**LEARNER GUIDE**

**Demonstrate Knowledge And Understanding Of HIV/AIDS In A Workplace, And Its Effects On A Business Sub-Sector, Own Organisation And A Specific Workplace**

Unit Standard No: 13915

NQF Level 3 Credits 4

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# PERSONAL INFORMATION

|  |  |
| --- | --- |
| **NAME** |  |
| **CONTACT ADDRESS** |  |
|  |
| **Code** |  |
| **Telephone (H)** |  |
| **Telephone (W)** |  |
| **Cellular** |  |
| **Learner Number** |  |
| **Identity Number** |  |
|  | |
| **EMPLOYER** |  |
| **EMPLOYER CONTACT ADDRESS** |  |
|  |
| **Code** |  |
| **Supervisor Name** |  |
| **Supervisor Contact Address** |  |
|  |
| **Code** |  |
| **Telephone (H)** |  |
| **Telephone (W)** |  |
| **Cellular** |  |

# **INTRODUCTION**

#### Welcome to the learning programme

Follow along in the guide as the training practitioner takes you through the material. Make notes and sketches that will help you to understand and remember what you have learnt. Take notes and share information with your colleagues. Important and relevant information and skills are transferred by sharing!

This learning programme is divided into sections. Each section is preceded by a description of the required outcomes and assessment criteria as contained in the unit standards specified by the South African Qualifications Authority. These descriptions will define what you have to know and be able to do in order to be awarded the credits attached to this learning programme. These credits are regarded as building blocks towards achieving a National Qualification upon successful assessment and can never be taken away from you!

### Programme methodology



The programme methodology includes facilitator presentations, readings, individual activities, group discussions and skill application exercises.

Know what you want to get out of the programme from the beginning and start applying your new skills immediately. Participate as much as possible so that the learning will be interactive and stimulating.

The following principles were applied in designing the course:

* Because the course is designed to maximise interactive learning, you are encouraged and required to participate fully during the group exercises
* As a learner you will be presented with numerous problems and will be required to fully apply your mind to finding solutions to problems before being presented with the course presenter’s solutions to the problems
* Through participation and interaction the learners can learn as much from each other as they do from the course presenter
* Although learners attending the course may have varied degrees of experience in the subject matter, the course is designed to ensure that all delegates complete the course with the same level of understanding
* Because reflection forms an important component of adult learning, some learning resources will be followed by a self-assessment which is designed so that the learner will reflect on the material just completed.

This approach to course construction will ensure that learners first apply their minds to finding solutions to problems before the answers are provided, which will then maximise the learning process which is further strengthened by reflecting on the material covered by means of the self-assessments.

#### Different role players in delivery process

* Learner
* Facilitator
* Assessor
* Moderator

### What Learning Material you should have

This learning material has also been designed to provide the learner with a comprehensive reference guide.

It is important that you take responsibility for your own learning process; this includes taking care of your learner material. You should at all times have the following material with you:

|  |  |
| --- | --- |
| **Learner Guide** | **This learner guide is your valuable possession:**  This is your textbook and reference material, which provides you with all the information you will require to meet the exit level outcomes.  During contact sessions, your facilitator will use this guide and will facilitate the learning process. During contact sessions a variety of activities will assist you to gain knowledge and skills.  Follow along in the guide as the training practitioner takes you through the material. Make notes and sketches that will help you to understand and remember what you have learnt. Take and share information with your colleagues. Important and relevant information and skills are transferred by sharing!  This learning programme is divided into sections. Each section is preceded by a description of the required outcomes and assessment criteria as contained in the unit standards specified by the South African Qualifications Authority. These descriptions will define what you have to know and be able to do in order to be awarded the credits attached to this learning programme. These credits are regarded as building blocks towards achieving a National Qualification upon successful assessment and can never be taken away from you! |
| **Formative Assessment Workbook** | The Formative Assessment Workbook supports the Learner Guide and assists you in applying what you have learnt.  The formative assessment workbook contains classroom activities that you have to complete in the classroom, during contact sessions either in groups or individually.  You are required to complete all activities in the Formative Assessment Workbook.  The facilitator will assist, lead and coach you through the process.  These activities ensure that you understand the content of the material and that you get an opportunity to test your understanding. |

### Different types of activities you can expect

To accommodate your learning preferences, a variety of different types of activities are included in the formative and summative assessments. They will assist you to achieve the outcomes (correct results) and should guide you through the learning process, making learning a positive and pleasant experience.



The table below provides you with more information related to the types of activities.

| **Types of Activities** | **Description** | **Purpose** |
| --- | --- | --- |
| **Knowledge Activities** | You are required to complete these activities on your own. | These activities normally test your understanding and ability to apply the information. |
| **Skills Application Activities** | You need to complete these activities in the workplace | These activities require you to apply the knowledge and skills gained in the workplace |
| **Natural Occurring Evidence** | You need to collect information and samples of documents from the workplace. | These activities ensure you get the opportunity to learn from experts in the industry.  Collecting examples demonstrates how to implement knowledge and skills in a practical way |

### Learner Administration



#### Attendance Register

You are required to sign the Attendance Register every day you attend training sessions facilitated by a facilitator.

#### Programme Evaluation Form

On completion you will be supplied with a “Learning programme Evaluation Form”. You are required to evaluate your experience in attending the programme.

Please complete the form at the end of the programme, as this will assist us in improving our service and programme material. Your assistance is highly appreciated.

### Assessments

The only way to establish whether a learner is competent and has accomplished the specific outcomes is through the assessment process. Assessment involves collecting and interpreting evidence about the learners’ ability to perform a task.

**To qualify and receive credits towards your qualification, a registered Assessor will conduct an evaluation and assessment of your portfolio of evidence and competency.**

**This programme has been aligned to registered unit standards. You will be assessed against the outcomes as stipulated in the unit standard by completing assessments and by compiling a portfolio of evidence that provides proof of your ability to apply the learning to your work situation.**



**How will Assessments commence?**

#### Formative Assessments

The assessment process is easy to follow. You will be guided by the Facilitator. Your responsibility is to complete all the activities in the Formative Assessment Workbook and submit it to your facilitator.

#### Summative Assessments

You will be required to complete a series of summative assessments. The Summative Assessment Guide will assist you in identifying the evidence required for final assessment purposes. You will be required to complete these activities on your own time, using real life projects in your workplace or business environment in preparing evidence for your Portfolio of Evidence. Your Facilitator will provide more details in this regard.

To qualify and receive credits towards your qualification, a registered Assessor will conduct an evaluation and assessment of your portfolio of evidence and competency.

### Learner Support

**The responsibility of learning rests with you, so be proactive and ask questions and seek assistance and help from your facilitator, if required.**



Please remember that this Skills Programme is based on outcomes based education principles which implies the following:

* You are responsible for your own learning – make sure you manage your study, research and workplace time effectively.
* Learning activities are learner driven – make sure you use the Learner Guide and Formative Assessment Workbook in the manner intended, and are familiar with the workplace requirements.
* The Facilitator is there to reasonably assist you during contact, practical and workplace time for this programme – make sure that you have his/her contact details.
* You are responsible for the safekeeping of your completed Formative Assessment Workbook and Workplace Guide
* If you need assistance please contact your facilitator who will gladly assist you.
* If you have any special needs please inform the facilitator

### Learner Expectations

Please prepare the following information. You will then be asked to introduce yourself to the instructor as well as your fellow learners



|  |
| --- |
| Your name: |
|  |
|  |
| The organisation you represent: |
|  |
|  |
| Your position in organisation: |
|  |
|  |
| What do you hope to achieve by attending this course / what are your course expectations? |
|  |
|  |
|  |
|  |
|  |

# UNIT STANDARD 13915

#### Unit Standard Title

Demonstrate knowledge and understanding of HIV/AIDS in a workplace, and its effects on a business sub-sector, own organisation and a specific workplace

#### NQF Level

3

#### Credits

4

#### Purpose

This unit standard provides a broad introduction to HIV/AIDS in the workplace. It introduces a broad case of knowledge about HIV/AIDS that will enable learners to be informed and caring workers in an industry. The focus is knowledge, skills, values and attitudes in relation to the learner`s own context and experience of the world of work.

#### Learning assumed to be in place

There is open access to this unit standard. Learners should

* Hold a GETC or equivalent qualification or
* Be competent in communication and mathematical literacy NQF level 2

#### Unit standard range

The typical scope of this unit standard is:

* The effect of HIV/AIDS on the individual, the workplace and society
* The effect of the HIV/AIDS pandemic on the economy, a sub-sector, and organisation and a specific workplace

#### Specific Outcomes and Assessment Criteria

**Specific outcome 1:** Know and understand HIV/AIDS and its effects on the human immune system

**Assessment criteria**

* The terms HIV and AIDS are known and explained at a basic level of understanding
* The way in which the immune system works is explained with reference to the role of antibodies in the immune system
* An indication is given as to how the HIV virus attacks the immune system
* The concept of a window period is explained with reference to the Elisa test
* The concept that the Elisa Test tests for antibodies is known and an indication is given of the implications that this has in terms of the window period and the use of vaccinations
* The fact that all babies born to HIV/AIDS mothers initially test positive for the HIV virus is known and reason are given to explain why these test results change over time.
* The concept of Voluntary Counselling and Testing (VCT) is explained with the reference to the role of the Rapid Test and confirmation by the Elisa Test
* The effects of HIV infection are explained including the ability of infected persons to perform work and the importance of lifestyle changes to boost the immune system and prevent reinfection
* The importance of pre and post test counselling is known and understood and the implications of HIV testing for an individual are discussed in terms of making a personal decision to take an AIDS
* The stages of the disease are outlined with an example of what happens at each stage from infection with HIV to full-blown AIDS and death
* The chances of a person surviving with AIDS are discussed with reference to the latest views on medication and the costs of the drugs

**Specific outcome 2:** Know and understand how HIV/AIDS is transmitted

**Assessment criteria**

* The effect of body fluids on transmission of the HIV virus is outlined at a basic level of understanding
* Sex is identified as the most common way in which the HIV virus is transmitted and other ways in which HIV is transmitted are listed with an indication of the conditions necessary for transmission
* The ways in which mother to child transmission can occur are listed and the implication of a pregnant woman/girl child having unprotected sex are indicated for both the mother and the unborn child
* Actions that an HIV positive mother can take to lower the risk of infection to the child and prolong the onset of AIDS in herself are presented in a poster to promote wellness.
* The dangers of drug abuse and behaviour that could result in HIV transmission are explained with suggestions for limiting transmission
* Precautions used in South Africa to ensure that blood products are HIV free are outlined at a basic level of understanding

**Specific outcome 3:** Know what behaviour is safe and what behaviour carries the risk of HIV transmission

**Assessment criteria**

* The relationship between human behaviour and HIV/AIDS is outlined at a basic level of understanding
* Ways in which the individual can avoid contracting or spreading HIV/AIDS are named with an indication of how own behaviour can reduce the risk of infection
* Examples of behaviour that carry a risk of contracting HIV/AIDS are named and classified according to whether they carry a high, medium or low
* Situations that have a potential to spread HIV/AIDS in the workplace are discussed and rated in terms of high, medium and low risk
* Fears and common misunderstandings about the transmission of HIV/AIDS are described in the context of the workplace
* The reasons are given why certain behaviours and activities carry a low risk of infection
* The role of sexually transmitted diseases (STDs) in the transmission of the HIV virus is known and understood and an indication is given of how untreated STDs greatly increase the risk of transmission

**Specific outcome 4:** Know what guidelines and assistance are available to support workers with HIV/AIDS

**Assessment criteria**

* Know what guidelines and assistance are available to support workers with HIV/AIDS and recognise own role in creating a caring work environment
* A company policy on HIV/AIDS or the National Department of Health's document "Guidelines for developing a workplace policy and programme" is accessed and evidence of knowledge is provided in the form of a brief summary
* The possible problems that a worker with HIV/AIDS could encounter are listed with suggestions as to what the learner himself/herself could do to create a caring situation in the workplace
* The importance of employers playing a proactive role in addressing the AIDS pandemic are known and understood and ways in which a company can create a caring environment for workers with HIV/AIDS are suggested for a familiar context
* The availability of HIV/AIDS prevention and wellness programmes provided by medical schemes, organisations and other bodies is known and an explanation is given on how to access them
* The treatment options available to a person with HIV/AIDS are known and a table is compiled indicating which treatment is available locally
* The rights of all workers in respect of HIV/AIDS are known and their personal responsibilities are understood dealing with the pandemic
* The Universal Precautions are known and applied in the work environment
* A code of behaviour in the workplace is drafted. To help someone cope with realisation that s/he has HIV/AIDS and to ensure co-workers are safe from infection; or To prevent someone who does not yet have HIV/AIDS from becoming infected
* A presentation is created to help address the stigma surrounding HIV/AIDS and the importance of employers playing a proactive role in dealing with HIV/AIDS

**Specific outcome 5:** Know and understand the implications of the HIV/AIDS pandemic for society, the economy, a business sub-sector, an organisation and a specific workplace.

