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# THE EFFECT OF HIV/AIDS ON THE CONTROL ENVIRONMENT: AN INTERNAL AUDIT PERSPECTIVE

**by**

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**To my family, friends and the colleagues that supported me during this project.**

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# SUMMARY

The İnternal auditing profession has undergone considerable changes during the past few years. A new definition has been formulated in 1999 for the profession and the Professional Practices Framework, including the *Standards,* has had to be adapted to incorporate this new definition. An internal auditor, in addition to being a control specialist, must now also assist management in a consulting capacity with risk management and corporate governance. According to the new *Standards,* an internal auditor should assist his or her organisation in maintaining effective controls by evaluating its effectiveness and efficiency and by continuously promoting improvement. The basis for the control system is a control environment that provides an atmosphere in which people conduct their activities and this has a direct influence on the way activities are structured, objectives are established and risk is addressed.

HIV/AIDS is a disease that threatens the world as a whole, global economies, individual countries, governments and also the business world, especially individual organisations. It is therefore vital that the consequences of this potential risk on an organisation are studied. Various studies done on this subject have indicated that managements are aware of the possible risk of HIV/AIDS to their organisations, but no study has at yet investigated the role that internal auditors can play or the effect of HIV/AIDS on the control environment.

This study firstly investigated whether HIV/AIDS has an effect on the control environment of an organisation. Secondly, the knowledge of internal auditors regarding the potential risk of HIV/AIDS to the organisation and the role they should play in assisting management with this risk, including its effect on the control environment, was investigated.

The research findings showed that HIV/AIDS does have an effect on certain elements of the control environment, namely the competence of the

workforce, organisational structure and the human resources policies and practices. The study also concluded that internal auditing should treat the risk of HIV/AIDS like all other risks threatening the organisation. Thus they should assist management in managing the risk and giving assurance to all stakeholders that the risk is being adequately managed. It was also concluded that although internal auditors are aware of the risk of HIV/AIDS to their organisations, especially the control environment, only a few internal auditing departments were performing their responsibilities in full. The level of commitment to managing this risk varied from total ignorance of HIV/AIDS in a business environment, to internal auditors performing audits on certain aspects in the management of this risk.

HIV/AIDS is not a normal business risk. Factors such as additional legislation, the disease being non-notifiable, the stigma associated with the illness, the fact that no cure is available, and many more make this a difficult risk to understand and to manage, thus complicating the responsibilities of internal auditors. Professional guidance is needed for the internal auditor on how to handle this risk.

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# CHAPTER 1
# BACKGROUND TO THE STUDY

## 1.1 INTRODUCTION

This chapter provides an introduction to and outline of the rest of the study. The topic of the study, namely the effect of HIV/AIDS on the control environment: an internal audit perspective, can be divided into two broad areas. The first is the role and function of an internal auditor, as the study focuses on an internal audit perspective on the problem. The second is HIV/AIDS. This is investigated to determine whether the disease is a threat to the world as a whole, individual countries, the business environment, organisations and individuals. The literature available on this topic is also critically reviewed, the problem formulation and hypotheses are discussed, as well as the rationale for the research study, the research design and the way the rest of the chapters are divided.

## 1.2 BACKGROUND

As mentioned above, the background to the study can be divided into two main areas. These are discussed briefly below.

### 1.2.1 The role and function of internal auditors

An internal auditor is a professional person who functions within an organisation to assist management with certain tasks. Although internal auditing is not a new concept, considerable changes have occurred in the last few years regarding the functioning of the profession.

One of the characteristics of a profession is the need to maintain a high degree of competency. The Institute of Internal Auditors has developed a Professional Practices Framework (hereafter referred to as PPF) in order

to meet this goal (Institute of Internal Auditors 1999). Three key elements in the framework are the definition of internal auditing, the Standards for the Professional Practice of Internal Auditing, and the Guidance - Development and Practice Aids. These are briefly explained in the context of this study.

The definition of internal auditing is the following:

> Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes (Institute of Internal Auditors 1999:3)

The above definition implies that it is important for an internal auditor to address control, including the control environment; risk management, including the identification and management of risks threatening the organisation's reaching of its objectives; and corporate governance, including assisting management by identifying crucial issues that could affect the organisation.

The new Standards for the Professional Practice of Internal Auditing (hereafter referred to as *standards*) are the criteria by which the success of the operations of an internal audit activity are evaluated and measured. The previous set of standards focused on the role of internal auditors in a compliance function, especially control. The *standards* were updated to include the issue of risk and corporate governance.

The Guidance - Development and Practice Aids include educational products, research studies and other relevant projects. The use of these aids is not mandatory, but internal audit staff could use them to assist organisations and those individuals to whom specific aspects of these guidance aids are relevant. The results of research studies that are relevant to the functioning of an internal auditor have been incorporated

into the guidance aids, and can be used by internal auditors to help them to assist management with its duties.

The new definition, as starting point of the rest of the PPF, encompasses all the dimensions of the internal auditing activity, suggesting a profession that is characterised by broad business parameters and technical skills. Internal auditors should understand business strategy and should focus on adding value by facilitating change through advice and counsel (Coetzee & Du Bruyn 2001:63). The concepts of control, risk management and corporate governance must be understood and incorporated in the internal auditing activity.

The control process is one of the elements addressed by the definition. Control is broadly defined as a process designed to provide reasonable assurance that the organisation's objectives will be achieved (COSO 1992:13).

The Treadway Commission has performed a comprehensive study on control in organisations and the study resulted in the COSO Report (1992). The report identified six elements of a sound control system, namely the control environment, risk assessment, control activities, information capture, the communication of information and continuous monitoring. The COSO report is currently being updated and will be re-issued early in 2004 (COSO 2003). For the purposes of this study, however, the specific elements in the control environment that form the basis of this research document have remained the same. Therefore the current COSO document methodology is used.

COSO divides the control environment into several categories. It is important for management, and for an internal auditor who is in a guiding role to management, to understand the effect of risks on the control environment. The categories identified by COSO are the following:

a Integrity and ethical values – Management's attitude, actions and behaviour regarding ethical issues, moral guidelines and procedures, an ethical code and disciplinary actions are some of the important elements. The risk in terms of the focus of this study is that no formal policy on how to treat people with HIV/AIDS may have been issued by management

b Commitment to competence – Employees should have the necessary knowledge and competence to perform their duties. The risks include that competent people infected with HIV/AIDS may not be doing their job properly; new appointments need to be made from a smaller pool of candidates; and many more relevant issues.

c Board of directors and the audit committee – An effective and efficient Board and audit committee see to it that the control system functions as planned, including the control environment.

d Management's philosophy and style – This refers to the attitude of management and the manner in which management manages the day-to-day activities of the organisation, for example, formal, informal, aggressive, or conservative.

e Organisational structure – This refers to the framework used for the execution, controlling and monitoring of the activities of the organisation. The risk is that, because people are on sick leave or dying, the organisational structure can collapse.

f Delegation of rights and responsibilities – This refers to the method used and the degree to which rights and responsibilities as well as initiatives are allocated to individuals. The risk is a lack of a comprehensive contingency plan to address a situation where people are infected with HIV/AIDS, for example, where people are on sick leave, or dying.

g Human resources policies and procedures – The employment of sufficient and capable people, and the development of these employees are affected most by the disease. Employing people with HIV/AIDS, the treatment of employees that are infected, medical aid issues, and pension plans, are some of the issues that must be investigated.

As the control environment is a broad concept, this study concentrates on the elements of the control environment where HIV/AIDS can play a major role, namely in commitment to competence, in the organisation's structure, and human resources policies and procedures.

A proper control environment forms a sound basis for the control system of the organisation. The control environment's success is based on the people driving the system (Arens & Loebbecke 1997:289). An inadequate control system operated by honest, competent people is of more value to an organisation than a proper system controlled by corrupt management and/or employees.

HIV/AIDS, like cholera, influenza, and other diseases caused by viruses, is a disease that affects humans. The huge number of people who have HIV/AIDS, especially in Sub-Saharan Africa, make this a disease that also threatens the business world and the workforce. The control environment in an organisation is based on the actions and attitudes of the management and the employees of that organisation. Therefore HIV/AIDS could and most probable does have an influence on the control environment.

### 1.2.2 HIV/AIDS

The world is becoming increasingly complex and the most serious challenges are by nature global. One of these global challenges, identified by the Millennium Project (one of several environmental organisations focusing on HIV/AIDS), is the control and reduction of new and re-

emerging diseases and immune micro-organisms (Glenn & Gordon 2002:15). Since the first cases of HIV/AIDS were reported 20 years ago, nearly 58 million people have been infected and 22 million have died - and these are only the known figures (Brookings Institution 2001:1). In 1997 the Doyle model predicted that by the year 2000 between 8% and 10% of adults in South Africa would be infected with HIV, increasing to about 22% in the year 2010 (Williams, Gouws & Abdool Karim 2000:297). The national prevalence rate amongst pregnant women already reached 24,8% in 2001, with KwaZulu-Natal being the highest at 33,5% and the Western Cape the lowest at 8,7% (Department of Health 2001:5).

What is of the greatest concern to the business environment is that infection rates are very high amongst young, economically active persons (UNAIDS/WHO 2002:4). This not only influences consuming power, but has an overwhelming effect on the workforce. It is thus a major threat to the achievement of strategic business objectives and related business risks. Hence, the incidence of HIV/AIDS is a matter of great concern for internal auditors.

A further concern for organisations is the various legislative stipulations and regulations related to HIV/AIDS. Some of the rules and regulations applicable include:

- the Employment Equity Act No 55 of 1998;
- the Labour Relations Act No 66 of 1995;
- the Occupational Health and Safety Act No 85 of 1993;
- the Basic Conditions of Employment Act No 75 of 1997;
- the Constitution of South Africa Act No 108 of 1996;
- the Code of Good Practice on Key Aspects of HIV/AIDS and Employment; and
- the King Report on Corporate Governance for South Africa, 2002.

Responding to HIV/AIDS in the workplace is essentially about managing the issue as a business risk; that is, having accurate and relevant

information about the epidemic, monitoring the progress, knowing or predicting the risk and addressing the risk by managing it (Evian 1998:4). To be able to address the problem of HIV/AIDS, management needs to know the risks involved, and minimise the risk by implementing a proper strategic action plan. The implementation and maintenance of a sound control system is the responsibility of management (King Committee on Corporate Governance 2002:45), but internal auditors are responsible, according to the new internal audit definition, for assisting management with this task. HIV/AIDS is a threat to people, therefore to the workforce and thus to the control environment. Management must understand the effect of HIV/AIDS on the business environment as well as its effect on the control environment.

## 1.3 LITERATURE REVIEW

An extensive review of the relevant literature has revealed that while much research has been done on HIV/AIDS, no research on the role of internal auditors regarding the effect of HIV/AIDS on an organisation has yet been done. The effect of HIV/AIDS on the control environment itself has also not yet been studied.

One of the largest research projects on HIV/AIDS in South Africa is the study conducted by the Centre for International Health (2002) at the Boston University School of Public Health. *The Program on the Social and Economic Impacts of the HIV/AIDS Epidemic* is a multidisciplinary, applied research programme conducted by the Centre. It brings together expertise in infectious diseases, public health, demography, epidemiology and economics in an effort to understand the effects of HIV/AIDS on households, businesses, government and other institutions in the developing world. It also addresses the need to identify and evaluate policies and programmes to mitigate the impact of HIV/AIDS (Centre for International Health 2002).

The HIV/AIDS Boston programme has various projects in progress, but the largest research programme is the *Study of the Impact of HIV/AIDS on Businesses in South Africa,* where, with the support of UNAIDS and the private sector, valuable information regarding the threat of HIV/AIDS is obtained and monitored. Six companies in heavy industry, agriculture, mining (processing), mining (extraction), retail and service have been examined (Rosen, Simon, Vincent, Macleod, Fox & Thea 2003a:10). A model for analysing the cost of HIV/AIDS to organisations has been developed as a result of the study (ARCH Project Annual Report 2000:2) (see table 4).

However, Dr Clive Evian, a well-known researcher on the topic of HIV/AIDS, has been actively involved in the study of HIV/AIDS in South Africa since the early 1980's, not only in the medical field, but also studying the effect of HIV/AIDS on organisations and the implementation of proper strategic plans. Various organisations were monitored by his organisation, Aids Management and Support, since the mid-1980's. He is now in a phase where follow-up investigations on some of these organisations are being performed. The effect of a proper corporate strategy can thus be measured by comparing the results of the first survey with those of the follow-up (Evian 2002).

The South African Business Coalition on HIV/AIDS (SABCOHA) was established in December 1997, committing itself to establishing a knowledge centre for best practices, policies, news, statistics and other guidance to mitigate the economic and social impact of HIV/AIDS. Information regarding global trends, the South African situation, the micro - and macro-economic impact, individual company level impact, business responses to the epidemic, and other relevant information, is available to members (SABCOHA 2002). Deloitte & Touche (2002) has issued a report on SABCOHA's assessment of HIV/AIDS initiatives in the private sector.

The information gathered by these research projects as well as other research studies forms the basis of the data used by this study.

## 1.4 PROBLEM FORMULATION AND HYPOTHESES

### 1.4.1 Primary problem formulation

HIV/AIDS is a known threat to the world, especially in Sub-Saharan Africa and South Africa (UNAIDS/WHO 2002:4). It is vital that the effects of the disease on the economy and organisations are studied. Management is responsible for a sound control system, and internal auditors are seen as control experts and must assist management with this task.

Various studies have indicated that management/s are aware of the risk that HIV/AIDS poses to their organisations (see Barac & Otter 2001:26, Deloitte & Touche 2002:1). Internal auditors should support management in their task by studying the consequences and effects of HIV/AIDS on the organisations concerned. It is internal auditors' duty, and hence the primary focus of this study, to understand the consequences of HIV/AIDS for the control system of an organisation. As the control environment forms the basis for the control system, the internal auditor first has to identify the risk that HIV/AIDS poses for this area to be able to assist management in controlling the effect of HIV/AIDS on the control system.

### 1.4.2 Sub-problems

The primary problem of identifying the effects of HIV/AIDS on certain elements of the control environment is divided into the following secondary problems:

1 Is the internal auditor aware of the business risk that HIV/AIDS poses for the organisation?

2 Is the internal auditor part of management's plan to address the risk posed by HIV/AIDS to the organisation?

3 What is the knowledge and input of internal auditing in management's strategic plan regarding HIV/AIDS?

4 What is the risk of the affect of the disease for the competency of the workforce and how will this effect the control environment?

5 What risk do the consequences of the disease pose for the structure of the organisation regarding the day-to-day management of activities?

6 What issues are a risk to the organisation and need to be addressed by management regarding the human resources policies and procedures?

7 Is the internal auditor aware of the possible effect that HIV/AIDS could have on the control environment?

### 1.4.3 Hypotheses

To guide this study and to provide a framework for the organisation for the structuring of conclusions and recommendations, the following research hypotheses were formulated:

1 Internal auditors are aware of the HIV/AIDS epidemic and the consequences that this risk holds for the organisation.

2 Internal auditors are assisting management with strategic objectives, strategies (plans) and related objectives regarding the risk of HIV/AIDS to the organisation.

3 HIV/AIDS, as a business risk, has an effect on certain elements of the control environment in organisations.

4 The effect of HIV/AIDS on the control environment can weaken the control system as a result of the loss of key elements in the system.

5 The cost involved in managing the risk of the consequences of HIV/AIDS must be paid to strengthen and/or maintain the control environment.

## 1.5 ROTIONALE FOR THE RESEARCH STUDY

As seen from the above problem formulation and the hypotheses, this study aims to prove that HIV/AIDS has an effect on certain elements of the control environment, and that internal auditors, as management consultants, should advise management on how to monitor and manage this risk. If this study can show that HIV/AIDS does affect the control

environment, the results can be used to ask what internal auditors are doing about this risk. In particular, one can then ask whether the internal auditor is bringing the fact that HIV/AIDS is affecting the control environment to management's attention. If this study concludes that very little is being done by internal auditors to address this risk, a set of guidelines should be developed by the internal audit profession globally, and it should be distributed to members of the Institute of Internal Auditors Inc to guide internal audit practitioners. The guidelines should be developed to assist internal auditors in their role, helping management to understand and control the effects of HIV/AIDS in their organisations. The guidelines should be published in the form of more Guidance - Development and Practice Aids as part of the Professional Practice Framework.

## 1.6 RESEARCH DESIGN

The research study is divided into two main areas, namely, an investigation as to, firstly, whether HIV/AIDS has an effect on certain elements of the control environment and, secondly, whether internal auditors are aware of such effects and the role they have to play with regard to this risk.

### 1.6.1 Data used

Data gathered by the Centre for International Health, Boston University School of Public Health forms the basis of the information used to determine whether HIV/AIDS has an effect on certain elements of the control environment. To determine the role of internal auditors in managing this risk, a questionnaire was designed and used as an aid in interviews with chief audit executives or other senior internal auditors responsible for risk management in their organisations.

### 1.6.2 Research method

The research focused on the three main areas of the control environment that would probably be most affected by HIV/AIDS, namely the commitment of the workforce to competency, the organisational structure, and human resources policies and procedures.

To establish the competency of the workforce, information regarding the cost of HIV/AIDS to an organisation, and other aspects was obtained and measured against the overall performance of the organisation for issues such as employee performance, a loss of personnel, the recruitment and training of new personnel, production, and absenteeism and the effect thereof on the morale of the workforce.

The organisational structure is influenced by the diminishing of a competent workforce, increased use of technology to reduce labour dependency, and absenteeism and the effect thereof on the delegation of rights and responsibilities.

Human resources policy and procedures could be affected by legislation on recruitment processes, the need to train new employees, training regarding HIV/AIDS prevention, the testing of employees and the treatment of HIV/AIDS positive employees, higher remuneration as a result of the smaller source of competent people, sick and compassionate leave, and medical aid and pension fund contributions.

The research first attempted to identify whether HIV/AIDS does have an effect on the abovementioned factors. Thereafter, a survey was used to address the knowledge of and the role played by internal auditors regarding the business risk posed by HIV/AIDS to their organisations.

The results were interpreted and meaningful conclusions about the effect of HIV/AIDS on business risk and the control environment were drawn from an internal auditing perspective.

## 1.7 OVERVIEW OF THE STUDY

The rest of the study can be briefly explained by providing an overview of each chapter.

In Chapter 2 internal auditing as a consulting activity that evaluates and improves the control process is explained. An overview of the history of internal auditing is given. This includes a definition of internal auditing, the Professional Practice Framework, and the Competency Framework. These are all explained in the context of the role of internal auditors in an organisation. The concepts of control, risk management and corporate governance are highlighted.

In Chapter 3 the possible risk of HIV/AIDS to the world, the global economy, individual governments, the business environment and organisations, and the role of management are investigated. Background on the nature, origin, prevention and cure of the disease, as well as the extent of the epidemic, are discussed.

Chapter 4 focuses on the literature available on the effect of HIV/AIDS on the control environment and the role of internal auditors in limiting this risk. The study first investigates the role of internal auditors in determining the effects of HIV/AIDS on an organisation. It then looks at the effect of the disease on the control system, in particular on the competency of the workforce, organisational structure, and human resources policies and procedures.

Chapter 5 describes the research methodology used in the empirical study and Chapter 6 presents an analysis of the research findings of the investigation. The chapter first focuses on the effect of HIV/AIDS on certain elements of the control environment and then looks at the role of internal auditors in controlling this risk. Next, internal auditors' awareness of HIV/AIDS as a risk to the organisation, their assistance to management

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in controlling the risk, and their awareness that the disease weakens the control system are discussed.

In Chapter 7, the conclusions of the study are set out, recommendations are made, and other potentially relevant research areas that need to be investigated are identified.

## 1.8 SUMMARY

In this introduction, a brief overview is given of the profession of internal auditing, the risk of HIV/AIDS, and the role of internal auditors regarding this potential risk. The chapter has also identified the research problem and methodology to be used in the rest of the study. The next chapter gives a more detailed explanation of the profession of internal auditing.

# CHAPTER 2
# INTERNAL AUDITING AS A CONSULTING ACTIVITY THAT EVALUATES AND IMPROVES THE CONTROL PROCESS

## 2.1 INTRODUCTION

Although the internal auditing profession is not new to the business environment, large changes have occurred in this profession during the last few years. Internal auditors are not only seen as the right hand of management in assuring that policies, plans and procedures are adhered to, they now also fulfil a consulting role, investigating and reporting on crucial issues such as business risks threatening the organisation (Krogstad, Ridley & Rittenberg 1999:27). Internal auditors are still seen as control experts and must continuously monitor and report on areas in the control environment that are, or could become, a potential weakness (Root 1998:120). Therefore internal auditors have the responsibility of being aware of business risks, as well as the effect these risks may have on the various aspects of a business, such as the control environment.

One of the main risks threatening not only the world in general, but the business environment in particular, and therefore, the control environment of organisations, is the disease known as HIV/AIDS (UNAIDS 2000:1). The question arises as to what extent this disease will affect the business environment and individual organisations. Responding to HIV/AIDS in the workplace is essentially about managing the disease and the issue surrounding it as a business risk. This implies having accurate and relevant information about the epidemic, monitoring its progress, knowing or predicting the risk to the organisation, and addressing the risk by managing it (Evian 1998:4).

Various studies have indicated that managements are aware of the risk posed by HIV/AIDS to their organisations (UNAIDS 2000; Deloitte &

Touche 2002). It is still uncertain whether internal auditors, in a consulting capacity, are supporting management in monitoring and managing HIV/AIDS by studying the effect of HIV/AIDS for organisations. It is the internal auditors' duty, and the primary focus of this study, to understand the effects of HIV/AIDS on the control system of an organisation. As the control environment forms the basis of the control system (COSO 1992:23), an internal auditor, as a control expert, first has to identify the risk posed by HIV/AIDS to this area to be able to assist management in controlling the effects of the disease on the control system.

