under 3 variable groups, being: (1) Demographic (2) Situational (3) Clinical. The conclusions of the study found that: (1) common generalizable factors include white race/ethnicity and male gender (2) other mutually consistent if not identical findings include: suicide soon after detainment or detained/remand status (pre-trial), placement in a single cell or isolation, and a history of alcohol and/or drug abuse (3) the Hayes studies<sup>33,34</sup> identified the risk of suicide for those who were stressed by the initial arrest and jailing and the importance of early screening of all inmates (4) the Fazel<sup>35</sup> study showed custody suicides to be associated with violent and homicidal offenses and lengthy sentences.

## 7. Royal Commission into Aboriginal Deaths in Custody<sup>36</sup>

As a result of an increase in the number of aboriginal deaths in custody, in 1989, Australia, the Royal Commission into Aboriginal Deaths in Custody was established. The results of this Commission can be considered as the largest research performed

into deaths in custody, with the findings thereof used to implement widespread policy changes throughout Australia. Its recommendations can be implemented in other countries, as many of them are general in nature and not specific to the Australian context.

Several of the recommendations could probably be imported to the South African context with good effect. The implementation of a protocol for investigating such deaths was identified as a necessity in all Australian states as it would provide appropriate guidance to conducting these inquests. The publishing of annual reports is also mentioned, which has been implemented in South Africa but the quality of such reports as discussed above is far below the standard needed when approaching these investigations. A further recommendation considered the post mortem examinations done in these cases, and recommended that “all post-mortem examinations of the deceased be conducted by a specialist forensic pathologist wherever possible or, if a specialist forensic pathologist is not available, by a specialist pathologist qualified by experience or training to conduct such post-mortems”.

## 8. Torture

The most notorious abuse of power by officials involves the use of torture. This is a legacy of many centuries and millennia, and is nothing new to society. The problem in the current day and age is trying to remove this scourge from society. Torture may be used to obtain information as to the crime committed, or to be committed, as well as merely an abuse of power to denigrate others. It has also been used to punish those who do not perform tasks as requested. Torture takes many forms including acts of commission and omission. In South Africa, torture is most commonly associated with the Apartheid regime, and specifically with John Vorster Square (Police Headquarters during that period).

These same events occur globally, especially in war-torn countries such as India, China and the Middle East. Specifically, the threat of terrorism creates monsters in these times, and the use of torture has become as much an art as a science with specific “investigators” being used to retrieve the necessary information. India, a

country that South Africa has connections with due to its involvement with BRICS (Brazil, Russia, India, China, South Africa), has a notorious rate of torture with almost 99.9% of deaths in police custody to have been caused as a result of an act of torture, within 48 hours of being taken into custody.<sup>37</sup> In a ten-year study in India<sup>37</sup>, 14,231 people were reported to have died in police and judicial custody (1,504 in police custody, and 12,727 in judicial custody). Police custody deaths ranged between 119 and 187 per year. In judicial custody, a large number of cases resulted from torture, denial of medical facilities and inhumane prison conditions amounting to torture, inhuman or degrading treatment. These deaths ranged between 1,140 and 1,532 per year. This same report noted that the number of deaths from conflict afflicted states do not reflect the gravity of the situation, with conflicting figures between those reported to the National Human Rights Commission (which was established by The Protection of Human Rights Act, 19 of 1994 – India) and those stated by officials in these states. Most commonly a healthy person before arrest suddenly developed medical complications once taken into custody and died. The officials escape prosecution by describing the cause of death as being a result of medical complications. Additionally, those cases not resulting in death are not mandated to be reported to the National Human Rights Commission.

The United Nations defines torture in the United Nations Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment<sup>38</sup> in article 1 (1) as “any act by which severe pain or suffering, whether physical or mental, intentionally inflicted on a person for such purposes as obtaining from him or a third person information or a confession, punishing him for an act he or a third party has committed or is suspected of having committed, or intimidating or coercing him or a third person, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with consent or acquiescence of a public official or other person acting on official capacity.”

This definition identifies 4 key elements to identifying an act as being “torture”:

- (1) It must be an act of inflicting *severe* pain or suffering. It does not have to result in a severe physical injury. This is the worst form of suffering.
- (2) There must be an *intention* to inflict pain or suffering. It can therefore not be an act of negligence.



- (3) The act must be done for the *specific purpose* of obtaining information or confession, etc.
- (4) There must be *involvement of state officials*, which may come in the form of active passive involvement or simply not intervening in preventing or ceasing the act.

In South Africa, there is still no formal legislative definition of torture. South Africa has ratified, in 1998, the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. At this point in time a draft bill has been formulated, to be called the “Prevention and Combating of Torture of Persons Act, 2012.”<sup>39</sup> The definition of torture is provided in Section 3 as meaning “any act or omission by which severe pain or suffering, whether physical or mental, is intentionally inflicted, by a public official or any person acting on behalf of a public official, on a person-

- (a) in order to-
  - (i) obtain information or a confession from him or her or a third person;
  - (ii) punish him or her for an act he or she or a third person has committed, is suspected of having committed or is planning to commit; or
  - (iii) intimidate or coerce him or her or a third person to do, or to refrain from doing, anything; or
- (b) for any reason based on the discrimination of any kind, but does not include pain or suffering arising from, inherent in or incidental to lawful sanctions.”

During this interim period torture has been recognised in terms of international legal definitions, as envisioned by Section of 233 of the Constitution, Act 108 of 1996<sup>6</sup> – “When interpreting any legislation, every court must prefer any reasonable interpretation of the legislation that is consistent with international law over any alternative that is inconsistent with international law.” The sentencing of convicted offenders is altered to include any conduct resulting in severe pain or suffering as an aggravating circumstance.

## 9. International Protocols

There are few examples of international protocols for the medico-legal investigation of deaths in custody. Two protocols created by the United Nations are: The “Minnesota Protocol” and the “Istanbul Protocol”.

The *United Nations Manual on the Effective Prevention and Investigation of Extra-Legal, Arbitrary and Summary Executions*<sup>40</sup> was created following years of research and analysis as a supplement to the “Principles on the effective prevention and investigation of extra-legal, arbitrary and summary executions” adopted by the United Nations Economic and Social Council in 1990. The Protocol was drafted by an international group of experts in forensic science, lawyers, and human rights experts, and was facilitated by the Minnesota Lawyers International Human Rights Committee.

Section B (Chapter III) identifies the purposes of these investigations, which may be generalised to any country. From a medico-legal point of view there are 4 important purposes: (1) victim identification (2) recovery of evidentiary material (3) determining cause, manner, location and time of death, as well as any pattern or practice that may have brought about the death (4) to distinguish between natural death, accidental death, suicide and homicide.

In Chapter IV – Proposed Model Autopsy Protocol (Minnesota Protocol), the proposed protocol is divided into components for scene investigation and autopsy. The scene component (Section 1) includes co-operative mechanisms between medical and non-medical personnel, the recording of features of the body and the scene, and the removal of the body from the scene. All of the recommendations provided would be feasible in a South African context.

Section 2, the autopsy component, provides a detailed overview of an autopsy to be utilised in these investigations, but which may be used for any medico-legal investigation should it be necessary. Emphasis is placed on recording of the autopsy (including findings, and persons present) as precisely as possible, as well the use of photographs and radiological techniques to preserve injuries (or their absence) at

autopsy. The use of such a protocol would in essence require a checklist, to be completed as the autopsy proceeds. The use of such a checklist would ensure that all important points are covered. This protocol is in fact not dissimilar from a routine autopsy procedure. Caution is necessary in these autopsies, which are covered by the inclusive nature of the autopsy protocol providing for all causes of death.

The final chapter of the Manual is a protocol for the disinterment and examination of human remains. The Annexures of the Manual include the above mentioned “Principles”, upon which the Manual is based. Principle 9 is imperative to all investigations, especially in this context. It states “There shall be a thorough, prompt and impartial investigation of all suspected cases of extra-legal, arbitrary and summary executions.” These qualities of an investigation should be universal to all investigations, but are more commonly side-lined by agendas and inaptitude.

The Istanbul Protocol – *Manual on the Effective Investigation and Documentation of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment*<sup>41</sup> – is an international guideline for “the assessment of persons who allege torture and ill-treatment, for investigating cases of alleged torture and for reporting findings to the judiciary or any other investigative body.” The Protocol was created in 1999 and passed by the United Nations as General Assembly resolution 55/89 of 4 December 2000 and Commission on Human Rights resolution 2000/43 of 20 April 2000. The use of this Protocol in comparison to the Minnesota Protocol would be in the case of torture and ill-treatment where the victim survived. The use of this protocol, therefore, would be optimally suited to “deaths in custody” but rather “torture and/or ill-treatment in custody”. Specific aspects of the examination can be adopted to the use of the Minnesota Protocol where torture or ill-treatment was thought to have been a contributing factor to the cause of death, or was the cause of death.

## 10. The Medico-Legal Investigation of Deaths in Custody in South Africa

The investigation of a “death in custody” in South Africa is a multi-disciplinary procedure, including the police, Independent Complaints Directorate, medico-legal personnel, and the National Prosecuting Authority (NPA). From the medico-legal

viewpoint many textbooks, journal articles and other literature provide a guideline for the complete and systematic investigation of these deaths.

According to the definition provided by the Regulations Regarding the Rendering of Forensic Pathology Service<sup>42</sup> which was drafted in terms of Chapter 11 of the National Act 61 of 2003, the medico-legal investigation of death “means the investigation into the circumstances and possible cause of death which is or may have been due to unnatural causes, and includes but which are not limited to:

- (a) the obtaining of relevant information at the scene of an accident where necessary;
  - (b) the performance of a post mortem examination, which may include an autopsy;
  - (c) the requesting and performance of special investigations; or
  - (d) the liaison with other relevant parties;
- to facilitate the administration of justice.”

The definition identifies (1) the objectives of the medico-legal investigation – circumstances and possible cause of death, (2) the nature of deaths to be investigated, and (3) the different sources of information an authorised person has to gather this information from – scene, post mortem examination, special investigations, and relevant parties. The definition provides the framework for the scope of this study. The information collected is compiled into an autopsy – GW 7/15 report – for use as a legal document in a court of law. The level at which the report is written (i.e. the quality of the findings) is only as good as: (a) the compiler and (b) the sources of information available. The years of experience affects the use of sources as well as the style and use of information in the report. In fact, report writing (similar to writing notes in hospital files in their legal status) is an acquired skill simply through the repeated performance of writing reports. This skill can be taught by the experienced to the inexperienced professional, but it is up to the latter to master this talent to allow for the report to be understandable by all who need to read and understand the findings. The style of report writing definitely differs between forensic medical practitioners, visible between ranks (i.e. between medical officers and registrars, and registrars and specialists) and between different individuals in the same rank (i.e. between specialists, etc.) The crux of generating a good report is not

the style but that the necessary information is present, both in the form of positive and negative findings (where important to note), and conclusions deduced from the findings.

Further, a post mortem examination “means an examination of a body, with the purpose of establishing the cause of death and factors associated with the death ... for medico-legal purposes.”<sup>42</sup>

Di Maio<sup>43</sup> recommended three components to the medico-legal investigation of all deaths in custody. The first part is the investigation of the scene, circumstances of death, current medical circumstances, past medical record, medications, police laboratory examination results, and if the death occurred in hospital – hospital investigation results. The second part is the autopsy, which is to be completed by an experienced certified forensic pathologist. This part includes examining the deceased’s clothes, external appearance of the body, examination of the organs of the body cavities, a “bloodless” neck dissection, additional side investigations, and the retention of body fluids as required. The third and concluding part are the laboratory tests, including a complete toxicology screen as well as the histological examination of tissues. Following this investigation the forensic pathologist has the duty of completing the death certificate stating the primary medical cause of death, mechanism of death, and manner of death (in the U.S.A.).

This textbook was written under U.S.A. circumstances but can be generalised to any country in the world, even South Africa (except for the cause and manner of death which is defined by the judiciary). This outline might not be feasible in its totality in the South African context for several reasons. There is a constant and chronic lack of forensic pathologists in South Africa with a current estimate of approximately fifty forensic pathologists countrywide. They are mostly concentrated in the academic centres of the country, with few if any qualified forensic pathologists positioned in rural mortuaries. In those settings the post mortem investigation must be done by an inexperienced, but “authorised”, individual or the body can be transferred to another mortuary, such as the PMLL, where there are experienced forensic pathologists employed. There is also a lack of resources for the performance of laboratory investigations with the current waiting period for a blood

alcohol concentration (BAC) being approximately six to nine months or longer, and for toxicology being approximately two years. This is due to the fact that there are only three forensic toxicology laboratories in the whole country, which have in the past been underfinanced and understaffed.

In Reay's article on deaths in custody<sup>31</sup>, a more thorough analysis of the topic is performed with differences discussed between the investigations of those who died in the process of being arrested versus those who died in custody.

At the scene of death, the circumstances of death should be clearly established. An FMP should be notified and attempt to attend and examine the body at the scene. This serves a dual purpose of assessing the circumstances of death, as well as establishing communication with the investigating officers in charge of this case. If scene attendance is not performed, there should be access to that information collected by the investigating agencies, including photographs, witness statements, and scene reports. This information helps to establish time of death and time of discovery of the body (post mortem interval – PMI), position of the body when found and any macroscopic differences between the body at the scene and the body on the autopsy table. This information should be obtained as quickly as possible, preferably before the autopsy, in order to better understand the circumstances of death, and to aid in the post mortem examination of the deceased.

Reay<sup>31</sup> advised that the same protocol used in the post mortem examination of homicidal violence victims be used in all cases of deaths in custody, including the collection of trace evidence, such as fibres, fingernail clippings, hair, etc.; swabs for seminal fluid; preservation of clothing; and complete and detailed photographs of any anatomic findings at autopsy. The collection of trace evidence and swabs for sexual activity would be a strain on South African resources, but in cases where obvious evidence is noted, it should be duly collected. The use of a video camera to record the autopsy is also suggested. Accompanying the autopsy, a complete toxicological screen should be done, including alcohol, street/illicit drugs, such as cannabis and amphetamines, and therapeutic drugs, such as hypnotics and sedatives. Again, if the complete screen were done on every victim (a) every case could be delayed over 2

years for completion of tests, and (b) there would be a drastic consumption of resources for other cases needing toxicology tests.

In cases of hangings in police or prison cells, the removal of the body from the ligature must be done with care, in order to (a) preserve the ligature for future examination, and (b) prevent skull fractures or scalp lacerations when the body is simply allowed to fall to the floor. The examination of such asphyxial deaths must include a bloodless neck dissection to assess any injuries present, but more importantly to exclude those injuries which could have resulted from strangulation or suffocation.

Specific to deaths occurring during the arrest of a suspect is the investigation of sudden deaths which occur following the application of a restraint, whether physical or mechanical, resulting in the restriction of breathing or blood flow, and subsequently death. The physical restraint used is usually a type of neck hold, which is described as common in the United States. The occurrence in South Africa is not known to the author, but as the statistics show the vast majority of deaths occurring during the arrest phase are due to gunshot wounds, and therefore the incidence of neck holds is presumed to be very low.

