

**Guidelines for the management of
Tuberculosis, Human Immunodeficiency
Virus and Sexually-Transmitted Infections
in Correctional Centres
2013**



health

Department:
Health
REPUBLIC OF SOUTH AFRICA

Published by the Department of Health, Private Bag X828, Pretoria 0001, South Africa

April 2013

Copyright: © Department of Health, Republic of South Africa 2012

For more information:

Department of Health

Dr Lindiwe Mvusi, Email: MvusiL@health.gov.za

www.doh.gov.za

Contents

Contents.....	III
Foreword.....	V
Acknowledgements.....	VI
Abbreviations.....	VII
Executive Summary.....	VIII
1. Introduction.....	1
1.1 Tuberculosis and Human Immunodeficiency Virus in Correctional Centres	11
1.2 Pathogenesis and Transmission of Disease	2
1.2.1 Transmission of Tuberculosis.....	2
1.2.2 Progression from Infection to Disease.....	3
1.3 Outline of the National Strategic Plan on HIV, STIs and TB 2012-2016.....	3
2. General Principles.....	5
2.1 General Principles of these Guidelines	5
2.2 Roles and Responsibilities.....	6
2.3 Operational Issues.....	7
3. Screening for Tuberculosis, HIV and Sexually Transmitted Infections	8
3.1 Tuberculosis Screening	8
3.2 HIV Screening	10
3.3 Sexually-Transmitted Infection Screening	11
3.4 Screening for chronic diseases conditions	11
4. Treatment of Tuberculosis, HIV and Sexually Transmitted Infections	12
4.1 Tuberculosis treatment.....	12
4.2 HIV and STI care and treatment	13
4.3 Adherence Support	13
4.4 Opportunistic Infections.....	14
4.5 Managing awaiting trial detainees	16
4.6 Nutrition	16
5. Prevention of Tuberculosis, HIV and Sexually Transmitted Infections.....	17
5.1 Education.....	17
5.2 Tuberculosis Prevention.....	17
5.2.1 Isoniazid Preventive Therapy in Adult Inmates	17

5.2.2 Isoniazid Preventive Therapy in Children.....	18
5.2.3 Infection Control	18
5.3 HIV Prevention	18
5.3.1 Post-exposure prophylaxis.....	22
5.3.2 Men’s Sexual Health	22
5.3.3 Condoms	22
5.3.4 Medical Male Circumcision	23
6 Women and Child Health.....	255
6.1 Pregnancy and Tuberculosis.....	255
6.2 Infant feeding	27
7. Post release continuum of care	29
7.1 Linkage and Retention in Care	29
8. Recording and Reporting	321
8.1 Monitoring and Evaluation.....	321
8.2 Tools for monitoring	351
8.3 Information flow.....	33
8.4 Key issues on completing registers	33
8.5 Coordination	34
9. Human Rights.....	365
9.1 General rights	35
9.2 Rights of detainees and inmates screening testing and treatment	36
9.3 Rights of detainees isolation and segregation	36
9.4 Rights of HCW and staff	37
9.5 Stigma	37
ANNEXE 1: Human Rights Provisions in the South African National Strategic Plan 2012-2016	40
ANNEXE 2: Tools and Guidelines for Human Rights	40
ANNEXE 3: Flow procedures for MMC	431
ANNEXE 4: Xpert Diagnostic Algorithm	42

Foreword

Tuberculosis and HIV, AIDS are the major causes of morbidity and mortality in the country. It is for this reason that our interventions must focus on prevention of new infections and expand access to testing and treatment services to all South Africans. Correctional facilities are potential areas for spread of airborne infections and the diversity of the population in these facilities justifies the implementation of interventions to mitigate the risk.

This document provides the general principles for the management and control of TB, HIV, AIDS and STIs in Correctional facilities. The primary audience is health and administrative staff in DCS and DOH. It is meant to provide guidance prevention of new infections, early detection through routine testing and early treatment of those with tuberculosis and human immunodeficiency virus infection and disease. It should be used in conjunction with the relevant Department of Health Guidelines.

The technical staff of the Department of Correctional Services at national and regional level will be responsible for ensuring that these guidelines are implemented by all health professionals within the Correctional Services. The Department of Health will provide assistance at the different levels through orientation, training and supervision.

Minister of Health

Dr Aaron Motsoaledi

Acknowledgements

The development of these guidelines has been a collaboration between the National Department of Health(NDOH), the Department of Correctional Services (DCS) and partners – the Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Office on Drugs and Crime (UNODC), World Health Organisation (WHO), The Aurum Institute, TB / HIV Care Association, Right to Care, and the University Research Co.(URC)

NDOH acknowledges the writing and editing team at the Aurum Institute, Parktown, South Africa, for their invaluable contribution to this document.

Director General for Health

Ms M P Matsoso

Abbreviations

ACSM	Advocacy, communication and social mobilization
AFB	Acid-Alcohol Fast Bacilli
AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral treatment
BCG	BacilleCalmette-Guerin
CD4 cells	White T helper cells which are progressively reduced in AIDS
CMV	Cytomegalovirus
CMX	Cotrimoxazole
CSF	Cerebrospinal fluid
DCS	Department of Correctional Services
DOH	Department of Health
DOTS	Directly-observed treatment short-course
EIA	Enzyme immunoassay
ETR	Electronic tuberculosis register
HAART	Highly active antiretroviral treatment
HCW	Health care workers
HCT	HIV counselling and testing
HIV	Human Deficiency Virus
INH	Isoniazid
IPT	Isoniazid preventive therapy
IV	Intravenously
LDH	Lactate dehydrogenase
MDR-TB	Multidrug-resistant tuberculosis
MMC	Medical male circumcision
MSM	Men having sex with men
M. tuberculosis	Mycobacterium tuberculosis
NGO	Non-governmental organization
NHLS	National Health Laboratory Service
NSP	National Strategic Plan on HIV, STIs and TB
OI	Opportunistic infections
PCR	Polymerase-chain reaction
PEP	Post-exposure prophylaxis
PICT	Provider initiated counselling and testing
PJP	Pneumocystis jiroveci pneumonitis
PLHIV	People living with HIV
PMTCT	Prevention of mother-to-child transmission
PNP	Peripheral neuropathy
Qid	Four times a day
STI	Sexually transmitted infections
TB	Tuberculosis
tds	Three times daily
T. gondii	Toxoplasma gondii
Tier.net	Monitoring and evaluation system for ART
UVGI	Ultraviolet germicidal radiation
WHO	World Health Organization
XDR-TB	Extensively drug-resistant tuberculosis

Executive Summary

Why we need these guidelines for correctional centres

- Inmates come from communities with **high rates of tuberculosis (TB) and human immunodeficiency virus (HIV)**. They may be undiagnosed or on treatment, which is then interrupted on incarceration, causing a **high risk of transmission** of disease.
- **Overcrowding, high population turnover and unhygienic conditions** contribute further to the spread of infectious diseases in correctional centres.
- **Inmates have the right to receive health care**, including preventive measures, equivalent to the care available in South African communities.
- Policies and practices should be put in place **to create a safer environment and diminish the risk** of transmission of TB, HIV and sexually transmitted infections (STIs) to inmates and staff alike.

Screening and diagnosis in correctional centres

- **Voluntary HIV counselling and testing** should be offered to all inmates at entry / exit and upon self-presentation. Two positive rapid tests confirm HIV infection. Inmates whose CD4 count is <350 cells/ μ L should be started on antiretroviral therapy (ART) and all inmates with newly diagnosed HIV should be assessed for TB infection.
- **Symptom-based TB screening** should be done in all inmates at entry / exit, upon self-presentation or as campaign screening at least annually. Screening needs to be extended to contacts. Chest X-ray and GeneXpert[®] MTB/RIF are complementary. An outbreak is defined as more than two inmates from one cell having TB, requiring investigation in collaboration with the Department of Health.
- **Universal screen for anal, oral and genital STIs** should be done in all inmates at entry, upon self-presentation and quarterly for HIV-positive inmates using specific algorithms based on symptoms.
- For **TB diagnosis**, all adult inmates with suspected TB should provide two sputum samples. If one of the specimens is smear or GeneXpert[®] MTB/RIF positive, TB treatment is commenced. If both specimens are negative in either test, HIV-negative inmates receive amoxicillin 500mg three times a day for 5 days and are then reassessed. HIV-positive inmates are referred for assessment, X-ray and TB culture.

Treatment in correctional centres

- **TB treatment:** Smear- or culture-positive and GeneXpert[®] MTB/RIF-positive, rifampicin-sensitive patients should be treated according to the National Tuberculosis Management Guidelines, the latter further need a second specimen sent for microscopy. GeneXpert[®] MTB/RIF-positive, rifampicin-resistant patients need to be referred to a multidrug-resistant TB unit for further management. Inmates with pulmonary TB should be isolated for two weeks. Hospitalisation should be considered for diabetes, liver disease, respiratory insufficiency, haemoptysis, serious adverse events of therapy and severe extrapulmonary disease.
- All **HIV-positive inmates** require repeat CD4 testing every 6 months, monthly TB symptom screening and regular STI screening. They should receive cotrimoxazole TB prophylaxis if CD4 count >350 cells/mm³ and ART if CD4 <350 cells/mm³ or WHO clinical stage IV disease. If inmates have TB,

ART should be started immediately. They should be screened for cryptococcal disease if $CD4 < 100 \text{ cells/mm}^3$.

- **STIs treatment** must be initiated immediately in all inmates with a confirmed diagnosis. The syndromic management flow charts for management of symptomatic STIs outlined in the DOH guidelines must be followed. In addition, HCT (if not recently tested), condom promotion, adherence counselling and education about the importance of partner notification and treatment. All patients must be reviewed on completion of treatment and referred if not responding to treatment.
- **Adherence support** should consist of information on the regimen and the reason for long-term treatment including side effects of therapy. Education should emphasise the importance of taking treatment exactly as prescribed. Support provided by nurses, care workers, treatment buddies and support groups should be complemented by pill counts.

Prevention in correctional centres

- Inmates and correctional centre staff should **be informed about TB, HIV and STIs** including prevention in their increased risk environment. Peer education as an effective means involves dissemination of correct information by both centre staff and inmates.
- **TB prevention:** Isoniazid preventive therapy (IPT) should be given to all HIV-infected adults who are not on TB treatment; are asymptomatic for TB; have no active liver disease and no history of alcohol abuse, psychosis, convulsions or neuropathy. Isoniazid 300 mg plus Vitamin B6 25 mg daily should be given for the duration of incarceration. Inmates should be monitored for side effects and indications for interruption of IPT. Special considerations apply for infants.
- **TB infection control** consists of environmental and administrative controls and personal protection. These involve an Infection Prevention and Control Committee and Plan, risk assessments, education of staff and inmates, regular screening, isolation of TB patients, coughing etiquette, face masks, save environments for sputum provision, natural ventilation where possible and ultraviolet germicidal radiation where affordable.
- **HIV prevention** requires a comprehensive approach including access to condoms and water-based lubricants; reducing vulnerability to rape; post-exposure prophylaxis with established drug regimens including monitoring of drug safety and potential seroconversion; harm reduction programmes to reduce the risk of HIV-transmission related to substance abuse; education on risk behaviour and preventive measures with a focus on men having sex with men; and male circumcision with adequate counselling on risk reduction after the intervention.
- **HIV- and TB-related stigma and discrimination should be antagonised** by peer education, support groups and information campaigns.

Women and child health in correctional centres

- **To prevent TB in pregnancy**, TB symptom screening should be done at every visit for all pregnant women, regardless of their HIV status. **All HIV-positive pregnant women without TB symptoms should receive IPT.**
- TB treatment should be given to all women if indicated.
- All HIV-positive pregnant women **should receive ART** regardless of their CD4 count.
- **All women** irrespective of HIV and TB status should be encouraged to **breastfeed**. If active TB has been excluded, **all infants** living with their mothers in correctional centres **should be started on IPT.**

- Prevention of mother-to-child transmission to be completed

Post-release from correctional facilities

- Efforts should be made to retain all inmates admitted to, transferred between and released from correctional facilities within the continuum of TB/ HIV care.

Recording and reporting

- Reporting, monitoring and evaluation is paramount and needs to strictly follow Department of Health (DOH) policies.

Human rights

- The rights of inmates, staff and health care workers guaranteed in the *Constitution of the Republic of South Africa* and the *Correctional Services Act* have to be systematically secured.

1. INTRODUCTION

1.1 Tuberculosis and Human Immunodeficiency Virus in Correctional Centres

An estimated 360,000 inmates move through the South African correctional centre system annually.¹The 2011/2012 annual report of the Department of Correctional Services (DCS) states that during this period, the inmate population was on average 158,790.²Inmates come from communities with high rates of tuberculosis (TB) and human immunodeficiency virus (HIV)/Acquired Immunodeficiency Syndrome (AIDS) prevalence, unemployment and poverty. On incarceration, they may have undiagnosed disease or may be on treatment, which is then interrupted in the process. This poses a high risk of transmission of TB and of selection for resistance in those who default treatment. Overcrowding, high population turnover and unhygienic conditions contribute further to the spread of infectious diseases within correctional facilities. Finally, DCS health care services are not adequately supported, trained or equipped to respond to inmate health care needs, which may lead to worsening of the burden of infectious diseases within correctional centres.