The consulting role of internal auditors, particularly with regard to an evaluation and the improvement of the control process, can only be fully appreciated if the internal auditing function within the profession is properly understood. With this objective in mind, an overview of the history of internal auditing, the definition of internal auditing, the Professional Practices Framework (PPF), the Competency Framework for Internal Auditors (CFIA), and the changing role of internal auditing with regard to control, risk and corporate governance processes, are highlighted in this chapter.

## 2.2 THE HISTORY OF INTERNAL AUDITING

As early as the beginning of the twentieth century, economic growth made it difficult for organisations to maintain control of their business activities and operational efficiency. Management lost direct contact with most of its subordinates. To overcome the problem of controlling the activities of the organisation, people known as internal auditors were appointed to review and report on what was happening. The tasks performed by the internal auditors varied from the checking of routine financial and operational activities, to analysing and appraising these activities (Institute of Internal Auditors Inc 2003).

As the profession evolved, internal auditors wanted greater recognition of their function and on 17 November 1941 The Institute of Internal Auditors

Incorporated (IIA Inc) was established in the United States of America (Institute of Internal Auditors Inc 2003). The initial purpose of the IIA Inc was to provide internal auditors with an opportunity to share their common interests and concerns (Sawyer, Dittenhofer & Scheiner 1996:9). Today, the IIA Inc is a dynamic international organisation that meets the needs of a worldwide body of internal auditors, dedicated to the continuing professional development of individual internal auditors and the internal auditing profession as a whole (Institute of Internal Auditors Inc 2003).

In 1944, Arthur E Hald, one of the founders of the IIA Inc, made the following statement:

> Necessity created internal auditing and is making it an integral part of modern business. No large business can escape it. If they haven't got it now, they will have to have it sooner or later, and, if events keep developing as they do at present, they will have to have it sooner. (Flesher 1996:3)

These words became true as internal auditing became one of the fastest growing professions of the second half of the twentieth century (Flesher 1996:3).

The activities of internal auditing expanded from being a watchdog (performing assurance activities for management) to being a guide dog for management. Modern internal auditing's responsibility is as broad as the current business environment. According to Arnold Baker, chief economist of a large organisation in the United States of America, there is going to be a fundamental change in the global economy, unlike anything we have seen before. An example of these dramatic changes is the fact that only one of the twelve largest industrial organisations in the United States of America in 1990, General Electric Company, still exists today (Marks 2001:44).

Internal auditors need to add value to an organisation by making sure that the activities of an organisation are performed economically, efficiently and

effectively; by foreseeing potential risks as well as by identifying existing risks, such as HIV/AIDS, that can threaten the organisation as a whole; by addressing corporate governance in their audit activities; by making sure that the organisation keeps up with the latest technology and processes; and much more (Marks 2001; Krogstad *et al* 1999).

To make sure that internal auditors keep up with changes in their environments, the IIA Inc developed a Common Body of Knowledge (CBOK) during 1972 (Sawyers *et al* 1996:29). This has been regularly updated, and during 1999 the IIA Inc's Research Foundation developed the Competency Framework for Internal Auditors (CFIA), to provide internal auditors with guidelines regarding their knowledge and the competencies needed to stay in touch with the changing business environment (McIntosh 1999:5). The changing role of the profession includes consulting. Internal auditors may also benefit from these guidelines because they can equip modern internal auditors better to evaluate new threats to the business environment, such as HIV/AIDS. The CFIA focuses on the skills needed by an individual person to be an efficient internal auditor.

For a long time, the environment that internal auditors operate in, namely internal audit departments or activities, lacked guidance on its role and responsibility towards the organisation it served. According to Mautz and Sharaf (1982:11), internal auditing was a well-established and well-respected activity, but there was little indication that it was well defined or clearly directed. The Statement of Responsibilities of Internal Auditing was prepared by the research committee of the IIA Inc and approved by the Board of Directors at its meeting on 15 July 1947. The purpose of the Statement was to establish a set of guidelines that defined the proper role and responsibilities of the internal auditing function within an organisation (Flesher 1996:34). The Statement has also been regularly updated and in June 1999, the IIA's Board of Directors voted and approved a new set of guidelines, headed by a new definition in the form of the Professional Practices Framework (Institute of Internal Auditors Inc 2003).

The definition is not only the starting point for these new guidelines, but forms the basis for the Professional Practices Framework (PPF - see section 2.4 for a detailed discussion) and the Competency Framework for Internal Auditors (CFIA - see section 2.5 for a detailed discussion).

## 2.3 DEFINING INTERNAL AUDITING

To appreciate fully the role an internal auditor can play in managing HIV/AIDS as a business risk, it is important to consider the nature of internal auditing. The definition of internal auditing forms the basis of the rest of the PPF. It is therefore important to investigate the changes that the definition has undergone to incorporate the new role of the internal auditing function as a consulting activity, with specific reference to the role of internal auditors with regard to the impact of HIV/AIDS as a business risk.

One of the elements of the first Statement of Responsibilities of Internal Auditing accepted by the IIA Inc in 1946, was a formal definition of internal auditing (Sawyers & Sumners 1973:5), namely:

> Internal auditing is an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization.

This definition led to the following statement of objective and scope issued in the same year (Sawyers & Sumners 1973:6):

> The objective of internal auditing is to assist members of the organization, including those in management and on the board, in the effective discharge of their responsibilities. To this end, internal auditing furnishes them with analyses, appraisals, recommendations, counsel and information concerning the activities reviewed. The audit objective includes promoting effective control at reasonable cost.

The above definition focuses mainly on the examination and evaluation of activities performed by the organisation; that is, compliance testing regarding the systems and informing management of weaknesses in the system or non-adherence to policies and procedures implemented by management.

As business processes became more complicated, information more widely obtainable, and the corporate world in general more sophisticated, the need for the internal audit profession to adapt to this new environment became evident. In 1997 the IIA Inc assembled a multi-national group, consisting of practitioners, academics and consultants, known as the Guidance Task Force (GTF) to study the needs of the profession (Institute of Internal Auditors Inc 2003). This group studied the internal auditing profession from several perspectives, for example, the global profession, internal auditing knowledge, and the future of the profession. The study concluded amongst other things, that the then prevailing definition of internal auditing was insufficient to articulate what the modern internal auditing profession does (McIntosh 1999). This definition was also insufficient to support the profession in providing consulting services with regard to various issues, for example, threats to the business environment such as HIV/AIDS.

On 26 June 1999, the IIA Inc Board of Directors approved the following new definition of internal auditing (Krogstad *et al* 1999:27):

> Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes.

In table 1 the key elements of the new definition are compared to those of the previous definition to emphasise the changes made.

**Table 1: Comparison of the previous and new definitions of internal auditing**

| Previous definition | New definition |
|---|---|
| Independent appraisal function | Objective assurance and consulting activity |
| Established within an organisation | Independently managed within an organisation |
| Examines and evaluates its activities as a service to the organisation | Adds value to improve the operations of the organisation |
| Assists members of the organisation in the effective discharge of their responsibilities | Assists an organisation in accomplishing its objectives |
| Does analyses, appraisals; makes recommendations; provides counsel and information concerning the activities reviewed | Uses a systematic and disciplined approach |
| Promotes effective control at reasonable cost | Evaluates and improves the effectiveness of the organisation's risk management, control and governance processes |

Source: Institute of Internal Auditors (1999:6)

In the above table, the consulting role of an internal auditor, as well as the fact that this role is based on assistance to management to help accomplish the organisation's objectives by identifying and managing threats, such as HIV/AIDS, is highlighted.

The original purpose of internal auditing was to provide assurance concerning historical activities in the organisation. Management's concept of internal auditing broadened over the years, which led internal auditors also to fulfil a consulting role. The new definition incorporates this added responsibility in the concept of consulting activities. Furthermore, there has

been a shift from the original watchdog role to a more futuristic approach that is based on adding value (Coetzee & Du Bruyn 2001:63).

The new definition of internal auditing encompasses all the dimensions of the internal auditing function, suggesting a profession that is characterised by broad business parameters and technical skills. Internal auditors should understand business strategy. The definition envisions internal auditors who focus on adding value by facilitating change through advice and counsel, in some cases even providing assurance to parties outside the organisation, for example, trading partners. The new definition expands the scope of internal auditing to recognise its key role in corporate governance and risk management, in addition to control activities (Coetzee & Du Bruyn 2001:63).

The new definition of internal auditing was the first of a number of changes that have resulted in a review of the status of guidance provided to internal auditors. The new definition has highlighted the wider responsibilities of internal auditing, for example, the consulting role, and therefore necessitated a revision of the current guidelines as embodied in the PPF. As HIV/AIDS is a potential threat to the business environment, including the control system, it is clear that the new definition, as part of the PPF, and the other elements of the framework incorporate the role to be played by internal auditors regarding this risk.

## 2.4 THE PROFESSIONAL PRACTICES FRAMEWORK (PPF)

Structural guidance is needed to keep up with the dramatic changes to the business environment and hence to the internal auditing profession. The scope of internal auditing activities has expanded, as highlighted in the new definition of internal auditing, and the need for guidance that can be followed, regardless of the industry, audit speciality or sector, has increased. The new definition of internal auditing also paves the way for the PPF, which provides a structural format for the different elements of

professional guidance. It consists of the following elements (Institute of Internal Auditors Inc 1999):

### 2.4.1 Definition of internal auditing

The definition of internal auditing is the umbrella under which the rest of the elements fall and has changed to incorporate the changes in the business environment (see the above discussion) and even new challenges to the internal auditing profession in its consulting role where threats to business objectives have to be managed, for example, HIV/AIDS.

### 2.4.2 Code of ethics

A code of ethics has been established to promote an ethical culture throughout the internal auditing profession. The code applies to all internal auditors performing internal audit services, regardless of the industry and the changing business environment.

### 2.4.3 Standards for the professional practice of internal auditing *(standards)*

The *standards* are the minimum requirements to be maintained by internal auditors for acceptable practice within the profession. They consist of various criteria by which the activities of internal auditing are evaluated and measured. The *standards* have been restructured to align them with the new definition of internal auditing and they now have a much broader perspective, prescribing a proactive role for internal auditors not only in control activities, but also in risk management and corporate governance processes, thus including the assistance of internal auditors to management regarding threats (such as HIV/AIDS) and the management and control of such risks.

### 2.4.4 Guidance – practice advisories

These guidelines include specific topics that currently require attention and may have a limited life or may be included in the formal *standards*, depending on importance, usage and acceptance.

### 2.4.5 Guidance - development

These guidelines consist of educational products, research studies. and other relevant material. They are not mandatory, but should help internal auditors to assist management with control, risk management and corporate governance processes relevant to the organisation. They are a valuable tool to be used in guiding internal auditors in the assistance to management regarding HIV/AIDS and its threat to the control environment.

The framework (PPF) is intended to encourage quality internal auditing services on a consistent basis worldwide and to guide internal auditors, management and audit committees. It is the internal auditor's task to operate within a professional framework to assist the organisation in achieving the highest quality results and its long-term objectives. New threats and risks such as HIV/AIDS, changes, innovations and other matters affecting the organisation should thus be investigated and if need be, incorporated into the framework to provide the internal auditor with guidelines regarding these issues.

As already discussed, the PPF consists of guidelines that define the role and responsibilities of the internal auditing activity. The skills needed by internal auditors to fulfil this role and responsibilities are detailed in the CFIA.

## 2.5 THE COMPETENCY FRAMEWORK FOR INTERNAL AUDITORS (CFIA)

The framework provides important insights into the future practice of internal auditing, as well as guidelines, competencies, the knowledge and skills needed for internal auditors to know how to perform their tasks. Therefore the manner in which internal auditors should address risks that threaten the organisation, such as HIV/AIDS, is explained in the discussion of the future role of internal auditing, the primary customers of internal auditing, the value proposition of internal auditing, and the competencies required of internal auditors to be able to perform their responsibilities properly. The CFIA consists of six modules. Each is discussed briefly below in connection with risk management, corporate governance and control (McIntosh 1999).

### 2.5.1 Overview

The overview consists of, *inter alia*, a short discussion on the main findings and challenges to the internal auditing profession, and an overview of the objectives and structure of the CFIA.

### 2.5.2 Internal auditing: the global landscape

This document consists of internal audit practitioners' experiences that will help determine the direction global internal auditing is taking, and includes the scope of internal auditing work; the numbers and location of internal auditors; the required competencies and qualifications; the professional development and training of internal auditors.

The scope of internal auditing activities varies as a result of cultural factors, organisational factors (such as the internal auditor being either a watchdog or a guide dog), and external events in a specific country that affect organisations (Birkett, Barbera, Leithhead, Lower & Roebuck 1999a). Risks and therefore controls thus vary according to the cultural mix of the workforce and the client base, as well as circumstances

affecting the country and organisation. This also influences internal auditors' role regarding the risk of HIV/AIDS.

### 2.5.3 Competency: best practices and competent practitioners

This document is divided in two parts, namely a description of a competent internal auditing function, and competency standards for internal auditors.

Internal auditing work takes place within diverse organisational settings, and constant change is taking place. Therefore internal auditors should have the competencies, skills and knowledge needed for the particular organisation that is being investigated. This includes international, institutional, organisational, sector/industry, internal auditing function and work knowledge. The field of practice includes knowledge regarding strategic functioning (understanding the organisation's environment), risk exposure (for example HIV/AIDS), the effect on the control system and control needed to minimise the risk, constant improvement in handling the risks identified in the control system, and assurance that the systems are functioning as implemented and planned by management (Birkett *et al* 1999b). This again underlines the fact that internal auditors need to understand the effect of risks such as HIV/AIDS on the business, including the control environment, to be able to perform their tasks with due professional care.

### 2.5.4 Internal auditing knowledge: a global perspective

In this document, existing information on research on internal auditing is examined. It illuminates the relationship between internal auditing practice and its contexts of practice. It implies that understanding the uniqueness of the organisation that must be audited is vital.

The document states that it is important for internal auditors to understand how factors such as relevant laws and regulations, the organisational functioning, the manner in which the organisation is managed, changes or

potential changes that are either internal or external, risks or potential risks threatening the organisation (such as HIV/AIDS) and the control system used by management to help achieve its objectives influence the organisation. Only by mentioning these issues can effective internal auditing activity occur that adds value to the organisation (Birkett *et al* 1999c).

### 2.5.5 The future of internal auditing: a Delphi study

This document sets out the opinions of 136 internal auditors regarding the issues identified by the *Internal Auditing Knowledge: Global Perspectives* module (refer to 2.5.4). The result of the research performed in global perspectives, was a comprehensive investigation into the opinion of internal auditors regarding critical issues and concepts in internal auditing.

Of the respondents in the survey, 75%indicated that they thought internal auditing would fulfil a consultative/facilitating/educational role in future. A large group, namely 77% of the respondents, indicated that assurance about the efficiency and effectiveness of risk management was the key task of internal auditing. In addition, 83% agreed that the internal auditors' contribution should enhance the understanding of controls that can be used in an organisation to address risks. The need to understand and manage risk has become a key concern for management and the study indicated the necessity of continuously improving risk management in the face of ongoing change and of minimising risk by means of proper governance and control (Birkett *et al* 1999d:81-85). This survey again highlights the important role of internal auditors in assisting management with the identification of risks such as HIV/AIDS, and the implementation of proper plans, for example, controls, to minimise such risks within an organisation.

### 2.5.6 Assessing competency in internal auditing: structures and methodologies

This document addresses the issue of how an internal auditing function's competencies can best be assessed, and the assessment of key role capabilities.

The CFIA has created a dramatically new image of the internal auditing profession. Internal auditors must constantly evaluate what they contribute to their organisations' reaching of objectives, and the skills and knowledge needed for them to be successful in meeting these demands. It is important that they understand the environment within which their organisation is functioning, including the extent of the threat of HIV/AIDS, and the effect of this disease on their organisation. Thereafter, they need to make sure that the internal auditing function has the necessary skills and knowledge to assist management with a particular threat.

## 2.6 THE ROLE OF INTERNAL AUDITING

Internal auditors need to make a meaningful contribution to meeting their organisation's main need, namely to reach its objectives. The Institute of Internal Auditors Inc has assisted individual internal auditors and internal auditing activities in this task by publishing the CFIA and PPF as sets of guidelines to fulfil this task.

As can be seen from the new definition of internal auditing, internal auditors are expected to add value and earn their living by advising management regarding control, risk and corporate governance processes and factors threatening these (Marks 2001:45), for example, HIV/AIDS. Thus, if this disease thus threatens the accomplishment of the organisation's objectives, internal auditors must investigate the effect of this risk on the control system and play a consulting role in adding value to the organisation and assisting management with its role.

In South Africa, the King Committee on Corporate Governance investigated corporate governance to promote the highest standards in managing a business. According to Sir Adrian Cadbury,

> Corporate governance is concerned with the balance between economic and social goals and between individual and communal goals… the aim is to align as nearly as possible the interests of individuals, corporations and society (King Committee on Corporate Governance 2002:8).

The King Report concluded that the objective of internal auditing is to assist management in the effective discharge of its duties and responsibilities; and therefore the scope of internal auditing includes control (including the control environment), risk management (investigating the potential threat of HIV/AIDS) and governance (how management is addressing this potential threat). It is important to note that, according to the King Report (2002:45), control and risk management, is still the responsibility of management and the board of directors, although internal auditors provide guidance and are actively involved.

The King Report acknowledges the contribution that internal auditing can make to the well-being of an organisation. The internal auditing profession has reacted by investigating and changing the definition of internal auditing. The new internal auditing definition now includes, apart from evaluating and testing the control system, the task of addressing risks threatening the organisation, and investigating the organisation's corporate governance by evaluating and improving the effectiveness of governance processes (Krogstad *et al* 1999). The role of internal auditing regarding these three key elements is discussed in more detail below.

### 2.6.1 Control

The control environment is a sub-section of an organisation's control system (COSO 1992:17). According to Standard 2120 of the IIA Inc, the internal audit activity should assist an organisation in maintaining effective

controls by evaluating their effectiveness and efficiency and by continuously promoting improvement (Institute of Internal Auditors Inc 2003).

A report similar to the King Report for South Africa, the Treadway Commission's report for the United States of America issued in 1987 (COSO 1992), identified control as the most important mechanism that management can use to ensure that its plans and procedures are adhered to, thus minimising the risks threatening the organisation (Root 1998). The Committee of Sponsoring Organisations (COSO) was asked to conduct a review of internal control as a result of the findings of the Treadway Commission's report (COSO 1992).

The committee called for organisations to work together to integrate the various internal control concepts developed and used by different organisations and to develop a common point of reference for internal control. Currently the committee is revising the 1992 COSO report and has published an exposure draft report for public comment (COSO 2003). The changes are briefly indicated in this study (see 2.6.2) after the current COSO report has been discussed. As the revised COSO report is still in a draft format and the main issue included in this study, namely the control environment, is basically the same, the 1992 COSO report is discussed in more detail.

The purpose of the COSO study was to provide a common understanding of internal control among all parties and to assist management in exercising better control over an entity. The result was a report, Internal Control – Integrated Framework, issued in 1992. The study developed a comprehensive definition of control, namely (COSO 1992:3):

> Internal control is a process, affected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- effectiveness and efficiency of operations;
- reliability of financial reporting; and
- compliance with applicable laws and regulations.

The first category focuses on the reaching of an organisation's business objectives, including the identification and management of risks. The second category looks at the data gathered and used in the decision-making process and financial statements. The third category examines compliance of laws and regulations to which the organisation is subject. Internal control, including the control environment, must thus support management's task to accomplish the organisation's objectives by identifying and managing risks or potential risks, such as HIV/AIDS.

A framework for the concept of internal control was developed by the committee to incorporate all of the above. This framework consists of six components (COSO 1992:17), which are briefly discussed below.

#### 2.6.1.1 The control environment

The control environment provides an atmosphere in which people conduct their activities and carry out their control responsibilities. It serves as the foundation for the other five components. The control environment has a direct influence on the way activities are structured, objectives are established and risk is addressed; and therefore it affects the control consciousness of people performing their day-to-day activities. For control and risk management to be successfully implemented in an organisation, internal auditors need to understand the environment internal auditing is built on. The control environment also forms part of the primary research problem, namely the effect that HIV/AIDS has on the control environment.

The control environment is thus the foundation for the rest of the control system. If the control environment is functioning effectively, chances are better that the rest of the control system can also work as planned. A

proper control environment forms a sound basis for the control system of an organisation by setting the tone in an organisation and influencing the control consciousness of its people (Du Plessis & Grobler 1998:126).

The control environment consists of various elements. The COSO framework divides this environment into seven elements. Each of these elements is briefly defined below (COSO 1992; Root 1998).

**a Integrity and ethical values**

Integrity and ethical values refer to management's attitude, actions and behaviour regarding ethical issues. Moral guidance and procedures, an ethical code, a code of conduct and disciplinary procedures are some of the important issues discussed. So, for example, there are various legislative stipulations regarding HIV/AIDS, which is a global issue. This legislation plays an important role and could influence an organisation's integrity and ethical values (see Chapter 3 regarding issues such as the fact that HIV/AIDS is being a non-notifiable disease in South Africa, prevalence testing, where management can set the example, and other issues).

Although a properly documented ethical code and disciplinary system is important, the behaviour of management regarding ethical values tends to carry even more weight in influencing the workforce, for example, speaking the truth at all times, keeping to promises, complying with rules and regulations, respecting private and confidential information (Ramsey 1996:14).

**b Commitment to competence**

Commitment to competence refers to the need for employees to have the necessary knowledge and competence to perform their duties properly. If an employer does not have and display the necessary qualities, the control environment is weakened (Boynton & Kell 1995:17). Factors such as employee performance, a loss of personnel, the need to recruit new personnel, and abnormal absenteeism, are some of the risk factors that

threaten the competency levels of the workforce. Internal auditors have to investigate the level of influence that HIV/AIDS has on these factors within an organisation.

