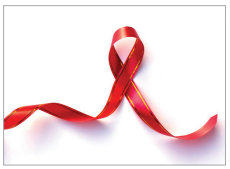
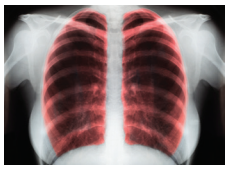
Approved November 2009





Harmonised Surveillance Framework for HIV and AIDS, Tuberculosis and Malaria in the SADC Region

Acknowledgements

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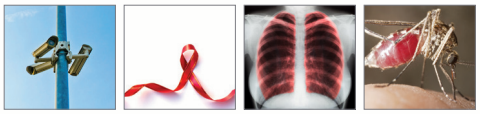

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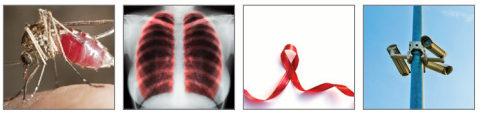
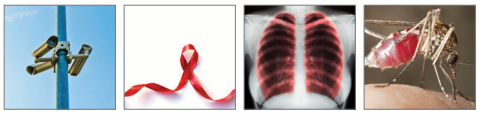


ACRONYMS AND ABBREVIATIONS

ACT	Artemisinin-based combination therapy
ANC	Antenatal clinic
AIDS	Acquired immune deficiency syndrome
ART	Antiretroviral therapy
CDC	Centres for Diseases Control (US)
CSW	Commercial sex workers
DHS	Demographic and Health Surveys
DOTS	Directly observed treatment, short-course
DRC	Democratic Republic of Congo
DST	Drug sensitivity testing
HIV	Human immunodeficiency virus
IDU	Intravenous drug users
IPT	Intermittent preventive treatment
IRS	Indoor residual spraying
M&E	Monitoring and evaluation
MDG	Millennium Development Goal
MDR-TB	Multidrug-resistant tuberculosis
MOH	Ministry of Health
PLWHA	People living with HIV and AIDS
SADC	Southern Africa Development Community
STDs	Sexually transmitted diseases
TB	Tuberculosis
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNGASS	United Nations General Assembly Special Session (on HIV and AIDS)
UNICEF	United Nations Children's Fund
VCT	Voluntary counselling and testing
WHO	World Health Organization
WHO AFRO	World Health Organization Africa Region
XDR-TB	Extensively drug-resistant TB



1. INTRODUCTION

The Southern African Development Community (SADC) is a regional body of 15 southern African countries that share a vision of a common future that will ensure economic wellbeing, improvement of the standards of living and quality of life, freedom and social justice, peace and security for the peoples of the region. This vision can only be realised in a healthy regional community. HIV and AIDS, tuberculosis (TB) and malaria constitute a very large part of the disease burden in the region, and continue to undermine the achievement of that vision.

SADC has responded to each of these diseases with declarations of commitment and mobilisation of resources. There is a need to monitor regional progress towards the goals and objectives outlined in those declarations. In order to achieve an accurate picture of disease trends in the region, SADC Member States require a common and efficient surveillance framework.

This document presents a harmonised surveillance framework for HIV and AIDS, TB and malaria in the SADC region. It is divided into three sections, each addressing one of these three communicable diseases. Each section describes gaps in the current surveillance systems, and presents a core set of indicators and data collection methods for each of the indicators. An additional section discusses regional data flows and reporting.

This harmonised surveillance framework is informed by an assessment of the status of surveillance systems for the three diseases in the SADC region, which is presented in the separate publication, the Assessment Report on the Status of HIV and AIDS, TB and Malaria Surveillance Systems in the SADC region.

2. RATIONALE FOR A HARMONISED SURVEILLANCE SYSTEM

Surveillance entails a vigilant approach to information gathering that serves to improve or maintain the health of a population. A functional disease surveillance system is essential for defining problems and taking appropriate action.

SADC Member States have signed numerous regional, continental and global commitments on the control of HIV, TB and malaria. Individually and collectively as a region they have a mandate to report on progress in the implementation of those commitments. However, if data on indicators that measure progress are collected using different surveillance methods, an accurate regional picture becomes elusive.

SADC Member States are generating information from different systems, such as public health surveillance systems, surveys, operations research and existing routine information systems. Hence, there is need to harmonise the surveillance methods to facilitate comparison of indicators across Member States. The objectives of the SADC Protocol on Health state that SADC will coordinate regional efforts on epidemic preparedness, mapping, prevention, control and, where possible, the eradication of communicable and non-communicable diseases. That requires a harmonised surveillance system.

It is important to draw a distinction between surveillance, and monitoring and evaluation. Surveillance refers to the routine tracking of diseases (disease surveillance) or behaviours (behaviour surveillance), using the same data collection system over time. Surveillance helps to describe an epidemic and its spread, and can contribute to predicting future trends and designing public health interventions. Monitoring and evaluation, on the other hand, refers to the continuous, routine and regular assessment of ongoing activities and/or processes. It is meant to provide managers and stakeholders of an ongoing intervention with indicators of progress (or lack thereof) towards the achievement of objectives and goals.

The assessment conducted across the SADC Member States confirmed the absence of regional harmonisation of surveillance frameworks of TB and malaria. There is some degree of harmonisation with respect to HIV and AIDS. Consequently, it is difficult to compare and track disease trends across Member States in the region.

For each of these three major diseases, there are surveillance frameworks already in place at Member State level. Those frameworks are based on national and international declarations and guidelines. However, for regional needs the existing surveillance frameworks still require strengthening in some respects. Some of the Member State surveillance systems' weaknesses include:

- Data flows are weak and reporting deadlines are not adhered to;
- There is minimal local data use;
- Human resource skills are limited; and
- There is weak research capacity, and data quality assessment is underdeveloped.

