HIV/AIDS and Sustainable Human Settlements Development in South Africa

An Introductory Guide for Municipal Practitioners

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Foreword

The notion of integrated and sustainable human settlements is powerful and appealing, particularly in light of the divided, fragmented, sprawling and consumptive nature of South Africa's settlements. In theory, the vision seeks to respond to the needs of current generations for decent shelter and good living conditions whilst ensuring that future generations will be able to enjoy the same rights. In practice, realising this vision is a complex endeavour, as it straddles across spheres of government, sector departments and a range of actors external to the state, including local citizens and communities.

HIV/AIDS is complicating an already complex agenda, but unless it is considered as an integral element of human settlements planning and development, we will loose a strategic opportunity to locate an effective response to HIV/AIDS where it belongs – at the centre of development.

Municipalities in South Africa are key institutions in bringing about sustainable human settlements that adequately respond to the challenges and implications associated with the HIV/AIDS epidemic. It is hoped that this guide will be useful to municipal planners, housing officials and other practitioners involved in planning, development and governance of human settlements.

Mirjam van Donk
DIRECTOR

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This guide is accompanied by another Isandla Institute publication, 'Building 'Positive' Spaces: Sustainable Human Settlements Development in the Context of HIV/AIDS' (2007).

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List of acronyms

ABC	Abstain, Be Faithful, Condomise
AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral treatment
ARV	Antiretroviral
CBO	Community-based organisation
Dplg	Department of Provincial and Local Government
HBC	Home-based Care
HIV	Human Immunodeficiency Virus
HSRC	Human Sciences Research Council
IDP	Integrated Development Plan
MEC	Member of Executive Committee
NGO	Non-governmental organisation
PMTCT	Prevention of mother-to-child transmission
SACN	South African Cities Network
SALGA	South African Local Government Association
SMME	Small, medium and micro enterprise
STI	Sexually Transmitted Infection
TB	Tuberculosis
VCT	Voluntary Counselling and Testing
VIP	Ventilated Improved Pit (latrine)

Glossary

AIDS-defining illness	An illness that is associated with the onset of AIDS. These illnesses seldomly occur in the general population. Examples include Kaposi's sarcoma, extra-pulmonary tuberculosis, HIV wasting syndrome, toxoplasmosis of the brain, lymphoma, and pneumocystis carinii pneumonia.[a]
Antiretroviral treatment	The use of drugs (often in combinations) which act on HIV in the body to delay or reverse the onset of AIDS, enabling people who are infected with HIV to live longer and with a better quality of life.[b]
Child-headed household	A situation in which the parent or caregiver of the household is terminally ill or has died, no adult family member is available to provide care and support and where a child has assumed the role of primary caregiver in respect of a child or children in the household in terms of providing food, clothing and psychosocial support.[c]
Epidemic	A widespread outbreak of a disease or infection within a population.[d]
Home-based care	The provision of comprehensive services by formal and/or informal caregivers in the home to promote, restore and maintain a person's maximum level of comfort, function and health, including care towards a dignified death.[e]
Incidence	HIV incidence refers to the number of new infections that occur over a time period. The *incidence rate* is the number of infections per specified unit of population in a given time period, for example, per 100 000 population per annum.[f]
Morbidity	Refers to illness.
Mortality	Refers to death. The *mortality rate* is the number of deaths in a given time period.
Opportunistic infections	Parasitic, bacterial, viral and fungal infections that occur when a person's immune system is weakened. Common opportunistic infections associated with HIV include tuberculosis, thrush, shingles, meningitis and pneumonia.[g]
Prevalence	HIV prevalence refers to the absolute number of people infected with HIV in a population at a given time. The *prevalence rate* is the proportion of the total population who are HIV-positive at a particular time, expressed as a percentage.[h]
Vulnerability	Vulnerability is used in this document to refer to the risk of an individual or group becoming infected with HIV, which may be determined by a variety of biological, behavioural, social, cultural and economic factors.

[a] Tomlinson, R. 2004:page 23.
[b] Holden, S. 2004: page ix.
[c] Department of Social Development. 2005: page ix.
[d] Holden, S. 2004: page ix.
[e] Department of Social Development. 2005.
[f] Barnett, T and Whiteside, A. 2002: page 49.
[g] Holden, S. 2004: page xi.
[h] Barnett, T and Whiteside, A. 2002: page 49.

1. Introduction to the Guide

1.1 About the guide

This introductory guide aims to offer practical guidance and suggestions on how HIV/AIDS[3] can be understood and integrated into housing and human settlements development in South Africa. It is widely accepted that as many as 5.5 million people in the country, or roughly 19% of the total population, are infected with HIV.[4] In the face of this crisis, there is growing recognition that HIV/AIDS cannot be successfully addressed as a purely disease-specific, health-related concern.[5] Attention is increasingly focussing on the relationship between HIV/AIDS and development, both in terms of how socio-economic development conditions, such as poverty, inequality and gender discrimination contribute to the spread of HIV, and the consequences of the epidemic for the prospects of improving human development and meeting national and international development targets, such as the Millennium Development Goals. In South Africa, this awareness of the need to broaden the conceptualisation of HIV/AIDS as a development issue has recently found expression in new and important policy developments, such as the latest National Strategic Plan on HIV/AIDS for 2007 – 2011, and the Department of Provincial and Local Government's (dplg's) Framework for an Integrated Local Government Response to HIV and AIDS (see boxes 7 and 10).

This guide locates a developmental perspective on HIV/AIDS within the context of housing and human settlements development. The document explains the ways in which human living environments have implications for the spread and management of the HIV/AIDS epidemic, as well as how HIV/AIDS affects many of the underlying assumptions and practical considerations involved in the development of sustainable human settlements. Beyond explaining the relationship between HIV/AIDS and housing and human settlements development, the guide provides practical guidelines on what integrating HIV/AIDS means for the day-to-day work of various actors involved in human settlements development processes.

1.2 Why the guide was developed

HIV/AIDS places new demands on all sectors, including built environment professionals and decision-makers involved in all aspects of human settlements development. While there is an expanding body of literature, toolkits and training materials around HIV/AIDS and local governance and development planning internationally, very few are explicitly packaged to address the relationship between HIV/AIDS and human settlement development processes. In the South African context, there are two reasons for particular urgency around the need for reflection and analysis of, and practical action in response to, the ways in which HIV/AIDS impacts on human settlements and, in turn, how the characteristics of the built environment impact on the context for the spread and management of the HIV/AIDS epidemic. Firstly, as is well known, South Africa is currently experiencing one of the world's most rampant HIV/AIDS epidemics, the effects of which have now begun to permeate every aspect of society. Secondly, the country's apartheid history has left a legacy of inadequate, spatially fragmented, racially divided and underdeveloped human settlements for the majority of the country's people. While a great deal has been done since 1994 to address this legacy (at times with perverse consequences), huge backlogs in access to housing and other basic services remain, and the quality of many of the new human settlements developed in recent years has fallen far short of what many consider acceptable standards.[6]

Through the lens of HIV/AIDS, this document revisits some of the fundamental principles of creating sustainable human settlements, with a view to encouraging the creation of better living environments that take into account the needs of people living with or directly affected by HIV/AIDS (and other chronic diseases) as well as, more broadly, creating a conducive environment for supporting and empowering people living in poverty and those who are particularly vulnerable, especially women and children.

The guide attempts to point to key issues to be considered in relation to HIV/AIDS and housing, without being prescriptive. It recognises that the specific situations, resources and capacities in different municipal settings may vary vastly. It is therefore up to each municipality to decide what are appropriate and feasible interventions given their particular local circumstances and constraints. It should be noted, however, that much of what is recommended in this guide falls within the ambit of what municipalities should in any case be doing as part of their mandate of "developmental" local government.

1.3 Who is the guide for?

The primary intended target audience for this document is local government practitioners and policy-makers directly involved in the planning, implementation, management and governance of human settlements. This includes housing practitioners, municipal planners, Integrated Development Planning (IDP) managers, heads of line function departments and councillors. However, since human settlement development processes are diverse and complex, and responsibilities for delivering the different components that make up "sustainable human settlements" cut across all three spheres of government, it is expected that the guide will also be relevant and useful for practitioners and policy-makers within provincial and national government departments.

Beyond government role-players, it is also anticipated that the guide will be an informative and practical resource for built environment professionals within the private sector, such as town planners, urban designers and architects. In the current South African context, where many municipalities currently lack sufficient internal human capacity for undertaking some of the more technical functions of housing and human settlements development, private service providers play a vital role in the sector.

Finally, while not the primary target audience of this particular document, it is expected that civil society organisations, such as non-governmental and community-based organisations (NGOs and CBOs), and any other community structures that have an interest in housing, development and health issues at local level, could benefit from reading this guide. One of the contributions this guide hopes to make is to promote a better shared understanding amongst all role-players of what constitutes sustainable human settlements, the roles and responsibilities of different actors, and, in particular, how municipalities and civil society actors can constructively engage with each other to resolve challenges confronting the most vulnerable in communities, both in terms of access to adequate settlements, as well as HIV/AIDS-related issues.

Due to the potential diversity of audiences who will use this guide, it is assumed that different readers will have different levels of knowledge and engagement with human settlements development processes – some will approach it primarily from a policy and political decision-making perspective, while others from a more hands-on technical, planning, or community organising perspective. Likewise, when it comes to knowledge of HIV/AIDS, some readers may be well informed about what HIV/AIDS is, and its socio-economic impacts, while others may have only a rudimentary understanding of these issues. For this reason, an attempt has been made to "level the playing field" through the inclusion of information boxes on key concepts, terms, policies and so on, which may be more informative for some readers than for others.

1.4 Scope of the guide

While HIV/AIDS should be considered in relation to all human settlements, the focus of this guide is on human settlements developed particularly for residents who require government assistance to meet their shelter and other basic needs. This assistance is provided mainly through informal settlement upgrading processes and the National Housing Subsidy Scheme implemented under the auspices of the national Department of Housing, as well as a range of other grants and transfers to local government to provide basic infrastructure and amenities.

The guide focuses on two particular aspects of human settlement development, informal settlements upgrading and greenfields settlements development (or what is commonly referred to as "RDP housing"). These foci were chosen because they currently represent the two dominant contexts for low-income human settlements development in South Africa. These two types of settlements, especially informal settlements, also feature many of the socio-economic and socio-physical characteristics that tend to foster the spread of HIV/AIDS and other health conditions, and in which the most poor and vulnerable people typically live and are least equipped to cope with the socio-economic impacts of HIV/AIDS. Issues of HIV vulnerability and HIV/AIDS-related socio-economic impacts are, of course, also important in the context of other housing types – for example, hostels and social housing – but they are beyond the scope of the present publication.

It should also be noted that, while there are elements of the guide that are generic and would be applicable to all settlement contexts, there is an inherent bias towards the two settlement types referred to above located within *urban* contexts. This urban bias results from Isandla Institute's organisational focus on urban policy and development, as well as the fact that HIV/AIDS tends to be more concentrated in urban contexts, for a variety of reasons which are elaborated on this document.

While this document may serve as a useful background resource for training, it was not specifically designed as a training manual. Furthermore, readers interested in a broader and more analytical discussion of the interconnections between HIV/AIDS,

human settlements and development are referred to an accompanying concept paper by Isandla Institute, entitled *Building "Positive" Spaces: Sustainable Human Settlements Development in the Context of HIV/AIDS.*

Finally, this document represents a first attempt to package a resource on HIV/AIDS and human settlements for municipal practitioners. As such, it is a work in progress that will be added to and improved over time. Isandla Institute welcomes all comments and suggestions that will assist us to make this an even more useful and relevant resource.

1.5 Structure of the guide

The guide is divided into two parts:

PART A provides a conceptual framework for understanding the relationship between HIV/AIDS and sustainable human settlements. Readers already familiar with the basic concepts relating to HIV/AIDS and sustainable human settlements may choose to skim this part or proceed directly to Part B. Part A begins by offering an explanation of the core components of what might be considered "sustainable" human settlements, as the backdrop for the rest of the document. It then provides a discussion of what makes HIV/AIDS a unique developmental challenge, and the key elements of an effective response to the epidemic. It then makes the linkages between responding to HIV/AIDS and sustainable human settlements. Finally, Part A ends with some key questions and guiding principles for integrating an HIV/AIDS perspective into human settlement development processes.

PART B examines priorities and strategies for integrating HIV/AIDS into sustainable human settlements development processes. This part of the guide is intended to be more hands-on, offering practical suggestions for those working in the sector on how to factor HIV/AIDS into key aspects of all steps involved in planning, designing, implementing and governing human settlements. The first section deals with upgrading informal settlements, which, we argue, is a priority intervention municipalities should undertake to address both the spread of HIV/AIDS as well as its health and socio-economic impacts. The following sections then deal with formal greenfields human settlement development processes, starting from assessing the demand for housing and other services in the context of HIV/AIDS, followed by issues to consider in the design phase. The remaining two sections then deal with how HIV/AIDS can be integrated into the implementation and post-implementation phases of developing human settlements. Although Part B has been arranged is such a way that informal and formal settlement development processes are dealt with separately, the intention was not to imply that the HIV/AIDS considerations involved in each are unrelated. For example, the reader will find that many of the suggestions with regard to the planning and design of greenfields developments will also be useful in the context of informal settlement upgrading.

PART A

CONCEPTUAL FRAMEWORK FOR UNDERSTANDING THE RELATIONSHIP BETWEEN HIV/AIDS AND SUSTAINABLE HUMAN SETTLEMENTS

2. Understanding sustainable human settlements

While not a new term, the notion of "sustainable human settlements" has received greater prominence in South Africa recently, particularly since the release of the Department of Housing's "Comprehensive Plan for the Development of Sustainable Human Settlements" in 2004, commonly referred to as the "Breaking New Ground" policy (see box 1). This section provides a brief conceptual framework for understanding sustainable human settlements. A distinction has been made between the normative characteristics of sustainable human settlements (i.e. the "ideal" key components or *outcomes*), and the *processes* that are intended to achieve the creation of sustainable human settlements (e.g. integrated development planning).

Box 1: Breaking New Ground

Unveiled in late 1994, the "Breaking New Ground" plan was a response to many of the inadequacies of the government's past housing responses and structural barriers to the creation of functioning housing markets in South Africa that serve the needs of all income groups. The plan advocates a shift away from a focus on quantitative delivery of basic shelter units to the creation of quality, sustainable human settlements and more efficient towns, cities and regions, and contains nine business plans that are intended to achieve this goal. The plan defines sustainable human settlements as "...well managed entities in which economic growth and social development are in balance with the carrying capacity of the natural systems on which they depend for their existence and result in sustainable development, wealth creation, poverty alleviation and equity."[7]

More information on the plan can be obtained on the national Department of Housing's website: www.housing.gov.za

2.1 Key components of sustainable human settlements

Human settlements are complex systems, much like natural ecosystems. They entail different built forms, human activities and natural elements that are connected and interact together across space. Ideally, this should produce a functional, integrated system that satisfies the physical and psychological needs of all of their inhabitants.