Globally, TB and HIV present major health challenges which are multiplied in correctional centres. A national prevalence survey conducted by the DCS in South Africa in 2006 found that 19.8% of inmates were HIV-positive compared to a national population prevalence of 16.3%. A recent study conducted by The Aurum Institute at Johannesburg Medium B Correctional Centre found a TB point prevalence of 3.4% amongst 981 inmates, more than double the prevalence seen amongst the general population of South Africa. Approximately 67% of TB cases in this study had been previously undiagnosed.

High TB/HIV co-infection rates compound the effects of the individual disease. In 2006, 44% of all new TB cases diagnosed in South Africa were found to be co-infected with HIV.³TB is the number one cause of death in HIV-positive persons. HIV has a dramatic impact on TB epidemiology and has been implicated as a principal cause for TB resurgence.^{4,5,6,7} HIV increases susceptibility to new infections including sexually transmitted infections (STIs), and increases the probability of reactivation of latent TB infection.^{5,6}

The DCS has made notable strides in addressing various aspects of health care in South African correctional centres, including provision of TB/HIV and STI screening at entry. Sentenced inmates reportedly have 100 % access to primary health care services with the DCS ensuring access to condoms, TB treatment, isoniazid preventive therapy (IPT) and antiretroviral treatment (ART).⁸Particular attention needs to be paid to awaiting trial detainees in police holding cells who do not have the same access to services. Overcrowding is a major problem in these cells due to delays in the judicial process. On sentencing, these inmates are then transferred to correctional centres where they may transmit disease, or those not sentenced may transmit disease upon release in the communities where they live.

Despite the progress made by the DCS, the burden of TB and HIV in correctional centres is increasing. Reasons include DCS health care staff shortages, late case detection, lack of isolation facilities for inmates with infectious pulmonary TB and inadequate treatment. There is a need for transformation of health care services in correctional centres to prevent new infections among

inmates. For effective infectious disease control in correctional centres, a combination of strategies needs to be implemented centred around:

- 1) **Prevention:** implementing strategies that reduce the numbers of new infections, e.g. decreasing overcrowding, putting in place infection control measures, and initiation of preventive therapy in high risk groups amongst other strategies.
- 2) **Early case detection:** conducting active case finding starting with baseline/ admission screening as part of the mandatory health examination on admission to the correctional centre, followed by bi-annual symptom screening or screening at every encounter with the health services during the stay in correctional centres. Rapid diagnostic tools must be used to reduce delays in confirmation of disease.
- 3) **Prompt initiation of treatment:** initiation of standardised treatment within 48 hours of diagnosis. This will require close monitoring of the specimen collection, result reports, recording and filing of results.

1.2 Pathogenesis and Transmission of Disease

1.2.1 Transmission of Tuberculosis

Mycobacterium tuberculosis (*M. tuberculosis*) is the commonest cause of TB in humans. TB is usually spread from person-to-person through the air by droplet nuclei (<5 microns) that are produced when a person with pulmonary or laryngeal tuberculosis coughs, sneezes, talks or sings. Droplet nuclei may also be produced during investigations such as sputum induction, bronchoscopy and through manipulation of lesions or processing of tissue or secretions in the laboratory.

These droplet nuclei are highly infectious and so small that air currents normally present in any indoor space can keep them airborne for up to four hours. When inhaled, the droplet nuclei get to the alveolar spaces within the lungs, where *M. tuberculosis* replicates.

Three factors determine the likelihood of transmission of *M. tuberculosis*:

- the number of organisms expelled into the air;
- the concentration of organisms in the air, determined by the volume of the space and its ventilation;
- the length of time an exposed person breathes the contaminated air.

One cough can produce about 3,000 droplet nuclei and a sneeze up to a million droplet nuclei, each of them containing a number of bacilli. The infectious dose of tuberculosis, meaning the number of *M. tuberculosis* bacilli needed to cause an infection in a person, is 1 to 10 bacilli. People with the most infectious type of TB are those with smear-positive pulmonary TB where *M. tuberculosis* is found in their sputum upon microscopy. Those with smear-negative pulmonary TB are much less infectious, and extrapulmonary TB, where there are no bacilli in the lungs, is not infectious.

Transmission of *M. tuberculosis* generally occurs indoors, in dark, poorly ventilated spaces where droplet nuclei stay airborne for a long time. Close contact with an infectious person and prolonged exposure increases the risk of transmission. If transmission results in infection, the progression to active disease is dependent on the immune status of the individual. In those with normal immunity, 90% of infections will not progress at the time and only 10% will develop active disease.

People with suppressed immunity are more likely to develop active TB than those with normal immunity; for example 50-60% of HIV-positive people infected with TB will go on to develop active

disease. The annual risk of developing TB in an HIV-positive individual is 10% compared to a lifetime risk of 10% in a healthy individual. Immunosuppressive conditions such as silicosis, diabetes mellitus, and prolonged use of corticosteroids or other immunosuppressive drugs also increase the risk of progression to active TB.

Immunisation with the currently available vaccine Bacille Calmette-Guerin (BCG) in infancy provides limited protection against the progression of TB from infection to disease later in life. The main benefit of BCG is the protection against the development of serious forms of TB in children, such as TB meningitis and disseminated TB. BCG does not protect adults against pulmonary disease.

1.2.2 Progression from Infection to Disease

Primary infection is usually asymptomatic and a positive tuberculin skin test 4-6 weeks after infection is the only evidence that infection has occurred. Multiplication of bacilli has been prevented in this case and only a few of them survive in a dormant state in granulomas. In 10% of people, the immune response is not strong enough to prevent multiplication of bacilli. The bacilli may then spread throughout the body causing primary TB disease within a few months after infection.

Post-primary TB is the disease that occurs in a previously infected person. It may occur either by reactivation of the described dormant (latent) bacilli or by re-infection. Reactivation occurs when dormant bacilli, which may persist in tissues for years after primary infection, start to multiply. This may be in response to a trigger such as weakening of the immune system, for example by HIV infection. Re-infection occurs when a person who previously had a primary infection is again exposed to an infectious person.

1.3 Outline of the National Strategic Plan on HIV, STIs and TB 2012-2016

The South African *National Strategic Plan* (NSP) on HIV, STIs and TB 2012 – 2016 is driven by a long-term vision for the country with respect to the HIV and TB epidemics. It has adapted, as a 20-year vision, the three zeros advocated by the Joint United Nations Programme on HIV and AIDS (UNAIDS). The vision for South Africa is:

- zero new HIV and TB infections;
- zero new infections due to vertical transmission;
- zero preventable deaths associated with HIV and TB;
- zero discrimination associated with HIV and TB.

The South African NSP (2012-2016) has set the following **broad goals** to achieve the 20-year vision:

- to reduce new HIV infections by at least 50% using combination prevention approaches;
- to initiate at least 80% of eligible patients on ART, with 70% alive and on treatment five years after initiation;
- to reduce the number of new TB infections as well as the number of TB deaths by 50%;
- to ensure an enabling and accessible legal framework that protects and promotes human rights in order to support implementation of the South African NSP;
- to reduce self-reported stigma and discrimination related to HIV and TB by 50%.

Four strategic objectives form the basis of the collective South African HIV, TB and STI response:

1. Addressing social and structural barriers to HIV and TB prevention, care and treatment by influencing societal norms and behaviours through structural interventions to reduce vulnerability to, and to mitigate the impacts of HIV and TB;
2. Preventing new TB, HIV, ST infections by ensuring a multi-pronged approach to TBHIV, STI and TB prevention which includes all biomedical, behavioural, social and structural approaches in order to reduce new HIV, STI and TB infections;
3. Sustaining health and wellness by ensuring access to quality treatment, care and support services for those with HIV, STIs and/or TB, and to develop programmes focussing on wellness, inclusive of both physical and mental health;
4. Ensuring protection of human rights and increasing access to justice in order to address issues of stigma, discrimination, human rights violations and gender inequality.

2. GENERAL PRINCIPLES

2.1 General Principles of these Guidelines

These guidelines provide standards from a public health perspective which South African correctional centre authorities should strive to achieve in their effort to prevent HIV and TB transmission in correctional centres and to provide care to those most affected by these diseases. The guidelines are specific for the South African context with its extremely high burden of the TB / HIV co-epidemic and based on the general principles defined in the World Health Organization's (WHO) *Guidelines on HIV infection and AIDS in Prisons* as outlined below:⁹

- a) All inmates have the right to receive health care, including preventive measures, equivalent to that available in South African communities without discrimination as defined in the *Bill of Rights in the South African Constitution*, in particular with respect to their legal status.
- b) The general principles adopted by the South African NSP (2012-2016) apply equally to inmates and to the community.
- c) The implementation of these guidelines should be developed through close collaboration among the national and provincial departments of health authorities, correctional centre administrations, and relevant partners, including non-governmental organizations (NGOs). The strategies should be incorporated into a wider programme of promoting health among inmates.
- d) Preventive measures for HIV / AIDS and TB in correctional centres should be complementary to and compatible with those in the community. Preventive measures should further be based on i) the specific conditions in correctional centres conducive of TB transmission and ii) behaviours known to be common in South African correctional centres and increasing the risk of HIV / AIDS such as unprotected sexual intercourse, the sharing or reuse of tattooing and body piercing equipment and the sharing of razors for shaving.
- e) The active involvement of partners and inmates, and the non-discriminatory and humane care of both TB / HIV infected inmates and those with AIDS / active TB are prerequisites for achieving a credible strategy for preventing both HIV and TB transmission.
- f) It is important to recognize that any correctional centre environment is greatly influenced by both centre staff and inmates. Both groups should therefore participate actively in developing and applying effective preventive measures, in disseminating relevant information, and in avoiding discrimination.
- g) Correctional Services management have a responsibility to define and put in place policies and practices that will create a safer environment and diminish the risk of transmission of HIV and TB to inmates and staff alike.
- h) Independent research in the field of TB / HIV among South African correctional centre populations should be encouraged to inform successful interventions in correctional centres in the country. Independent examination by an ethical review committee should be carried out for research procedures in correctional centres, and ethical principles must be strictly observed. The results of such studies should be used to benefit management, inmates and staff, for example by improving prevention or treatment policies for both diseases in the specific setting of South African correctional centres. While correctional centre

administrations should not seek to influence the scientific aspects of such research procedures, their interpretation or publication, their prior approval of any such undertaking is required.

2.2 Roles and Responsibilities

2.2.1 Duties of Doctors

- Diagnose and treat patients appropriately;
- Provide initial education and counselling of patients;
- Clinically assess patients during treatment;
- Manage adverse effects of medicines;
- Refer very sick, complicated and multidrug-resistant(MDR) / extensively drug-resistant (XDR) TB patients to the appropriate level of care;
- Ensure appropriate use and storage of medicines.

2.2.2 Duties of Professional Nurses or Equivalent

- HIV testing, psychosocial support for co-infected patients;
- Organize the administration of treatment including directly observed therapy;
- Identify risk behaviours that may lead to default;
- Provide ongoing education and counselling of patients;
- Liaise with security staff;
- Assess patients monthly and in collaboration with the doctor;
- Liaise with the laboratory for follow up of results;
- Maintain an adequate supply of drugs, laboratory supplies and TB clinic/ patient cards and registers;
- Maintain updated patient records and registers;
- Establish a proper referral system for patients within correctional facilities and those referred to facilities outside correctional services;
- Ensure tracing and screening of all contacts of clients with infectious TB;
- Coordinate referrals for patients who are released or transferred to another centre while undergoing therapy and follow up on referrals;
- Coordinate awareness campaigns;
- Participate in district quarterly meetings;
- Provide appropriate information, education and communication education (IEC) material and conduct group health education activities;
- Prepare quarterly reports on case detection, sputum conversion and treatment outcome and submit to the sub-district and district.

2.2.3 Duties of the Regional DCS Programme Manager or Supervisor

- Plan and budget for TB and HIV activities;
- Monitor the implementation of the programmes in correctional centres;
- Liaise with the provincial TB and HIV managers;
- Conduct skills audit and coordinate training for staff;
- Provide technical assistance to the correctional centre health staff;
- Assist with the organization of the health services in correctional centres;

- Assist correctional centres in developing an efficient referral system of patients to ensure continuity of care for patients;
- Ensure sufficient drug supply and supplies in all correctional health facilities;
- Coordinate laboratory services and communication with laboratories;
- Conduct support visits to correctional health facilities;
- Collate and validate correctional health facility data;
- Plan and conduct social mobilisation and awareness campaigns, health promotion and educational campaigns;
- Adapt, develop and distribute relevant IEC material in local language;
- Compile and submit quarterly reports to the provincial level;
- Evaluate progress with implementation of the programmes;
- Participate in quarterly provincial TB/ HIV meetings.