3. PROCESS FOR DEVELOPMENT OF THE SURVEILLANCE FRAMEWORK

The process for the development of this surveillance framework was participatory including Member States, the SADC Secretariat and various stakeholders. The process was also informed by internationally-recognised best practices,

Firstly, a desk review of the current national, regional and global policies relevant to surveillance of HIV and AIDS, TB and Malaria was conducted. This was followed by assessments in each Member State, during which key informants within the respective programs, including development partners, civil society organizations and the private sector were consulted to provide information on the state of programmes and policies. The respondents also shed light on some challenges and best practices. Each visit culminated in a country level assessment report which was reviewed and validated by officials from the Ministry of Health of each Member State.

The country reports were then compiled to inform a regional picture of the situation and response analysis. The draft regional assessment report was used as a basis for developing the Regional Framework. Both the draft Regional assessment report and the draft Framework were then reviewed by a technical team for technical soundness. The team comprised Member States, Technical Partners, Civil society Organizations and the SADC Secretariat. The purpose of the review team was to strengthen the quality of the documents.

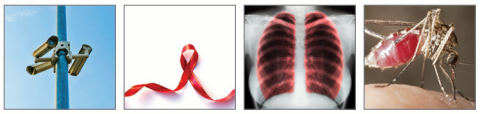
Following the technical review and the incorporation of the comments, the documents were then presented to a regional workshop for validation of the situation and response analysis report and consensus building on the proposed regional framework. All Member States and major stakeholders including regional partners and civil society organisations were invited to the validation and consensus building workshop. The workshop was held in November 2009 in Harare, Zimbabwe. The meeting recommended the draft reports for approval through the SADC structures subject to the incorporation of suggested changes.

Accordingly, the revised reports were reviewed by the CD Project Steering Committee and SADC National AIDS Authorities for technical soundness and recommendation for approval by Ministers. Finally, the document was reviewed by Senior Officials in Ministries of Health and those responsible for HIV and AIDS before being submitted for approval by the joint ministerial committee of Ministers of Health and those responsible for HIV and AIDS. The document was approved at the joint meeting of Ministers of Health and those responsible for HIV and AIDS held in December 2009 in Mbabane, Swaziland.

4. HARMONISED SURVEILLANCE FRAMEWORK FOR HIV AND AIDS

SADC has developed an HIV and AIDS Harmonised Surveillance Framework for the SADC Region (2008). That framework harmonises the data collection methods that are recommended for use by all Member States. In addition, the SADC region has an HIV and AIDS Monitoring and Evaluation Framework. In 2007, Member States agreed on HIV and AIDS indicators that had to be tracked and reported on by all Member States. Those indicators were to track progress toward realising regional, continental and global commitments, focusing on:

- HIV prevention and social mobilisation;
- HIV counselling and testing; treatment, care and support; and
- Resource mobilisation.



The harmonised surveillance framework for HIV and AIDS was guided by the regional, continental and international declarations, which SADC Member States have signed, including:

- The Abuja Call for Accelerated Action Towards Universal Access to HIV and AIDS, Tuberculosis and Malaria Services of 2006, which called for leadership commitment at national, regional and continental levels for resource mobilisation. Member States pledged that 15% of national budgets would be devoted to the health sector, protection of human rights, strengthening of health systems, access to affordable medicines, and research and development in the fight against HIV and AIDS.

- The Millennium Development Goals, specifically Goal 6, Target 6A, which requires countries to "Have halted by 2015 and begun to reverse the spread of HIV and AIDS", and Target 6B, which requires that they "Achieve, by 2010, universal access to treatment for HIV and AIDS for all those who need it."

- SADC Protocol on Health Article 10, which commits Member States to deal effectively with HIV and AIDS and other sexually transmitted diseases by:

- Harmonising policies aimed at disease prevention and control, including co-operation and identification of mechanisms to reduce the transmission of STDs and HIV infection;
- Developing approaches for the prevention and management of HIV and AIDS/STDs to be implemented in a coherent, comparable, harmonised and standardised manner;
- Developing regional policies and plans that recognise the intersectoral impact of HIV and AIDS/STDs and the need for an intersectoral approach to these diseases; and
- Cooperating in the standardisation of HIV and STD surveillance systems, in regional advocacy efforts, and in the sharing of information.

These declarations and strategies guide the surveillance framework in monitoring progress towards achieving the stated goals and targets for HIV and AIDS.

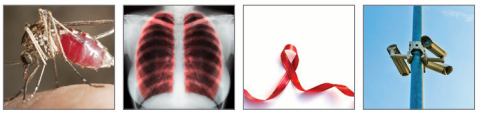
4.1 Current SADC core HIV and AIDS indicators

The current Framework uses indicators in the priority areas that were articulated in the Maseru Declaration on HIV and AIDS (2003).

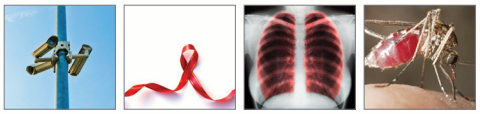
Table 3.1 lists the current HIV and AIDS indicators, which SADC Member States are tracking.

Table 4.1: SADC HIV and AIDS indicators

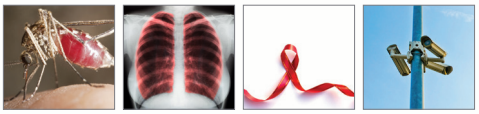
1. HIV prevention and social mobilisation			
Indicator	**Numerator**	**Denominator**	**Data source**
Percentage of young people aged 15-24 years who are HIV infected	Number of young people aged 15-24 years who are HIV-positive	Number of young people aged 15-24 years surveyed	Population based surveys
Percentage of men and women aged 15-49 years who had sex with more than one partner in the last 12 months	Number of men and women aged 15-49 years who had sex with more than one partner in the last 12 months [This indicator must be reported separately for women, men, and both]	Number of men and women aged 15-49 who had sex in the last 12 months	Population-based surveys