The South African textbook by Schwar et al<sup>44</sup> is a recognised source of South African Forensic Pathology knowledge. However, this textbook was published in 1988 and has never been updated. Nevertheless, this is a frequently referred to text by many forensic pathologists, and contains specific relevant information regarding the medico-legal investigation of deaths in custody.

The authors of this text book comment that the post mortem examinations of detainees “differs from other medico-legal, post mortem examinations in that, at the subsequent inquest, more importance is attached to certain observations than is generally the case.” It further lists several key particulars that must be noted when performing these examinations, including:

- (1) an in loco examination of the body, identifying special features and the immediate environment
- (2) post mortem interval (PMI) determination

- (3) “A complete and meticulous post mortem examination”
- (4) examination of the injuries found and determination of their nature and age
- (5) specimens for special laboratory examinations of an adequate and suitable nature including histological analysis
- (6) photo-documentation
- (7) tissue preservation e.g. whole brain in a case of head injury.<sup>44</sup>

As per any other investigation, the post mortem findings are determined by the circumstances of death. The text further comments on the medico-legal significance of these specific post mortem examinations describing the determination of the primary medical cause of death to be “extremely difficult”, and the necessary reconstruction as to the sequence of events resulting in death. Also, in cases of suicide, the text specifically recommends a psychiatrist (not mentioned in other texts) be consulted as to the reason for the alleged suicide.<sup>44</sup> These recommendations are similar to those provided by other sources above.

The “Regulations Regarding the Rendering of Forensic Pathology Service”<sup>42</sup> stipulate that only an “authorised person” may perform a post mortem examination. The authorised person is defined as a forensic pathologist, forensic medical officer or medical practitioner qualified to perform post mortem examinations and/or autopsies on human bodies or the remains thereof appointed in terms of regulation 22(b). However, there is no Standard Operating Practice in place to investigate these deaths.

A forensic pathologist is a qualified medical practitioner registered with the Health Professions Council of South Africa (HPCSA), with the further qualifications of a Masters of Medicine in Forensic Pathology and/or a fellow of the Colleges of Medicine of South Africa (CMSA) as a Forensic Pathologist. The duration of training is four years. There may also be a one or two year period of training as a medical officer in forensic pathology before being accepted as a registrar in forensic pathology (forensic pathologist in training). A consistent level of training throughout South Africa is intended to create experienced, knowledgeable forensic pathologists following their qualification. Together with the actual examinations taken, the



practical expertise of forensic pathologists is a necessity in this field, which in itself may be linked to the academic centre at which training took place.

There needs to be an enquiry into the current situation of the Forensic Pathology Service in the rural provinces of Mpumalanga, North West, Limpopo, the Eastern Cape and the Northern Cape. These provinces do not have the academic “centres of excellence” present in the other provinces to different degrees. They cannot always rely on qualified forensic pathologists or even forensic pathology medical officers to perform their medico-legal examinations; these are mostly left to the general practitioners who have been hired to perform the necessary examinations on request. These cases must be referred to a centre of excellence.

Prior to 2006, medico-legal mortuaries were under the management of SAPS. During the 1990’s, representation was made to parliament to bring these facilities under the management of the Department of Health. This was owing to the fact that forensic medicine is a health concern and not a police concern. Additionally, while under the management of SAPS, there were times at which the impartiality of the medico-legal mortuaries was brought into question. This was especially due to the prevailing political and social climate under “Apartheid” where certain racial groups were marginalised. The re-alignment of the FPS under the Department of Health was performed in order to remove this suspicion from the FPS.

### 11. Aim of the Study

This study and dissertation aims to:

- (1) Determine the scope and nature of the current and medico-legal investigation practice into deaths in custody at the Pretoria Medico-Legal Laboratory in order to propose a protocol for the investigation of such deaths
- (2) Analyse the victim and post mortem profiles and thereafter compile statistics for further analysis

It is envisioned that these aims have been answered as completely as possible in this study, and that the accompanying introduction have provided a thorough background, not only into the relevance of studying deaths in custody, but also of the

current infrastructure and method of performing the medico-legal examinations of the FPS, which has been tasked for this specific purpose.

The accompanying discussion component will analyse the results component of the study and further explore key issues as they are identified. This section will provide the reader with the knowledge necessary to confidently identify the issues and understand the position currently being faced by the personnel of the FPS specifically the forensic medical practitioners.

## Chapter 2: Methodology

### 1. Setting

The study was conducted at the Pretoria Medico-Legal Laboratory (PMLL), in Pretoria, South Africa. This specific mortuary was chosen due to its association with the University of Pretoria, as well as the fact that it performs over 2000 autopsies per year (1 of the 5 biggest mortuaries in South Africa).

### 2. Selection of Research Material

All individuals that died as a result of police action, in police custody, or in correctional services custody that were admitted to the PMLL between 1 January 2007 and 31 December 2011 (inclusive) were included in the study. The source material reviewed included the admissions register and the National Injury Mortality Surveillance System (NIMSS) forms. A comprehensive list of subjects was compiled from these 2 sources.

### 3. Study Design

A retrospective, descriptive case audit was performed.

### 4. Data for Examination

A data collection form (Appendix A) was compiled in order to record the relevant data. For most of the data collection sections, possible categories were number-coded for ease of entry on an Excel spread sheet, and for subsequent statistical analysis. Other sections containing open-ended questions with provided space on the form for recording of such data.

The data collection form was set out, such that the opening part contained questions pertaining to the demographics of the deceased, followed by a section on the cause, manner and mechanism of death. Following these sections was the section on the autopsy findings, and subsequently the section pertaining to the

findings of ancillary investigations. The next sections provided for the recording of information in specific “cause of death” death, including “hanging”, “gunshot wounds”, and “blunt force trauma”. The concluding sections recorded data pertaining to officials and forensic medical practitioners present at the scene of death and at the autopsy, and to the nature of medical care received surrounding the time of death.

## 5. Methodological Limitations and Constraints

As with any study of a retrospective nature the data to be collected is only as complete as that provided by the documents to be analysed, i.e. in this case, the admissions register, NMSS forms, and PMLL case files. The completeness of these documents depends on the officials primarily completing them fully and to the best of their ability, and duly noting when information is not available. When reviewing the autopsy records it became apparent that the completeness (or “thoroughness”) of the autopsy report depended on the forensic medical practitioner (FMP) conducting the autopsy. This was particularly the case in hanging deaths where the pathological findings noted were “operator dependent”.

Importantly, data was only collected from one mortuary in South Africa, and as such may not be generalised to other mortuaries in other cities and provinces in the country (and beyond its borders). It is suggested that future studies use data from multiple mortuaries in different provinces, not only increasing the sample size, but also increasing the representativeness of the country as a whole. Furthermore, it could be used (due to the wide variety of deaths seen in “deaths in custody”) as a means of determining what information is recorded in the different causes of death by the FMP’s of different provinces and in doing so allow for a standardized guideline for minimum data recording to be co-authored and published.

## 6. Statistical Analysis of Data

All statistical analyses were performed in conjunction with the Department of Statistics at the University of Pretoria using SAS 9.3<sup>®</sup>.

## 7. Ethical Considerations

Research on sensitive individual information needs to provide for ethical considerations necessary to preserve anonymity of the study subjects. The research proposal for this study was approved by the Main Research Ethics Committee of the Faculty of Health Science at the University of Pretoria, prior to the commencement of the study. Furthermore, the study was approved by the MSc Protocol Committee of the Faculty of Health Sciences at the University of Pretoria prior to commencement of the research. Permission was also obtained from the Gauteng Department of Health and the Mortuary Manager of the Forensic Pathology Service in Pretoria to access information from the files at the PMLL. A unique study reference number was allocated to each case file. This ensured that any personal identifying information would not be accessible by persons other than study investigators. No personal details (i.e. names) were used on any of the data sheets. The PMLL files were stored in an archive vault at the PMLL, whilst the data sheets were kept at the Department of Forensic Medicine in the Pathology Building at the University of the Pretoria.

It is important to note that the review of data (existing case files) of this nature, is also an integral and essential responsibility of professional and management staff at this institution (PMLL), for purposes of efficient case investigation, protocol development and resource allocation. The data collection forms, case files and DR numbers were only jointly available to me (the primary investigator) and my co-investigator (Dr du Toit-Prinsloo).

## Chapter 3: Results

### 1. Overview

Over the period reviewed (2007 – 2011), a total of 94 cases of “death in custody” were identified according to the stated inclusion criterion and analysed with the data collection form, which aided in the categorisation and statistical analysis of the data to be reviewed. The admission profile of cases over the 5 year period is depicted in table 2, according to total deaths for the year and in the 3 separate categories of “deaths in custody”. The data indicates that for 2007 and 2008 the number of deaths was constant (12), and the following year doubled to 24, and then 25. On average there were 18.8 deaths in custody over all three categories per year, with an average of 9.8 police action, 6.6 police custody, and 3.4 correctional services custody deaths per year, respectively.

The category with the greatest number of deaths is that of police action followed by police custody and lastly, correctional services custody. The number of police action deaths is nearly double that of police custody and nearly triple that of correctional services custody deaths.

Year	Deaths as a result of police action	Police custody deaths	Correctional Services custody deaths	Total Deaths
2007	2	6	4	12
2008	8	2	2	12
2009	13	9	2	24
2010	15	6	4	25
2011	11	5	5	21
Total	49	28	17	94

Table 2. Number of deaths in custody per year at the PMLL

## 2. Demographics

The gender, age and race characteristics of the study population are illustrated in tables 3 – 5 below. Males accounted for all but 4 cases included in the study. The increase in the annual number of deaths depicted in table 3 is shown to be due to the increase in the number of male deaths per year over the time period. The mean age is similar for the “police action” and “police custody” deaths categories but almost 30% higher for the “correctional services” custody category. The median reflects a similar scenario with an increase for the correctional services category in comparison with the other 2 categories. The majority of deaths in custody at the PMLL are blacks (84%), followed by coloured (7%), whites (6%), and Asians (2%) (of admission).

Year	Deaths as a result of police action		Police custody deaths		Correctional Services custody deaths		Total deaths	
	Male	Female	Male	Female	Male	Female	Male	Female
2007	1	1	6	0	4	0	11	1
2008	8	0	2	0	2	0	12	0
2009	13	0	9	0	2	0	24	0
2010	14	1	5	1	4	0	23	2
2011	11	0	4	1	5	0	20	1
Total	47	2	26	2	17	0	90	4

Table 3. Deaths in custody according to gender

Category	Range (years)	Mean (years)	Median (years)
Overall	16 – 61	32.3	30
Police Action	17 – 49	30.4	29
Police Custody	16 -57	31.5	30
Correctional Services Custody	20 – 61	39.0	39

Table 4. Deaths in custody according to age

Category	White	Black	Coloured	Asian
Police Action	0	47	2	0
Police Custody	5	20	2	1
Correctional Services Custody	1	12	3	1
Total (94)	6	79	7	2

Table 5. Deaths in custody according to race



### 3. Place of Death

The place of death is first presented as an overview of all the deaths analysed, and then separated according to category of death. This is depicted in figure 1 and table 6. The data shows that 47% of deaths in custody occur pre-arrest. All of these cases occur within the category “death as a result of police action”. As the data indicates, no deaths occurred between arrest and the police station.

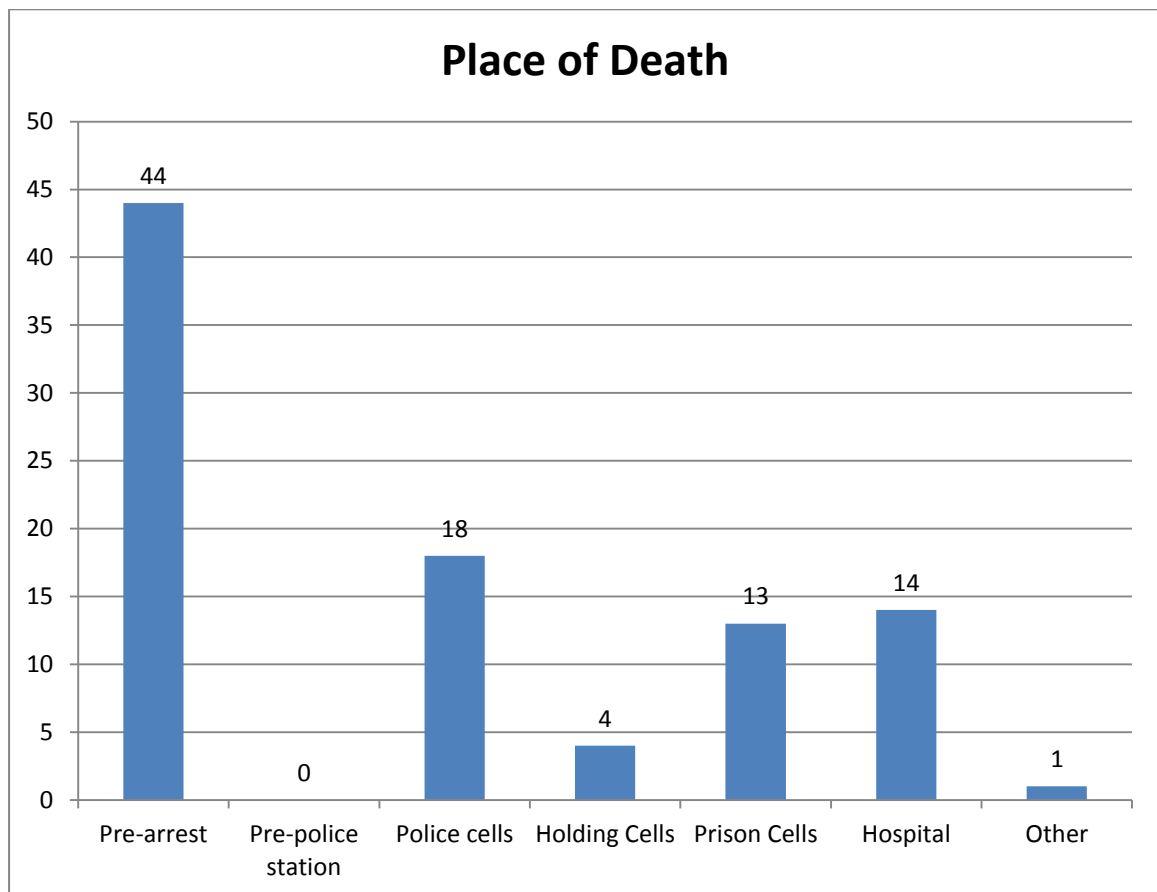


Figure 1. Deaths in custody according to place of death

Category	Pre-arrest	Pre-police station	Police cells	Holding cells	Prison cells	Hospital	Other
Overall	44	0	18	4	13	14	1
Police Action	44	0	0	0	0	4	1
Police Custody	0	0	18	4	0	6	0
Correctional Services Custody	0	0	0	0	13	4	0

Table 6. Deaths in custody according to place of death

#### 4. Cause, Mechanism and Manner of Death

These 3 headings are the focus of the medico-legal investigation of death. The study findings are depicted in tables 7 and 8 and figure 2. The primary medical cause of death was noted from the autopsy reports included in the case files. The most common cause of death was gunshot wound, followed by hanging, blunt force trauma, and undetermined. Other causes of death constitute approximately 10% of the deaths. The mechanism of death was haemorrhage in 13 cases, rhabdomyolysis in 1, and acute peritonitis in 2 as reflected in figure 2. The most common manner of death was homicide, with over half of the deaths, followed by suicide, natural and undetermined were equally common, and accidents.

