# DCS HIV Prevalence Survey 2006
# EXECUTIVE SUMMARY

## 1. INTRODUCTION

The Department of Correctional Service (DCS) commissioned LIM'UVUNE CONSULTING to undertake an Unlinked, Anonymous HIV and Syphilis Surveillance Study among staff employed by, and offenders in the custody of, the Department of Correctional Services in South Africa.

The sample of both personnel and offenders for the study was stratified according to the following demographics as specified by the Department's Task Directive;

- Urban / rural Correctional Centers
- Gender
- Age groups
- Work rank levels(for personnel only)
- Regions according to the Department's geographical divisions.

The surveillance study was conducted upon the granting of approval by the Ethics Committee of the Human Science Research Counsel. After collection of blood specimens, as per the procedure drawn by NHLS/NICD, blood samples were forwarded to NHLS laboratories nearest to the Correctional Centre tested, who in turn forwarded them to the National Head Office Laboratory for testing.

## 2. SAMPLE AND PARTICIPATION

### 2.1 The pilot study (Gauteng)

In the pilot study conducted in Gauteng in May/June 2006, seven hundred and sixty eight (768) staff members and two thousand seven hundred and seventy (2770) offenders, a 10% of the personnel and offenders was sampled. Of the total personnel and offenders sampled, the participation rate was 8.72 % and 26.93 respectively.

### 2.2 National Rollout

A national surveillance study (rollout of the programme that started with the pilot) was conducted during the months of October and November 2006. A 10% of the national

population of personnel and offenders in the Department was sampled which gave rise to a sample size of 3024 and 8649 respectively. The participation rate for personnel and offenders was 34.1% and 52.6% respectively which marked a dramatic rise from the Gauteng Pilot, which with all probabilities, is a result of the concerted campaign and marketing of the prevalence survey by the Department. (Note this is a surmise, without a scientific study it would be difficult to confirm with certainty)

The national participation rate of 34.1% and 52.6% for staff and offenders drops to 29.0% and 46.4% respectively, with the inclusion of the results of the Gauteng Pilot study. Staff was negative to the survey both in the Pilot study and National Rollout but when we engaged them informally, we determined that they considered their refusal to participate, to a certain extent as "rebuttal" of senior management initiatives and a channel to vent their internal problems. (Note - no attempt was made to scientifically test this).

## 3. THE RESULTS

### 3.1 HIV: Personnel Prevalence Rate

The prevalence rate of HIV, among staff (Gauteng included) of the Department of Correctional Services who participated in the study was found to be at 9.98% or 109 of staff members tested positive to HIV test. This is less than the national population prevalence rate of 16.25%. Of the 109 HIV positive personnel;

- 93.6% of them are at production level.
- 5.5% of them are at middle management
- 0.9% of them are at top management.

The majority (87.2%) of the HIV positive personnel are in the age categories of between 26-35 Years and 36-45 Years .The category 18-25 Years and 45-55 Years recorded a 0.9% and 9.2% HIV prevalence respectively , with no HIV Prevalence among the over 56 years tested.. The province with the highest prevalence rate among staff tested at 22.7% is Kwazulu Natal followed by LMN at 14.40%. The center tested with the lowest recorded HIV rate is Head Office at 0% followed by Western Cape at 2.6%.

**Conclusion**

**The researcher can, with 90% confidence, conclude that the total number of HIV positive personnel within the 38268 personnel population of Department of**

**Correctional Services is between 2588 (lower limit) and 5392(the upper limit) with the more likely number being 3775.**

### 3.2 HIV: Offenders Prevalence Rate

The HIV prevalence rate among offenders (Gauteng Pilot included) who participated in the study was found to be 19.8% or 1047 offenders tested positive to HIV test. This is more than the national HIV population average of 16.25 %. Of the 1047 offenders tested positive to HIV;

- 94% are male and only 6% are female.
- The majority (81%) of the HIV infected offenders are in the 26-35 and 36-45 Years categories.

The province with the highest rate of HIV Prevalence among offenders tested is Kwazulu-Natal at 34.4% followed by Gauteng at 22.5%. Western Cape has the lowest number of HIV positive offenders among the tested at 6.3% followed by Eastern Cape at 16.5%

**Conclusion**

**The researcher can, with 90% confidence conclude that the total number of HIV positive offenders in the 113567 offender population of Department of Correctional Services is between 20909 (lower limit) and 25744(the upper limit) with the more likely number being 23258.**

### 3.3 Syphilis: Personnel Prevalence Rate

The prevalence rate of Syphilis among staff (Gauteng included) of the Department of Correctional Services at the time of the study was found to be at 2.9% or 32 staff members tested positive to Syphilis. Of the 32 staff members tested positive to Syphilis;

- 65% are in the age category of 26-35 and 36-45 years;
- 87.5 % of them are at production Level.
- 9.4% of them are at middle management and
- 3.1% of them are at top management

The Province with the least prevalence among those tested is Kwazulu Natal at 1.7% followed by Free State/Northern Cape. The province with the highest number is Gauteng at 4.5% followed by Eastern Cape at 3.8%

**Conclusion**

**The researcher can, with 90% confidence conclude that the total number of Syphilis positive personnel within the 38268 personnel population of Department of Correctional Services is between 623 (lower limit) and 2629 (the upper limit) with the more likely number being 1388.**

### 3.4 Syphilis: Offenders Prevalence Rate

The Syphilis prevalence rate among offenders tested (Gauteng Pilot included) at the time of the study was found to be 5.6% .The syphilis is concentrated mainly in the age group of 26-35 Years at 33% and followed by the age category of 36-45 Years at 19.5%. The 56 years and older category has a 3% prevalence Rate among those tested.

**Conclusion**

**We can, with 90% confidence conclude that the total number of Syphilis positive offenders in the 113567 offender population of Department of Correctional Services is between 5533 (lower limit) and 8466(the upper limit) with the more likely number being 6900.**

## 4. RECOMMENDATIONS

It is therefore recommended that;

4.1 The momentum with the offenders be maintained and increased with all the necessary programmes of comprehensive HIV and AIDS management initiatives, including;

- Information and Education campaigns
- Improved treatment of sexually transmitted diseases.
- Voluntary Counseling and testing.
- Antiretroviral treatment

4.2 With staff, much as all the above is applicable but first it is recommended that a Human Capital Satisfaction Measurement (HCSM) Survey be conducted to enable the Department to understand and grasp with the full issues affecting personnel in the workplace. It is important to note that these could merely be perceptions and not facts. But if perceptions are not measured and managed properly, to the person who perceives them gradually they become facts and it gets expensive to change the perceptions. Most of the time perceptions can do damage to the business or Department concerned particularly to the image and integrity of leadership.

- From our pre-test counseling sessions and informal discussions with staff, right from Gauteng (pilot) to other provinces, staff showed little interest in the participation, instead they were asking questions like "why do we have to participate when Management shows no regard in ourselves and well being" manifested, according to them by stagnation in their career growths, work environment, policies they don't agree with e.g. reward policies etc.

- In some instances they don't seem to identify with the culture of the Department, particularly in areas like Transkei. We had no mandate to try to dig deeper on these matters but evidently and through their low participation rate, one can observe and discern that they are having serious issues to air but channels, (that is their view) are limited (This is our observations emanating from informal discussions, no attempt was made to do a scientific study no matter how limited it was because its outside of the scope of this research).

4.3 Despite the fan fare associated with launching the National Rollout and commitment from Head Office that other activities on the day of the survey must be scaled down to give prominence and priority to the survey, other senior managers (not a majority though but still a sizable number) would not make themselves available at the testing stations on the day of the survey. It would seem that the whole event is not theirs. The Regional and Centre Coordinators would welcome LIM'UVUNE CONSULTING TEAM and be ushered straight to the workstations and no visibility of senior management even in the function organized to coincide with the event. In future it is recommended that pledges (even symbolic) from senior management to participate in the activities (not in the process of taking blood if not

sampled) must be done. Where senior management was involved, there was a good atmosphere and participation even from reluctant staff members.

4.4 Periodic Prevalence survey, including KAP Survey is conducted, probably in a two/three year cycle to enable the Department to measure correlations between training and all other interventions and results attained.

4.5 Management in the Department of Correctional Services take a closer look on the impact of drugs on the prevalence of the STIs including HIV AND AIDS and Syphilis in Correctional Centers particularly where gangsterism is rife.