Proportion of young people aged 10-24 years who cite a member of the family as a source of HIV and AIDS related information	Number of young people aged 10-24 years who cited a member of the family as a source of HIV and AIDS information	Number of young people aged 10-24 years who were surveyed	Population-based surveys
Percentage of schools that provided life skills-based HIV education in the last academic year	Number of schools that provide life skills-based HIV education the last academic year	Number of schools with teachers trained in life skills	School surveys
Percentage of women and men aged 15-24 years who correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	Number of women and men aged 15-24 years who both correctly identified ways of preventing sexual transmission of HIV and who rejected major misconceptions about HIV transmission	Number of women and men aged 15-24 years surveyed	Population-based surveys
Percentage of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission	Number of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission	Number of HIV-positive pregnant women who received antenatal care services	Routine statistics
Percentage of donated blood units screened for HIV in a quality-assured manner	Number of donated blood units screened for HIV in a quality-assured manner	Number of donated blood units	Laboratory routine statistics
Number of female and male condoms distributed	Number of men and women aged 15-49 years who used a condom the last time they had sex with a casual partner in the last 12 months	Number of men and women aged 15-49 years who have had sex with a casual partner in the last 12 months	National condom supply chain system
Percentage of men and women aged 15-49 years who used a condom the last time they had sex with a casual partner with in the last 12 months	Number of men and women aged 15-49 years who used a condom the last time they had sex with a casual partner in the last 12 months	Number of men and women aged 15-49 years who had sex with a casual partner in the last 12 months	Population-based surveys and special surveys
Percentage of infants born to HIV-infected mothers who are infected	Number of infants born to HIV-infected mothers who are infected	Number of infants born to HIV-infected mothers	Routine health statistics



2. Improving treatment, care and access to counselling and testing services and support			
Percentage of health care facilities providing ART	Number of healthcare facilities that qualify to provide ART that are actually providing ART	Number of all healthcare facilities surveyed that are eligible to provide ART	Health facility surveys
Percentage of health care facilities with referrals for HIV and AIDS care and support services	Number of health care facilities with referrals for HIV and AIDS care and support services	Number of health care facilities in the country	Health facility surveys
Percentage of orphaned and vulnerable children aged 0-17 years whose households received free basic external support in caring for the child	Number of orphaned and vulnerable children aged 0-17 years whose households received free basic external support in caring for the child	Number of orphaned and vulnerable children aged 0-17 years	Population-based surveys
Current school attendance among orphans and non-orphans aged 10-14 years	Number of orphans aged 10-14 years enrolled during the school calendar year	Number of children aged 10-14 years enrolled during the calendar year	Education statistics
Percentage of children aged less than 18 years who are orphans (single, double orphans)	Number of orphans both single and double aged below 18 years	Number of children aged below 18 years	Population-based surveys, model estimates
Percentage of large enterprises/companies which have HIV and AIDS workplace policies and programmes	Number of large enterprises/ companies which have HIV and AIDS workplace policies and programmes	Number of large enterprises/ companies	Special surveys
Percentage of chronically ill people that are receiving home-based care from trained care providers	Number of chronically ill people receiving home-based care from trained care providers	Number of chronically ill people that are receiving home-based care	Health service statistics
Number of providers trained in home-based care			Health information system; programme evaluation
Percentage who undertook an HIV test in the last 12 months and who know the results	Number of people who took an HIV test in the last 12 months and who know the results	Number of people who took an HIV test in the last 12 months	Routine health statistics
Percentage of facilities providing HIV testing services	Number of facilities in the country eligible to provide HIV testing services and are actually providing testing services	Number of facilities in the country that are eligible to provide HIV testing services	Health information systems
Percentage of population expressing accepting attitudes towards PLWHA	Number of people surveyed who reported an accepting or supportive attitude on all four battery of questions	Number of people surveyed	Population-based surveys
Percentage of people with advanced HIV infections receiving ART	Number of people with advanced HIV infections receiving ART	Number of people with advanced HIV infections	Health information system
Percentage of districts or local administration units with at least one health facility providing ART	Number of districts or local administration units with at least one health facility providing ART	Number of districts or local administration units	Health facility surveys



3. Resource Mobilisation			
Percentage of the national budget committed to the health sector	Annual health budget	Annual national budget	Country budget documents
Amounts of public funds for research and development of a preventive HIV vaccine and microbicide			Medical Research Council Reports

4.2 Gaps in current SADC core HIV and AIDS indicators

While efforts have been made to comprehensively track the indicators that Member States should report on, there are gaps. The current indicators do not, for example:

- Track and report HIV and TB collaborative indicators;
- Track and report paediatric indicators; or
- Track new emerging issues like male circumcision.

There is a need to comprehensively address these important areas.

4.3 Criteria for selection of HIV/TB collaborative indicators

Collaborative indicators were selected on the basis of:

- Existing global indicators that Member States were already tracking and reporting on;
- Their appropriateness for tracking declared regional and international commitments;
- Collaborative activities between HIV and TB; and
- Ease of data collection and collation.

The additional HIV and AIDS indicators presented in Table 3.2 are based on these criteria.

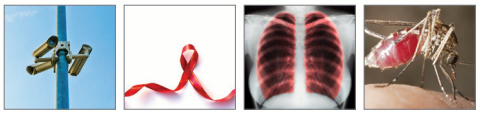


Table 4.2: Additional core set of indicators and data sources for HIV surveillance

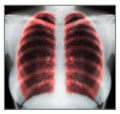
Indicator	Numerator	Denominator	Data source	Frequency of reporting
Percentage still alive after initiating ART (1st & 2nd line) after 12 months, 24 months, 36 months etc.	All patients alive and on ART in cohort	All patients initiated on ART within that cohort	Routine ART data	Annually
Percentage of people with advanced HIV infection receiving ART (disaggregated by age; 0-14, 15+ years)	Number of people with advanced HIV infections receiving ART	Number of people with advanced HIV infections	Health information system; routine ART data	Annually
Percentage of most-at-risk populations (IDU, MSM, CSW)** who received an HIV test in the last 12 months who know the result	Number of most-at-risk populations (IDU, MSM, SW) who received an HIV test in the last 12 months who know their result	Total number of most-at-risk populations (IDU, MSM, SW) who received an HIV test in the last 12 months	Special surveys	Every 3 years
Percentage of most-at-risk populations (IDU, MSM, CSW) who are HIV-infected	Number of most-at-risk populations (IDU, MSM, SW) who are HIV-infected	Number of most-at-risk populations (IDU, MSM, SW) who received an HIV test	Special surveys	Every 3 years
Number of males circumcised			Routine services data	Annually
Percentage of males circumcised (disaggregated by age)	Number of men circumcised in survey population	Males population in survey	DHS	Every 5 years