The “primary medical cause of death” is “the disease or injury which initiated the train of morbid events leading directly to death”.<sup>44</sup> The “mechanism of death” is the physiological derangement which ultimately results in death. The “manner of death” explains the circumstances under which the death occurred.

Category	Gunshot Wound	Hanging	Blunt Force Trauma	Other	Undetermined
Overall	45	17	10	15	7
Police Action	45	0	4	0	0
Police Custody	0	13	5	5	5
Correctional Services Custody	0	4	1	9	3

Table 7. Deaths in custody according to primary medical cause of death

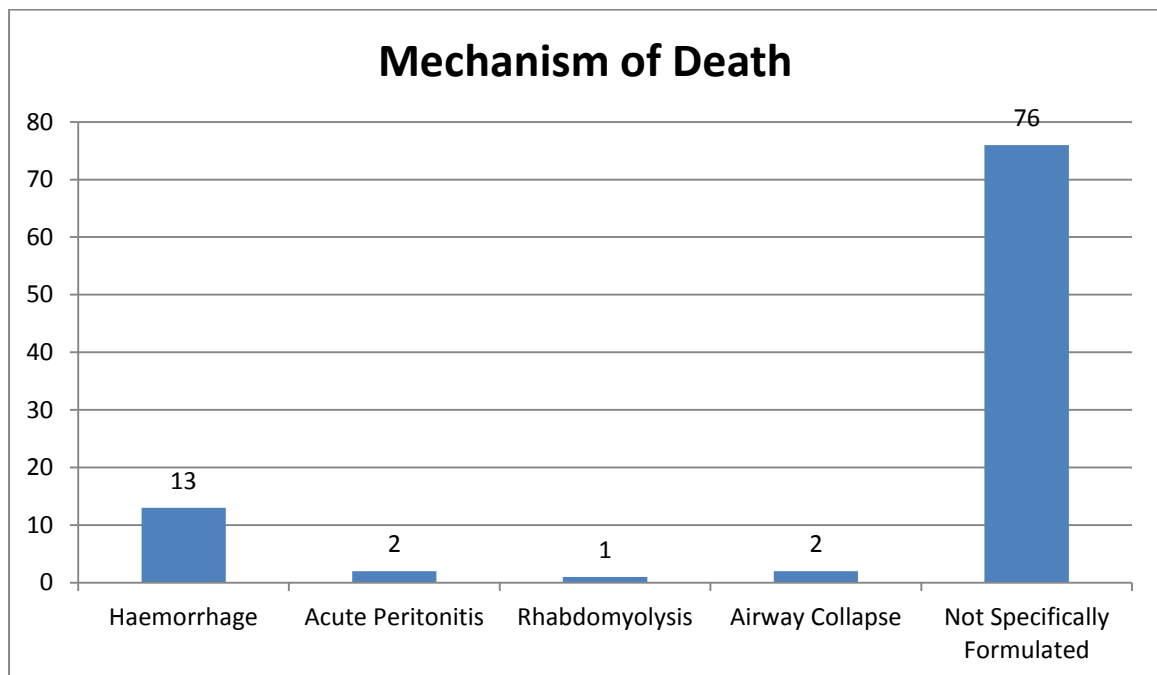


Figure 2. Deaths in custody according to mechanism of death

Category	Homicide	Suicide	Accident	Natural	Undetermined
Overall	48	18	6	11	11
Police Action	44	1	4	0	0
Police Custody	3	13	2	3	7
Correctional Services Custody	1	4	0	8	4

Table 8. Deaths in custody according to manner of death

### 5. Autopsy Type

In all cases a full autopsy was performed, including an external examination of the clothes, if applicable, followed by full evisceration and dissection of the organs. There were no viewings or partial autopsies.

### 6. Ancillary Investigations

This heading includes blood alcohol concentration (BAC) tests, toxicology screens, and histology. The results are shown in figures 3 to 8. BAC tests were performed on 89 (94%) of the cases. BAC tests were not performed in the remainder owing to the length of time the deceased were in hospital before death occurred. Of the BAC tests done 73% were negative i.e. reported 0.00g/dl. In 4.5% alcohol was detected, but below the legal limit of 0.05g/dl. Eleven per cent (11%) had a BAC above the legal limit, and the same percentage had results not available at the time of the study. The range of BAC performed was 0.00 to 0.39g/dl, with a mean of 0.022g/dl and standard deviation of 0.064g/dl. Of greater concern was the time delay from performing the BAC test to the test results becoming available. The time delay increased from 2007 (mean of 12.9 days) to 2010 (mean of 221.2 days) and then started decreasing in 2011 (mean of 171.1 days). There was a combined average of 144 days with a median of 156 days.

Twenty two per cent (22%) had an accompanying toxicology screen – to detect illicit drugs such as cannabis, amphetamines, etc. or medications such as hypnotics and sedatives - with the majority (81%) not yet available. Of those reported 1 had a negative finding and 1 each carbon monoxide, illicit drugs (cocaine), and prescription medication.

Forty five per cent (45%) of cases had a histological examination accompanying the autopsy. Thirteen (13) of these examinations confirmed the cause of death, 1 established the cause of death, and 28 did not contribute to determining the cause of death. The remaining cases did not have a histological examination performed, most commonly because the primary medical cause of death was gunshot injury.