**c The board of directors and the audit committee**

The board and the audit committee should be effective and efficient in performing their duties regarding the control system, including the rest of the elements of the control environment.

**d Management's style and philosophy**

These elements refer to the attitude with and the manner in which management runs the day-to-day activities of the organisation. If management ignores major risks or potentially catastrophic circumstances such as HIV/AIDS, the control system is not only weakened, but it becomes more difficult to reach the organisation's objectives (Holman 1996:63).

**e Organisational structure**

The organisational structure is the framework used for the execution, controlling and monitoring of the activities of the organisation to ensure that the organisation's objectives are reached. Resources are organised in a formal, structured manner, and if this is disrupted, for example, due to a loss of personnel as a result of AIDS, or absenteeism as a result of HIV, the structure could either collapse or not fulfil its function (Ratliff *et al* 1996:526).

**f Delegation of authority and responsibility**

Delegation refers to the methods used and the degree to which authority and responsibility are allocated to individuals. If certain individuals are removed from the organisation by being abnormally absent or dying as a result of HIV/AIDS, a weakness is created, as another individual may end up having too much authority and responsibility (Dunn 1996:162).

**g Human resources policy and practice**

Human resources management should ensure the employment of sufficient and capable people, as well as the development and well-being of these employees. An employment policy that is not in line with government regulations, medical aid and pension plans, training, remuneration structures, and much more, can create risks that could threaten the organisation. As discussed in more detail in Chapter 3, legislation, government's code of good practice on HIV/AIDS issues, management's responsibility regarding HIV/AIDS in the managing of a business and other factors all play a key role in the development of policies and practices for the workforce.

### 2.6.1.2 Risk management

The second component of the COSO framework is risk management, as every entity faces a variety of risks that threaten the reaching of the organisation's objectives (for example, HIV/AIDS). These risks must be identified, measured, analysed and controlled.

### 2.6.1.3 Control activities

Control activities are the policies and procedures that help to ensure that management’s directives are carried out and that the necessary actions are taken to address any risks identified. These activities include, for example, management's strategic plan on how to deal with risks such as HIV/AIDS.

### 2.6.1.4/5 Information and communication

The fourth and fifth elements, information and communication, identify the need for pertinent information to be identified, captured and communicated in a form and time frame that enables people to carry out their responsibilities. Effective communication must also occur in a broader sense, as all staff must receive a clear message from top management

that control responsibilities must be taken seriously, that people must understand their role in the internal control system, as well as how individual activities relate to the work of others.

#### 2.6.1.6 Monitoring

The last component, monitoring, addresses the fact that we live in a changing environment. Internal control systems need to be monitored; a process that assesses the quality of the system's performance over time to make sure that current risks are identified and the necessary controls are in place to address these risks (Root 1998). Even if a risk such as HIV/AIDS is not a threat to a specific organisation at a given time, the situation may change after a certain period. Therefore risk and potential risk must be constantly monitored.

As can be seen from the above discussion of the COSO model (1992), the control environment sets the tone for establishing objectives for the organisation. Setting objectives is a precondition to risk assessment. There must first be objectives before management can identify risks that threaten their chances of achieving these objectives and can take the action necessary to manage these risks (COSO 1992). Therefore management needs to be aware of the business risk that HIV/AIDS poses to an organisation. Then it needs to address this risk by implementing a proper strategic plan.

### 2.6.2 Risk management

According to various dictionaries, risk is the possibility that an accident or a loss can occur, or a potential threat as a result of an uncertainty (for example, HIV/AIDS is an uncertain and sometimes unrecognised threat to society and the business environment). For the purposes of this study, risk is classified as business risk. According to Arthur Andersen (1998) risk is:

> the threat that an event or action will have a negative effect on the ability of the organisation to achieve its business objectives and to execute its strategies effectively.

Risk management is the responsibility of management, and it is management that must decide on the organisation's appetite for risk. To manage risk, management should have an understanding of the concept of risk in general, the specific risks that threaten the organisation and the risk management process (King Report on Corporate Governance 2002). It is therefore important to identify whether HIV/AIDS is a risk in general (see Chapter 3), and if so, if this risk threatens a specific organisation.

The process of identifying and analysing risk is an ongoing process. As circumstances (internal and external) changes for the organisation, risks threatening objectives must be addressed (COSO 1992). To manage all the diverse risks facing the organisation, including HIV/AIDS, a structured approach is required. Furthermore, according to the IIA Inc's Standard 2110, the internal audit activity should assist the organisation by identifying and evaluating significant exposures to risk (Institute of Internal Auditors Inc 2003).

The Committee of Sponsoring Organizations (COSO 1992) saw the importance of organisations' managing risk. A revised COSO exposure draft report for public comment, the Enterprise Risk Management Framework, has recently been made available on the Internet (COSO 2003). Whereas the first COSO report focuses on control and risk as part of the implementation of proper control procedures, the second report focuses on enterprise risk management and controls as a tool to help manage risks threatening an organisation. According to the draft report, all entities face uncertainty, but management must decide how much uncertainty the organisation is prepared to accept and must manage the process, not overstepping that line. The steps identified in the enterprise risk management process are the internal environment (the foundation for the other components), setting objectives (management determines the

strategic, operational, reporting and compliance objectives of the organisation), event identification (management determines factors influencing events, for example, internal or external), risk assessment (how events will affect the achievement of objectives), risk response (for example, avoiding, reducing, sharing or accepting risk), control activities (policies and procedures to help ensure that risk responses are properly executed), information and communication, and monitoring the process.

The internal environment is the basis for the rest of the process and refers to basically the same issues as the term control environment in the current COSO report. Concepts such as risk management philosophy, risk appetite and risk culture has been added to the current elements of a control environment.

To conclude, management must understand risks in general (such as HIV/AIDS), be able to identify risks threatening the organisation and to implement a suitable risk management programme (for example, a proper control system) to address and minimise these risks. Internal auditors should assist management with this process and therefore need to understand risks in general and the effect of such risks for their organisations.

Risk management is one of the key issues of corporate governance processes, which are the responsibility of management. Therefore internal auditors need to understand the governance processes implemented by management to be able to play a consulting role in the management of the organisation.

### 2.6.3 Corporate governance

More than ever before, management and audit committees are seeking assistance from internal auditors on corporate governance issues (Steinberg & Pojunis 2000:34), including vital issues such as HIV/AIDS. This need was also recognised when the concept of corporate governance

was incorporated in the new definition and standards of internal auditing (Institute of Internal Auditors Inc 1999). The role of internal auditing in assisting management with corporate governance was also included in the King Report (King Report on Corporate Governance 2002).

Corporate governance is defined by mainstream accounting and finance literature as the range of control mechanisms that protect and enhance the interest of shareholders of business enterprises (Fama & Jensen 1983:311). As the role of internal auditing evolved to include increased guidance, it became necessary to identify specific areas where the internal audit activity could assist management (Steinberg & Pojunis 2000:36).

The IIA Inc Standard 2130 states that the internal auditing activity should contribute to the organisation's governance process by evaluating and improving the process (Institute of Internal Auditors Inc 2003). The IIA Inc Research Foundation and PricewaterhouseCoopers have conducted a study on the Board of Directors' responsibilities and leadership, and have identified tools that internal auditors need to assist management with this task (PricewaterhouseCoopers 2000:2). This study identified eight key responsibilities for the Board, namely strategy and planning; risk management; tone at the top; measuring and monitoring performance; transformation; management evaluation, compensation and succession planning; internal and external communication; and effective board dynamics. It was also agreed that the first five areas should be the focus areas for internal auditing in assisting management.

With the exception of strategy, the topic discussed most at Board level is risk (Steinberg & Pojunis 2000:36). Directors do not like surprises, such as people who become ill or die as a result of HIV/AIDS, incidents such as product failure, physical or technology disaster, or problems due to failing to comply with new legal or regulatory stipulations with regard to HIV/AIDS, to interfere with their management plans. Because managing risk is a core competency for most internal audit departments, the department can provide great value helping the Board to identify significant

risks. Management tends to be neglectful about ensuring that the organisation has an effective, ongoing process to identify risks, measures the potential impact against a varied set of assumptions, and does what is necessary to manage risks proactively (Steinberg & Pojunis 2000:37).

The PricewaterhouseCoopers (2000) study's results show that effective Boards recognise that corporate culture starts with the tone set by management. Increasingly, directors recognise that softer issues, such as ethical values, the competency of employees, and human resources policies and practices must also be evaluated and addressed. Internal auditors have long familiarised themselves with these issues while studying and assessing the control environment. Familiarity with these concepts enables internal auditors to assist management in providing the Board with relevant information, and to supplement it with direct input (Steinberg & Pojunis 2000:38). Therefore internal auditors as control experts, understand the control environment and can assist management in managing the organisation (corporate governance) by identifying the effects that HIV/AIDS, as a risk to the organisation, poses to the control environment.

## 2.7 CONCLUSION

As can be seen from the discussion above regarding the new definition of internal auditing, as well as the PPF and CFIA, it is clear that internal auditors in a consulting capacity are well equipped to assist management in identifying the effects of HIV/AIDS on the control environment. It is also clear that internal auditors can be expected to assist management in the areas of control and risk, and therefore of delivering value at the highest levels of their organisation, by enhancing corporate governance. As can be seen from the above discussion, the concepts of control, including the control environment, risk management and corporate governance are inseparably linked. Internal auditors must help their organisations to accomplish their objectives by evaluating and improving the effectiveness of risk management, control and governance processes.

The question now to be answered by management and internal auditors is whether HIV/AIDS is a risk, not only globally, to individual countries or areas, but also to specific communities and organisations functioning within specific boundaries. If HIV/AIDS is a risk, the next question that needs to be asked is how internal auditors, as control experts, can support management in a consulting role to address this risk and the effect thereof on the control environment.

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# CHAPTER 3
# THE EFFECT OF HIV/AIDS AS A POSSIBLE RISK TO THE WORLD, GLOBAL ECONOMY, INDIVIDUAL GOVERNMENTS, THE BUSINESS ENVIRONMENT AND ORGANISATIONS

## 3.1 INTRODUCTION

In the previous chapter it has been argued that professional internal auditors as control experts are well equipped to assist management to deal with control and risk. Internal auditing has also been described as a function that could add value in the business environment by evaluating and improving the control system, the risk management process and corporate governance processes. This is also true regarding the possible risk of HIV/AIDS to the organisation. Therefore, before the effect of HIV/AIDS on the control environment can be debated properly, it is important to focus on HIV/AIDS as a possible business threat.

HIV/AIDS is a known threat in the world, especially in Sub-Saharan Africa and South Africa (UNAIDS/WHO 2003). It is vital that the consequences of the disease on the economy, governments, and the business environment and individual organisations in particular are studied. Studies performed *inter alia* by the Centre for International Health, Boston University School of Public Health (2002), SABCOHA (2002), Deloitte & Touche (2002), and others have indicated that managements are aware of the possible risk posed by HIV/AIDS to their organisations.

Internal auditors first have to understand what HIV/AIDS is to be able to determine the extent of the problem, its effect(s) on the economy, the role of governments, the effect(s) on the business environment and organisations, and finally the role of management. Thereafter, internal auditors, in a consulting capacity should decide how management can be assisted to deal with HIV/AIDS as a possible risk.

## 3.2 THE NATURE, ORIGIN AND PREVENTION OF HIV/AIDS

To determine the effect(s) of HIV/AIDS on the business environment, the organisation and the control environment, internal auditors need to familiarise themselves with how the virus works. The human immunodeficiency virus (HIV) enters the body and attacks the immune system. The immune system's function is to control or eliminate bacteria and viruses that threaten the body, and to eliminate damaged body cells that could become cancerous. If the immune system deteriorates, the body cannot fight diseases and becomes ill. When illnesses, anything from influenza to cancer, together with HIV attack the immune system, this is known as the acquired immune deficiency syndrome (AIDS). The result of AIDS is death (Ward 1999:386; Barnett & Whiteside 2002:34). Unfortunately, the knowledge that HIV causes AIDS and thus ultimately causes death is only the beginning of understanding the epidemic.

Today it is known that there are two types of HIV, namely HIV-1 and HIV-2. They are very similar, but HIV-1 is more aggressive in causing diseases. Apart from this difference in the two types of viruses, scientists have now identified 11 subtypes of the HIV-1 virus (Ward 1999:356, Janse van Rensburg 2000:267). Table 2 overleaf sets out the subtypes and the regions or countries where each type predominates. It is important to study and track each subtype, as each type responds differently to a given treatment. Re-infection by another type could damage the immune system even more rapidly than infection by only one type. The effect of re-infection on an organisation and its control environment could thus be catastrophic, as people who are infected with different subtypes become weaker more quickly and die faster. Management and the workforce need to know this.

Table 2: Predominant HIV subtypes in various countries and regions

| HIV subtype | Region or country predominance |
|---|---|
| Also known as Group M (major): | |
| A | Central and East Africa |
| B | Americas, Europe, Thailand, Japan |
| C | Southern Africa, India |
| D | Central, East and South Africa |
| E | Thailand, Japan, India |
| F | Romania, Brazil, Zaire |
| G | West Africa |
| H | West Africa, Taiwan |
| I | Cyprus |
| J | Zaire |
| Group O | Unusual or recently identified subtypes that do not fit into the Group M categories |

Source: Ward (1999:357)

Knowing how long a person has between infection and illness and death is important in plotting the effect of the epidemic on the economy and society. The period from HIV infection to death varies, depending on the circumstances of the individual. It has long been believed that with a healthy lifestyle (proper medical care, nutritious food, a stress-free life and non-exposure to infections), the period from initial HIV infection to the development of AIDS averaged ten years, and with proper treatment, including prescribed drugs, from the onset of AIDS to death, two years. However, recent studies have indicated that resistance to existing drugs is growing (Barnett & Whiteside 2002:44). The virus continuous to mutate. Today, in addition to the subtypes indicated in Table 2, there are over 120 sites in its structure. Hence, the incubation period has shortened to an average of seven years (Barnett & Whiteside 2002:44).

The fact remains that HIV/AIDS is a disease that affects people throughout the world. To do something about the problem, the United Nations and other global institutions, governments, regions, organisations, society and individuals need to know of the problem, its origins, spread, treatment, prevention, and other important issues.

### 3.2.1 The origin and spread of HIV/AIDS

Between 1980 and 1981, five young men in the United States of America were treated for a disease called *Pneumocystis carinii,* a disease usually found in older people. These cases were reported to and investigated by the Centre for Disease Control and Prevention, United States of America. The number of cases increased and soon scientists identified this to be a different illness. It was named AIDS (Ward 1999:366-368).

In 1984, HIV was identified as the cause of AIDS. The most crucial evidence came from a later study conducted in Thailand between 1988 and 1994, where 200 000 Thais were tested in 1988 and 700 000 Thais were tested in 1994(Ward 1999:378).

Scientists can still only speculate about the origin of HIV, but many believe that HIV-2 was present in an African monkey and became transmissible to humans through a series of mutations, and that HIV-1 was originally carried by African chimpanzees (Ward 1999:376; Janse van Rensburg 2000:267).

The means by which HIV is transmitted has been identified to be sexual contact (either heterosexual or homosexual); contact with blood (for example, blood transfusions) or other bodily fluids, blood products or tissues (through needle sharing, for example, in drug use or poor medical care), accidental needle pricks, or breaks in the skin; transfer from an infected mother to her infant before or during birth and breast-feeding (Ward 1999:35-37; Janse van Rensburg 2000:268). No new facts are known about the transmission of the virus and questions such as whether

a mosquito that bites a person will be able to spread the virus, can still not be answered with certainty. Societies and governments today focus on preventing infection and developing a vaccine (Barnett & Whiteside 2002:45). Although managements cannot help to develop new medicines (other than by donating money for research), it is important that organisations assist in preventing the disease from spreading. Internal auditors should assist management with this task, but must first understand the prevention and prognosis of the disease.

### 3.2.2 The prevention of HIV/AIDS

At this point in time, there is no cure for HIV or AIDS. However, there are drugs that can slow the process. Antiretroviral drugs are the primary treatment for HIV. The type(s) chosen vary according to the individual, the stage of the disease, the body's resistance to the drug, re-infection by a different type of virus (see Table 2), and other factors. New drugs are being developed continuously, but various uncertainties remain, for example, about the resistance of the virus to these drugs (Ward 1999:76).

The success of any treatments depends on medical personnel's knowledge and understanding of HIV/AIDS and the drugs used. Patients must be educated on how to use the drugs, and motivated to use the drugs continuously, as side-effects are very severe and emerge as time goes by (Ward 1999:69). Management can play a leading role in motivating employees by implementing training programmes regarding the use of the drugs, possible side-effects and other factors regarding the drugs.

The cost of treatment also plays an important role. The cost of the drugs alone varies from US$1800 per year per patient to US$350, depending on the pharmaceutical company and the country. The amount spent on research has to be included in the cost. At this stage, research is focusing on the subtypes found mainly in Western Europe and the United States of America (Barnett & Whiteside 2002:45).

The only way to prevent the disease from spreading is for individuals to refrain from behaviour and practices that increase the risk of acquiring HIV and of transmitting it to somebody else. Thus, proper communication of knowledge about the disease, the study and change of social and cultural environments, proper health care, and other factors play an important role in preventing the disease from spreading (Barnett & Whiteside 2002:40). Management, with the help of internal auditors, should develop a proper plan to assist employees with this. First, it is necessary to know what the level of the spread of the epidemic is and which regions, countries and areas are at risk and which gender(s), age group(s) and intellectual levels amongst workers are affected.

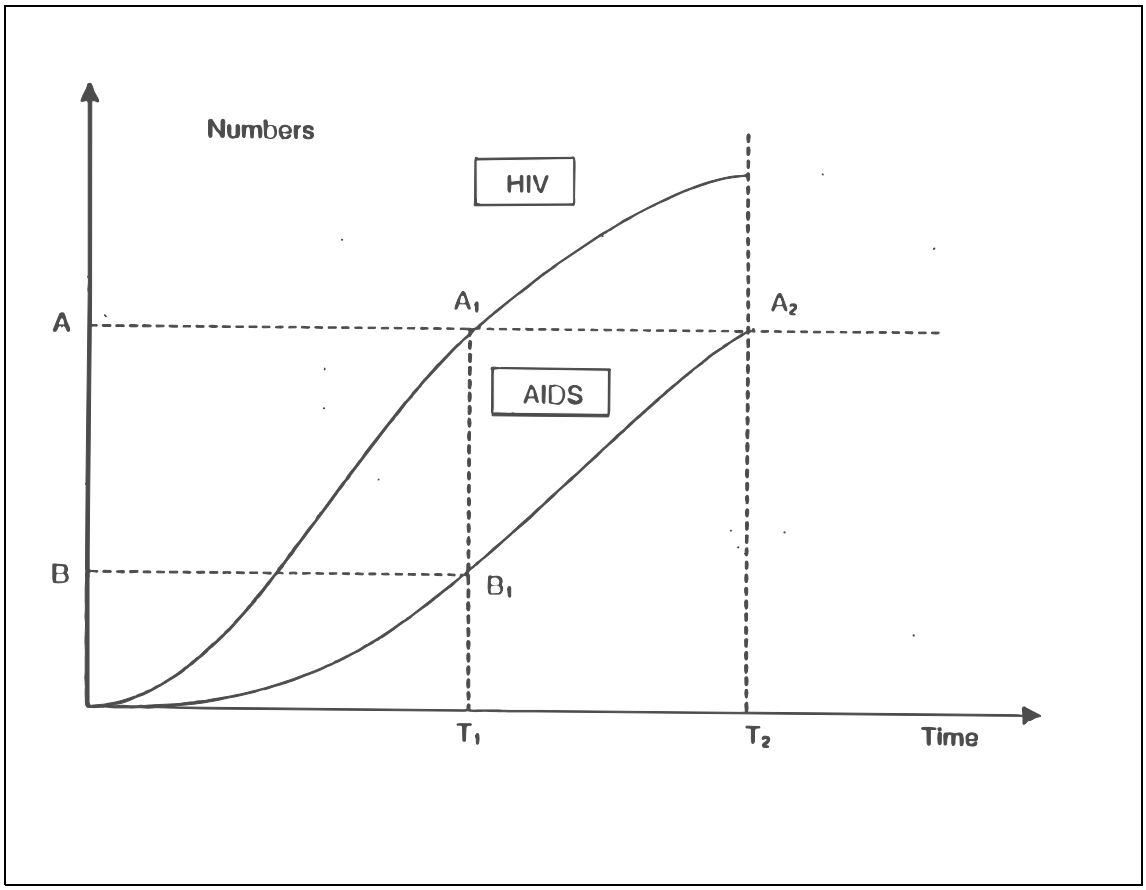
## 3.3 HIV/AIDS AS AN EPIDEMIC

An epidemic is a rate of spread of a disease that reaches unexpectedly high levels, affecting a large number of people in a relatively short time. A pandemic refers to a collective description of epidemics of world-wide proportions, such as HIV/AIDS today (Barfield 1997). In modern society, with its transport networks, no community is isolated. Therefore it is easy for an epidemic to become a pandemic.

### 3.3.1 The epidemic curve of HIV/AIDS

All epidemics have a specific pattern: a disease infects the population slowly, affecting some and missing others. Then infection increases dramatically. Lastly, the number of new infections slows down as most people are already infected and the epidemic reaches a plateau (Barnett & Whiteside 2002:46). What makes HIV/AIDS different from other epidemics is the fact that there are two curves (see Figure 1), namely one for HIV and one for AIDS (Barnett & Whiteside 2002:47-48). This pattern followed by the illness makes this disease very dangerous, as people tend to forget about the second curve that follows the first a few years later.