A review of literature and some key policy documents in South Africa was used to identify the following key characteristics that constitute "sustainable human settlements":

Provision of adequate housing

Housing is arguably the most obvious basic component of any human settlement. Housing is one of human beings' most basic needs and is recognised as a basic human right. Adequate housing provides many benefits that are fundamental to human physical and psychological well being, for example:

- Most fundamentally, shelter from the elements
- Access to basic services (for example, a safe potable water supply, sanitation, electricity, solid waste disposal) that enable inhabitants to meet their most basic needs and contribute to a healthy, clean living environment
- Privacy and protection from external threats to our safety
- Greater dignity
- A space to raise children and enjoy family life and to relax
- A physical address (important for access to formal employment and other resources)
- A form of security, collateral to secure access to other resources e.g. a loan from a bank
- A space for home-based economic activity, such as running a small business making or selling goods
- Land for growing food

In the South African context, the dominant understanding of low-income housing is that of freestanding houses on single plots. However, "housing" can take a variety of other forms, such as multi-storey blocks of flats, row houses, semi-detached houses or hostels.[8]

Box 2: The right to adequate housing

Access to adequate housing is widely recognised as a basic human right. Beyond the benefits of housing itself, the right to adequate housing is important because it serves as a foundation for accessing various other rights. As Smit notes, "housing rights are particularly important as an organising principle of State policies and programmes because they intersect with a particularly wide range of other rights."[9]

Recognising housing as a basic human right has important implications for government housing policy-makers and practitioners, in terms of understanding their constitutional obligations to contribute to realising this right for all, and especially for those within society who are most vulnerable and marginalised, including people living with and affected by HIV/AIDS.

South Africa's Constitution enshrines the right to adequate housing, and broadly defines the obligations of the state to assist those without their own private means to do so to access housing. Section 26 (1) of the Constitution states that "everyone has the right to have access to adequate housing," while section 26(2) states that "The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of this right." The Grootboom Judgement in 2000 and various other court rulings have defined more precisely what "the right to have access to adequate housing" means, and the scope of what constitutes "reasonable" policy and implementation measures "to achieve the progressive realisation of this right."[10]

There are also a number of international human rights treaties and declarations that include the right to adequate housing, to which South Africa is also a signatory. One of the most important of these is the Habitat Agenda, which was adopted at the second United Nations Conference on Human Settlements in Istanbul in 1996. As one of the 171 nations that adopted the declaration, South Africa agreed to a number of commitments. One of these is Article 39, which states: "…we recognise the obligation by Governments to enable people to obtain shelter and to protect and improve dwellings and neighbourhoods. We commit ourselves to the goal of improving living and working conditions on an equitable and sustainable basis, so that everyone will have adequate shelter that is healthy, safe, secure, accessible, and affordable and that includes basic services, facilities and amenities, and will enjoy freedom from discrimination in housing and legal security of tenure."[11]

What constitutes "adequate" housing is frequently debated in relation to a number of dimensions, such as the size, design and materials specifications of housing units themselves, basic services provided, access afforded to social and economic amenities, affordability and urban versus rural contexts. However, internationally, and locally in South Africa, certain minimum technical standards have been widely accepted as benchmarks for what constitutes "adequate" housing. What has been emphasised is that service levels and technical specifications should be *appropriate* for the context in relation to local financial and implementation capacity, as well as users. It has been noted, for example, that a high level of service that fails may pose a greater threat to public health and the environment than a lower level of service.[12]

Secure tenure, which may take a variety of forms (other than purely ownership), and protection from arbitrary eviction are also considered key elements of adequate housing.

Location is a critical determinant of how adequate and sustainable housing is. In South Africa, housing intended for low-income residents has too often been developed on the periphery of towns and cities, far from employment opportunities. The acquisition and development of suitable, well-located land for housing is thus a vital element of creating sustainable human settlements.

Box 3: National Housing Subsidy Scheme

South Africa is one of a few developing countries that has a large-scale government-driven programme to assist citizens without their own private means to meet their housing needs. Since 1995, the national Housing Subsidy Scheme has been the primary government housing assistance measure. Qualifying beneficiaries receive a once-off capital subsidy to access a

housing opportunity. The size of the subsidy awarded is determined on a sliding scale based on household income. A number of different types of subsidies are available under the scheme to meet a variety of different housing needs. Despite this, however, a common criticism is that the focus on the delivery of "free-standing RDP houses" and ownership as the dominant tenure model is restrictive in the range of options available to poor households. In the context of HIV/AIDS and its impacts on household fluidity and mobility, it has been suggested that greater flexibility, especially in terms of access to rental housing, is important.

By September 2006, approximately 2.2 million houses, housing an estimated 8.4 million people, had been delivered through the scheme.[13] Despite these impressive figures, the rate of delivery has been insufficient to eradicate housing backlogs and to keep pace with the growth in new households. Concerns have also been raised that there has been an over-emphasis on numbers, and insufficient attention to the quality of the houses provided. The national Norms and Standards in Respect of Permanent Residential Structures, introduced in 1999, was an attempt by government to provide tighter regulation of minimum acceptable standards for low-income housing delivery. In early 2007, the national Department of Housing announced further increases in the required standards of quality for subsidized housing (effective from 1 April 2007). These new standards include that the minimum size for housing units would be raised from 30m^2 to 40m^2, and that they must include two bedrooms, a separate bathroom with a shower, basin and a toilet, a combined kitchen and living area and an electricity board, where electricity is available. In order to afford the higher specifications, the government has indicated that the full subsidy amount per unit (raised to R38 984 for 2007-08) should be used for the construction of the top-structure and that only in exceptional circumstances should any of the subsidy amount be used to cover the costs of internal municipal engineering services.[14]

The Housing Subsidy Scheme consists of eight different subsidy types. In terms of the number of subsidies allocated, the following are the most important:

Project-linked Subsidy
This is by far the most common subsidy type. It allows qualifying beneficiaries who have never owned a property to access and own a complete residential unit (including land, internal infrastructure and topstructure), which is developed within an approved housing project developed for subsidy beneficiaries.

Individual Subsidy
This subsidy type enables beneficiaries to acquire ownership of serviced stands and to enter into house building contracts, or to purchase an existing residential property which is not part of approved housing subsidy projects. Individual subsidies may be credit-linked, in which case qualifying beneficiaries apply for the subsidy via a bank when they apply for a housing loan, or non-credit-linked, in which case they receive only the subsidy to purchase an existing house.

Consolidation Subsidy
Consolidation subsidies are intended to afford previous beneficiaries of serviced stands, financed by the previous housing dispensation, the opportunity to construct a topstructure.

Institutional Subsidy
This subsidy is the only type that allows for tenure options other than full individual ownership. It is available to approved institutions to enable them to provide affordable housing stock for individuals who qualify for housing subsidies on an instalment sale, rental or rent-to-buy option. Transfer of units from the institution to beneficiaries may not take place for a minimum of 4 years.

People's Housing Process
The People's Housing Process, or PHP, is a subsidy mechanism that provides support to communities in which individuals wish to enhance other housing subsidies by building or organising the construction of their houses themselves. The grant provides an establishment grant of to cover the costs of technical and other support, such as housing support centres and staff to manage the project.

Source: www.housing.gov.za; Office of the Public Service Commission, 2003:10

Box 4: Functions of local, provincial and national government with regard to housing and human settlements development, as defined in the Housing Act 107 of 1997

Local government	Section 9: (1) Every municipality must, as part of the municipality's process of integrated development planning, take all reasonable steps within the framework of national and provincial housing legislation and policy to– (a) ensure that: (i) the inhabitants in its area of jurisdiction have access to adequate housing on a progressive basis; (ii) conditions not conducive to the health and safety of the inhabitants of its area of jurisdiction are prevented or removed; (iii) services in respect of water, sanitation, electricity, roads, stormwater drainage and transport are provided in a manner which is economically efficient (b) set housing delivery goals in respect of its area of jurisdiction; (c) identify and designate land for housing development; (d) create and maintain a public environment conducive to housing development which is financially and socially viable; (e) promote the resolution of conflicts arising in the housing development process; (f) initiate, plan, co-ordinate, facilitate, promote and enable appropriate housing development in its area of jurisdiction; (g) provide bulk engineering services, and revenue generating services in so far as such services are not provided by specialist utility suppliers; and (h) plan and manage land use and development
Provincial government	Section 7: (1) Every provincial government... must...do everything in its power to promote and facilitate the provision of adequate housing in its province within the framework of national housing policy (2) For the purposes of subsection (1) every provincial government must through its MEC– (a) determine provincial policy in respect of housing development; (b) promote the adoption of provincial legislation to ensure effective housing delivery; (c) take all reasonable and necessary steps to support and strengthen the capacity of municipalities to effectively exercise their powers and perform their duties in respect of housing development; (d) co-ordinate housing development in the province (e) when a municipality cannot or does not perform a duty imposed by this Act, intervene... to ensure performance of such duty; and (f) prepare and maintain a multi-year plan in respect of the execution in the province of every national housing programme and every provincial housing programme and every provincial housing programme which is consistent with national housing policy...
National government	Section 3: (1) The national government... must ...establish and facilitate a sustainable national housing development process. (2) For the purposes of subsection (1) the Minister must– (a) determine national policy, including national norms and standards, in respect of housing development; (b) set broad national housing delivery goals and facilitate the setting of provincial and, where appropriate, local government housing delivery goals in support thereof; (c) monitor the performance of the national government, and, in co-operation with every MEC, the performance of provincial and local governments against housing delivery goals and budgetary goals; (d) determine a procurement policy...in relation to housing development; (e) assist provinces to develop the administrative capacity required for the effective exercise of their powers and performance of their duties in respect of housing development

	(f) support and strengthen the capacity of municipalities to manage their own affairs, to exercise their powers and perform their duties in respect of housing development; (g) promote consultation on matters regarding housing development between the national government and representatives of– i) civil society; ii) the sectors and subsectors supplying or financing housing goods and services; iii) provincial and local governments; and iv) any other stakeholder in housing development (h) promote effective communication in respect of housing development

Access to social and economic infrastructure

Along with housing, the other key physical ingredients of sustainable human settlements are a range of facilities and services that humans require to live healthy, safe and productive lives. These include clinics, schools, roads, parks and other open spaces, sports and recreational facilities, community halls, police and other emergency services, shops and informal trading facilities. A vital consideration in the choice of location for new housing developments should be proximity to existing community facilities. The principle of equality of access is also critical, especially in the context of South Africa, where historically certain communities have been deprived of many of the social amenities and services that more affluent communities have often taken for granted.

Economic viability

In order for human settlements to be economically viable, residents need access to income opportunities, either through formal employment or the informal economy. The location of housing developments in relation to existing opportunities for formal employment is thus an important consideration in ensuring that human settlements are sustainable. Economic opportunities should also be integrated within housing developments themselves by setting aside land for formal businesses to develop, as well as for informal sector activities, such as street trading. The design of housing units, the layout of residential areas and the regulation of land uses should also aim to promote opportunities for residents to generate livelihoods.

Access to efficient transport systems

Since the majority of residents of lower-income communities are unable to afford private transport, access to affordable, reliable and safe public transport is vital to enabling people to access employment opportunities, as well as other social amenities, such as clinics and schools. One of the most detrimental legacies of apartheid planning is the spatial disjuncture between where most poor people live and where they have access to work opportunities, which means that poor residents are forced to endure long and expensive daily commutes to work. Affordable public transport therefore plays a key role in integrating cities and making them more efficient systems that work for the poor. Non-motorised forms of transport through, for example, cycle and pedestrian pathways, should also be accommodated in public transport planning.

Socially integrated and inclusive communities

It goes without saying that the most important "ingredient" of any sustainable human settlement is the people who live in them. The notion of social inclusivity has special significance in South Africa, with its history of physically dividing people along racial lines in settlements that, for the majority of the population, severely limited their life chances and opportunities. Sustainable settlements should contribute to integrating people from all backgrounds, including different race and socio-economic groups. Particular emphasis should be paid to ensuring that the needs of the most vulnerable members of communities are accommodated. One of the frequent critiques of more recent human settlement development practices in South Africa is that the poor have been concentrated together in low-income housing projects, which has merely served to further entrench apartheid-style social segregation and inequality. The Department of Housing has recently begun to promote the concept of "inclusionary housing," which is an attempt to encourage the integration of housing for lower-income groups within higher-income housing developments. Since it is well-established that poor households frequently rely on neighbours for material support in hard times, integrating residents of different socio-economic standing also assists to support social support networks that can benefit the most vulnerable members of communities.

Social inclusivity also implies greater sharing of community facilities, for example sports amenities and libraries, between different communities. This not only creates opportunities for previously segregated communities to interact with each other, but from a planning and cost perspective also avoids unnecessary duplication and wastage of resources.

Greater efficiency through densification and compaction

One of the key aspects of creating sustainable human settlements should be to reduce the current urban sprawl that is a historic feature of the development of South Africa's towns and cities. Achieving higher density and more compact urban settlements through, for example, promoting medium and high density housing types, filling in vacant land and sub-division promotes more economical and efficient use of land and services, thereby lowering the costs to government and residents of providing housing and services. It also, very importantly, allows more people, especially the poor, to access serviced, well-located land close to economic opportunities and existing social infrastructure. Moreover, higher density residential environments also contribute to greater uptake and affordability of public transport.

Environmentally sustainable

No form of development can be considered "sustainable" without taking into consideration its impacts on the natural environment. The location and development of human settlements should, as far as possible, minimise negative impacts on the local ecology, especially where natural ecosystems are particularly fragile or rich in biodiversity. A classic example is the destruction of wetlands to make way for greenfields housing developments. It is also important to ensure that the carrying capacity of the natural environment is not exceeded, i.e. that the resources provided by nature are not utilised or degraded at a pace faster than they can be replenished. Towards this goal, housing should include design features that minimise the use of water and energy. The production of waste from households and industry should also be minimised and, where possible, recycled. Human settlements should also include adequate open spaces and natural vegetation, which contributes to creating a more aesthetically pleasing, but also healthier, living environment.

Box 5: Integrated Development Planning

Sustainable human settlements should, by their nature, be *integrated* settlements. The achievement of the sustainable human settlement outcomes outlined above requires a high level of co-ordination between all role-players, including different government agencies across the three spheres of government, as well as the private sector, and community stakeholders. However, a lack of intergovernmental co-ordination and co-operation has often resulted in the creation of sterile, dormitory style townships, not much better (and sometimes even worse) than those created under apartheid.