** Where possible all indicators must be disaggregated by age, and sex.*
*** IDU=injecting drug users; MSM=men who have sex with men; CSW=commercial sex workers*

Table 4.3: Proposed core set of collaborative indicators for HIV/TB surveillance

Indicator	Numerator	Denominator	Data sources	Frequency of reporting
Percentage of HIV-positive people who are screened for TB on their first visit to an HIV clinic	Number of HIV-positive people screened for TB during the first visit to HIV clinic	Total number of HIV-positive people visiting the clinic in the same period	TB registers VCT/ HIV/ART registers	Annually
Percentage of HIV-positive TB patients who are on ART	Number of HIV-positive TB patients who are on ART	Total number of HIV-positive TB patients	TB registers	Annually
Percentage of HIV-positive people who are TB-positive (co-infection rate)	Number of HIV-positive people who are also TB-positive	Total number of HIV-positive people	TB registers VCT/ HIV/ART registers	Annually

NB: All indicators must be disaggregated by age and sex.

5. HARMONISED SURVEILLANCE FRAMEWORK FOR TUBERCULOSIS

The proposed harmonised surveillance framework for TB is guided by the regional, continental and international declarations that SADC Member States have signed up to:

- The Abuja Call for Accelerated Action Towards Universal Access to HIV and AIDS, Tuberculosis and Malaria Services of 2006, which called for the prevention of multidrug-resistant TB, and for universal access to prevention, treatment, care and support for TB;

- The Millennium Development Goals, specifically Goal 6, Target 6C, which requires countries to "Have halted by 2015 and begun to reverse the incidence of tuberculosis";

- The SADC Protocol on Health Article 12, which commits Member States to:
- Develop strategies for the sustained control of TB, including the efficient supply and delivery of drugs; and
- Ensure, where appropriate, the harmonisation of TB control activities and HIV and AIDS programmes.

The Strategic Plan for the Control of TB in the SADC Region, 2007-2015, recommended the Stop TB Strategy as the basis for TB surveillance in the region. The goal of the Stop TB Strategy is "To reduce dramatically the global burden of TB by 2015 in line with the Millennium Development Goals and the Stop TB Partnership targets." The specific objectives are to:

- Achieve universal access to high-quality diagnosis and patient-centred treatment;

- Reduce the suffering and socioeconomic burden associated with TB;

- Protect poor and vulnerable populations from TB, TB/HIV and MDR-TB; and

- Support the development of new tools and enable their timely and effective use.

Current targets linked to the MDGs, and endorsed by the Stop TB Partnership, require that countries, by 2015:

- Reduce TB prevalence and death rates by 50% relative to 1990 levels; and

- Eliminate TB as a public health problem (<1 case per million population).

These declarations and strategies guide the surveillance framework in monitoring progress towards achieving the stated goals and targets. The recommended case definitions for TB to be used in regional reporting, as well as the proposed TB surveillance framework, are listed below.

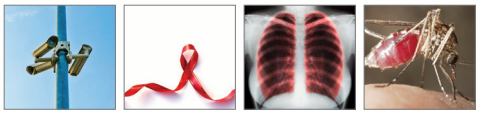
5.1 Criteria for selection of core indicators

Core TB indicators were selected on the basis of:

- Existing global indicators which Member States are already tracking and reporting on;

- Appropriateness in tracking stated regional declarations; and

- Compilation of national indicators that might not be present in other Member States.



5.2 Recommended case definitions for TB surveillance

The following case definitions for TB cases are recommended:

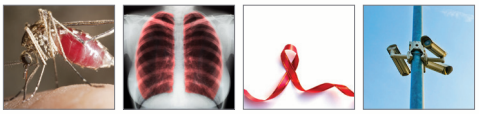
- Tuberculosis "case" refers to a patient in whom any form of TB has been diagnosed by Laboratory and clinical investigation.
- Definite case: A patient with positive culture for the Mycobacterium TB complex.
- New case: A patient who has never had treatment for TB or who has taken anti-TB drugs for less than one month.
- Relapse: A patient who previously received TB treatment and was declared cured, or who completed treatment and has once again developed sputum-smear or culture positive TB.
- Re-treatment case: A patient previously treated for TB who is started on a re-treatment regimen. This can be after previous treatment has failed (treatment after failure), or when the patient returns to treatment having previously defaulted (re-treatment after default; see below), or when a patient previously declared cured or treatment completed has been diagnosed with bacteriologically-positive (sputum smear or culture) TB (relapse).
- Re-treatment after default: A patient who completes at least one month of treatment and returns after at least two months' interruption of treatment with active TB as judged on clinical, bacteriological or radiological grounds.
- Transfer-in: A patient who has been transferred from another TB register to continue treatment in the receiving treatment unit.
- Other: All cases that do not fit the above definitions – for example, chronic TB case, a patient who remains smear-positive after completing a re-treatment regimen under supervision.

The following treatment outcome definitions are recommended:

- Cured: A patient who was initially smear-positive and has become smear-negative in the last month of treatment and on at least one previous occasion.
- Treatment completed: A patient who was initially smear-positive and has completed treatment without proof of cure (no smear results at the end of treatment), or a patient who was smear-negative or had extensive pulmonary tuberculosis, who has completed treatment.
- Died: Patient who dies for any reason during the course of treatment.
- Defaulted: A patient whose treatment was interrupted for two consecutive months or more.
- Transferred Out: A patient who has been transferred to another reporting unit and for whom the treatment outcome is not known.
- Treatment failure: A patient who, while on treatment is smear-positive at five months or later after starting treatment, or a patient who was initially smear-negative before starting treatment and became smear-positive after the second month of treatment.
- Cohort: A group of patients in whom TB has been diagnosed, and who were registered for treatment during a specified time period (for example, the cohort of new smear-positive cases registered in the calendar year 2005).