2.3 Operational Issues

The DCS with the support of the DOH at national, provincial, district and sub-district levels must ensure that the required resources are available to enable relevant staff to operationalize and implement these guidelines. Issues to be considered in the implementation of the guidelines include, but are not limited to:

- Development and implementation of a Health Human Resources recruitment, retention, development and management strategy for the DCS;
- Development of staffing norms specific for the provision of health care services in a correctional environment;
- Provide the required equipment (computers, software, telephones);
- Assessment of drug supply management and drug storage capacity at DCS health facilities (including tracer medicines and supplies);
- Placement of x-ray facilities within DCS health facilities
- Consideration of point-of-care testing based on numbers of inmates and access.
- Mapping of laboratory services in relation to DCS health facilities in order to improve diagnosis.
- Explore possibilities of improving current infrastructure for infection control purposes;
- Assessment of DCS health facilities for the possible regional centralisation of MDR-TB and admission of MDR-TB patients;
- Development of a workplace TB Policy for DCS.

3. SCREENING FOR TUBERCULOSIS, HIV AND SEXUALLY TRANSMITTED INFECTIONS

3.1 Tuberculosis Screening

- TB screening should be done for inmates entering, currently residing or leaving a correctional centre.
- Inmates who present TB symptoms must be investigated as soon as possible. A proper history including previous episodes of active TB disease, family history of TB or TB contact and other underlying risk factors such as HIV and diabetes must be obtained from the inmate. A thorough medical examination should be undertaken followed by bacteriological and radiological examination.
- TB screening of correctional centre staff must be conducted within the occupational health services. The management of staff who acquired TB in the workplace must be outlined in the DCS Workplace Policy and communicated to all staff.

3.1.1 Frequency of TB screening

1. **Entry screening:** TB screening at entry to detect undiagnosed active TB and to identify inmates who are presently on TB treatment in order to ensure continuation and adherence to treatment. It is important that this screening is documented, and that the record can be found during follow-up, i.e. it needs to be filed alphanumerically.
2. **TB screening campaigns:** Bi-annual intensified case finding must be conducted amongst all incarcerated inmates.
3. **Self-reported /peer referred TB suspect:** Screening of inmates who visit the health facility at the correctional centre seeking relief for respiratory symptoms.
4. **Contact investigation:** Screening for TB amongst persons who have shared a cell or spent time with an inmate with active TB.
5. **Exit and transfer screening:** TB screening on release as part of the pre-release programme. This should include symptom screening, bacteriological examination and / or radiological examination as indicated.

3.1.2 TB screening and investigation

1. **Symptom-based screening:** TB symptom screening is recommended for all persons at the time of entry into the correctional centre. Any inmate who has symptoms suggestive of TB should be immediately isolated and evaluated for TB disease. Inmates are screened for symptoms of:
 - Persistent **cough** for more than 2 weeks;
 - **Fever** for more than 2 week;
 - Drenching night **sweats**;
 - Unexplained **weight loss** (more than 1.5 kg in a month);
 - General body weakness;
 - Chest pain;
 - Haemoptysis.

Inmates should also be asked if they have a history of TB disease or if they have been treated for latent infection or TB disease previously. Other underlying risk factors such as HIV and diabetes must also be identified.

Inmates who have any of the **first four TB symptoms** should be regarded as TB suspect and immediately receive a thorough medical evaluation, including sputum examinations or, if indicated, chest X-ray.

2. Chest X-ray

- Where indicated, TB suspects must be referred for chest X-ray to nearest public health facilities.
- Inmates with any parenchymal abnormality on their chest X-ray are followed up with sputum examination.
- Chest X-ray should not replace symptom screening. However, it can be used together with a symptom questionnaire. Numerous studies have shown that this screening combination doubles the TB case-finding rate.
- Cost and logistical barriers in most correctional centres mean that chest X-ray screening might not be readily available.

In addition, for every person who is identified with TB, a chest X-ray is needed to determine the extent of the disease, pre-existing lung damage or scarring, and to exclude concomitant lung disease. This will assist in pre-empting any residual lung impairment that might result from the disease.

3. Tuberculin skin test screening

Tuberculin skin testing has limited use in correctional centres as the test is too technical and its use on a large scale faces logistical problems.

4. GeneXpert® MTB/RIF testing

- A spot sputum specimen should be collected under supervision from an inmate presenting symptoms of TB and then sent for GeneXpert® testing. The laboratory request form should be completed fully and specify that this is a pre-treatment specimen. The results should be followed up with the laboratory within 24-48 hours.
- GeneXpert® MTB/RIF is particularly useful as a screening tool for TB in HIV-positive inmates where most patients initiating ART lack the classical symptoms of TB resulting in missed diagnosis.
- GeneXpert® MTB/RIF should not replace symptom screening but can be used in combination with symptoms and chest X-ray to increase sensitivity of testing.

5. Smear microscopy/ Culture

A spot sputum specimen must be collected from an inmate with a positive Xpert result for baseline microscopy. This is used to determine the infectiousness of the patient. Where Xpert result is negative, the inmate is HIV positive and TB highly suspected, a culture and LPA or DST may be conducted to confirm diagnosis of TB or DR-TB.

5. Contact investigation

Prompt and active screening for TB among close contacts of sputum smear-positive (i.e. infectious) pulmonary TB patients. Close contacts include, but are not limited to:

- All inmates who sleep in the same cell as the TB patient;
- Infants of women diagnosed with TB.

In addition, for multi drug (MDR-) or extensively drug-resistant (XDR-) TB cases, the following should also be considered for contact investigation:

- Inmates who spend time in closed or poorly ventilated work areas (e.g., carpentry and handicraft shops) that operate inside the same correctional centre as the TB patient;
- Inmates who interact with the TB patient during recreational activities;
- Correctional centre staff who come in contact with a TB patient;
- Visitors.

TB suspects among the contacts listed above must be identified and investigated for active TB.

6 Outbreaks: An outbreak investigation should be considered if more than two inmates from one cell are found to have TB. This should be done in collaboration with the DOH.

3.1.3 Managing inmates with TB symptoms

- Any inmate who has TB symptoms should be immediately isolated and investigated for TB disease. If TB is not confirmed they can then be transferred back to the cells.

3.2 HIV Screening

HIV Counselling and Testing (HCT) should be offered to all inmates. Participation should be voluntary.

3.2.1 Frequency of HCT

- **On entry, during incarceration and on release:** HCT should be offered as an integrated service with other health programmes, such as for TB, STIs, prevention of mother-to-child transmission (PMTCT), paediatric care (where applicable) and ART management.
- **As part of routine screening campaigns:** Provider-initiated testing and counselling (PITC).
- **Inmate-initiated HCT:** When inmates present at the health care facility of a correctional centre requesting to be tested.

3.2.2 How to conduct HCT

- Written verbal consent should be obtained.
- Pre-test counselling sessions, these may be conducted in groups or individual sessions.
- Rapid HIV testing should be carried out with a finger prick using an approved testing kit.
- Inmate should be re-tested within three months after first HIV-negative test result.
- If the first rapid HIV-test is positive, a confirmatory HIV-test (second rapid test) should immediately be performed from a second finger prick using a different rapid test kit product.
- An inmate is considered HIV-positive if the second rapid test is also positive.
- Refer for HIV ELISA antibody laboratory testing if first and second test results are discordant.
- Point-of-care CD4 testing and immediate referral for ART initiation of inmates whose CD4 count is <350 cells/ μ L.
- Assess all inmates with newly diagnosed HIV for active TB or latent TB infection; including symptom screening, history of exposure, physical examination, and chest X-ray. A tuberculin skin test with 5 mm induration cut-off is recorded as positive.
- When CD4 <200 cells/ μ L and tuberculin skin test are negative, patients should have repeat tuberculin skin test after initiation of ART and immune reconstitution.

3.3 Sexually-Transmitted Infection Screening

Universal screening for anal, oral and genital STIs for all adolescent and adult inmates on admission to a correctional centre must be conducted. Special focus should be on gonorrhoea, syphilis and chlamydia screening.

3.3.1 Frequency of screening

- Inmates entering a correctional centre;
- Self- or peer-reported suspected STI cases;
- Quarterly STI symptoms screening for HIV-positive inmates.

3.3.2 How to screening for STIs

- Conduct sexual history, exposure and behavioural risk assessment.
- Make use of specific algorithms for STI screening based on presence of symptoms, e.g. ulcers, lacerations or urethral discharge etc.
- Physical examination of those with symptoms
- Laboratory examination where indicated

3.4 Screening for chronic diseases/ conditions

- Diabetes;
- Hypertension;
- Alcohol and substance use;
- Obesity.

4. TREATMENT OF TUBERCULOSIS, HIV, AIDS AND SEXUALLY TRANSMITTED INFECTIONS

Treatment of inmates with TB and HIV / AIDS should generally follow the latest DOH Guidelines.

4.1 Tuberculosis treatment

Treatment is based on diagnostic testing:

- Xpert® MTB/RIF-positive, rifampicin-sensitive:
 - Send a second specimen for microscopy;
 - Follow the National Tuberculosis Management Guidelines 2013.
- Xpert® MTB/RIF-positive, rifampicin-resistant:
 - Refer to MDR-unit for further management.
- Smear or culture positive:
 - Follow the National Tuberculosis Management Guidelines 2013.

All patients with drug sensitive TB (New and Retreatment) must be treated with Regimen 1 (2RHZE/ 4RH)

Table 4.1: Management of drug-resistant TB

	Definition	Management
Mono-resistant TB	Resistance to a single first-line drug.	Seek expert opinion.
Poly-resistant TB	Resistance to two or more first-line drugs, but not including both isoniazid (INH) and rifampicin.	Seek expert opinion.
MDR-TB	Resistance to both INH and rifampicin.	Refer to MDR-unit.
XDR-TB	Resistance to INH, rifampicin, any fluoroquinolone and any second-line injectable	Refer to MDR-unit

NB: Non-tuberculous mycobacteria or mycobacteria other than TB is not the same as drug-resistant TB and must be referred for specialist assessment and treatment.

- MDR- /XDR-TB treatment facilities in correctional services:
 - Ideally there should be one MDR- /XDR-TB isolation facility per region:
 - Should include mono/poly-drug resistance specialist advice;
 - Specialist consultation from DOH (outreach team);
 - Ensure access to audiometry
 - Correctional centre management should be advised on appropriate prioritisation if inmates need to visit an external MDR-unit.

4.1.1 Isolation of inmates with infectious TB

Inmates diagnosed with pulmonary TB should be isolated for at least two weeks (if drug susceptible TB) and at least 6 months or when smear and culture negative if MDR/ XDR-TB. If they need to leave the isolation area for any reason, they should wear a surgical face mask.

4.1.2 Criteria for hospitalisation

Hospitalisation must be considered for TB patients under the following circumstances:

- Diabetes/ liver disease
- Respiratory insufficiency
- Moderate to severe hemoptysis
- Serious adverse events due to TB medicines
- Severe extrapulmonary disease
- Confirmed MDR/ XDR-TB

4.2 HIV and STI care and treatment

HIV prevalence in correctional centres ranges from 6% in the Western Cape to approximately 34% in KwaZulu-Natal.¹⁰ There is thus sufficient need to warrant on-site HIV care services to improve access to required services.

All HIV-positive inmates require;

- scheduled repeat CD4 testing every 6 months;
- monthly TB symptom screen (see 3.2);
- regular screening and treatment of STIs (quarterly for HIV-positive inmates; see 3.3);
- cotrimoxazole TB prophylaxis if CD4 <350 cells/mm³;
- TB and HIV prevention counselling;
- management of other opportunistic infections;
- isoniazid preventive therapy (IPT, see eligibility criteria in 5.2.1);
- cryptococcal screening if CD4<100cells/mm³;
- ART in patients with;
 - CD4 <350 cells/mm³ or WHO clinical stage IV disease;
 - DS-TB/ DR-TB patients

4.3 Adherence Support

Several measures have been shown to increase adherence with long-term treatment for HIV and TB which may pose considerable challenges to patients. These measures become essential in the demanding setting of correctional centres to assist inmates in completing their treatment.

4.3.1 Education and information

It is critical that inmates are provided with sufficient information about the treatment they are receiving including the regimen, dosage and the reason for long-term treatment. They should be made aware of what side effects they might have to expect and what action to take if they experience any of these side effects. Education should emphasise the importance of taking treatment exactly as prescribed to avoid ineffective treatment and inducing resistance. Before and during treatment, it is important to continuously remind inmates of the importance of scheduled

follow up visits and continuous tests as prescribed by their health care worker (HCW) or nurse. Care takers should explain to inmates the risks of combining treatment with other substances and that they need to avoid sharing their medication with other people.

4.3.2 Counselling

Counselling is a cornerstone of ensuring adherence and should be started on the day of HIV screening. Counselling is aimed at alleviating fears, dispelling myths and eliminating uncertainties patients might have in relation to their diagnosis and treatment. Counselling should be done every time the inmate is seen during follow up in addition to the discussion of acute issues arising from treatment at that particular moment.

4.3.3 Support

For any patient to adhere to treatment they need support from health care providers, other support staff, family members and / or their peers. In correctional centres, support groups play an important role. Nurses and peer educators need to be trained on how to run a support group and should be mentored until they are fully competent in this important task. Everyone involved in care will have to know about support groups existing at the respective centre so that they can link newly diagnosed inmates to a support group. HCWs and nurses have to build a sound rapport and effective relationship with inmates so that these patients trust them and are encouraged to be open with them. To enhance support, care providers should encourage inmates to have a treatment buddy, a person who will remind and encourage them to take their treatment regularly.