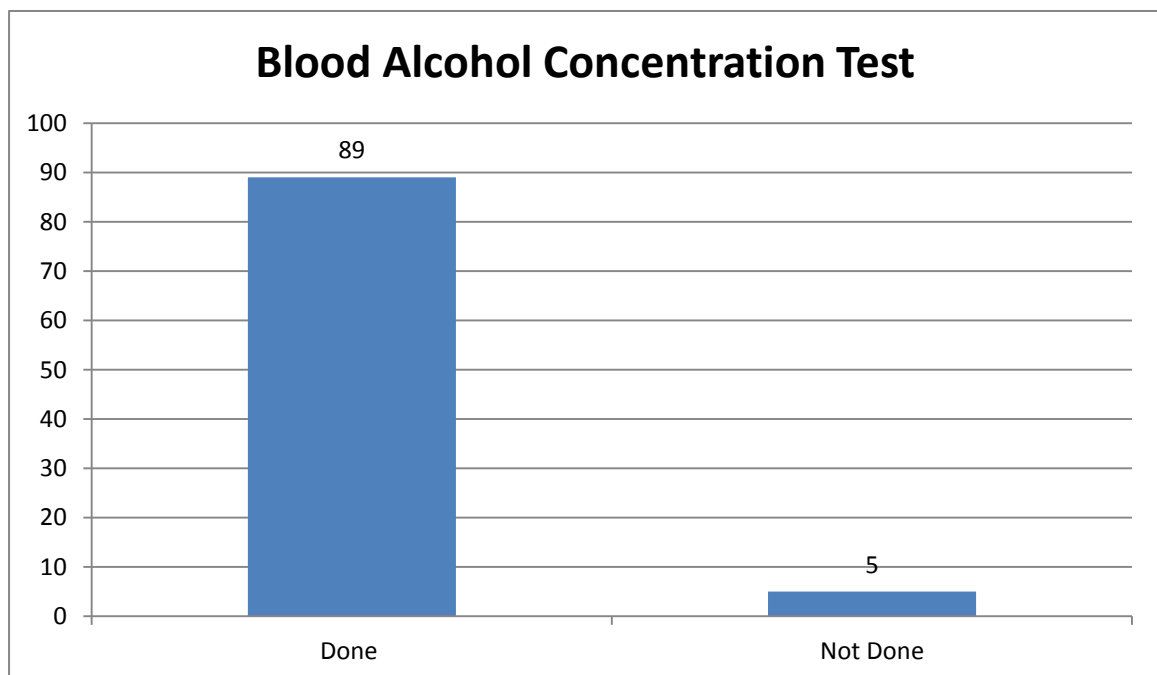


Figure 3. BAC tests performed

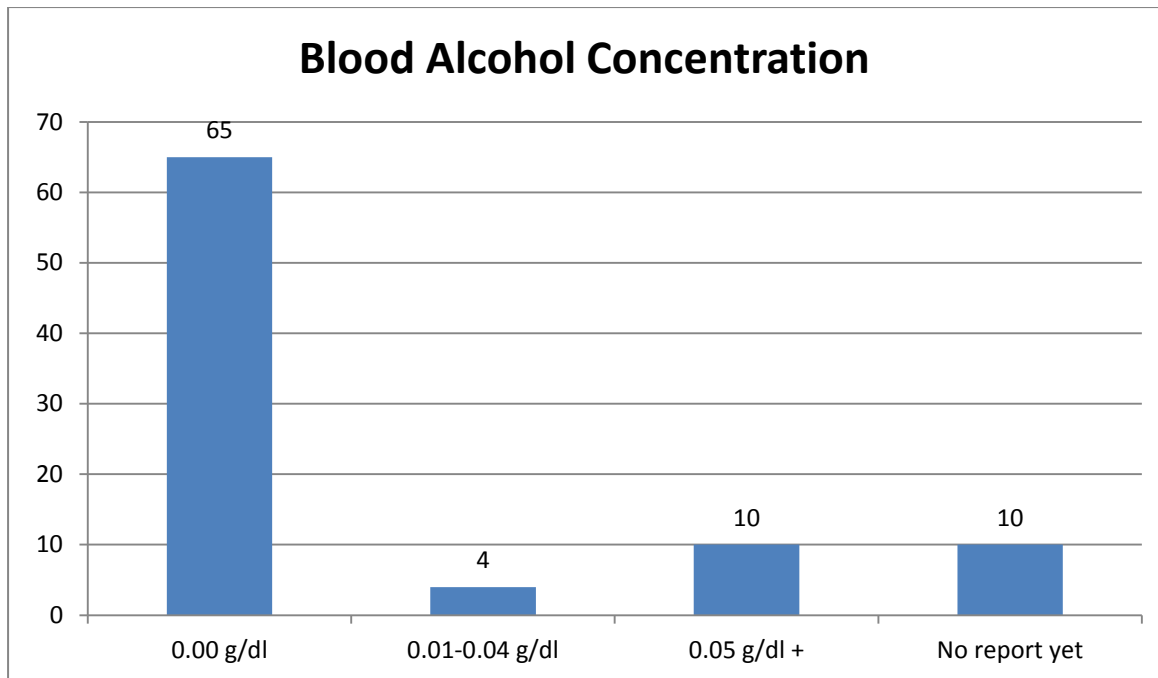


Figure 4. Values of BAC on tests done

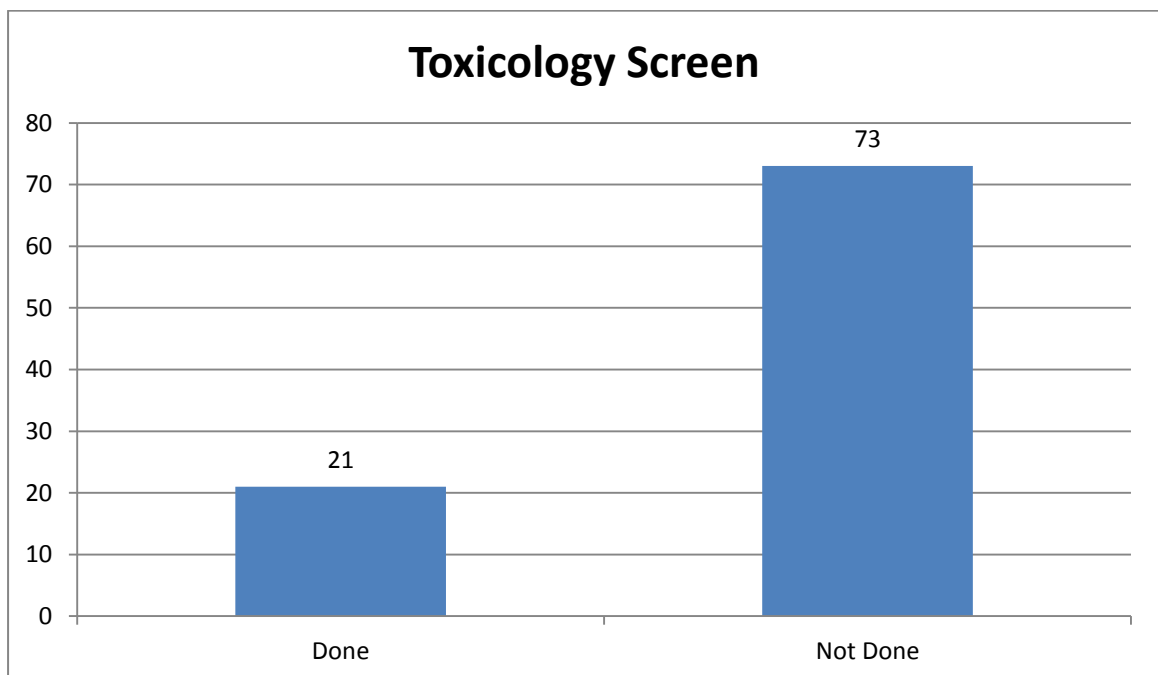


Figure 5. Toxicology screens done

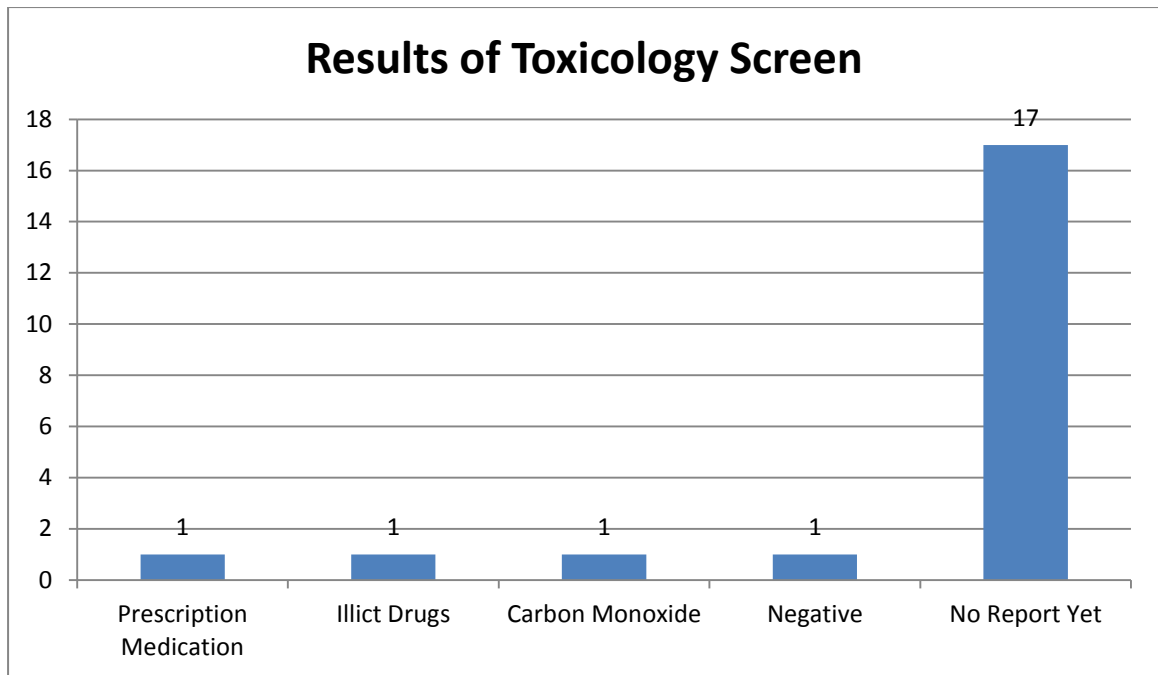


Figure 6. Results of toxicology screens

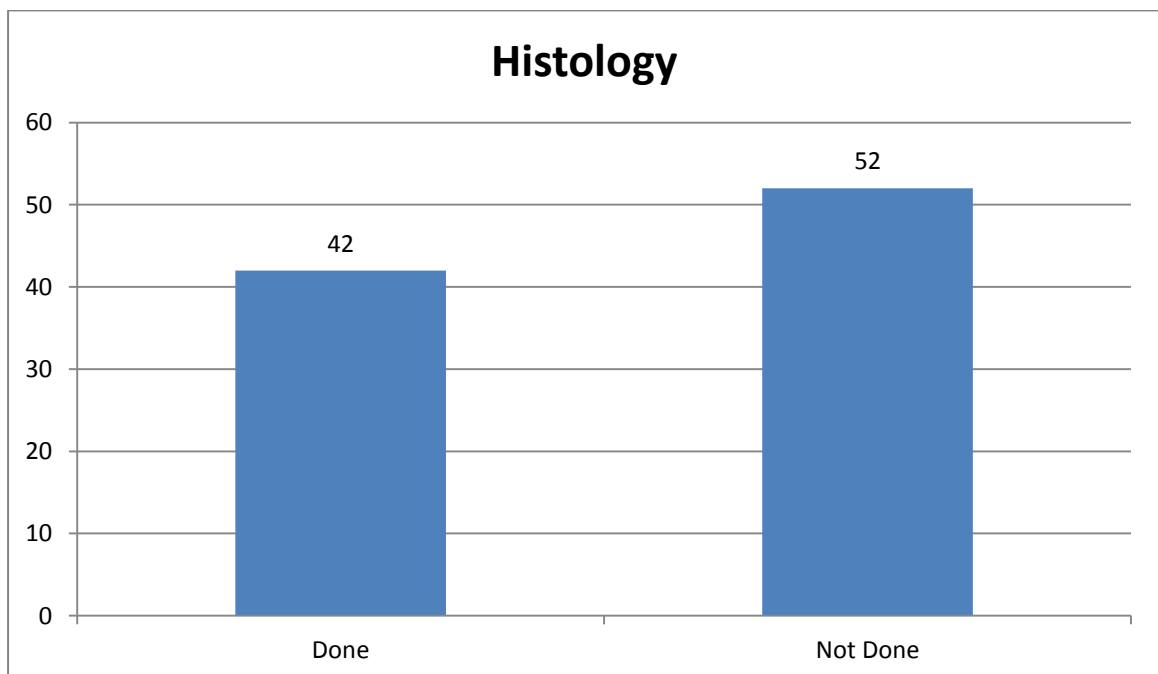


Figure 7. Histological examinations done

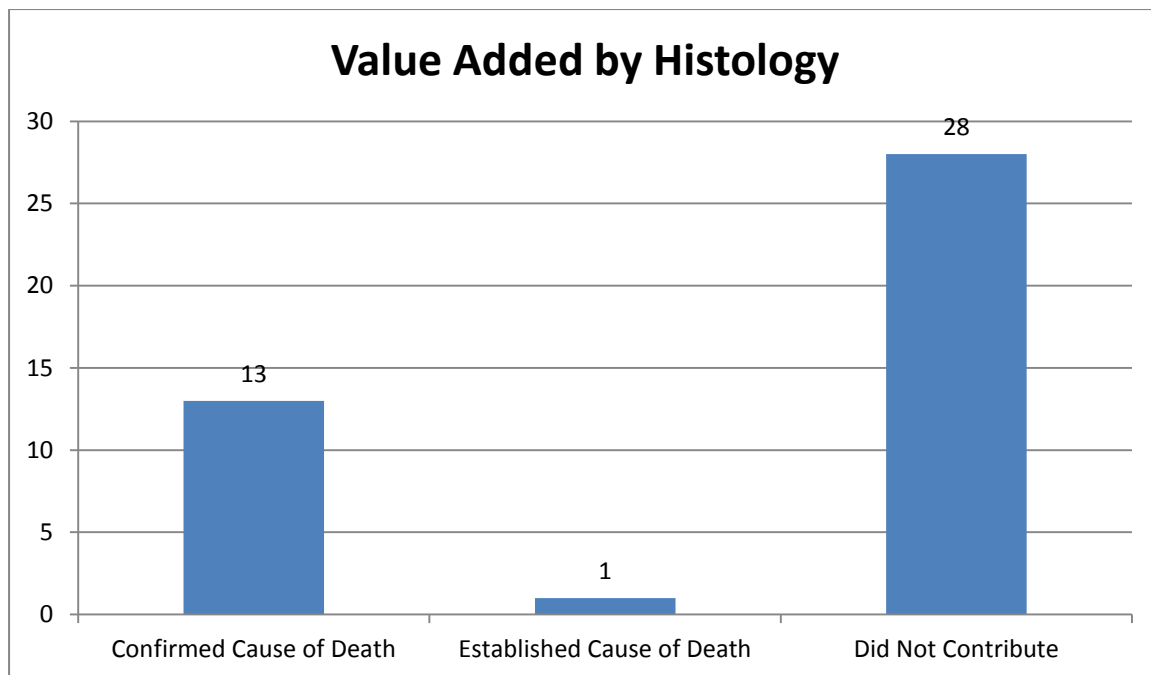


Figure 8. Value added by histological examinations

## 7. Officials

This category contains the results pertaining to officials at the scene, officials at the autopsy, and the rank of the forensic medical practitioner performing the autopsy. The results are shown in figures 9 to 11. Seventeen (17) of the 80 non-hospital scenes were noted as being attended by forensic medical personnel. Four (4) of the police action deaths scenes were attended by an FMP, with 1 of those being attended by an ICD official. A FMP was present at 10 of the police custody deaths scenes, with an ICD official attending 3. Three of the correctional services custody deaths scenes were attended by an FMP, with no record of a scene being attended by a representative from the Judicial Inspectorate of Correctional Services.

At autopsy, all were attended by an FMP and a forensic officer. Of the 77 relevant cases, an ICD official attended 57 of the autopsies (74%). No autopsy was recorded as being attended by a representative of the JICS.



Eight (8%) autopsies were performed by a medical officer, 29 (31%) by a registrar, and 57 (61%) by a specialist forensic pathologist, including 2 performed by the chief forensic pathologist.

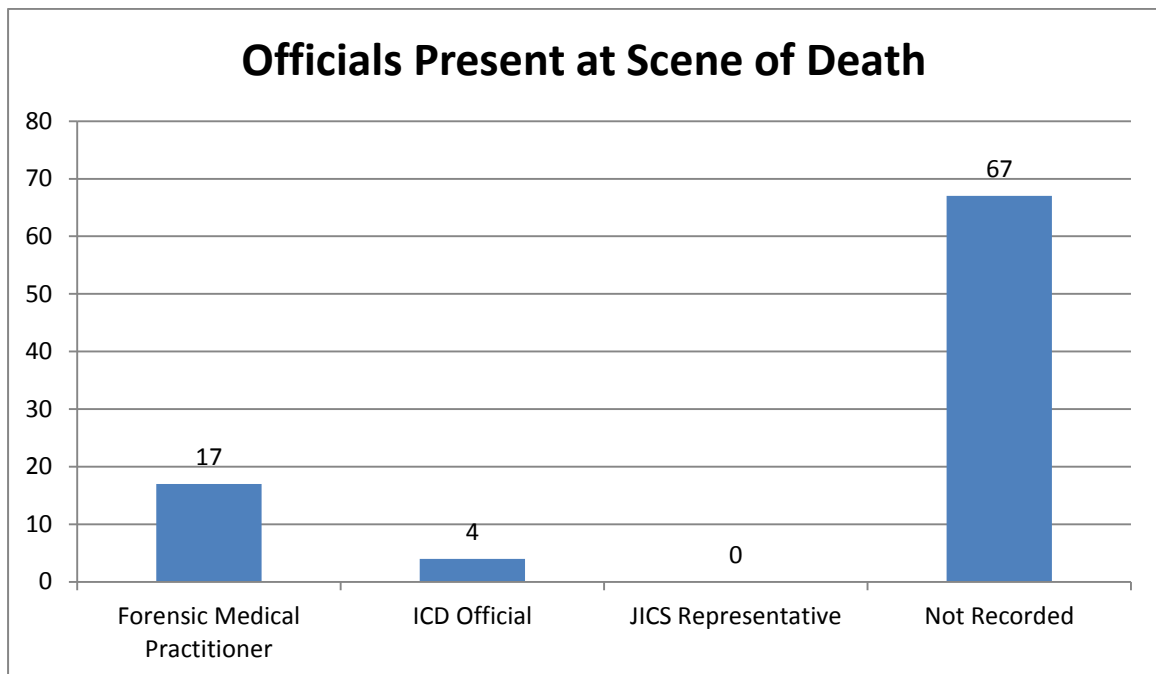


Figure 9. Officials present at the scene of death

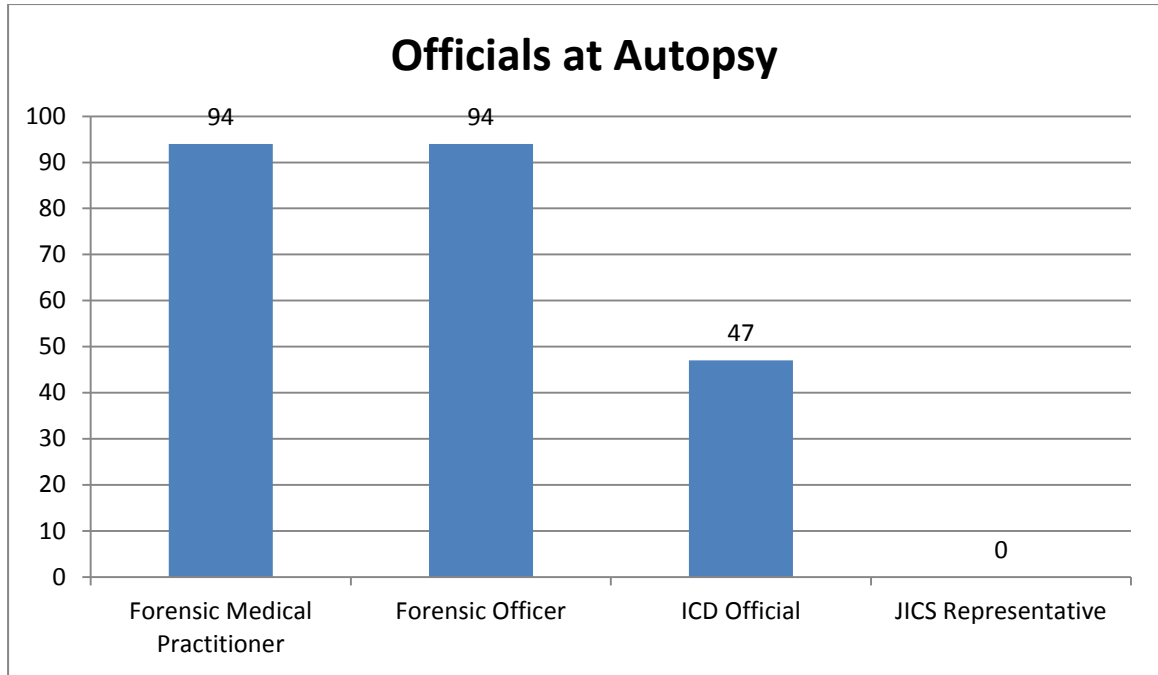


Figure 10. Officials present at the autopsy

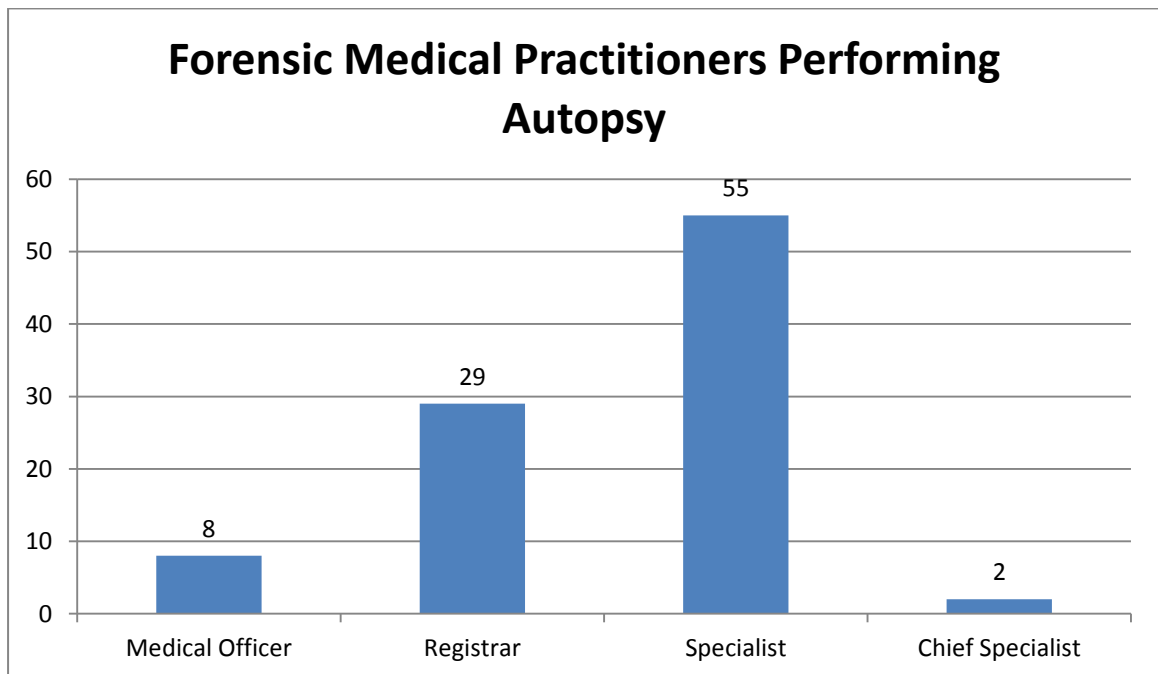


Figure 11. Rank of Forensic Medical Practitioner performing the autopsy

## 8. Medical Treatment

This is divided into whether or not medical treatment was administered, and if so what type of medical treatment. This is shown in figures 12 and 13. In 53 cases (57%) medical treatment was sought in the peri-mortem period. The most common form was emergency care by paramedics in 35 cases (66% of those receiving care). It is difficult to say whether emergency care was actually given by the paramedics or if they just declared the individual dead as this distinction is not made in the NIMSS. In the other cases, treatment was obtained in hospital, either a public or private hospital, or the hospital section of the correctional services facility.