**Assessment criteria**

* The needs of AIDS orphans are outlined with reference, at a basic level of understanding, to the burden of a large number of orphans on society and the economy
* The effect of a population composed mainly of children and the aged on the economy and the State is outlined at a basic level of understanding
* The need for medical care for people with HIV/AIDS and the implications for employers and the State are discussed at a basic level of understanding
* The effect of HIV/AIDS on the workforce and family income is discussed at a basic level of understanding
* The effect of HIV/AIDS for an organisation are discussed at a basic level of understanding
* The implications of HIV/AIDS for a specific workplace are discussed at a basic level of understanding
* The implications of HIV/AIDS for an industry sub-sector are discussed at a basic level of understanding

#### Critical Cross-Field Outcomes

* **Unit Standard CCFO Identifying** - The learner is able to identify and solve problems in which responses show that responsible decisions using critical and creative thinking have been made in knowing what information may be given to prospective employers and other persons about employees.
* **Unit Standard CCFO Collecting** - The learner is able to collect, organise and critically evaluate information in analysing the relationship between the four Acts.
* **Unit Standard CCFO Demonstrating** – The learner is able to demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation in understanding the need to ask carefully worded questions in interviews and the consequence of giving information about employees to a third party.
* **Unit Standard CCFO Organising** - The learner is able to organise and manage him/herself and his/her activities responsibly and effectively in preparing questions for interviews and compiling the required reports.
* **Unit Standard CCFO Working** – The learner is able to work effectively with others as a member of a team, group, organisation or community in ensuring fair labour practice.
* **Unit Standard CCFO Communicating –** The learner is able to communicate effectively in explaining the various sections of the legislation and in calculating the Skills Development Levy for a business unit.
* **Unit Standard CCFO Contributing –** The learner is able to participate as a responsible citizen in the life of local and national communities in knowing how to ensure fair labour practice. The learner is able to be culturally and aesthetically sensitive across a range of social contexts in implementing the EE policy of an organisation in a business unit.
* Demonstrate understanding of aspects of the Basic Conditions of Employment Act (BCOE) (as amended) that business unit managers might be responsible for implementing.

# SECTION ONE: UNDERSTAND HIV/AIDS

#### Specific outcome

The learner will: know and understand HIV/AIDS and its effects on the human immune system

#### Assessment criteria

On completion of this section you will be able to ensure that:

* The terms HIV and AIDS are known and explained at a basic level of understanding
* The way in which the immune system works is explained with reference to the role of antibodies in the immune system
* An indication is given as to how the HIV virus attacks the immune system
* The concept of a window period is explained with reference to the Elisa test
* The concept that the Elisa Test tests for antibodies is known and an indication is given of the implications that this has in terms of the window period and the use of vaccinations
* The fact that all babies born to HIV/AIDS mothers initially test positive for the HIV virus is known and reason are given to explain why these test results change over time
* The concept of Voluntary Counselling and Testing (VCT) is explained with the reference to the role of the Rapid Test and confirmation by the Elisa Test
* The effects of HIV infection are explained including the ability of infected persons to perform work and the importance of lifestyle changes to boost the immune system and prevent reinfection.
* The importance of pre and post test counselling is known and understood and the implications of HIV testing for an individual are discussed in terms of making a personal decision to take an AIDS test.
* The stages of the disease are outlined with an example of what happens at each stage from infection with HIV to full-blown AIDS and death
* The chances of a person surviving with AIDS are discussed with reference to the latest views on medication and the costs of the drugs

#### CCFO

Unit standard CCFO communicating

Learners are able to communicate effectively and responsibly using visual and/or language skills when explaining the stages of HIV/AIDS and presenting an example of what happens at each stage of the progression of the disease and how to address the stigma surrounding HIV/AIDS. They can also communicate effectively using visual, mathematics and language skills when presenting the findings of their research and producing posters and presentations regarding ways of HIV positive mother can lower the risk of infection to her child and prolong the onset of AIDS in her own body.

## What is HIV/AIDS?

AIDS

HIV

Acquired

Immunodeficiency

Syndrome

Human

Immunodeficiency

Virus

AIDS is caused by the human immunodeficiency virus (HIV). By killing or damaging cells of the body's immune system, HIV progressively destroys the body's ability to fight infections and certain cancers.

We all know the devastating consequences of being infected with HIV.

In fact it is quite astonishing that something so small that you can only see it with an electron microscope which magnifies it many, many times can cause such damage to a body so huge as that of a human being.

No wonder that people often ask, does it really exist? And what does it look like?

**There can be no doubt. HIV does exist.**

HIV infection is first and foremost a biomedical condition.

HIV is one of a family of retroviruses that enters the bloodstream and attacks the body’s immune system, compromising its ability to fight infections.

South Africa has one of the largest number of HIV infected people in the world



**5.3 million people are infected with HIV/AIDS in South Africa**

**(End of 2002)**

**One in every five adults is infected with HIV/AIDS in Southern Africa**

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**Worldwide statistics**

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People living with HIV/AIDS

Total: 40 million

Adults: 37 million

Children: 2,5 million

Cumulative HIV/AIDS-associated deaths: Year 2003 Total: 3 million

New Infections Globally per year

Approx 5,3 million new HIV infections

**Sub-Saharan Africa**

**Adults and children living with HIV/AIDS**

**25 to 28,2 million**

Cumulative HIV/AIDS-associated deaths: Year 2003:

Total: **2,2 – 2,4 million**

### Stages of HIV Infection

Once infected with HIV, a person is labelled ‘HIV positive’ and carries the virus for the remainder of his or her life. At the point of infection, a battle begins between the virus and the body’s immune system. This battle proceeds through various stages before the person dies. For the purposes of explanation, six stages will be identified.

#### Stage 1 HIV infection

This is when the virus enters the body. There are no signs or symptoms of infection.

#### Stage 2 Window period

The virus is present in the body but has not yet produced antibodies, which can show up in an HIV test. (Antibodies are proteins present in the body to fight off diseases.) There are no signs or symptoms of disease. This stage usually lasts from 2 to 12 weeks, but may last months.

#### Stage 3 Seroconversion

This is when antibodies develop in the blood and an HIV test will detect them. In other words, it is when you convert from being HIV-negative to HIV-positive. Some people have a flu-like illness for a few days - slight fever, tiredness, aching muscles and joints.

#### Stage 4 HIV infection with no symptoms

There are no signs or symptoms of illness, although infection is present. This period may last from a few months to many years.

#### Stage 5 HIV / AIDS related illnesses

The immune system (the cells which fight disease) has been damaged by the virus. Symptoms of diseases increase but as yet they are not severe enough to threaten life. Examples of symptoms are a low-grade fever that lasts several weeks, diarrhoea, extreme tiredness, weight loss, skin rashes, swollen glands and night sweats. Women may get vaginal infections (thrush) that never seem to clear up, even with treatment. Infections gradually become more frequent and more serious. This period may last for months or years.

#### Stage 6 AIDS

Serious infections and cancers invade the body because the immune system is now very weak. Typical infections are pneumonia, skin cancers, "slim's" disease and TB. The patient could die at this stage from an untreatable condition.

### Opportunistic Infections

People diagnosed with AIDS may get life threatening diseases called **opportunistic infections**, which are caused by microbes such as viruses or bacteria that usually do not make healthy people sick.

Infection with HIV can weaken the immune system to the point that it has difficulty fighting off certain infections. These types of infections are known as "opportunistic" infections because they take the opportunity a weakened immune system gives to cause illness.

Many of the infections that cause problems or may be life-threatening for people with AIDS are usually controlled by a healthy immune system.

The immune system of a person with AIDS is weakened to the point that medical intervention may be necessary to prevent or treat serious illness.

Today there are medical treatments that can slow down the rate at which HIV weakens the immune system. There are other treatments that can prevent or cure some of the illnesses associated with AIDS. As with other diseases, early detection offers more options for treatment and preventative care.

The term AIDS applies to the most advanced stages of HIV infection.

AIDS includes all HIV-infected people who have fewer than 200 CD4 positive T cells per cubic millimetre of blood.

(Healthy adults usually have CD4 positive T-cell counts of 1,000 or more.).

#### Symptoms of Opportunistic Infections

Symptoms of opportunistic infections common in people with AIDS include:

* Coughing and shortness of breath



* Seizures and lack of coordination
* Difficult or painful swallowing
* Mental symptoms such as confusion and forgetfulness
* Severe and persistent diarrhoea
* Fever
* Vision loss
* Nausea, abdominal cramps, and vomiting
* Weight loss and extreme fatigue
* Severe headaches
* Coma

#### Children with AIDS

Children may get the same opportunistic infections, as do adults with the disease. In addition, they also have severe forms of the bacterial infections all children may get, such as:

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* Conjunctivitis (pink eye)
* Ear infections
* Tonsillitis.

#### Development of Cancer

People with AIDS are particularly prone to developing various cancers, especially those caused by viruses such as Kaposi's sarcoma and cervical cancer, or cancers of the immune system known as lymphomas.

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These cancers are usually more aggressive and difficult to treat in people with AIDS.

Signs of Kaposi's sarcoma in light-skinned people are round brown, reddish, or purple spots that develop in the skin or in the mouth.

In dark-skinned people, the spots are more pigmented. Many people are so debilitated by the symptoms of AIDS that they cannot hold steady employment or do household chores. Other people with AIDS may experience phases of intense life-threatening illness followed by phases in which they function normally.

### What Are The Early Symptoms Of HIV Infection?

Many people do not have any symptoms when they first become infected with HIV. Some people, however, have a **flu-like illness within a month or two after exposure to the virus**. This illness may include:

* Fever
* Headache
* Tiredness

Enlarged lymph nodes (glands of the immune system easily felt in the neck and groin.

These symptoms usually disappear within a week to a month and are often mistaken for those of another viral infections.

During this period, people are very infectious, and HIV is present in large quantities in genital fluids.

The period of "a-symptomatic" infection is highly individual. Some people may begin to have symptoms within a few months, while others may be symptom-free for more than 10 years. This time varies greatly from person to person and can depend on many factors, including a person's health status and their health-related behaviours

Even during the a-symptomatic period, the virus is actively multiplying, infecting, and killing cells of the immune system.

### Complications

As the immune system worsens, a variety of complications start to take over. For many people, their first sign of infection is large lymph nodes or "swollen glands" that may be enlarged for more than three months.

Other symptoms often experienced months to years before the onset of AIDS include:

* Lack of energy
* Weight loss
* Frequent fevers and sweats
* Persistent or frequent yeast infections (oral or vaginal)
* Persistent skin rashes or flaky skin
* Pelvic inflammatory disease in women that does not respond to treatment
* Short-term memory loss
* Some people develop frequent and severe herpes infections that cause mouth, genital, or anal sores.
* Painful nerve disease called shingles.
* Children may grow slowly or be sick a lot

## How Is HIV Infection Diagnosed?

Because early HIV infection often causes no symptoms, a doctor or other health care provider usually can diagnose it **by testing a person's blood for the presence of antibodies (disease-fighting proteins) to HIV.**

HIV antibodies generally do not reach detectable levels in the blood for one to three months following infection. It may take the antibodies as long as six months to be produced in quantities large enough to show up in standard blood tests.

#### Advantages of early testing

* People with HIV infection can discuss with a health care provider when they should start treatment to help their immune systems combat HIV.
* Help prevent the emergence of certain opportunistic infections (see section on treatment below).
* Alerts HIV-infected people to avoid high-risk behaviours that could spread the virus to others.

People exposed to the virus should get an HIV test as soon as they are likely to develop antibodies to the virus - within 6 weeks to 12 months after possible exposure to the virus.

Most health care providers can do HIV testing and will usually offer counselling to the patient at the same time.

Of course, **individuals can be tested anonymously** at many sites if they are concerned about confidentiality.