Moreover, misalignment in the plans of different departments has frequently led to anomalies such as housing being delivered without related infrastructure like roads, clinics or schools, or health facilities being built and then lying dormant because no operational budget has been allocated to cover the staff and running costs of the facility.

The recognition that many of the human settlements developed in the 1990s have not been integrated nor sustainable was a major motivation for introducing the system of Integrated Development Planning (IDP) through the Local Government: Municipal Systems Act (32 of 2000). In terms of the Act, it became compulsory for all municipalities to formulate a single IDP document that would apply to the entire area under the municipality's jurisdiction and would be the "principal strategic planning instrument which guides and informs all planning and development, and all decisions with regard to planning, management and development, in the municipality."[15] Each municipality's IDP should be reviewed on an annual basis to assess changing needs within communities, and progress with delivery. IDPs are intended to be the basis upon which municipal budgets are formulated.

A central goal of IDP is to ensure greater alignment between the policies and plans of different departments across the three spheres of government. All housing and related infrastructure and service delivery within municipalities is required to take place within the ambit of the municipal IDP. According to the Housing Act of 1997 (Section 9(1)(f)):

"Every municipality must, as part of the municipality's process of integrated development planning, take all reasonable and necessary steps within the framework of national and provincial housing legislation and policy to initiate, plan, coordinate, facilitate, promote and enable appropriate housing development in its area of jurisdiction."[16]

IDP documents, which are reviewed annually, are expected to contain, amongst other elements, an assessment of community needs (derived by means of public participation), a prioritisation of these needs, a development vision for the municipality, an audit of available resources, skills and capacities, strategies to achieve the development goals set out, with programmes ad projects to implement these strategies, a three-year financial plan and key performance indicators and performance targets.

The IDP process itself consists of 5 phases[17]:
Phase 1: Analysis - analysis of the current social, economic and environmental state of the municipality, and the needs of communities
Phase 2: Strategies - development of objectives and strategies to achieve the objectives
Phase 3: Projects - identification and prioritisation of development projects
Phase 4: Integration - integration of projects and checking that projects contribute to the development objectives of the municipality
Phase 5: Approval – presentation of IDP to municipal council for consideration and approval

3. Making the connections: HIV/AIDS and sustainable human settlements

3.1 What is different about HIV/AIDS?

In many respects HIV/AIDS is a chronic disease like any other, such as diabetes or hypertension. However, HIV/AIDS has a number of important distinguishing characteristics that set it apart from most other health conditions and which have particular implications from a development perspective. These characteristics can be defined as:

The way it is transmitted:
While HIV can be transmitted in a number of ways (see box 6), the primary mode of transmission in South Africa is through heterosexual sexual contact.

Who tends to be infected:
While anyone can be infected with HIV, in South Africa there are clear patterns in terms of the groups who tend to be at highest risk of infection - young people (20-34 years) in the economic prime of their lives, women, people living in poverty, and urban dwellers (and particularly people living in urban informal settlements).

Who it affects:
HIV/AIDS is an epidemic in South Africa and is now so widespread that virtually no household remains unaffected, either directly or indirectly. Because of its impacts in terms of illness and death amongst the economically productive segment of the population, HIV/AIDS ultimately affects all of us. HIV/AIDS skews the demographic profile of the country by taking out the middle age stratum of society, and creating more orphans and a greater proportion of older people (who are often left to care for orphans). Poor people and women in particular tend to experience the most direct negative socio-economic consequences of the epidemic.

The length of time it takes from infection to illness and death:
Unlike with most other diseases, in the case of HIV/AIDS, most infected people only start to display signs and symptoms of disease after many years.[18] This means that for an initial period it may be difficult to notice the effects of the epidemic in any particular area, but the impacts nevertheless need to be anticipated and planned for.

It has no cure:
Although there are effective anti-retroviral and other medications for managing HIV/AIDS and its associated diseases, there is currently no cure or vaccine for HIV/AIDS.

These factors have important implications for how HIV/AIDS can be prevented and managed, as both a health and a development issue. The relationship between HIV/AIDS and human settlements specifically is explained further in the following sections.

Box 6: HIV and AIDS – Essential information
The Human Immunodeficiency Virus (HIV) is a virus that progressively destroys the body's immune system and prevents it from fighting off infections or healing. HIV does this by infiltrating two types of immune system cells, the main one being CD4 cells. Once inside the cells, HIV copies the cell's DNA so that it can't be detected by the body's immune system. HIV cells then reproduce in large numbers inside the host immune cells and escape and, in the process, destroy the host cell.

The HIV cells then go on to infect more immune cells. Eventually, the rate at which CD4 cells are killed exceeds the rate at which they can be reproduced, which causes the number of CD4 cells in a person's body to fall. When the number falls below 200 per microlitre of blood (a healthy person has about 1200 CD4 cells), a person is regarded as having AIDS (Acquired Immune Deficiency Syndrome). At this point serious opportunistic infections and other illnesses, such as tuberculosis, pneumonia, and certain cancers, begin to occur, which increase in frequency, severity and duration, until eventually, the person dies. From initial infection with HIV, to falling ill with AIDS, can take a long time, up to ten years. For most of this time, the disease may be asymptomatic - many people may not even know that they are infected with HIV and may remain as healthy as normal.

HIV is transmitted through bodily fluids. This can happen in a variety of ways. By far the most common mode of transmission is through unprotected sex, which accounts for about three quarters of infections. Other ways the virus can be transmitted are through mother-to-child infection (either during pregnancy, at the time of birth, or through breastfeeding), the use of contaminated blood or blood products, or coming into contact with contaminated blood (e.g. open wounds), and the use of contaminated needles when taking intravenous drugs. You cannot be infected with HIV in other ways - for example, if a person with HIV coughs, he/she cannot pass on the virus, or if you hug or touch a person with HIV, or drink from the same cup, you cannot get HIV.

While there is currently no cure or vaccine for HIV/AIDS, for those who are infected, the progress of the disease can be reduced through the effective treatment of opportunistic infections. More recently, medicines that fight HIV directly, called antiretroviral drugs (ARVs), have also been developed. These drugs are often used in different combinations (cocktails) and work by reducing the viral load in the body. Introduced at an appropriate stage, and with consistent use, antiretroviral therapy (ART) can help patients live relatively healthy and productive lives for many years.

Sources: Barnett, T and Whiteside, A. 2002:30-44; World Bank, 1999:17-21

3.2 HIV/AIDS in South Africa

It is important to locate an understanding of HIV/AIDS as a development issue, with specific reference to human settlements, within a broader understanding of the key demographic and locational characteristics of the epidemic in South Africa. The HIV data presented below was obtained from the 2005 Human Sciences Research Council (HSRC)/Nelson Mandela Foundation South African National HIV Survey, which is widely considered to be one of the most complete and reliable sources of data on HIV/AIDS in the country.[19]

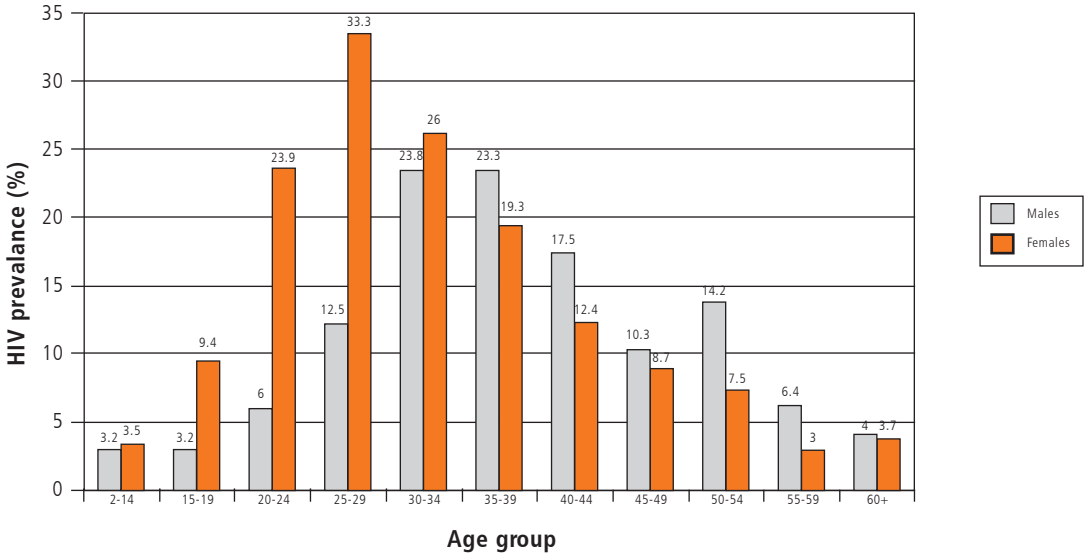
Overall HIV prevalence

Amongst the total population aged 2 years and older, the study estimated HIV prevalence to be 10.8%. Amongst adults aged 15-49, HIV prevalence is estimated to be 16.2% (roughly one in every six adults).

Prevalence by sex and age group

Figure 1 shows HIV prevalence by sex and age. The overall HIV prevalence rate amongst females aged 2 and older was found to be significantly higher (13.3%) than for males (8.2%). The highest HIV prevalence rate is amongst young females in the age group 25-29 years, which peaks at 33.3%. HIV prevalence amongst males peaks at 23.3% in the 30-34 and 35-39 age groups.

Figure 1: HIV prevalence by sex and age group, South Africa 2005



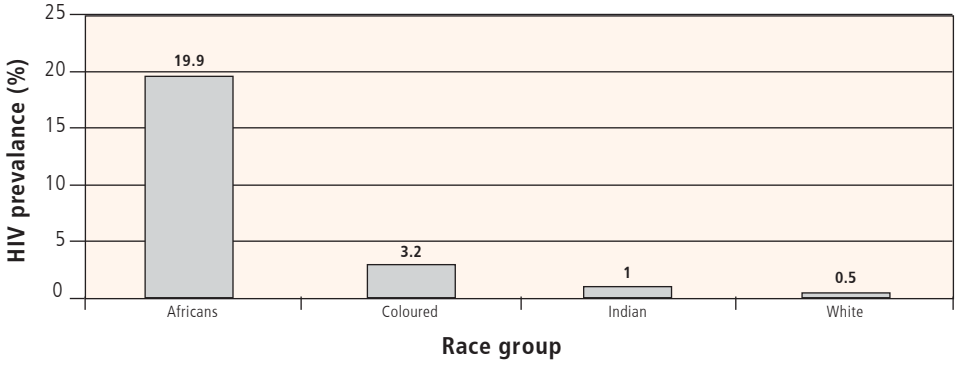
Source: HSRC/Nelson Mandela Foundation *South African National HIV Survey*, 2005, pg. 35

In terms of *incidence* (which refers to the rate at which HIV is being spread), the HSRC study found that HIV incidence among adult females aged 15-49 was more than double that in males – 6.3% compared to 2.4%. A particularly alarming statistic is that that incidence amongst females aged 15-24 was five times higher than for males in this age group – 6.5% compared to 0.8%.[20]

Prevalence by race group

Figure 2 reveals that the prevalence of HIV among adult Africans is significantly higher than for any other race group in South Africa.

Figure 2: HIV prevalence among adults aged 15-49 by race, South Africa 2005

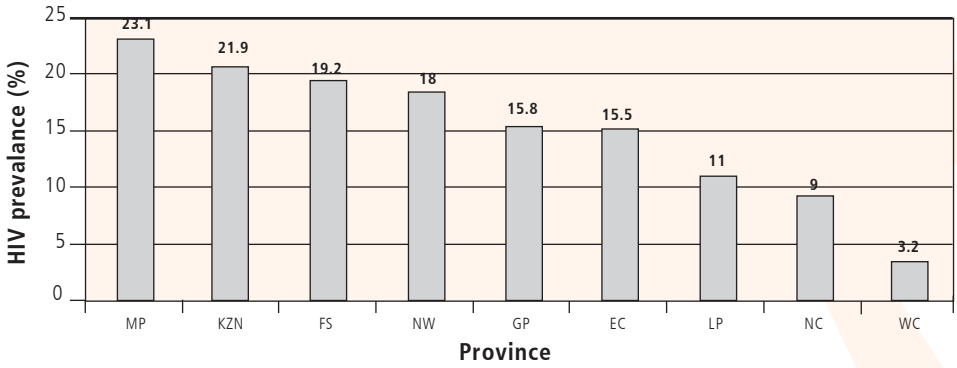


Source: HSRC/Nelson Mandela Foundation *South African National HIV Survey*, 2005, pg. 40

Prevalence by province

According to the data presented in figure 3, the province with the highest HIV prevalence rate amongst adults in 2005 was Mpumalanga (23.1%), followed by KwaZulu-Natal (21.9%) and Free State (19.2%). The province with the lowest prevalence was the Western Cape, at 3.2%.

Figure 3: HIV prevalence among adults aged 15-49 by province, South Africa 2005

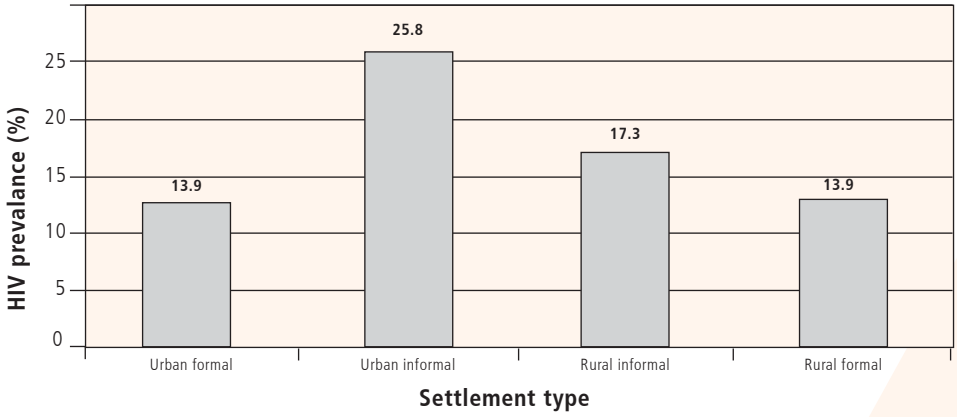


Source: HSRC/Nelson Mandela Foundation *South African National HIV Survey*, 2005, pg. 39

Prevalence by locality type

Of particular interest for the contents of this guide, figure 4 indicates that the locality types with the highest prevalence of HIV amongst residents aged 15-49 is urban informal settlements (25.8%), followed by rural informal settlements (17.3). Section 4.1 offers some insights into the reasons for the higher prevalence amongst residents of informal settlements.