Figure 1: The two epidemic curves of HIV/AIDS




Source: Barnett and Whiteside (2002:48)

At a given time (T1), the number of people infected with HIV (A1) does not dramatically influence the community or workforce, as some of the people will not even know they are infected or will not become ill, and the AIDS cases (B1) are low. People tend to forget that all people with HIV will get AIDS and will die. It is important for management to determine what the HIV rate is at a given time for their organisation, as this will not only help management to determine the effect of the disease on the organisation at that time, but will also give an indication of the risk to follow (AIDS cases). Internal auditors need to make management aware of this fact.

### 3.3.2 The estimated prevalence of HIV/AIDS

In the United Nations' programme on HIV/AIDS, called UNAIDS, the United Nations has joined forces with the World Health Organisation (WHO), to address this problem globally. Various studies by these

organisations and information received from different countries are published on a regular basis (UNAIDS/WHO 2002:1). Shocking figures were revealed in the latest UNAIDS/WHO report, issued in December 2003. Globally, it is estimated that AIDS claimed more than 3 million lives during 2003, an estimated 5 million were infected with HIV during this time, bringing the total number of people living with the virus to 42 million. Figure 2 (below) sets out the prevalence of the disease globally (UNAIDS/WHO 2003:36).

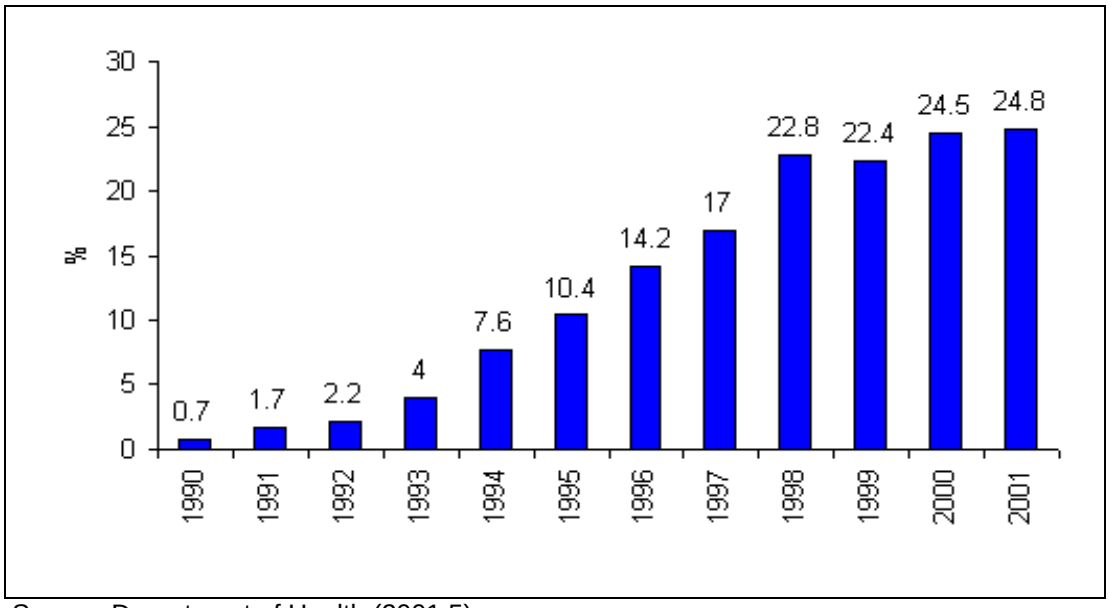
Globally, Sub-Saharan Africa is the most severely affected, with the Southern African Development Community containing the highest number of infected individuals (UNAIDS/WHO 2003:7).

Figure 2: Adults and children estimated to be living with HIV/AIDS, 2003


Source: UNAIDS/WHO Report, (2003:36)

In South Africa, the Department of Health annually performs a HIV/AIDS study by testing all pregnant women attending a public sector antenatal clinic (Department of Health 2001:1). This is not the most accurate method of determining the national HIV/AIDS prevalence rate, as abortions are not included. The fact that a woman who is HIV positive has 50% less of a chance of becoming pregnant than one who is HIV negative (Barnett & Whiteside 2002:19); that women are more likely to be infected than men (Ward 1999:216); that not all pregnant women attend public sector clinics; and many other reasons make this method problematic. The government has declared HIV/AIDS a non-notifiable disease (Department of Health 1997:33). Therefore, the following figures can only be an estimate of the extent of the disease in South Africa.

Figure 3: National HIV prevalence trends as a percentage of antenatal clinic attendees in South Africa, 1990-2001

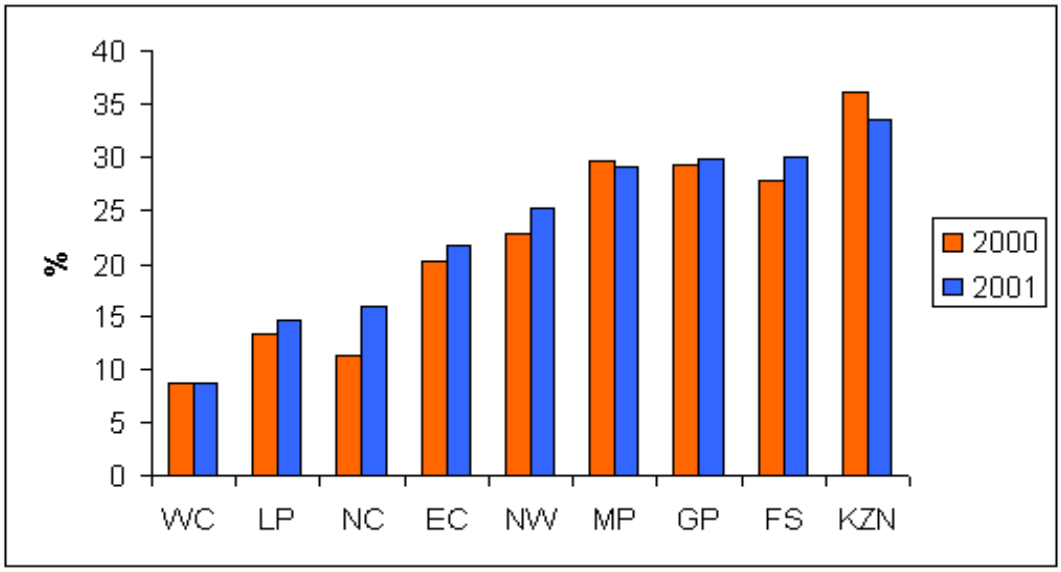



Source: Department of Health (2001:5)

From Figure 3, it seems that the HIV epidemic has reached a plateau (see Figure 1 - first curve) in South Africa. However, the question should be asked how accurate the information that these figures are based on is. Also, the population is decreasing as a result of people dying of AIDS (see Figure 1 - the second curve). Thus 24,8% of a smaller population has a much greater impact than 24,5% of a larger population.

The Department of Health has also used this study to identify the extent of the problem for different geographic regions and age groups (Department of Health 2001:6). These variances could have a direct influence on the workforce in general, as well as on certain organisations within a specific region. The following two figures indicate the infection rate per region for South Africa (Figure 4) and the rate per age group (Figure 5).

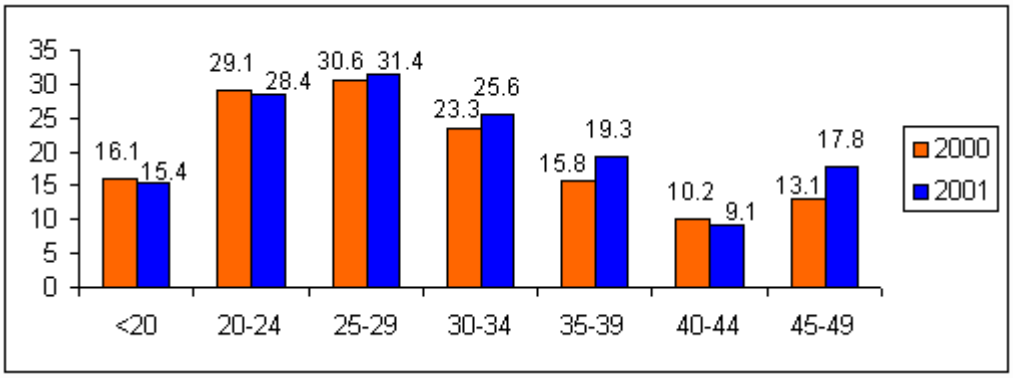
Figure 4: HIV prevalence as a percentage by province of antenatal clinic attendees in South Africa, 2000-2001




Source: Department of Health (2001:6)

The above indicates a growth in prevalence in six of the nine regions, with only KwaZulu-Natal and Mpumalanga showing a decrease. Again, it should be taken into account that the figures for KwaZulu-Natal were very high for the previous years, and it is possible that the population has decreased and that therefore the percentage will be affected. Management needs to be made aware of different infection rates, as these will have a direct influence on the existing workforce, as well as on potential employees, and therefore on the control environment (factors such as the possibility of part-time employees filling in for employees being ill, and many more).

Figure 5: HIV prevalence as a percentage by age group of antenatal clinic attendees in South Africa, 2000-2001




Source: Department of Health (2001:7)

Although there has been a slight decrease in the statistics for teenagers (<20), the 20 to 24 group, and the 40 to 44 group, a worrisome fact to the business environment is that infection levels are very high amongst young, economically active persons. This concern is also addressed by the UNAIDS/WHO (2002) and the South African Business Coalition on HIV/AIDS (SABCOHA 2002).

The figures above show that HIV/AIDS will not only influence the economy (for example, productivity and the consuming power), but will also have an overwhelming effect on the current and potential workforce, as the youth are our future. The disease is thus a major threat to the achievement of strategic business objectives and dealing with related business risks for individual organisations.

Governments and the business world should understand the effect that HIV/AIDS will have on the economy and the social environment, and how this will influence their tasks. It is their duty to bring this knowledge to the attention of communities and other role players. Hence, for management to really understand the effect of HIV/AIDS on its organisation, a proper prevalence study should be conducted amongst the workforce.

## 3.4 THE EFFECT OF HIV/AIDS ON THE ECONOMY

The most obvious impact of HIV/AIDS on the economy is its effect on the labour force. The disease mainly affects people within the most productive years of their life (see Figure 5). As labour is a key input in production, lower growth in the population and thus in the workforce will have a negative effect on economic growth (SABCOHA 2002:15).

Economic growth is determined by a country's productive capacity. Capital formation requires savings sourced domestically or internationally. Domestically, investments are threatened by HIV/AIDS, as an additional burden is placed on government finances (increased expenditure for prevention and treatment; and reduced revenue income because there are fewer people). Private sector savings are also negatively affected, as companies spend more on labour due to skills shortages, the cost of training new recruits, medical costs and various other factors. The potential for foreign investments is also threatened, as capital inflow only happens when investors see growth opportunities and new markets - unlikely with the extent of HIV/AIDS in South Africa (Nedcor Economic Unit 2001:3). It is therefore important for governments, the business environment, and the management of organisations in particular to be aware of the fact that HIV/AIDS can be seen as a potential business risk.

The overall effect on economic growth is, at this stage, purely speculative. Different assumptions and models have resulted in estimates of the impact of HIV/AIDS varying from a 0,3% subtraction from the annual Gross Domestic Product to more than 1,5% at the height of the crisis (Nedcor Economic Unit 2001:4). According to SABCOHA (2002:16), this figure is estimated at 1% for South Africa for the year 2001. The effect depends primarily on the response of the business environment, as well as government, over the next few years. Managements need to be made aware of these figures as this potential business risk could have a direct effect on organisations as well as on the control environment.

## 3.5 HIV/AIDS AS A CHALLENGE TO GOVERNMENTS

As indicated above, governments face special challenges from HIV/AIDS, and although few data exist about the impact of the disease on government activities, it is essential to look at the role government has to play (Barnett & Whiteside 2002:295). One of the roles of government is to provide a service to communities, individuals and businesses. Therefore, government has to ensure that it has competent, healthy and sufficient employees to fulfil this role by focusing on the prevention of infection amongst government employees and the treatment of staff with HIV/AIDS. The government also has to implement strategies to help fight the disease by implementing prevention programmes and medical services, monitoring the effect on the economy, and regulatory measures to force individuals, businesses and others to address the problem (Barnett & Whiteside 2002:296-297). This must be successfully done with less government income, as productivity will decrease and both organisations and individuals will pay less tax.

At the Special Session of the United Nations General Assembly in June 2001, the world's governments adopted the Declaration of Commitment on HIV/AIDS (UNAIDS/WHO 2002:6). For the first time, time-bound targets according to which governments and the United Nations may be held accountable were set. In sub-Saharan Africa, 40 countries have developed national strategies and 19 countries have National AIDS Councils (UNAIDS/WHO 2002:8). In South Africa a strategic plan was designed in February 2000 to guide the country's response as a whole to the epidemic (HIV/AIDS/STD strategic plan for South Africa 2000:5). The Minister of Health, Dr Manto Tshabalala-Msimang, initiated the development of this strategic plan in July 1999, and all sectors of society have become actively involved, including the business environment.

Government saw the need to protect those with and without HIV/AIDS and this response was based on the principles in the Constitution of South Africa, Act No 108 of 1996 (South Africa 1996). In terms of section 9 of the Constitution, unfair discrimination, also against the HIV/AIDS infected, is prohibited. From this starting point, a number of laws were changed or implemented to prevent unfair discrimination based on HIV/AIDS, namely the Employment Equity Act No 55 of 1998, the Medical Schemes Act No 131 of 1998, the National Policy for Health Act No 116 of 1990, the Promotion of Equality and Prevention of Unfair Discrimination Act No 4 of 2000, the Labour Relations Act No 66 of 1995, the Occupational Health and Safety Act No 85 of 1993, and the Basic Conditions of Employment Act No 75 of 1997 (Strong 2002).

As each act of government can only address certain issues, the need for a more comprehensive set of guidelines for incorporating these laws and strategic plans into the working environment has become a necessity. The National Economic Development and Labour Council (2000) has developed a Code of Good Practice on Key Aspects of HIV/AIDS and Employment that sets out guidelines for employees and trade unions on how to manage HIV/AIDS within the workplace.

The new legislation has increased the possibility that HIV/AIDS could become a business risk to organisations. Managements need to know the content of these laws and other guidelines, and how this affects them in managing their workforce. This should be seen as a specialised field. The risk of increased litigation against organisations where employees feel that they have been discriminated against cannot be ignored. Internal auditors, as consultants to management, need to make sure that management is aware of these facts and of how they could influence the control environment.

## 3.6 THE EFFECT OF HIV/AIDS ON THE BUSINESS ENVIRONMENT AND INDIVIDUAL ORGANISATIONS

As previously discussed, the effect of the disease on the economy depends heavily on the response of the business environment and governments to this threat over the next few years. Organisations, thus managements and by implication internal auditors, should take note of the effects of HIV/AIDS on their environment, including the control environment. If the disease not yet had a large impact, they should implement pro-active strategies and plans to minimise the impact. The effects of HIV/AIDS on organisations can be divided into two main groups, namely risks threatening the external environment and those influencing the internal environment. Internal risks can be further divided into direct and indirect risks (Randell 2002:88-89).

External risks include for example economic risks (a decrease in Gross Domestic Product growth, inflation increases as a result of increased labour costs); market risks (a decrease in demand as a result of a drop in the number of consumers); service delivery failure; the collapse of business partners' operations; and political/legislative risks (various laws that influence business operations). Statistics released by major companies confirm that these risks are real. One such example is the decline in beer production. According to News 24 (Stoddard 2002), South African Breweries (SAB) must expand their market globally as its domestic market is literally dying. A study conducted by the company projected that 12,58 million fewer litres of beer will be sold during 2002 as a result of AIDS, and 41,68 million litres less in 2006.

Risk influencing the internal environment can either be caused directly by death, absenteeism or illness, or indirectly, flowing from direct risks. Direct risks include the increased cost of group life cover; the cost of providing medical and retirement benefits; the cost of absenteeism; higher staff turnover (the cost of recruitment and training new staff); the cost of compassionate leave (attending funerals or attending to sick family

members) or sick leave (providing additional part-time employees to do the job); the cost of HIV/AIDS management programmes (including consultant's fees); the increased cost of bad debt as a credit risk; and many others (Randall 2002:88-89). Internal auditors in organisations have a crucial role to play in advising and assisting management in managing these risks.

Shocking statistics underlying these risks have been released by various companies. Examples include increased production costs for gold mine group Gold Fields Limited of about US$6 per ounce. The cost to the company as a result of the disease for Anglo Platinum was R75 million for 2002 (Bain 2002:17). One of South Africa's biggest employers, Escom, spends R180 million annually on a HIV/AIDS programme (Isa 2002), and according to a study done by the minister of Public Service and Administration during 2000, AIDS is officially the biggest killer of public servants (Anonymous 2002). Where risks are properly identified and managed, such figures should not come as a surprise to management. It is internal auditors' duty to make sure that management is aware of all the facts and that effective risk management and control processes are in place to address this important issue.

Other risks flowing from direct risk are difficult to quantify most of the time. This does not mean that they are less serious or could be ignored. Indirect risks include reductions in staff productivity (as a result of illness); increases in staff supervision; fluctuations in competency levels (a high staff turnover); increased litigation (many laws and regulations regarding the treatment of employees with HIV/AIDS); higher salaries (the loss of skilled or managerial competencies); a loss of workforce morale (people without HIV/AIDS feel that they have to work harder); the loss of client relationships (due to high staff turnover); a decline in reputation in the business environment or clients (as a result of bad service); and many more (Randall 2002:88-89).

The above lists not only give an indication of the scope of possible risks, but also of the fact that HIV/AIDS is a risk to any organisation that has either customers and/or employees. The only way for organisations to address this risk is by implementing a proper risk management strategy. As discussed above, some of these risks are easy to quantify (for example, with the help of actuarial models), whilst others are more difficult to quantify. Risks threatening business objectives must be identified and measured. Then an appropriate risk management strategy should be decided upon. In the previous chapter it was established that a risk management strategy is the role of management. HIV/AIDS in general poses a risk to the business environment and therefore to organisations in particular. Every management must address the possible risk of HIV/AIDS as part of its duties.

## 3.7 THE ROLE OF MANAGEMENT WITH REGARD TO HIV/AIDS

The King Report on Corporate Governance specifically states as one of its recommendations for sound corporate governance that companies should understand the social and economic impact that HIV/AIDS will have on business activities; adopt an appropriate strategy, plans and policies to address and manage the impact; regularly monitor performance; and report on HIV/AIDS to stakeholders (King Report on Corporate Governance 2002:117). From this, it is clear that it is essential for organisations not only to have a proper plan in place, but to report to stakeholders on this plan, as well as on the effect of HIV/AIDS on the organisation, including the control environment. The question to be asked is whether management is aware of this responsibility and if internal auditing, as a consulting activity, is assisting management in this task.

From a study performed by Deloitte & Touche (2002:5) in which 110 South African companies participated, it was clear that most of the larger companies (with more than 500 employees) do have a formal policy, but still tend to underestimate the effect that HIV/AIDS will have on these organisations. The study indicated that only 27,3% of the respondents in

the survey had commissioned a HIV/AIDS risk assessment to assess their current and future HIV/AIDS risk. This lack of foresight is probably the result of companies' not performing anonymous prevalence tests (only 11 indicated that either anonymous blood or saliva tests had been performed) and therefore they do not know the percentage of employees that is HIV positive.

Although, as is clear from the details discussed in this chapter, HIV/AIDS is a threat to the world economy and the business environment in general, the management of a given organisation will only know the true effects of the disease and how this should be managed in that organisation, after an in-house anonymous prevalence study has been conducted (SABCOHA 2002:15). Management will then know what the actual risk threatening the organisation is and can thereafter be assisted by experts to manage this risk. One of these types of expert is the internal auditor who plays a consulting role, adding value to the organisation regarding control systems, risk management and corporate governance.

## 3.8 CONCLUSION

As can be seen from the above discussion, global institutions such as UNAIDS/WHO (2002), governments, the business environment (SABCOHA 2002), and many other role players have recognised the effect that HIV/AIDS could have on the world, society and closer to home, on organisations. Managing an individual organisation could be a complex task, as it includes many different areas that must be planned, directed, organised and controlled. Management can use experts to help accomplish this task successfully.

One of these types of experts is the internal auditing function. Internal auditors are control experts, but also play a consulting role regarding risk management and corporate governance. From the above discussion, it is clear that HIV/AIDS is a risk or potential risk to most organisations. It is therefore essential for internal auditing to inform management about this

risk and to assist management in managing the problem as part of corporate governance.

An internal auditor is a control expert, and from the discussion in the previous chapter, it is clear that the control environment forms the basis of the control system. Therefore internal auditors first have to determine the effect of the risk of HIV/AIDS on the different elements of the control environment to be able to determine its effect on the control system. The control environment consists of various elements (see the discussion in 2.6.1.1). If the possible effect of HIV/AIDS on these individual elements can be established, a clearer picture can be drawn (see Chapter 6) of what must be done by management, with the help of the internal auditor, to minimise the effect of the risk of HIV/AIDS on the control environment.

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# CHAPTER 4
# LITERATURE REVIEW

## 4.1 INTRODUCTION

It has been concluded in the previous chapter that HIV/AIDS poses a possible risk to organisations. Management has specific legal and statutory duties regarding risk management, including HIV/AIDS, as well as the control system. It has also been argued that internal auditing, which plays a consulting role to management regarding risk management and corporate governance, should assist management in determining the possible effect of HIV/AIDS on the organisation. The effects of HIV/AIDS could threaten various components of an organisation, including the control system. Therefore internal auditors as control experts should, in a consulting capacity, assist management to put in place an effective control system.

The basis for the control system (see the discussion in 2.6.1) is the control environment, which consists of various elements. Internal auditors should thus first understand the effect of HIV/AIDS on the various elements of the control environment before trying to determine the effect on the rest of the control system. The control environment, with its various elements, is a broad concept. This chapter therefore focuses on the elements most likely to be affected by HIV/AIDS, namely personnel's commitment to competence, the organisational structure, and human resources policies and practices.