4.3.4 Pill counts

For all inmates who are new on treatment, care providers should do regular pill counts to improve adherence. This measure complements counselling and education on treatment. For inmates new on treatment, a treatment buddy is very helpful to inform, motivate and monitor them.

4.4 Opportunistic Infections

The common opportunistic infections (OI) in HIV-infected persons are outlined in the table below.

Condition	Cause/ Aetiology	Clinical features	Action
Pneumocystis jiroveci pneumonitis (PJP)	Fungus called <i>Pneumocystis jiroveci</i>	Tachypnoea, recessions, respiratory distress, sometimes cyanosis, usually very little to hear on auscultation.	Refer for investigation and management
Cryptococcal meningitis	Fungus called <i>Cryptococcus neoformans</i>	Change in mental status (from confusion to lethargy to coma), headache, fever; Nausea, vomiting, papilloedema, focal neurologic deficits neck stiffness and sensitivity to light; Lungs: from mild pneumonia to acute respiratory distress syndrome (ARDS), fever, cough, dyspnoea; Skin: papules, pustules, nodules, ulcers; Bone lesions.	Refer for investigation and management

Mycobacterium avium complex	Mycobacterium avium complex (MAC) <i>M. avium</i> , <i>M.intracellulare</i> , <i>M. paratuberculosis</i>)	Recurrent fever, Weight loss Failure to thrive (children), Fatigue Chronic diarrhoea, Malabsorption; Persistent or recurrent abdominal pain; Lymphadenopathy, hepatomegaly, splenomegaly.	Refer for expert opinion
Cytomegalovirus (CMV) retinitis	Cytomegalovirus	Asymptomatic, or present with floaters, field defects, scotoma, or decreased visual acuity.	Refer for investigation and management
Toxoplasmosis	Toxoplasma gondii	Fever; Headache; Confusion and/or focal neurological deficits.	Refer for investigation and management
Kaposi's Sarcoma	Human herpes virus type 8(HHV – 8)	Skin: Purple or bluish patches and nodules Oral: Usually palate, tongue or gums GIT: Pain, bleeding, or obstruction Lungs: Dyspnoea, cough, wheezing, and /or haemoptysis;	Refer for expert opinion

4.5 Managing patients who refuse treatment

Treatment is voluntary, adequate counselling should be provided to the patient to ensure they understand the implications of not taking the treatment on their health and that of others. Full knowledge regarding the treatment must be communicated for them to make an informed decision. For MDR and XDR-TB treatment informed consent must be obtained from the patient or family member or designated person in cases where the patient is not in a state to make a decision. Where all efforts fail to convince patient to take treatment or when patient terminates consent, the patient must sign the *Refusal of Treatment* form.

4.6 Managing awaiting trial MDR and XDR-TB detainees

Whilst the rights of the detainees to a fair and speedy trial must be upheld, the appearance of the patient in court may pose a public health risk due to the following;

- inadequate ventilation in courts
- medical condition of the patient (bacteriological results, severity of disease, response to treatment)
- transportation of patient to court

To expedite court appearances for such high risk detainees, court rooms which meet the criteria for airborne infection control or courts with enclosed accused/ witness stands and remote court proceedings through video conferencing may be considered. Appropriate personal protective equipment must be used during transportation of the patients to court.

4.7 Nutrition

There is a vicious cycle between tuberculosis, HIV and malnutrition with one fuelling the other. The availability of safe and healthy food is essential in maintaining and improving inmates' health.^{11,12} Considerable benefits can be achieved when correctional centres work in a complementary manner to promote healthy lifestyles and facilitate healthy eating. Adequate nutrition should be considered one of inmates' basic human rights.

Undernourishment can be considered one of the risk factors in the development of TB, since it is known to adversely affect the immune system and predispose people in high risk settings to acquiring TB infection/ TB disease. Targeting nutritional support to malnourished populations at high risk for TB could potentially reduce the incidence of active TB. Vulnerable groups in correctional centres – such as pregnant and breastfeeding women, substance users, teenagers and elderly people also have specific dietary requirements.

TB / HIV co-infected TB patients present with loss of appetite, nausea and vomiting, diarrhea, weight loss and micro nutrient deficiencies which result in anorexia, weakness and cachexia. Energy requirements are high in TB patients at about 35-40 kcal per kilogram of ideal body weight. This estimate is based on the energy and nutrient requirements for an undernourished and hypercatabolic patient. In TB / HIVco-infected patients, the energy requirements could be increased by 20 - 30%. Mineral and vitamin requirements are higher in TB patients because they are important in maintaining body functions and for different metabolic processes. Therefore, multivitamin and mineral supplements providing 50 – 150% of the recommended daily allowance are recommended.

A healthy meal should mainly consist of starchy foods and a variety of other nutrients such as vitamins and minerals (fruits, vegetables), proteins (beans, milk products, meats, eggs, fish, nuts), sugars and fats, should be included every day.

It is recommended that meals in correctional centres should be nutritionally balanced, with low fat, sugar and salt content and high in complex carbohydrates. Meals should include 5-6 portions of fruit and vegetables daily. There must be a set menu consisting of breakfast, lunch, dinner with at least one hot meal per day and approved by a qualified dietician. This menu should be rotated monthly.

It is however important not to recommend routine special diets as these are unnecessary from a medical point of view and could potentially become a perverse incentive.

5. PREVENTION OF TUBERCULOSIS, HIV AND SEXUALLY TRANSMITTED INFECTIONS

5.1 Education

Inmates and correctional centre staff should be comprehensively informed about TB, HIV/AIDS and STIs, including effective ways of preventing transmission in the increased risk environment within correctional centres. Clear information should be provided on all types of sexual behaviour that can lead to HIV-transmission. Information also need to consider the needs of inmates after release. Education material intended for the general public (posters, leaflets and the mass media) should also be made available to inmates.

Inmates should receive TB and HIV/AIDS education on their entry into the correctional centre, during their incarceration and in pre-release programmes. All inmates should have an opportunity to discuss health-related information with appropriate staff.

To enable peer education as an effective means of education, both correctional centre staff and inmates should be involved in disseminating correct information. Correctional services should train inmates as peer educators so that they are enabled to mobilise and educate their fellow inmates. These peer educators should be educated on TB, HIV/AIDS and STIs with regular updates on new developments with regard to prevention and treatment of these diseases. Health care professionals, social workers and trainers should support, mentor and monitor the work done by peer educators to ensure and improve quality. Even though peer educators should be independent; they need guidance by a professional who can answer their questions and advise them to fully develop their potential and equip them with relevant skills to fulfil their task with maximum effect.

Advocacy, communication and social mobilisation (ACSM) should include

- Treatment literacy;
- Infection control, e.g. cough hygiene;
- Symptom recognition;
- Rights and responsibilities;
- Stigma assessment and reduction;
- Education, e.g. peer education;
- Behaviour change communication;
- Adherence support.

5.2 Tuberculosis Prevention

5.2.1 Isoniazid Preventive Therapy in Adult Inmates

IPT reduces TB incidence in HIV-infected patients.¹³ Despite the fact that ART reduces the likelihood of developing TB disease, TB incidence among HIV-infected patients receiving ART is still 10 times greater than in the general South African population.¹⁴ IPT can be safely given to patients on ART to reduce the incidence of TB.¹⁵

All HIV-infected adults who:

- are not on TB treatment;

- are asymptomatic for TB;
- have no active liver disease/ history of alcohol abuse;
- have no history of psychosis, convulsions, neuropathy.
- Positive Tuberculin Skin Test

As there is a high rate of TB transmission in correctional centres, eligible HIV-positive inmates should remain on IPT for the duration of their incarceration.

5.2.2 Isoniazid Preventive Therapy in Children

All children less than two years of age, whether HIV- positive or HIV-negative, staying with their mothers in the correctional centre and who are asymptomatic for TB should receive IPT to prevent development of TB disease:

- If asymptomatic: start IPT;
- If symptomatic: investigate thoroughly for TB.

5.2.3 Infection Control

Correctional facilities face inherent difficulties in implementing TB infection control because of the limitations placed on mobility of persons and the need to secure the environment. Infection control strategies therefore need to accommodate these difficulties.

TB infection control strategies aim to address the following:

1. Reduce the production of infectious TB droplets in the local environment. These interventions are referred to as administrative controls.
2. Eliminate infectious TB droplets once they are generated. These are referred to as environmental controls.
3. Decrease or prevent inhalation of infectious TB droplet nuclei by staff and inmates, and minimize the risk of developing active TB. These interventions are referred to as personal protection.
4. Creating an enabling environment to facilitate implementation of TB infection control interventions , referred to as Managerial controls

The above infection control measures are based on an understanding of the biology of the transmission of TB. In order to implement them, several other preconditions to facilitate the creation of an enabling environment in which the respective interventions can be implemented have to be fulfilled:

1) Managerial Controls

In as much as political pressure and commitment is required for the implementation of TB control programmes, managerial commitment to the implementation of TB infection control is necessary within correctional centres to ensure success of TB prevention efforts. All correctional facility staff and all persons entering the facility should be aware of the risk of TB transmission, and be committed to reducing the risk of TB through implementation of these measures.

- a. An Infection Prevention and Control Committee should be established to coordinate the development and implementation of the plan in the different areas of the correctional facility. This should be a multidisciplinary group comprising the Head of the correctional centre, infection control officer, TB and HIV coordinator, an environmental hygiene supervisor and unit managers.

This committee should have the following responsibilities:

- i. To meet monthly;
 - ii. To ensure risk assessments are conducted annually;
 - iii. To develop and update a TB infection control plan;
 - iv. To review the quality of implementation of TB infection control in the centre;
 - v. To ensure ongoing staff training regarding requirements of TB infection control;
 - vi. To effect any changes necessary to ensure TB infection control is implemented.
 - vii. To ensure that finances and budgets allow for implementation of infection control interventions. These may include costs of shelters for outside waiting areas, fans to circulate air and ultraviolet germicidal irradiation (UVGI) units. If immediate funding is not available, donor funds may be sought to effect changes.
- b. A designated infection control officer should be appointed who will be responsible for overseeing the implementation of the infection control plan, training of HCWs, inmates and custodial officials and monitoring the impact of the measures in place.
- i. Training of correctional centre staff in TB infection control interventions. All staff, including professional nurses, doctors, inmates performing cleaning duties and pharmacists should be aware of the details of the infection control plan. This will ensure that the relevant officials and inmates are informed of TB infection control measures.
 - ii. Education of inmates in TB awareness and TB prevention. Awareness of TB signs and symptoms by inmates leads to better health seeking behaviour and a shorter time-to-diagnosis. This in turn reduces spread of TB, and improves TB control. Within the centre, health promotion talks, posters and leaflets on TB and HIV should be available and include TB awareness.
- c. The TB infection control plan must be developed annually for each correctional facility. This should be informed by the findings of the risk assessment. It must outline what should be done in case of inmates or staff with TB symptoms and those diagnosed with TB, and precautions to be taken by inmates and staff. The plan should have the following structure - coordination of TB infection control; administrative controls, environmental controls; personal protection. It should also indicate the name of the person responsible for each intervention. The document must be evaluated quarterly and updated whenever necessary to accommodate for changes.

2) Administrative controls

These are the most important of interventions to reduce TB infection in correctional centres. The interventions listed below can only be implemented through a coordinated effort of centre managers. Cough etiquette should be emphasized so that few infectious TB droplets are produced and released into the air. The following strategies are recommended:

1. Screening of inmates for cough as they enter the centre and at regular intervals.
 - a. Screening on entry to the centre is best done within six hours of admission. A poster promoting inmate disclosure of coughing should be placed in a prominent position in the screening area.

- b. Screening of inmates for TB signs and symptoms should be conducted during consultation.
 - c. Inmates should be encouraged to report if their fellow inmates are coughing in order to ensure prompt diagnosis and treatment.
2. Separation of inmates who cough from those who don't (triaging):
Isolation facilities for inmates who are coughing during investigation must be established to ensure that they are not mixed with non coughing inmates in the cells. In the health facilities coughing patients should be triaged in waiting areas and those admitted in hospitals kept in isolation wards until sputum investigation results are available.
3. Education of inmates in cough hygiene:
All inmates should be educated about the importance of cough hygiene and hand washing. Coughing into masks or tissues traps droplets from a cough, and prevents generation of droplet nuclei which can spread TB. Inmates should be asked to dispose of these tissues or masks into appropriate receptacles in waiting areas. Additional supplies of masks or tissues should be given to warders for this purpose. Regular and timeous ordering of masks / tissues is necessary to ensure an uninterrupted supply.
4. Immediate referral and investigation for TB of inmates who are coughing:
 - a. Active follow up of inmates who are identified as coughing (either by staff or fellow inmates) should be undertaken immediately.
 - b. All correctional centre staff should be familiar with the procedures for screening and investigating inmates for TB.
5. Provision of a safe environment for collection of sputum:
 - a. All sputum collection should be done in a safe environment; the safest environment is out-doors in the sun.
 - b. It is appropriate to give the client access to an appropriate space to cough sputum, and also to give access to running water to wash hands afterwards.