This group constitutes the denominator for calculating treatment outcomes.

A case of MDR-TB is defined as a person with bacteriologically proven TB who continues to produce positive smears or cultures, despite directly-observed first-line treatment (DOTS), and who is (with at least one positive culture and drug susceptibility result) showing resistance to rifampicin and isoniazid.



MDR-TB is further categorised according to history of previous treatment or previous drug use:

- Patients with no history of previous TB or MDR-TB treatment;
- Patients with history of previous TB treatment, i.e. first-line drugs; and
- Patients with a history of previous MDR-TB, i.e. second-line drugs.

MDR-TB is also categorised according to the patient's previous treatment history, which is usually referred to as the patient's "registration group":

- New: An MDR-TB patient with no history of drug use before or use for less than one month;
- Relapse: An MDR-TB patient who was previously considered cured (whether in Category I, II or IV), but who has returned with smear-positive MDR-TB and is proved to be MDR-TB, based on culture and drug sensitivity testing;
- Treatment after default: An MDR-TB patient who is returning to TB treatment after defaulting from treatment as is now smear positive for AFB and is proved to be MDR-TB on culture and drug sensitivity testing;
- Treatment after failure of category I: A patient who has had Category I, but the treatment failed and the patient is proved to be MDR-TB, based on culture and drug sensitivity testing;
- Treatment after failure of category II: Patient has had category II treatment and the treatment failed and is proved to be MDR-TB on culture DST;
- Other: Not matching any of the above.

A case of XDR-TB is defined as an MDR-TB case that is also resistant to at least an injectable second-line drug (kanamycin, capreomycin) and any flouroquinolone.

Tables 4.1, 4.2 and 4.3 provide the TB, MDR-TB and XDR-TB surveillance core indicators, data collection methods, and the frequency of reporting to the region. Table 5.1 presents the surveillance core indicators for TB/HIV collaborative activities.

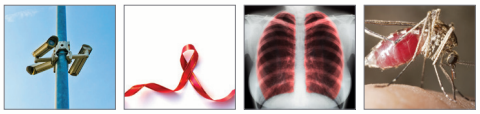


Table 5.1: Core set of indicators and data sources for TB surveillance

Impact measure	Indicators	Numerator	Denominator	Data sources	Frequency of reporting
TB Prevention	TB prevalence rate (Estimated number of all active TB cases per 100 000 population at a given point in time)	Total number of cases, new and old, in the population at a particular point in time	The total population	Population-based surveys	Every 5 years
	TB incidence rate (Estimated number of TB cases per year, per 100 000 population)	Number of new cases in a given period	The total population at risk	Longitudinal surveys or population surveys, or case notifications	Every 5 years
	TB mortality rate (Estimated number of deaths due to TB, all cases, per year per 100 000 population)	Total number of deaths due to TB in a given period	The total number of TB cases in a given period	Routinely collected data: TB registers,	Annually
Case Reporting	Case detection rate per 100 000 population	Annual new smear-positive notifications (+/- DOTS)	Estimated annual new smear-positive incidence	Case notification and estimates of incidence	Annually
Treatment Outcomes	Treatment success rate	New sputum smear-positive patients started treatment in a given reporting period who completed treatment, with or without proof of cure	Total number of new sputum-positive cases put on treatment in the given period of time	Routinely collected data on cohorts of patients undergoing treatment: TB registers and laboratory registers	Annually

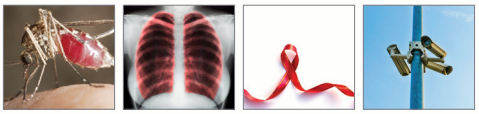


Table 5b: Core set of indicators for MDR-TB

Impact measure	Indicators	Numerator	Denominator	Data sources	Frequency of reporting
MDR-TB case reporting	Percentage of MDR-TB patients identified by bacteriology confirmation (MDR-TB pick-up rate)	Number of MDR-TB cases identified by culture and drug sensitivity testing	All culture positive set of specimens with 1st line anti-TB drug sensitivity testing results (i.e. number of all TB cases with 1st line anti-TB drug sensitivity testing results)	Routinely collected data: TB registers for retreatment and new cases, laboratory drug sensitivity, reports drug resistance sentinel surveillance, rapid surveys of risk groups	Annually

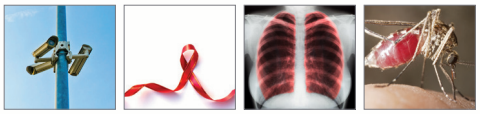
Table 5.2: Core set of indicators for XDR-TB

Impact measure	Indicators	Numerator	Denominator	Data sources	Frequency of reporting
XDR-TB case reporting	Percentage of XDR-TB patients identified by bacteriology confirmation (XDR-TB pick-up rate)	Number of all XDR-TB cases identified by culture and 2nd line drug sensitivity testing in the country.	All 2nd line cultures positive cases with drug sensitivity testing results (i.e. number of TB cases with 2nd line drug sensitivity testing results)	Culture and drug sensitivity testing done routinely on all retreatment cases and MDR-TB cases so as to pick up as many cases as possible	Annually

Table 5.3: Core set of indicators, data sources and reporting frequency for TB/HIV collaborative activities

Impact measure	Key surveillance indicators	Numerator	Denominator	Data sources	Frequency of reporting
Co-infection	Percentage of TB patients who test HIV-positive	Number of TB patients who are HIV-positive among those counselled and tested	Number of TB patients receiving HIV testing and counselling	Routine health services statistics sentinel surveys	Annually

** For MDR-TB it is recommended that all Member States should do culture and drug sensitivity testing on all retreatment cases.*
*** For XDR-TB it is recommended that all Member States should do culture and drug sensitivity testing on all MDR cases.*



5.3 Data sources for TB surveillance

The data collection methods for the proposed harmonised surveillance Framework are based on the Stop TB Strategy and findings from the assessment report on surveillance systems for HIV and AIDS, TB and malaria. The data collection methods are:

- Routine health services statistics (routine data sources). Routine health service statistics are the mainstay of TB surveillance. Data on TB are collected from the routine care of TB patients whose records are kept in the TB register. TB case findings are recorded in the lab register. These constitute the major sources of TB surveillance data. These data sources can be strengthened further by implementing an electronic TB register in which patient data are kept at the point of care and are synchronised, with a second copy of the register also being kept at national level. An electronic TB register facilitates early detection and response to cases that default treatment or are resistant to first-line drug treatment.