## ACKNOWLEDGEMENTS

I would like to thank all those who made the survey possible in particular the following people and organisations;

### From the Department of Correctional Services (DCS)

- Mr. Ngconde Balfour (MP), Minister of the Department of Correctional Services.
- Ms Loretta Jacobus (MP), Deputy Minister of the Department of Correctional Services
- Mr. Linda Mti, Former National Commissioner of the Department of Correctional Services.
- Ms. Jabu Sishuba, Chief Deputy Commissioner: Development and Care
- Freddie Engelbrecht, Deputy Commissioner: Personal Well Being
- Mr. Gustav Wilson, Director: HIV and AIDS
- All the Regional Commissioners, Deputy Regional Commissioners and their management and staff.
- National and Regional Steering Committee and Task Team members
- Regional Coordinators: HIV and AIDS and Health Care Services
- A special word of appreciation in particular to the late Ms Nadine Wookay, Eastern Cape Regional Coordinator: HIV and AIDS, who has since passed on. She and her team displayed enthusiasm and determination during the survey and she was looking forward to know the level of participation and the HIV and Syphilis rates in the Eastern Cape. However, this was not to be for her. May her soul rest in peace.

### Organizations

- The United States Presidential Emergency Plan for AIDS Relief (PEPFAR) for the funds made available to undertake the survey.

- Dr Terry Marshal, Programme Head NHLS: Comprehensive Care, Treatment and Management Programme for HIV and AIDS and all staff at NHLS who made this project a success. If it was not for her strategic interventions, advise and commitment, we would have found it tough.

## Associates and staff of LIM'UVUNE CONSULTING

Finally, I would like to give

- A special thanks to the two Doctors, Dr Ndamane and Dr Gaga who came on board in the project with their medical expertise.
- All the nurses that assisted LIM'UVUNE CONSULTING through out South Africa

**KHAYA SAKAWULI**
**LIM'UVUNE CONSULTING**

## LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| AIDS | Acquired Immuno Deficiency Syndrome |
| ASSA | Actuarial Society of South Africa |
| DCS | Department of Correctional Services |
| (N)DOH | Department of Health |
| ELISA | Enzyme Linked Immuno – Sorbent Assay |
| HIV | Human immune Virus |
| HSRC | Human Science Research Council |
| MRC | Medical Research Council |
| WHO | World health Organisation |
| RE | Reactive to the test |
| NR | Non -reactive |
| POS | Positive |
| VCT | Voluntary Counseling and Testing |
| NEG | Negative |
| INS | Insufficient blood |
| NHLS | National Health Laboratory Services |
| PART% | Participation rate |
| CI 90% | Confidence Intervals |
| KZN | Kwazulu Natal |
| LMN | Limpopo/Mpumalanga/North West |
| FS/NC | Freestate/Northern Cape |
| EC. | Eastern Cape |
| WC | Western Cape |
| GT | Gauteng |
| TM | Top Management inclusive of Director upwards |
| MM | Middle Management inclusive of Senior Correctional Officer to Deputy Director. |
| SOP | Standard Operating Procedures |
| PL | Production level, inclusive of Correctional Officer grade 1 and below. |
| PC | Prison Classification. |
| R | Rural |
| U | Urban |
| F | Female |
| M | Male |

# 1. INTRODUCTION

The Department of Correctional Service (DSC) "[1]with the vision of excellence in serving the community and government of the Republic of South Africa", procured the services of LIM'UVUNE CONSULTING to conduct an HIV and Syphilis infection surveillance on both Personnel and Offenders in the Correctional Centers in South Africa as well as in the Head Office and Regions.

Correctional Services is a microcosm of the broader society and therefore consequently problems besetting the communities outside are as prevalent in the Correctional Centers as well. Specifically and inherently, Correctional Centers are more susceptible to societal problems especially Sexually Transmitted Infections (STIs) due to the nature of socialization or lack of prevention methods inside the centers.

Therefore the correctional population has a much higher need for comprehensive programmes that would create awareness, identify and treat diseases like HIV and AIDS, Syphilis and all other STIs. Appropriate, timely and responsive surveillance studies inform sound management of policies and interventions that assist in containing and arresting the spread of the diseases.

The Department [2]"has placed rehabilitation at the center of its core business". Expressly, the Department is preparing the offenders to actively resume their rightful activities and duties in their communities, once they are released. It is the acceptance of the reality that HIV and Syphilis and other STIs awareness programmes have to be optimized within the Correctional Centers so that even upon their releases, the released persons can continue living a positive life for the benefit of themselves, community and the country's population at large.

To this end, DCS commissioned LIM'UVUNE CONSULTING to undertake the Surveillance study of HIV and Syphilis and LIM'UVUNE CONSULTING conducted the study in two phases as prescribed in the task directive i.e.

- Gauteng Pilot Study
- National Study

[1] Task directive for the provision of an Unlinked , Anonymous HIV and Syphilis Surveillance 2005
[2] Task directive for the provision of an Unlinked , Anonymous HIV and Syphilis Surveillance2005

The report therefore gives an account of the study on HIV and Syphilis Prevalence in the Correctional Centers (including Gauteng Pilot study), Head Office and regional Centers.

## 2. SURVEY OBJECTIVES

The objective of the survey was to gather information scientifically on HIV and Syphilis among personnel and offenders in the Department of Correctional Services (DCS) starting with Gauteng region of the Department as a pilot study and thereafter a national rollout as enunciated in the task directive. [3]The main objectives were

- To conduct an unlinked, anonymous survey of offenders and personnel to establish the prevalence of HIV infections.
- To conduct an unlinked, anonymous survey of offenders and personnel to establish the prevalence of sexually transmitted infection, namely Syphilis.

## 3. THE METHODOLOGY

### 3.1 The Stratified Random Sample (see Annexure 4)

The project methodology involved a stratified random sample of both offenders and personnel according to:

- Urban /Rural Correctional Centers
- Gender
- Age Groups: 18 to 25 years; 26 to 35 years; 36 to 55 years; and 56 years and older.
- Work rank levels : Top Management ( inclusive of Director upwards); Middle Management (Inclusive of Senior Correctional Officer to Deputy Director); and Production Level (inclusive of Correctional Officer Grade 1 and bellow)
- Regions according to the Department's geographic divisions

[3] DCS task directive 2005

### 3.2 The Population

- The offender population was the total incarcerated sentenced offenders of 137000 nationally (33000 sentenced offenders in the Gauteng Region included as the pilot)
- The personnel population was a total number of 33000 nationally (8000 personnel in the Gauteng Region included as pilot)
- At the time of the survey, the population in the correctional services settings was 113567(inclusive of 27,700 for Gauteng) for offenders and 38268(7880- Gauteng) for personnel.

### 3.3 The Sample

- An Independent Company's services, ((MSSA (Market Survey and Statistical Analysis)) were procured by LIM"UVUNE CONSULTING to draw the sample plan and the sample according the specifications in the Task Directive of the Department. (For the list of Correctional Centers sampled, refer to appendix 3)

First the sample plan was approved by the Department of Correctional Services and then the sample drawn based on the plan was also approved as per the Department's task directive. (Appendix 4).For personnel, the sample was 3792 and for offenders 113567 both including Gauteng. Appendix 3 shows all the sampled centers and sample numbers.

Appendix 4 shows the sampling method for Gauteng and the same principle was applied when drawing the national sample.

## 4. THE UNIQUE IDENTIFICATION SYSTEM

Complying to and strengthening the anonymity and unlinkness nature of the study, a separate and unique bar-coding identification system was designed. The National Health Laboratory Services designed the unique coding system where each specimen collected would be identified using the bar-codes. E.g. CSSNCGROT023 depicting the following

- CSS Correctional Services Survey
- NC Northern Cape
- GROT Grootvlei
- 023 Specimen No. 23.

Then, NHLS attached its own identification system, in the lab form submitted by LIM'UVUNE CONSULTING when testing is conducted. See Appendix 2 (the lab form)

Five labels were printed for each specimen:

- 1st Label stuck onto each blood tube.
- 2nd Label stuck on a lab form sent to NHLS ( see appendix 2 on the left side column)
- 3rd Label retained in duplicate form by LIM'UVUNE CONSULTING.
- Last two labels retained for contingency purposes.