Figure 4: HIV prevalence among adults aged 15-49 by locality type, South Africa 2005

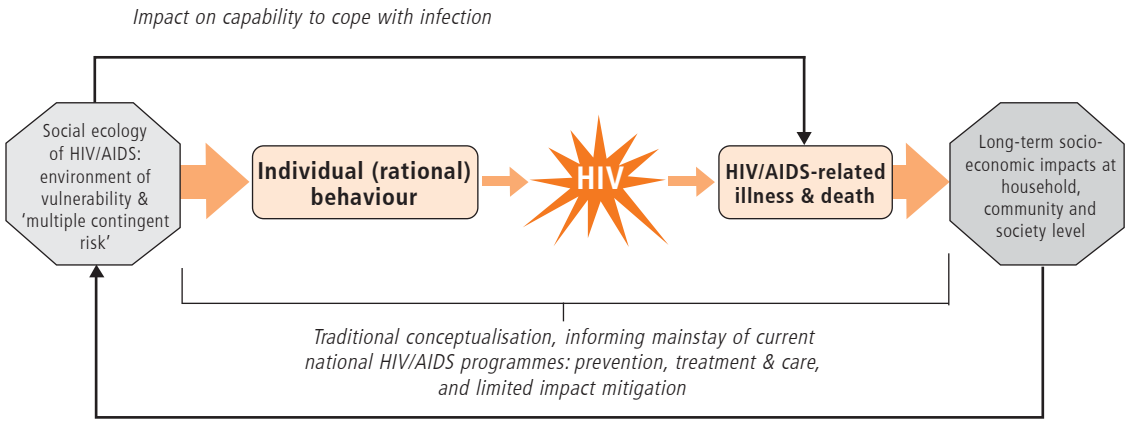


Source: 2005 HSRC/Nelson Mandela Foundation HIV/AIDS Study, pg. 40

3.3 Approaching HIV/AIDS as a development issue

The traditional response to HIV/AIDS has been dominated by a bio-medical perspective, which focuses primarily on the health and behavioural dimensions of the epidemic. While this approach is necessary, increasingly a more developmental approach is being integrated into HIV/AIDS responses. This approach contextualises individual behaviour and health conditions within the material circumstances within which people live and seeks to understand and respond to the forward and backward linkages between the causes and consequences of HIV/AIDS and the development context (see figure 5).

Figure 5: A developmental approach to HIV/AIDS



Source: ©Isandla Institute

From a developmental perspective, the interconnections between HIV/AIDS and poverty and between HIV/AIDS and gender inequality are critical. Responding effectively to HIV/AIDS is as much about addressing poverty and gender inequality as it is about generating awareness about, and preventing, the spread of new infections and treating disease.

3.3.1 HIV/AIDS and poverty

In the case of poverty, it is widely recognised that the poor are disproportionately affected by HIV/AIDS. Individuals living in poverty typically face a higher risk of HIV infection as a result of factors such as existing poor health status related to living in overcrowded, unhealthy conditions and not having access to good nutrition and medication, and limited access to information about protecting oneself from HIV.

Poor households are typically least prepared and able to recover from the livelihoods and other shocks to individuals and households that typically occur as a result of morbidity and mortality associated with HIV/AIDS. Having a member of a household with HIV/AIDS has a particularly severe financial impact on poor households. Household incomes can be dramatically affected when breadwinners become ill or die, or have to leave employment to care for other ill household members. Having a household member with HIV/AIDS also results in additional expenses, such as transport to medical facilities, medication, food and supplies for home-based care. Many poor households also take orphans or adults living with HIV/AIDS into their care, which can place further strain on limited household resources. Death also results in a further economic shock, with the high cost of funerals.

Thus, illness and death connected to HIV/AIDS plays a major role in eroding household livelihoods and asset bases, and exacerbating the poverty of already poor households. In turn, poverty feeds into a vicious cycle in which the health, well-being and dignity of those living with HIV/AIDS is compromised.

3.3.2 HIV/AIDS and gender inequality

The unequal power relations that characterise the relationship between men and women in most societies are also often noted as a key factor that contributes to the spread of HIV/AIDS. As the statistics presented above reveal, women and girls typically face a much greater risk of HIV infection. This is a result of numerous biological and social factors. In many contexts, for example, women are unable to negotiate safe sex, or stigma makes them less likely than males to seek treatment for sexually transmitted infections (STIs). Poor women may also have little choice but to engage in risky transactional sexual relationships to support themselves and their children. Women and girls are also more likely to be victims of sexual violence.

In addition, women and girls typically bear the brunt of the negative impacts of HIV/AIDS, often because of socially constructed notions of the role of females within the family; for example, girls are more likely to be taken out of school to care for a sick household member or to go to work to bring in an income for the household. The close link between poverty and gender also needs to be recognised, with the burden of poverty being well known to fall disproportionately on women and girls. Women and

girls are also typically more likely to be forced by poverty into situations that make them more vulnerable to HIV infection, such as commercial sex work or seeking 'sugar daddies.'[21] What appears to be a growing culture of materialism in South Africa, and related peer pressure, is also likely to be contributing to this situation. HIV/AIDS therefore tends to have a greater negative effect on women, and exacerbates the inequalities that exist between men and women.

While prevention and medical treatment interventions are central to efforts to curtail the rate of new infections and to prolong the lives of those living with AIDS, the long-term goal of eradicating poverty and under-development remains key to addressing the challenges posed by the HIV/AIDS epidemic.

Key point: **All interventions aimed at reducing poverty in all its multi-dimensional aspects, as well as improving the status of women in society, have a vital role to play in an effective response to the HIV/AIDS epidemic**.

Box 7: National Strategic Plan on HIV/AIDS 2007-2011

The new national Strategic Plan on HIV/AIDS for South Africa was finalised in early 2007, and sets out the country's comprehensive response to the HIV/AIDS epidemic over the five-year period to 2011. The plan follows, and seeks to improve, the 2000-2005 national strategic plan. The four core elements of the plan are:

1. Prevention
2. Treatment, care and support
3. Research, monitoring and evaluation
4. Human and legal rights

The plan sets out a number of ambitious goals, including:
- reducing the rate of new infections by 50% by 2011, through reducing vulnerability by means of poverty alleviation, development, women empowerment, reducing sexual transmission (multiple infections), and reducing the HIV incidence rate amongst under fives (through prevention of mother-to-child transmission - PMTCT)
- Providing a package of treatment, care and support available to 80% of HIV-positive people and their families by 2011.

What is particularly notable about the plan is the emphasis placed on the response to HIV/AIDS requiring the involvement of all sectors within government and civil society. While the national Department of Health will take the lead, the plan is intended to provide the basis for every sector to formulate its own HIV/AIDS strategic and operational plans. The plan also makes an explicit attempt to broaden the focus of the response to HIV/AIDS away from purely health-oriented interventions, to also consider issues of poverty, socio-economic conditions, and gender inequality.

The plan is available on the Department of Health's website: www.doh.gov.za

3.4 Core elements of an effective response to HIV/AIDS

There is a general consensus that a holistic, integrated response to HIV/AIDS epidemic entails three core dimensions.[22]

1. **HIV prevention and reducing vulnerability to infection**
2. **Treatment, care and support**
3. **Mitigating the current and future social, economic, political and institutional impacts of HIV/AIDS**

Each of these dimensions is explained in more detail below:

HIV prevention and reducing vulnerability to infection:
In a context such as South Africa's, where HIV is primarily transmitted through unprotected sexual activity, the conventional approach to preventing the spread of the virus has been to focus on the "ABC" message – Abstain, Be faithful to one partner and use Condoms. The underlying assumption of this approach is that, armed with knowledge about the risks of contracting HIV

(and other STIs) through unprotected sex, and how to protect themselves, individuals will make the rational decision to adopt safer sexual practices, for example, using a condom. However, the limitations of a focus only on individual choice and responsibility have been noted in a number of studies, which argue that factors related to societal, economic, and material contexts also have a critical role to play in shaping individual sexual behaviour.[23] For many people living in disadvantaged circumstances, and particularly girls and women, it is often difficult to put knowledge about safe sex into practice.[24] For example, studies have indicated that young women living in poverty frequently engage in sexual relationships with older male partners, in return for ongoing financial or material support.[25] In such relationships, women tend to have greatly reduced power to insist on safe sexual practices, such as the use of condoms and faithfulness[26] and by having an older, more sexually experienced male partner, their risks of contracting HIV are increased. In many situations, women are the victims of violent sexual crimes, which they have no power to prevent.

Box 8: Groups especially vulnerable to HIV/AIDS

While no one is immune to HIV infection, studies have revealed that certain groups of people are more at risk of being infected because they are more commonly associated with high-risk behaviour, or because their marginalised status prevents them from accessing information, treatment or support. In many cases, stigma and discrimination plays a significant role in preventing individuals within these groups from accessing the support they need to protect themselves. Among the groups that are at higher than normal risk of HIV infection are:

- Commercial sex workers
- Men who have sex with men (MSM)
- Intravenous drug users
- Mobile populations, including migrant workers
- Youth
- Women in general, especially female teenagers[27]
- Disabled people
- Refugees

At a local (municipal) level, while efforts aimed at encouraging individual behaviour change are a vital component of a local HIV prevention strategy, this should be combined with interventions to address the underlying social and economic factors that give rise to certain kinds of high-risk behaviour and the spread of the epidemic. While there are likely to be commonalities in these factors across most municipalities in South Africa, there may also be locally-specific issues and concerns that act as drivers of the epidemic.

Key point: **Conventional prevention approaches do not adequately respond to the socio-economic context which plays a role in shaping people's sexual behaviour.**

The empowerment of women, confronting culturally-entrenched gender discrimination and the reduction of all forms of oppression and abuse of women is a critical element of prevention efforts and reducing women's vulnerability to HIV infection. Other key factors that may put individuals or social groups at higher risk of HIV infection include bio-medical factors, such as one's sex, immune system status, the presence of STIs, poverty and lack of income, high levels of income inequality, low levels of education, lack of food security, inadequate access to health facilities, weak social cohesion, and high levels of migration, social instability and violence in society[28] (see table 1).

Table 1: Influences on HIV infection and programme responses

Level	Factors influencing HIV infection	Programme responses
Bio-medical Focus on the body	Virus sub-types; Stage of infection & viral load; Presence of STIs; Physiology (women more vulnerable); Circumcision; Unsafe medical procedures; Immune system status	Research into vaccine and cure; Treatment of opportunistic infections; Antiretroviral treatment; STI treatment; Condom promotion and distribution; Blood screening, sterilising equipment
Behavioural Focus on what people do or have done to them	Number of sexual partners; Rate of partner change; Concurrent sexual partners; Age gap between partners; Condom use; Rape; Alcohol use; Injecting drug use	Provision of information and education; Promotion of individual sexual behaviour change; Condom promotion and distribution; Voluntary counselling & testing (VCT); Needle exchange programmes
Micro-environment Focus on the local context in which people live	Poverty; Women's rights and status; Gender norms, cultural practices and traditions; Health status and access to health care; Literacy; Mobility and migration; Levels of conflict and violence	Poverty reduction; Empowerment; Nutrition programmes; Health care; Education; Livelihoods security; Promotion of human rights; Legal reform
Macro-environment Focus on the national and global contexts	Wealth; Income distribution; Culture; Religion; Governance	Social and economic policies that promote economic growth, development & redistribution; Legal reforms; Human rights; Debt relief; Trade policies

Source: Holden, 2004:46 (adapted from Barnett and Whiteside 2002:78)

Treatment, care and support:
For people who are HIV-positive, it is especially important to strive to live a healthy lifestyle, in order to avoid opportunistic infections and to delay for as long as possible the onset of AIDS-defining illnesses. A positive outlook, good nutrition and access to appropriate medication when necessary can help people with HIV to maintain a healthy, active and fulfilled life. Interventions should include medical, social and financial support to those infected and affected and palliative care for those in the terminal stages of illness.

In what is sometimes referred to as the "feminisation" of the HIV/AIDS epidemic[29], the role of caring for sick household and community members is usually performed by women and girls. Measures to reduce the greater burden of care that falls on women and girls also need to be included as part of a gender-sensitive response to the epidemic.

Mitigating the current and future social, economic and institutional impacts of HIV/AIDS:
Because of its implications for increasing morbidity and mortality, HIV/AIDS imposes negative social and financial burdens on individuals and households, which erodes their ability to "cope" with the disease. Households affected by HIV/AIDS typically

incur a loss of income as breadwinners become ill, pass away or have to take time off work to care for other household members. Household disposable income is often diverted to pay for medical treatment and transport to medical facilities. Many households also "cope" with the additional financial burden of HIV/AIDS by cutting their consumption of food (which has further negative health impacts for those living with HIV/AIDS) and "luxury items" and reducing expenditure on services like electricity and school fees. The death of a household member brings with it the further burden of the costs of a funeral. Having to take in new members who are sick, or orphans and other children, places a further financial strain on many households (see Box 9).

In many communities, households rely on social networks to assist them when times are hard. While this is a critical coping mechanism in the face of HIV/AIDS, the scale of the epidemic means that there is a limit in especially poor communities to the ability of neighbours and other residents to offer material assistance to particularly vulnerable households.[30]

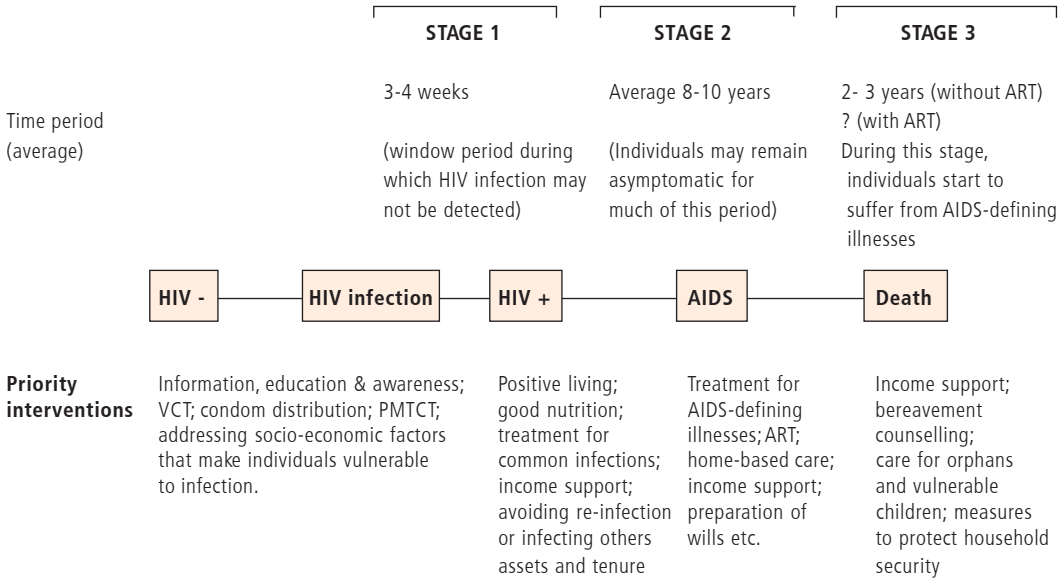
Box 9: Orphans and vulnerable children

One of the most tragic results of the HIV/AIDS epidemic in South Africa is the rapidly growing number of children made vulnerable or orphaned by HIV/AIDS. In 2004, an estimated 2.2 million children had lost either one or both their parents.[31] The number of orphans in the country more than doubled between 2003 and 2006.[32]

According to the National Strategic Plan on HIV/AIDS 2007 - 2011[33], "The worst affected children – those in deeply impoverished households – experience various forms of physical, material and psychosocial deprivation and assaults on their health as a result of lack of parental care and nurturing environment. Often these children are separated from caregivers and siblings and sent to stay with other relatives or other carers or social networks."