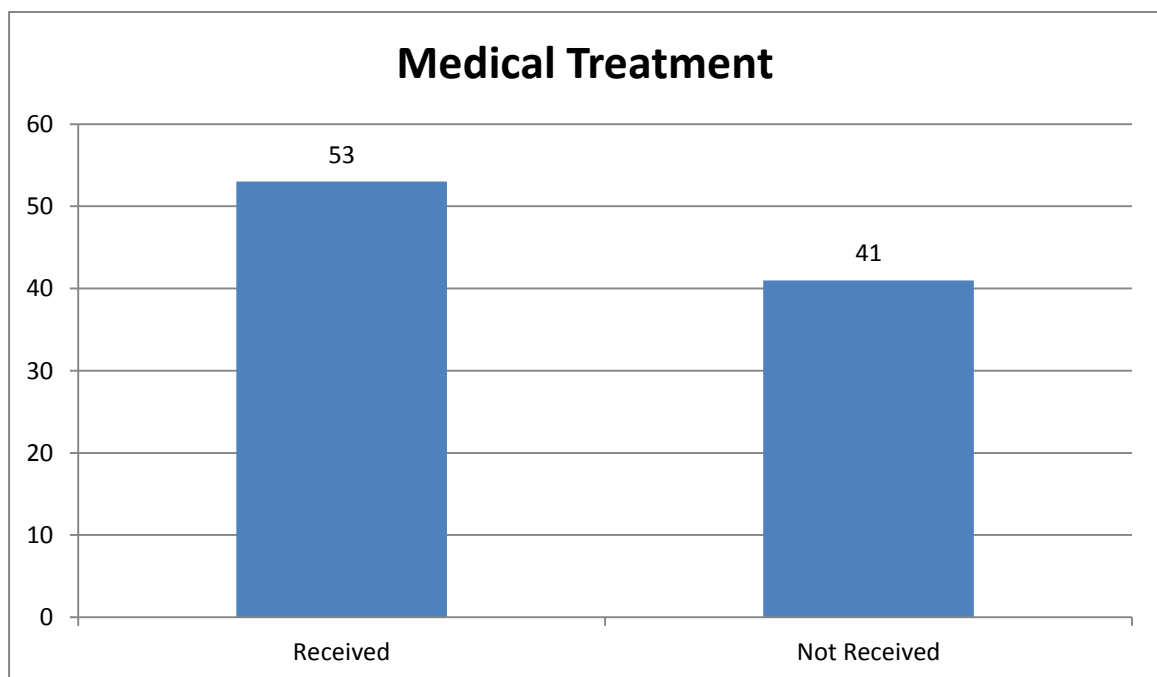


Figure 12. Deaths in custody according to medical treatment

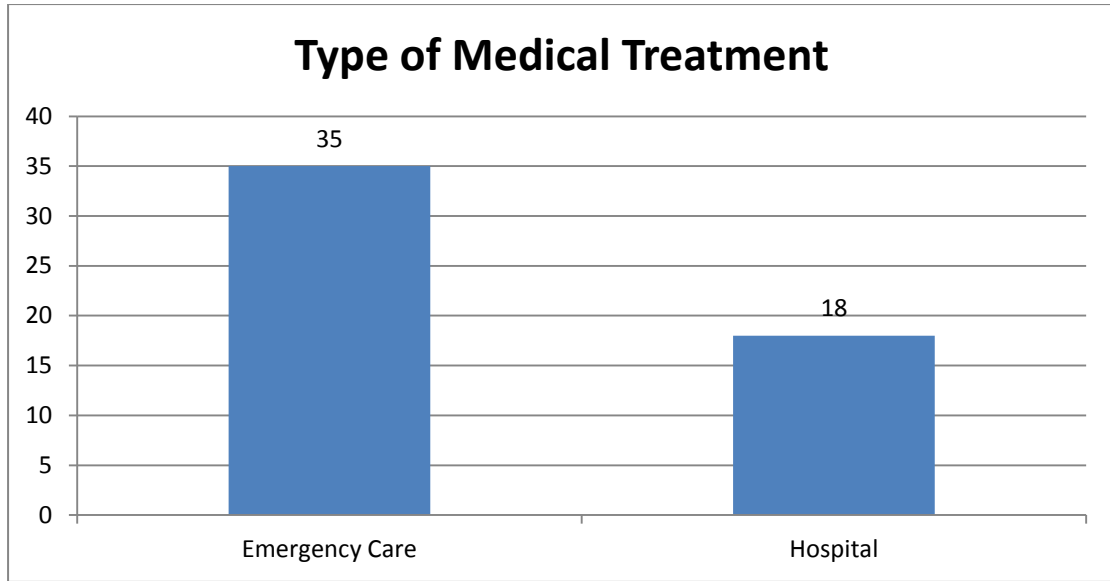


Figure 13. Medical treatment according to type obtained

### 9. Post Mortem Interval (PMI)

This section depicts the post mortem interval, in this case the time between death and autopsy as shown in figure 14. The range of post mortem interval was between 0 and 28 days, with a mean of 2.7 days and a median of 2 days.

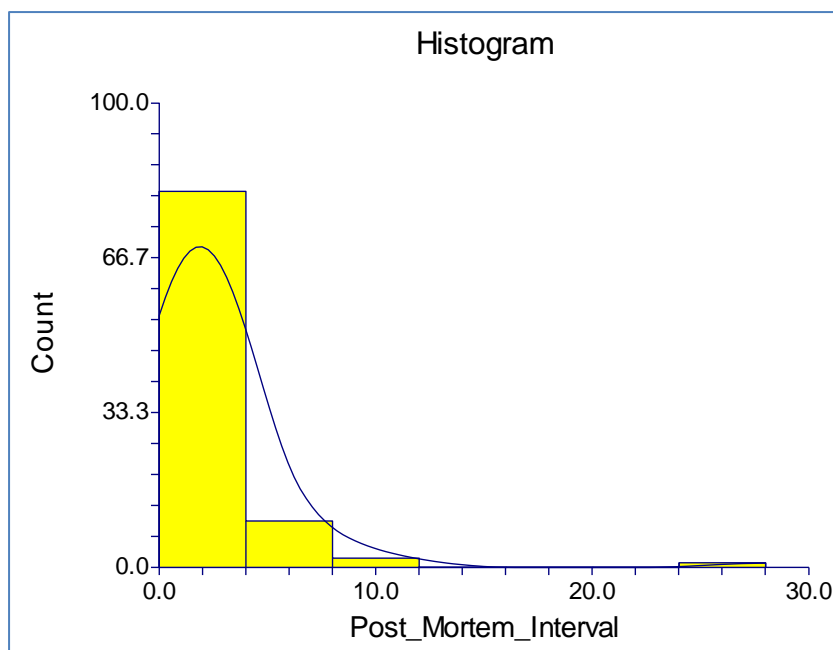


Figure 14. Post mortem interval distribution

## 10. Hanging Cases

This section presents the data obtained specific to the 17 hanging cases. The results are shown in tables 9 to 13. In all but 1 case, the ligature was present at autopsy. The tongue was protruding in approximately half of the cases, with rivulets of saliva seen in less than half of the cases. In all cases a “bloodless” neck dissection was performed by the forensic medical practitioner performing the autopsy.

Analysis of the furrow marks recorded indicates 15 single and 2 double furrow marks. The 2 cases with double furrow marks had a mark above and below the thyroid cartilage with 6 other cases reporting furrow marks above the thyroid cartilage. In 9 of the cases the location of the furrow mark in relation to the thyroid cartilage was not noted. In 4 cases a partial furrow mark was noted (in contrast to a circumferential furrow mark without skin sparing). In all but 1 case an apex of suspension was identified. In 1 case no notes about the furrow mark were made.

Twelve (71%) of the decedents used items of clothing to fashion the ligature, 24% used bed linen present in the cell, and in 1 case “string” was used.

Twelve (71%) of the “bloodless” neck dissections showed no abnormalities, 3 (18%) showed soft tissue haemorrhages and the other 2 cases showed unrelated or incidental findings.

	Ligature Present	Tongue Protruding	Rivulets of Saliva	Bloodless Neck Dissection Performed
Yes	16	9	7	17
No	1	8	10	17

Table 9. Post mortem examination findings (part 1)

	Single Furrow Mark	Double Furrow Mark	Above Thyroid Cartilage	Through Thyroid Cartilage	Below Thyroid Cartilage	Partial Furrow Mark	Point of Suspension
Count	15	1	8	0	2	4	15

Table 10. Post mortem examination findings (part 2)

Ligature Material	Clothes	Bed Linen	Other
Count	12	4	1

Table 11. Post mortem examination findings (part 3)

Bloodless Neck Dissection Findings	No Abnormalities	Soft Tissue Haemorrhage	Cartilage or Bone Fractures	Other
Count	12	3	0	2

Table 12. Post mortem examination findings (part 4)

Place of Suspension	Inside Cell	Shower Area	Tree	Not Recorded
Count	4	1	1	11

Table 13. Hanging cases according to point of suspension

## 11. Gunshot Wound Cases

This section presents the data obtained specific to the gunshot wound cases. The results are shown in tables 14 to 15. Forty-two (93%) of the autopsy reports did not report the range of fire. One case reported it as being close range, and in 2 cases it was reported as being a distant gunshot wound.

The most common position of the gunshot wound was the thorax -38%- (anterior and posterior aspects of the chest), followed by the back (36%), arms (31%) and equally common in the head, abdomen and legs (27%), with 3 cases of gunshot wounds to the neck and 1 case of gunshot wound to the genital and pelvic region. Many of the cases were multiple gunshot wounds to multiple regions of the body.

Range of Fire	Close Range	Distant	Not Mentioned
Count	1	2	42

Table 14. Gunshot wound cases according to range of fire

Anatomical Location of GSW	Head	Neck	Thorax	Abdomen	Arms	Legs	Back	Genitals and Pelvis
Count	12	3	26	11	14	12	6	1

Table 15. Gunshot wound cases according to position of gunshot wound

## 12. Natural Deaths

There were 11 cases (12%) where the cause of death was ruled to be due to natural disease processes. The causes of death and their frequencies are shown in Table 16.

<b>Cause of Death</b>	<b>Frequency</b>
Coronary Artery Disease	3
Cerebrovascular Incident	2
Gastrointestinal Haemorrhage	1
Pulmonary Thromboembolism	1
Tuberculosis (with/without pneumonia)	2
Viral Myocarditis	1
Hypertensive Heart Disease	1

Table 16 Primary Medical Causes of Natural Deaths



## Chapter 4: Discussion

### 1. Overview

An average of 2283 bodies was examined annually at the Pretoria Medico-Legal Laboratory over the 5 year period from 2007 to 2011, based on the NIMSS forms. On average, 19 of the above cases were “deaths in custody”, constituting less than 1% of the total case load. However, for reasons already noted, the medico-legal investigation of these cases must be carefully and thoroughly handled. Despite these cases representing only 1% of the annual caseload the burden of investigation and time spent on these cases is out of proportion to the number of cases. The results of this study will help to document the current state of the medico-legal investigation into these deaths, and will help to inform or develop protocols for future verification and implementation.

The 94 deaths which formed the subjects of this study represent only part of the approximately 2000 reported deaths in custody per year in South Africa. In contrast, in Australia there had been only a reported 2 056 deaths in custody from 1980 to 2008, in a population only half that of South Africa's. The rate of death per 1000 prisoners in Australia is 2.0 per 1000 for males and females.<sup>4</sup> The rate of death per 1000 prisoners in South Africa was reported as 7.0 per 1000 in 2007, the last year for which death rates were reported.<sup>18</sup>

### 2. Year of Death

In the study, the number of custody deaths per year is constant for 2007 and 2008, but doubled in 2009, and remained at similar levels for 2010 and 2011 compared to 2009. It must be noted that not all “natural” deaths are admitted to the PMLL as this is not mandated by the legislation. As previously discussed a death certificate can be completed by a medical practitioner in cases of “natural” deaths, and these bodies would not undergo a medico-legal investigation.

### 3. Category of Death

In the study at the PMLL, deaths in custody as a result of police action were the commonest (52%), followed by police custody deaths (30%), with correctional

services custody deaths being the least common (18%). When dividing the cases between the 2 independent agencies investigating, of the 87 ICD cases 56% were police action deaths and 44% were police custody deaths. This is in comparison with the official ICD reports<sup>1</sup> which indicate a national (and Gauteng Province) proportion closer to 66% police action deaths, and 33% police custody deaths. The Bhana study<sup>17</sup> identified an even greater preponderance towards police action. This will be more closely looked at in the sections discussing the manner and cause of death.

#### 4. Demographics

In this study the vast majority of decedents were males. This can be compared to the mortuary's actual ratio of male:female admissions of approximately 3:1. There were no female prison deaths admitted to the PMLL.

The analysis of the ages of the deceased indicates an overall range between 16 and 61 years, a mean age of 32.3 years and a median age of 30 years. Police action and custody deaths reflect a similar range, mean and median ages. The correctional services custody deaths however range from 20 to 61 years with a higher mean and median age of 39 years (for both). The ICD reports<sup>1</sup> indicate a peak of deaths among the 26 to 35 years old age group (47%) with 70% of deaths ranging between 19 and 35 years old. No mean or median age is reported for comparison. The Bhana study<sup>17</sup> reported a range of 10 to 61 years of age with a mean age of 28.6 years for the 2 categories studied. The JICS reports unfortunately do not provide any figures regarding the ages of the deaths occurring within its investigative jurisdiction, therefore there is no national comparison for that determined in this study. The higher age of those dying in prison custody is consistent with international studies in Ontario (mean age of 40.3 years)<sup>45</sup>. The NDICP (Australia) reports a median age at death of 43 compared to that of the prisoner population of 33.2. Approximately 75% of police action or police custody deaths were younger than 40 years old, most commonly between 25 and 39 years old.<sup>4</sup>

The analysis of the race of the deceased indicates that 84% are black, 7% coloured, 6% white, and 2% Asian. There are no race figures available in the ICD and JICS reports. Bhana's study<sup>18</sup> reported 91.5% black predominance.

## 5. Place of Death

The most common place of death, in relation to the most common category of death, is pre-arrest. This occurs between the time the suspect was identified and the time of arrest. This “place” accounts for 47% of all deaths. The second most common place of death is in police holding cells operated at police stations and elsewhere. Deaths in hospitals (15%) and prison cells (14%) follow, “other” places being the least common. The “other” death occurred at a police officer’s home and was the alleged homicide by a police officer of his girlfriend.

In comparison to South African literature, the ICD reported<sup>1</sup> that 58% of police action and police custody deaths died at the crime scene with 21% dying in hospitals and 17% in police cells. No data was available from the JICS as to the place of death. This is consistent with data from the NDICP<sup>4</sup> where over 50% occur in cells and approximately 40% in public or prison hospitals

## 6. Cause and Mechanism of Death

The primary medical cause of death may be defined as “the disease or injury which initiated the train of morbid events leading directly to death” by Schwar et al<sup>44</sup>. This is one of the main objectives of conducting a post mortem examination, together with establishing (1) the mechanism and (2) the manner of death. The primary medical cause of death is noted on the front page of the medical practitioner’s (MP) autopsy report. The ultimate decision as to what the primary medical cause of death is, is left in the hands of the courts.