For a complete set of the bar coding system, see Appendix 2

## 5. ETHICS APPROVAL

Surveys conducted using human tissues including blood, raise ethical questions and a researcher must take into account all these ethical considerations and protocols. LIM'UVUNE CONSULTING was not different, hence prior to conducting the study, an application for approval of the study was lodged with the Ethics Committee of the HSRC and it was granted (Appendix 1).The purpose was to validate the study in line with the Task Directives and to adhere to protocols relating to testing the research subjects in line with international protocols relating to HIV surveillance studies. Issues covered in the application included but not limited to:

- Voluntarism
- Confidentiality
- VCT offer by the Department
- Random Selection
- Stigmatization
- Consent etc.

Consent forms were developed and submitted to HSRC with the application and the forms were interpreted in all different South African languages (Appendix 9)

# 6. THE RESEARCH PROCESS

## 6.1 Training and fieldwork

Preparatory meetings were held with the Steering Committee members of DCS to among others

- Explain and agree on the survey protocols , methods and procedures
- Clarify and resolve logistical and administrative issues

The meetings were followed with workshops by LIM'UVUNE CONSULTING medical doctors and laboratory coordinators for venesectors. The purpose of the workshops was to;

- Train all relevant personnel on procedures and processes involved in drawing blood, labeling and transportation of the samples and all other relevant administrative issues.
- Train personnel on confidentiality issues
- Training on counselling of participants.

## 6.2 Pre-test counseling

Prior to the actual pulling of blood from the participants, a group pre-test counselling by trained LIM'UVUNE CONSULTING personnel was done in a group of 15 to 20 offenders and the participants were then ushered to a venesector individually. The venesector would then conduct individual pre-test counselling and reiterate the contents of the of the consent form on a one to one basis.

Personnel procedures were conducted in a separate and most of the time in another building from the one used by offenders.

## 6.3 Specimen Collection

For both personnel and offenders, blood was pulled into the tubes supplied by NHLS and at the same time labeled with the unique bar-coding. After the procedure, blood specimen and completed data sheet were then sent to the participating NHLS laboratories close to the Correctional Centers in compliance with the requirements of NHLS

### 6.4 Screening and testing

For Gauteng, a total of 813 blood specimens and for the National rollout a total of 5584 specimens for offenders and personnel were screened for HIV using the Elisa test and for Syphilis using PRP test by NHLS as well as data capturing , mining .(see Appendix 2).
For Standard Operating Procedure used by NHLS for testing HIV and Syphilis, please refer to NHLS SOP (Appendix 2)

It is also the requirement that blood specimens collected for the survey and all raw data be destroyed; however, this can only happen when the Department has no queries on the data. (Refer to the letter of destruction by NHLS Appendix 2)

## 7. QUALITY ASSURANCE

In the course of the survey, data quality management was conducted by NHLS/NICD (see Appendix 2)

## 8. PARTICIPATION LEVELS

### 8.1 The Pilot study

The HIV and Syphilis prevalence Survey was piloted in Gauteng out of offender population of 27700 and staff population of 7880. A 10% random sample yielded a sample for;

- Staff of 768, only 67 staff members participated yielding a participation rate of 8.72%.
- Offenders of 2770, only 746 offenders participated yielding a participation rate of 26.93% among offenders.

### 8.2 National Rollout

The survey was rolled out nationally, with the offender population of 85867and staff population of 30388. A 10% random sample on both Staff and Offenders yielded the following sample

- Staff of 3042 and only 1031 staff members participated , a participation rate of 34.1%
- Offenders of 8649 and a total of 4553 offenders participated in the National Rollout, a participation rate of 52.6%.

Figure 1 below shows the participation levels in the Pilot, National Rollout and the cumulative effect of blending the two, which is a drop in the National Participation Levels to 29% for staff and 46.4% for offenders. The surge in the participation stakes from 8.72% for staff (26.93% for offenders) from the pilot to 34.1%(52.60% for offenders) can be , to a certain extent, attributed to the concerted and vigorous efforts by Top Management including the involvement of the ministry in the marketing of the survey process. (**Note** we can only surmise the value add (and the extent of the add) of the campaigns by senior management, but we can't with certainty attribute all of it directly because it was not specifically measured)

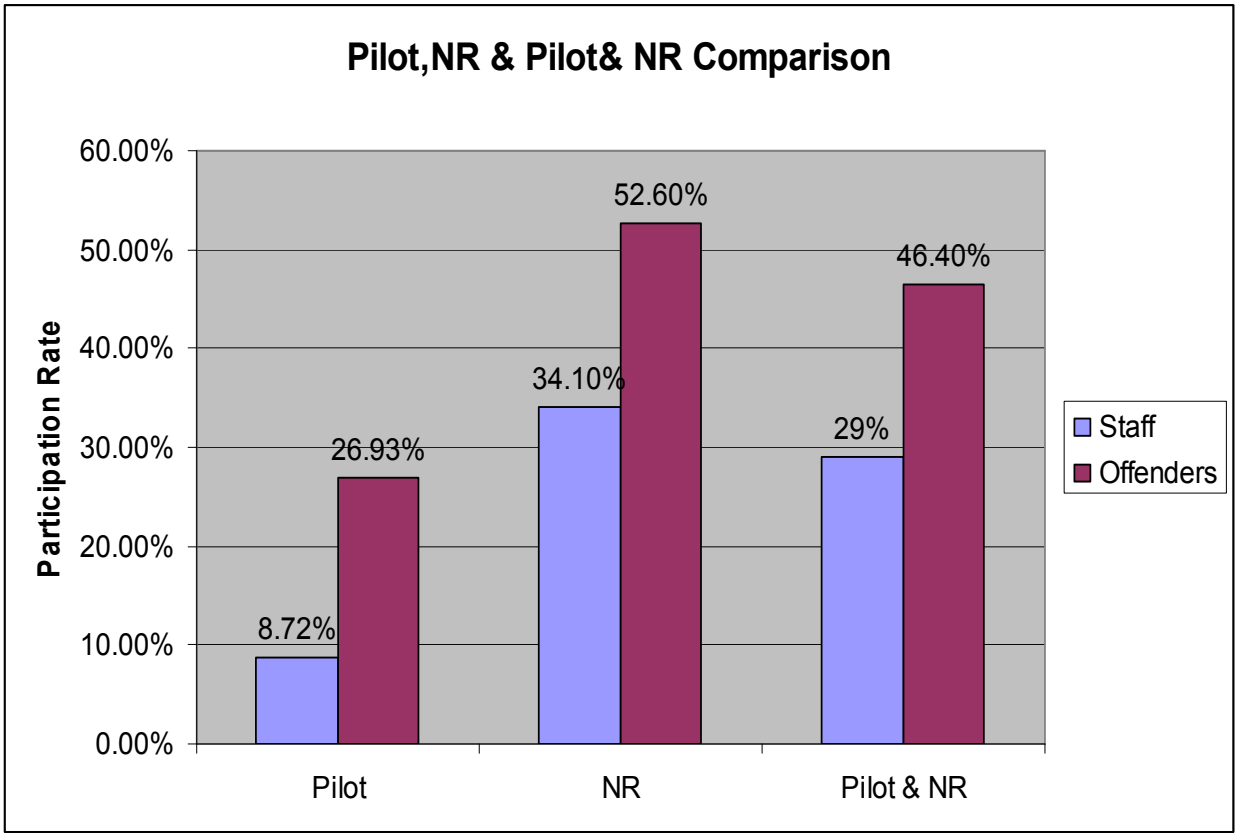


Figure 1 NR in the above figure denotes national rollout.

## 9. THE NATIONAL PREVALENCE RATE

Other than the debate on the cause of the disease, probably the second other issue that generates heated arguments in the field of HIV AND AIDS is the National Prevalence Rate of HIV and AIDS.