3) Environmental controls

Environmental controls can reduce the risk of TB transmission by preventing the spread of *M. tuberculosis* containing droplet nuclei, decreasing their concentration in enclosed areas, and removing or cleaning contaminated air. The main focus is to attain adequate ventilation to remove all infectious droplet nuclei from the room.

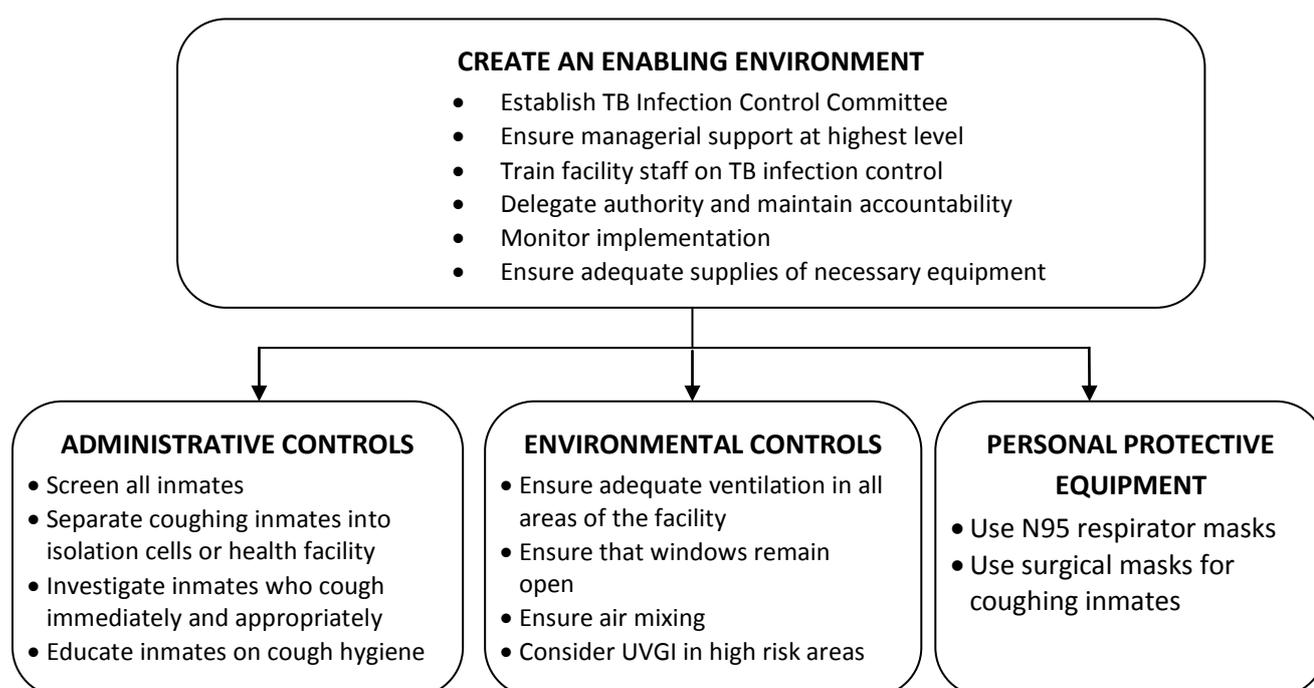
- a. Well-ventilated enclosed facility areas through:
 - Natural ventilation is always better than mechanical ventilation. Maintenance of good air circulation by opening windows and use of fans in waiting areas, accommodation facilities and consultation rooms.
 - Air mixing should be maintained – this can be done through natural means (air current induced by wind etc.) or mechanically through fans. The mixing of air is critical to ensure that all air has equal chance of being vented to the outside. When air is still, pockets of air may contain higher numbers of infectious droplets, and therefore increase the risk of acquiring TB infection by inmates and officials.
- b. Use of UVGI units:
 - If finances permit, UVGI units are a useful companion intervention to administrative controls and ventilation. These should be installed in high risk areas such as

admission cells or remand detention facilities where turnover of awaiting trial detainees is high.

4) Personal Protective Equipment (PPE)

1. Use of N95 masks to prevent inhalation of *M. tuberculosis*:
 - a. N95 masks are useful where strategies to limit production of infectious droplet nuclei are only partially effective. Officials attending to inmates who are suspected of having TB can wear N95 masks. Where risk of TB transmission can be adequately controlled through environmental and administrative means, N95 masks are not necessary.
 - b. Correct use of the masks is essential.
2. Use of surgical masks is recommended on inmates who are suspected of having TB or confirmed TB patients, in areas where they mix with other inmates/ staff and during transportation. This prevents the spread of infectious particles into the immediate environment following a cough.

Figure 5.1: Principles of TB infection control in correctional facilities



5.3 HIV prevention

For the most effective results of HIV-prophylaxis, it is critical that “Combination HIV-Prevention Strategies” which encompass biomedical, behavioural and structural strategies be employed.¹⁶

The minimum package of HIV-prevention measures in detention facilities should include:¹⁷

- Education;
- HIV counselling and testing;
- Access to condoms and water-based lubricants;

- Reducing vulnerability to rape and other forms of sexual assault;
- Post-exposure prophylaxis;
- Harm reduction programmes to reduce the risk of HIV-transmission and acquisition related to substance abuse (such as injecting drug use);
- Male Circumcision (with adequate counselling regarding risk reduction after circumcision);
- Basic hygiene measures such as soap and disinfectant.

Potential sources of HIV infection in correctional centres include: Sex (consensual or non-consensual), tattooing, sharing of needles, razors, hair clippers, violence, pregnancy, labour and breastfeeding.

5.3.1 Post-exposure prophylaxis

HIV post-exposure prophylaxis (PEP) is one of several interventions that together make up a package of “Biomedical HIV Prevention Interventions”. Basic principles of PEP in the Southern African context of high HIV prevalence and a generalized epidemic apply equally in the correctional centre setting.¹⁸ These include: a less heightened distinction between occupational and non-occupational HIV exposure; all unknown source exposure should be assumed to be HIV-infected; use of triple ART regimens; minimizing local exposure as far as possible; administration of PEP as soon after exposure as possible (efficacy after 72 hours is unlikely); all PEP regimens should be administered for a minimum of 28 days; a comprehensive infrastructure and support for the exposed individual. Concomitant exposures (such as Hepatitis B virus and other STIs) as well as other consequences (pregnancy, emotional and psychological trauma) should be dealt with appropriately.

Consideration should be given to the effectiveness, simplicity, tolerability and safety of the regimen. Monitoring the safety of the medicines as well as potential seroconversion is an integral part of PEP.

Table 5.2: Monitoring drug safety and seroconversion under PEP

	Source	Exposed				
	Baseline	Baseline	2 weeks	6 weeks	3 months	6 months
HIV	✓	✓		✓	✓	✓
Blood group		✓	✓if sero converted			
HBV		✓(Unless known immunity)				✓
FBC with diff		If on AZT	If on AZT			
LFT		✓				
ALT			✓	✓		
Cr Cl		✓	✓	✓		

5.3.2 Men’s Sexual Health

The South African NSP (2012-2016) specifically identifies men who have sex with men (MSM) as being at higher risk of acquiring HIV than heterosexual males of the same age, with men older than 30 years having the highest HIV prevalence. Although the law no longer criminalises sex between men, and the *South African Constitution* provides specific protection on the basis of sexual orientation, social attitudes lag far behind the law. MSM experience stigmatisation in both correctional centres and health settings, and hence are often reluctant to seek help relating health concerns.

MSM in correctional centres have a higher vulnerability for male-on-male rape. MSM who have been raped often do not seek health care, nor do they access post-exposure prophylaxis, both of which are key to reducing the high risk of HIV transmission during rape.

Concerted and specifically targeted interventions are needed to address the HIV and TB health needs of this group. The involvement of organisations with specific experience in working with MSM is crucial to ensuring meaningful MSM interventions. Training interventions should focus on;

- training of correctional services staff on stigma and behaviour change towards MSM;
- training of correctional services staff on the health needs of MSM, including their vulnerability to rape, HIV and TB;
- training of health care workers within correctional centres on the provision of MSM-friendly health services;
- training of health care workers within correctional centres on the provision of PEP to MSM, and “marketing” these services to the corrections community

Table 5.3: Activities to be implemented for different target groups

TARGET GROUP	ACTIVITIES
DCS staff	<ul style="list-style-type: none"> • Provide training for staff at all correctional centres regarding stigmatisation of MSM, including their legal and constitutional rights; • Provide training for staff at all correctional centres on MSM and their health needs, including their particular vulnerability to HIV and TB; • Provide training to staff at all correctional centres on the vulnerability of MSM to rape, and the higher risk of HIV and other STIs through rape; • Provide training to HCWs within correctional centres on how to provide more MSM-friendly health service; • Provide training to HCWs within correctional centres on how to provide PEP, particularly for rape.

Table 5.4: Core indicators of implementation

Indicator	Measurement
Proportion of correctional centrestafftrained on stigmatisation of MSM, including their constitutional and legal rights	Proportion (%)
Proportion of correctional centre staff trained on MSM and their particular health needs, including their particular vulnerability to HIV and TB	Proportion (%)
Proportion of correctional centrestafftrained on the vulnerability of MSM to rape, and the higher risk of HIV and other STIs through rape	Proportion (%)
Number of HCWs trained within correctional centres on how to provide more MSM-friendly health services	Number
Number of HCWs trained within correctional centres on how to provide PEP, particularly for rape	Number

5.3.3 Condoms

Correctional facilities should make sure that male and female condoms and lubrication for condoms are available and accessible for all inmates. Information and demonstration of correct condom use should form part of counselling.

5.3.4 Medical Male Circumcision

In keeping with the 2007 WHO/UNAIDS recommendation for countries with generalized HIV epidemics and low circumcision rates to promote medical male circumcision (MMC), and to

integrate it into a comprehensive HIV prevention package. South Africa in 2010 adopted voluntary MMC as a preventive intervention, prioritizing males between the ages of 15 and 49. MMC in correctional centres should be integrated into the provinces' programmes.

Factors that need to be considered when integrating MMC into TB / HIV management programmes in the correctional services include access, equity, maximum benefit to recipient, availability of service providers and the security status of the inmates. Some have suggested that inmates who are imminently due for release into society should be prioritised for MMC as this would address the above considerations of access, equity and maximum benefit to recipients. A minimum age of 18 years is recommended for MMC because it eliminates the need for parental consent which will be difficult to receive given the circumstances.

a. **Operational issues:** Integration of MMC into the TB / HIV prevention, care and treatment programmes in correctional centres is dependent on the provision of a basic package of services which includes:

- Provider Initiated HIV Counselling and Testing (PICT) and appropriate management of newly diagnosed HIV-positive inmates;
- TB symptom screening, appropriate investigation and management;
- Screening and syndromic management of STIs;
- Provision of condoms and promotion of correct and consistent use thereof;
- Age-appropriate risk reduction counselling that addresses the risks and benefits of MMC;
- Harm reduction counselling, including reducing the number and concurrency of sexual partners.

Refer to Annexure 3 for the MMC algorithm on page 41.

6. WOMEN AND CHILD HEALTH

6.1 Pregnancy and Tuberculosis

The principles of treating TB in pregnancy are as follows:

- It is very important to prevent and treat TB in pregnancy, both for the mother and the unborn child.
- Always conduct a TB symptom screen (see 3.1) at every visit for ALL pregnant women, regardless of their HIV status.
- All HIV-positive pregnant women should receive ART regardless of their CD4 count (see 4.1).
- All HIV-positive pregnant women who do not have TB symptoms should receive IPT (see 5.2.1).

Treatment of TB during pregnancy

- First-line TB medicines (2RHZE/ 4RH) can be safely used in pregnancy and during breastfeeding,
- Do not use streptomycin as it is ototoxic to foetus.