- Population-based surveys are important in TB surveillance, especially for calibrating TB prevalence and incidence indicators. The Demographic and Health Survey (DHS) is of special importance, and we recommend that it be conducted every four to six years (as is the case for the HIV and AIDS population-based surveillance surveys). Sub-sampling the national sample for longitudinal surveys would assist in determining TB incidence.

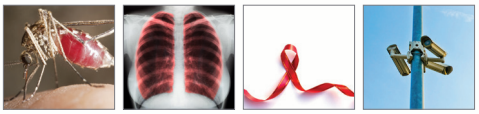
- Sentinel MDR and XDR-TB surveillance. It is recommended that anti-TB drug resistance sentinel surveys be carried out every five years.

5.4 Data sources for TB/HIV surveillance

The proposed data sources for TB/HIV surveillance are:

- Routine health service statistics. These are data collected from routine care of TB patients who are tested for HIV on a voluntary and confidential basis. This Framework recommends that all SADC Member States should aim to test all TB patients for HIV.

- TB/HIV sentinel surveys. These are selected sentinel sites where a predetermined number of TB patients are tested for HIV. This Framework recommends all cases of TB (sputum positive or sputum negative) to be tested for HIV. This may not be necessary if the Member State is implementing routine HIV testing.



6. HARMONISED SURVEILLANCE FRAMEWORK FOR MALARIA

The harmonised surveillance Framework for malaria is guided by regional, continental and international declarations, which SADC Member States have signed. These include:

- The Abuja Call for Accelerated Action Towards Universal Access to HIV and AIDS, Tuberculosis and Malaria Services of 2006, which pledged to accelerate malaria control programmes with a goal to eliminate malaria by using all effective strategies, such as indoor residual spraying, insecticide-treated bed nets, Artemisinin-combination therapy (ACT) and intermittent presumptive therapy.

- The Millennium Development Goals, of which Target 6C requires that governments will "have halted by 2015 and begun to reverse the incidence of malaria and other major diseases".

- SADC Protocol on Health Article 11, in which Member States pledged to:
- Establish efficient mechanisms for the effective control of malaria in the region;
- Cooperate and assist one another in order to reduce the prevalence of malaria, and with support from stakeholders, ensure the optimal use of resources – by, for example, sharing scarce technical resources and operations research, harmonising goals, policies, guidelines, protocols, interventions and treatment regimens, and integrating malaria control mechanisms into primary health care services.

The recommended surveillance framework strategy for malaria in the SADC region is the Roll Back Malaria Strategy, as referred to in the Strategic Plan for the Control of Malaria in the SADC Region, 2007-2015. The Roll Back Malaria strategy's objective is to halve the malaria burden in participating countries by applying interventions that are adapted to local needs and by strengthening the health sector.

The commitments and strategies mentioned earlier guide the surveillance framework in monitoring progress towards the stated goals and targets.

This Framework proposes the use of both passive and active surveillance systems, depending on the stage of malaria control/elimination continuum in the SADC Member States. Passive surveillance involves the reporting of all confirmed malaria cases from all health facilities to the appropriate health authorities, and is most appropriate for the malaria control stage.

Active surveillance involves the follow up of all malaria cases and screening the potential contacts of cases, including identifying potential breeding sites of mosquitoes, treating all positive contacts, and providing appropriate intervention (for example, providing insecticide-treated nets or targeted indoor residual spraying). Active surveillance is most appropriate in malaria elimination stages. The key indicators for monitoring progress towards the stated goals and objectives are listed in Table 5.1. Common case definitions are important in malaria surveillance. The proposed case definitions to be used in regional reporting of malaria surveillance data are listed below.

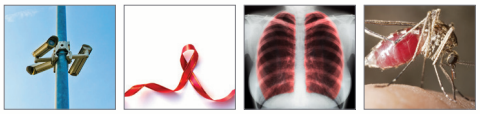
6.1 Case definitions in malaria surveillance

· Malaria case: It is recommended that all SADC Member States use definitive diagnosis for a malaria case, as confirmed by a rapid diagnostic test. Where rapid diagnostic tests are not available, it is recommended that Member States use WHO malaria definitions, which include fever, chills/rigors, joint pain, headaches and history of person, place and times.

- Malaria epidemic: The number of malaria cases for a given week exceeding the third quartile number of cases for the same week in a three to five years data set constitutes malaria epidemic.

- Malaria treatment: The primary goal for assessment for a case of uncomplicated malaria is to promptly and effectively treat malaria to prevent progression to severe malaria. Case management in malaria should aim to reduce the parasite reservoir through early diagnosis and treatment and use of efficacious medicines. Prompt treatment is the key to reducing malaria complications.

- Malaria drugs: On the basis of the WHO 2003 recommendations and accumulating evidence, ACTs are considered acceptable.



For treatment of P. Falcipurum, the use of ACT is preferable because of its effect on gametocyte-carriage rates. Malaria drug policy change should include Primaquine treatment for P. vivax (radical treatment) and ACT plus one-day gametocyte treatment for P. Falciparum.