One of the problems that policy makers and decision makers are faced with is the wide range of estimates of the size and impact of the HIV AND AIDS epidemic[4]. Graph 2 below illustrates the number of organisations that generate their own research and prevalence rate in the field

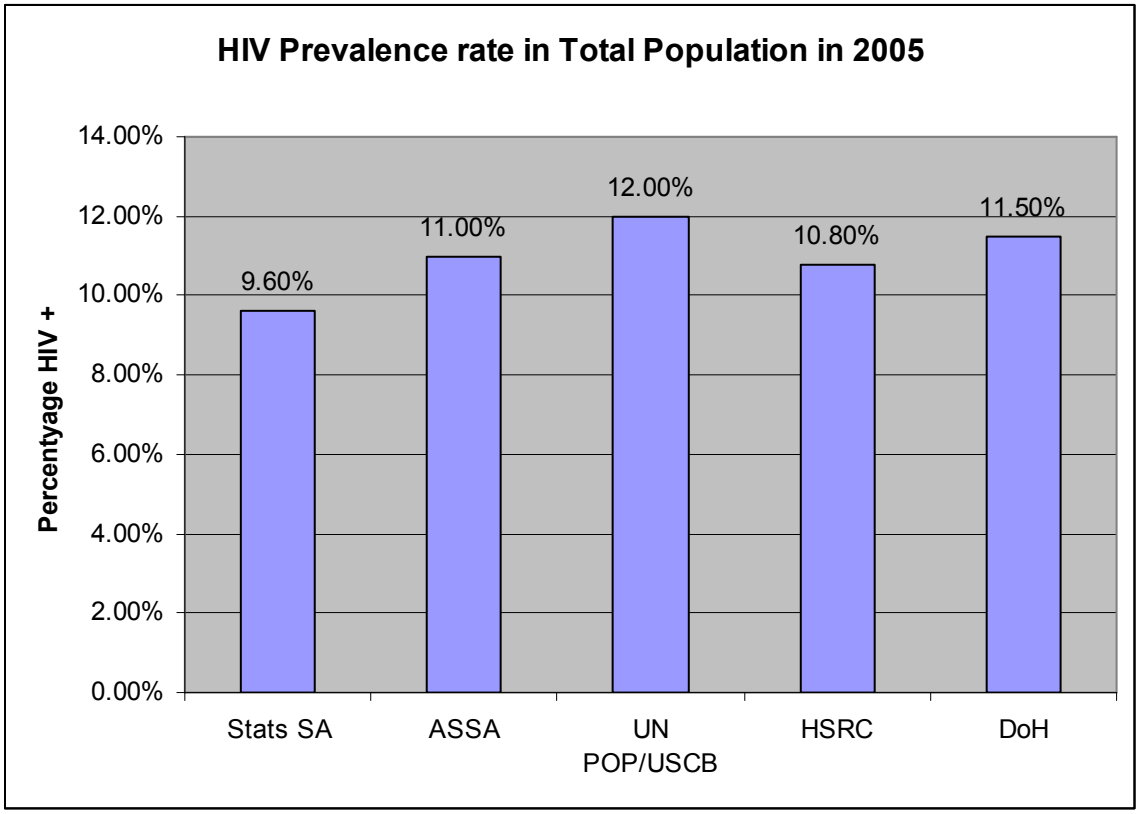


Figure 2(Adopted from MRC, ASSA and CAR UCT report on the Demographic Impact of HIV AND AIDS in SA.

DSC Preferred Prevalence Rate.

The Department directed LIM"UVUNE CONSULTING to use the DoH Prevalence rate. It was obtained in the 2005 research document titled "REPORT: NATIONAL HIV AND SYPHILIS ANTENATAL SERO-PREVALENCE SURVEY IN SOUTH AFRICA 2005. The **national prevalence rate is 16.25%**

[4] Demographic Impact of HIV/AIDS in SA, MRC,ASSA and CAR UCT .p17

# 10. THE FINDINGS

## NB: The following section (section 10) must be read with appendix 3(Summary of results)

### 10.1 HIV Prevalence: Staff

#### 10.1.1 Work Rank Levels

A total number of 1098 staff members participated in the study Gauteng included; The HIV Prevalence is 9.9% or109 staff members tested positive. This is less than the National Population rate of 16.25%[5]

Of that 109 staff members tested positive to HIV (figure 3 below);

- 93.6% are in the production level,
- 5.5% in the middle management and
- 0.9% in senior management.

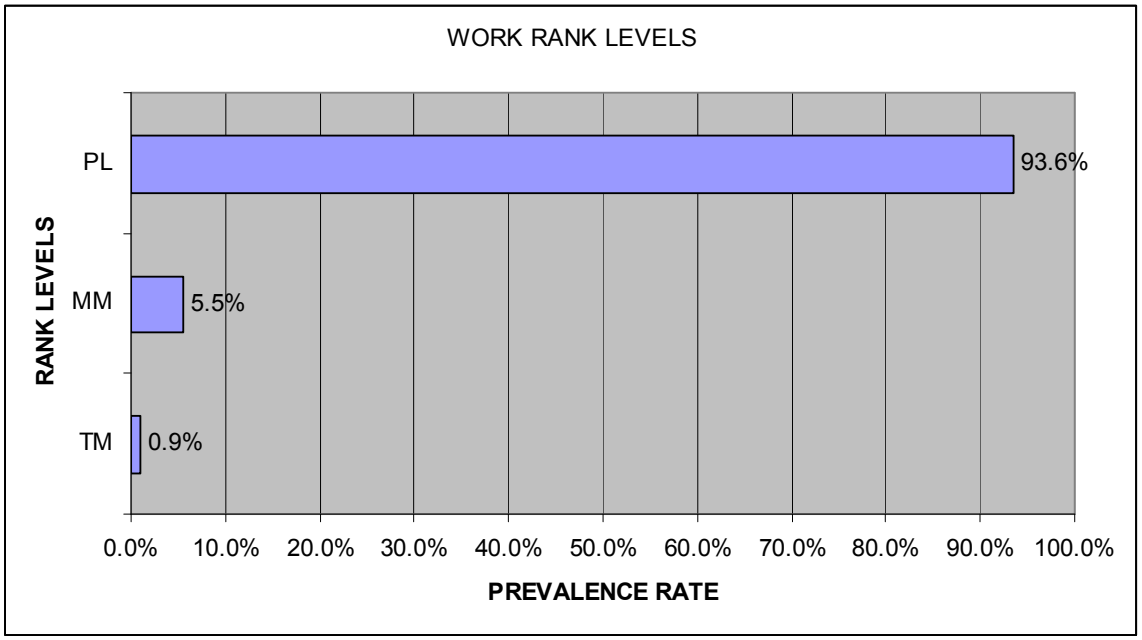


Figure 3

#### 10.1.2 Age categories

[5] DOH , Report , National HIV and Syphilis Antenatal Sero-Prevalence Survey in SA ,p17

Of the 109 staff members tested positive to HIV in the study (figure 4 below);

- 0.9 % are in the 18-25 years age category,
- 45% are in the 26-35 years category,
- 42.2% are in the 36-45 years category and
- 9.2% are in the 46-55 years category

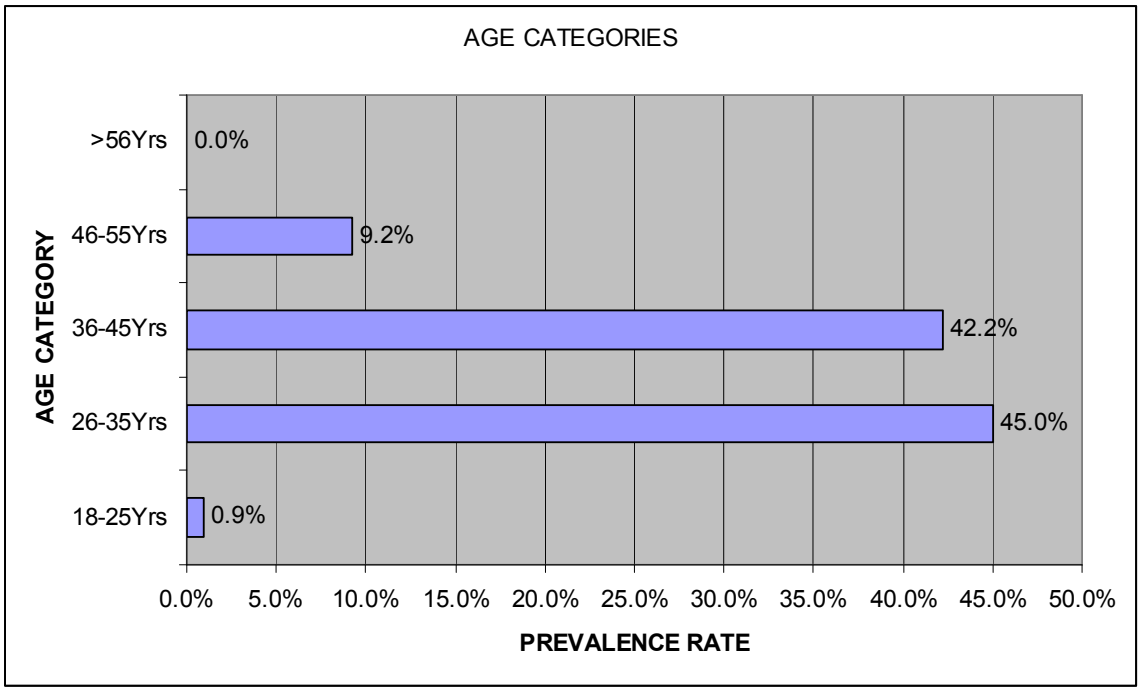


Figure 4

**10.1.3 Regional prevalence**

Of the 109 staff members tested positive to HIV, the regional prevalence rate in a descending order is as follows (figure 5 below)