However, the following approach is always recommended:

Counselling – Testing – Counselling

### Why should I know my HIV-status?

* You can take control of your problem, learn all about it and be able to identify any early signs of illness.
* Early diagnosis, careful medical monitoring and treatment can make a huge difference to your health and prolong your life by many years.
* HIV-positive people can group together to form a strong voice able to move government, employers, medical aids and society to constructive action.
* Many medical aids are providing an extra, chronic disease benefit for those who register with them. Treatment is affordable but the cost of anti-retroviral (AIDS) drugs has still to come down considerably before the most persons can afford them.
* You will help to stop the spread of the epidemic.
* You will find a common bond of camaraderie with many others facing a similar challenge. Receiving and giving support will help you a lot.
* You will be able to live your life to the full because you won’t be putting off important things for later.
* Your partner may be at risk from you and should be protected, or vice versa.
* Your planning for the future will reduce the impact of the illness on family and friends and even yourself.
* A specialist doctor who has knowledge of treating the disease before you become sick should manage HIV/AIDS.
* If you are HIV-positive you have to learn that there are some things, which you should do, and some things, which you should not do. This can prolong your life considerably.
* You can become a part of the awareness-spreading team.

### Counselling

#### People who are HIV positive:

* Have many feelings including negative feelings such as fear, helplessness and anger.
* May find it difficult to talk to their friends and family about their feelings.
* Have many decisions to make about their life.

Friends and family members may not know how to talk to those who are close to them who are HIV positive. It is important that people who feel this way have a chance to talk about these feelings with an experienced counsellor.

Anyone having an HIV/AIDS test should speak to a counsellor before the test, and should be able to discuss their test results with a counsellor

Counsellors can also offer ongoing support, information and advice to HIV positive people, their partners, friends and family.

There are many organisations that offer counselling face-to-face or over the telephone. Counselling is available from:

AIDS Training, Information and Counselling Centres (ATICCs) in most big towns.

The free 24-hour AIDS Helpline at 0800-012-322.

Social workers and some community organisations.

## Testing

In the past most clinics made use of the Eliza Test and will probably continue to do so for quite some time as it remains a very reliable test that is relatively cheap. The major disadvantage of the Elisa Test is the fact that the test is usually done off-site.

In the case of South Africa the test is done for the clinics by the SA Medical Research Institute. It takes about one week for the results to come back. Often patients fail to come back for the results. This may be because they have had time for a rethink, and then they refuse to hear the outcome of the test.  Another disadvantage for clinics is that the test is not free. Many people cannot afford to pay for it. Paying for employees, students etc. can be quite expensive if you have a very large institution.

The Rapid Test takes from 15 to 60 minutes to show up HIV antibodies. The advantage of this is that the patient does not have to leave the clinic. Whilst waiting he can be counselled for the results. The test is also very affordable.

Pre and post HIV test counselling is required for persons undergoing all HIV testing regardless of the testing method.

#### P24 Antigen Detection (checks for the virus)

This method can detect a component of the virus within a few weeks after infection. Although not dependent on antibody production, the sensitivity of this test is such that in most cases an ELISA antibody assay would provide the answer at less expense.

#### PCR Antigen Detection (checks for the virus)

This method is known as the ‘three week test”. This, an extremely sophisticated method that can detect very small numbers of HIV virus in blood soon after infection. The virus usually becomes detectable 3-4 weeks after exposure and the test may be positive some time before antibodies are found (i.e. in the window period). This test will remain positive for the duration of the illness. In further sophistication, the assay is used to quantify the amount of virus in the blood to help in management and drug therapy of infection with HIV.

Although continuous improvement towards more user-friendly methods, the molecular technologies are still ultra-sophisticated and, unless performed in a super-specialist environment, can lead to significant technical aberrations and false results; very expensive and limited to only very few laboratories; not at all suitable for mass screening

#### ELISA and Western Blot.

If a person is highly likely to be infected with HIV and yet both tests are negative, the health care provider may request additional tests.

The person also may be told to repeat antibody testing at a later date, when antibodies to HIV are more likely to have developed.

Other "HIV" tests are used when people already know that they are infected with HIV. These help measure how quickly the virus is multiplying (a viral load test) or the health of your immune system (a T-cell test).

#### What Does It Mean If I Test Positive?

A positive test result means that you have HIV antibodies, and are infected with HIV.

Testing positive does not mean that you have AIDS.

Many people who test positive stay healthy for several years, even if they don't start taking medication right away.

You will get your test result from a counsellor who should tell you what to expect, and should let you know where to get health services and emotional support.

**If you test negative** and you have not been exposed to HIV for at least three months, you are not infected with HIV. Continue to protect yourself from HIV infection.

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**Testing positive does not mean that you have AIDS.**

**Many people who test positive stay healthy for several years, even if they don't start taking medication right away.**

#### How Accurate Are The Tests?

Test results for HIV are accurate more than 99.5% of the time. Before you get the results, the test has usually been done two or more times.

The ELISA or EIA is the first test. It uses enzymes to test for HIV antibodies. (The first versions of these tests were slow, and often gave false positive results. The newer versions are faster and more accurate).

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Before a positive ELISA test result is reported, it is confirmed by a second test.

#### Special Cases That Can Lead To False Results:

Children born to HIV-positive mothers may have false positive test results. This is because mothers pass on their infection-fighting antibodies to their newborn children. Even if the children are not infected with HIV, they have HIV antibodies and will test positive. Other tests, such as a viral load test, must be used.

People who were recently infected may have a false negative result. It takes at least three weeks, and possibly as long as three months, to produce antibodies to HIV. You should wait for three months after you were exposed to HIV before being tested, or test right away and then again when three months have gone by. During this "window period" you can transmit the virus to others if you are infected.

Babies born to mothers infected with HIV may or may not be infected with the virus.

Babies carry their mothers' antibodies to HIV for several months. If these babies lack symptoms, a doctor cannot make a definitive diagnosis of HIV infection using standard antibody tests until after 15 months of age. By then, babies are unlikely to still carry their mothers' antibodies and will have produced their own, if they are infected.

#### In summary

* HIV testing looks for antibodies in the blood, or saliva or urine.
* The immune system produces these antibodies to fight HIV, but it can take up to three months for them to show up.
* During this "window period" you will not test positive for HIV even if you are infected.
* Normal HIV tests don't work for children born to HIV-infected mothers.

A positive test result does not mean that you have AIDS.

If you test positive, you should learn more about HIV and AIDS

### Activity 1

# SECTION2: HOW IS HIV/AIDS TRANSMITTED

#### Specific outcome

The will: know and understand how HIV/AIDS is transmitted

#### Assessment criteria:

On completion of this section you will be able to ensure that:

* The effect of body fluids on transmission of the HIV virus is outlined at a basic level of understanding
* Sex is identified as the most common way in which the HIV virus is transmitted and other ways in which HIV is transmitted are listed with an indication of the conditions necessary for transmission.
* The ways in which mother to child transmission can occur are listed and the implication of a pregnant woman/girl child having unprotected sex are indicated for both the mother and the unborn child.
* Actions that an HIV positive mother can take to lower the risk of infection to the child and prolong the onset of AIDS in herself are presented in a poster to promote wellness
* The dangers of drug abuse and behaviour that could result in HIV transmission are explained with suggestions for limiting transmission.
* Precautions used in South Africa to ensure that blood products are HIV free are outlined at a basic level of understanding

#### CCFO

Unit standard CCFO contributing: A learner can participate as a responsible citizen in the life of a local community by knowing what behaviour is safe and what behaviour carries the risk of HIV/Aids transmission and by taking appropriate safety precautions.

Unit standard CCFO organising: Learners are able to organise and manage him/herself and his/her activities responsibly by making lifestyle choices about HIV/AIDS.

Unit standard CCFO communicating: Learners are able to communicate effectively and responsibly using visual and/or language skills when explaining the stages of HIV/AIDS and presenting an example of what happens at each stage of the progression of the disease and how to address the stigma surrounding HIV/AIDS.

They can also communicate effectively using visual, mathematics and language skills when presenting the findings of their research and producing posters and presentations regarding ways of HIV positive mother can lower the risk of infection to her child and prolong the onset of AIDS in her own body.

## Transmission of HIV/AIDS



### How is HIV transmitted?

**HIV must get into a person's blood to infect them**. For you to transmit it to another person it has to pass from your body in your blood or your sexual fluids, into their body through a break in their skin.



* Sexual contact with an infected person.
* Contact with infected blood
* Sharing of needles/syringes during drug injection.
* Although less common blood transfusions.

In the health care setting, workers have been infected with HIV after being stuck with needles containing HIV-infected blood or, less frequently, after infected blood gets into a worker's open cut or a mucous membrane (for example, the eyes or inside of the nose).

### Mother-to-Child Transmission



Mother-to-child transmission of HIV occurs in two ways.

* The first is at birth when the infant comes into contact with the blood of an infected mother in the uterus.
* The second is through infant breastfeeding.

It is estimated that about 50 to 65 percent of infections occur at birth. Since mother-to-child transmission is a result of the heterosexual epidemic, infants in the Third World are at greatest risk, particularly in sub-Saharan Africa. Globally, mother-to-child transmission accounts for about 5 to 10 percent of infections, and possibly 15 to 20 percent in Africa.

Those infants that escape infection at birth, nevertheless, run the risk of infection through breastfeeding. Switching to alternative forms of milk substitutes is not easy, particularly in settings where the primary causes of infant deaths are inadequate safe water supply, malnutrition and infectious diseases.

Some people fear that HIV might be transmitted in other ways; however, **no scientific evidence to support any of these fears has been found**!

If HIV were being transmitted through other routes (such as through air, water, or insects), the pattern of reported AIDS cases would be much different from what has been observed. For example, if mosquitoes could transmit HIV infection, many more young children and preadolescents would have been diagnosed with AIDS.

### Sexually transmitted diseases (STD’S)

Having a sexually transmitted disease such as syphilis, genital herpes, chlamydial infection, gonorrhea, or bacterial vaginosis appears to make people more susceptible to getting HIV infection during sex with infected partners.

### What body fluids transmit HIV?

Body fluids proven to spread HIV:

* blood
* semen
* vaginal fluid
* breast milk
* other body fluids containing blood

Additional body fluids that may transmit the virus that health care workers may come into contact with are:

* fluid surrounding the brain and the spinal cord
* fluid surrounding bone joints
* fluid surrounding an unborn baby

Scientists and medical authorities agree that HIV does not survive well in the environment, making the possibility of environmental transmission remote.

HIV is not spread through casual contact such as the sharing of food utensils, towels and bedding, swimming pools, telephones, or toilet seats.

### Households

Although HIV has been transmitted between family members in a household setting, this type of transmission is very rare. These transmissions are believed to have resulted from contact between skin or mucous membranes and infected blood. To prevent even such rare occurrences, precautions should be taken, for example,

Gloves should be worn during contact with blood or other body fluids that could possibly contain visible blood, such as urine, faeces, or vomit.



Cuts, sores, or breaks on both the care giver's and patient's exposed skin should be covered with bandages.

Hands and other parts of the body should be washed immediately after contact with blood or other body fluids, and surfaces soiled with blood should be disinfected appropriately.

Practices that increase the likelihood of blood contact, such as sharing of razors and toothbrushes, should be avoided.

Needles and other sharp instruments should be used only when medically necessary and handled according to recommendations for health-care settings. (Do not put caps back on needles by hand or remove needles from syringes. Dispose of needles in puncture-proof containers).

### Kissing



Casual contact through closed-mouth or "social" kissing is not a risk for transmission of HIV.

Because of the potential for contact with blood during "French" or open-mouth kissing, it is recommended not to engage in this activity with a person known to be infected.

However, the risk of acquiring HIV during open-mouth kissing is believed to be very low

### Biting

In 1997, the US Centre for Disease Control and Prevention published findings from a state health department investigation of an incident that suggested blood-to-blood transmission of HIV by a human bite. There have been other reports in the medical literature in which HIV appeared to have been transmitted by a bite.

Severe trauma with extensive tissue tearing and damage and presence of blood were reported in each of these instances.

Biting is not a common way of transmitting HIV.

There are numerous reports of bites that did *not* result in HIV infection.

### Saliva, Tears, and Sweat

HIV has been found in saliva and tears in **very low quantities** from some AIDS patients.



It is important to understand that finding a small amount of HIV in a body fluid does not necessarily mean that HIV can be *transmitted* by that body fluid.

HIV has *not* been recovered from the sweat of HIV-infected persons.

Contact with saliva, tears, or sweat has never been shown to result in transmission of HIV.