A thorough search performed of the relevant literature and information resources such as libraries and the Internet, it was established that no formal research has been conducted to date on the role of the internal auditing function regarding the management of the potential risk of HIV/AIDS to an organisation. Furthermore, no formal research could be

found on the effect of HIV/AIDS on the control environment as a whole. Hence, this chapter aims to determine whether internal auditing is currently playing a role in the management of the risk of HIV/AIDS in organisations, what the role of internal auditors is or should be, and whether the control environment is affected by this disease. The results can then be used to develop guidelines for internal auditors to assist management with this risk.

This chapter first investigates the literature to establish what the professional responsibility of internal auditors regarding risk management is, with specific reference to HIV/AIDS. As can be seen from the discussions in the previous chapters, internal auditors as control specialists must assist management in determining risks threatening the control environment. Therefore, the next step would be to investigate the literature dealing with the effects of HIV/AIDS on the most affected elements of the control environment.

## 4.2 THE ROLE OF INTERNAL AUDITING IN DETERMINING THE EFFECTS OF HIV/AIDS ON AN ORGANISATION

As mentioned above, no formal research has yet been conducted on the role of the internal auditing function regarding the management of the potential threat HIV/AIDS poses to an organisation, particularly in achieving organisational objectives. The question arises whether internal auditors, in an assurance or consulting capacity, are aware of their professional responsibility regarding the effect of HIV/AIDS as a risk or potential risk to organisations. If not, should they be informed? If they are aware, what is being done about the problem and is it sufficient in supplying management with the necessary information to address this risk?

The Institute of Internal Auditors Research Foundation has conducted various studies (Walker, Shenkir & Barton 2002; Miccolis, Hively & Merkley 2001) on enterprise risk, which is defined as 'any action or event that will

adversely affect an organisation's ability to achieve its business objectives and execute its strategies successfully' (Walker *et al* 2002:2). Managing risk, in terms of this definition, means that resources (for example, people, technology, knowledge), business strategy and processes should be aligned to manage the uncertainties that an organisation faces. The IIA Board has approved the new definition of internal auditing and *standards* (see 2.3). Internal auditors have clearly been made aware that they have an important role to play regarding risk management. In particular, Performance Standard 2110 suggests that the internal auditing activity should assist management in identifying and evaluating risks (Institute of Internal Auditors Inc 2003). Therefore, one can conclude that the internal auditing profession (and by implication professional internal auditors) is(are) aware of its(their) professional responsibility regarding the management of risk.

It was concluded in Chapter 3 that HIV/AIDS is a threat to the world, countries, governments, society and individuals. Statistics indicate that certain countries, communities, age groups, organisations, business sectors, and so on will be more severely affected by this disease than others (Barnett & Whiteside 2002). Internal auditors thus have to investigate (or to suggest such an investigation to management) the effects of HIV/AIDS on the specific organisation to be able to identify whether this disease is an enterprise risk or not. Although research has been conducted by the IIA Research Foundation on the risk poses by people to an organisation (Miccolis *et al* 2001:33), no formal proof could be found to suggest that an investigation of the effects of HIV/AIDS by internal auditing is currently standard practice in organisations. Therefore this issue was investigated further in this study by means of interviews with chief audit executives in various internal auditing activities in South Africa. The results of this investigation are discussed in Chapter 6 of this study.

The impact of epidemics such as HIV/AIDS can be history-changing. So, for example, North America would have been very different if most of the indigenous population had not been wiped out by microbes brought in over

a period of time by immigrants from Europe (Barnett & Whiteside 2002:24). All organisations will most definitely be affected by this epidemic, and certain organisations could be eliminated if this risk is not addressed in time. The internal auditing profession should thus consider the investigation of the epidemic and the role the internal auditing activity has to play. If necessary, it should develop guidelines in the form of Guidance - Development and Practice Aids of the Professional Practices Framework (see 2.4.6).

Members of the internal auditing profession, being control specialists and according to Performance Standard 2120, being responsible for promoting improvements to the control system in general on a continuous basis (Institute of Internal Auditors Inc 2003), should further this investigation by researching the effects of HIV/AIDS on the control system.

## 4.3 THE EFFECTS OF HIV/AIDS ON THE CONTROL SYSTEM

The control system of an organisation is a very broad concept. COSO (see 2.6.1) divides the control system into six elements. It states that the control environment forms the basis for the rest of the elements (COSO 1992). It is thus logical for internal auditors first to investigate the effects of HIV/AIDS on the control environment before studying its effects on the rest of the control system. The control environment consists of various elements. Although all of those elements play an important role in contributing to the soundness of the control system, certain elements would probably be more affected by HIV/AIDS than others, for example, management's commitment to competent personnel, the organisational structure and human resources policies and practices. This study therefore focuses on these three areas. As previously mentioned in 4.1, no formal research has as yet been done on the effects of HIV/AIDS on the control environment, but various studies have included certain factors influencing the above three elements. These studies are discussed briefly to identify relevant findings, as well as gaps where further investigation is required.

### 4.3.1 The effects of HIV/AIDS on personnel's commitment to competence

Personnel's commitment to competence encompasses the need for employees to have the necessary knowledge and competence to perform their duties properly (COSO 1992:26). A study performed by Moore, Cheng and Dainty (2002:318) regarding the competence of the workforces of organisations concluded that competence is more than only knowledge and the ability to perform a specific job or task. It includes individuals' behaviour and attitudes regarding their duties. One need to ask oneself whether HIV/AIDS could affect the competence of the workforce of a specific organisation and, if so, whether internal auditors know this and are drawing this problem to management's attention.

Factors such as poor employee performance (as a result of illness, illness or death at home or of someone close to the employee), absenteeism of employees (and the effects thereof on the morale and attitude of the workforce), the loss of personnel, technical skills and experiential knowledge (death or serious illness amongst employees, especially highly skilled workers), increased staff turnover and the cost of recruiting and training new personnel (especially where the possible pool of new recruitments could become smaller), and the effects of the above on production output should be investigated to be able to conclude whether HIV/AIDS could affect the competence of the employees of a particular organisation. According to a study by Morris and Cheevers (2000) on the primary needs of a sugar mill's employees infected with HIV/AIDS, it is clear that the cost involved for the company regarding the competence of the workforce is much higher than direct medical costs (see Table 3 below).

Table 3: Direct cost of HIV/AIDS per worker per year (% of total)

| COST | % of TOTAL |
|---|---|
| Replacement worker | 28 |
| Lost productivity | 28 |
| Training of new employees | 5 |
| Hospitalisation | 1 |
| Clinic and physician visits | 10 |
| Absenteeism | 28 |
| TOTAL | 100 |

Source: Morris and Cheevers (2000:7)

As can be seen from the above table, it can cost a company 33% of the total direct cost of an HIV/AIDS worker to make sure the job is getting done (getting replacement workers and training them) and 56% on a lower competence level of the workforce as a result of lost productivity and absenteeism.

Absenteeism is the greatest problem faced by organisations, according to Barnett and Whiteside (2002:17). A study performed by Roberts, Rau and Emery (1996) has indicated that 37% of increased labour cost is a direct result of HIV-related absenteeism, and 15% is a result of AIDS absenteeism. The lower AIDS absenteeism figure could probably be linked to the fact that people with AIDS are very ill and thus tend to resign or retire. A comprehensive study was performed during 1995 at five different hospital sites in California, in the United States of America, to investigate differences in the hours worked by HIV/AIDS-infected as well as non-infected patients (Leigh, Lubeck, Farnham & Fries 199:855). Approximately 28% of the study group has been diagnosed with AIDS, 40% were HIV-positive but did not have AIDS, and 31% were HIV-negative. The study concluded that there was no difference between the hours worked by patients without HIV/AIDS and those that are HIV-positive. However, there was a difference of 14 work hours per week between AIDS patients and the other two groups. This was the result of

the fact that most of the AIDS patients were too ill to work. Those with full-time employment worked three hours per week less than members of the other two groups.

Although the result is significant for management in respect of the workforce, the results of the study are limited because of the non-randomness of the sample - patients were recruited from well-known hospitals and clinics and were dominantly white men with higher education qualifications who could afford medicine and health care. It may therefore not be possible to generalise the results to the general population. A further limitation is the non-measurement of the quality of the work performed by the AIDS patients and that done by the HIV-positive patients.

A study performed by Deloitte & Touche (2002:13) on behalf of SABCOHA (South African Business Coalition on HIV/AIDS) to assess HIV/AIDS initiatives in the private sector included the following question: 'Have staff been encouraged and trained to become more multi-skilled to permit work to continue despite staff losses?' Only 33,6% of the 110 respondents answered 'yes' to this question. This indicates that managements are not aware of the possible threat to the commitment to competence by the workforce if a significant number of employees die as a result of HIV/AIDS.

Barac and Otter (2001:10) have performed a study on the financial accountability of HIV/AIDS. Questionnaires were sent to 50 top companies identified by the *Financial Mail* Special Survey of Top Companies in June 2000, and 28 responded. Companies were requested to rank the costs most influenced by HIV/AIDS. The relevant costs to commitment to competency were a decline in productivity as a result of illness (ranked highest), on-the-job training (ranked third), a decline in productivity as a result of morbidity on the job (ranked fourth), recruitment costs (ranked fifth) and pre-employment training costs (ranked sixth).

To the question whether absenteeism was taken into account in budgets(Barac & Otter 2001:27), only 35,65% of the respondents indicated that this was done. One has to ask whether the remaining 64,35% of the participants are aware that absenteeism is increasing as a result of HIV/AIDS, and how this could affect the organisation financially and otherwise. To the question whether employee losses occurred amongst unskilled workers rather than skilled ones (Barac & Otter 2001:27), only 57,1% indicated they did, which suggests that 42,9% of respondents thought that employee losses occurred mainly amongst medium to high-skilled workers and even key personnel, which is more difficult to replace. On the other hand, only 10% of the respondents (Barac & Otter 2001:27) indicated that they foresaw the appointment of more than one person for each job to compensate in advance for future HIV/AIDS replacements and only 7,1% indicated that they are taking out key personnel insurance to cover the cost of recruiting replacements for people in critical positions due to the HIV/AIDS threat.

The only research that could be found on the effects of HIV/AIDS on the productivity of the workforce was a study performed at a Kenyan tea plantation (Fox, Simon, Rosen, MacLeod, Bii, Foglia and Wasunna 2003) where the workers are paid per kilogram of tea leaves picked per day. The productivity of 54 workers who had either died of AIDS-related illnesses or had retired due to HIV/AIDS was compared to that of 217 non-infected workers who were working in the same field over the same period of time as the HIV/AIDS workers. There were no significant differences between the healthy and the ill workers in terms of age, years of experience, or gender. The study concluded that workers' productivity declined by an average of 18% from three years before death, measuring an average of 7,6 kilograms per day six months before their death.

In terms of the above studies, the quantitative costs involved for an organisation as a result of HIV/AIDS have been discussed. However, qualitative costs are also involved, namely the impact of HIV/AIDS on the

mental and physical efforts of an employee with HIV/AIDS. No direct research could be found on this topic. The aim of a study performed by Massagali, Weissman, Seage and Epstein (1994:1979) was to determine the impact of HIV/AIDS on personal (mental effort) and job characteristics (physical effort) from the time of AIDS diagnosis to employment loss. Interviews were held with patients at three medical care sites in Boston, in the United States of America. Although mental and physical efforts were not tested, the study investigated how long employees stayed employed after AIDS was diagnosed. Respondents who held a job that required high mental effort and little physical effort were employed much longer after AIDS was diagnosed than people with a job that required low mental effort but needed high physical effort. This could indicate that employee performance by HIV/AIDS sufferers in a job requiring a high level of physical input could be lower than that of employees in a job that needed a high level of mental input. If this is true, this will directly affect the competency level of unskilled employees and thus the control environment.

Although the studies cited above address certain factors influencing the commitment of management to a competent workforce, no study has identified the implications for the control system, especially the control environment. In Chapter 6, this study therefore identifies all the direct and indirect factors influencing commitment to a competent workforce and the cost thereof. The Centre for International Health at the Boston University School of Public Health has developed a model for analysing the cost of HIV/AIDS to organisations (ARCH Project Annual Report 2000:2 - see Table 4) and with the help of UNAIDS and various organisations in the private sector, is monitoring six large companies in Southern Africa. The information from this study will be used to address the first problem, namely to determine whether HIV/AIDS has an effect on the competency of the workforce. Secondly, if it is proven that HIV/AIDS does affect the competence of the workforce, this study will aim to determine whether internal auditors are aware of this and are bringing it to management's attention. These questions are empirically investigated by means of

interviews with chief audit executives in various internal auditing activities in South Africa.

A competent workforce is needed to do the job, but this competent workforce and other areas of an organisation (such as activities and functions) should be planned, controlled and monitored in such a way that the organisation's objectives are achieved. The second element of the control environment that could possibly be affected by HIV/AIDS is thus the organisational structure.

### 4.3.2 The effects of HIV/AIDS on the organisational structure

An organisational structure consists of a framework used for the planning, execution, controlling and monitoring of the activities of an organisation to ensure the organisation reaches its objectives. This includes the structuring of authority and responsibility (COSO 1992:27) and it should be designed in such a way that the organisation's strategies and objectives are achieved (Locke 2000:291). According to a study performed (Hunter 2002:14) on organisations of different sizes and at different stages of their business life cycle, the design of an organisation can be divided into two categories. The first includes contextual elements (for example, strategy, technology, culture and business environment). The second refers to structural elements (such as the reporting relationship, decision-making processes, communication processes and the co-ordination of work). It is management's responsibility to design an organisation in such a way that these elements are addressed effectively. HIV/AIDS could affect the way management structures the organisation, as a result of absenteeism (the effect on the delegation of rights and responsibilities, and the co-ordination of tasks performed) and the diminishing competent workforce (due to the death of key personnel and the effect on decision-making processes, and increased use of technology to reduce labour dependency). The question to be asked is whether internal auditors are aware of these possible influences on the organisational structure and are drawing them to management's attention.

As previously mentioned, HIV/AIDS could play an important role in the increase of absenteeism and the diminishing competent workforce. Very little literature could be found on the effects of this disease on the day-to-day running of businesses, including the delegation of tasks, rights and responsibilities and the co-ordination of activities. The only document that recognises this risk is the UNAIDS's Business Response to HIV/AIDS, where increased organisational disruption and the possible effects thereof on the decline in production are briefly mentioned (UNAIDS 2000:3).

The study performed by Barac and Otter (2001:27) touched on the issue of the increased use of technology to replace dependence on employees. To the question whether organisations invest in machinery and equipment to address the possible effects of HIV/AIDS on the organisation, 32% of the respondents indicated that this practice was increasing in their organisations. However, two-thirds either did not know of this practice or did not think it important enough. No further literature could be found on this topic.

Various gaps exist in research on the effects of HIV/AIDS on organisational structure, particularly the effects on the delegation of rights and responsibilities, the co-ordination of tasks, the death of key personnel and the effects thereof on decision-making processes and on increased use of technology to replace labour input. In Chapter 6, the information gathered by the Boston University School of Public Health (see 4.3.1 above for a more detailed discussion) is used to identify possible costs related to the effects of HIV/AIDS on organisational structure. Then, having proved that HIV/AIDS does affect the organisational structure of an organisation, this study explores whether internal auditors are aware of this and is drawing management's attention to it. This was investigated by means of interviews with chief audit executives in various internal auditing activities in South Africa.

Organisational structure, although it may involve a formal framework, in practice represents people: management must do the planning, managing, controlling and directing of the workforce, to perform certain tasks effectively and efficiently. Therefore, the handling of the workforce is very important for organisational structure. The third element of the control environment that could possibly be effected by HIV/AIDS is the human resources policies and practices of an organisation.

### 4.3.3 The effects of HIV/AIDS on human resources policies and practices

Proper human resource policies and practices should achiecve the employment of sufficient and capable people, as well as the development and well-being of these employees to ensure that the organisation's objectives and goals are met. This includes hiring, training, evaluating, promoting and compensating employees (COSO 1992:29). The personnel of an organisation are regarded by many authors as the most important aspect of internal control: a simple system of control with a few competent and trustworthy personnel is more valuable than a complex and well-planned control system managed by people who are negative, incompetent and dishonest (Van der Merwe 1996).

As seen in Chapter 3 of this study, HIV/AIDS is a threat to the world, countries, communities and therefore organisations, through their workforces. According to a study performed by Family Health International (Rau 2002:19), there are specific factors relating to a workforce that increase the risk of HIV/AIDS to an organisation. The most important of these are a large number of employees who live without their families or away from home; long-distance transport as an important part of the organisation; middle- and upper-level employees who travel frequently; and being situated in a country or region that is undergoing rapid economic change. If these factors are present, human resources policies and practices regarding HIV/AIDS must be managed accordingly. The organisation should develop a pro-active strategic plan and establish

appropriate policies and practices for personnel issues (Evian 1998:4), such as recruitment processes and the training of new employees, HIV/AIDS prevention training, personnel evaluation, testing of all personnel and treatment for HIV/AIDS positive employees, employee benefits such as sick and compassionate leave, medical aid and pension funds and remuneration policies.

As discussed in 3.5, the government of South Africa has implemented various forms of legislation to protect employees or potential employees with HIV/AIDS from unfair discrimination. According to the Code of Good Practices on key aspects of HIV/AIDS and employment (National Economic Development and Labour Council 2000:2), no person with HIV or AIDS shall be unfairly discriminated against within the employment relationship. This includes issues such as recruitment procedures, appointments, job classifications, remuneration and other benefits, training and development, performance evaluation, promotions, termination of services, and many more.

Management is responsible for ensuring that the applicable legislation is adhered to (King Report on Corporate Governance 2002:158). In addition to a possible legal department, management may ask internal auditors to perform compliance audits to evaluate compliance. Currently, it is common practice for internal auditing functions to perform audits on human resources policies and practices and these should include audits of compliance with relevant labour legislation. It is not clear whether these audits do include HIV/AIDS legislation.

It must be noted that HIV/AIDS is a non-notifiable disease (Department of Health 1997:33). This means that a person does not have to inform an employer or potential employer that he or she is HIV positive. Furthermore, employers may not force employees to undergo a test to determine whether they are HIV positive. They can therefore only determine the extent of the disease amongst their workforce by performing voluntarily prevalence studies (Evian 1998:2). With this in mind, management needs

to manage HIV/AIDS in the workplace by implementing policies and practices for the management of human resources, without knowing its real presence and scope.

With HIV/AIDS being a non-notifiable disease, a person does not have to disclose his or her HIV/AIDS status when applying for a position at an organisation. This means that people with HIV/AIDS may be employed without management's knowing of the additional cost that could follow. According to the study performed by Barac and Otter (2001:29), most organisations do not see this as a problem, as 48% of the respondents indicated that, even if it were legally permitted, they would not ask job applicants to undergo a HIV/AIDS test.

The hiring of especially skilled labour could become a problem as the pool of potential employees with knowledge becomes smaller as people die of AIDS. According to Barnett and Whiteside (2002:243-244), there is consistent evidence of the impact of AIDS in companies across Southern Africa due to deaths amongst workers. In 1999, it was calculated that 9,41 per 1000 workers in a sugar mill in Swaziland died of AIDS-related illnesses. Based on a study performed in Botswana on five companies, the average cost to recruit and train a replacement for an employee lost to AIDS is R8 405 (Greener 1997). This is most possibly an understatement in South Africa, as tertiary costs and personnel search firms' costs are higher according to Greener's study. The implications of recruitment and training costs versus the possible employment of a person with HIV/AIDS must be investigated by internal auditors and brought to management's attention. Managements have to be informed of these problems in order to provide for future increases in salaries, hiring costs and the cost of training new employees.

Various studies have been performed to determine the extent and the costs of HIV prevention and training programmes. According to the study performed for SABCOHA by Deloitte & Touche (2002:9-10), although 65,5% of the organisations indicated that they do have a HIV/AIDS

awareness or education programme, only 36% of the respondents indicated that managers or supervisors had been trained to manage HIV/AIDS-related matters in the workplace. Furthermore, the study observed that only 19% of the responding organisations had conducted an employee survey to determine knowledge, attitudes and practices surrounding HIV/AIDS. This again indicates that most organisations' awareness and education programmes are not functioning effectively or efficiently.

None of the above studies indicated what the role of internal auditing is or should be, although human resources policies and practices are part of normal internal auditing activities. Good internal auditing practices suggest that internal auditors should investigate their organisations' current activities regarding this issue and inform management of the prevailing situation.

A further area of human resources policies and practices that will most probably be affected by HIV/AIDS is the compensation to and benefits for employees. As previously mentioned, salaries of employees could increase as the pool of knowledge decreases, especially for skilled labour. Other areas that could be affected are medical aid, pension fund, leave, and the treatment cost for employees diagnosed with HIV/AIDS. According to the study performed by Deloitte & Touche (2002:11-12), most companies' medical aids have a HIV/AIDS disease programme and provide death and disability benefits for HIV/AIDS employees. The larger companies (with more than 500 employees) have indicated a 16% increase in their benefit contributions.

According to research gathered by Family Health International (Rau 2002:25), the medical costs at an agro-estate in Kenya jumped 150% from 1989 to 1993 and even more to 1997. Barac and Otter (2001:26) confirm this trend, as 72,4% of the respondents in their study had experienced a material increase in the payment of medical services and/or health insurance in the past five years. Furthermore, 55% of the respondents

indicated that the impact of HIV/AIDS had to be taken into account in the actuarial assumptions used to calculate retirement benefits (Barac & Otter 2001:26). A large South African insurance company's estimate of potential benefit liabilities for lump-sum payments on death, spouse pension funds and disability pensions, indicated an increase from 7% in 1995 to 18% in 2010 (Barnett & Whiteside 2002:282). Management, with the help of internal auditors, should investigate the effects of the above costs to their specific organisations to be able to manage this potential risk.