Figure 6.1: Diagnostic algorithm for HIV-positive pregnant women on ART

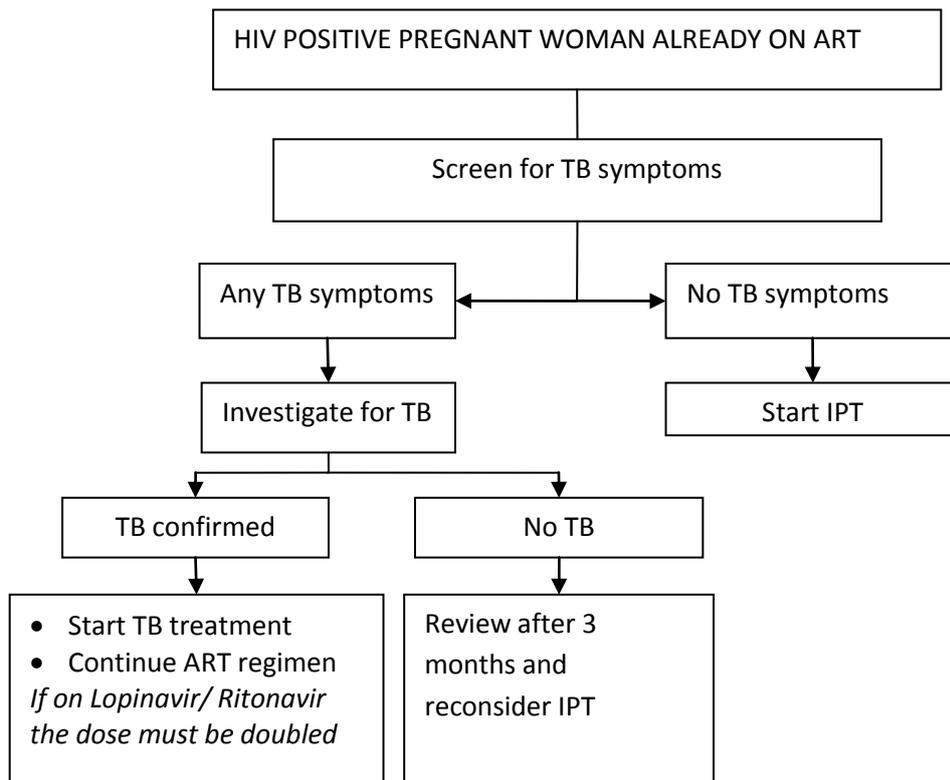
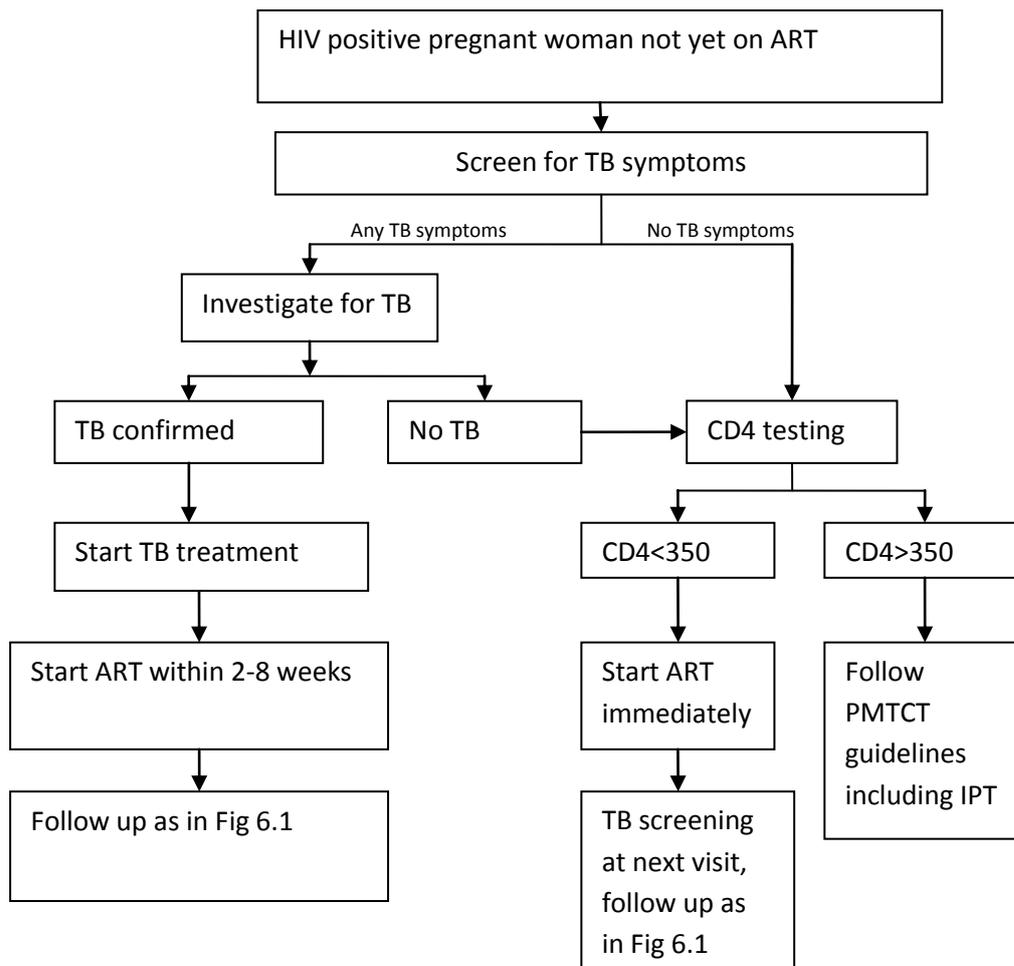


Figure 6.2: Diagnostic algorithm for HIV-positive pregnant women not yet on ART



Close monitoring is required for the following;

- Woman diagnosed with TB in the last **two months** of pregnancy;
- Woman with TB who has not shown good clinical response to therapy and/or whose smear microscopy has not converted.

All infants born to a mother with TB should be referred for a thorough workup to exclude active TB, if the infant has no TB and living with the mother, they must be started on IPT. All mothers should be encouraged to breast feed.

6.2 Infant feeding

The recommendations are as follows:

- All mothers can safely breastfeed.
- Exclusive breastfeeding for 6 months irrespective of HIV status must be promoted.
- Appropriate complementary feeding can be introduced after 6 months with continued breastfeeding for two years and beyond.
- HIV-positive women should however only breastfeed for maximum 12 months. Complementary feeding after 6 months can be introduced at 6 months, **and**
 - the mother should be on lifelong HAART; or

- the infant should be on daily nevirapine prophylaxis for the duration of breastfeeding, to a maximum of 12 months.¹⁹

7 POST RELEASE CONTINUUM OF CARE

7.1 Linkage and Retention in Care

The correctional facilities provide an opportunity to test for and treat HIV and TB. Favourable TB / HIV treatment outcomes among inmate in these facilities have been reported (unpublished Aurum data). However, during (a) admission into correctional centres, (b) transfer between centres, and (c) the transition back to their home communities, many (ex-) inmates are likely to discontinue treatment. Once inmates fall out of the care continuum, not only is the health of the inmate at risk, but close contacts and sexual partners are potentially at risk of infection with drug-resistant TB or with HIV.

Health care professionals must develop comprehensive discharge plans for inmates on treatment for HIV / AIDS, STIs and TB who are to be released to ensure continuity of care and post treatment evaluation.

Objectives

1. To ensure that all inmates admitted to and transferred between correctional centres are retained within the continuum of TB / HIV care.
2. To ensure successful re-integration of released inmates into the general society by providing information and support to enable them to transition from the correctional facility-based TB / HIV care to community care after release.

These objectives are within the context of the South African NSP (2012 – 2016) which advocates ensuring that 70% of patients initiated on ART are alive and on treatment at the end of five years, and that >85% TB treatment cases are successfully treated.

Groups at high risk to be lost from the care continuum:

- Newly admitted inmates;
- Inmates transferred between correctional centres;
- Detainees attending court;
- Inmates who are discharged or released.

In order to meet the objectives in these identified target groups, the activities in table 7.1.1 are recommended.

Table 7.1: Activities to be implemented for different target groups

TARGET GROUP	ACTIVITIES
Newly admitted inmates	<ul style="list-style-type: none">• Immediate health screening and needs assessment at the time of admission to determine required level of care.• Rigorous inventory control at healthcare facilities to avoid stock run-outs for HIV and TB drugs.• Accurate and timeous record completion to facilitate follow up and linkage of inmates to appropriate care.• Establishment of inmate's tangible and perceived barriers that may impede their ability to seek care services within the correctional centre.
Inmates transferred between correctional	<ul style="list-style-type: none">• Establish communication systems between DCS health care professionals and case management officers in South African Police Services to ascertain transfer dates for inmates on HIV/TB treatment (at minimum 7 days prior notice).

centres	<ul style="list-style-type: none"> • Prior to the date of transfer, health care staff from transferring centre should provide receiving centre with verbal or written notice of the transfer at least 48 hours in advance. • Provide inmates with medical file and referral letter at the time of transfer (GW20/14). • Implement control checks at arrival to ensure that the referral package has been provided. • In case of classified inmates being transferred, the health care officials at the receiving end must obtain records from the transferring centre. • Telephonic follow up by transferring centre up within a period of 7 days to ascertain continuation of care.
Detainees attending court	<ul style="list-style-type: none"> • Establish communication systems between DCS clinic staff and case management officers to ascertain court dates for detainees on HIV/TB treatment (at minimum 7 days prior notice). • Provide a list of alternative healthcare facilities within the release catchment area. • Provide motivational counselling to detainees in order to create self-efficacy to confidently access community care. • Provide referral letter for detainees to carry to court, in the event of release directly from court. • Provide a minimum 7-day supply of continuation medication to the detainee. • Implement control checks at arrival to ensure that the referral package has been provided. • Inform community TB/HIV district coordinators of the release of the detainee and provide their contact details to facilitate community follow up.
Inmates discharged or released	<ul style="list-style-type: none"> • Establish communication systems between DCS clinic staff and case management officers to ascertain release dates for inmates on HIV/TB treatment (at minimum 7 days prior notice). • Establish inmate's expectations and concerns about seeking medical care and treatment after release. • Establish inmate's tangible and perceived barriers that may impede their ability to seek services upon release. • Develop entry-into-care plan with inmate. This should be appended to the release plan. • Provide referral letter and supporting documentation. • Provide a list of alternative healthcare facilities within the release catchment area. • Implement control checks upon release to ensure that the referral package has been provided. • Where possible, calling staff at the referral facility to inform them about the referral. • Where possible and applicable, an initial 30 day supply of treatment supply should be issued to inmate at the time of release. • Use of community corrections services to follow up inmates released with conditions. • Telephonic follow up with staff at healthcare facilities were inmates are referred. • Telephonic follow up with released inmates.

Table 7.2: Core indicators of success

Indicator	Measurement
Number of offenders released while on TB / HIV treatment	Number (n)
Number of pre-release counselling sessions per inmate prior to release	Number (n)
Proportion of released inmates on TB / HIV medication issued with continuation treatment supplies at time of release	Proportion (%)
Quantity of treatment continuation supplies issued per participant	Number of days' supply
Proportion of inmates successfully followed up at 30 or 90 days after release	Proportion (%)
Proportion of inmates entering care within 30 or 90 days after release	Proportion (%)

8 RECORDING AND REPORTING

8.1 Monitoring and Evaluation

Programme monitoring and evaluation should be conducted in order to improve accountability, enable ongoing learning and problem-solving, and identify opportunities for improvement. Measures should be simple and the communication in monitoring and evaluation should focus on:

- ensuring that each suspect and case receives appropriate management;
- describing the TBcontrol programme;
- assessing TB risk and performance of programme;
- collecting and organizing data;
- analyzing data and forming conclusions;
- using the information to improve the TB programme;
- for DCS correctional health facilities, regional offices and the national office, districts and sub-districts to monitor their performance and allocate resources appropriately;
- for DOH to allocate resources appropriately.

Principles for monitoring and evaluation in correctional centres:

- It is important that, where available, standard DOH data collection tools are used including the electronic tuberculosis register (ETR.net) and the monitoring and evaluation for ARTsystem (Tier.net).
- Duplicate data collection should be avoided and systems should aim to eliminate duplication.
- Important to ensure that management areas are assigned to a specific district for reporting purposes and that the reporting is implemented.
- DOH District support visits to correctional centres are recommended and should be facilitated through a direct link to the district.
 - Data quality assurance processes for health data should apply to correctional centres.
 - Correctional centres to participate in training and district programme review.
 - Important that visit findings are recorded, reported and communicated.
- Correctional services to use of the PHC supervisory manual.

8.2 Tools are used for monitoring TB and HIV patients

The following standard tools used by the DOH will be used to monitor performance of the TB programme in DCS:

- **TB and STI screening form:** Used to record screening for TB and STIs at entry to the correctional centre (within eight hours). It is important that this is filed and the records are easily retrievable for legal purposes.
- **Facility TB treatment record (GW 20/12):** The blue clinic/hospital card is used to collect all the information about the patient, treatment and outcomes. It serves as a medical record information and as any medico-legal documents must be fully completed and stored safely after the patient has been discharged from the correctional centre.

- **Laboratory request form for Sputum Examination:** A specific TB laboratory request form is available from the National Health Laboratory Services (NHLS). This form should be fully completed and accompany any specimen sent to the laboratory.
- **Patient treatment card (GW 20/15):** This is a patient-held card used to record details of treatment including daily doses taken for all TB patients on treatment. It can be presented by the patient at any facility to access treatment. This card must always be fully completed and up to date.
- **TB identification and follow up register (GW 20/13):** Used to record all symptomatic patients identified during the screening. The specimen collection date and results date are also captured in this register to monitor the turn-around time for the results, and time to initiation of treatment.
- **Tuberculosis register (GW 20/11):** Used to summarise key information on each registered patient. It provides an overview of all registered patients and should be used to monitor programme performance. The register needs to be updated on a daily basis.
- **Transfer/ Referral form (GW20/14):** Used to summarise the patient's condition and clinical progress when the patient is referred to another facility for continuation of treatment.
- **Drug resistant TB register for mono and poly-resistant TB, M/XDR-TB**
- **TB Notification forms**

8.2.1 The electronic TB register

The ETR.net and EDRWEB are programme management tools. The information in the paper registers is captured into the electronic register and collated using this tool. All health facilities at correctional services should have access to the ETR.net and the Tier.Net.