### Insects

From the onset of the HIV epidemic, there has been concern about transmission of the virus by biting and bloodsucking insects. No evidence of HIV transmission through insects--even in areas where there are many cases of AIDS and large populations of insects such as mosquitoes.



* HIV is not transmitted by insects.
* HIV does not reproduce (and does not survive) in insects

Thus, even if the virus enters a mosquito or another sucking or biting insect, the insect does not become infected and cannot transmit HIV to the next human it feeds on or bites. HIV is not found in insect faeces.

There is also no reason to fear that a biting or bloodsucking insect, such as a mosquito, could transmit HIV from one person to another through HIV-infected blood left on its mouthparts.

#### Reasons:

Infected people do not have constant, high levels of HIV in their bloodstreams

Insect mouth parts do not retain large amounts of blood on their surfaces.

Scientists who study insects have determined that biting insects normally do not travel from one person to the next immediately after ingesting blood. Rather, they fly to a resting place to digest this blood meal.

## Ways in which HIV is not transmitted

* Giving first aid when good safety practices are followed;
* Contact of blood or other body fluids on unbroken skin;
* Giving blood if you are not HIV-positive;
* Caring for someone with HIV/AIDS when appropriate precautions are taken;
* Touching, hugging and shaking hands;
* Mosquitoes or any other biting insects;
* Coughing and sneezing;
* Food and water;
* Air
* Toilet seats;
* Sharing clothes and bedding;
* Swimming with a person who has HIV/AIDS.

### Drug and alcohol abuse

It is estimated that as many as 31% to 57% of HIV cases could be attributed to drug abuse, specifically where drugs are injected. This is due to sharing of needles/syringes during drug injection or using needles and syringes that have been used before.

Drugs that are taken orally, not with needle and syringe, could also increase the risk of contracting HIV, as drug users may trade sex for drugs or money.

Abusing drugs, alcohol and illegal substances could also increase:

* the risk of being infected with HIV due to impaired judgement and displaying behaviour that would put you at risk of contracting HIV, e.g. unprotected sex
* your susceptibility to HIV infection
* the risk that you will forget to take your medication or adhere to the prescribed medication schedule
* the risk that the disease will progress more quickly as drug abuse could interfere with the working of the HAART drugs

HIV patients who were receiving highly active antiretroviral therapy (HAART), and were currently drinking, have greater HIV progression than those who do not drink. They found that HIV patients who drank moderately or at at-risk levels had higher HIV RNA levels and lower CD4 cell counts, compared with those who did not drink.

*If you use drugs, you can prevent infection by not injecting them. If you do inject, don’t share equipment. If you must share, clean equipment with bleach and water before every use*

If you use intravenous (injected) drugs, never share needles, rent works or use re-bagged needles. If you must re-use needles, cleaning your works will reduce your risk of getting infected from needle use. You can clean needles by doing the following:

* Draw cold water into the needle.
* Shake and tap the needle, then flush the water out.
* Do this three times.
* Fill the needle with undiluted household bleach, shake, tap and flush out the bleach.
* Do this three times.
* Never let the bleach enter your body.

### Importance of lifestyle changes to boost immune system when living with AIDS

The immune system defends the body from developing potentially harmful diseases and conditions by identifying and reacting to antigens, large molecules (usually proteins) on the surface of cells, viruses, fungi or bacteria.

When a person is in good health, their immune system will attack antigens associated with the development of thrush. However, those with compromised immune systems (whether due to short-term or chronic illness) are at a particularly high risk of coming down with thrush.

### How to Strengthen the Immune System

One of the best ways to prevent yourself from developing a host of diseases is to strengthen your immune system so that it can properly fight off harmful antigens. In general, making some lifestyle changes can greatly improve your immune system function. Some things you can do to boost your immune system include:

* eat a healthy, balanced diet that is low in fat and cholesterol
* establish consistent sleeping patterns so you are well rested
* exercise regularly
* minimize or properly manage stress (Regular exercise, proper rest and eating healthy all contribute to reducing stress.)
* take a daily multivitamin to ensure you are getting the nutrients you need.

***SO2, AC6: Precautions used in South Africa to ensure that blood products are* HIV free are outlined at a basic level of understanding**

It is the mission of the South African National Blood Service (SANBS) to provide the safest possible blood and blood components to blood transfusion recipients

This is why SANBS has implemented a new technology for testing blood that has been donated: Nucleic Acid Amplification Testing (NAT).

NAT is based upon the direct amplification and detection of viral nucleic acids rather than antibody production by the system of the infected person.

The type of NAT technology used for blood donor screening is the polymerase chain reaction assay (PCR). This is a relatively simple technique where a DNA template is amplified to produce specific DNA fragments in vitro, as opposed to other tests where antibody production by the immune system of the infected person is tested.

The advantage of PCR is that it achieves a more sensitive detection and higher levels of amplification of specific sequences in less time.

NAT also reduces the window period, which further improves the safety of the blood supply.

The SA National Blood Service test for the following infectious agents:

* Hepatitis B surface antigen tests
* Anti\_HCV antibody tests
* Anti-HIV 1+2 antibody tests
* Ps antigen tests (for HIV)
* Syphilis antibody tests (TPHA)
* NAT

### Activity 2

# SECTION 3: SAFE AND UNSAFE BEHAVIOUR

#### Specific outcome

The learner will know what behaviour is safe and what behaviour carries the risk of HIV transmission

#### Assessment criteria:

On completion of this section you will be able to ensure that:

* The relationship between human behaviour and HIV/AIDS is outlined at a basic level of understanding
* Ways in which the individual can avoid contracting or spreading HIV/AIDS are named with an indication of how own behaviour can reduce the risk of infection
* Examples of behaviour that carry a risk of contracting HIV/AIDS are named and classified according to whether they carry a high, medium or low risk
* Situations that have a potential to spread HIV/AIDS in the workplace are discussed and rated in terms of high, medium and low risk
* Fears and common misunderstandings about the transmission of HIV/AIDS are described in the context of the workplace
* The reasons are given why certain behaviours and activities carry a low risk of infection
* The role of sexually transmitted diseases (STDs) in the transmission of the HIV virus is known and understood and an indication is given of how untreated STDs greatly increase the risk of transmission

#### CCFO

Unit standard CCFO collecting: Learners are able to collect, organise and evaluate information by researching situations that have a potential to spread HIV/AIDS in the workplace and discussing and rating them in terms of high, medium and low risk.

Unit standard CCFO contributing: Learners are able to be culturally sensitive across a range of social contexts when describing and explaining the stigma surrounding AIDS and creating a caring support system in the workplace.

## How Can HIV Infection Be Prevented?

Because no vaccine for HIV is available, the only way to prevent infection by the virus is to avoid behaviours that put a person at risk of infection, such as sharing needles and having unprotected sex.

HIV can be spread through sexual intercourse. Many infected people have no symptoms and have not been tested. If you have sex with one of them, you put yourself in danger.

Many people infected with HIV have no symptoms. Therefore, there is no way of knowing with certainty whether a sexual partner is infected unless he or she has repeatedly tested negative for the virus and has not engaged in any risky behaviour.

Only water-based lubricants should be used with male latex condoms!

Although some laboratory evidence shows that spermicides can kill HIV, researchers have not found that these products can prevent a person from getting HIV.

People should either abstain from having sex or use male latex condoms or female polyurethane condoms, which may offer partial protection, during oral, anal, or vaginal sex.

The risk of HIV transmission from a pregnant woman to her baby is significantly reduced if she takes AZT during pregnancy, labour, and delivery, and her baby takes it for the first six weeks of life.

### Safe Sex

If you have a sexually transmitted disease, the virus can pass much easier into your body during sexual intercourse because you will have open sores that allow the virus through. Women are infected more easily through sex, because the lining of the vagina breaks easily, and allows the virus into the body.

Using a condom consistently and correctly protects you and your partner from sexually transmitted infections (STIs) and HIV/AIDS.

Sex is safer if:

* You use a condom
* The penis does not penetrate the vagina or anus
* You have sex with only one partner in your lifetime, and your partner only has sex with you - this is a faithful relationship
* You and your partner have an HIV test which shows negative and then you only have sex with each other - this is also a faithful relationship

#### How Effective Are Condoms?

Other than abstaining from sex, there is no better method to prevent contracting an STI than using a condom: they also act as a contraceptive.



Condoms offer the best protection when **used correctly and every time** partners have sex.

Condoms are nearly 100% foolproof. Failure is more often than not due to user-failure and not condom-failure.

The responsibility for using condoms should be shared by both partners. A caring approach to issues of sexuality and sex education should aim to strengthen the ability of women to negotiate condom usage with their male partners.

#### Correct use

Sexually active people are encouraged to seek advice from a health worker if they or their partners experience problems using condoms. Sexual partners are also encouraged to explore new, stimulating, and safe ways to use condoms.

Seeking advice regarding condom use, safe sex, STIs and HIV/AIDS is a sign of caring for oneself and one’s sexual partners. Confidential advice on all these topics is available from the government Aids Helpline on 800-012-322.

Leaflets demonstrating correct condom use are available from most public health centres.

#### Male condoms

Are available:

* for free at government clinics at hospitals, organisations in the community and in some workplaces



* at a low cost at shops and pharmacies

Always carry condoms with you, and use a condom every time you have sex

Speak to your health worker if you want a demonstration on how to use a condom, or if you are having problems using condoms.

Store condoms in a cool place. Heat and strong sunlight can damage condoms.

#### When you are ready to have sex:

|  |
| --- |
| 1. First check the expiry date then open the condom-pack carefully so that the condom is not damaged. |
| 2. Check that the condom will roll onto the penis correctly. |
| 3. The penis must be erect and the foreskin pulled back. |
| 4. Squeeze the tip of the condom to make sure there is no air in it. |
| 5. Roll the condom down to the base of the penis. |
| 6. Make sure that the condom stays on during sex. |
| 7. Do not use vaseline or oils such as baby oil for lubrication during sex, as these can weaken the condom and cause breakage. |
| 8. It is important to remove the condom immediately after ejaculation, otherwise fluid might leak out. Hold the base of the condom and pull out of the vagina. |
| 9. Slide the condom off the penis. Tie a knot in it to prevent the fluid leaking out and dispose of the condom safely. |

#### The female condom

The female condom can be used to prevent pregnancy, sexually transmitted diseases (STDs) and HIV/AIDS. Female condoms are only available at some clinics. The female condom has a thin outer ring and a loose inner ring.

Female condoms give the **best protection if they are used correctly every time you have sex**. It can be used even if you are menstruating. Share the responsibility of using condoms with your partner.

When condoms are used reliably*,* they have been shown to prevent pregnancy up to 98 percent of the time among couples using them as their only method of contraception. Similarly, numerous studies among sexually active people have demonstrated that a properly used latex condom provides a high degree of protection against a variety of sexually transmitted diseases, including HIV infection.

For condoms to provide maximum protection, they must be used *consistently* (every time) and *correctly*.

Seeking advice regarding condom use, safe sex, STIs and HIV/AIDS is a sign of caring for oneself and one’s sexual partners.

**Confidential advice on all these topics is available from the government Aids Helpline on 800-012-322.**

## What Treatment Is available?

There are medicines available which boost the immune system and reduce the amounts of the virus in the body.



These are called anti-retroviral drugs and protease inhibitors. Most of them are produced by multinational pharmaceutical companies and are very expensive. It has been found that if you take three of these drugs together, it boosts your immune system effectively.



Two common examples of these drugs are AZT and Nevirapine. AZT is particularly effective in reducing the possibility of a mother infecting her baby during childbirth.

**There is no cure for AIDS.**

Because it costs the government a lot of money to treat babies who are born with HIV infection, it is more cost-effective for it to provide this drug to pregnant women who are HIV positive.

Apart from these anti-retroviral drugs, there are medications, which treat the infections that invade your body when you have AIDS. These medications help people live longer and better. Again, most of the drugs are sold by multinational pharmaceutical companies, and are too expensive for workers. Some of the drugs are produced much more cheaply in other countries, such as India or Thailand, but South Africa is under pressure not to produce or import cheaper versions of the drugs.

The government has implemented a Bill - the Medicines and Related Substances Bill - which allows South Africa to import the cheaper medicines into South Africa, and provide a wide range of treatments for AIDS infections.

### Do Antiviral Drugs Cure AIDS?

A blood test called the **"viral load"** is used to measure the amount of HIV virus in your bloodstream. People with lower viral loads stay healthier longer.

The triple-drug combinations have lowered some people's viral loads to the "undetectable" level, which means they are too low to be measured with the existing tests.