As discussed in 4.3.1, absenteeism is the greatest problem related to HIV/AIDS. Although sick and normal leave is monitored by most organisations, absenteeism is not only the result of employee illness. The study by Barac and Otter (2001:26) indicates that most responding employers have accepted a policy whereby compassionate leave is regulated for taking care of sick family members, attendance at funerals of close family members, colleagues and friends. The cost of this should be calculated and properly managed. Internal auditors currently performing compliance tests on the leave system should assist management in this task.

The above studies highlight the impact that HIV/AIDS has on an organisation's human resources policies and practicess. Again, no specific study addresses the implications for the control environment. This study, in Chapter 6, identifies, using information gathered by the Centre for International Health at the Boston University School of Public Health (2002), factors influenced by HIV/AIDS with regard to human resources policies and practices in an organisation. Hence, if proved that HIV/AIDS does affect the human resources policies and practices of an organisation, the role of internal auditors is investigated by means of interviews with chief audit executives in various internal auditing activities in South Africa.

## 4.4 CONCLUSION

Internal auditors, the right hand of management regarding risk management, control and corporate governance, must be aware of the potential risk poses by HIV/AIDS to organisations. This study therefore first investigates the knowledge of internal auditors of the effects of HIV/AIDS on an organisation and the role they should play in informing management of the effects by interviewing chief audit executives of prominent internal auditing activities in South Africa. This study suggests the development of internal auditing guidelines in this regard published as Guidance - Development and Practice Aids of the Professional Framework by the Institute of Internal Auditors Inc.

Factors such as absenteeism, employee performance, staff turnover, the hiring of employees, the training of staff, medical aid and pension fund contributions, and others are affected by HIV/AIDS. These factors influence certain elements of the control environment, namely the maintaining of a competent workforce, organisational structure and human resources policies and practices. As discussed in this chapter, previous studies performed do not address the role of internal auditing regarding these matters. Internal auditors, as control experts, should investigate the effect of HIV/AIDS on the control system, and more specifically the control environment. This study therefore also investigates the direct and indirect factors influencing the elements of the control environment probably most affected, as mentioned above, as well as the cost of the effects to organisations, using the information gathered by the Centre for International Health at the Boston University School of Public Health.

Since HIV/AIDS does affect the control environment, the study investigated whether internal auditors are aware of this effect and are bringing it to management's attention, as well as the role internal auditors have to play in an assurance and consulting activity. This information was gathered by interviewing chief audit executives of prominent internal audit activities.

University of Pretoria etd - Coetzee, G P (2004)

# CHAPTER 5
# RESEARCH METHODOLOGY

## 5.1 INTRODUCTION

The previous chapter concluded that, although some research studies have been performed on the effects of HIV/AIDS on organisations, no specific research study has been performed on the effects of the disease on the control environment. Various studies have indicated that management is aware of the risk posed by HIV/AIDS to their organisations (Barac & Otter 2001; Deloitte & Touche 2002). This issue is therefore not investigated further in this study. It has become apparent from the above discussion that no study has determined the role of internal auditors, as the right hand of management in issues such as risk management, control activities and corporate governance, regarding the potential risk of HIV/AIDS to organisations.

To enhance knowledge of the research topic in the internal auditing field and to provide a basis for further research on the issues concerned, the remainder of this dissertation focuses on an investigation of the effect of HIV/AIDS on the control environment as well as the role of the internal auditor regarding HIV/AIDS as a potential risk to an organisation.

In this chapter, the research methodology used to determine the effect of HIV/AIDS on the control environment, and the role of internal auditors regarding the management of the potential risk of HIV/AIDS to organisations are described in some detail. To determine the effect of HIV/AIDS on the control environment, data gathered by the Centre for International Health, Boston University School of Public Health are used to determine whether the costs related to HIV/AIDS in respect of specific issues such as absenteeism, and productivity is substantial, compared to the effect of the performance of the organisation. These issues are directly

linked to the elements of the control environment most likely to be affected by HIV/AIDS. The information focuses on six sectors of the private sector, namely heavy industry, agriculture, mining (processing), mining (extraction), retail and service.

Then, to determine the role of internal auditors regarding the potential risk of HIV/AIDS as well as the knowledge of internal auditors regarding the effects of HIV/AIDS on the control environment, survey research was conducted. This research involved various steps as described by Abdel-Khalik & Ajinka 1979:31 and Zikmund 2000:166, of which the following have been used in this study:

- the identification of the objectives and hypotheses of the study;
- the identifications of target groups;
- the selection and design of an instrument of measurement;
- data collection;
- the preparation of the data for processing and analysis;
- analysis of data;
- an interpretation of the results; and
- the drawing of conclusions and the making of recommendations on the basis of the research findings.

This chapter explains the research methodology used in this study to determine the role of internal auditors regarding the potential risk posed by HIV/AIDS to an organisation and the knowledge of internal auditors regarding the effect of HIV/AIDS on the control environment.

## 5.2 RESEARCH DESIGN

As was explained in 2.6.2 of this study, internal auditors have an assurance and consulting role to play regarding risk management, which would include the risk posed by HIV/AIDS. The question to be asked is whether internal auditors are supporting management with the task of managing HIV/AIDS by studying the effects of HIV/AIDS on their

organisations. With regard to assurance, internal auditors are control specialists; hence management relies heavily on internal auditing functions to evaluate the effectiveness of the control system, including the control environment as the basis of the control system.

This research study was designed to address these objectives and selected hypotheses flowing from the objectives by using a specific research method. The objectives, hypotheses and research methodology are discussed in more detail below

### 5.2.1 Research objectives and hypothesis

It is an internal auditor's duty, and the primary objective of this study, to understand the effects of HIV/AIDS on the control system of organisations, starting with the control environment. It was expected that such an investigation would increase understanding of, and give insight into the as yet relatively new potential risk and its implications for the internal auditing discipline. Furthermore, it was expected that the investigation would provide a justification for the development of an appropriate Guideline or Practice Advisory by the Professional Issues Committee or another group designated by the Guidance Planning Committee of the Institute of Internal Auditors Inc.

To attain the above objectives, two research methods were used. In the first instance, a literature review was used (see Chapter 2 to 4) to determine the theoretical basis for the research topic, the arguments relating to practical implementation issues, prior research conducted on various aspects relating to HIV/AIDS, and the world-wide situation regarding the subject. Information gathered by the Centre for International Health, Boston University School of Public Health was used to determine whether HIV/AIDS has an effect on specific issues, such as absenteeism, related to the control environment.

The second research method, namely survey research (as discussed in greater detail in this chapter) was used to analyse the views of chief audit executives on the role of internal auditing in managing the risk of HIV/AIDS, as well as the effects of the disease on the control environment. Similarities and differences between the perceptions of the interviewees were expected to enhance understanding of and give interesting insights into the various issues concerned and to provide a justification for the recommendations to be made to the IIA Inc. for appropriate guidance to members.

The primary problem in identifying the effects of HIV/AIDS on the control environment was divided into the following secondary problems:

1 Are internal auditors aware of the business risk that HIV/AIDS poses to organisations?
2 Are internal auditors part of management's plan to address the risk of HIV/AIDS for the organisation?
3 What is the knowledge and input of internal auditing in management's strategic plan regarding HIV/AIDS?
4 What is the risk of the effects of the disease on the competence of the workforce and how will this affect the control environment?
5 What risks do the consequences of the disease pose to the structure of the organisation regarding the day-to-day management of activities?
6 Which factors related to the management of human resources policies and practices pose a risk to the organisation and need to be addressed?
7 Are internal auditors aware of the possible effects that HIV/AIDS could have on the control environment?

To guide this study and to provide a framework for organisations to use the resulting conclusions and recommendations (Emory 1985:28; Kerlinger 1992:19; De Vos 1998:104) the following research hypotheses were formulated:

1 Internal auditing is aware of the HIV/AIDS epidemic and the consequences that this risk holds for organisations.

2 Internal auditing is assisting management with strategic objectives, strategies (plans) and related objectives regarding the risk of HIV/AIDS to the organisation.

3 HIV/AIDS, as a business risk, has an effect on certain elements of the control environment in organisations.

4 The effect of HIV/AIDS on the control environment can weaken the control system as a result of the loss of key elements in the system.

5 The costs involved in managing the risk of the consequences of HIV/AIDS must be undertaken to strengthen and/or maintain the control environment.

In view of the dearth of knowledge on the role of internal auditors regarding the potential risk of HIV/AIDS to an organisation, as well as the sensitivity of the subject, it was decided that the research would make the best positive contribution if it established authoritative viewpoints on the issues raised in the hypotheses. As this research can be regarded as a pioneering effort to promote knowledge on a topic as yet largely unexplored in the internal auditing field, the hypotheses were formulated without the reference to similar studies conducted. The main research problem as well as the sub-problems was thus tested against the above hypotheses.

Having established the objective and the hypotheses of the research, the rationale for the selection of target groups is explained in the next section.

### 5.2.2 Selection of target groups

The study focuses on the perceptions of chief audit executives of the role of internal auditors regarding the potential risk of HIV/AIDS to organisations. Two groups of chief audit executives were chosen, namely ones in larger organisations with more than 10 000 employees, and ones in smaller organisations with fewer than 10 000 employees. The reason for

this distinction is that the internal audit function at smaller organisations, although functionally the same as internal audit functions at larger organisations, could differ, as it is possible that fewer funds are made available for internal auditing activities in smaller organisations. If this is true, smaller organisations will also probably spend less on managing the potential risk of HIV/AIDS. This study was determined to ensure that if it was proven that internal auditors were aware of the risk of HIV/AIDS and were assisting management to monitor this risk, it should be proven true for all organisations, - large and small ones.

Statistical sampling was not applied in the study. The reason for this was that not all organisations have an internal auditing department. Also not all internal auditing departments function at their full potential because internal auditing is a relatively new profession in the South African business environment. Instead, two specialised population groups were selected with the help of the Institute of Internal Auditors in South Africa. It was assumed that if the chief audit executives of internal auditing departments that have a sound relationship with the governing body of all internal auditors in South Africa are interviewed, the results could be generalised reasonably safely to the rest of the internal auditing functions that have some link to the Institute. For the larger organisation group, six companies were chosen, namely one each from the service sector, mining, finance, and petroleum industry and two from retail. For the smaller organisation group, five companies were interviewed, namely one each from the telecommunication sector, the service sector, construction, production, and finance. This gave a broad overview of the different companies participating in the internal auditing field in South Africa. The list of people attending the Institute of Internal Auditor's Annual Conference during August 2003 was used as a basis to determine which sectors should be targeted. It should be noted that the public sector was not part of the investigation, as internal auditing is relatively new to local and national government.

Next, the research method used to determine the attitudes of the chief audit executives of the target companies is described.

### 5.2.3 Research method

The method used to gather the desired information on the role of internal auditing regarding the management of the potential risk of HIV/AIDS was survey research. This research method can be described as a fact-finding and hypothesis-generating process, according to which data is collected in a planned manner to discover the incidence, distribution and interrelation of certain variables. The data is commonly collected by means of personal interviews, mail questionnaires or telephonic questionnaires and data usually relates to facts, opinions, beliefs, attitudes or behaviour (Abdel-Khalik & Ajinka 1979:45; Zikmund 2000:190).

To implement the survey research methodology in this study, a personal interview was applied to test the attitudes of the chief audit executives of the selected target groups towards the subject of the study. The questions posed in the interview were designed mainly to determine the opinions of chief audit executives or other senior members of the internal auditing function (some internal auditing functions had separate risk management divisions within the internal auditing department and in such cases the heads of these risk management divisions were interviewed). This method was chosen as HIV/AIDS is a sensitive issue in South Africa (being a non-notifiable disease) and a questionnaire would probably not be completed as truthfully as answers to questions asked in an interview. Furthermore no other related studies regarding the role of internal auditors had previously been performed and it was uncertain what the knowledge of the chief audit executives would be regarding HIV/AIDS.

On the other hand, this research method has certain shortcomings that should be noted, especially when the conclusions drawn from the analysis of the data are considered (Buckley, Buckley and Chiang 1976:44; Oppenheim 1979:21; Emory 1985:158; Zikmund 2000:196). This includes

the fact that opinions are not factual but only present the impressions of the respondents. Secondly, the strategy has certain methodological shortcomings, such as biases inherent to the design and the wording of the questionnaire (the researcher sets the questions, determines the target and determines the time of the research), systematic biases where the targets tended to focus on favourable or strong statements, and systematic biases in the administration of the questionnaire. Thirdly, the quality and accuracy of the information gathered depended on the ability and willingness of the targets to co-operate. Lastly, errors could occur in the preparation, interpretation and analysis of the data and the results could be wrongly interpreted.

Although the limitations of this research method must be mentioned, they neither individually nor collectively appeared to affect the results of this study significantly, as special precautions were taken to minimise the effects of the problems. These include the setting of a formal questionnaire (see Annexure A) that was used during the interviews to eliminate biases inherent in the design and wording of the questions asked, and the identification of the most suitable person in the internal auditing department to be interviewed.

Against the background of these facts, the design of the personal interview questionnaire used in this study is explained in more detail below.

### 5.2.4 Personal interview questionnaire

In this section, various aspects relating to the design of the questionnaire are described. These include the context and layout of the questionnaire, reasons for the choice of questions, and the pre-testing of the questionnaire.

To attain the research objectives and test the hypotheses and supplementary information specified above, the questionnaire was divided into two main sections, namely the internal auditor's role with regard to

HIV/AIDS, and the elements of the control environment affected by the disease. The first section investigated general issues such as whether HIV/AIDS was classified as a risk to the organisation, whether internal auditing assists management with risk matters, what the role of internal auditors is or should be regarding HIV/AIDS, and the general knowledge and actions of the organisation as a whole as well as that of internal auditing regarding the disease.

The second section of the questionnaire was divided into three parts, namely the effects of HIV/AIDS on personnel commitment and competence at the workplace, the effects on the organisational structure, and the effects on human resources policies and practices. As previously discussed, these were the three main elements of the control environment most likely to be affected by HIV/AIDS. The results of the interpretation of the information gathered by Boston University were discussed with the interviewees. The questionnaire then focused on specific questions to investigate whether the interviewees knew these effects, whether they were aware of their organisation's knowledge regarding the information, and what the role of internal auditors were regarding these issues.

The questionnaire was pre-tested by circulating it to three researchers in the auditing environment. Their comments and suggestions were incorporated into the questionnaire. The questionnaire was also tested on a human resources manager. The reason for this is that in most organisations, HIV/AIDS is the overall responsibility of the human resources department and it was assumed that a human resources manager would be the best person to identify any lack of clarity and weaknesses or shortcomings in the questionnaire.

After the questionnaire had been compiled, interviews were arranged with the various chief audit executives.

### 5.2.5 Response

Chief audit executives from the list of companies identified by the Institute of Internal Auditors as active members of the Institute in South Africa were contacted for a personal interview. After the topic of the research study had been explained to them, all were eager to participate. In certain instances they referred the interviewer to the risk division (part of the internal auditing department) as they felt that these person(s) would have more knowledge regarding the topic of HIV/AIDS.

Each interviewee chose a venue and a time for his/her interview (they mostly opted for an interview at the interviewee's premises). All the interviewees eagerly participated in the session, replying to the questions asked and they indicated that they would like to receive a copy of the results of the study. They also indicated that a guideline from the Institute of Internal Auditors on the role of internal auditing regarding the risk of HIV/AIDS is necessary, as this risk does not fall within the normal boundaries of risk management for organisations.

After the interviewer had gathered the information, the data was prepared and processed to enable the information to be incorporated in the results of the research study.

### 5.2.6 Data preparation, processing and interpretation

The information gathered from the interviews was immediately summarised after each interview. After all the interviews had been completed, a spreadsheet was compiled to compare the responses of all the interviewees on each question. The results of the processing of the data gathered during the interviews as well as an interpretation of the results are presented and discussed in Chapter 6 of this study. Although great care was taken to obtain accurate and useful information, the research study had certain limitations.

## 5.3 LIMITATIONS OF THE RESEARCH

As has been mentioned in 3.2, HIV/AIDS is a relatively new potential risk to organisations and therefore the implications for the internal auditing discipline are somewhat unclear. Knowledge of the disease is limited, as even medical experts are uncertain about all the issues related to HIV/AIDS. This is underlined by all the new research being done and available on the medical aspects of the disease.

HIV/AIDS is also a very sensitive issue as government has determined that it is a non-notifiable disease (see 3.3.2) and the disease is currently greatly stigmatised. People fear the disease and do not like to talk about its existence. Furthermore, the hypotheses were formulated without the availability of similar studies previously conducted and could be incomplete. With all these limitations in mind, the results of the survey conducted are discussed in the next chapter.

## 5.4 SUMMARY

This study was performed using two research methods, namely literature and survey research. In this chapter the survey methodology has been discussed in detail: the research objectives and hypotheses, the selection of a target group, the research method used to gather the information, the questionnaire used in the personal interviews, the responses of the interviewees, and the data preparation, processing and interpretation. In the next chapter, the results obtained from the research are discussed in greater detail to test the hypotheses described in this chapter. Hence, Chapter 6 firstly determines whether HIV/AIDS does affect the control environment by analysing the data gathered by the Boston University. Secondly, the results of the interviews with the chief audit executives of internal auditing functions are interpreted to determine whether the internal auditing profession is aware of the possible risk posed by HIV/AIDS to an organisation and what the role of internal auditors should be.

# CHAPTER 6
# THE RESEARCH FINDINGS ON THE EFFECT OF HIV/AIDS ON THE CONTROL ENVIRONMENT AND THE ROLE OF THE INTERNAL AUDITOR REGARDING THE RISK OF HIV/AIDS

## 6.1 INTRODUCTION

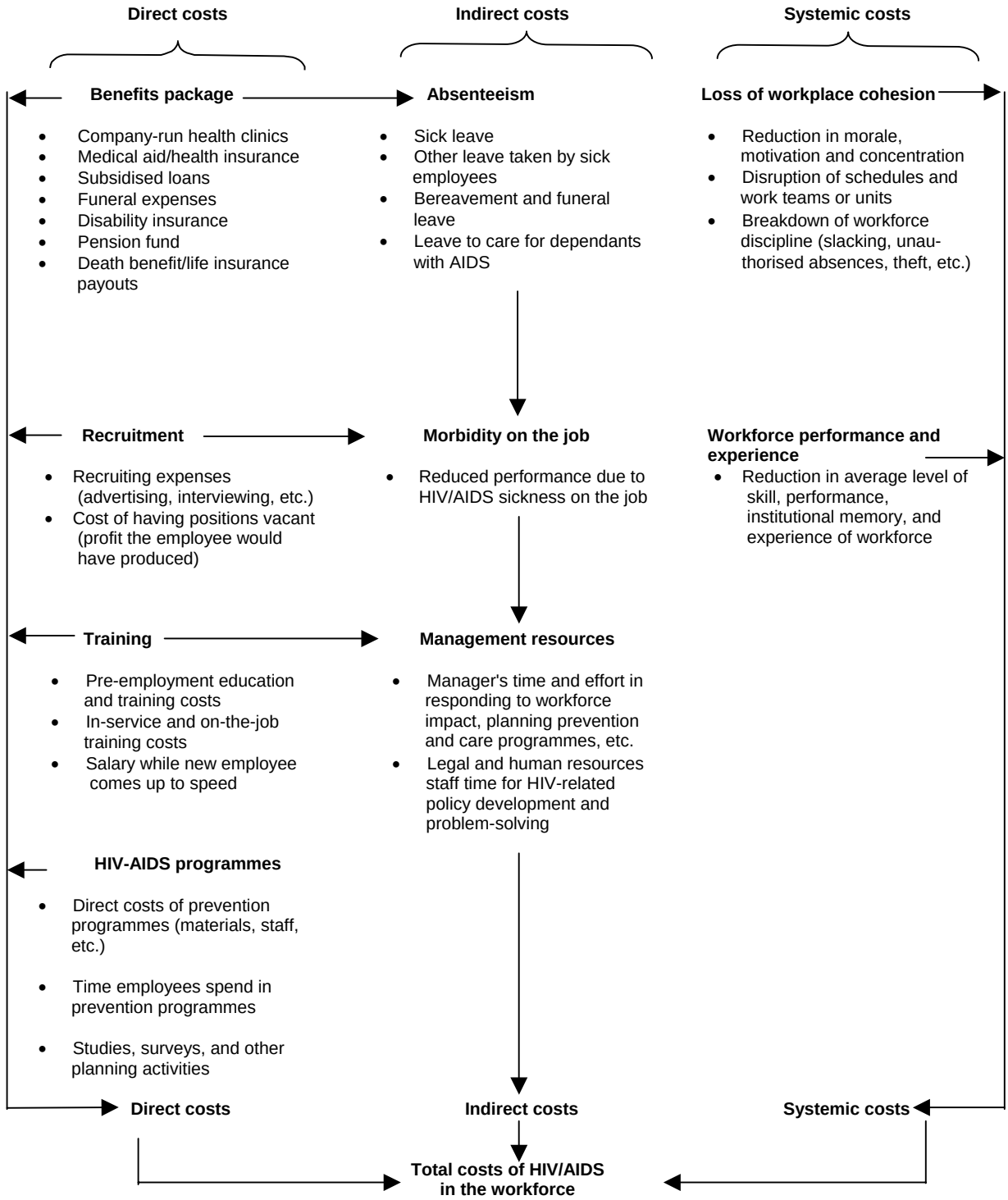
In Chapter 5, the research methodology used to determine the role and knowledge of internal auditors regarding the management of HIV/AIDS and its effects on the control environment was discussed. The information gathered by the Centre for International Health, Boston University School of Public Health was used to determine whether HIV/AIDS does have an effect on certain elements of the control environment. Only information that could have a direct effect on personnel competence, the organisational structure, and human resources policies and practices were used in the analysis. In the first part of this chapter, these results are discussed. Secondly, the role of internal auditors was investigated by means of a survey, conducting personal interviews with chief audit executives at internal auditing departments in the private sector. The second part of this chapter focuses on the results of these interviews.