- KZN has the highest HIV prevalence rate among staff members. More than the national population rate of 16.25.
- Western Cape has the lowest HIV prevalence at 2.6%, less than the prevalence rate of staff members in the Department of 9.9%. Regions are as follows

| Region | HIV Prevalence |
|---|---|

- Kwazulu Natal 22.7%
- LMN 14.4%
- Eastern Cape 12.1%
- Gauteng 4.5%
- FSNC 4%
- WESTERN CAPE 2.6%
- HEAD OFFICE 0

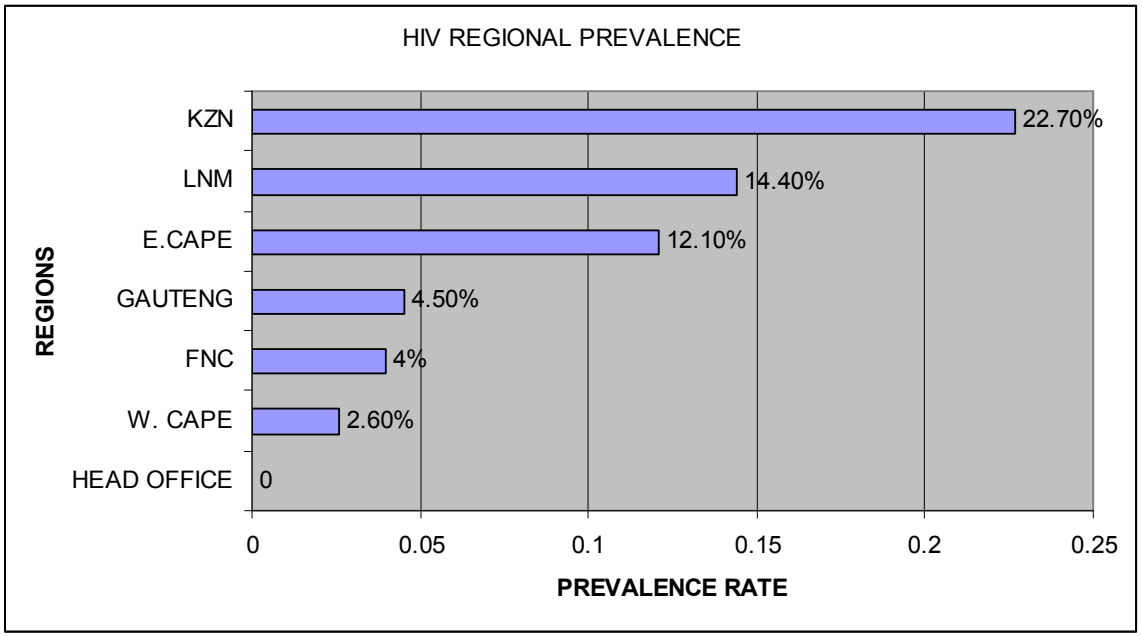


Figure 5

**10.2 HIV PREVALENCE OFFENDERS**

The HIV prevalence rate nationally (including Gauteng) among the 5299 Offenders tested is 19.8 %( 1047),

**10.2.1 Age category**

Of the 1047 offenders tested positive nationally, the HIV prevalence in the age categories is as follows (see figure 6 below)

- 11.8% is in the 18-25 category,
- 46.6% in the 26-35 year category,
- 21.4% in the 36-45% category,
- 3.2% in the 46-55Year category and
- 0.9% in the above 56% category.(see fig 4 below)

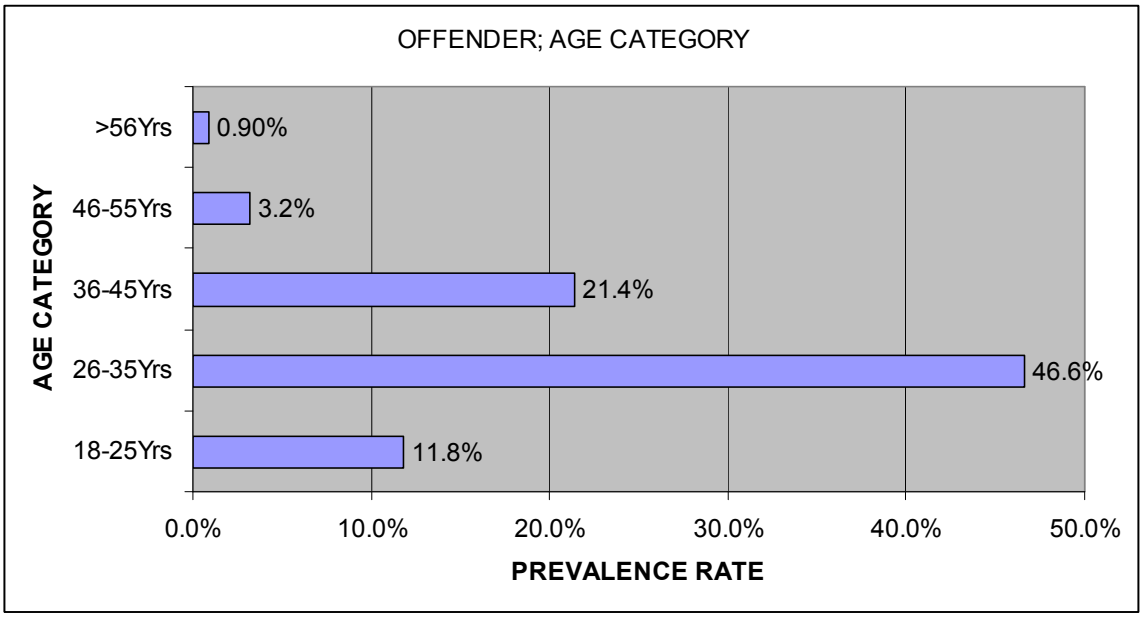


Figure 6

### 10.2.2 Regional Prevalence

Of the 1047 offenders tested positive, the regional prevalence rate is as follows in the descending order

| Region | HIV Prevalence |
|---|---|
| ○ Kwazulu Natal | 34.6% |
| ○ Gauteng | 22.5% |
| ○ LMN | 20.7% |
| ○ FSNC | 19.5% |
| ○ Eastern Cape | 16.5% |
| ○ Western Cape | 6.3% |

KZN offenders have the highest HIV prevalence rate in the South African Correctional Services setup, more than two times the national population prevalence rate of 16.25. (Figure 7)

Western Cape offenders have the lowest HIV prevalence rate at 6.3%, even less than the national general population prevalence rate.