Figure 6 presents a crude depiction of the "life-cycle" of HIV/AIDS, and how, at different points in the disease's progression, different interventions are required. The first priority should be to prevent new infections, which requires efforts to promote behaviour change, as well as initiatives to address underlying factors within the development context that may contribute towards certain high-risk behaviours. Once individuals are HIV-positive (stage 2), the focus should be on enabling them to remain as healthy as possible for as long as possible (i.e. delaying the onset of AIDS). Once individuals have developed AIDS (stage 3), there is a need to ensure that they receive life-prolonging medical treatment (including anti-retroviral treatment). It is also important to ensure that households directly affected by having a member living with HIV/AIDS are supported to reduce the potential financial and social shocks that may arise. Specific provision also needs to be made for children who may be orphaned as a result of HIV/AIDS (e.g. preparing wills).

Figure 6: The life-cycle of HIV/AIDS and priority interventions



The impacts of HIV/AIDS extend beyond the individual and household level to the broader community and societal levels through the impacts of illness and death on the collective availability of resources and weakened capacity within the state and private sectors. The effects of this may be seen in reduced economic and productive activity, declining employment, growing poverty and inequality, and increased conflict.

An emphasis on different interventions will be required depending on the stage of the epidemic in any particular country, region or municipal area. For example, if the rate of HIV prevalence is currently low, the focus of interventions should be on prevention to ensure that the prevalence rate remains low and that the further spread of HIV is minimised. In cases where HIV prevalence is rapidly rising, the focus should be on preventing new infections as well as providing care and support to those who are now infected. In societies with a mature HIV/AIDS epidemic, such as South Africa, where the socio-economic and institutional impacts of HIV/AIDS have become evident, strategies to mitigate these impacts are also crucial.

Box 10: Framework for an Integrated Local Government Response to HIV and AIDS

In April 2007 the national Department of Provincial and Local Government (dplg) published its "Framework for an Integrated Local Government Response to HIV and AIDS," which is intended to guide municipalities on how they can play an active role in the fight against HIV/AIDS. The Framework explains how HIV/AIDS is a development issue that municipalities need to integrate as part of their core mandates of ensuring integrated development and the delivery of basic services. It also explains how HIV/AIDS can impact on the institutional and financial capacity of municipalities to carry out their functions, and what they can do to minimise these impacts. The dplg has plans to roll out capacity building for municipalities to implement the framework over the next three years. More information about the framework, and an electronic version of the document, can be obtained from the dplg's website, www.dplg.gov.za. Printed copies of the framework can also be requested from the dplg on 012 334 0600.

3.5 Why is HIV/AIDS an issue for sustainable human settlements development?

This sub-section addresses the focus of this guide, namely the relationship between HIV/AIDS and human settlements. It argues that with regard to each dimension of a holistic response to HIV/AIDS outlined above (i.e. prevention; treatment, care and support; and impact mitigation) there are factors related to people's housing conditions and the socio-physical environments in which they live that may impact adversely on the effectiveness of the response to the HIV/AIDS epidemic. Conversely, the HIV/AIDS epidemic also has implications for the creation and sustainability of viable, integrated human settlements.

3.5.1 HIV prevention and reducing vulnerability to infection

At first glance, the linkages between reducing the spread of HIV through sexual behaviour change and housing and human settlements development may not seem obvious. However, the shelter circumstances under which people live and their socio-physical environment play a significant role in shaping people's behaviour and their exposure to HIV infection. There are also factors within human settlement environments that have particular gendered implications, which may put women and girls at greater risk of infection.

Key point: **People's living conditions play a significant role in shaping their exposure to HIV and their sexual behaviour.**

Table 2 gives examples of the connections between human settlements and vulnerability to HIV infection.

Table 2: Examples of human settlement conditions and vulnerability to HIV infection

Shelter/settlement conditions	Impact on exposure vulnerability to HIV infection[34]
Inadequate access to potable water and sanitation	Can lead to exposure to infections such as worms, bilharzia and malaria, which can increase the infectiousness of HIV-positive individuals and make HIV-negative individuals more vulnerable to HIV infection through weakening their immune systems and the ability of their bodies to fight off HIV infection.[35] Worms in mothers from drinking unsafe water increases the risk of transmitting HIV from mothers to children by up to seven times.[36] Lack of access to clean water makes formula feeding a potentially life-threatening risk for babies, and puts babies at risk of HIV infection through breastfeeding. Potential safety risk, especially for women and girls, of having to fetch water from communal taps or use outside toilets, especially at night.[37]
Lack of health care facilities	Restricts residents' access to information and advice about HIV/AIDS, safe sex and sexual decision-making, VCT, condoms, PMTCT and treatment for STIs.
Overcrowding and/or lack of internal partitioning within houses	Lack of privacy within the home, which is likely to expose children to sexual activity, which may lead to them experimenting with sex at a younger than normal age and/or being exposed to forced sex. [38] Research has indicated a link between lowered age of sexual debut and heightened risk of HIV infection.[39]
High density living conditions (e.g. in informal settlements)	Research has suggested that the age of sexual debut of young people living in overcrowded informal settlements is lower than in other settlement types.[40] This places them at higher risk of HIV infection. Makes effective policing within settlements more difficult, resulting in an environment in which sexually-related crimes and gender-based violence are less likely to be prevented or reported.[41]
Lack of solid waste removal	Unsanitary living conditions likely to lead to disease, which can increase the infectiousness of HIV-positive individuals and make HIV-negative individuals more vulnerable to HIV infection through their immune systems being weakened. Inadequate measures to dispose of waste from HBC may also pose a risk of infection with HIV and other micro-organisms to those who come into contact with such waste including blood, urine, stool, pus, other bodily fluids, and used dressings and sharps.[42]
Lack of tenure security	High rates of mobility correlated with increased risk of HIV infection due to the greater likelihood of multiple sexual partnerships. Lack of tenure security may further disempower women and force them into remaining in abusive relationships.
Lack of access to schools	Restricts young people's access to information about HIV/AIDS as well as support and counselling with regard to sexual relationships and relationships with family and peers.
Lack of access to economic opportunities and income	Individuals may resort to offering sex to secure the means for their survival, or to acquire "luxury goods" (such as branded clothing, cell phones etc.). Transactional sexual relationships may take the form of commercial sex work, or relationships in which individuals offer sex in return for material support, such as shelter and food. The practice of young women entering into relationships with older men (so called "sugar-daddies") places them at even greater risk of HIV infection.

Shelter/settlement conditions	Impact on exposure vulnerability to HIV infection[34]
Poor environmental design within human settlements (e.g. inadequate street lighting, unfenced or unmaintained open spaces)	Creates greater scope for contact crimes, including sexual assault. Contributes to a depressing living environment within which residents may feel disillusioned and hopeless about their current and future opportunities, in the context of which the threat of HIV-infection may be perceived as less of an immediate priority.
Lack of social cohesion within communities (e.g. when new communities are created by low-income housing developments)	Reduces opportunities for material and economic support amongst residents, which may lead to individuals resorting to sexual networking to support themselves and their households. Lack of social cohesion may also deprive individuals from access to information and a supportive environment and positive values that would allow them to make informed choices about their sexual behaviour.
Lack of access to affordable, safe and reliable public transport	Negatively affects the ability of people, especially the poor, to access medical and other facilities where they can access VCT and other information that can help them reduce their risk of HIV infection. Residents' access to employment opportunities, and recreational facilities, is restricted. Lack of adequate security measures related to public transport, and the location and distance to access transport facilities (e.g. bus/taxi stops and train stations) poses particular risks to the safety of women and girls.
Uncontrolled proliferation of formal or informal establishments where alcohol is sold (e.g. shebeens, nightclubs)	Research indicates a strong link between alcohol use and more risky sexual behaviour and sexual crimes against women and children.[43] Young people are especially vulnerable to risks posed by alcohol consumption and casual sexual liaisons.
Lack of child-care facilities (e.g. crèches)	Restricts women's opportunities to seek and take up opportunities for income generation, which limits their level of independence and may force them into transactional sexual relationships or to remain in abusive relationships. Lack of supervision of young children, especially girls, left at home while parents are away poses risks to the safety of the children.
Inadequate policing	May contribute to higher levels of gender-based violence and sexually-related crimes against women and girls.
Lack of libraries	Directly, libraries provide an outlet for information about HIV/AIDS, while indirectly, libraries serve to support the educational development of young people, as well as provide places for recreation and socialising.
Inadequate recreational facilities	Boredom amongst young people may lead to sex being used as a form of entertainment. In the case of girls, especially, a lack of recreational facilities close to where they live may encourage them to become involved in sexual relationships with men who can afford to pay for entertainment and transport to venues. The lack of electricity in the home, and hence the absence of television as a form of entertainment, also contributes to boredom and idleness amongst residents.[44]

Box 11: Integrating HIV/AIDS awareness into municipal functions

As part of their local strategies to reduce the transmission of HIV, a number of municipalities in South Africa have introduced innovative measures to integrate HIV/AIDS information dissemination and condom distribution into their day-to-day functions. Examples include signs being erected at municipal parks, open spaces and recreational centres, decals on municipal vehicles, messages on municipal utility bills, refuse bins and bags. While such efforts are a useful dimension of addressing the HIV/AIDS epidemic at local level in that they expose a wide audience to messages about HIV/AIDS, research has suggested that information and awareness-raising alone are insufficient to effect behaviour change in many people. This emphasises the need for municipalities to do what they can to address the drivers of the epidemic through a more developmental approach.

3.5.2 Treatment, care and support

The physical conditions under which many people live, especially those living in poverty, can severely constrain their ability to maintain good health and to access the treatment, care and support they require. For people in the later stages of HIV/AIDS, who may have AIDS-defining illnesses, inadequate shelter conditions also impact negatively on their comfort and dignity, as well as the ability of carers to provide an acceptable and dignified level of care. Access to adequate shelter, basic services like water and sanitation, and community support facilities, also play a significant role in addressing the gendered nature of the home-based care aspect of the HIV/AIDS epidemic.

Key point: **Shelter and living conditions have a fundamental impact on people's ability to live healthy, comfortable and dignified lives.**

Table 3 provides examples of some of the ways in which elements of human settlements can impact on the health, comfort and dignity of residents, especially those living with HIV/AIDS:

Table 3: Examples of human settlement conditions and impacts on health, comfort and dignity

Shelter/settlement conditions	Impact on exposure vulnerability to HIV infection[34]
Overcrowding within the house	Creates an environment conducive to the transmission of airborne infections, such as tuberculosis (TB), and compromises the effectiveness of ART. Impairs the privacy and dignity of inhabitants, in particular, household members who are ill.
Lack of potable water on site	Access to safe drinking water is essential for avoiding infections such as worms, bilharzia and malaria, which can accelerate the progression from HIV to AIDS.[46] Safe water for drinking is essential for avoiding dehydration (especially in cases of chronic diarrhoea), a common illness affecting those living with HIV/AIDS. Water is required for taking medicines. Lack of water restricts people's ability to maintain personal hygiene (e.g. bathing and washing hands after using the toilet) and hygiene in the home (e.g. cleaning surfaces and washing bed linen, clothes and cooking and eating utensils), which can lead to the spread of various infections. This, in turn, is likely to undermine the immune systems of HIV-positive and negative individuals, putting the latter at greater risk of contracting HIV and the former at risk of the faster onset AIDS and death Water is required for safely preparing and cooking food. Carers (usually women) may have to walk long distances to fetch clean water. The time spent on this could be used for other productive purposes. For HIV-positive individuals without carers, having to walk long distances and carry water can be detrimental to their health. Water is required for growing food (e.g. kitchen gardens), which can support good nutrition, which is vital for people living with HIV/AIDS.

Shelter/settlement conditions	Impact on exposure vulnerability to HIV infection[34]
Inadequate sanitation	Inadequate disposal of human excreta exposes residents to a variety of viral, bacterial and protozoan pathogens, which can lead to diseases such as diarrhoea, gastroenteritis, hepatitis A, typhoid fever, cholera and dysentery.[47] Inadequate sanitation can also contaminate water supplies with human excreta. People with compromised immune systems, especially people living with HIV/AIDS, are most susceptible to these health risks. It is important that VIP latrines be properly constructed and maintained in order to avoid becoming a health hazard for all residents, but especially those who are living with HIV/AIDS.[48] Chronic diarrhoea is one of the main problems afflicting people living with HIV/AIDS. Access to toilets that are close to their dwellings, and that are hygienic, is thus especially important for the comfort, health and dignity of residents living with HIV/AIDS.
No electricity connection	Electricity provides a clean source of energy for boiling and purifying water to avoid infections, for cooking and for refrigeration, which is useful for keeping food fresh and is required for storing certain medicines. A lack of access to electricity forces residents to use other sources of energy (burning wood, paraffin and other fuels) that cause air pollution, which can be very harmful to their health (especially in the case of those with compromised immune systems due to HIV/AIDS). Burning fuels for energy also poses a risk of fires in the home. For those who are bedridden, it may be especially difficult to escape the dwelling in the event of fire. Without electricity, carers (usually women) may have to walk long distances to fetch firewood. Besides the costs in terms of time and effort involved, this takes away time that could be used to provide care or engage in other productive activities.
Inadequate refuse removal	A lack of proper disposal of waste contributes to an unhealthy environment in and around the home, which can contribute to the spread of various diseases, which has particularly negative health implications for residents living with HIV/AIDS. Where measures for safely disposing of waste from home-based care are inadequate, residents may be exposed to various infections.
Poor thermal insulation within the house	Extreme temperatures within the home are likely to exacerbate ill-health and discomfort.
Inadequate damp proofing	Moisture penetration and resulting damp can cause or exacerbate respiratory infections.
Lack of access to health care facilities	Restricts access to medical care as well as psycho-social support (e.g. HIV/AIDS support groups).
Inadequate measures to control air pollution	Air pollution can cause or aggravate various respiratory and other health conditions.
Lack of tenure security	A stable housing situation is important in terms of the ability of residents to access and sustain medical treatment from clinics and hospitals. In the case of residents taking ARV and/or TB medications, it is particularly important that medication be taken on a sustained basis without disruption. Where residents have to move, they may lose access to health care facilities where they can obtain their medications.