This does not mean that all the virus is dead. In fact, new studies show that the virus continues to multiply very slowly.

Researchers used to believe that antiviral therapy could eventually kill off all of the HIV virus in the body. Now this seems unlikely. However, it may be possible to lower the amount of virus in the body and repair the immune system enough that patients could stop taking drugs.

### Does HIV cause AIDS?

This is a debate that was recently on the tongues of most South Africans due to certain utterances by the National Government. However, Research has revealed a great deal of valuable medical, scientific, and public health information about the human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). The ways in which HIV can be transmitted have been clearly identified. Unfortunately, false information or statements that are not supported by scientific findings continue to be shared widely through the Internet or popular press.



### No AIDS Symptoms After 10 Years?

A small number of people first infected with HIV ten or more years ago have not developed symptoms of AIDS. Scientists are trying to determine what factors may account for their lack of progression to AIDS, such as particular characteristics of their immune systems or whether they were infected with a less aggressive strain of the virus, or if their genes may protect them from the effects of HIV. Scientists hope that understanding the body's natural method of control may lead to ideas for protective HIV vaccines and use of vaccines to prevent the disease from progressing.

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### Theoretical Risk, Known Risk, Low Risk And High Risk

#### Theoretical Risk

There is a theoretical risk of HIV infection from any behaviour that study has failed to show resulted in HIV infection, but in which a body fluid which is known to contain HIV comes in contact with a partner's mucous membranes or blood stream.

#### Known Risk.

There is a known risk of infection wherever a behaviour has been documented to result in HIV transmission by case series or prospective, epidemiological study.

#### Low Risk.

There is a low risk of infection when prospective, cohort-style studies have failed to demonstrate a statistically significant relationship between the behaviour and infection, but case reports continue to suggest a correlation.

#### High Risk.

There is a high risk of infection when prospective cohort-style study has established a relationship and the risk is deemed substantial.

slow down the growth

VIRUS

VIRUS

DRUGS

**When the virus is slowed down, so is HIV disease.**

HIV = **Retrovir**us

Drugs = Anti**retrovir**al Therapy.

Because no vaccine for HIV is available,the only way to prevent infection by the Virus is to avoid behaviour that puts a person at risk of infection, (sharing needles and having unprotected sex).

### Important facts about HIV infection, AIDS and the workplace

HIV/AIDS affects millions of South Africans from all walks of life, including people in the workplace. Because HIV disease, even in its earliest stages, is treatable infected people are as likely as any other employee to live active, productive lives long after infection. Remember, for some people, a combination of medications is able to prevent the virus from multiplying at a detectable level.

Human Immunodeficiency Virus (HIV) damages the body's ability to fight off both ordinary and life-threatening infections. While medical management of HIV disease has improved dramatically, there is no cure for HIV disease. No one has been cured of AIDS.

HIV is a bloodborne virus, not an airborne virus. Laws that govern the management of HIV in the workplace reflect this fact.

Globally, AIDS is affecting business by diminishing workforces in some countries and disabling people in their most productive years in all countries. While the direct medical costs of AIDS are enormous, the uncalculated costs lie in the productive work that many people of working age are and will be unable to perform.

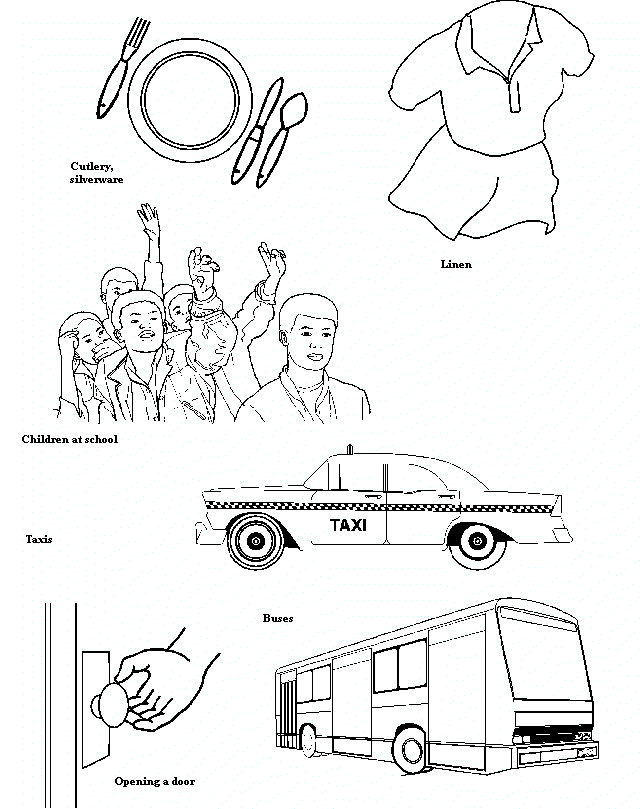
HIV is an equal opportunity infector. Age, gender, ethnicity, sexual orientation, cultural heritage--none of these offer immunity if a person engages in risk behaviours that can transmit HIV.

### Fears and common misunderstandings about HIV/AIDS

*HIV cannot be transmitted through casual contact*. Personal contact in the workplace is casual. You cannot get HIV through any of the following activities:

* patting a co-worker on the back;
* sharing equipment;
* sharing restrooms;
* shaking hands;
* hugging;
* coughing;
* sneezing;
* using the same drinking fountain;
* using the same telephone;
* eating together.

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**Most workers have no risk of becoming infected with HIV in the workplace because HIV is not spread by casual contact. However, any worker who may come into contact with blood, semen, vaginal fluids or body fluids containing blood may risk exposure to HIV.**

## Perceived To Be High Risk Jobs

People working together, even in very close contact, do not risk transmitting HIV infection unless they engage in activities that put an infectious body fluid into direct and intimate contact with someone else's mucous membranes or bloodstream

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Food-service workers known to be infected with HIV need not be restricted from work unless they have other infections or illnesses (such as diarrhoea or hepatitis A) for which any food-service worker, regardless of HIV infection status, should be restricted.

All personal-service workers (such as hairdressers, barbers, cosmetologists, and massage therapists) should follow specific preventative measures, even though there is no evidence of transmission from a personal-service worker to a client or vice versa. Instruments that are intended to penetrate the skin (such as tattooing and acupuncture needles, ear piercing devices) should be used once and disposed of or thoroughly cleaned and sterilized.

Instruments not intended to penetrate the skin but which may become contaminated with blood (for example, razors) should be used for only one client and disposed of or thoroughly cleaned and disinfected after each use.

Personal-service workers should use the same cleaning procedures that are recommended for health care institutions

### Sexually transmitted disease (STD)

Any disease (such as syphilis, gonorrhoea, AIDS, or a genital form of herpes simplex) that is usually or often transmitted from person to person by direct sexual contact.

Sexually transmitted diseases usually affect initially the genitals, the reproductive tract, the urinary tract, the oral cavity, the anus, or the rectum but may mature in the body to attack various organs and systems.

Undetected STDs can cause serious health problems. It is also important to practice safe-sex behaviours so you can avoid getting STDs.

* Sexually transmitted diseases like Gonorrhoea and Syphilis increase the chance of the infected person catching the HIV Virus, due to the presence of ulcers and open sores on the genitals.
* Sores from other sexually transmitted illnesses (STIs) may bleed during sex. Unprotected genital sexual contact involving violence has a very high risk of infection for both men and women.
* Sexually transmitted diseases usually affect initially the genitals, the reproductive tract, the urinary tract, the oral cavity, the anus, or the rectum but may mature in the body to attack various organs and systems.
* If left untreated, STDs can cause serious health problems including cervical cancer, liver disease, pelvic inflammatory disease (PID), infertility, and pregnancy problems.
* Having some STDs (such as chancroid, herpes, syphilis, and trichomoniasis) can increase the risk of your getting HIV if you are HIV-negative and get exposed to HIV. People with HIV may also be at greater risk to get or pass on other STDs.

For some STD’s there are signs that are easy to see. Signs can usually be seen between 3 and 21 days after having sex without a condom. These are some of the signs of STD’s

* White, yellow or green **discharge** coming out of the penis or vagina
* Smelly discharge coming out of the penis or vagina
* A burning feeling when you pass urine
* Sores on the vagina, penis or anus
* Itching or redness around the vagina or penis
* Pain in the lower stomach.
* Painful sex
* Pain in the testicles (for a man)
* Swollen glands in the groin

#### Gonorrhoea

A sexually transmitted disease characterized principally by inflammation of the mucous membranes of the genital tract and urethra.

The incubation period of gonorrhoea is usually 3 to 5 days (range 2 to 10 days). The first symptoms in the male are a burning sensation upon urination and a purulent urethral discharge that may be profuse or may be so meagre as to go unnoticed. In the absence of treatment, the infection usually extends deeper, to involve the upper urethra, the neck of the urinary bladder, and the prostate gland. Urgency and frequency of urination and, occasionally, blood in the urine may follow.

The initial symptoms in the female are, in most instances, so mild as to go unnoticed. Slight vaginal discharge with burning may occur.

#### Syphilis

The causative organism of venereal syphilis is a slender, coiled, flexible bacterium with regular, tightly wound coils. This bacterium, T. pallidum, averages 8 to 10 microns (millionths of a metre) in length. The bacterium requires moisture to exist, so continuous moisture is a necessity for the transfer of the microorganism from one person to another. The most common means of such transferral is sexual intercourse. In the body's tissues, the spirochete bacteria reproduce and remain present for the lifetime of the infected person unless destroyed by treatment. Syphilis is effectively treated with penicillin, which kills the spirochetes.

#### Herpes simplex

Herpes infections are significant not only in terms of the discomfort they cause but also for the potentially serious illness that might occur in infants born to mothers with genital herpes infections. A variety of treatments have been used for genital herpes, but none have been entirely satisfactory.

Genital Herpes is an infection of the genitalia, caused by herpes simplex virus type 2 (HSV-2). The virus is highly contagious and may be transmitted by individuals who are lifelong carriers but who remain asymptomatic (and may not even know they are infected). Infections are most often acquired through direct genital contact.

### Activity 3

# SECTION 4: SUPPORT WORKERS WITH HIV/AIDS

#### Specific outcome

The learner will know what guidelines and assistance are available to support workers with HIV/AIDS

#### Assessment criteria:

On completion of this section you will be able to ensure that:

* A company policy on HIV/AIDS or the National Department of Health’s document "Guidelines for developing a workplace policy and programme" is accessed and evidence of knowledge is provided in the form of a brief summary
* The possible problems that a worker with HIV/AIDS could encounter are listed with suggestions as to what the learner himself/herself could do to create a caring situation in the workplace
* The importance of employers playing a proactive role in addressing the AIDS pandemic are known and understood and ways in which a company can create a caring environment for workers with HIV/AIDS are suggested for a familiar context
* The availability of HIV/AIDS prevention and wellness programmes provided by medical schemes, organisations and other bodies is known and an explanation is given on how to access them.
* The treatment options available to a person with HIV/AIDS are known and a table is compiled indicating which treatment is available locally.
* The rights of all workers in respect of HIV/AIDS are known and their personal responsibilities are understood dealing with the pandemic
* The Universal Precautions are known and applied in the work environment
* A code of behaviour in the workplace is drafted
* A presentation is created to help address the stigma surrounding HIV/AIDS and the importance of employers playing a proactive role in dealing with HIV/AIDS

#### CCFO

**Unit standard CCFO identifying**: Learners are able to identify and provide possible solutions that would lead to the organisation and themselves creating a caring environment for workers with HIV/AIDS and by actively discouraging negative attitudes towards people wit HIV/AIDS. Learners are able to make decisions about their own lifestyle.

**Unit standard CCFO working**: A learner is able to work as a member of a team when presenting information addressing the stigma of HIV/AIDS and the importance of a proactive strategy in the workplace.

**Unit standard CCFO contributing**: Learners are able to be culturally sensitive across a range of social contexts when describing and explaining the stigma surrounding AIDS and creating a caring support system in the workplace.

There are a number of laws and guidelines relating to people who have HIV/AIDS in the workplace.

An HIV positive employee has the same rights and duties as other employees. They cannot be treated differently to other employees by employers or by co-workers.

No employer can require that a job applicant have an HIV test before they are employed

**HIV positive employees are also entitled to the same training, development and promotion opportunities as any other employee.**

**An employee cannot be fired, retrenched or refused a job simply because they are HIV positive.**

## Workplace Policies and Guidelines

There are many positive steps employers and employees can take to deal with the HIV/AIDS epidemic. These include:

Developing a workplace policy on HIV/AIDS.