## 6.2 THE EFFECT OF HIV/AIDS ON SPECIFIC ELEMENTS OF THE CONTROL ENVIRONMENT

Research by the Centre for International Health, Boston University School of Public Health (see 1.3 for a discussion) has shown that the cost of HIV/AIDS to an organisation can be divided into three components, namely direct cost, indirect cost and systemic cost (Centre for International Health 2002:256). Direct costs refer to impacts that involve an increase in financial input by the company. Indirect costs refer to reduced workforce productivity. Systemic costs refer to costs that result from the cumulative

impact of various HIV/AIDS cases. The Boston University research group has developed a model for analysing these costs (see Table 4 below).

Table 4: Economic impact of workforce HIV/AIDS (internal effects only)




Source: Barnett and Whiteside (2002:256)

Most direct costs can easily be measured using the human resources and financial data from a company's database. Indirect costs and systemic costs are somewhat more difficult to measure. Six companies in Southern Africa were identified for the Centre's analysis, ranging from large corporations to smaller companies, operating in different sectors and situated in South Africa and Botswana (see Table 5 below for an abstract of the analysis of the organisations used in the study). These companies gave their full support to the project and information and relevant data was made available to the Boston University project (Rosen, Simon, Vincent, Macleod, Fox and Thea 2003a).

Table 5: Summary of companies included in the Boston University study

| | **A** | **B** | **C** | **D** | **E** | **F** |
|---|---|---|---|---|---|---|
| Year studied | 1999 | 1999 | 2000 | 2001 | 2001 | 2001 |
| Industry | industry | agriculture | mining | mining | retail | media |
| Workforce size | >25 000 | 5 000 - 10 000 | 500 - 1 000 | 500 - 1 000 | <500 | 1 000 - 5 000 |
| Est.% HIV positive | 7,9% | 23,7% | 29% | 23,6% | 10,5% | 10,2% |
| Total annual cost of AIDS | $11,9 m | $594 000 | $206 000 | $93 400 | $13 300 | $1m |
| Cost of AIDS % of salaries | 3,7% | 1,8% | 5,9% | 1,9% | 0,4% | 2,4% |

Source: Rosen et al (2003a:10)

For the purposes of this study, the costs gathered by the Boston University team (Rosen *et al* 2003b) that relate to the three elements of the control environment most affected by HIV/AIDS are studied, namely commitment to competence, organisational structure and human resources policies and practices, to determine whether HIV/AIDS does affect the control environment and therefore the control system of an organisation.

### 6.2.1 Commitment to competence

As previously discussed in this study (see section 2.6.1.1 and 4.3.1), personnel commitment to competency entails the need for employees to have the necessary knowledge and skills to perform their duties properly, including individuals' behaviour and attitudes regarding their duties. Absenteeism, as a result of illness, special or funeral leave, and leave to take care of dependents that have AIDS, is probably the biggest reason directly linked with HIV/AIDS why employees do not perform their jobs properly. Regression analysis was used to estimate additional days of sick leave taken in the two years prior to the termination of the service of employees who died of HIV/AIDS or were retired on disability due to HIV/AIDS (see Table 6 for data). Only sick leave was included in the study because of a lack of data on reasons for special leave or funeral leave.

Table 6: Additional sick leave

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| Days per worker in last year on job | 49.0 | 68.4 | 30.4 | 36.0 | 11.2(*) | 17.1 |
| Days per worker in second last year on job | 15.3 | 20.2 | 0 | 14.0 | n/a (*) | 10.4 |

(*) Employees who apply for disability retirement are automatically placed on an additional three months of paid sick leave. Only one year of sick leave data was obtained from this company.

Source: Rosen et al (2003b)

The above information clearly shows that HIV/AIDS does have an effect on absenteeism. As the above information only reflects sick leave taken by employees that died in service or retired on disability, other leave taken by all employees due to illness at home or attendance of funerals must still be added to get the real effect of HIV/AIDS on absenteeism. Even so, the above information indicates an average of 35,35 days additional sick leave taken by employees that had AIDS. When a specific person is not there to do his/her job as a result of absenteeism, there are various other issues

that affect commitment to a competent workforce (for example, his/her knowledge and skills are not available; other employees must perform the extra tasks; and people are demotivated because of the extra workload).

Another factor that has an effect on the commitment of the workforce on competence is the loss of people (and with that their skills and knowledge) and the replacement of those skills and knowledge. Human resources data were used to estimate the average duration of vacancies as a result of death or retirement due to AIDS (see Table 7 for data).

Table 7: Vacancies due to HIV/AIDS related deaths or retirement

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| Months vacancy per skilled worker | 2.0 | 0.25 | 3.1 | 2.0 | 0.55 | 2.0 |
| Months vacancy per manager | 3.0 | 2.0 | 3.8 | 3.0 | 0.64 | 3.0 |

Source: Rosen et al (2003b)

The above table clearly indicates that skills and knowledge are lost for a period of time as a result of a loss of employees due to retirement and death. On average, it takes a company 1,65 months to replace a skilled worker and 2,57 months to find a new manager. During this time, other employees must do the extra tasks (usually an impossible task), are overworked, tired and make mistakes. Another scenario is where these tasks are not performed. Again, the competence of the workforce and the precision with which tasks are performed are sacrificed. Management should also be concerned that the external pool of skills and knowledge that can be recruited to replace existing employees could become smaller because other companies are facing the same problem. Thus companies are competing for the same people. The result will then be higher salaries, with fewer people trained to do the job.

A further problem that aggravates the loss of knowledge and skills is a reduction in productivity due to new employees' learning curve. The time of training measured includes time spent on pre-service orientation and time spent by a provider of on-the-job training. Secondly, an estimation of the

reduction in productivity between employment and full productivity is given (see Table 8).

Table 8: Reduction in productivity due to new employees' learning curve

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| Months training per skilled worker | 3.0 | 3.0 | 1.5 | 1.5 | 2.2 | 4.0 |
| % reduction in productivity | 30% | 50% | 50% | 25% | 50% | 60% |
| Months training per manager | 6.0 | 3.0 | 3.0 | 3.0 | 2.6 | 2.0 |
| % reduction in productivity | 30% | 50% | 20% | 25% | 50% | 55% |

Source: Rosen et al (2003b)

According to the above data, it takes a skilled worker on average 2,5 months to become fully productive. During the learning stage, the worker performs, on average, 44% less. For a manager it takes even longer, namely 3,26 months and being 38,3% less productive. As discussed above, during this time, co-workers must either help to perform the new recruit's tasks, or the quality and quantity of the output is sacrificed. This has a direct influence on employee performance and on production output.

A worker that is HIV/AIDS positive and is still working can also have an effect on the production output as a result of poor performance and of supervisors' needing to assist these employees with their tasks. The loss of productivity of employees that have died or have been retired due to AIDS, as well as the estimated supervisor's time spent on helping these people, is given below (see Table 9).

Table 9: Loss of productivity at work and need for supervisory assistance

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| % lost in last year on job | 29% | 42% | 36% | 63% | 22% | 36% |
| % lost in second last year on job | 5% | 31% | 12% | 33% | 3% | 4% |
| Days supervisory assistance required in last year of service | no data | 6.6 | 11.5 | 24.6 | 12.7 | 14.5 |

Source: Rosen et al (2003b)

According to the data collected, employees who have died of AIDS or retired as a result of the disease were on average 38% less productive in the 12 months before their death or retirement, and on average 14,7% in the 12-month period proceeding the last year of service. On average, supervisors spent 14 days per year in assisting these ill people in performing their tasks. These figures indicate that people with AIDS and their supervisors have some difficulty in performing their tasks with the necessary efficiency and focus. This could have a direct result on the commitment to competence, for example, supervisors have to perform more tasks, become tired, edgy and careless; they have to check their own work instead of the ill worker performing the tasks and the supervisor controlling the output; healthy employees feel that they are paid the same as HIV/AIDS infected workers but have to produce more output; and other relevant issues.

HIV/AIDS has an effect on the competence of the workforce. For certain companies, especially where physical labour input is high (see Companies A, B, C and D - Table 6), sick leave has increased dramatically, leaving other employees to perform the ill worker's tasks. Some companies face difficulty in replacing workers that have died or retired as a result of AIDS (see Companies A, C and F - Table 7). Again the workforce must perform extra tasks, influencing either the quality and/or quantity of the output. When new employees are recruited and employed, they must be trained by attending courses and training sessions (and thus being away from the

work) and on-the-job training, thus being less productive during this time. People that are HIV/AIDS positive are also less productive. All companies identified a large decrease in the productivity of ill workers, including their delivery of the physical (industry, agricultural and mining) and mental (retail and media) effort needed to do the work.

The above indicates that a competent workforce is in danger of disintegration. Management needs to know this and internal auditors, as control specialists, assisting management with the risks threatening the organisation should bring this to their attention. A competent workforce is a must to be able to get the work done, but this workforce's activities and structure must be properly planned to make sure that the organisations' objectives are met. One way of doing this is to develope a proper organisational structure.

### 6.2.2 Organisational structure

An organisational structure is a framework used for planning, executing, controlling and monitoring the activities of an organisation to ensure that the strategies and objectives of the organisation are achieved. This can be broadly explained as the day-to-day running of an organisation, including the delegation of rights and responsibilities, the co-ordination of tasks, and decision-making processes. Factors that can influence the organisational structure as a result of HIV/AIDS are, firstly, the death of key personnel that have certain rights and obligations and are responsible for decision-making. Secondly, task disruption can occur as a result of the death of personnel, from unskilled workers to management. Thirdly, an increase in the use of technology may occur to replace the diminishing workforce.

The study performed by the Boston University team did not address these issues, as data were not available at the companies that were investigated by them (refer to 6.2). However, they did identify the level of the workforce affected by the disease, namely, from skilled workers to management. Table 10 identifies the estimated prevalence rate of HIV positive

employees of unskilled workers, skilled workers, supervisors and managers, and non-permanent workers.

Table 10: Estimated HIV prevalence

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| Unskilled workers | 12.4% | 26,7% | 39,4% | 34,5% | 12,9% | 15,6% |
| Skilled workers | 9,3% | 22,7% | 39,2% | 18,55% | 2,5% | 7,2% |
| Supervisors/ Managers | 4,2% | 8,2% | 14,3% | 6,23% | 2,3% | 4,2% |
| Non-permanent workers | n/a | 31,2% | n/a | n/a | 17,6% | 18,4% |
| Average | 7,9% | 23,7% | 29% | 23,6% | 10,5% | 10,2% |

Source: Rosen et al (2003b)

A matter of concern to the companies in the study was the high level of HIV positive employees that are either skilled workers (average16,58%) or managers/supervisors (average 6,57%). These are the people that have the necessary knowledge and skills to make sure that activities run smoothly. Senior management mostly delegates rights and responsibilities via line management, supervisors and senior workers. Although these are the people that make sure the work gets done, it is usually unskilled workers (average 23,58% are HIV positive) that perform most of the physical work.

HIV/AIDS could affect the organisational structure of an organisation. The above data only gives the HIV prevalence rate, but as was discussed in Chapter 3 of this study, HIV leads to AIDS and that in turn causes death. Companies such as C, B and D that have high percentages of HIV positive employees have to acknowledge the fact that these workers, in the near future, will become ill and die. Who will then be responsible for decision-making? Who will then make sure that the day-to-day activities of the organisation run smoothly? Who will then make sure that the work gets done? Who will then do the work?

Management needs to be aware of this threat to the organisation. Again it should be asked whether internal auditors are aware of these facts and are bringing them to management's attention. An organisational structure, although it is a formal structure, consists of people. These individuals must be looked after by means of proper human resources policies and practices.

### 6.2.3 Human resources policies and practices

A proper human resources policy, including aspects such as hiring, training, evaluating, promoting and compensating individuals, ensures that employees have a positive attitude regarding their employers and their work. HIV/AIDS is an illness that affects individuals and should thus be included in human resources management. Apart from the applicable legislation on HIV/AIDS (see 3.5) and the role of internal auditors in making sure that the organisation is adhering to this legislation, the cost HIV/AIDS has on human resources management must be calculated. Costs include the recruiting, training and possibly higher salaries of new employees to replace workers that have died or retired as a result of HIV/AIDS, prevention training programmes for current employees, prevalence studies to determine the percentage of HIV positive employees, the treatment of employees with HIV/AIDS, changes in medical aid contributions, pension fund contribution increases, end-of-service benefits, and increases in leave benefits.

The study performed by the Boston University addressed only the costs that were readily available from the current databases of the participating companies and did not include all the possible costs discussed in the above paragraph. In Table 11, the results of the Boston University research regarding the increase in wages as a result of HIV/AIDS employees, the percentage of this cost in relation to the total wages of the organisation, and the percentage of this cost as part of annual operating expenses are given.

Table 11: The cost of HIV

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| Cost of HIV/AIDS | $12021916 | $599913 | $207713 | $62930 | $13465 | $1010580 |
| % of wages | 3,7% | 1,8% | 5,9% | 1,9% | 0,4% | 2,4% |
| % of annual operating expenses | 0,62% | 0,22% | 0,6% | 0,04% | 0,01% | 0,64% |

Source: Rosen et al (2003b)

Although the cost for most of these companies seems relatively low in comparison to their annual operating expenses (all below 1%), HIV/AIDS is increasing the cost of labour and this affects the competitiveness of business in a global market. An increase of between 0,4% and 5,9% in labour costs due to HIV/AIDS seems rather low, but this increase in labour could affect the attractiveness of these companies to potential investors who depend on low-cost labour (NEPAD 2002).

Factors that suggest that these figures might be higher include the fact that not all costs were available to the Boston University group (see the discussion above). The assumptions used in this study were also very conservative (Rosen *et al* 2003b). The investigations were performed between 1999 and 2001, but the UNAIDS reports published since 1999 indicate an increase in the HIV/AIDS figures for Sub-Saharan Africa. Bearing these factors mind, organisations should note that the cost of HIV/AIDS for human resources management could be much higher.

The above discussion clearly indicates that HIV/AIDS does have an effect on the commitment to personnel's competency, organisational structure, and the management of human resources. For some companies the cost could be lower than for others. The fact remains that there is an effect, and management should know about this. Internal auditors, as management's

right hand regarding issues such as risk management and control, should know about these potential effects of HIV/AIDS for the control environment and make sure that management are aware of them too.

The second part of this chapter focuses on the results obtained from personal interviews with chief audit executives on these matters.

## 6.3 THE ROLE OF INTERNAL AUDITING WITH REGARD TO THE RISK OF HIV/AIDS

The research methodology used to gather information regarding the role of internal auditors in managing the risk of HIV/AIDS for an organisation was discussed in detail in Chapter 5. The next part of this chapter focuses on an analysis and summary of the information gathered by means of the interviews held with the chief audit executives of eleven organisations.

### 6.3.1 Background data

As discussed in Chapter 5 (see 5.2.3), a survey was used to interview the eleven chief audit executives or person(s) responsible for risk management in the eleven organisations' internal auditing departments. It must be remembered that the results of this study are based on these individuals' perceptions and knowledge of the issues addressed in the questions asked by the interviewer. The questions were formulated to gather information on the role of internal auditors regarding the potential risk of HIV/AIDS. It could thus be possible that someone else, not in internal auditing, is performing the duties that should normally be the internal auditors' responsibility. As mentioned before, various studies have indicated that management is often aware of the threat of HIV/AIDS to their organisations, but this study only focuses on the role and perceptions of internal auditors.

The information is presented by distinguishing, where needed, between the respondents from the two groups, namely larger organisations with more than 10,000 employees and those with less than 10,000 employees.

### 6.3.2 Internal auditing's awareness of HIV/AIDS and risks to the organisation

It was necessary to first establish what the chief audit executive or risk manager in each of the eleven organisation knew about HIV/AIDS. All eleven interviewees indicated that they believe HIV/AIDS is a threat to their organisations. Some even knew where this risk lay on their organisation's risk ranking list (high risk). All agreed that they advised management on various risk matters and all except one small organisation indicated that this includes the risk of HIV/AIDS. On the question as to what the role of internal auditing is or should be regarding this risk, all except one (from the smaller organisation group) agreed that the risk of HIV/AIDS should be treated like any other risk in the organisation, as prescribed by the *standards* of the Institute of Internal Auditors and the King Report (refer to 2.4.3 and 3.7). Comments varied from a need to take only a consulting role (giving advice to management and making sure management has a policy in place), to managing the risk (assuring that the risk is managed by performing audits on the policies, strategies and plans of management; facilitating workshops; monitoring management's actions; and incorporating HIV/AIDS issues in the human resources audit).

These findings were contradicted by the answers received to a number of specific questions as to what the internal auditing department's tasks were regarding the management of this risk. Only major issues such as HIV/AIDS policy, legislation, prevalence studies and monitoring the effects and the cost of HIV/AIDS were included in the interviews.

### 6.3.3 Internal auditing's assistance to managing the risk of HIV/AIDS

Each responded agreed that his/her organisation does have a HIV/AIDS policy, drawn up by management. Only two of the chief audit executives of the larger organisations indicated that they had been part of the process of developing this policy, by either commenting or by reviewing the final product. The internal auditors in the smaller organisations had been more involved with three of the five being part of the process and one even being part of the development team.

Most of the people interviewed indicated that they were aware of the additional legislation regarding HIV/AIDS, specific issues applicable to organisations, but when they were asked whether someone in the organisation was monitoring compliance and whether internal auditing was incorporating this in their audits, the answers did not tally with their claim. None of the internal audit activities of the six larger organisations incorporated compliance with the legislation in their audits and two were uncertain whether anyone was monitoring compliance. The internal audit activities in the smaller organisations were more certain about their facts and all indicated that someone in the organisation was monitoring compliance, but again, not one had incorporated compliance with the legislation in audits.

On the issue of prevalence studies and the voluntary testing of employees, only two of the internal audit activities of the larger organisations indicated that such studies take place at their organisation. What was worrying was that two of the organisations were unsure about what prevalence studies were and whether these studies were being undertaken by their organisations. All five the smaller organisations knew about prevalence studies and three of the five indicated that their organisations do undertake these tests. All indicated that internal auditing plays no role in these studies; neither in the identification of a suitable company or person(s) to perform the tests, nor the monitoring of the process, the evaluation of the

results, assisting management in the interpretation of the information, nor any other activity that forms part of prevalence studies.

Except for one of the smaller organisations, where the chief audit executive is part of the AIDS Committee, most indicated that internal auditing is not directly involved with monitoring and managing of HIV/AIDS. This is not the task of an internal auditor, but as indicated in the discussion on the cost of HIV/AIDS to an organisation, management must be aware of what this disease is costing the organisation to be able to manage these costs and control the bottom line, namely the profit margin. Internal auditors should make sure that the information management receives is accurate and reliable. To the question whether the chief audit executive was aware of their organisation monitoring the costs of HIV/AIDS, only one respondent from the larger organisations confirmed that he was aware that it happened, two were uncertain and three were positive that it was not done. The smaller organisations all knew that some of the cost was either monitored (two of the five) or was definitely not monitored. Only one internal auditor from a large organisation indicated that internal auditing played a role in this process, namely auditing the direct known costs involved by HIV/AIDS.

With regards to general issues such as whether internal auditing is directly affected by HIV/AIDS, two chief audit executives of the larger organisations confirmed that some of their organisation's staff members had left the company as they were infected with the disease, and all agreed that it is not impossible that internal auditing could be directly affected. Furthermore, to the question whether it is essential that internal auditing staff have a general knowledge of HIV/AIDS, all agreed that this is a given, but, except for one large organisation, they acknowledged that this was not the case at the moment. Except for two organisations, all confirmed that their organisations were actively involved in a HIV/AIDS programme for the local community, but internal auditing was again not directly involved.

More specifically, internal auditors as control specialists should ask whether HIV/AIDS has an effect on the control environment as the basis of the control system. Internal auditors should be aware of management's efforts to address the HIV/AIDS risk, the costs involved, and if applicable, draw management's attention to the risk of HIV/AIDS threatening the control system.

### 6.3.4 Internal auditing's awareness that HIV/AIDS weakens certain elements of the control environment

The information gathered by the Boston University group, although limited to data easily available on the organisations' data bases, clearly indicates that HIV/AIDS does have an effect on certain elements of the control environment. The elements probably most affected by the disease include the commitment of the workforce to competence, organisational structure and the human resources policies and practices. It has also been argued above that internal auditors, as control specialists and management's right hand regarding risk management, should know about the effects of HIV/AIDS on the control system, and therefore the control environment that forms the basis for the control system.

#### 6.3.4.1 Commitment to competence

Although all the respondents agreed that HIV/AIDS has an effect on costs due to absenteeism, loss of personnel, staff turnover, the need to replace workers, the training of new workers, employee performance and loss of productivity, they were uncertain whether their organisations were monitoring these costs, and indicated that internal auditing were not involved in this monitoring, for example, auditing the process that accumulates the costs. Most of the interviewees were either unsure whether their organisations monitored the cost of HIV/AIDS regarding the commitment to a competent workforce, or were certain that it was not done. Only one chief audit executive of the larger organisations and two of the smaller ones indicated that they were aware that some of the costs

were monitored, but two were uncertain about which of these costs. Only one respondent of the smaller organisations indicated that the internal auditing department was actually auditing the costs regarding HIV/AIDS, but on a very limited basis. The latter finding contradicted the claim by five of the respondents of the larger organisations and two of the smaller ones that they were seeing the effects of the disease on the morale of the workforce and thus agreeing that it was affecting the day-to-day activities of the organisation.