3.5.3 Mitigating the current and future impacts of HIV/AIDS

The level of access to adequate housing and other key services and facilities that comprise sustainable human settlements plays a significant role in either strengthening or eroding the capabilities of households and communities to cope with the negative socio-economic consequences of the HIV/AIDS epidemic. Ideally, housing should provide an economic asset, which households affected by HIV/AIDS can utilise to leverage access to various forms of income generation and social support.

The location of low-income housing in relation to employment opportunities is one important aspect of human settlements that has a direct bearing on the financial situation of households and their ability to sustain economic shocks arising from HIV/AIDS.

Housing and related infrastructure development processes, especially when they involve labour intensive processes, can be used to create livelihoods in poor communities and stimulate local economic development, small business development and skills transfer and development. Realising these benefits can support the creation of more economically viable and sustainable communities, in which households are in a better position to cope with the negative economic and other implications of HIV/AIDS. More economically viable and sustainable human settlements also contribute to reducing the vulnerability of residents to HIV infection in the first place, through addressing a variety of factors related to household economic hardship and the accompanying tendency to resort to sexual networking for income as a means of survival.

Access to social services and facilities as part of sustainable human settlements is also important to strengthening the resilience of households and communities affected by HIV/AIDS. These can include poverty reduction projects, especially targeted at women-headed households, and services to support orphans and other vulnerable children, including child-headed households.

The tenure and occupational security of households affected by HIV/AIDS is another important consideration in relation to the relationship between HIV/AIDS and human settlements. In many cases where a male head of household dies, women and children are left vulnerable to being displaced from their homes by relatives or members of the community. Interventions to monitor and uphold the tenure rights and occupational security of vulnerable households, such as women-headed and child-headed households, are thus important in the context of HIV/AIDS.

The negative effects of HIV/AIDS at a household level also have implications for municipalities, in terms of planning for service provision, the ability to supply services, and their financial viability, both in relation to expenditure and ability to generate revenue from local sources, such as rates and service charges. These issues are dealt with in more detail in section 5.3.

3.6 Key questions for integrating HIV/AIDS into human settlements development

1. How does HIV/AIDS alter the *assumptions* underlying the planning, users/beneficiaries, development and governance of sustainable human settlements?
2. In what ways do factors related to the socio-physical environment within which people live shape their options for minimising their exposure to possible HIV infection, and affect their ability (negatively or positively) to live healthy and dignified lives if they are infected or directly affected by HIV/AIDS?
3. In what ways can human settlements strengthen the resilience of households and communities to cope with the negative socio-economic impacts of HIV/AIDS, both now and in the foreseeable future?
4. What are the implications of HIV/AIDS for the ability of municipal and other role-players to effectively plan, design, finance, construct, and maintain sustainable human settlements?

3.7 Guiding principles for integrating HIV/AIDS into human settlements development

PRINCIPLE 1
All human settlements development processes should strive to create living environments that a) reduce the vulnerability of residents to contracting HIV b) promote the health, comfort and dignity of all residents, especially those living with HIV/AIDS, and c) support households that are affected by HIV/AIDS.

PRINCIPLE 2
Human settlements development processes should explicitly address the needs and challenges experienced by people living with HIV/AIDS, the poor, women and vulnerable children.

PRINCIPLE 3
Public participation is central to creating sustainable human settlements. All people, including people living with HIV/AIDS, have the right to participate in making decisions that affect their lives. An enabling environment for the participation of people living with and affected by HIV/AIDS in all human settlements-related processes should be created and nurtured.

PRINCIPLE 4
Housing delivery for low-income households should provide a choice of housing types and tenure arrangements to accommodate diversity and flexibility in household arrangements as a result of HIV/AIDS.

PART B

PRIORITIES AND STRATEGIES FOR INTEGRATING HIV/AIDS INTO SUSTAINABLE HUMAN SETTLEMENTS DEVELOPMENT

This second part of the guide proposes priorities and practical interventions for integrating an HIIV/AIDS perspective into sustainable human settlements processes. It starts off by making the case for prioritising informal settlement upgrading as a critical intervention for addressing HIV/AIDS within urban settlements. It then proceeds to examine how HIV/AIDS can be integrated into the planning, design, implementation and post-implementation phases of developing new human settlements. Readers should take note that much of the discussion and recommendations in the section on developing new greenfields human settlements, such as the design considerations contained in sub-section 5.2, will apply equally to informal settlement upgrading processes.

Box 12: Community participation in the context of HIV/AIDS

Throughout this guide, there is an inherent notion that people should be actively enabled to participate in all aspects of human settlements development and governance. Community participation generally has been entrenched in South Africa as a fundamental goal and instrument for sustainable development. Within the arena of local governance and human settlements development, the South African Constitution of 1996 stipulates that one of the core objectives of local government is to encourage the involvement of communities and community organisations in matters of local government. The Municipal Systems Act of 2000 has an entire chapter devoted to how community participation in local government can and should be promoted. The Housing Act of 1997 (Section 2 (1)), states, as one of its general principles, that all spheres of government must "consult meaningfully with individuals and communities affected by housing development."

Community participation in development can be considered as both a right in itself, as well as a way of making development interventions more effective, relevant and sustainable, by involving those who are intended to benefit from them. Municipalities have a variety of instruments at their disposal for including communities in planning, developing and managing human settlements, including IDP and budget meetings, ward committees, and project steering committees.

It is very important that people living with, or directly affected by HIV/AIDS (such as household members or carers), have the opportunity to be involved in participatory decision-making processes, as these decisions can have a particularly significant impact on their health and wellbeing. Because of the particular gendered implications of HIV/AIDS, women's participation is also especially important. However, it is important for those organising opportunities for community participation to take into account the particular barriers people living with HIV/AIDS, and those who care for them (and women), may face in taking part in participatory processes. An obvious barrier is people being unable to attend meetings because they are ill, or have to care for someone who is ill. However, stigma and discrimination against those infected and affected by HIV/AIDS, which is still rife within communities, may cause people to be reluctant to attend meetings or, if they do, to speak openly about issues that affect them.

As a result, the voices of those infected or affected by HIV/AIDS may not be heard through conventional community participation channels, such as IDP or ward meetings. Sometimes, however, issues of that are priorities for people with HIV/AIDS may be voiced in other ways, such as concerns about lack of medical facilities, basic services, or initiatives to reduce poverty, all of which are directly relevant to HIV/AIDS. It is important for those facilitating community participation events to be proactive in putting HIV/AIDS on the agenda for discussion at these events, and to speak openly about HIV/AIDS issues. It may be especially useful for elected representatives and community leaders to talk openly about HIV/AIDS, and to encourage communities to do the same. It is also important for municipalities to integrate alternative mechanisms for enabling people living with HIV/AIDS to have their voices heard. One approach is to proactively seek out organisations and groups (e.g. NGOs, faith-based groups) that work with people living with HIV/AIDS, to obtain input on their specific development needs and priorities.

4. Integrating HIV/AIDS into informal settlement development processes

Informal settlements are a prominent feature of South Africa's urban landscape, driven by population growth in urban areas that has outstripped the supply of new low-income housing and the provision of basic services. Despite recently reinvigorated efforts at accelerating the creation of new settlements, with a target set of "eradicating" informal settlements by 2014[49], realistically, it will take many years to provide all those in need with decent housing. For now, informal settlements are set to remain a feature of almost all towns and cities across South Africa.

4.1 Why informal settlement upgrading is a priority in the context of HIV/AIDS

Results of HIV prevalence studies have clearly shown that informal settlements are the settlement type with the highest HIV prevalence rates in South Africa. As presented earlier in Part A of the guide, the 2005 HSRC/Nelson Mandela Foundation Study on HIV/AIDS in South Africa[50] found that adults (15 – 49 years) living in urban informal settlements had the highest HIV prevalence rate (25.8%), followed by adults living in rural informal settlements (17.3%). Put differently, this means that on average, one in four people between the ages of 15 and 49 years living in urban informal settlements is currently HIV-positive. Women in this age group make up a disproportionate number of those infected with HIV.

Research has also indicated that informal settlements are also the settlement type with the highest HIV *incidence* rate. One recent study reported that "Although only 8.7% of the total South African population aged 2 years and above lives in urban informal settlements, 29.1% (166 000/571 000) of the total estimated number of new infections in South Africa are found in this residence geotype."[51] In other words, the HIV/AIDS epidemic is spreading more rapidly in urban informal settlements compared to other settlement types.

The reasons for the significantly higher HIV prevalence and incidence rates in informal settlements can be attributed to a number of risk factors that are associated with the conditions within informal settlements and socio-economic profile of the communities living in them. These factors include:

Overcrowding – overcrowding is a characteristic feature of informal settlements and contributes to poor living conditions and the spread of various infections, which lowers residents' general health status. People with a poor health status are at greater risk of contracting HIV than those with strong immune systems.[52]

Poor access to medical facilities – Most informal settlements have inadequate access to clinics and hospitals, which reduces residents' access to information about HIV prevention, VCT, PMTCT and condoms. It also means that people with STIs are less likely to receive treatment. The existence of STIs increases an individual's vulnerability to HIV infection.[53]

High levels of mobility – many residents of informal settlements are migrant workers who come to urban locations in search of work. Many of these workers maintain homes and families in rural areas, while also maintaining sexual relationships in their urban homes.[54] This contributes to higher levels of sexual activity and the spread of HIV.

Poverty – most residents of informal settlements have very low, or no, incomes or means to support themselves. This may leave some residents, especially women, with little option but to resort to transactional sexual relationships or commercial sex work to survive. The disempowered position of many women may also force them to stay in partnerships with breadwinners, even in situations where partners have multiple concurrent sexual relationships.[55]

Substance abuse – while not necessarily higher than other settlement types, levels of alcohol and drug abuse amongst residents living in informal settlements are typically high.[56] Substance abuse is associated with higher levels of unprotected sex and sexual violence against women and children, which enhances vulnerability to HIV infection.

In addition to the greater vulnerability to HIV infection associated with informal settlements, the living conditions within these settlements typically impact very negatively on residents' health and safety. As noted in table 3 earlier in Part A, some examples include:

- Overcrowding increases the potential for the spread of airborne and other diseases, most notably TB
- High levels of poverty impact negatively on people's ability to achieve an adequate nutritional intake necessary to maintain good health

- Lack of access to safe drinking water, adequate sanitation and solid waste management leads to widespread health problems, such as diarrhoea and intestinal worms
- Lack of access to health facilities restricts access to HIV/AIDS treatment and care programmes
- Damp penetration within dwellings contributes to rheumatism, arthritis and respiratory diseases, such as pneumonia, bronchitis and upper respiratory tract infections[57]
- Lack of electricity forces inhabitants to rely on energy sources such as burning wood, paraffin and candles, which may pollute the air inside the shack and be a greater fire risk
- Lack of proper roads and stormwater drainage can lead to flooding, which can pose safety risks and destroy shelters and people's possessions.[58]

Despite the many challenges and hazards associated with living in informal settlements, it is nevertheless important to recognise and appreciate the reasons why people live in these types of settlements. For one, this is where they can access the city most easily, through social networks. In many cases, the location of informal settlements means that work opportunities, through either the formal or informal economies, are more accessible to residents. The cost of transport to work may also be significantly lower for residents of informal settlements. The cost of accommodation in informal settlements is typically far lower than in formal settlements. Overcrowding in previous formal dwellings, or the desire for independence or to escape difficult family situations, may also be a push factor for people to take up residence in an informal settlement.

Thus, while not by any means adequate or acceptable, for many people living in an informal settlement offers them opportunities that they otherwise would not have access to. For this reason, it can be argued that a more pro-active response to informal settlements is required, rather than the reactive and negative approach that appears to be dominant amongst many municipal planners and housing practitioners and policy-makers.[59] A more pro-active and appropriate response to informal settlements should contain three key elements a) an integrated approach to informal settlement upgrading (b) a high level of meaningful community participation (see box 12), and c) more flexible regulations with regard to tenure, land use and construction.[60] Drawing on these three elements, the following sub-section proposes a number of priority interventions for informal settlements, with a particular focus on interventions that serve to reduce vulnerability to HIV infection and support the capability of households and poor communities to cope with the health and socio-economic impacts of the disease.

4.2 Priority interventions for informal settlements

4.2.1 In-situ upgrading

For the reasons stated above, wherever possible, consideration should be given to regularising and upgrading existing informal settlements. Each settlement would need to be assessed on an individual basis to determine whether upgrading is an option and whether it is desirable and in the best interests of the residents of the settlement. This upgrading should be done in an integrated manner, taking a holistic view of the needs of residents and their priorities, and involving residents in decision-making processes to the greatest extent possible and practicable. Consideration should also be given to the views of the residents of communities neighbouring the informal settlement.

The first priority in upgrading informal settlements should be to provide adequate access to all residents to the following basic services on a sufficient, affordable and reliable basis:

- Potable water (minimum communal taps)
- Sanitation (minimum communal VIPs)
- Health facilities (in the form of a permanent clinic or regular mobile clinics)
- Electricity connections to each dwelling
- Solid waste removal
- Street lighting
- Schools within reasonable proximity
- Fire hydrants within reasonable proximity to all dwellings
- Stabilised earth roads, and lined stormwater drainage channels[61]

In addition to the provision of basic services and facilities, municipalities and other role-players should also assist residents in terms of interventions relating to their shelter needs, social development and livelihoods development.[62]

Each of these is explained in more detail below:

Interventions to improve shelter conditions: provide technical advice on the design of houses, construction methods and materials to use to enable residents to improve their dwellings and create a more healthy and comfortable living environment. Access to housing subsidies to construct formal dwellings may be introduced in the later stages of the project. However, care should be taken to ensure that those who do not qualify for government housing subsidies are not excluded in the process.

Interventions to promote social development: assist the community to set up neighbourhood, women's and youth groups, form savings clubs, provide crèches and pre-school education, adult education, community health education, HIV/AIDS support and HBC groups, disaster prevention and fire safety initiatives and crime prevention campaigns. Residents should also be informed about, and assisted to apply for, social assistance grants and other government subsidies that they may be eligible for.

Interventions to promote livelihoods development: support households and the community to initiate income-generating activities, development of skills, access finance for small business development, opportunities for trade and urban agricultural initiatives.