The following reports can be generated by the system for a specified period or as a summary over time:

- Reports on case finding;
- Reports on sputum conversion;
- Reports on treatment outcome;
- Facility profile reports.

The following standard tools used by the DOH will be used to monitor performance of the HIV programme in the correctional services:

- **HCT form (consent and HCT record card):** Used to record HCT information taken during screening and testing at correctional centre.
- **HCT register:** Used to summarise key information on each patient who underwent HCT. All inmates with HCT should be recorded in this register for easy follow up, CD4 count results and other relevant tests. TB screening should also be recorded.
- **Pre-ART register:** Used to summarise key information on each patient tested HIV-positive and not eligible for treatment. It should be used to monitor programme performance.
- **HIV clinic card:** This is a patient-held card used to record details of the visits and the changes in blood results and treatment.
- **ART register:** Used to summarise key information on each registered patient. It provides an overview of all registered patients and should be used to monitor programme performance.

- **New clinical stationery:** Used to capture HIV-positive patients’ data (prior to ART and on ART) during consultation. This form can be used as a transfer letter.
- **Tier.net:** Is a programme management tool. The information in the Pre –ART and ART register is captured into the Tier.net.
- **Laboratory request form for monitoring bloods** (CD4 count and viral load): programme for comprehensive management of HIV, care and treatment of HIV/AIDS from NHLS is a form used to request blood test.
- **IPT register:** Used to summarise key information on each patient registered on IPT. It provides an overview of all registered patients and should be used to monitor programme performance.
- **Adverse event form**
- **Referral/Transfer form**

8.3 Information flow

Paper-based tools are used at centre level to record the clinical information. This information is then entered into the TB register. Completeness of the registers is vital in ensuring good quality data. The registers must therefore be reviewed weekly for completeness and correctness. As soon as each page is completed it must be forwarded for capturing in the ETR as follows:

Form	When to submit
Pink sheets	As soon as it is completed including all fields up to “Pre-treatment sputum results”;
Yellow sheets	As soon as all the fields up to “End of the intensive phase sputum results” (2 or 3 months) are completed;
Green sheets	As soon as all the “End of continuation phase sputum results” (6-9 months), “Treatment outcome” and “all HIV information” fields are completed.
White sheets	Retain in the facility. This page must have complete information on case finding, smear conversion and treatment outcomes for all patients started on treatment. Where this is not clear, it must be rewritten in ink as this serves as the source document for audits.

8.4 Key issues to consider when completing the registers

8.4.1 TB identification and follow-up register (TB Suspect Register)

- Use NHLS bar code sticker to document specimen number;
- If testing was done by Xpert® MTB/RIF, indicate this in the “Comments” section
 - NB: Patients diagnosed with Xpert® MTB/RIF also need to have a smear taken to monitor treatment response.
- Offer all TB suspects HIV testing. An extra column can be added to record HIV result.
- Remember to complete the monthly summary sheet at the back of the TB Suspect Register.

8.4.2 DS-TB Register / DR-TB Register

- Complete all the fields in the TB register
- Update HIV and ART data in the TB Case Register.

- Update follow up sputum results at 2/3 months and on treatment completion
- Check for completeness before submitting to the next level

8.4.3 TB Notification Forms

- TB is an infectious disease with major public health significance; therefore a notifiable medical condition.
- TB notifications are reported to the South African Disease Notification System which is a passive surveillance system.³
- Complete and submit a notification form for each newly diagnosed TB case.

NB: Obtain accurate contact and alternate contact details to ensure follow up in the event of default. Confirm contact details at each visit and update details.

8.5 Coordination

Existing structures at district, provincial and national must be responsible for the overall coordination of the implementation of these guidelines. TB, HIV, AIDS and STI programme in correctional services should be a standing item in DMT meetings, provincial and national TB and HIV meetings.

Joint supervisory visits to both DOH and DCS facilities must be planned and conducted at least monthly by sub district, quarterly by district and twice a year by province.

9 HUMAN RIGHTS AND STIGMA

9.1 General rights

- All offenders (awaiting trial detainees, awaiting sentence detainees and sentenced inmates) have rights.^{20,21,22} Detainees and inmates with HIV should be treated in exactly the same manner as all others. It is unlawful for an inmate to be treated differently (e.g. housed separately) because of HIV status.^{23,24}
- An awaiting trial detainee is a person charged with a crime but presumed innocent; the HIV status of an accused person should not negatively affect the judgement about his guilt.
- The rights of people accused of a crime are protected in that it is unlawful to force a person to make a confession or admission (e.g. whether s/he has tested HIV-positive) that could be used as evidence against the person.
- The statutory rights of detainees and inmates are rights passed by parliament. The *Correctional Services Act* sets out these rights and the rules that the DCS must follow in running the facilities under its control (e.g. the DCS must ensure a clean and hygienic correctional centre environment).²⁵
- In terms of the *Right to Healthcare and Medical Treatment*, the DCS complies with all DOH policies and practices. The right to adequate medical treatment generally means that a detainee or inmate with HIV or TB should have access to the same kind of care and treatment available in the community. The *Correctional Services Act* states that:
 - The DCS must provide adequate healthcare services to all detainees and inmates so that they can lead a healthy life.
 - All detainees and offenders have a right to medical treatment.
 - Detainees and inmates can ask to be treated by their own doctor at their own cost.
 - A detainee or inmate cannot be forced to have a medical examination, test
- Detainees and or treatment, unless his/her medical condition creates a threat to the health of others inmates have the right to confidentiality about private matters, including health. If an official knows about the HIV status of a detainee or inmate (or a member of staff), the official may only tell someone else with the consent of the detainee or inmate (or staff member).
- Detainees and inmates face the same risk of HIV infection as other South Africans and they therefore have the same right to protect themselves as those in the community. The DCS has made a commitment to provide HIV education and condoms to detainees and inmates.
- A detainee or inmate who is very ill may be released early. While HIV-infected detainees and inmates do not have any special rights to early release, a detainee or

inmate dying of AIDS is likely to be considered for early release. However, with ART and TB treatment, this is unlikely.

- The DCS policy allows detainees and inmates to visit dying relatives, and this includes family members dying of AIDS.

9.2 The rights of detainees and inmates with regard to testing, screening and treatment

It is unlawful for anybody – including a detainee or inmate – to be tested for HIV or screened for TB against his/her wishes.

After admission to the correctional centre, every inmate is given a health examination, which can include testing for contagious or communicable diseases (e.g. hepatitis, TB) if the medical practitioner deems this necessary. Informed consent must always be given for an HIV test or a TB screen, i.e. the person must understand the purpose of the test and what the result may mean for him/her.

Patients need to be fully informed and counselled about their treatment. Individuals have a right to know what is being done to their bodies; therefore patients undergoing TB testing and treatment should receive comprehensive information about the risks, benefits and alternatives available to them. Considerations of informed consent are also particularly relevant when diagnosis is offered although no treatment can be provided.

TB treatment should be provided on a voluntary basis. If a detainee or inmate refuses treatment, this is likely to be due to insufficient counselling, lack of treatment support or fear of disclosure to other inmates. As with any other significant medical intervention, the voluntary and informed decision of the detainee or inmate is necessary to start TB treatment.

9.3 The rights of detainees and inmates with regard to isolation and segregation

Because detainees and inmates have a right to privacy and dignity, it is unlawful to segregate those with HIV or TB from the rest of the population. Segregation is only allowed if ordered by the medical practitioner on medical grounds (e.g. communicable diseases). In such a case, the detainee or inmate must be examined at least once a day by a medical practitioner. The time periods for segregation are very strict and may never go over 37 days.

In very rare cases, where all efforts to engage a patient to adhere to treatment fail, the rights of others might justify efforts to isolate the contagious patient involuntarily. However, involuntary isolation should always be a last resort, and it is essential that the manner in which it is implemented complies with applicable ethical and human rights principles.

While contagious TB patients who do not adhere to treatment or who are unable or unwilling to comply with infection control measures pose significant risks to the public, those risks can be addressed by isolating the patient.

It is never appropriate to compel treatment of TB patients over their objection. Isolated inmates should be offered treatment but, if they do not accept, their informed refusal should be respected, as the isolated inmate no longer presents a public health risk. Forcing

these patients to undergo treatment over their objection would require a repeated invasion of bodily integrity, and could put health-care providers at risk. Moreover, as a practical matter, it would be impossible to provide effective treatment without the patient's cooperation.

9.4 The rights of healthcare workers and DCS staff

HCWs and DCS staff are also at risk for TB transmission from those not yet diagnosed and/or started on treatment. DCS staff in correctional centres have higher rates of TB infection and disease than the general population. The infection prevention and control measures should reduce the time persons with undiagnosed TB spend in correctional centre settings and should improve ventilation and thus dilution of any TB droplets in the environment. Nevertheless, the risk to staff will never be zero, and an additional aspect of protecting staff is promoting early recognition of TB disease and standard treatment.

The duty of care in health care provision does not exist in a vacuum, but depends on the provision of goods and services. If these important reciprocal obligations of the healthcare system to the HCWs are not fulfilled, provision of appropriate TB care may not even be possible. For example, unhealthy HCWs will not be able to properly care for patients. The DCS is therefore obliged to:

- provide training, equipment, and protection to those in charge of TB patients;
- provide the skills and information necessary for HCWs to assess their risks and take proper precautions;
- provide access to TB diagnosis, including TB screening, for HCWs living with HIV;
- identify and treat HCWs with active TB, using the best proven treatment (including HCT, ART, and chemoprophylaxis for TB if indicated);
- clearly articulate their expectations about the working conditions for HCWs, the specific roles they are expected to assume, and the risks inherent in those situations;
- appropriately compensate HCWs for their services; this may include danger pay and insurance for themselves and their families, and disability pay for those who become infected.

HCWs and staff have a right to refuse TB screening, but their refusal should be documented and signed (as this may influence compensation).

9.5 Stigma

HIV-related stigma has been documented widely since the start of the HIV/AIDS pandemic. HIV stigma refers to prejudice and negative attitudes towards people living with HIV (PLHIV). The consequences of stigma are wide-ranging: deleterious effects on the mental health of PLHIV, including low self-esteem and self-blame; being shunned by family, peers and the wider community; poorer reporting for care and treatment in health-care settings; an erosion of rights; and less favourable outcomes in terms of HIV testing, adherence to ART and TB treatment.

More recently, stigma directed at people living with active TB disease has been shown to have similar effects and less favourable outcomes in terms of treatment completion.

The South African NSP (2012-2016) in its Strategic Objective 1 aims to "reduce HIV- and TB-related stigma and discrimination". It states that a clear programme of action that covers innovative and

established methods of stigma elimination is essential, and that training is key in such programmes to empower and educate communities and individuals.

Objectives

- To provide peer education training for correctional centrestaff, including HIV and TB stigma mitigation;
- To provide peer education training for correctional centre inmates, including HIV and TB stigma mitigation;
- To assist the DCS to run six-monthly campaigns in correctional centres to mitigate HIV and TB stigma;
- To develop support groups for inmates on ART and inmates on TB treatment, in order to improve treatment outcomes.

Table 9.1: Activities to be implemented for target groups

TARGET GROUP	ACTIVITIES
DCS staff	<ul style="list-style-type: none"> • Provide peer education training for DCS staff at all correctional centres regarding HIV and TB stigma mitigation; • Provide on-going support to the DCS to run six-monthly campaigns on HIV and TB stigma reduction, including provision of appropriate posters and audio-visual materials; • Provide training to staff at all correctional centres to run effective support groups for inmates on ART and for inmates on TB treatment.
Inmates and detainees awaiting trial	<ul style="list-style-type: none"> • Provide peer education training to a specified number of inmates at all correctional centres, enabling such inmates to provide peer education on HIV and TB, including HIV and TB stigma mitigation; • Provide ongoing support and training to correctional centre peer educators to update their knowledge and skills base regarding HIV and TB, including stigma mitigation.

Table 9.2: Core indicators for implementation

Indicator	Measurement
Proportion of correctional centre staff trained on HIV and TB peer education (including stigma mitigation)	Proportion (%)
Number of inmates trained as HIV and TB peer educators (including stigma mitigation)	Number
Proportion of inmates trained through peer education programmes for HIV and TB (including stigma mitigation)	Proportion (%)
Proportion of correctional centres which have run HIV and TB stigma mitigation campaigns at least once every six months	Proportion (%)
Proportion of correctional centres providing weekly TB treatment support groups	Proportion (%)
Proportion of correctional centres providing weekly HIV treatment support groups	Proportion (%)

ANNEXE 1: HUMAN RIGHTS PROVISIONS IN THE SOUTH AFRICAN NATIONAL STRATEGIC PLAN 2012-2016

DCS Draft Operational Plan

SO4: Ensure Protection of Human Rights and Increased Access to Justice

SO4.1: Ensure rights are not violated when interventions are implemented and establish mechanisms for monitoring abuses and exercising rights

Targeted interventions

- Audit interventions to identify potential for human rights abuses;
- Guard against rights violations as part of policy development and programme planning;
- Use existing bodies to monitor human rights abuses and increase access to justice;
- Build capacity within public institutions and civil society to increase access to justice and redress.

SO4.2: Reduce HIV and TB discrimination in the workplace

Targeted interventions

- Implement a national campaign against unfair discrimination;
- Empower employees in small and non-traditional workplaces.