Negotiating benefits such as medical aid, insurance, retirement benefits and disability cover in the interests of all employees.

Developing a workplace programme that includes awareness campaigns, condom distribution, treatment of sexually transmitted diseases and care for HIV-positive staff members.

The Department of Health has develop an HIV/AIDS Policy Guideline that may be used by organisations to assist them in developing a workplace policy on HIV/AIDS.

The Labour Relations Act, 1995, provides specific guidelines concerning HIV/AIDs in the workplace.

### Management of Employees Who Have HIV Or AIDS

#### Performance management

Employees living with HIV will be productive for a longer period if they receive the medical, social and psychological support they need.

If procedures for assessing and managing the performance of employees do not already exist, these must be developed proactively and transparently so that, as the impact of AIDS becomes more apparent, employers are able to respond rationally.

It is advisable to develop procedures for performance assessment and management, so that all supervisors and managers are clear on the criteria for dealing with:

* Absenteeism;
* Sick leave;
* Transfer to lighter duties;
* Ill health;
* Retirement;
* Employee counseling and so on.

#### Employees with HIV may need support in the following areas:

Facilitating the employee’s access to health services outside the workplace if these are not available in the workplace;

Giving the employee time to attend clinics or counseling;

Transferring the employee to lighter or less stressful duties, where it is both necessary and possible; and

When employees are no longer able to work, they should be offered early retirement with benefits normally due to ill healthy. Employees who retire due to ill health must be informed in advance of the benefits for which they may or may not be eligible (i.e. medical aid, life insurance, and so on).

#### Criteria for determining when an employee is too sick to work

Management, in consultation with the HIV/AIDS and STD committee, trade unions and workplace forums, need to decide on the criteria that will be used to determine when an employee is too sick to work.

A legal test exists to determine when an employee is too sick to work:

“Whether, because of the employee’s absences and incapacity, having regard to the frequency and duration of such absences and the effect they have on his co-workers’ morale, the employer could in fairness have been expected to wait any further before considering dismissal.”

Hendricks v. Mercantile & General Re-insurance (LAC)

#### The following factors should be considered when dealing with dismissal:

* The ability of employees with HIV to continue working satisfactorily in his/her present position and the possibility of transferring the employee to lighter/less stressful duties;
* The possibility that continued employment is against the employee’s interests (for example, the continued stress of working may accelerate her/his illness);
* The possibility that continued employment is not in the employer’s interests (for example, the employee is no longer able to perform his/her job satisfactorily);
* The presence/absence of care-givers (for example, families, relatives, other care facilities) to provide support for employees with HIV.

#### How to deal with employees who refuse to work with colleagues with HIV

Employees are more likely to avoid or refuse to work with a colleague with HIV when they have limited knowledge about the disease and are worried that they too will become infected.

Fears can be allayed and working environments normalized if information about how the virus is transmitted is provided. It is important that peer educators and members of the AIDS committee lead in demonstrating support for their colleagues living with HIV.

However, some employees may still refuse to work with an infected colleague. If that is the case, the employer should respond by trying to solve the problem through the normal negotiation channels. As a last resort, if negotiation and education are still insufficient in resolving the dispute, the normal disciplinary procedures should be followed.

### Developing A Workplace Programme

**Set up a committee**. The first and most important element is to set up a committee through which discussion and consultation can occur.



The members of this committee will include representatives from all levels of the organization, from shop stewards and other staff representatives through to management.

#### A Collaborative Approach to HIV/AIDS And STDs

It is important to remember that the fight against HIV/AIDS and STDs is best fought in a collaborative manner.

The collaborating partners must include business, labour, government and non-government organizations (NGOs). The fight will only be effective if all these sectors combine their efforts and resources.

#### Concerns Of Employees

* Avoiding infection with HIV.
* Ensuring that the people living with HIV are treated fairly by all.
* Ensuring that confidentiality is maintained.
* Having a safe working environment.
* Protection from discrimination.
* Protection of employee benefits.
* Protection of promotion and training opportunities.

#### Concerns Of Employers

* Recruitment of employees who are capable of performing the tasks they are required to perform.
* Provision of equal and sustainable employee benefits (including health care cover).
* Performance management in relation to, amongst others, productivity losses and absenteeism.
* Retaining experienced and trained staff.
* Fair and sustainable approach to training, promotion and benefits.
* The risk of becoming HIV-positive at work (mainly in health care facilities).
* The issue of employment people with HIV in high-risk or unhealthy environments.

#### Responsibilities Of Managers

* Ensure that the process of consultation takes place.
* Help develop an HIV/AIDS and STD programme.
* Show your commitment to the HIV/AIDS and STD programme.
* Allow time for employees to take part in the HIV/AIDS and STD programme.
* Formalize the job description of anyone who is involved in implementing the programme to facilitate their work and increase their credibility.
* Feed comments down from management.
* Ensure that resources are made available to the programme.
* Participate in collaborative partnerships.

#### Responsibilities Of Employees

* Take responsibility for your own wealth.
* Participate in the programme.
* Own the programme.
* Respect the privacy and confidentiality of those living with HIV.
* Respect the rights of those who are not HIV-positive.
* Take the lessons you learn at the workplace to your home community.
* Participate in collaborative partnerships.

#### Responsibilities Of Supervisors

* Show commitment to the HIV/AIDS and STD programme.
* Allow time for employees to take part in the HIV/AIDS and STD programme, including attending STD clinics, other health services and education and awareness programmes.
* Provide a link between management and the shop floor.
* Participate in collaborative partnerships.

#### Responsibilities Of Shop Stewards & Trade Unions

* Ensure that your union develops an HIV/AIDS and STD policy, or that at least there is a clear position put forward in discussions with management and supervisors.
* Ensure the process of consultation throughout the workplace takes place.
* Show commitment to the programme from the unions.
* Encourage employees to be involved in the programme
* Feed comments up from the shop floor
* Participate in collaborative partnerships

Handout 1 contains the Department of Health’s HIV/AIDS Policy Guideline

Handout 2 contains the MIBFA HIV/AIDS Policy

### Activity 4

## HIV And Rights

|  |  |
| --- | --- |
| http://www.aidsinfo.co.za/images/rights1.gif | The South African Constitution has a Bill of Rights that protects all people. This means that people living with HIV/AIDS have the same rights as any other person. |
| http://www.aidsinfo.co.za/images/rights2.gif | Any person living with HIV/AIDS has the right to medical treatment and care. |
| http://www.aidsinfo.co.za/images/rights3.gif | Children infected with HIV have the right to attend any school. |
| http://www.aidsinfo.co.za/images/rights4.gif | No employer can require that a job applicant have an HIV test before they are employed. |
| http://www.aidsinfo.co.za/images/counsel2.gif | An employee cannot be fired, retrenched or refused a job simply because they are HIV positive. |
| http://www.aidsinfo.co.za/images/rights5.gif | Women infected with HIV have the right to make choices about their pregnancy. A woman cannot be forced to terminate her pregnancy if she is HIV positive. |
| http://www.aidsinfo.co.za/images/rights6.gif | Any person with HIV/AIDS has the right to confidentiality. No one can give out information about a persons HIV status without their permission. |
| http://www.aidsinfo.co.za/images/work3.gif | Insurance companies can currently refuse life insurance to people living with HIV. Many insurance companies do however have special policies for people who are HIV positive. |
| http://www.aidsinfo.co.za/images/rights7.gif | People with HIV have the right to live their lives with respect, dignity and freedom from discrimination and blame. |

### Caring For People With HIV And AIDS

#### Help Those Who Are Infected:

* Show love, respect and support.
* Know the facts of HIV/AIDS and talk openly about them
* Help them to avoid stress.
* Give healthy meals.
* Encourage them. Go with them to get treatment if they are sick.

There is a small risk that HIV can be transmitted accidentally through contact with infected blood. It is important:

* that all blood is treated as possibly infected
* that first aid kits which include protective gloves and other devices are available in the workplace
* that employees are trained to prevent HIV transmission when helping an injured person.

## First Aid And HIV/AIDS

High standards of precautionary and safe practices are essential at all times to prevent the remote risk of contracting HIV/AIDS by giving first aid.

First aid saves lives. Give first aid to anyone in need without discrimination and treat them all with respect.

#### Basic Hygienic Measures In First Aid

* Wash your hands with soap and water before and immediately after giving first aid. If gloves are available for use in first-aid situations, you should also wash your hands well before putting them on and after disposing of them.
* Avoid contact with body fluids when possible. Do not touch objects that may be soiled with blood or other body fluids. Be particularly attentive and take precautionary measures, especially the use of gloves, if you have to provide first aid in situations where there are mass casualties or fighting.
* Be careful not to prick yourself with broken glass or any sharp objects found on or near the injured person.
* Prevent injuries when using, handling, cleaning or disposing of sharp instruments or devices.
* Cover cuts or other skin breaks with dry and clean dressings.
* Chronic skin conditions may cause open sores on hands. People with these conditions should avoid direct contact with any injured person who is bleeding or has open wounds.

Wash your hands with soap and water before AND immediately after giving first aid

#### Giving mouth-to-mouth ventilation

This lifesaving procedure should not be withheld through fear of contracting HIV or other infections. There are no reported cases of HIV transmission from mouth-to-mouth ventilation, but **if the injured person is bleeding from the mouth or the first aider has open mouth-sores, direct contact with blood should be avoided**.



Use a clean cloth or handkerchief, to wipe away any blood from the injured person's mouth and to ensure clear airways.

Learn how to use simple face shields or pocket masks during mouth-to-mouth ventilation. If possible, first-aid kits should contain such shields or masks, or the first aiders should carry their own.

The absence of face shields or pocket masks should NOT be a reason to withhold mouth-to-mouth ventilation

#### Dealing with someone who is bleeding

Bleeding can be life threatening. A person losing blood needs first aid to stop the bleeding.

If possible, instruct the injured person that he/she can stop the bleeding by applying direct pressure to the wound himself/herself.

If the injured person cannot stop the bleeding for any reason, you can use clean, thick cloth, clothing or any other suitable material as a barrier to stop the bleeding and to avoid direct contact with the blood. When this compressive bandage is not efficient or possible, apply proximal pressure on the main artery.

If you have gloves with you, wear them, especially in case of mass casualties or fighting.

#### Being in contact with the injured person's blood



If your hands are contaminated with blood, wash them thoroughly with soap as soon as possible.

If another part of your body is splashed or contaminated by blood or body fluids, especially the eyes, wash or flush it with lots of water.

If your skin is cut by any object that is contaminated with blood, wash the wound thoroughly with soap and water and apply a dry and clean dressing.

If you are worried that you have been in contact with any kind of infection, seek confidential medical advice, counselling and testing immediately

#### Cleaning up blood spills

Spilt blood should be soaked up with absorbent materials such as cloths, rags, paper towels or sawdust. These materials should be considered as contaminated waste and be put in plastic bags for disposal, or burnt or buried.

The area contaminated with blood should then be washed with a disinfectant (preferably sodium hypo-chlorite – household bleach – diluted 1:10 with water to give 0.1-0.5 per cent concentration) to clean the area.1 Wait for 10 to 15 minutes before rinsing the contaminated area.



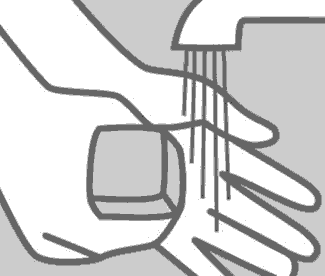
Wear general-purpose utility gloves, thick rubber household gloves or two pairs of ordinary gloves to avoid contact with blood when cleaning the contaminated area. Put the gloves in a plastic bag for disposal after use.

If gloves are not available, use other suitable materials to avoid direct contact with the blood.

#### Cleaning materials contaminated with blood

Cloths or clothing that are contaminated with blood should be handled with great care.

Wear general-purpose utility gloves or thick rubber household gloves if you have to handle contaminated cloths or clothing, which should then be disposed of properly, burnt or buried.



**You should always wash your hands with soap and water**

**after cleaning up blood or other body fluids**

**Materials contaminated with blood should be handled with great care**

### Barriers To Transmission

To minimise the risk of disease transmission, various types of barriers and shields have been developed for use by first aiders and they should be included in first-aid kits. You should learn how to use these barriers.



**Gloves** can be used and disposed of after use.

**Face shields or pocket masks** can be used in mouth-to-mouth ventilation.

**Plastic bags** can be used as gloves for protection and for collecting any soiled material.

**Thick cloth**, clothing or any other suitable material can also be used as a barrier to avoid contact with body fluids.