- Pharmaco-vigilance: WHO defines pharmaco-vigilance as the detection assessment understanding and prevention of adverse effects or any related problems. Health workers need to be trained to monitor and document and report any adverse events in the use of malaria drugs. A systematic approach to pharmaceutical management will ensure that anti-malarials for a complete course of malaria prevention or treatment are available and appropriately used according to an effective treatment strategy and timeline. The policy is to involve four basic functions selection, procurement, distribution and use, each building on the others. Management support systems will hold these functions together. Different countries are at different points in achieving effective drug management for malaria.

6.2 Criteria for selection of core indicators

Core indicators were selected on the basis of:

- Existing Roll Back Malaria indicators that Member States are already tracking and reporting on;
- Appropriateness for tracking stated regional declarations;
- Appropriateness for tracking various disease states (some Member States are in the control phase while others are in the elimination phase of malaria control);
- Ease of data collection and collation; and
- Compilation of national indicators that might not be present in other Member States.

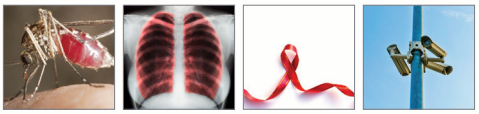


Table 6.1: Core set of indicators and data sources for malaria surveillance

Indicator	Numerator	Denominator	Data source	Frequency of reporting
Percentage of confirmed malaria cases	Total confirmed (microscopy & rapid diagnostic testing)	Total tested	Laboratory registers	Annually
Malaria cases per 1,000 population	Total number of confirmed malaria cases	Total population	Routine data	Annually
Percentage of deaths attributed to malaria disaggregated by age group	Total number of deaths attributed to malaria within a given age group.	Total deaths within age group.	Routine data	Annually
Proportion of population in IRS target areas covered with IRS in the last 12 months	Population that lives in structures that were sprayed in the last 12 months	Population that lives in the indoor residual spraying targeted areas	Indoor residual spraying activity report	Annually
Proportion of household residents who slept under an insecticide-treated net the previous night (disaggregate by age and pregnant women)	Number of household residents who slept under an insecticide-treated net the previous night	Total number of household residents	Household survey	Every 2 years
% of pregnant women protected by IPTp (at least 2 doses)	Number of pregnant women taking at least 2 doses of IPTp	Number of pregnant women attending antenatal clinics	Routine antenatal clinics data	Annually

6.3 Data sources for malaria surveillance

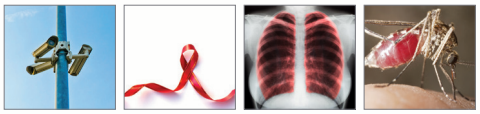
6.3.1 Routine service statistics

- It is proposed that routine service statistics constitute the main sources for routine malaria surveillance. Those statistics capture and report service data from public health service delivery points.

6.3.2 Population-based surveys

- It is recommended that Member States carry out population-based surveys every two to four years.

These surveys track malaria prevalence indicators and general characteristics of the disease in the Member States. Population-based blood surveys can provide information on malaria prevalence, the level of endemicity, and high-risk areas and population groups.



6.3.3 Special surveys

- The Malaria Indicator Survey should assess malaria-related health service delivery in health facilities. This is a representative household survey, which follows the Roll Back Malaria and MERG-recommended guidelines, and which is used to obtain the following information:

- Household-level possession of nets, treated nets and long-lasting insecticidal nets;
- Use of insecticide-treated nets among target populations (especially children younger than five years and pregnant women);
- Coverage of indoor spraying among households;
- Prompt provision of anti-malarial treatment for febrile episodes;
- Measure the prevalence of malaria parasitaemia among children younger than five years of age, as well as among populations older than five years (one in four households will be tested); and
- Assess the burden of anaemia among children young than five years.

6.3.4 Entomological monitoring and vector control records

These are a central repository of information related to entomological monitoring and application of chosen vector control interventions, including but not limited to breeding site mapping, foci investigation, indoor residual spraying, larviciding and/or stocking of larvivourous fish. Entomological surveys can be done every five years.

6.3.5 Geographical reconnaissance

- It is recommended that Member States integrate surveillance data with geographical reconnaissance data. It would include collection of information on the number, type, location and means of access to all houses and field shelters, as well as on communication. Geographical Reconnaissance can be done annually.

Geographical reconnaissance provides a basis for the choice of field centres and depots, for detailed schedules and itineraries of spraying and surveillance personnel, for the final deployment of transport, and for the numerical control of the completeness of the work accomplished or reported.

7. IMPLEMENTATION MECHANISMS FOR THE FRAMEWORK

The implementation mechanism defines the key stakeholders and their roles in the implementation of the Framework. Furthermore, it provides guidance on how the framework will be financed. Lastly, it identifies the critical indicators to be monitored to ensure that the framework is fully integrated in the work of the Member States. To this end, this section is intended to map out the steps on the domestication of the framework, including how it will be financed and monitored.

7.1 Stakeholder roles and responsibilities

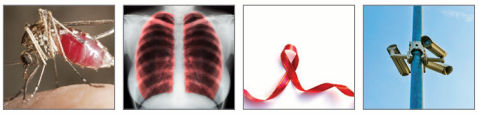
The successful implementation of the harmonized surveillance framework requires the involvement of all key stakeholders at both national and regional levels. To this end, it is important to provide an outline on their roles.

7.1.1 Member States

- The SADC Health Ministers will oversee and monitor the implementation of this Framework.

- Member States shall take a lead role in ensuring that this framework is integrated to the annual work plans of their national surveillance programmes.

- Member States shall ensure that national surveillance programmes involve various departments in the Ministries of Health (and key stakeholders in the public and private sectors (for example, donors, WHO, partners, community-based organisations, and training institutions) to identify their roles in the implementation of the various activities articulated in the Framework.



- Member States shall provide the necessary training to surveillance experts to ensure common understanding of the Framework.

- Member States shall develop a detailed plan on strengthening the quality of data to ensure uniformity across Member States.