The most common cause of death in the study was gunshot injury resulting in a total of 45 deaths (48%). This is not distributed throughout the categories. It is only found in police action deaths, of which 92% were gunshot injuries. There were also 4 blunt force trauma deaths in the circumstances of police action. The second most common cause of death was hanging, which only occurs in police custody and correctional services custody, and is split 13 (77%) to 4 (23%). This is the most common cause of police custody deaths, 46% of these deaths. There were 11 “natural” deaths. There were 7 cases where the cause was “undetermined”. The cause was undetermined or unascertained at autopsy alone. The most common cause of death in correctional services custody was “natural causes”.

Unfortunately, the annual ICD report does not include specific information regards the primary medical cause of death. In the Bhana study<sup>17</sup> the cause of death in police action deaths was found to be gunshot wound in 75% of cases. Furthermore, in police custody deaths, 50% were hangings and 25% had undetermined causes of death. In Australia<sup>4</sup>, the most common cause of death in correctional services was “natural” causes followed by hanging. The cause of death in police action/custody cases was most commonly due to “external/multiple trauma” or gunshot wounds.

The mechanism of death may be defined as the terminal or pre-terminal pathophysiological change which ultimately results in death. The mechanism is causally related to the primary medical cause of death. The mechanism is important in the context of time frame between injury and death, e.g. an individual is involved in a motor vehicle accident and suffers a head injury. The individual subsequently dies a day later in hospital. The cause could be head injury and the mechanism of death could be raised intracranial pressure. As there is a relatively long time between injury and death, the possibility of medical negligence comes to the fore. The mechanism of death could be important in determining whether or not medical negligence was present. Unfortunately, in many cases the mechanism of death was not formulated as part of the autopsy report.

The most frequent mechanism of death determined was haemorrhage occurring in approximately 20% of the cases. Other mechanisms of death were acute peritonitis, rhabdomyolysis and airway collapse. In the majority of cases the mechanism of death was not identifiable for varying reasons.

### 7. Manner of Death

The most common manner of death in the study was homicide (51%), which correlates with the number of gunshot wounds as the cause of death. All but 1 of the gunshot wounds was a homicide (the other being a suicide), with 3 cases of homicide in police custody and 1 in correctional services custody. The category with the most homicides was police action, correlating with the cause of death category

above. The second most common manner of death was suicide (20%) with 18 cases, most of which were in police custody and 5 in correctional services custody. All but 1 were suicide by hanging, the other being a gunshot wound. The third most common manner was divided equally between natural and undetermined deaths. Most of the natural deaths were in correctional services custody, but some did occur in police custody. Of the undetermined deaths most were in police custody with several in correctional services custody. The least common manner was accidental. This includes 1 case of 3 suspects dying in a motor vehicle accident, a case of burns, a case of accidentally falling down the stairs, and 1 case of falling from a height. The most common manner in police custody was suicide and the most common manner in correctional services custody was natural.

### 8. Autopsy Type

The Regulations<sup>42</sup> define an autopsy as “the post mortem dissection of a body so as to determine the cause of death and the nature of injuries and disease processes which may be present.” In certain circumstances (where there is a good medical history and good chances of a natural death having occurred) a viewing autopsy is performed. In other cases a limited autopsy is performed. In these cases the post mortem examination is terminated when obvious macroscopic pathology is seen which indicates the cause of death. If unnatural death is probable, a full autopsy is performed. The study revealed that 100% of cases received a full autopsy. Cases of deaths of individuals in custody should undergo a full autopsy as part of a comprehensive medico-legal investigation protocol comparable with that used in Sudden Unexpected Death of Infants (SUDI) cases.

### 9. Histology

Histological examinations were performed in 42 (45%) cases. Thirteen cases confirmed the suspected cause of death, 1 case established the cause of death (viral myocarditis) and 28 were “irrelevant” as to formulating the cause of death. When determining the proportion of deaths per category with histological examinations, 16% of police action, 64% of police custody, and 82% of DCS custody deaths had an accompanying histological examination. It is understandable that the rate of histology in police action deaths was relatively low as the cause of death is, in most cases was

straight forward, due to the damage witnessed at autopsy from the gunshot wounds inflicted.

The use of histology in the medico-legal investigation is controversial with studies showing that they do not contribute to the determination of the cause of death. Specifically in hanging deaths, Tse et al<sup>48</sup> reviewed 100 cases and found that in no cases did the use of histology assist in determining the cause of death. In 35% of cases no microscopic finding of note was discovered. This study confirmed that histology can be used to confirm natural findings in the body at death, such as pneumonia or cancer, which could be related to the reason why the hanging occurred, but not to the cause, manner or mechanism of death itself in hanging cases.

#### 10. Blood Alcohol Concentration Tests

The study revealed that in almost all cases BAC tests were requested. Where results were available, 14 of 80 tests was positive ranging from 0.01 to 0.39g/dl. A positive result can give insight to unusual behaviour demonstrated by the decedent before death. An individual picked up by the police and kept in holding cells because of strange behaviour and a smell of liquor on the breath can result in death in police custody. This individual may have had a head injury or may have acute alcohol poisoning. There was 1 case where the primary medical cause of death was formulated as due to “suspected alcohol poisoning”. The question which needs to be addressed is whether SAPS can be trusted with making the call of whether or not the individual needs to be taken to hospital or to sleep off the alcohol. At the minimum, regular check-ups of these individuals in the cells needs to be made.

#### 11. Toxicology Screens

In cases of substance abuse, toxicology can be requested. The most commonly tested for substances are illicit substances, e.g. dagga, cocaine, etc. and prescription medication, such as sedatives and anticonvulsants, which can cause side effects resulting in death. Individuals who die in custody constitute a key subset of the community. Drug abuse is prevalent in correctional centres. The use of illicit

substances can give insight to suspicious behaviour prior to death. There must be greater vigilance regarding the possibility of drug usage in cases of deaths in custody. Routine toxicological investigation should form part of a protocol to be used in the medico-legal investigation of deaths in custody.

The study discovered that 22% of the cases had an accompanying toxicology screen, 81% were unreported as of the time of the study, and here lies the problem with these investigations in South Africa. Of those reported, one had a negative finding, and 1 each reported carbon monoxide, illicit drugs (cocaine metabolites), and prescription medication. Just from these 4 results, it can be seen that there is value to the investigation when performed.

Associated with custody deaths is the occurrence of “excited delirium”. It is characterised by an “acute onset of bizarre or violent behaviours, including aggression, combativeness, hyperactivity, extreme paranoia, hallucinations, superhuman strength or incoherent shouting.”<sup>48</sup> This has been noted most frequently following cocaine use, but may also be seen after using lysergic acid diethylamide (LSD), phencyclidine (PCP) or methamphetamine.<sup>48</sup> The individual usually struggles with the police officers, and is then restrained, stops struggling and is discovered to be dead.<sup>48</sup> This type of case was not found in this study, but police officers should be cautioned about confronting these individuals. After being carefully restrained, they should be taken immediately to a medical centre for treatment.<sup>48</sup>

## 12. Officials

The presence of medical practitioners and members of the ICD and JICS is of paramount importance in the investigation of these cases. Their presence is essential at the scene of the death to understand the circumstances surrounding the death, to gather witness statements, to gather evidence and to examine the body at the scene of death. ICD/JICS officials are needed at the autopsy to provide information from the scene of death as well as assisting with the correlation of post mortem findings with findings at the scene of death or history of the incident resulting in the death. If the ICD (IPID) investigator or investigating officer is not present, and no forensic medical practitioner was present at the scene, no background surrounding the death may be known, including the fact that this was a death in

custody. Their presence also allows them to see first-hand the autopsy and be able to understand, to a degree, what is described in the autopsy report formulated by the forensic medical practitioner.

Firstly, this study revealed that 17 of the 94 scenes were attended by forensic medical personnel, 18%. There may be various reasons to this. This can be falsely low for the following reason: 1 FMP attends the scene, as he/she is on call, and another performs the autopsy without informing that FMP that the scene was attended and what the findings at the scene were. This does occur, as discovered while analysing the files. Communication between pathologists must be higher, especially when it is possible for this to happen. A scene was noted as being attended only if it was written as such in the autopsy report or if the FMP noted such on another form in the PMLL case file; another limiting factor for correct numbers. Complimentary to the number of scenes attended by FMP's is the number of other officials noted as being present at the scene, as only those noted in the autopsy report were marked as being present, whether or not they were actually present at the scene. If you analyse this figure further, the author discovered that only 9% of police action deaths, 36% of police custody deaths, and 18% of CS custody scenes were attended by FMP's. Another factor involved in whether or not a scene is attended is whether or not the FMP is actually called out by the ICD officer, and this can affect these numbers to some degree, but there must be a limit as to that effect, as these numbers are not even close to 50% attended. A final factor is that the deceased died in hospital in which case the author feels it is understandable that the scene was not attended (at the hospital), but in some cases it is necessary to visit the scene where the injury occurred, which (if preserved) may provide evidence as to the circumstances of the death. There was no record of any scenes being attended by a representative of the Judicial Inspectorate of Correctional Services. Of the scenes noted in the case files ICD officials attended 29% of those attended by a FMP, and which are mandated for ICD officials to attend.

Following the scene, the next important point of contact between the parties involved is the autopsy, which occurs at the PMLL. All autopsies are attended by FMP's and forensic officers, for the simple reason that the forensic officers perform the function of eviscerating and dissecting the bodies, and the FMP's note the



macroscopic pathology and external findings, as well as performing the special examination techniques necessary in certain circumstances, e.g. bloodless neck dissection, testing for pneumothorax, etc. This combined effort by the forensic officers and FMP's is a necessity due to the daily caseload and provide for efficiency in delivering a Forensic Pathology Service. The presence of ICD officials occurred at 57 of the 77 mandated cases, a 74% attendance. This is a better result than the scenes attended, however these numbers need to be improved to ensure all cases are thoroughly investigated by all parties involved, which cannot happen if 1 of the parties is lax in the performance of duties. No representative from the Judicial Inspectorate of Correctional Services was noted as being present at the autopsy.

Also of importance to the performance of the autopsy is the rank (or level of experience) of the FMP performing the autopsy, indicating the experience of that individual. The medical officer usually has the least experience in the field and indicates any doctor post-community service. This is the entry-level into the Department of Forensic Medicine at the University of Pretoria, and experience begins here. The next higher rank is that of forensic pathology registrar, indicating a forensic pathologist in-training. This rank lasts for at least 4 years and coincides with that individual studying at the University of Pretoria towards an MMed(Path)(Forens) degree. Following successful completion of the required examinations, the rank of forensic pathologist is conferred on that individual. The difference of ranks within the designation of "forensic pathologist" depends on the years of experience in that rank and differs between senior specialist, principal specialist, and the head of the unit is the chief specialist. For the purposes of this study, the differences within the rank were not noted, except for chief specialist. It must also be remembered in the rural provinces such trained FMP's are not usually present and the performance of the autopsy usually falls onto the shoulder of an inexperienced medical officer who has never had any form of forensic pathology training, or if it is an experienced medical officer, it could be that the autopsy technique, specimen retention and report writing are of an inferior nature, which should not be regarded as reliable, especially in complex cases such as deaths in custody. Some FMPs in rural areas do have minor forensic pathology training, e.g. attending a practical course provided by the academic centres.

It must also be remembered that practical techniques are mastered through performing them, no matter the profession. It is important in this context as the more inexperienced the medical practitioner, even when they are FMP's, the lower the total number of autopsies performed and complex autopsies performed. Specific to death in custody cases would be cases where the deceased is reported to have died suddenly or been found hanging, in which cases signs of torture, strangulation, etc. must be specifically searched and might either not be looked for, or misinterpreted. The junior FMP's should observe and assist the senior FMP's when they perform these medico-legal examinations and at a later stage begin performing them while supervised and finally on their own.

The study discovered that of the 94 autopsies performed 8 (9%) were done by medical officers, 29 (31%) by registrars, and 59 (60%) by forensic pathologists, of which 2 were done by the chief forensic pathologist, It is necessary and understandable for the junior ranks to obtain experience in perform medico-legal investigations in this category of death, it is hoped that they were guided by senior members of the team, whether or not they were asked, in the correct procedure to follow when attending the scene, when performing the autopsy and when requesting any ancillary investigations. The number of autopsies performed by the chief FP was limited due to the heavy burden of additional duties of this position, which limits the number of autopsies performed in general, including this category of death.

The problem can be viewed as different parts of the investigation working in silos with poor communication between these "silos". The scene attendees need to inform those performing the autopsy of their findings. Those performing the autopsy need to inform the necessary ICD, JICS and SAPS members of their findings, etc. The use of good communication and the implementation of a protocol for the investigation of cases of deaths in custody could improve the quality of investigation performed in these cases.

### 13. Medical Treatment

In 57% of cases some form of medical treatment was sought. One reason for not seeking medical care is the fact that the injuries resulted in near-instantaneous death, or the individual clearly was lifeless upon discovery of the body. Of the cases

receiving medical care, 66% received emergency care at the scene, and the remaining cases received some form of hospital care. Further studies should focus on ante-mortem medical treatment in custody – specifically police, and especially correctional services custody – to determine whether death resulted from negligent medical care. When analysing the medical treatment in each category, 25 of 49 police action deaths, 18 of 28 police custody deaths, and 10 of 17 correctional services deaths received medical treatment.

Medical treatment in hospital included attending casualty, being hospitalised for a period of time and being discharged, and dying in hospital in an operating theatre or in the ward or intensive care unit. One of the cases of death in correctional services custody was a patient in the hospital section of the correctional centre who hanged himself in this section of the facility.

Gunnel et al<sup>49</sup> found that in hanging cases, those that reach hospital alive have a relatively high probability of survival. The mortality rate of hangings is approximately 80%, therefore there are those that survive hangings if reached in time and removed from the suspension point.

#### 14. Post Mortem Interval

The term post mortem interval (PMI) indicates the length of time between time of death and discovery of the body. The term in this study was widened to time of post mortem examination, to determine the usual waiting time before autopsy. The study discovered that the range was between 0 and 28 (no explanation for this case was discovered in the file) days, with a mean period of 2.7 days, and median time of 2 days. The closer the time between death and autopsy the fresher the scene will be in the officials' memory, but also the investigation can more quickly continue with the findings of the post mortem examination guiding the investigators forwards in their investigations.

#### 15. Hanging Cases

Hanging is a type of ligature strangulation in which the force applied to the neck is derived from the gravitational force acting upon the body.<sup>50</sup> Hanging was used as the method of choice in suicide.

There were 17 hanging cases in a total of 94 deaths, divided between 13 police custody and 4 DCS custody deaths. Starting with the scene of death, the point of suspension was located inside the police/DCS cell in 4 of the cases. In one case a shower faucet was used, and in 1 case a tree was used. In the remaining cases no point of suspension was noted in the case file (either in the autopsy report or other documentation present in the file). This could be due to absence from the scene or failure to note this information in the report. This is important not only in determining the height of suspension, but also informing the police about points in the cell so that they can be redesigned to prevent future deaths. Gunnell et al<sup>49</sup> confirms that the most common points of suspension being areas with the cell, specifically the cell window bar in 48%. This is confirmed by the NDICP<sup>4</sup> with more than a third each using cell bars or other cell fixtures. Two other common points of suspension recorded were shower fixtures and bed bunks. One in 6 cases occurs in prison health care centres<sup>49</sup>. The point of suspension can vary depending on the place of death; deaths in police custody reporting more commonly that the hatch/bolt hole to the cell door being used in approximately half of cases and the door or door hinge used in a quarter of cases<sup>44</sup>.