Unbroken skin is a good barrier to prevent infection. But the absence of barriers is NOT a reason to refuse to give first aid

## Universal Precautions





Universal precautions refers to the practice, in medicine, of avoiding contact with patients' bodily fluids, by means of the wearing of nonporous articles such as gloves, goggles, and face shields. Medical instruments, especially scalpels and hypodermic needles should be handled carefully and disposed of properly in a sharps container. Pathogens fall into two broad categories, bloodborne (carried in the body fluids) and airborne. Standard universal precautions cover both types.

Universal precautions should be practiced in any environment where workers are exposed to bodily fluids, such as:

* Blood
* Semen
* Vaginal secretions
* Synovial fluid
* Amniotic fluid
* Cerebrospinal fluid
* Pleural fluid
* Peritoneal fluid
* Pericardial fluid

Universal precautions are recommended not only for doctors, nurses and patients, but for health care support workers. Some support workers, most notably laundry and housekeeping staff, may be required to come into contact with patients or bodily fluids.

### Prevent HIV/AIDS

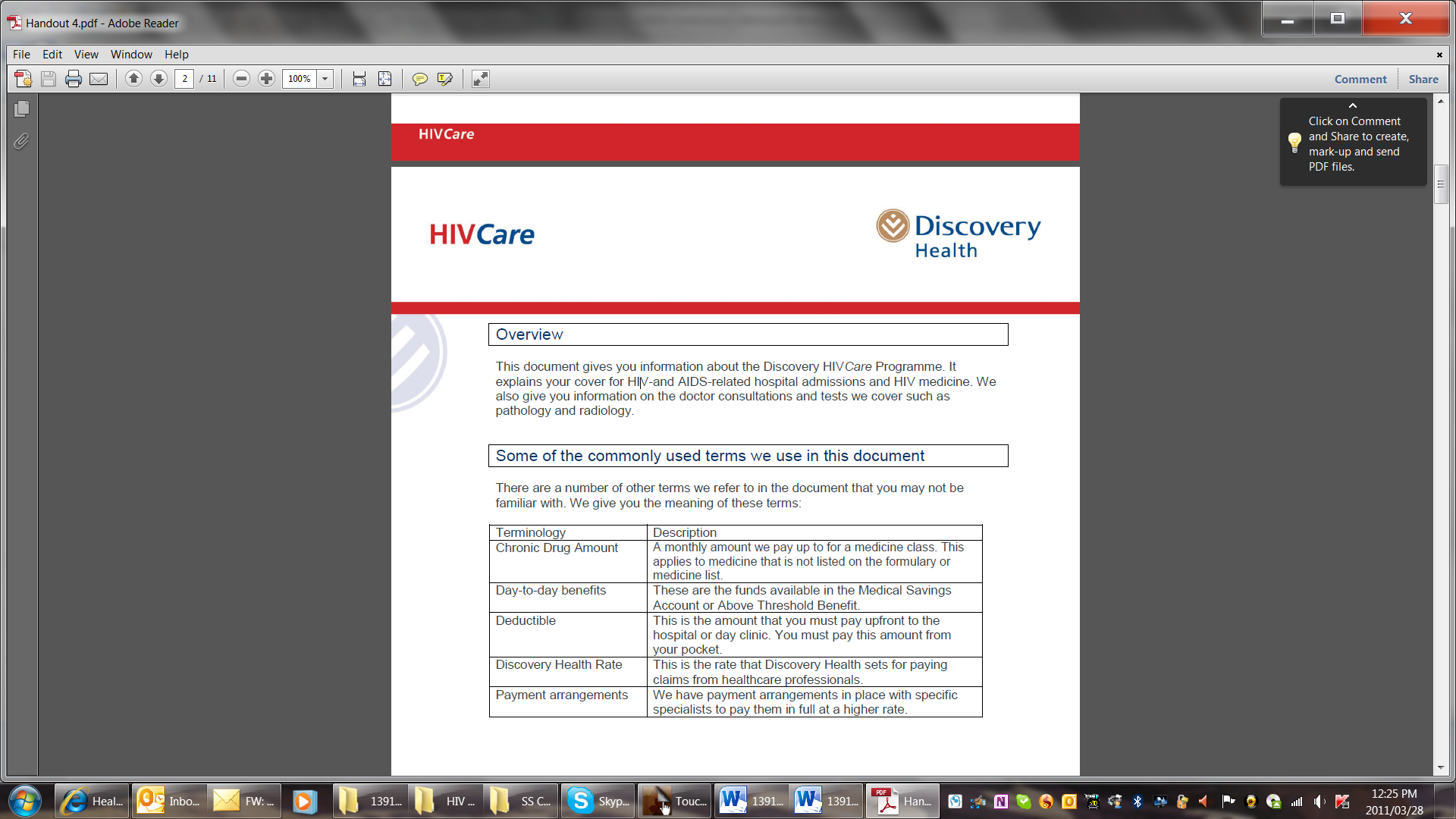
The best way to prevent being infected by HIV/AIDS is to follow the guidelines given elsewhere in this book:

* Practice safe sex
* Cultivate a healthy lifestyle
* Do not abuse drugs or alcohol
* Do not reuse needles and syringes
* Apply universal precautions when administering first aid

### Wellness programmes

The HIV/AIDS disease can be managed to ensure that you are able to work and live a productive and quality life. Medication and a healthy life style will combat many of the negative effects of HIV/AIDS.

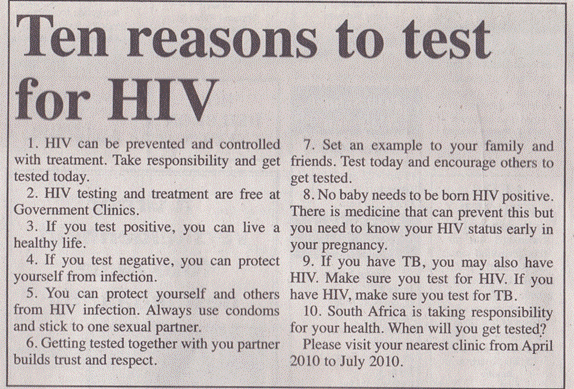
Medical aid schemes now also have HIV/AIDS prevention and wellness programmes. Handout 4 contains details of one such programme administered by Discovery.



Every medical aid will have its own programme, contact your medical aid company for details.

Your local clinic will also be able to advise you about steps to prevent HIV as well as wellness programmes. You should also be able to get counselling and medication from your local clinic, if you do not belong to a medical aid.

Newspapers and magazines also contain articles about HIV from time to time. These articles will give you the latest information about HIV, treatments and contact centres. The following article appeared in the Heilbron Herald on 2 July 2010.



### Activity 5

# SECTION 5: THE HIV/AIDS PANDEMIC

#### Specific outcome

Know and understand the implications of the HIV/AIDS pandemic

#### Assessment criteria:

* The needs of AIDS orphans are outlined with reference, at a basic level of understanding, to the burden of a large number of orphans on society and the economy
* The effect of a population composed mainly of children and the aged on the economy and the State is outlined at a basic level of understanding
* The need for medical care for people with HIV/AIDS and the implications for employers and the State are discussed at a basic level of understanding
* The effect of HIV/AIDS on the workforce and family income is discussed at a basic level of understanding.
* The effect of HIV/AIDS for an organisation are discussed at a basic level of understanding.
* The implications of HIV/AIDS for a specific workplace are discussed at a basic level of understanding.
* The implications of HIV/AIDS for an industry sub-sector are discussed at a basic level of understanding
* The availability of HIV/AIDS prevention and wellness programmes provided by medical schemes, organisations and other bodies is known and an explanation is given on how to access them.

#### CCFO

**Unit standard CCFO demonstrating**: Learners can demonstrate an understanding of the world as a set of related systems when demonstrating knowledge and understanding of the implications of HIV/AIDS for society, the economy, a sub-sector, organisation and a specific workplace.

## HIV/AIDS Pandemic

The human immunodeficiency virus (HIV), sometimes called the ‘AIDS virus’ was discovered to be the cause of the disease in 1983.

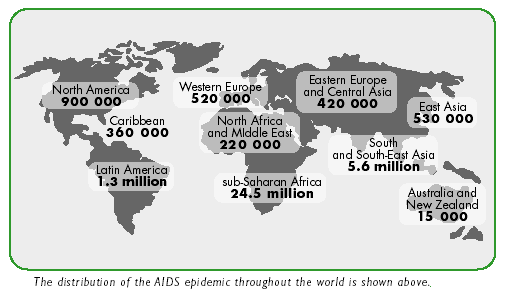
Everyone and anyone can get HIV / AIDS, but those most at risk are youth, women, migrant workers, long-haul truck drivers and sex workers.

The following socio-economic factors help to spread the epidemic in South Africa.

Migrant labour increases the spread of the disease by breaking families apart.

* Single sex hostels
* Overcrowded housing
* Poor access to health care
* Lack of recreation facilities
* Lack of information
* Illiteracy and poor education
* High unemployment
* Exploitation and inequality of women (this makes it difficult for women to demand safer sex)
* Other poverty related diseases such as TB

Some countries and communities are more vulnerable to HIV infection than others. Of the approximately 40 million HIV infections worldwide (1998), about 90 per cent occur in poor (developing) countries. Of these countries, the hardest hit areas are in Sub-Saharan Africa, where nearly 2/3 of the infections worldwide have occurred.



South Africa is among the countries experiencing the greatest increase in HIV infection in the world. Surveys from antenatal clinic attendees in 1998 indicate that 22.8% of women tested positive. There was some variation between regions, with provinces such as KwaZulu Natal having rates of infection almost twice as high as provinces such as Northern Province or Western Cape. In the absence of strong measures to control transmission, the epidemic will likely peak and stabilise at levels of infection between 25 and 30% nationally, and then decline by 10-20% as people begin to die of HIV/AIDS and its complications.

Before AIDS, the average life expectancy in South Africa by the year 2010 would have been 68 years. However, the impact of HIV/AIDS has shortened this by 2 decades, with the average life expectancy approaching only 48 years by 2010.

The natural course of HIV infection in a population is divided into three phases of infection –latent, epidemic and persistent phase. Each phase impacts on a society in different ways.

The latent phase normally lasts for 5-10 years – people are generally not aware of the disease and are only beginning to fall ill. At this time, the impact of HIV is generally small.

In the epidemic phase, as levels of infection begin to peak and plateau, the impact on the health sector is significant as the number of hospital admissions and clinic visits due to HIV-related illnesses grows dramatically.

Finally, in the persistent phase, as people begin to die in large numbers, the social and economic consequences are felt. As the disease affects young people, often during their most economically productive years, families (particularly children and the elderly), communities and the work force are all significantly affected by their loss.

### Status Of The Epidemic In South Africa

The total number of HIV infected people in South Africa is expected to increase well into the next decade.

The rate of infection among the general population could stabilize in the near future because the number of AIDS-related deaths will begin to offset the number of new infections.

HIV infections will continue to increase until

* Society at large appreciates the extent of the epidemic, and
* People alter their behaviour and their response to those who are infected and affected.
* The epidemic is becoming more visible through onset of AIDS.
* The life of every person in the country will probably be affected in some way.

#### Factors contributing to make SA susceptible

j0128881

There are a number of predisposing factors that have made and continue to make South Africans susceptible to a particularly severe epidemic. These include:

|  |
| --- |
| Established epidemics of other sexually transmitted disease (STDs). These act to increase the likelihood of transmission of HIV. |
| Disrupted family and communal life, due in part to apartheid, migrant labour patterns and high levels of poverty in the region. |
| Good transport infrastructure and high mobility, allowing for rapid movement of the virus into new communities. |
| Resistance to the use of condoms, based on cultural and social norms. |
| The low status of women in society and within relationships. Economic dependency and the threat of physical force, in particular, make it difficult for women to protect themselves from infection. |
| Social norms that accept or encourage high numbers of sexual partners, especially amongst men. |
| Parallel norms that frown on open discussion of sexual matters, including sex education for children and teenagers. |

#### South African HIV/AIDS data

Most data on the South African HIV/AIDS epidemic is obtained from the anonymous, annual survey of pregnant women attending public sector antenatal clinics. A review of the South African antenatal surveys is presented at the end of this document. Although imperfect, these data are sufficient to estimate the current and future size and impact of the epidemic by using projection models, such as the Doyle simulation model used here, to extrapolate from antenatal clinic attendees to the rest of the population.