Because of the higher HIV prevalence amongst informal settlement residents, HIV/AIDS awareness and prevention drives should be specifically targeted at these settlements. In addition, systems for identifying and supporting vulnerable children (including child-headed households) should be established. It is particularly important to ensure that the tenure rights of vulnerable children are protected, and that their vulnerability to arbitrary eviction from their homes (at the hands of authorities, community members or even extended family) is minimised as far as possible. This requires making vulnerable households aware of, and enforcing, existing legal and regulatory mechanisms, such as the Extension of Security of Tenure Act (No. 62 of 1997) and the Prevention of Illegal Eviction from and Unlawful Occupation of Land Act (No. 19 of 1998).[63]

4.2.2 Relocation

Relocating residents from informal settlements can have a number of unintended negative consequences for the affected households, especially those affected by HIV/AIDS:

- The new houses they move to (i.e. in cases where they are relocated to RDP projects) may be smaller than their previous informal dwellings. This may result in overcrowding and the spread of disease, households splitting or households losing tenants on whom they relied for income or in-kind support[64]
- Residents might incur much higher transport costs to access employment, which reduces income available for treatment and are for those living with HIV/AIDS
- Residents might lose opportunities for informal trading and providing other services that they earned an income from
- Residents may lose access to their clinic, which, in the case of those with HIV/AIDS or TB, may interrupt their treatment
- Residents may be separated from neighbours, extended families and friends, who provide social and material support
- Children may need to change schools, which may add further to household transport costs

While not ideal, in certain situations there may be no alternative to relocating all or some of the residents of informal settlements – for example, where people are living in potentially dangerous locations, such as on floodplains or unstable ground or under electricity pylons.

In such cases, the following measures are recommended in order to avoid or minimise the potential negative impacts of relocation on residents:

- Involve the affected residents in all key decisions, such as when and especially where they will be relocated to. Special consideration should be given to including people living with HIV/AIDS, affected households, home-based caregivers and other vulnerable groups in these decision-making processes
- Ensure that the new location is serviced with a minimum adequate level of basic services, and facilities (especially health facilities and schools)
- Assist members to move and to take all their belongings
- If possible, move people to the same area in order to avoid disrupting social networks
- In the allocation of new houses or stands, if possible, allow residents who wish to stay together to get houses or stands next to each other

IN YOUR MUNICIPALITY...

- How many informal settlements are there?
- Do you have a policy on informal settlements?
- Have you made adequate provision in the municipal budget for providing basic services and access to community facilities to informal settlements?
- Do you include informal settlements as part of HIV prevention campaigns?
- What services do you provide to residents of informal settlements to assist in their social and economic development?
- In the context of community participation, do you consciously engage people living with HIV/AIDS and/or their representative organisations, affected households, vulnerable groups, and home-based caregivers?

5. Integrating HIV/AIDS into formal settlement development processes

This section is concerned with the development of new (greenfields) low-income human settlements, or what are typically referred to as "RDP" projects. These new settlements have been of varying, although generally poor, quality in terms of what constitutes "sustainable" human settlements. The aim of the section is to provide practitioners and policy-makers involved in the development of these settlements with guidelines for how to take HIV/AIDS into account during each phase of the settlement development process. It starts by looking at the ways in which HIV/AIDS may affect the nature of the demand for housing and other services and facilities. It then offers some suggestions for how HIV/AIDS can be factored in during the design phase of new human settlements, followed by a look at HIV/AIDS considerations during the implementation phase of the settlement development process. Finally, the section concludes by looking at key interventions and issues to consider with regard to HIV/AIDS once settlements have been constructed and inhabited.

The way the phasing of the human settlements development process is presented here is by necessity crude, in order to point out the relationships between HIV/AIDS and key stages in the human settlements development process. However, it is acknowledged that in many instances, settlements will not be initiated from scratch and there may be overlaps in phases as a single project unfolds. What is offered here then is a set of suggestions, which the reader may use or adapt as appropriate to the particular circumstances of the human settlements development processes they are engaged with.

5.1 Assessing housing and infrastructure needs in a context of HIV/AIDS

5.1.1 The importance of accurate data

The importance for appropriate planning of sustainable human settlements within any geographical area of having access to up-to-date and reliable data on the local demographic dynamics is heightened in a context of an HIV/AIDS epidemic. Through its impacts on mortality and morbidity, HIV/AIDS can have a profound affect on localised patterns of population increase or decrease and household formation and mobility, which in turn have a direct bearing on the planning and provision of housing and other services and facilities that make up sustainable human settlements.

In order to anticipate, and plan effectively for, the impacts of HIV/AIDS on the local population, it is important that municipal planners and decision-makers know as much as possible about the nature of the HIV/AIDS epidemic within the municipal area. The type of data that is useful to obtain includes the following:

- HIV prevalence
- HIV incidence
- The number of people with AIDS, and the number requiring ART
- Mortality patterns, including who is dying - age and gender – and from what (if possible to ascertain)
- The number of women-headed households
- The number of orphans and child-headed households

One of the challenges in planning with HIV/AIDS in mind is the lack of HIV/AIDS data available at a municipal level in South Africa. For the first time in 2006, the National Department of Health's annual antenatal HIV survey collected HIV prevalence estimates for each district in the country. While this data should be very useful, it is also important to be aware that the characteristics and dynamics of the epidemic may vary, sometimes quite markedly, amongst different local municipalities within districts,

or at a sub-municipal level, or even, as we have seen in the case of informal settlements, by different settlement types. In most cases, HIV/AIDS data is unlikely to be readily available at a more localised level of individual towns or settlements. However, it might be possible to get some idea of the local HIV/AIDS situation from data from VCT sites and clinics that serve these settlements.

IN YOUR MUNICIPALITY...

- Do you know what the HIV prevalence rate is? How has it changed in recent years?
- What is the HIV incidence rate? How has it changed in recent years?
- How have mortality rates changed in recent years?
- How many women-households are there?
- How many child-headed households are there?
- How many orphans are there?

5.1.2 HIV/AIDS and housing

Increases or decreases in the quantitative demand for housing within any municipal area are intrinsically shaped by demographic and migration trends within the area (see table 4). Local demographic trends are shaped by a variety of different factors, of which the nature of the local HIV/AIDS situation is one important consideration. HIV/AIDS is a driver of fluidity in household formation patterns, household size, composition and mobility. Since housing demand is based primarily on households, these factors will have important implications for the demand for housing and related services.[65]

Table 4 offers a useful matrix for analysing different migration scenarios and the possible resulting implications for housing demand within municipalities. It should be noted that the table refers only to migration patterns, and does not consider other demographic factors that are likely to influence housing demand within municipalities, for example, households splitting, which could increase the demand for housing.

Table 4: Four basic scenarios for urbanization and migration and implications for housing demand within municipalities

Scenario	Description	Implication for housing demand
1. In-migration	Municipal area experiences population in-migration and urban growth	Likely increase, growth of informal settlements if demand not matched by supply
2. Out-migration	Area experiences population out-migration and therefore declining population	Likely decrease, possibility of housing left behind by out-migrating households to address existing backlog or temporary housing needs
3. Temporary migration	Area experiences a temporary population influx due to short- to mid-term opportunities	Fluctuating demand, with periods of possible under-supply
4. Backlog	Area experiences stable/neutral urbanisation (where in-migration roughly matches out-migration) but historic housing backlog needs to be addressed	Ongoing demand until backlog eradicated

Source: Adapted from National Department of Housing. 2006. National Housing Programme for Housing Sections of Integrated Development Plans, pg. 11

The government's new housing policy, "Breaking New Ground," contains some important insights into some national demographic trends that are shaping housing demand nationally.[66] According to the policy document, there was a 30% increase in the absolute number of households in South Africa between 1999 and 2004. Moreover, between 1996 and 2001, the average household size declined from 4.5 members to 3.8 members. While these changes cannot be directly attributed to the HIV/AIDS epidemic in the country, it is possible that it has had an important role to play. The Breaking New Ground document also notes that urban populations are increasing, driven by urbanisation and population growth, and that about 20% of all urban residents are first generation residents i.e. they are relative newcomers to urban areas. The implication of this is that there is a rapidly growing demand for low-income housing in urban areas amongst predominantly poor households who require government assistance to meet their shelter and basic service needs.

While this national picture is useful, it is worth noting that the situation in every municipality will be unique. In analysing the potential impacts of HIV/AIDS on housing demand within a particular municipality, it is important to consider the stage of the epidemic within the municipality. As described earlier in section 3.4, the level of maturity of the local epidemic will have important implications in terms of the current and anticipated negative consequences of illness and death on households, and the resulting impacts on shelter demand. It is also important to take into account the existing backlog in housing provision for low-income households within a particular municipality as this will also have a bearing on whether the impacts of HIV/AIDS on housing demand can be absorbed within the local housing market, or whether the backlog rises further, leading to further overcrowding of existing informal settlements and associated negative health and social impacts. The location of the municipality will also have an effect on HIV/AIDS prevalence and housing demand within the municipal area.

While anticipating future trends in demand for housing is no easy task, it is critical to effective planning and budgeting, not only for new housing, but also for the extension of services and the provision of new community facilities required as settlements expand.

So far we have considered HIV/AIDS and its implications for housing demand in quantitative terms. However, it is also important to consider the *qualitative* dimension to housing demand. One qualitative issue relates to the adequacy and suitability of the design of housing units with regard to HIV vulnerability factors and the health and comfort of inhabitants, especially those living with HIV/AIDS. This is looked at in more detail in section 5.2 below.

Another qualitative issue is the type of tenure arrangements available. In South Africa, the dominant mechanism for providing low-income housing is the project-linked housing subsidy, which provides beneficiaries with ownership of a property. However, households affected by HIV/AIDS may prefer non-ownership forms of tenure, such as affordable rental, since this may accommodate more fluid household sizes and income dynamics, as well as enable households greater mobility should they require it to search for livelihoods opportunities in other locations.

Finally, though not an aspect emphasised in this document, the HIV/AIDS epidemic also generates the need for "special needs" housing for particular groups affected by HIV/AIDS. In South Africa, most attention has focussed on shelter for orphans and vulnerable children, and there have been some interesting innovations using combinations of housing subsidies and social assistance grants to provide sustainable forms of non-institutional community-based care for children affected by HIV/AIDS.[67] It should also be noted that adults living with HIV/AIDS whose families cannot or will not care for them also require special housing support.

IN YOUR MUNICIPALITY...

- How many households are there currently? How has this changed in the past five years?
- What do you know about changes in household size in your municipality?
- What is the existing housing backlog? How has this changed in the past five years?
- What is the anticipated change in housing demand in the municipality? Is it expected to increase or decrease in future years?
- Is there a growing demand for non-ownership forms of housing provision (e.g. rental or social housing)? Does the municipality have plans for providing these types of accommodation?
- What provision has been made for special needs housing for vulnerable children and orphans, and adults affected by HIVAIDS?

5.1.3 HIV/AIDS and basic services

While adequate access to basic services such as water and sanitation is important for the health and comfort of all households, it is especially critical for households containing members living with HIV/AIDS.

Table 5 provides a summary of the quantitative and qualitative implications of HIV/AIDS for household demand for water, sanitation, energy (electricity) and refuse removal.

Table 5: Implications of HIV/AIDS for household demand for basic services

	Quantitative implications	Qualititative implications
Water[68]	Increased demand due to: - extra drinking water required to replace fluids during bouts of diarrhoea, a common infection amongst people living with HIV/AIDS - extra drinking water required to take medicines and to make food easier to eat for patients suffering from mouth ulcers or thrush - more regular bathing required to minimise the risks of skin infections - more water required for maintaining a high level of hygiene within the home to minimise risks of various infections - additional water required for washing soiled bedding and clothing - water required to thoroughly wash fruits and vegetables in order to reduce risks of infection by gastro-intestinal pathogens - people may use additional water to grow vegetables, which is critical to maintaining a healthy diet	Maintaining a high quality of water is very important to avoid disease; Cleanliness of water is also critical since many HIV-positive mothers elect to formula feed rather than breastfeed. Formula feeding can only be an option where mothers have access to a source of clean water. The reliability of supply is also more important in a context where people are so reliant on water for their health
Sanitation	Additional water required for flushing when people living with HIV/AIDS suffer from diarrhoea	The design of toilets and the technology used must en-able a high standard of hygiene to be easily maintained
Energy (electricity)	Unlikely to be a significant quantitative impact on most low-income households. In more affluent households which use washing machines and electric heaters, consumption may increase	Reliable supply of electricity important for keeping fresh foods and medicines refrigerated. Electricity also makes possible forms of entertainment such as television and radio
Refuse removal	Unlikely to be a significant quantitative impact, except that waste from home-based care will be generated	Adequate provision needs to be made for safe disposal of home-based care waste

According to at least one study[69], the 6kl of free water provided by most municipalities as part of their free basic services allocations to indigent households is insufficient for households affected by HIV/AIDS. On the basis of calculations based on the estimated water needs of people living with HIV/AIDS and their carers, the research suggests that the amount of water required by a household containing one member who is sick with HIV/AIDS is more than double the 6kl free basic amount.

IN YOUR MUNICIPALITY...

- Are there adequate plans in place to ensure that service delivery backlogs are eradicated within a reasonable time period?
- Are free basic services provided?
- Do you think the current provision of free basic services in your municipality is adequate for households living with HIV/AIDS?
- Is the quality of services provided monitored regularly and an adequate standard and reliable supply maintained?

5.1.4 HIV/AIDS and community facilities

As with housing and basic services, the implications of HIV/AIDS for community facilities also has quantitative and qualititative dimensions.

Health facilities are the most obvious community facilities one would expect to be affected in the context of an HIV/AIDS epidemic. Where HIV prevalence within a particular area is high, there is likely to be an increase in the demand for health services, which means that more, or larger, health facilities may be required. The design of facilities may also need to be adjusted to take into consideration typical users with HIV/AIDS-related illnesses. The type of treatment and care provided by health facilities may also change in the context of an HIV/AIDS epidemic.[70] Anecdotal reports indicate that because of fear of stigma people living with HIV/AIDS often prefer to use health facilities outside of the areas where they live, which may complicate planning decisions about where new health facilities should be built.

Mortuaries, burial space and crematoria are other community facilities that are frequently cited in relation to the HIV/AIDS epidemic. Depending on the stage of the local epidemic within a particular municipal area, there may already be an increased rate of demand for facilities to dispose of the deceased, or a future increased demand may be anticipated. An increase in the demand for indigent burials, with associated costs for the municipality, may also be anticipated. Planning appropriately for this requires at least a basic knowledge of mortality trends within the municipal area.

Perhaps less obvious is the impact of HIV/AIDS on educational facilities. However, AIDS-related deaths amongst children, and increased drop-out rates due to increased household poverty or the burden of care falling on children, may lead to a drop in school enrolment rates. This will have implications for the number and location of schools required within each municipal area. The design of new schools also needs to take HIV/AIDS-related impacts into consideration. For example, larger sick-bays may be required to accommodate more children who are likely to be ill at school.[71] Though not a local government responsibility, an increase in household poverty rates as a result of HIV/AIDS may also have other education-related implications, for example an increase in the demand for free schooling, school feeding schemes and subsidised school uniforms.