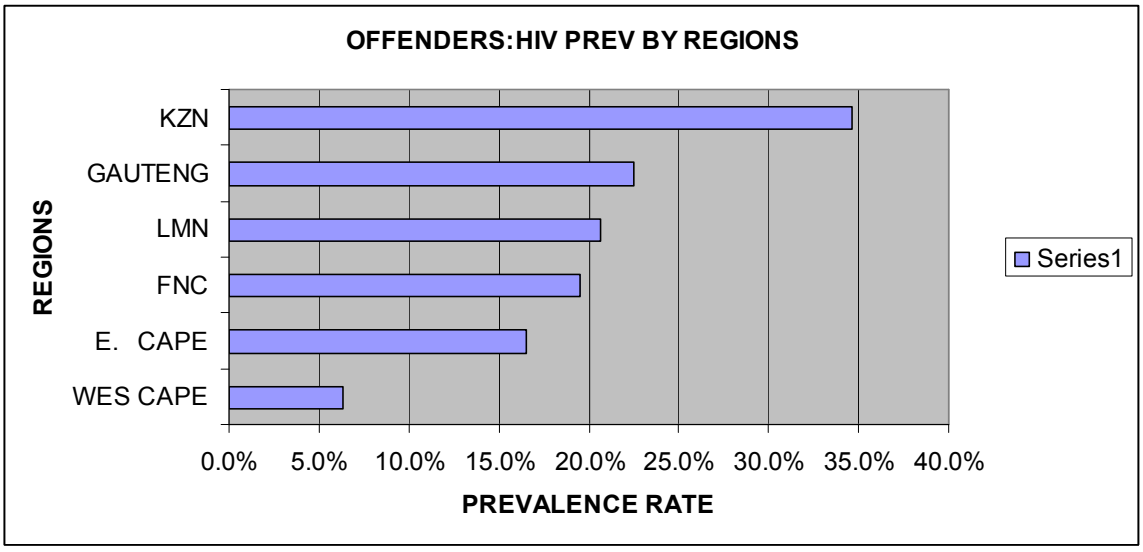


Figure 7.

### 10.3 SYPHILIS

## Syphilis Prevalence Rate Staff

Of the 1098 staff members who participated in the study, the syphilis prevalence rate is 2.9 % (32 staff members tested reacted to the test).

### 10.3.1 Age Categories (figure 8)

Of the 32 staff members tested positive to the Syphilis test, their age categories are;

- 3.1% of them (32) are in the age category of 18-25 Years
- 37.5% of them are in the age category of 26-35 Years
- 37.5% of them are in the age category of 36-45 Years,
- 12.5% of them are in the age category of 46-55 Years
- 0% in the category of >56 years,

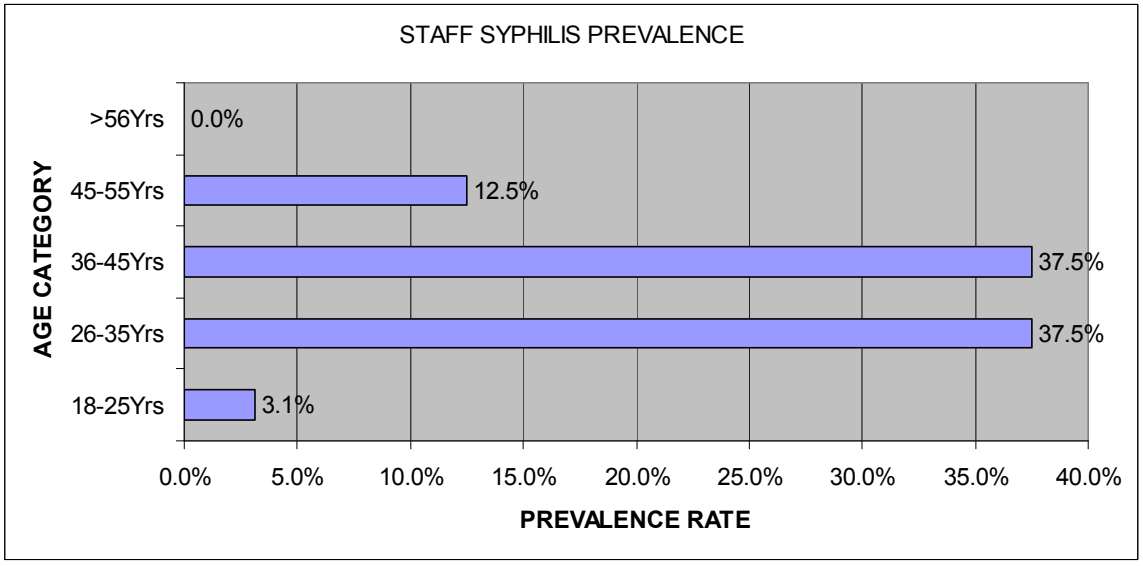


Figure 8

### 10.3.2 Work Rank Levels (figure 9 below)

Of the 32 staff members tested positive to Syphilis,

- 3.1% of them are in Top Management
- 9.4% of them are in Middle Management
- 78.1% of them are in the Production level

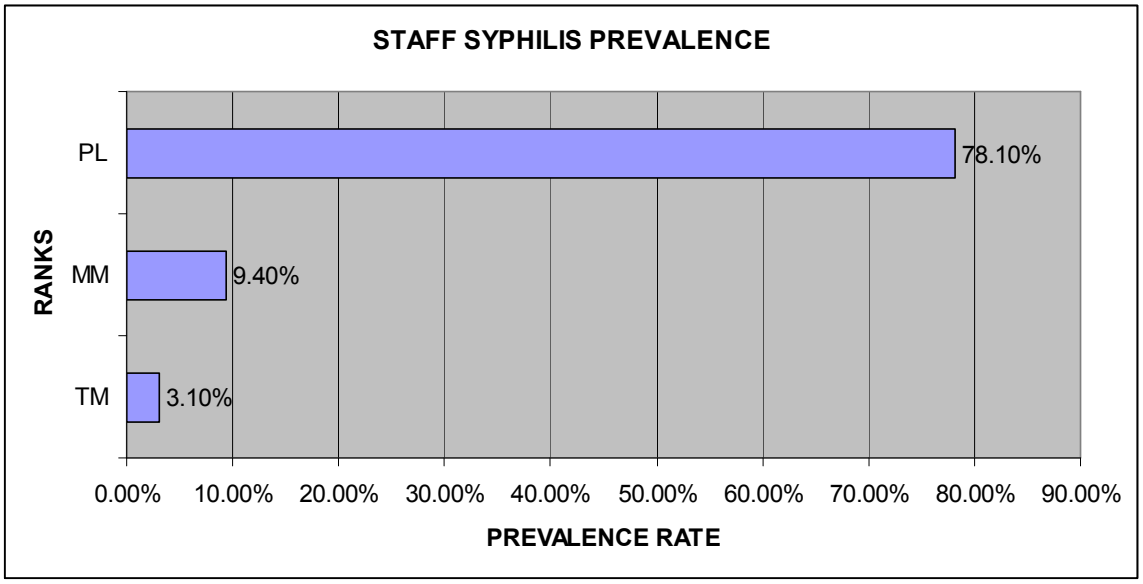


Figure 9

### 10.3.3Regions (figure 10 below)

- Gauteng has the highest Syphilis rate among staff members followed by Eastern Cape, LMN Western Cape and Head Office.
- Kwazulu Natal has the lowest Syphilis infection rate among staff members (see fig10) .,

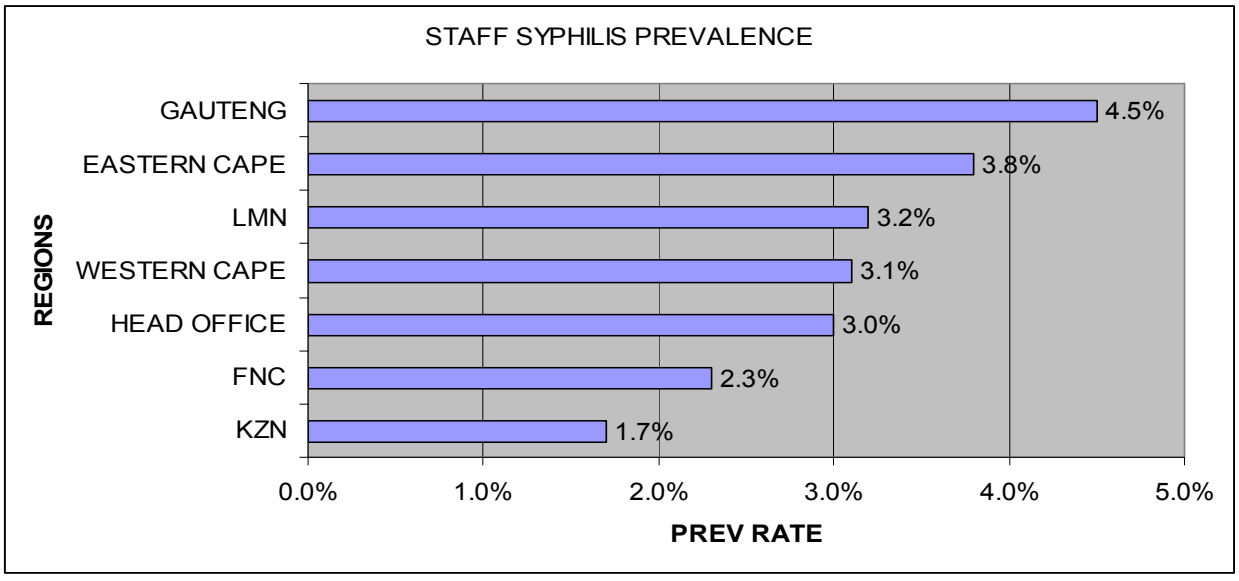


Figure 10

### 10. 4 Syphilis Prevalence rate Offenders

Five thousand two hundred and ninety nine (5299) Offenders were tested. Of that 297 or 5.6% reacted positive to the test.,