Using projection models allows us to estimate the level of HIV infection in the general population. However, some groups and geographical areas will be much more or less affected than the average, and we need to consider this when assessing these models. Community surveys have confirmed the high level of infection among young women. For example, one study in a high-risk community surrounding a mine in Gauteng showed that HIV prevalence among men peaked at 30% at age 35, and among women at 50% at age 35. Also, information from death certificates confirms an alarming increase in death among the 20 to 40 year age group.

#### AIDS deaths

The number of deaths each year due to AIDS is expected to rise rapidly in South Africa.

|  |  |
| --- | --- |
| Year | Estimated Deaths per year |
| 2000 | 120 000  (Death certificates suggest that already half of all adult deaths can be attributed to AIDS) |
| 2005 | 354 000 to 383 000 |
| 2010 | 545 000 to 800 000 |

#### Impacts of HIV on population size and structure

Birth rates are expected to decline due to deaths among people in relatively high fertility age groups as well as reduced fertility of HIV-infected women.

|  |  |  |
| --- | --- | --- |
| Without HIV/AIDS | | |
| Year | Population | Growth Rate |
| 1999 | 43.7 million | 1.7% |
| 2010 | 51.3 million | 1.5% |
| With HIV/AIDS | | |
| 2010  (best-case scenario) | 47 million |  |
| 2008  (worst scenario) | 46.7 million | Negative growth thereafter. |

#### Impacts on Households

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Poor households in South Africa carry the greatest burden and have the least reserves available to cope with the disease.

While South Africa’s GDP per capita positions it as a middle-income country, this masks large differences between rich and poor households.

|  |  |
| --- | --- |
| Total | Fact |
| Less than 60% of the population. | Formal housing. |
| 17% of households. | Obtain their water supply directly from dams, rivers, streams and boreholes. |
| Less than 30% of households. | Telephone installed. |
| Half of all households. | No flush or chemical toilets. |
| 34% of population. | Unemployed. |
| 26% of the employed. | Earn R500 or less per month. |
| 11% of the employed | Earn more than R4500 per month. |
| 0% | Support system for unemployed persons who were never formally employed, or who have been unemployed for longer than one year. |

#### Why is the effect of AIDS greater at household level?

The most severe impacts of HIV/AIDS occur at household level. The effect of AIDS is greater than that of other diseases for several reasons:

AIDS mainly strikes adults aged between 25 and 45, so people are ill and die in the years in which they tend to have the greatest role as providers, carers and nurturers.

Households spend an increasing amount on health care for people with AIDS.

HIV/AIDS can impose major stress on households from well before a member becomes sick to well after they have died.

AIDS typically strikes more than one household member.

Affected persons are often prevented from gaining access to some of the few social support mechanisms because HIV/AIDS is stigmatized.

The financial impacts of AIDS on households are as much as 30% more than deaths from other causes.

#### Psycho-social effects

Diagnosis and disclosure of HIV status in itself result in major stress for the individual involved.

|  |
| --- |
| The death of a young adult or a child is very traumatic for all household members. |
| Stress and depression can compromise function and well-being in all areas of family life, school and work performance, family relationships, and capacity for child-care. |
| Responses to stress can include alcohol and drug abuse, and unsafe sexual behaviour. |
| Stigmatization of HIV/AIDS often causes social rejection and alienation, and can compromise employment, housing, schooling and child-care responsibilities. |
| Informal caregivers for the terminally ill generally lack training and experience, are on call 24 hours a hours a day, and are typically emotionally close to the patient. |
| Many households in South Africa have to provide care in cramped housing with limited or no access to basic amenities such as water and sanitation. |
| As the illness becomes impossible to conceal, caregivers and all household members are more likely to experience rejection, ‘fear of contamination’ and anticipatory grief. |
| The psycho-social impact becomes more acute when deaths occur. Enormous levels of grief within households and communities are one of the major results of the AIDS epidemic. |
| Children will be highly traumatized by watching their parents die. |
| Stigmatization means that the loss is less likely to be discussed or acknowledged, or the bereaved socially supported. |
| Single parents, older children or the elderly may be left to run households. |

#### HIV/AIDS impacts on households economies

|  |  |
| --- | --- |
| Initial effects on household can include: | |
| Loss of insurance and medical benefits. | Cost of pre-Aids treatments. |
| Increased medical and other costs due to AIDS (e.g. transport to and from health services). | Reduced capacity to work. |

**Surviving family members, including children, forced into very low paid work, crime or sex work, which in turn would perpetuate the epidemic.**

Spend time caring for the person with AIDS.

Family dependant on

Old age pension,

Social support grants, or

Sale of assets.

Remaining resources used to cover burial costs.

Ability to pay for children’s education, food, housing, basic utilities and home maintenance reduced

Family members able to earn

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Impact on women

#### Impact on Women

Women are heavily affected by the epidemic. They are at greater risk of infection due to biological, social and economic factors, and are also more vulnerable to socio-economic impacts for several reasons.

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Women-headed households in South Africa tend to be poorer than those headed by men

Unemployment is far higher among women than men.

Even among married women, there is a high level of economic maltreatment.

Partners of one in five married women regularly withheld money for essential living expenses, such as food, rent or bills, while having money for other things.

Violence against women is high, with 13% of women reporting being beaten by a partner.

Many women face risk of abandonment and abuse if they disclose their HIV positive status.

Women traditionally provide care to the terminally ill, and female children in particular may be required to provide care, especially in single-parent households or when one parent has already died of AIDS.

Widows may become dependent on a husband’s male heir for support under some customary legal arrangements, which may make them more vulnerable.

Refer to handout 3

### Activity 6

## Economic Impact

### The South African Economy

The HIV/AIDS epidemic confronts South Africa at a time when its economy has shown growth averaging 2% pa between 1995 and 1999, and inflation averaging around 7% a year.

In South Africa the gap between rich and poor (Gini coefficient of 0.61) is among the highest in the world.

|  |  |
| --- | --- |
| Country | Gap between rich and poor |
| South Africa | 0.61 |
| Kenya | 0.57 |
| Nigeria | 0.59 |
| Zambia | 0.44 |

Health status and other social indicators are substantially better than the sub-Saharan African average (although there are large disparities between race and income groups).

**Major Health Problems.** Among the major health problems endemic in some areas are tuberculosis, malaria and cholera. Inter-personal violence, including violence against women, is prevalent.

### Labour Situation

Manufacturing is the largest contributor to GDP in South Africa, followed by community, social and personal services. The greatest percentage of workers is employed in these sectors. Some industries, notably mining, are undergoing a rapid shift from labour-intensive to mechanized production methods.

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The government’s current strategy is to spur economic growth via restrain in public spending and encouraging international investment. But this strategy has done little to stimulate employment. In fact, despite modest economic growth, there has been a steady shedding of formal sector jobs throughout the 1990’s.

There are large provincial differences in unemployment rates, ranging from a low of 19% in the Western Cape to high of 41% in the Northern Province and Eastern Cape.

### Effects of HIV/AIDS on business

The epidemic primarily affects working-age adults and far exceeds any other threat to the health and well being of South African employees.

At the level of individual business, HIV/AIDS among managers, employees and their families will impose significant direct and indirect costs.

Over the next decade the number of employees lost to AIDS could be the equivalent of 40 to 50% of the current workforce in some companies.

Research conducted by the Harvard Centre for International Health on two South African companies indicates that:

* HIV infection may cost companies between 2 and 6% of salaries per year.
* Each HIV infection is likely to cost companies between 1 and 6 times the employee’s annual salary, depending on the company’s benefit structure.

These costs can be divided into direct and indirect costs.

**Direct Costs.**

Direct costs to companies include costs of health care and other employee benefits. However, as lower income earners who are disproportionately affected tend to have few benefits, the impact of HIV/AIDS on direct costs will not be as much as may have been expected.

Nonetheless, HIV/AIDS is already resulting in rising costs of employee benefits in South Africa, and the cost of an average set risk benefits is expected to double over the next 5 to 10 years, unless they are restructured.

**Indirect Costs.**

The most significant costs for most companies are likely to be indirect. These include costs of

* Absenteeism due to illness or funeral attendance
* Lost skills
* Training and recruitment costs
* Reduced work performance and
* Lower productivity.

Obviously, these costs are most striking for skilled workers, where instant substitution is more difficult.

By 2010, it is estimated that approximately 15% of highly skilled employees will have contracted HIV.

The vulnerability of business to HIV/AIDS will vary, depending on factors such as the type of business and production process. Labour-intensive firms may appear to be at higher risks of lost production, but the **actual impact will depend on the ease with which employees can be substituted**.

**Example**: For a high skill, labour intensive industry it will be very costly to train replacement staff, whereas low-skill industries such as commercial cleaning will be easily able to find replacement employees event at the height of the epidemic.



Some capital-intensive industries can be more vulnerable to HIV/AIDS than labour intensive ones, especially those in which employees specialize in operating particular machinery

**Example:** Within the mining industry, gold mine employees have borne the brunt of the HIV epidemic, but because there is relatively little task specialization, production has not been seriously affected.

Coal mining, on the other hand, employs small numbers of machine operators each performing specialized tasks, and loss of a few operators can lead to substantial production decline.

Other factors influencing the overall costs of the epidemic include:

* The risk profile of employees.
* Risk modification attempts by some companies
* The degree to which work process have been planned to take HIV infection into account.

Over time, however, the **cost of HIV/AIDS for most businesses will be substantial, and could affect international competitiveness**. In some companies, illness and death of owners or key managers may be disastrous. Small and medium size enterprises reliant on local skilled people are probably particularly susceptible.

Business may also be susceptible to inadequate responses to HIV/AIDS among key suppliers. Particularly important are likely to be water and electricity, telecommunications and basic government service suppliers, where breakdowns in the continuity of supply could have downstream effects on many companies. **Impact assessment and forward planning by all sectors of government will be critical to minimizing these problems**.

### Impact on markets

HIV/AIDS will also affect the growth of many markets for goods and services. Vulnerability levels of particular markets will be influenced both by the nature of the goods or services produced and the demographic and risk profile of consumers. Certain markets will even expand, most notably for health care services.

Affected households will divert expenditure to HIV/AIDS-related needs such as health care and funeral expenses. Non-essential goods with high elasticity’s of demand are likely to be more susceptible to household expenditure shifts than staple products. **Poor households will be pushed further into poverty**. **Many middle income households will become poor, and market growth for goods and services targeted at upwardly mobile households may be negatively affected.**

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The risk of default on credit payments will also increase in response to the epidemic. Pre-loan testing for HIV will be offset some of this, but for long-term loans, such as mortgages, testing will be of limited value as borrowers could become infected after approval of the loan. Long-term lenders and insurers have already begun adapting products to reduce their exposure.

Furthermore, affected households will need to draw on savings for more immediate needs, thus reducing savings levels and credit supply.

## The Socio-Economic Determinants of HIV/AIDS

**There is very little chance of HIV being transmitted in the workplace.** However, there are many other circumstance related in some way to the workplace which represent increased risk of HIV transmission.

Risk of HIV transmission to the workplace include:

* Migrancy and migrant labour.
* Single sex hostels.
* Overcrowded housing.
* Poor access to health care services.
* Lack of recreation facilities.
* Lack of accurate information.
* High unemployment.
* Exploitation of women.
* Other factors related to poverty, such as tuberculosis (TB).

All these factors make it difficult for people to take control of their lives.

It would be in the interests of your organization to look at the situation of its employees and see if any of the factors listed above might be contributing to the spread of HIV/AIDS. **The risk of transmission can be reduced by attending to some of the points listed above.**



Your organization will be going a long way towards addressing the issue of how to manage the HIV/AIDS and STD epidemic by developing a policy and programme on HIV/AIDS and STDs.

The concerns of both employees and employers must be considered in developing an HIV/AIDS and STD policy and programme (refer back to Learning Unit 3).

### What research is going on?

International organisations are conducting an abundance of research on all areas of HIV infection, including **developing and testing preventive HIV vaccines and new treatments** for HIV infection and AIDS-associated opportunistic infections.

Researchers also are investigating exactly **how HIV damages the immune system**.

This research is identifying new and more effective targets for drugs and vaccines as well as **tracing how the disease progresses in different people**.

Scientists are **investigating and testing chemical barriers**, such as topical microbicides, that people can use in the vagina or in the rectum during sex to prevent HIV transmission.

They also are looking at other **ways to prevent transmission**, such as controlling sexually transmitted diseases and modifying people's behaviour, as well as ways to prevent transmission from mother to child.