The ligature used in the hanging was present at autopsy in all but 1, but the nature of that ligature was noted in the case file by the forensic officer attending the scene. In 12 cases (71%) items of clothing were used e.g. trousers, scarf, shirts, etc. In 24% (4 cases) bed linen was used, and in 1 case the case file noted that “string” was used. These findings are consistent with international research indicating that the ligature is an item at hand, which in the majority of cases is an item of clothing or bed linen<sup>42</sup>. In Australia, sheets are used in over 50% of hangings, clothing being used in approximately 1/3 of cases<sup>4</sup>.

At autopsy several specific findings are noted in the report in such cases. Firstly, the presence of the protruding tongue past the dental arches, was noted in just over half of the cases (9). Rivulets of saliva were noted in 7 of the 17 cases. Rivulets of saliva most commonly run from the corner of the mouth to the chest area<sup>51</sup>.

The furrow mark is that skin mark created by a ligature, and is usually localised above the larynx<sup>49</sup>. The furrow mark generally slants upwards toward the knot but, in general, does not create a circumferential abrasion (except when a slip knot is used),

fading out at the point of suspension and noted as an area of “skin sparing”. It initially has a pale yellow parchment appearance with a congested rim, later drying out and becoming dark brown. The depth and outline of the furrow mark is dependent on the nature of the ligature with harder and thinner material leaving a deeper, better outline than that of a ligature consisting of soft material. In cases of the latter being used, the groove of the furrow mark may be poorly defined and pale, as well as devoid of bruises and abrasions<sup>49</sup>. Specific to the furrow mark (or ligature abrasion) present on the deceased, the occurrence of a single furrow mark was noted in 15 of the cases and that of a double furrow mark in 1 case. A double furrow mark could occur due to a shift in the body position causing the ligature to shift to a new position or the ligature is tied around the neck twice. The position of the furrow mark was also noted in relation to the thyroid cartilage, with 8 of the cases having a furrow mark above the thyroid cartilage, 2 below the thyroid, 0 through the thyroid cartilage, and in 7 cases the relation was not noted. This was noted in the case reports of not only medical officers and registrars, but also of specialists. Also, whether or not the furrow mark was complete was noted, with 4 cases of a partial furrow mark involving skin sparing. In all but 1 of the cases where a furrow mark was noted, an apex of the furrow mark was found indicating the location of the knot. There were 13 cases where the apex was located posteriorly, 2 cases where it was on the left lateral side of the neck, 1 case where the apex was not able to be identified, and in 1 case, as noted above, no features of the furrow mark were noted including this specific note. In the literature, haemorrhages were noted most frequently where the apex was located anteriorly and least commonly where posterior, but even the occurrence was 49% in posterior hangings and 62% overall<sup>52</sup>. There were 2 hanging cases where there was soft tissue haemorrhage of the strap muscles of the neck, 1 where a right thyrohyoid muscle haemorrhage occurred with a posterior apex, and another case where “haemorrhage of superficial strap muscles at level of clavicle” was noted with no indication as to which side it occurred. The latter case occurred with posterior apex too. The other haemorrhage noted was a prevertebral, subfascial haemorrhage from vertebrae C4 to C6.

All hanging cases had a “bloodless” neck dissection. Most of these examinations did not reveal any pathology in the neck region. In 3 cases soft tissue haemorrhages were noted, in 1 case a “tidal mark” was noted on the posterior pharyngeal wall, and

in 1 case an enlarged lymph node was noted. No fractures of the laryngeal cartilages or of the hyoid bone were noted. The studies in the literature performed to determine the nature and frequency of internal neck injuries provide wide ranging results. In more than half of hanging cases no internal structures of the neck were injured<sup>51</sup>. In another study there were internal neck injuries in 85.70% of cases with the most commonly injured structures being the thyroid cartilage and the sternocleidomastoid muscle. The occurrence of such injuries was found not to be related to the ligature location or the type of hanging<sup>52</sup>. Another study found the occurrence of sternocleidomastoid haemorrhages to be positively associated with the site of the ligature knot, as well as with free body hanging<sup>53</sup>.

### 16. Gunshot Wound Cases

When analysing the 45 gunshot wound cases in isolation, a few statistics are noteworthy when determining the current state of medico-legal investigation into deaths in custody. The range of fire can be divided into contact, close-range, intermediate, and distant shots. This is determined from examination of the clothes and the wounds as well as the surrounding tissues, which can provide evidence necessary in this determination.

However, in 42 (93%) of cases no estimation was made as to the distance of the shot. This is surprising when you consider that this is necessary for the FMPs to deduce the circumstances of death. It may be that the clothing was not present at the post mortem examination which could hamper the opinion of the FMP as to the distance. In 1 case, the wound was estimated to have been at a close range, and in 2 cases from a distant range.

Furthermore, as a part of the autopsy every wound is noted in terms of position on the body. The study found that 38% were on the thorax, 36% on the back, 31% on the arms, 27% on the head, abdomen and legs, and 3 cases of gunshot wounds to the neck. One case of genital wounds was noted. In the Bhana study<sup>17</sup>, the head, chest, and abdomen were the commonest areas of wounding.

The number of wounds afflicted was noted on the autopsy report, together with an opinion as to which wounds were entrance wounds and which were exit wounds. Twenty of the gunshot wound cases were killed by a single gunshot. Eight deceased

were killed by 2 shots, and the remainder died from “multiple” gunshot wounds. Thus, in the majority of cases at most 2 shots were necessary to incapacitate the suspect.

The following must be considered when assessing police shooting deaths. In March 2012, an article appeared in the Citizen (and other newspapers) about the capabilities of the SAPS to carry firearms<sup>54</sup>. It was reported that 27 329 (17%) of 157 704 officers trained did not comply with the regulations of the Firearms Control Act of 2004, as they had failed their firearms proficiency tests. Following this report, the Police Minister, Nathi Mthetwa and acting national police chief Nhlanhla Mkwanazi were prevented from removing the firearms from these officers due to a court interdict obtained by the South Africa Policing Union (SAPU).<sup>55</sup> The reason provided for this interdict was the fact that this would endanger these officers’ lives in the battle against armed criminals. The report upon which these newspaper articles were based cited several reasons for the SAPS officers having failed their firearms proficiency tests. A small percentage was deemed unfit due to medical conditions such as epilepsy, cerebral haemorrhage, and exhaustion. Most were declared unfit as they were suffering severe psychological conditions, involved in domestic violence or had criminal prosecutions pending. A significant number also had criminal intent – such as serious crimes, threatened to shoot fellow officers, attempted murder, pointing firearms, robbery, and intimidation – or suicidal ideation. Others were declared unfit because of alcohol abuse or were receiving anger-management counselling. Finally, others failed as they could not use their firearms properly. This report is worrying to the South African citizen as these SAPS officers are in effect unsafe in carrying or using firearms, and are themselves breaking the law by carrying a firearm without having passed the prerequisite firearm proficiency test. From the SAPS officers’ side they see a daily battle between SAPS officers and armed criminals resulting in an ever-increasing SAPS death toll.

Another important, related event that occurred in February 2012 was the killing of a Soweto teenager, Thato Mokoka, by a SAPS student constable, Sipho Mbhata, using an R5 rifle in full automatic mode.<sup>55</sup> It was subsequently discovered that Mbhata had been declared unfit to carry a firearm and had attempted suicide in December 2011. In August 2012 Mbhata was convicted of murder.

In terms of pathology at autopsy, 2 subsets of information can be derived from the case files: the organs injured most commonly, and other common autopsy features in gunshot wound cases. The most common organ injured was the lung, correlating with the incidence of gunshots to the thorax and abdomen. The most common “other” autopsy feature was the presence of a subendocardial haemorrhage in the left ventricular outflow tract, occurring in approximately 1/3 of cases, most probably due to haemorrhage.

Moving on to the firearm/s used in the killing of the decedents, it is concerning that only 12 of 45 cases (27%) was the firearm, or probable firearm, used to inflict the wounds noted in the autopsy. When reported, a handgun/pistol/9mm was reported the most common, with rifles, specifically the R5, the only other firearm mentioned. These 2 weapons are standard issue police weapons. It can be postulated that the weapon was not known due to the investigating officer or ICD investigator not attending the scene or the post mortem.

## 17. Natural Deaths

Natural deaths are defined in the Code of Guidelines for Forensic Pathology Practice in South Africa<sup>15</sup> as “any case where the death is solely and exclusively the result of a natural disease process, not precipitated by trauma, anaesthetic or therapeutic mishap. “

There were a total of 11 deaths ruled to be “natural” in cause, divided between police custody and correctional services custody as mentioned above, with the majority in correctional services custody. The most common cause of death in these cases was “cardiovascular” in origin, including 3 cases of ischaemic cardiac disease (including 1 case of an acute myocardial infarction), 1 case of viral myocarditis, and 1 case where the cause was ruled as “hypertensive heart disease”. This finding is consistent with international studies where cardiovascular conditions are the commonest medical cause (and in some studies all causes) of death. The second most common category was pulmonary pathology, including 2 cases of pulmonary tuberculosis (1 in which bronchopneumonia was also discovered at autopsy) and 1 case of a bilateral pulmonary thromboembolism. There were also 2 cases of



cerebrovascular incidents (1 with underlying hypertension), and 1 case of intestinal haemorrhage.

Ten of the 11 cases had accompanying histological investigation. The only case not having histology was 1 of the cases of a cerebrovascular incident, in which the macroscopic evidence was overwhelming in concluding the cause of death. The use of histology in these cases always contributed towards determining the cause of death, whether it was in a confirmatory manner or in a diagnostic manner. This confirms the fact that histology can be used to magnify the “natural” pathology of organs discovered in natural and unnatural deaths.

Specific to suspected ischaemic cardiac disease deaths, the use of histology is imperative as the international standard of post mortem diagnosis of this cause of death is through the use of histology.

The number of deaths in correctional services custody could possibly have been higher if no inmates were allowed to be paroled on medical grounds as per Section 79 of the Correctional Services Act<sup>3</sup>, which states that: “Any person serving any sentence in a correctional centre and who, based on the written evidence of the medical practitioner treating that person, is diagnosed as being in the final phase of any terminal disease or condition may be considered for placement under correctional supervision or on parole, by the National Commissioner, Correctional Supervision and Parole Board or the Minister, as the case may be, to die a consolatory and dignified death.”

This has been amended by Section 14 of the Correctional Matters Amendment Act<sup>2</sup>, 5 of 2011. Any sentenced offender may now be placed on medical parole if: “(a) such offender is suffering from a terminal disease or condition or if such offender is rendered physically incapacitated as a result of injury, disease or illness so as to severely limit daily activity or inmate self-care; (b) the risk of re-offending is low; and (c) there are appropriate arrangements for the inmate’s supervision, care and treatment within the community to which the inmate is to be released.” This could increase the current average of approximately 60 to 70 medical parolees per to year to a number double that in the future.

## 18. Undetermined Cause of Death

There were 7 cases in which the cause of death was undetermined, including 4 in police custody and 3 in DCS custody. The cause of death could remain undetermined only from autopsy, or from additional investigations. In these cases the courts need to decide whether the cause of death remains as “undetermined”, or if there is reason for a specific cause of death to be formulated. In 2 of the 3 DCS custody cases, a full workup (including autopsy, histology, toxicology, BAC) was done, and in the other only histology was performed. In all 4 police custody cases a full workup was done. Furthermore, in only 1 case was a forensic medical practitioner noted as being present at the scene. Being present at the scene might have given the FMP more insight into the circumstances, and warrants further investigation. None of these cases, in which reports were available, reported the presence of alcohol or substances in the bodies of the deceased. These causes could still yet be determined based on these pending results. However, the case in which histology had already been performed and no cause was determinable will most likely remain as such. If any of these cases had been admitted to hospital, a clinic-pathological correlation can aid in determining or formulating a cause of death.

## 19. NIMSS Forms

The National Injury Mortality Surveillance System (NIMSS) system was introduced in 1999 in order to collate data produced during the medico-legal investigation of known and suspected deaths due to non-natural deaths<sup>56</sup>. The use of the NIMSS system currently at the PMLL is limited to recording of data onto the NIMSS forms with subsequent entry onto a yearly Excel spread sheet. There is no forwarding of this data to the national NIMSS database, the reason for which is financial in origin. The lack of data forwarding prevents the accurate analysis of this data on a national basis, with a resulting effect on the trends of non-natural deaths not being identified. There is a second flaw in the system, that being of data capturing i.e. transferral of data from the form to the spread sheet. The study discovered that data are not being transferred correctly, with the relevant category to this study under “Scene of Injury” being “15” sometimes being incorrectly entered as another number or another number being entered as “15”. A further flaw in the system is that there is no scene under “scene of injury” for “deaths as a result of

police action”, resulting in a potential and actual loss of files for this study and future studies investigating deaths in custody. This flaw can be corrected by the forensic officer or medical practitioner completing the form to mark the scene as “custody, prison” when such a death occurs, which will be the easiest when transferring to the computer database, or filling in “other” – death as a result of police action or IPID case. A final flaw in the system is that “old” forms are being used, where “newer” forms are in use elsewhere in the country. These forms have an additional section when compared to this form in that special categories of death can be noted, including “deaths in custody”, which could be marked whether the death occurred as a result of police action, in police custody or in correctional services custody, negating the effect of a lack in the “scene of injury” category

## Chapter 5: Protocol

### Introduction:

This protocol has been formulated based on the recommendations of textbooks, journal articles and international protocols. The idea of this protocol is to provide a baseline standard regarding the medico-legal investigation of deaths in custody, specifically at the Pretoria Medico-Legal Laboratory, which may be generalised to any medico-legal laboratory in South Africa. A standard approach needs to exist within South Africa regarding these investigations. As there is no current Standard Operating Practice (SOP) currently in existence in South Africa, this protocol would exist to fill that void. The use of this protocol would not be mandatory; there is no legal mandate for a protocol to exist. Owing to the controversial nature of these cases, the use of a protocol to provide for a complete and thorough medico-legal investigation is recommended internationally. The lack of research locally into these deaths has resulted in complacency in these investigations, which can be removed with the initiation of such a protocol.

This protocol is aimed to be used for the medico-legal investigation of deaths in custody, but may also be used in those investigations outside the sphere of “deaths in custody”. The same cause(s) and manner of death occurring in custody occur outside of custody and present in the everyday routine scope of a forensic pathologist in South Africa. Gunshot wounds, hangings and natural diseases represent the 3 major causes of deaths in this subgroup of the population. These causes are also very common in the general public. The use of this protocol could enhance the medico-legal investigation currently in place, or suggest improvements to current protocols in place for these deaths occurring in the general population.