#### 6.3.4.2 Organisational structure

The organisational structure encompasses the everyday running of a business. HIV/AIDS could affect these activities due to absenteeism or a loss of key personnel, including supervisors and decision-makers, the diminishing competent workforce, production disruption with regard to reporting processes, decision-making and the co-ordination of activities. To the questions whether HIV/AIDS had an effect on the delegation of rights and responsibilities and the day-to-day co-ordination of business efforts, the organisations where internal auditing was more involved in managing this risk clearly indicated that HIV/AIDS does have an effect on both, and that in some cases a major crisis is faced by these organisations. Still, except for the respondent of one large organisation that was involved in consulting management with regard to the outsourcing of certain functions, all indicated that internal auditing was not playing a role in the potential crisis that their organisations were facing. All indicated that their managements were not restructuring their business units or considering such a process to address the risk of HIV/AIDS. Only one respondent of a large organisation indicated that its management was investigating the possibility of replacing workers with technology to address this threat.

#### 6.3.4.3 Human resources policies and practices

An organisational structure within a typical organisation consists of individuals performing certain tasks, hence, the human resources policies and practices that HIV/AIDS could affect should be investigated, such as benefit payments, recruitment and training costs, medical aid, pension funds, prevention training, the treatment of workers with HIV/AIDS, and increases in salaries. As discussed in 4.3.3, certain factors increase the likelihood of HIV/AIDS amongst the workforce (when employees live away from their families, the organisation conducts long-distance transport activities, and when middle- or upper-level employees travel frequently). Nine of the interviewees confirmed that one or more of these elements were applicable to their organisations. One of the respondents of the large organisations even indicated that the organisation was replacing own transport drivers with private owner-drivers. This suggests that the HIV prevalence rate is high or could increase as a result of these factors being present. Almost all (ten of the eleven interviewees) indicated that they were aware that these factors increased the likelihood of HIV/AIDS amongst the workforce. Except for a respondent of one of the larger organisations and three respondents from the smaller organisations, all were uncertain whether management were aware that these factors have an effect on the extent of HIV/AIDS amongst the workforce.

Some of the interviewees were either uncertain whether HIV/AIDS issues were incorporated in human resources policies and practices (in two of the larger organisations) or were sure that they were not (in one of the smaller ones). Those that indicated (eight of the interviewees) that it was part of human resources manuals confirmed that only certain issues were addressed. Only one respondent of a larger organisation confirmed that most of these factors were included in its human resources manual. Contradicting to the fact that most agreed that certain elements were included in their human resources manuals, only four repondents confirmed that HIV/AIDS-related issues were included in the internal audit

departments' audits or investigations; and then they only observed trends in certain factors.

Regarding the cost of HIV/AIDS to human resources management, most were either uncertain about whether their organisations were monitoring applicable expenses or knew that it was not done. Therefore, internal auditing played no role either, for example, auditing the accumulated costs involved. Only three of the respondents indicated that it was being done, but included only direct costs, such as increases in the medical aid contributions. Only one of these three respondents confirmed that the internal auditing department was auditing these costs accumulated by management.

On the subject of prevention programmes implemented to prevent further infection amongst the workforce, only three of the interviewees indicated that they do audit adherence to these programmes implemented by management. One of these three indicated that it only did so as part of its health and safety audits and not specifically for HIV/AIDS programmes. The internal auditing function was not involved in the determination whether these programmes were achieving their objectives, namely the prevention of the spread of the disease amongst the workforce.

## 6.4 OVERALL ASSESSMENT OF THE RESEARCH FINDINGS AND SUMMARY

The first part of this chapter focused on the costs related to HIV/AIDS in certain elements of the control environment. The information gathered by the Boston University indicates that HIV/AIDS has an effect on the competence of the workforce in the form of increased absenteeism, the loss of competent workers, a loss in productivity due to the need to train new employees and supervisory efforts. The data further indicates that the organisational structure is affected due to delegation of rights and obligations, the co-ordination of tasks and the day-to-day running of activities, as the number of supervisors and managers infected with the

disease is abnormally high. Thirdly, the information shows that human resources management is affected, as the cost of HIV/AIDS as a percentage of total wages can be as high as 5,9%.

The second part of this chapter focused on the role of internal auditors regarding the risk of HIV/AIDS and its effect on the control environment. It was clear from the research results that HIV/AIDS poses a risk or potential risk to the organisations that participated. All the interviewees indicated that internal auditing is responsible for advising management on risk issues, and ten of the eleven interviewed agreed that this should include the risk of HIV/AIDS. The rest of the research study showed that the contrary was actually being practiced. Internal audit activities play no role or a small role in important issues regarding HIV/AIDS such as a HIV/AIDS policy, compliance with applicable legislation, and prevalence studies. With reference to monitoring of the effects and the costs of HIV/AIDS to the control environment, very little was being done by most internal auditing activities. The fact that some were unsure about whether management was controlling and monitoring the cost of HIV/AIDS was very worrying. A risk can only be controlled if all the information regarding that risk is made available and internal audit has verified that the information used in the decision-making process is reliable, for example, by auditing the data and processes.

The next chapter focuses on a detailed interpretation of the research results, problems identified and steps that should be taken to rectify the problems and further research that may be relevant to this topic.

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# CHAPTER 7
# SUMMARY AND CONCLUSIONS

## 7.1 INTRODUCTION

In the previous chapter, the results of the study were given. The aim of this chapter is to summarise these results, interpret the information, come to a logical conclusion, and make recommendations to rectify the problems identified. Finally, areas related to this study's topic that should be investigated further are listed.

## 7.2 SUMMARY OF THE RESULTS OF THE STUDY

The results of this study can be divided into two main areas, namely the effect of HIV/AIDS on the control environment, and the role of internal auditors with regard to managing this risk in the organisation.

### 7.2.1 The effect of HIV/AIDS on the control environment

The first part of this study was limited to the information gathered by the Boston University related to issues affecting the control environment, such as absenteeism. Furthermore, only those elements of the control environment most likely to be affected by HIV/AIDS were included, namely commitment to a competent workforce, organisational structure, and human resources policies and practices. With regard to a competent workforce it was proven that absenteeism increases as a result of HIV/AIDS. A loss of employees occurs as a result of retirement of ill workers or death of workers due to HIV/AIDS, and with that there is a loss of expertise and skills. There is a major reduction in productivity due to new employees' learning curve, people is feeling ill at work and not performing their tasks as well as they should, and supervisors that have to

assist workers when workers feel unwell or supervisors that perform the workers' tasks due to the absenteeism of employees with HIV/AIDS.

With regard to organisational structure, the only information that could be linked to the day-to-day running of organisations affected by HIV/AIDS is the fact that the disease infects all levels of the workforce; from unskilled workers to managers, who are the people that make decisions and control functions, activities, *et cetera*.

Human resources management is affected by HIV/AIDS, as it has been shown that the cost of the disease as a percentage of total wages was as high as 5,9%. Bearing this information in mind, internal auditors were approached to evaluate their knowledge of and participation in managing this risk for the organisation.

### 7.2.2 The role of internal auditors regarding the risk of HIV/AIDS

The interviews held with the various chief audit executives or risk managers in internal auditing departments were structured to address three main areas, namely the internal auditors' awareness of the potential risk of HIV/AIDS to their organisations, internal auditing's assisting management with the management of this risk, and internal auditors' awareness that HIV/AIDS weakens the control environment as the basis for the control system.

Most interviewees agreed that HIV/AIDS is a risk to their organisation and that internal auditors must advise management on risk matters, including the risk of HIV/AIDS. On the issue of a formalised HIV/AIDS policy, all indicated that their organisation did have one, but most of the internal auditing departments had not been part of the process of developing or evaluating the final document. Internal auditors are aware of the additional legislation pertaining to HIV/AIDS, but none of the interviewees included these issues in their compliance audits. Some indicated that they were aware of other personnel, mostly human resources staff, who were

monitoring compliance with the legislation linked to HIV/AIDS. With regard to prevalence studies performed by management to determine the incidence of the disease amongst their workforce, internal auditing has played no role in assisting management. Some of the interviewees were even uncertain about what prevalence studies were. The same results were obtained regarding the monitoring of the cost of HIV/AIDS to an organisation. Most were either unsure whether management was monitoring the cost of the disease, or were sure that it was not done. Again, internal auditing had played no role in the process, either by making management aware of these additional costs, or by auditing the process, procedures and methods.

Internal auditors as control specialists should make sure that the control system is functioning as planned and that the control procedures function within a sound control environment. All the interviewees agreed that HIV/AIDS could have an effect on a competent workforce, organisational structure, and human resources policies and practices. With this in mind, it was worrisome that almost all the interviewees indicated that either their organisations did not monitor the cost of HIV/AIDS in relation to these elements of the control environment, or they were uncertain whether it was being done. In the organisations where the costs were monitored, except for one, internal auditing had played no role in this process, either by auditing the methods used and the information gathered, or by advising management on issues such as restructuring the business to accommodate the effects of HIV/AIDS. Almost all indicated that the factors increasing the likelihood of HIV/AIDS amongst the workforce were present in their organisation, thus increasing the possible effects on human resources management. Most agreed that they were uncertain about whether HIV/AIDS-related issues were incorporated in their organisation's human resources policies and practices.

With the above in mind, the information gathered during the research is interpreted below and a conclusion is reached in order to make a recommendation on how to address these issues and rectify the problems indicated.

## 7.3 INTERPRETATION OF THE RESULTS WITHIN THE LIMITATIONS OF THE STUDY

The results from the information gathered by Boston University indicated that HIV/AIDS does have an effect on certain elements of the control environment. Although the information obtained from the study was limited as a result of the sensitivity of the disease and a lack of data available on the data bases of the organisations included in the study, the Boston University study has demonstrated that HIV/AIDS affects the competence of the workforce, the day-to-day running of the business and thus the organisational structure, and lastly the management of human resources. It can be assumed that the effects of the disease will differ from organisation to organisation, and that for some the effect can be devastating.

With regard to the role of internal auditors in the management of this risk, only eleven chief audit executives were interviewed. Statistical sampling was not used and formal questionnaires were not circulated. Statistical sampling would not have succeeded, as internal auditing is a relatively new profession. In South Africa, with the recent issue of the King Report and Public Finance Management Act, Act No 1 of 1999, a number of internal auditing functions are in the process of either being established or of being upgraded. Having completed the personal interviews, the interviewer has concluded that formal questionnaires would not have been successful in obtaining the relevant information. The reasons for this conclusion are that the interviewees, although they were eager to participate, were mostly very ignorant about the effects of HIV/AIDS on their organisation. To try to make the situation look better, they kept referring to other people in the organisation as doing quite a lot regarding

the management of HIV/AIDS. This study's main objective, however, was to focus on internal auditing's perspective on the risk of HIV/AIDS.

The distinction made between the smaller and larger organisations was shown to been necessary as, in most cases, the smaller organisations were more actively involved or knew more about what their organisations were doing about the risk of HIV/AIDS. The reason for this is probably that internal auditing in smaller organisations is assisting management on all issues related to risk and compliance. Some of the larger organisations had separate compliance departments, risk management divisions, HIV/AIDS committees, or other forums. In these instances, the chief audit executive believed that the risk of HIV/AIDS was covered and internal auditing had a very limited role, if any, to play in the management of HIV/AIDS. This is in contrast to the definition of internal auditing, the Professional Practices Framework of the Institute of Internal Auditors, especially the *standards*, and the King Report on Corporate Governance.

The management of risks is the responsibility of the Board of Directors (see 3.7), and the role of internal auditing is to give an assurance to all stakeholders that the risks threatening the organisation are being adequately managed (see 2.6.2). Although all the interviewees agreed that HIV/AIDS is a threat to their organisations, only a few were performing their duty regarding this risk. The level of commitment and the tasks performed varied considerably, ranging from total ignorance of HIV/AIDS in a business environment, to having people in the internal auditing department with detailed knowledge of the disease and performing most of the tasks needed to be able to give stakeholders the necessary assurances. Only one organisation was very actively involved in monitoring the management and effects of HIV/AIDS, and although this internal auditing activity had undertaken most of the steps needed to address the issues raised in the questionnaire, some were still not properly in place.

Given the role that management and internal auditing respectively have to play in the management of HIV/AIDS, as well as the summary and results of this study, a number of conclusions can be reached and recommendations can be made.

## 7.4 CONCLUSIONS AND RECOMMENDATIONS

As mentioned above, the risk of HIV/AIDS should be managed by the Board of Directors, using the expertise available in or to the organisation either to minimise the effect of the disease on the organisation by controlling certain factors, or to eliminate the risk, which is not possible, as all organisations need people to perform certain tasks. The role of internal auditing is often limited to giving assurances to all stakeholders that the risk of HIV/AIDS is being adequately managed. This should include making management as well as other people aware of the potential threat posed by the disease to the organisation, business unit or department; audits of the information used to make decisions regarding HIV/AIDS and compliance with legislation and other rules and procedures; auditing workplace programmes on HIV/AIDS (see Annexure B); giving advice on and evaluating plans and procedures; giving advice on what should be monitored and how this can be done; being involved in the implementation of programmes or projects regarding HIV/AIDS, such as prevalence studies and prevention programmes; running the reporting process on HIV/AIDS including financial statement reporting and sustainability reporting; and evaluating the effects on specific areas relevant to the duties of internal auditors such as the control system. The one organisation interviewed in the study that performed most of the above tasks, agreed that even they were not doing everything possible and that specific guidelines should be set up to help internal auditing departments to do all they can to assist in the management of this risk.

HIV/AIDS is not a common risk; that is, not all people are aware of the real consequences of this deadly disease to the world, countries, communities, the business environment and organisations. Internal auditors may not be

specialists on HIV/AIDS, but this does not lessen internal auditing's responsibility regarding its role in managing this risk. Internal auditing should treat HIV/AIDS just like all other risks threatening the organisation. According to the *standards* of the Institute of Internal Auditors, if expertise is lacking in an internal auditing function, this expertise must be obtained from elsewhere.

HIV/AIDS is a real threat to organisations, especially in Sub-Saharan Africa. Internal auditors are not experts on diseases and how HIV/AIDS could affect their organisations. Internal auditors are, however, management's right hand on risk management, control and corporate governance. Hence, this study concludes that internal audit guidelines should be developed to assist internal auditors in their duty regarding the management of HIV/AIDS. These guidelines should be developed by the Institute of Internal Auditors Inc. with the help of people in the internal auditing profession who are actively involved in the issue of HIV/AIDS, but could include experts from other areas such as the medical profession, the insurance and medical aid environment, human resources management and wellness partners.

## 7.5 AREAS FOR FURTHER RESEARCH

In conducting this research study, other topics that can be linked to this study were identified. These topics should be considered:

- The weakening of the control environment as a result of a disease such as HIV/AIDS can result in an increase of fraud.
- The weakening of the control environment can affect the rest of the control system, especially control procedures.
- A database needs to be developed to monitor the effects of HIV/AIDS on organisations.
- There is a need to establish an executive committee to manage high-risk issues that threaten to lead to the disintegration of organisations, such as HIV/AIDS.

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**Annexure A**

# INTERNAL AUDITING'S ROLE WITH REGARD TO HIV/AIDS

## Knowledge of Internal auditing regarding HIV/AIDS

Investigate by means of interviews:

- How many people are employed by your organisation?
- Do you think HIV/AIDS is a risk / potential risk to your organisation?
- What do you think is or should be the role of internal auditing regarding this risk / potential risk?
- What role do you think should IIA Inc. and IIA (SA) play in providing members with guidance on handling HIV/AIDS issues?
- What in your opinion should be the chief audit executive's and audit committee's role with reference to HIV/AIDS (refer to King II)?
- Is your internal audit activity directly affected by HIV/AIDS?
- Do you think it is essential for internal auditing staff members to have a general knowledge of HIV/AIDS?
- Do you advice management on risk matters?
- Does this include the risk or potential risk of HIV/AIDS?
- Does your company have a HIV/AIDS policy?
- What is the role of internal auditing regarding this policy?
- Is internal auditing actively involved with the monitoring and managing of HIV/AIDS?
- Are you aware of all the relevant legislation regarding HIV/AIDS?
- Is there someone in the organisation monitoring if the company complies with the legislation and is internal auditing incorporating this in their audits?
- Does your company do prevalence studies?
- What is the role of internal auditing in prevalence studies?
- How often does this happen (plan to happen)?
- Does your company monitor the cost of HIV/AIDS?
- What is the role of internal auditing in this process?

- Is your organisation actively involved with local HIV/AIDS programmes?

## Elements of the control environment affected by HIV/AIDS

### Personnel commitment to competence

Proof by means of figures that HIV/AIDS has an effect on:

- Employee performance
- Absenteeism (sick leave, illness, attending funerals, *et cetera*)
- Loss of personnel (technical skills, knowledge and experience, insurance)
- Staff turnover
- Replacement worker (recruitment, higher salaries, multi-skill workers)
- Training of new employees (formal and on-the-job)
- Lost productivity

Further investigation by means of interviews:

- Is your company monitoring the above?
- Do you think HIV/AIDS has an effect or potential effect on this?
- Is internal auditing involved with this?
- To what extend?
- Do you think HIV/AIDS has an effect on the morale of the workforce?

### Organisational structure

Proof by means of figures that HIV/AIDS has an effect on:

- Absenteeism and loss of key personnel for example supervisors and higher levels
- Burden on management regarding reporting processes, decision-making, co-ordination jobs
- Diminishing competent workforce (less competent people)

- Production disruption
- Replacement of diminishing workforce with machinery / technology

Further investigation by means of interviews:

- Does HIV/AIDS have an effect on the delegation of rights and responsibilities as a result of absenteeism and loss of personnel?
- Does HIV/AIDS have an effect on the day-to-day running of the business?
- Is your company planning to replace workers with technology?
- Does management restructure the organisational structure or co-ordinate tasks as a result of HIV/AIDS?
- What is the role of internal auditing in this matter?

## Human resource policies and procedures

Proof by means of figures that HIV/AIDS has an effect on:

- Benefit payment
- Recruitment and training
- Medical aid
- Pension fund
- Prevention training
- Treatment of HIV/AIDS workers
- Higher salaries (remuneration)

Further investigation by means of interviews:

- Is one or more of the following applicable to your organisation:
    - employees live away from home,
    - long-distance transport,
    - middle and upper level employees travel frequently?
- Do you know that these factors have a major effect on the increase of HIV/AIDS?
- Does management know this, and if not, is internal auditing making them aware of this?

- Is the risk of HIV/AIDS incorporated in your HR policies and procedures, for example recruitment procedures, HIV/AIDS prevention training, prevalence studies, treatment of HIV/AIDS employees, employee benefits, medical aid, pension fund, remuneration policies?
- Do you audit adherence to HIV/AIDS legislation as part of your HR audit?
- Do you include HIV/AIDS related issues in HR investigations, for example leave system?
- Does your company monitor the cost of HIV/AIDS for HR management?
- Do you think remuneration of new employees could increase as a result of fewer skilled workers to be recruited?
- What is the role of internal auditing regarding this?
- Does your company measure the cost involved versus appointment of a HIV/AIDS person on the short, medium and long term?
- Do you think HIV/AIDS should be a notifiable disease?
- What is the role of internal auditing regarding HIV/AIDS prevention programs?

**Annexure B**

# HIV AIDS RISK ASSESSMENT

| Activity | Activity objectives | Risks | Controls |
|---|---|---|---|
| Workplace | Maintain planned production levels.<br>Ensure production costs are kept in check. | Excessive absenteeism (due to funerals and sick leave) resulting in a drop in productivity.<br><br>Low staff morale from deaths resulting in a drop in productivity.<br><br>Performance management:<br>• Inadequate performance management system.<br>• Increased production costs from lower output per employee/gang.<br>• Hidden infected employees not timeously detected.<br>• Payment of labour costs and production bonuses for unproductive sick employees.<br><br>Inability to secure funds to manage HIV/AIDS risks. | |
| | Maintain a safe working environment. | Workplace mistakes resulting in workplace disasters/accidents.<br><br>Heatstroke – Collapse on the job.<br><br>Workplace accident infections or transmissions (employee to employee). | |

| | | | |
|---|---|---|---|
| Staff Recruitment | Ensure fit and healthy staff are recruited. | Recruitment of unfit staff resulting in excessive costs.<br><br>Ongoing employment of unfit or unhealthy employees resulting in productivity reductions.<br><br>Inadequate employee testing and screening process.<br><br>Non-compliance to Union agreements and labour legislation (litigation).<br><br>Lack of or non-compliance to an HIV/AIDS Policy. | |
| VCT and wellness clinics | Obtain employee acceptance to join wellness programmes.<br><br>Promote early treatment and early detection of employees.<br><br>Prevent new HIV infections. | Employees non acceptance to be screened or engage on the programme.<br><br>Poorly run clinics or wellness programmes.<br><br>Poor service or STI treatment at Medical Stations, including Judgemental staff. | |
| Awareness Campaigns and Staff Training | Promote overall awareness of the disease.<br><br>Promote wellness clinics attendance. | Campaigns not achieve the right perception or level of awareness.<br><br>Campaigns do not reach all the required staff, inadequate coverage.<br><br>Society reputational risks on failed projects or of lack of commitment to address the disease.<br><br>Lack of union commitment to programmes. | |

| | | | |
|---|---|---|---|
| Human resources and training | Adequate training to identify unproductive/sick staff.<br><br>Staff man power planning adequately addresses the potential AIDS impact.<br><br>Adequate Medically Infected Employees processes. | Inadequate supervisory training.<br><br>Manpower Planning:<br>• Inadequate short term and long term man power planning.<br>• Loss of critical/key employees or skills.<br>• Sudden loss or drop in productivity of a large group of employees all within the same time period; including large scale unplanned absenteeism. The inability to effectively re-allocate staff for work.<br>• Inadequate monitoring of skills availability and labour forecasts.<br><br>Medically Affected Employees:<br>• Inadequate medically affected policies and procedures including poor implementation of such policies and procedures.<br>• Inability to efficiently remove/treat ill staff, or find alternative working environment.<br><br>Increased costs due to inflexible contractual employee benefits.<br><br>Increased medical costs. | |