7.1.2 SADC Secretariat

The SADC Secretariat will coordinate the overall implementation and monitoring of this Framework on behalf of the Ministers of Health. Specific responsibilities will include:

- Advocating for implementation of the Surveillance Framework in relation to the commitments made by Member States (such as the SADC Protocol on Health, and the Maputo Declaration);

- Facilitating the reporting of harmonized indicators

- Facilitating skills transfer and sharing of good/innovative practices, benchmarking of Member States among each other and provide a platform of sharing of good practices;

- Coordinating regional training programmes on surveillance and regional databases.

7.1.3 Other stakeholders

Other stakeholders include UN Agencies, bilateral donors and development partners, local and international NGOs, community-based organisations and communities, the private sector and research and training institutions. All are essential for the successful implementation of the Framework.

Their roles will vary but will include:

- Assisting in implementation of agreed Surveillance Framework.

- Advocate for strengthening quality of data.

- Augment resources to ensure timely communication of the surveillance reports.

- Provide additional human resources as needed to support implementation of minimum standards.

7.2 Financing mechanisms

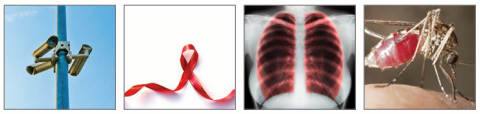
Implementation of this Framework may require additional financial resource allocation by each Member State. Funding for the activities required to meet the harmonized surveillance will be allocated within the national budgets of each Member State, if these activities are not currently provided for in surveillance budgets.

Member States shall ensure that:

- Areas that need additional financial resources are identified, with the participation of all relevant stakeholders, including UN agencies, donors, development partners, and NGOs.

- Each area that needs improvement is costed. Examples could include the costing of quality assurance or automation.

- National surveillance programmes receive endorsement from their Ministries of Health where additional finances are required.



8. Monitoring and Evaluation

8.1 Role of Monitoring and Evaluation in Implementation of Harmonised Surveillance Framework

The harmonised surveillance framework for the three communicable diseases (HIV and AIDS, TB and Malaria) contains core indicators that, if successfully monitored, will show progress towards realization of global, continental and regional commitments for each of the three diseases. Furthermore, monitoring levels and trends in the core indicators would objectively identify aspects of the intervention where progress is slow, thus, allowing identification of concrete solutions to the identified challenges. Thus, results from monitoring implementation of the harmonised surveillance framework will inform management decisions aimed at fine-tuning the response to HIV and AIDS, TB and Malaria at the MS level. At the same time, results from monitoring will show progress that the region is making in the implementation of regionally agreed commitments and continental and global commitments for each of the three diseases.

8.2 Monitoring and Evaluation at MS Level

At the MS level, the first thing that has to be done is domesticating the core indicators for each of the three diseases in national HIV and AIDS, TB and Malaria monitoring and evaluations systems. This means that MS will revise their data collection tools to allow the collection of the core indicators that will have been domesticated into national M&E systems. The MS will orient service providers for HIV and AIDS, TB and Malaria on how to collect data on the core indicators. Furthermore, the MS will train data managers for the three diseases on how to add these core indicators to their databases as well as building quality checks for these indicators.

Thus, in summary Member States will:
- Domesticate core indicators for each of the three diseases in national M&E systems for each of the three diseases;
- Integrate the core indicators in the databases for HIV and AIDS, TB and Malaria;
- Collect and validate data on the core indicators for each of the three diseases;
- Analyse the data to show levels, patterns and trends for each of the three diseases; and
- Prepare annual national reports for each of the three diseases

8.3 Monitoring and Evaluation at the SADC Regional Level

At the SADC regional level, the interest is tracking implementation progress as measured by the levels and trends of the core indicators at the regional level. Thus, at the regional level the SADC Secretariat will prepare annual analytical reports for each disease that show the extent to which progress is being made towards global, continental and regional commitments and targets. These reports will be used to identify aspects of the response to each of the three diseases were progress is slow.

8.4 Reporting Mechanisms

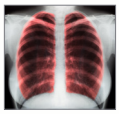
The following are the steps that are followed in preparing and reporting on the core indicators for HIV and AIDS, TB and Malaria:

Member States will prepare national annual reports for each of the three diseases based on data on the core set of indicators. The reports will be covering the period January – December every year. These reports will be shared with the SADC Secretariat by 30 April every year.

- The data contained in the reports for each of the three diseases will be validated at the Member States level before the reports are submitted to the SADC Secretariat;

- The SADC Secretariat will then compile a regional report for each of the three diseases and share the draft reports with MS' Ministries of Health and Ministries responsible for HIV and AIDS and experts from partner organisations by end of June every year for review and comments;

- Member States programme managers for HIV and AIDS, TB and Malaria will provide their comments on the draft regional reports for the three diseases by end of July every year;

- The SADC Secretariat will incorporate the comments in each of the reports and present them to senior officials from Ministries of Health and Ministries responsible for HIV and AIDS for review and recommendation to Ministers for approval;

- The Drafts of the three reports will then be presented to Ministers of Health and Ministers responsible for HIV and AIDS for approval at their annual meeting

The reports that are prepared and submitted by MS to the SADC Secretariat also describe challenges that MS are experiencing in the implementation of the Harmonised Surveillance Framework.

9. RECOMMENDATIONS

In order to facilitate the full implementation of this Framework, the following are recommended:

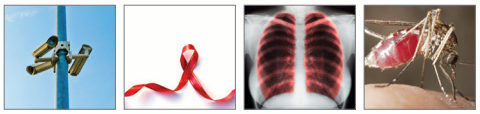
- All key players in the Member States must contribute quality data to the central, regional level.

- Disease programme managers should use the surveillance data to guide and target public health interventions. In addition, programme managers must document “Best Practices” and engage in evidence-based programming.

- The SADC Secretariat must facilitate capacity building of staff members at Member States level who are involved in data management and analysis.

- Member States may want to consider developing a plan for data analysis, covering frequency of data analysis and methods for information dissemination.

- Member States should be assisted in operationalising the harmonised surveillance Framework through various capacity building strategies, facilitated by the SADC Secretariat.



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