The protocol is divided into the different components of the medico-legal investigation. The first component is the scene of death investigation. Following this is the approach at the autopsy, and subsequently the reporting of such deaths. There are 2 separate components regarding the specific nature of certain investigative techniques to be employed in hangings, and in gunshot wound cases. The use of this protocol is not all-encompassing, and serves as an initial attempt at a protocol for the medico-legal investigation of deaths in custody. This protocol needs

to be updated at regular intervals as the literature indicates new methods or areas of investigation are necessary, as well as when the legislation mandates the inclusion or exclusion of investigations specific to these cases, e.g. the new IPID Act, which dissolved the ICD and created the IPID with its own investigative powers and mandates. The protocol follows.

#### Scene of Death Investigation:

- The FMP to attend all possible scenes especially:
  - Sudden deaths following a struggle with law enforcement
  - Deaths in police custody
  - Deaths in correctional services custody even if the death appears to be a natural death
- Describe the circumstances of death
- Note officials present or absent. Where present, record contact details.
- Request all medical records of individuals in police or correctional services custody to be made available
- The forensic medical practitioner who attends the scene should also perform the autopsy except where more experienced/qualified personnel should perform the autopsy, but then the medical officer/registrar who attended the scene should attend the post mortem except if not possible
- Discuss the matter with specialist forensic pathologist on call
- Must inform Chief forensic pathologist of the region where the death occurred of the nature or circumstances of the death
- The FMP at the scene should make explicit arrangements with other officials e.g. IPID, SAPS, photographer regarding the date and time of the post mortem to ensure attendance

#### Post mortem Examination:

- A specialist FMP does autopsy circumstances permitting with a registrar/medical officer being present in a training capacity
- Record presence/absence of officials
- External examination:

- Clothing
- Wounds
- Body fluids
- Identifying features
- Full body X-ray (if available)
- Full autopsy report
- Tissues and fluids taken for ancillary investigations
  - Must take histology if suspicious or natural death
  - BAC on all except after 24 hours in hospital/from arrest placement in holding cells
  - Toxicology screen in all deaths in detention

#### Report:

- Scene report
  - Circumstances of death
  - Body position, descriptors, possible post mortem interval
  - Photographs
- Detailed post mortem report
  - GW7/15 or examination equivalent
- Ancillary investigations
  - Histology
  - Toxicology and BAC

#### Hanging Cases:

- Attend all scenes
- Note position of body, suspension point, apex, ligature material, any obvious injuries, appearance of tongue and presence of rivulets of saliva
- Remove body from suspension point without damaging the ligature (unless absolutely impossible)
- At autopsy perform full external examination before removing the ligature, without destroying the knot
- Furrow mark:
  - Number of furrow marks

- Direction of furrow
- Continuous or interrupted
- Colour
- Dimensions
- Distinct imprint to ligature pattern
- Areas of neck involved
- Relation to local landmarks, including thyroid cartilage
- Apex – if present, versus horizontal furrow mark
- Ligature:
  - Photograph in situ
  - Nature and composition
  - Width
  - Location
  - Type of knot
- Full autopsy of body without removing neck organs. Use “bloodless” dissection technique.
- “Bloodless” dissection:
  - Note superficial haemorrhages of neck muscles
  - Note fractures of cartilages or hyoid bone – if a fracture or haemorrhage is present, retain for histological examination or confirmation
  - Note any injuries to neck vessels
  - Note any other abnormalities of structures in the neck region

#### Gunshot Wound Cases:

- Radiograph body before removal from body bag for presence of ballistic evidence inside the body and inside the body bag
- In the presence of the FMPs performing the autopsy:
  - Remove body from body bag and perform external examination, noting defects in clothing and presence of ballistic evidence on clothing
  - Remove clothing and note any defects of the skin of the body.
- Radiograph after removal of clothing if indicated

- Note the following about every wound suspected to be of ballistic origin
  - Diameter of wound
  - Shape of wound
  - Collar of abrasion
  - Stippling, tattooing, soiling
  - Can wound edges be approximated?
  - Appearance of edges of wound
  - Is this consistent with an entrance or exit wound?
  - If it is consistent with an entrance wound what is the approximate range of fire, based on the findings above?
  - Height from the heel of the foot
- During evisceration and dissection of organs, the likely gunshot wound track should be identified, describing all injuries along the track. The suspected track entrance and exit wounds should be noted in relation to the wounds described above.
- The presence of projectile(s) should be recorded as well as the suspected calibre and type of gun used.
- All ballistic evidence should be collected by ballistics evidence personnel present at the autopsy for analysis and identification of the calibre and possible weapon used.



## Chapter 6: Key Issues in Summary

The study highlighted several key issues. These issues need to be addressed by representatives of the ICD (IPID), the JICS and the FPS in order to move forward and improve the investigation of deaths in detention.

- (1) South Africa has a notorious history of human rights abuses, including questions surrounding deaths in detention. The cases of Biko and Timol as discussed above represent cases of deaths in detention during Apartheid, but Marikana and Tatane represent cases of deaths of in detention occurring in more recent times. The fact that this issue is still prominent is of concern to all parties involved.
- (2) The number of deaths in custody in South Africa is large and unacceptable. Of concern is the increase in the numbers of deaths in detention in South Africa from the time the independent investigative bodies were formed and statistical information became available. The lack of consistent and detailed statistical information from the independent investigative bodies is also troubling and makes it difficult to compare the number of deaths in South Africa with those in other countries.
- (3) Until recently the FPS was part of the SAPS. While a part of SAPS there was a question of impartiality surrounding the FPS. The SAPS was the executive arm of Apartheid, and the FPS could probably have been used to their benefit. In the mid-1990's representation was made to parliament to transfer the medico-legal laboratories (mortuaries) from the management of SAPS to the Department of Health. This transfer subsequently took place in 2006. The FPS thus became an independent investigative body. This represented an important step in improving the impression of impartiality on the part of the FPS. The years to come could define the FPS as a service of quality, impartiality and integrity.
- (4) The vast majority of deaths in correctional services are natural deaths and as such are not admitted to the medico-legal laboratories for medico-legal

investigation. The author suggests there should be a referee for all deaths in detention, similar to a referee for all cremations. An alternative is to enact legislation, just as in many other developed countries, whether all deaths in detention are treated as “other than natural deaths”. This would make it illegal for a death in detention not to be admitted for a medico-legal investigation.

- (5) The various organisations involved in the investigation of deaths in detention work in silos. There needs to be communication between the various organisations, especially top-level communication. This could be in the form of a commission required to review every case of death in detention. Communication is also needed on the ground level between the forensic pathologists, the IPID investigators and the representatives of the JICS. Presently there is little or no communication occurring at this level. This could be compromising the effectiveness of the medico-legal investigation and any inquests resulting therefrom. A unified front is essential in overcoming the difficulties in investigating deaths in detention.
- (6) If the issues identified in this study are occurring in Pretoria (which has an academic forensic medicine department), then what is happening when inmates die in large correctional service centres in remote areas, e.g. Kuruman? More forensic pathologists are needed and, particularly in rural areas, and all cases of deaths in detention should be referred to academic centres. This would allow complete medico-legal investigations to be performed.
- (7) There is no standardised protocol applicable to South Africa. The draft protocol outlined above contains key components which would be imperative in a final protocol. A national forum could be a platform to discuss the investigation of deaths in detention with all the concerned parties, including the ICD (IPID), JICS and the FPS. Other concerned parties, such as Lawyers for Human Rights could also be party to this forum. The ultimate goal of this forum would be to identify the shortcomings in the investigation of deaths in custody by all parties concerned. The result of this forum would ideally be the formulation of a protocol for the investigation of deaths in detention.

## Chapter 7: Conclusion

Deaths in custody in South Africa are an under-researched and underrated phenomenon. The controversy surrounding these deaths is out of proportion to the number of deaths which occur. These deaths are not a novelty to current events, but have been made notorious due to such personalities and events as Steve Biko, Andries Tatane and Marikana. South Africa has not reformed in its ways, and the numbers have only been increasing since the inception of independent watchdog bodies, the ICD and the JICS. The potential exists for a turn-around strategy to be employed, but that can only be implemented if research is performed to identify the key issues in this multi-disciplinary problem, as was done in Australia. This allowed for key policy changes and an on-going national-deaths-in-custody program to be developed, the rewards of which are short and long-term in nature.

A key issue in this multi-disciplinary problem is the medico-legal investigation of deaths in custody. This is the domain of the forensic pathologists, a field which itself is multidisciplinary in nature due to the vast knowledge of medicine, law, the sciences, and other subjects, which need to be understood in order for a forensic medical practitioner to be considered competent. This study aimed to identify and understand the current state of the medico-legal investigation.

The author has firstly identified the incomplete and inadequate definitions of a “death in custody” and the categories thereof, in South Africa and in other countries. In some cases the definitions were described by legislature and in others by the bodies investigating these deaths. It was also important to identify the legislation in South Africa which controls the investigation of deaths in custody in South Africa, as well as the safeguards in place to prevent their occurrence. South African literature is sparse in its coverage of deaths in custody, especially from the perspective of forensic pathology. International literature has covered the topic in medical journals, epidemiological journals, criminological journals, and others.

The combating of torture has come to the forefront in recent years, with the United Nations intent on creating a global crusade to eradicating it. South Africa is part of this fight, and needs to ensure the passing of the required legislation to criminalise and penalise any form of torture or cruel, inhuman or degrading

punishment or treatment. Part of this is the treatment of individuals who have their liberty removed – i.e. those in custody. This has resulted in the ICD (IPID) and the JICS moving forward with the Human Rights Commission in joining forces to combat torture. This issue will definitely be of significant attention in the years to come.

This study identified the current weaknesses of the medico-legal investigation at the Pretoria Medico-Legal Laboratory, and has provided a basic, draft protocol for review with the intention of becoming permanent. The lack of protocols and minimal standards has impacted the functioning of the PMLL.

The study confirmed the statistics which have been researched by the independent investigative bodies, identifying new categories for research. This includes the presence of the appropriate representatives from the FPS, IPID and JICS at scenes of death and at autopsies, as well as the use of special dissection techniques and ancillary investigations to investigate these cases. Research will have to be undertaken on a national scale to confirm the issues identified in this study, as the numbers in this study are too small to identify statistically significant relations between the various factors.

South Africa is an ideal setting for the research of deaths in custody. The inclusion of an academic institute should be mandatory to ensure the quality of such research.

An annual national conference/meeting of forensic pathologists, IPID, SAPS and JICS is strongly recommended. The scope of the meeting should be to examine the extent, possible causes and possible recommendations to prevent and minimise deaths of individuals in custody.

The medico-legal investigation of death is a monumental effort to examine as a whole, but the division into its constituent parts can create opportunities to identify ways to improve its functioning, the investigation of deaths in custody being just one of its functions.

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**Appendix A: Data Collection Form**

Research Reference No.: \_\_\_\_\_

DR No.: \_\_\_\_\_

Year and Month of Death: \_\_\_\_\_

Gender: 

Male (1)	Female (2)	Undetermined (3)
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Age (years): \_\_\_\_\_

Race: 

White (1)	Black (2)	Coloured (3)	Asian (4)	Undetermined (5)
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Place of Death:

Police Cells (1)	Holding Cells (2)	Prison Cells (3)	Pre-Arrest (4)	Pre-Police Station (5)	Hospital (6)	Other (7)
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Primary Medical Cause of Death:

Gunshot Wound (1)	Hanging (2)	Blunt Force Trauma (3)	Other (4)	Undetermined (5)
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Mechanism of Death: \_\_\_\_\_

Manner of Death: 

Homicide (1)	Suicide (2)	Accident (3)	Natural (4)	Undetermined (5)
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Intoxicated: 

Alcohol (1)	Drugs (2)	Both (3)	Neither (4)	Undetermined (5)
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Medication or Substance of Abuse: \_\_\_\_\_

Time since Arrest/Detention (hours/days): \_\_\_\_\_

Medical History: \_\_\_\_\_

Other Relevant History: \_\_\_\_\_

Autopsy Findings: \_\_\_\_\_

Macroscopic: \_\_\_\_\_  
\_\_\_\_\_

Viewing (1)	Limited (2)	Full (3)	None (4)
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Histology: \_\_\_\_\_

FP No. \_\_\_\_\_

No. of slides/organs retained \_\_\_\_\_

Done (1)	Not Done (2)	
Confirmed Cause of Death (1)	Determined Cause of Death (2)	Did Not Assist (3)

Ancillary Investigations: \_\_\_\_\_  
\_\_\_\_\_

<b>Toxicology Screen</b>	<b>Done (1)</b>	<b>Not Done (2)</b>	
	<b>Confirmed Cause of Death (1)</b>	<b>Assisted (2)</b>	<b>Did Not Assist (3)</b>

**Presence of Officials at Scene:**

<b>Forensic Pathologist (1)</b>	<b>Medical Officer (2)</b>	<b>ICD Officer (3)</b>	<b>Inspecting Judge or Representative (4)</b>	<b>Hospital Personnel (5)</b>	<b>Registrar (6)</b>	<b>Not Mentioned (7)</b>
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**Presence of Officials at Post mortem examination/Autopsy:**

<b>Forensic Pathologist (1)</b>	<b>Medical Officer (2)</b>	<b>ICD Officer (3)</b>	<b>Inspecting Judge or Representative (4)</b>	<b>Forensic Officer (5)</b>	<b>Registrar (6)</b>	<b>Not Mentioned (7)</b>
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**Hanging Cases:**

<b>Present (1)</b>	<b>Not Present (2)</b>
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**Ligature**

- What is the nature of ligature?

\_\_\_\_\_

**Friction Abrasion**

<b>Single (1)</b>	<b>Double (2)</b>	<b>Above Thyroid Cartilage (3)</b>	<b>Through Thyroid Cartilage (4)</b>	<b>Below Thyroid Cartilage (5)</b>	<b>Partial (6)</b>	<b>Apex (7)</b>
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**Tongue Protruding**

<b>Yes (1)</b>	<b>No (2)</b>
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**Rivulets of saliva**

<b>Yes (1)</b>	<b>No (2)</b>
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**Bloodless Neck Dissection**

<b>Yes (1)</b>	<b>No (2)</b>
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- Findings:

\_\_\_\_\_  
\_\_\_\_\_

**Gunshot Wound Cases:**

**Number of Wound(s):** \_\_\_\_\_

**Anatomy of Wound(s):** \_\_\_\_\_

**Pathology/Description of Wound(s) and Track(s):**

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**Weapon Used:** \_\_\_\_\_

**Gunshot Distance**

Contact (1)	Close Range (2)	Intermediate (3)	Distant (4)	Not Mentioned (5)
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**Position of Gunshot**

Head (1)	Neck (2)	Thorax (3)	Abdomen (4)	Arms (5)	Legs (6)	Back (7)	Genitals (8)
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**Rank of Person Conducting Post mortem examination/Autopsy:**

Medical Officer (1)	Registrar (2)	Specialist (3)	Chief Specialist (4)
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**Blunt Trauma Cases:**

Head Trauma (1)	Neck Trauma (2)	Thoracic Trauma (3)	Abdominal Trauma (4)	Other Trauma (5)
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**Medical Attention Sought/Rendered**

Yes (1)	No (2)
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**Medical Treatment Type**

Emergency Treatment at Scene (1)	Hospital (2)	Other (3)
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**Medical Treatment Time and Place:** \_\_\_\_\_

**Determination of Time of Death:** \_\_\_\_\_

**Post Mortem Interval (Days):** \_\_\_\_\_