#### 10.4.1 Age categories

Of the 297 offenders tested reactive/positive to the Syphilis test, the prevalence in different age categories is as follows (see figure 11 below)

| Age | Prev. rate |
|---|---|
| • 18-25 Years | 12.8% |
| • 26-35 Years | 33.0% |
| • 36-45 Years | 19.5% |
| • 46-55 Years | 7.7% |
| • >56 Years | 3.0% |

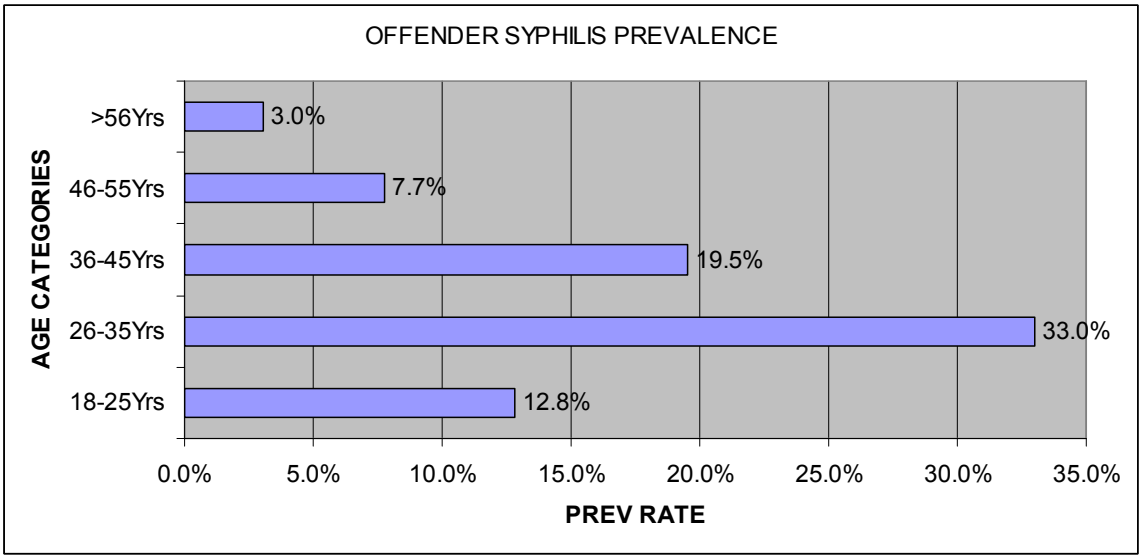


Figure 11

#### 10.4.2 Regions

Of the 297 offenders tested, the prevalence rate is as follows in the descending order (figure 12 below)

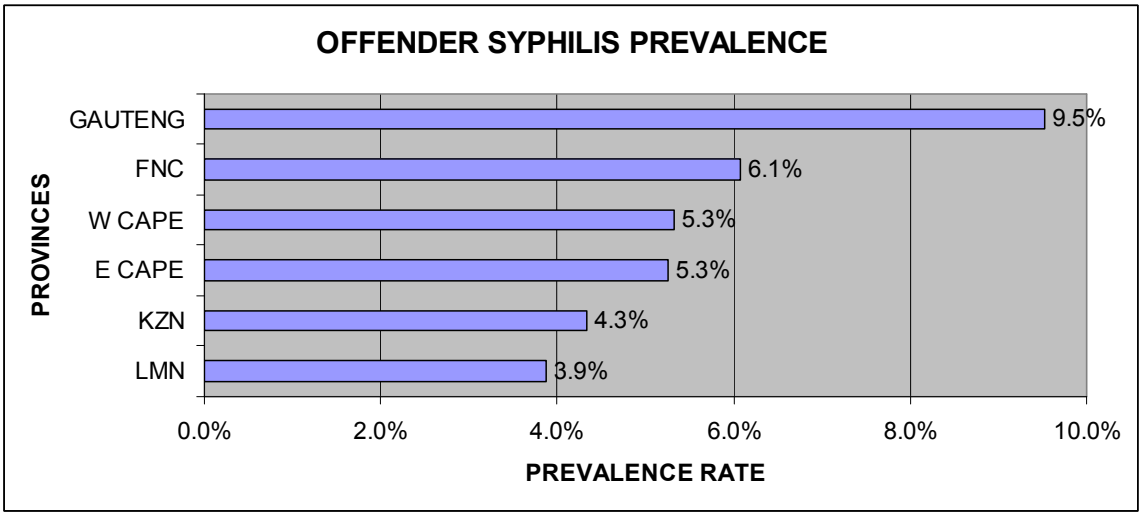


Figure 12

## 10.5 COMPARISON OF HIV AND SYPHILIS BY PROVINCE

### 10.5.1 STAFF

Generally Syphilis prevalence rate is lower than the HIV prevalence rate by a huge margin in some regions except in Gauteng and Western Cape where the rate of HIV is marginally higher than Syphilis.(see fig 13 below)

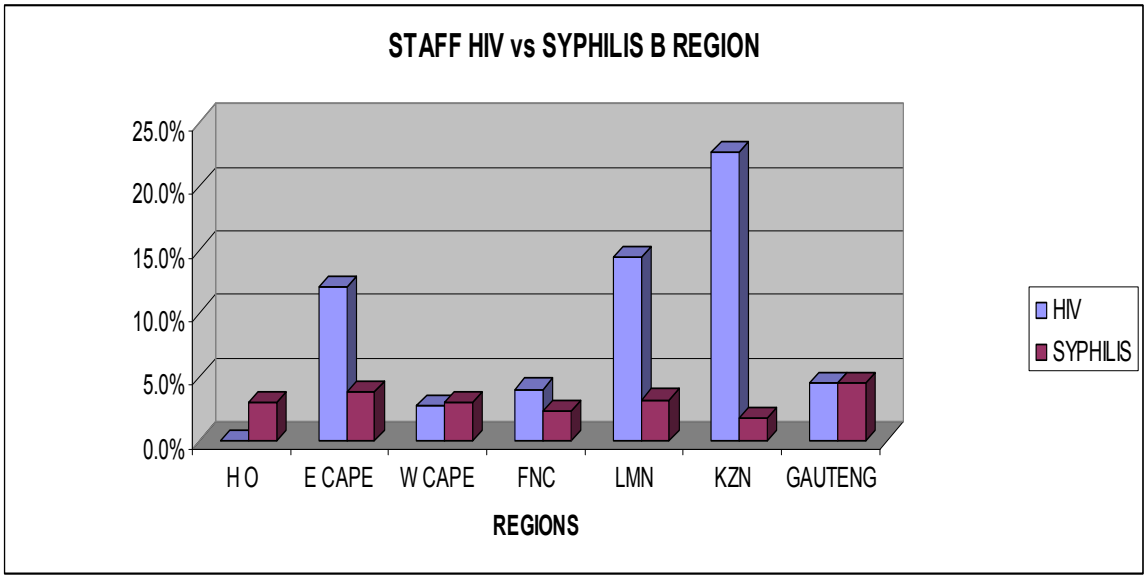


Figure13

### 10.5.2 OFFENDERS

With all the regions there is a big margin between the HIV prevalence rate and the Syphilis Prevalence rate except Western Cape. (See figure 14 below)