SO4.3: Reduce discrimination in access to services

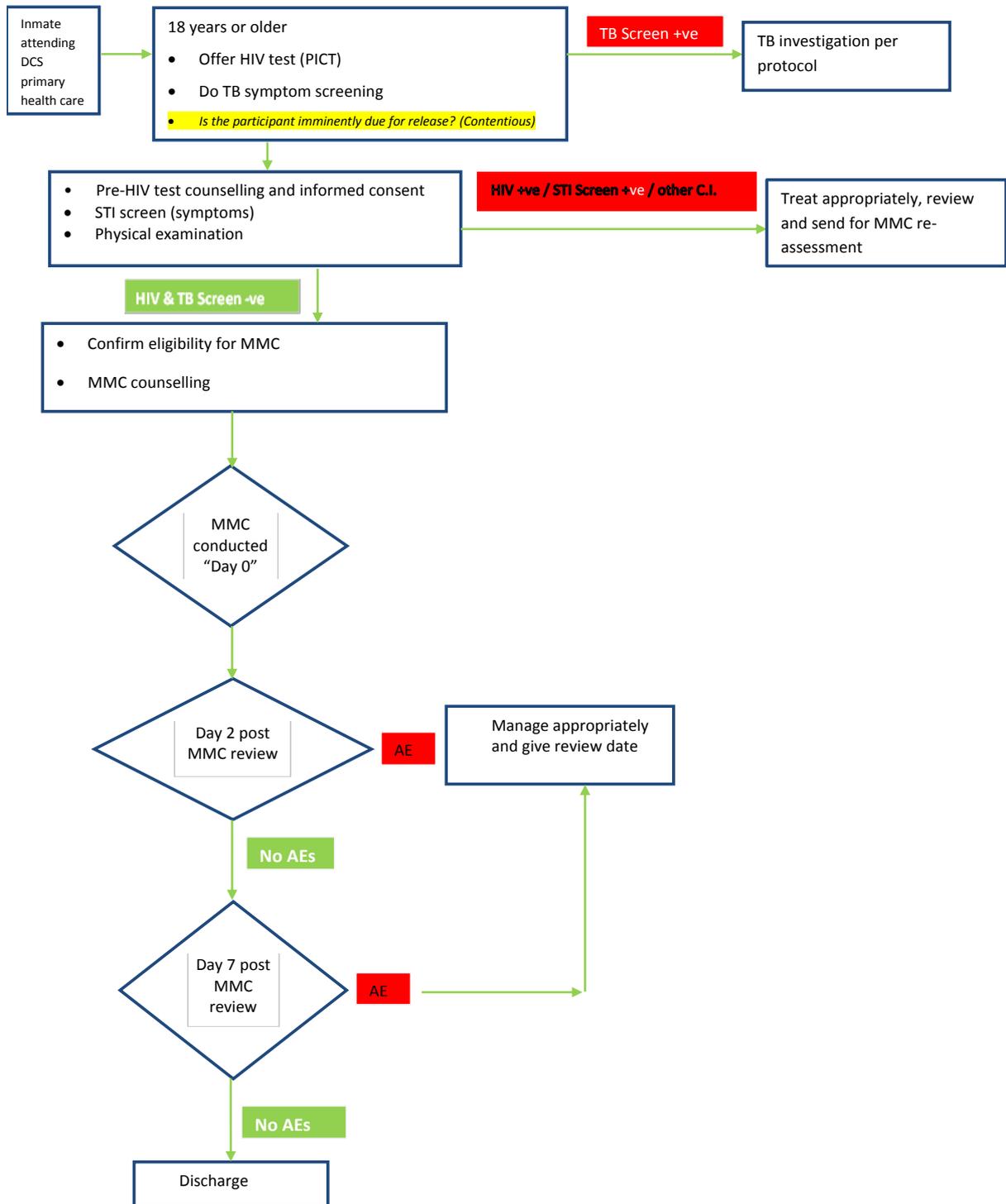
Targeted interventions

- Ensure that oversight bodies receive and address complaints;
- Train social service providers to prevent unfair discrimination.

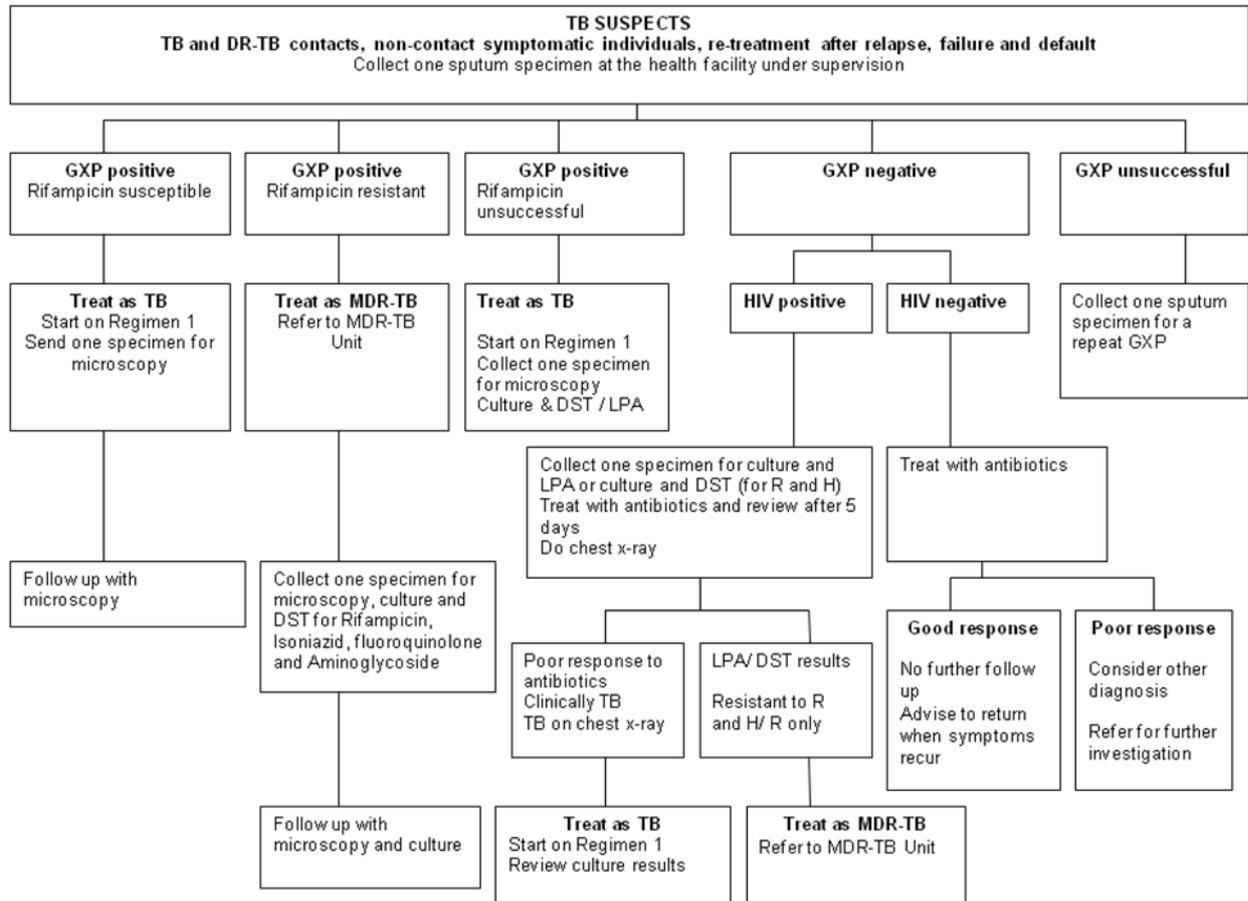
ANNEXE 2: TOOLS AND GUIDELINES FOR HUMAN RIGHTS

- HIV and AIDS and TB Management Policy for the Public Service and its tools (guidelines and Monitoring & Evaluation plan) 2009 aligned with the South African NSP (2012-2016)
- National Mainstreaming Framework/Guideline for the mainstreaming of HIV and TB in a gender-sensitive and rights-based manner for civil society, business and labour (aligned with South African AIDS Council, Governance & Administration Cluster, National Economic Development and Labour Council and Southern African Development Community)
- Revised Code of Good Practice on HIV and AIDS in the World of Work aligned to International Labour Organization Recommendation 200 of 2010
- DCS HIV and AIDS Policy and Guidelines for Inmates
- DCS HIV and AIDS Policy and Guidelines for Officials (also consider STI, TB)
- All Department of Health Clinical Guidelines/Protocols HIV and TB

ANNEXE 3: FLOW OF PROCEDURES FOR MMC



ANNEXE 4: XPERT DIAGNOSTIC ALGORITHM



REFERENCES

-
- ¹Walmsley R. World Prison Population List 7th ed. London: Kings College London; 2006.
- ²Annual Report for the 2011/2012 Financial Year. Pretoria, South Africa: Department of Correctional Services; 2012.
- ³Global tuberculosis control 2008; surveillance, planning, financing. Geneva, Switzerland: World Health Organization. Available from: http://www.who.int/tb/publications/global_report/2008/en/index.html
- ⁴Cantwell MF and Binkini NJ. Impact of tuberculosis in Sub-Saharan Africa: A regional perspective. *Int J Tuberc Lung Dis* 1997; 1:205-214.
- ⁵Gazzard B. Tuberculosis, HIV and the developing world. *Clin Med* 2001 Jan-Feb; 1(1):62-68.
- ⁶Cantwell MF, Binkini NJ. Tuberculosis in Sub-Saharan Africa: A regional assessment of the impact of HIV and national tuberculosis control program quality. *Tuberc Lung Dis* 1996; 77:220-225.
- ⁷Dolin PJ, Raviglione MC, Kochi A. Global Tuberculosis incidence and mortality during 1990-2000. *Bull World Health Organ* 1994; 72:213-220.
- ⁸Key Populations, Key Responses: A Gap Analysis for Key Populations and HIV in South Africa, and Recommendations for the National Strategic Plan for HIV/AIDS, STIs and TB (2012–2016). Pretoria, South Africa: Department of Correctional Services; 2012.
- ⁹WHO Guidelines on HIV Infection and AIDS in Prisons. Geneva, Switzerland: World Health Organization, 1999.
- ¹⁰2006 Department of Correctional Services HIV prevalence survey. Pretoria, South Africa: Department of Correctional Services; 2006.
-
- ¹¹Health in Prisons: A WHO guide to the essentials in prison health. Copenhagen, Denmark: Euro Regional Office, 2007.
- ¹²South African Guidelines on Nutrition for People living with TB, HIV / AIDS and other Chronic Debilitating Conditions. Pretoria, South Africa: Department of Health; 2001.
- ¹³Akolo C, Adetifa I, Shepperd S, Volmink J. Treatment of latent tuberculosis infection in HIV infected persons. *Cochrane Database Syst Rev* 2010, Issue 1. Art. No.: CD000171. DOI: 10.1002/14651858.CD000171.pub3.
- ¹⁴Golub JE, Pronyk P, Mohapi L, Thsabangu N, Struthers H, Gray GE, et al. Isoniazid preventive therapy, HAART and tuberculosis risk in HIV-infected adults in South Africa: a prospective cohort. *AIDS*. 2009 Mar 13;23(5):631-636.
- ¹⁵Rangaka MX, Boule A, Wilkinson RJ, van Cutsem G, Goemaere E, Goliath R, et al. Randomized controlled trial of isoniazid preventive therapy in HIV-infected persons on antiretroviral therapy. 19th International AIDS Conference, Washington DC, US. THLB03, 2012.
- ¹⁶Combination HIV Prevention: Tailoring and Coordinating Biomedical, Behavioural and Structural Strategies to Reduce New HIV Infections. A UNAIDS Discussion Paper. Last update September 2010. Available from: www.unaids.org.
- ¹⁷Guidelines for the Prevention and Treatment of HIV in Arrested and Detained and Sentenced Persons. Southern African HIV Clinicians' Society. June 2008. Available from: http://sahivsoc.org/upload/documents/guidelines_june_2008.pdf
- ¹⁸Post Exposure Prophylaxis Guidelines. Southern African HIV Clinicians' Society. November 2008. Available from: http://sahivsoc.org/upload/documents/guidelines_nov_2008.pdf
- ¹⁹Infant and Young Child Feeding policy, Draft 2nd edition. Pretoria, South Africa: Department of Health; 2012.
- ²⁰Constitution of the Republic of South Africa Act, No 108 of 1996.
- ²¹WHO Guidelines on HIV and AIDS for Prisons. Geneva, Switzerland: Joint United Nations Programme on HIV/AIDS. UNAIDS/99.47/E; 1999.

²²Andrew Coyle. Human Rights Approach to Prison Management. 2nd edition. London, United Kingdom: International Centre for Prison Studies; 2009. ISBN 0-9545444-2-0.

²³AIDS Law Project and Lawyers for Human Rights: HIV/AIDS and the Law: A Trainer's Manual. First edition, July 1997.

²⁴The South African Offenders Organisation for Human Rights Mission Statement.

²⁵Correctional Services Act, No 8 of 1959.