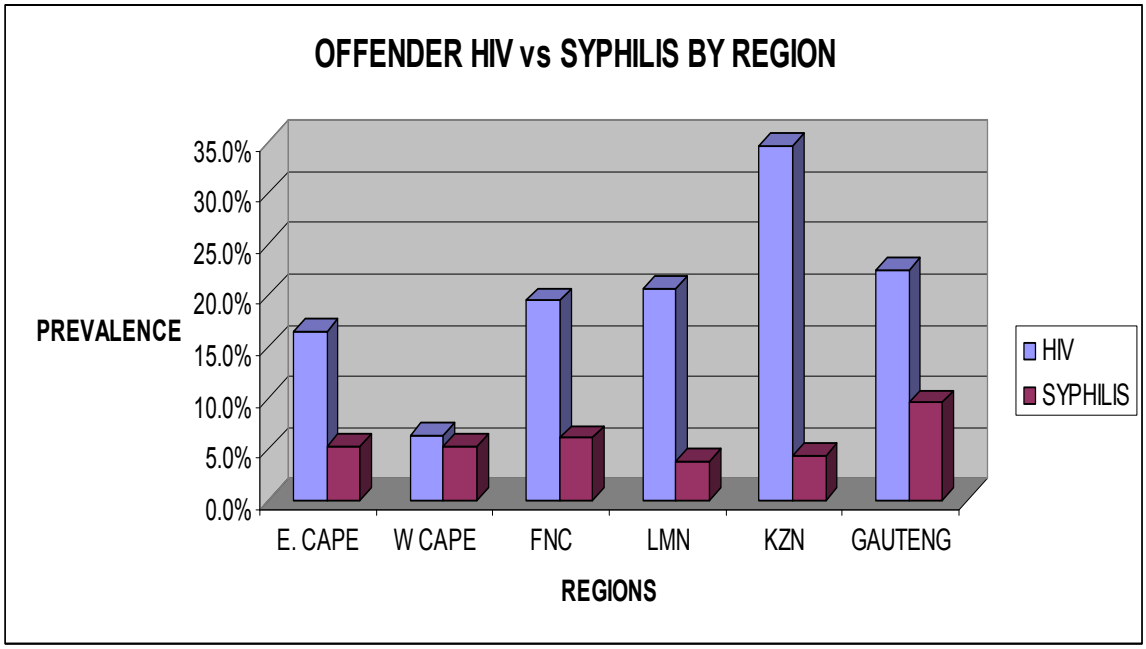


Figure14

## 11. CONFIDANCE INTERVALS

Since it was requested that we must illustrate this portion in a way its going to be understood by everybody, it is done therefore by way of an example.( see Appendix 3) summary and charts for the Confidence Levels.

➢ By way of an example:

- If out of 1000 individuals who have been sampled , 400 participated
- And 60 of the 400 participants were HIV+
- Then the HIV prevalence would be15% among the participants.
- But we don't know that ***exactly*** 15% of the 1000 sample (i.e. 150) are HIV+ because of the 600 who did not participate.
- However, we ***can*** say that we are 90% confident that between 129 and 175 of the 1000 are HIV+
- That 1000 was a sample from a bigger population, therefore how do you extrapolate that to the population? see the formula and the confidence intervals in Appendix 3

## 12. LIMITATIONS OF THE STUDY

- The sampling method specified by the Department posed challenges in that those who wanted to participate and were outside the sample were not allowed as it would compromise the validity of the study.

- Some, (not a high figure though) of the sampled participants who knew their status were sometimes not willing to participate. They would come to LIM"UVUNE CONSULTANTS and openly declare their status, however, they would refuse to be part of the study because their "participation reminds them every time of their condition"(sampled positive) which reflects non acceptance of their conditions. Therefore it is possible that the prevalence rate could be higher/lower than recorded.

- Personnel simple refused to participate as they postulate that the intention of DCS with the survey is to "medically board" all those that the Department has discovered their status through the survey. Further it became clear that staff

members want to use the sessions of pre-test counseling and the process of the survey as a platform to air their problems and to register their "protest of unsolved issues" or bluntly to " get even with the Department this time" hence the participation rate was low.

- With such a low participation rate from personnel particularly in Gauteng, the current prevalence rate of Syphilis and HIV could actually be more than what was revealed by the study,

## 13. RECOMMENDATIONS

The Participation rate has, among

- Offenders, dramatically improved from a mere 27% in the pilot study in Gauteng to an average of 52.6%(all other regions excluding Gauteng).
- Personnel increased from a mere 8.7% in the pilot study to an average of 34.1% nationally excluding the pilot study.

It is therefore recommended that:

- the momentum with the offenders be maintained and increased with all the necessary programmes of comprehensive HIV and AIDS management initiatives, including
  - Information and Education campaigns
  - Improved treatment of sexually transmitted diseases.
  - Voluntary Counselling and testing.
  - Antiretroviral treatment

- In view of negativism displayed by staff, it is highly recommended that an organization wide survey for personnel to determine the issues and the cause of the issues is done. It is important to note that these could merely be perceptions not facts. But if perceptions are not measured and managed properly, to the person who perceives them, gradually they become facts and it gets expensive to change the perceptions of staff when negative perceptions have reach high levels in an organisation. Most of the time perceptions can do

damage to the business or Department concerned particularly to the image and integrity of leadership.

- It is recommended that the survey (Human Capital Satisfaction Measurement-HCSM/Organisation Climate) be both quantitative and qualitative as this would reveal the real issues staff have. It is our view that, to effectively manage an organization with such a huge number of employees, strategic leadership needs to understand what the key drivers are from the human capital perspective that makes employees identify with the institution ,to an extent of making it their employer of choice. This would also test the readiness of staff to implement the Batho Pele service delivery plans.

  - From our pre-test counselling sessions and informal discussions with staff, right from Gauteng (pilot) and to other provinces , staff showed little interest in the participation , instead they were asking questions like " why do we have to participate when Management shows no interest in ourselves and well being " manifested, according to them by stagnation in their career growths, work environment, policies they don't agree with ie reward policies etc.
  - In some instances they don't seem to identify with the culture of the Department, particularly in areas like Transkei. We had no mandate to try to dig deeper on these matters but evidently and through their low participation rate, one can observe and discern that they are having serious issues to air but channels (according to them) are limited ( This is our observations emanating from informal discussions with them. No attempt was made to do a scientific study no matter how limited it was because it is outside of the scope of this research).

- Despite the fan fare associated with launching the National Rollout and commitment from Head Office that other activities on the day of the survey must be scaled down to give prominence and priority to the survey, other senior managers (not a majority though but still a sizable number) would not make themselves available at the testing stations on the day of the survey. It would seem that the whole event is not theirs. The Regional and Centre

Coordinators would welcome LIM'UVUNE CONSULTING TEAM and be ushered straight to the workstations and no visibility of senior management even in the function organized to coincide with the event. By and large, there has been a significant improvement from the pilot situation. In future pledges from senior management to participate, not in the process of taking blood if not sampled , is necessary but a pledge in the whole activity in his/her centre. Where senior management was involved, there was a good atmosphere and participation even from reluctant staff members.

- Periodic Prevalence survey, including KAP Survey is conducted, probably in a two/three year cycle to enable the Department to measure correlations between training and all other interventions and results attained.

- Ownership of the HIV Programmes and Initiatives including the Prevalence study results at center level be intensified as this would serve to deepen the service delivery to the prison population (as part of Batho Pele)

- Much as the utilization of resources to fight HIV and AIDS is distributed in the formula that the Department use, but a special attention need to be given to areas where HIV prevalence is high especially KZN and Gauteng.

- Syphilis in the Western Cape need to be given a special attention because in some Correctional Centres, Syphilis prevalence rate is more than the HIV rate.

- Correctional Services management to take a closer look on the impact of drugs on the prevalence of the STIs including HIV AND AIDS and Syphilis in Correctional Centers particularly where gangsterism is rife.

# 14. CONCLUSION

**NB:** This section must be read with the Confidence Interval Tables in appendix 3 and the formula used)

**The researcher can conclude that;**

- **With 90% confidence, the total number of HIV positive personnel within the 38268 personnel population of Department of Correctional Services is between 2588 (lower limit) and 5392(the upper limit) with the more likely number being 3775.**

- **With 90% confidence, the total number of Syphilis positive personnel within the 38268 personnel population of Department of Correctional Services is between 623 (lower limit) and 2629 (the upper limit) with the more likely number being 1388.**

- **With 90% confidence, the total number of HIV positive offenders in the 113567 offender population of Department of Correctional Services is between 20909 (lower limit) and 25744(the upper limit) with the more likely number being 23258.**

- **With 90% confidence, the total number of Syphilis positive offenders in the 113567 offender population of Department of Correctional Services is between 5533 (lower limit) and 8466(the upper limit) with the more likely number being 6900.**