Facilities for the care and protection of children are likely to be more in demand in a context of an HIV/AIDS epidemic. Municipalities should ensure that there are a sufficient number of facilities, such as crèches, within communities to cater for the needs of vulnerable children, as well as to give respite to their carers.[72] Facilities that provide care to terminally ill individuals, such as hospices, also need to be provided.

With regard to providing services for those affected by HIV/AIDS, partnerships between government, civil society and local businesses might be particularly fruitful. There are numerous examples of innovative partnerships between municipalities and local NGOs that have ensured that facilities for the care of adults or children affected by HIV/AIDS are provided on a sustainable basis. For example, the Msunduzi Municipality (Pietermaritzburg) donated an old transport department building to a local faith-based organisation, Tabitha Ministries, which has converted the building for use as a shelter facility to provide care for people living with HIV/AIDS, HIV/AIDS education, and home-based care and nutrition training for their families.[73]

IN YOUR MUNICIPALITY...

- Are all communities adequately serviced with essential community facilities?
- What are the expected impacts of HIV/AIDS-related morbidity and mortality on the demand for community facilities in different areas?
- What are the future requirements in terms of mortuaries, burial space and crematoria likely to be? Does your municipality have a policy on indigent burials?
- What is the scope for partnerships between the municipality, civil society organisations and the local business sector to provide HIV/AIDS-related services and support?

5.2 Human settlement design considerations in a context of HIV/AIDS

This sub-section looks at issues related to the design of housing and human settlements with a view to:

a) Preventing new infections and reducing residents' vulnerability to HIV infection
b) Improving the health, dignity and comfort of inhabitants, especially those living with HIV/AIDS and their carers, and
c) Strengthening the capacity of households to cope with the negative socio-economic impacts of HIV/AIDS.

In table 6, the issues are arranged vertically in terms of four categories of design considerations, namely unit design, basic services, community facilities, and town planning layout/environmental design. Next to each issue, running horizontally across the table, is an indication of which aspects of the response to HIV/AIDS the issue is related to (in terms of a, b, c above). In the final column of the table, some practical suggestions regarding design specifications and/or minimum levels of services are offered. It should be noted, however, that the appropriateness of, and the resources and capacity available to comply with, these suggested standards are likely to differ between municipalities.

As one example to illustrate the use of the table, under "Unit design" considerations, "Adequate plot size" is indicated as being relevant to improving health, comfort, dignity and well-being of occupants by enabling the unit to be expanded if necessary, thereby reducing overcrowding and the possible spread of disease. Food grown on the plot can also be used to enhance the nutritional intake of residents. The issue of adequate plot size is also indicated as relating to mitigating the socio-economic impacts of HIV/AIDS, in terms of the possibility of the food grown being sold to supplement the incomes of poor households, or being given to poor neighbours. A minimum plot size of 100m² in urban areas is then suggested as an adequate size that would allow for a "starter" unit to be expanded and for a small vegetable garden to be grown on the property.

IN YOUR MUNICIPALITY...

- To what extent do you currently take into account these design considerations in the development of human settlements?
- Are the suggested design standards realistic and feasible in your municipal context? What additional financial and other resources would be required to implement them?

Table 6: Summary of design considerations relevant to HIV/AIDS and suggested standards

	Preventing new infections & reducing vulnerability	Improving health, comfort, dignity & well-being	Mitigating socio-economic impacts	Suggested standards[74]
Unit design				
Adequate unit size to avoid overcrowding	Minimises spread of disease and weakening of immune systems and vulnerability to HIV infection	Minimises spread of disease and weakening of immune systems	Sufficient space for household to take in more members if required	At least 40m² (new national Department of Housing standard set from 1 April 2007)
Internal partitioning to provide privacy for occupants	Children not exposed to sexual activity	Ill household members have privacy		At least two separate, enclosed bedrooms, and separate bathroom with shower, basin and toilet (new national Department of Housing standard set from 1 April 2007)
Appropriate internal design to promote hygiene, privacy and comfort of occupants	Minimises spread of disease and weakening of immune systems	Minimises spread of disease and provides privacy for ill household members		E.g. Kitchen area should be located away from toilet; toilet should have a door and adequate ventilation

	Preventing new infections & reducing vulnerability	Improving health, comfort, dignity & well-being	Mitigating socio-economic impacts	Suggested standards[74]
Unit design				
Orientation of unit on plot to maximise potential for unit to be expanded to accommodate in-take of new household members		Reduces overcrowding and possible spread of disease	More house-hold members can be accommodated if required	Orientation of the house to maximise use of available space on plot
Adequate ventilation to provide fresh air and remove indoor air pollutants and to dry internal dampness	Minimises spread of disease and weakening of immune systems	Promotes health and comfort of occupants		At least two openable windows in different walls to allow for cross-ventilation; Ventilation blocks
Adequate thermal insulation to maintain a healthy and comfortable temperature within the home		Promotes health and comfort of occupants		Thick walls; Ceilings; Larger windows should be north facing to allow in warmth from sunlight; Doors and windows fit properly, draught proofing; Adequate ventilation measures (e.g. air bricks, openable windows)
Adequate protection from damp to reduce potential for respiratory diseases such as pneumonia, bronchitis, TB and various viral and bacterial infections	Minimises spread of disease and weakening of immune system	Promotes health and comfort of occupants		Damp proof coursing in the walls; Apron around base of unit and damp proof membrane beneath floor slab; Roof overhangs to protect walls from damp penetration; Adequate ventilation
Adequate lighting for physical and mental well-being, as well as for carrying out daily household tasks, reading, HBC and home-based economic activity		Promotes health and comfort of occupants		Suitably sized and located windows - larger windows should be north facing to allow in warmth from sunlight
Adequate plot size to enable extensions to units and food gardening		Reduces overcrowding and possible spread of disease. Food to provide nutritional sustenance	Food grown can be sold to generate additional income for the household or given to community members	100m² urban areas; 200m² for on-site sanitation. It should be noted however that plot sizes may be smaller in well-located urban locations and for certain housing types (e.g. for double-story attached row housing), while plots in peri-urban areas may be larger. It is also important to consider alternatives to free-standing houses on separate plots, e.g. blocks of flats or cluster housing

	Preventing new infections & reducing vulnerability	Improving health, comfort, dignity & well-being	Mitigating socio-economic impacts	Suggested standards[74]
Unit design				
Low maintenance design and materials to reduce future costs of maintaining unit to household			Saves the household income that can be used for food and medicine	Maximum possible quality materials and workmanship; technologies, design features and quality control to reduce future maintenance costs to households
Use of water-saving design features and devices to reduce costs to household (as well as environmental conservation)			Saves the household income that can be used for food and medicine	Water conserving taps (e.g. tap aerators and flow restrictors); Low flow rate showerheads; Dual flush toilet cisterns and low flush toilet suites
Maximise opportunities for unit/plot to be used as a base for economic activity			Enables household to generate income to relieve poverty	Multi-functional design E.g. flexibility to run spaza shop and other home-based businesses from the unit (e.g. sewing, baking, shoe repair, appliance repair etc)
Basic Services				
Water	Supports health and immune system to resist HIV infection	Water required to maintain health, hygiene, comfort & dignity		Single, metered standpipe per erf (formal housing) or communal standpipe within 200m (informal settlements), 1 per 15-25 dwelling units
Sanitation	Supports health and immune system to resist HIV infection	Supports health and prevents disease		VIP per erf (formal housing); VIPs need to be located at least 7m from the house; Communal toilets (informal housing) 1 per two households (12 people), 75 m walking distance
Energy	Enables entertainment such as TV and reduces boredom amongst youth	Supports health and prevents disease	Enables certain kinds of economic activities to be undertaken from the home	Electrical connection to each unit
Solid waste removal	Supports health and immune system to resist HIV infection	Supports health and prevents disease		Regular collection of household waste; Measures to safely dispose of medical waste and waste from home-based care
Roads	Access to health, social and economic facilities	Access to each erf with graded or gravel paved road;		Access to all major community facilities, especially clinics and hospitals; Adequate provision for pedestrian pathways and bicycle lanes

	Preventing new infections & reducing vulnerability	Improving health, comfort, dignity & well-being	Mitigating socio-economic impacts	Suggested standards[74]
Basic Services				
Stormwater drainage to prevent build-up of water, creating damp environment		Supports health and prevents disease		
Public transport	Can reduce safety risks to women and children	Access to health, social and economic facilities	Access to economic opportunities to support household livelihoods	Safe, reliable and affordable public transport to be provided; Ensure that public transport services all major community facilities, especially clinics and hospitals, as well as main centres of economic activity
Quality control of services installed			Minimises need for maintenance, which saves poor households money that can be used for other uses	Regular monitoring during installation
Safe access to communal standpipes and toilets	Can reduce safety risks to women and children			Adequate lighting around communal standpipes and toilets
Emergency services (medical; fire)		Critical for health and safety of residents	Prevents loss of property and assets and greater impoverishment	Population thresholds and maximum access distances/times appropriate for local municipal context
Community facilities				
Health facilities	Access to information and prevention services	Access to treatment and support		Population thresholds and maximum access distances/times appropriate for local municipal context
Educational facilities Primary school High school	Access to information and prevention services	Access to advice and support	Education key to youth empowerment	
Crèche	Promotes safety of young children		Enables parents to search for economic opportunities	
Recreation facilities: Sports field Local park Playground	Young people less likely to become bored, also able to access HIV/AIDS information	Promotes healthy lifestyles		Population thresholds and maximum access distances/times appropriate for local municipal context

	Preventing new infections & reducing vulnerability	Improving health, comfort, dignity & well-being	Mitigating socio-economic impacts	Suggested standards[74]
Community facilities				
Municipal offices	Access to HIV/ AIDS information		Poor households able to access indigent and other support from municipality	
Police station	Prevention of sexually-related crimes		Prevent loss of property and assets	
Community centre	Access to HIV/AIDS information	Provides venue for socialising and obtaining support		
Library	Access to information about HIV/AIDS; recreational opportunities	Access to recreational material and opportunities to socialise		
Shops		Access to food & medicines	Access to economic opportunities	Population thresholds and maximum access distances/times appropriate for local municipal context
Public telephones		Access to emergency services and counselling		
Religious centre (church, mosque etc.)		Promotes spiritual well-being and access to social support	Access to social and material support	
Town planning layout/ Environmental design				
Economic viability of settlements	Reduces need to resort to transactional sex		Access to economic opportunities	Integrate housing within existing settlements; close to existing or planned economic opportunities and community facilities; maximise use of existing vacant land to avoid urban sprawl
Promotion of safety	Prevention of sexually-related crimes, especially against women & children			Positioning of houses facing inwards onto common spaces, children's playgrounds, roads and pedestrian pathways; Location of entrance and exit points considered in order to minimise use of roads and paths as thoroughfares; Adequate lighting and security around community facilities

	Preventing new infections & reducing vulnerability	Improving health, comfort, dignity & well-being	Mitigating socio-economic impacts	Suggested standards[74]
Town planning layout/ Environmental design				
Street lighting	Prevention of sexually-related crimes, especially against women & children			High mast security lighting
Green space and landscaping for shade, temperature regulation, wind, noise, water runoff and air pollution reduction, growing fruits, vegetables and medicinal plants and to create a more aesthetically pleasing and healthy living environment		Promotes health and comfort of residents	Food grown can be sold or used to support poor households	Plant appropriate trees and vegetation in communal spaces and encourage and assist residents to grow gardens on their plots
Control of vacant land to reduce safety risks, restrict illegal dumping and to enable productive community uses, such as food gardening or recreational activities	Prevention of sexually-related crimes, especially against women & children	Promotes a more healthy local environment	Potentially provides income opportunities for local residents	Vacant plots fenced off and/or vegetation regularly cut; Vacant plots to be used for community vegetable gardening and recreational space; Community-based, labour intensive methods of maintaining open spaces can be used to provide incomes to poor households
Control and reduction of air pollution to reduce the incidence of respiratory and other diseases		Promotes a more healthy local environment		Compliance with zoning regulations to ensure that polluting industries and activities are located away from, and restricted within, residential living areas; Monitoring and enforcement of municipal air pollution standards

5.3 Integrating HIV/AIDS in the implementation phase

This section provides suggestions for how an HIV/AIDS perspective can be integrated into the implementation or delivery phase of the human settlements development process. This phase entails the construction of housing, basic infrastructure and community and economic facilities that constitute sustainable human settlements.

5.3.1 HIV/AIDS and implementation capacity

While the focus of this guide is on minimising the impacts of HIV/AIDS on the general population through human settlements interventions, it is critical to understand and respond to the impacts of HIV/AIDS on the internal functioning and capacity of various institutions and role-players involved in the human settlements development process, including government at all three spheres and the private sector. In terms of the capacity of municipalities, which is the main focus of attention in this guide, as with any workplace, municipal staff involved in human settlement development processes may themselves be at risk of

contracting HIV, already be living with HIV/AIDS or be directly affected by it. In each case, there are likely to be consequences for the capacity of the individual to perform his or her job effectively, which may negatively affect processes involved in the creation of sustainable human settlements. Depending on the role and level of responsibility of the individual affected, the implications for the human settlement development process may be different. For example, where municipal planners and professionals responsible for planning and overseeing implementation of plans are affected, the resulting shortage of expertise at this level may have a particularly severe impact on development processes.

Responding to the internal dimensions of HIV/AIDS requires municipalities to devise effective policies, strategies and programmes to reduce new infections amongst staff (including education and awareness, access to VCT, treatment for STIs, distribution of condoms), as well as to provide or facilitate access to the necessary treatment, care and support required by staff (and their immediate families) who are infected or directly affected. A useful resource for municipalities needing to develop internal HIV/AIDS responses is "Managing HIV and AIDS in the Municipal Workplace: A Guide for Local Government," published by the South African Local Government Association (SALGA) and the South African Cities Network in 2005.[75]

Housing and infrastructure development projects may attract migrant workers to an area, many of whom are likely to be men away from their families for long periods of time. In such situations, there are increased risks of the workers contracting HIV through sexual networking, as well as infecting members of the local population. Construction companies should therefore also play a role in educating their staff about the risks of HIV/AIDS and offer them support to undergo VCT and have access to condoms. Municipalities should use all means possible to encourage companies to meet their obligations towards their staff in terms of HIV/AIDS. For example, municipalities could include requirements for HIV/AIDS workplace policies as part of their eligibility criteria for municipal contracts.

5.3.2 Maximising opportunities for economic development

At national level, housing and related infrastructure development has been envisaged as a key driver of poverty reduction through generating economic growth and job creation. One of the seven business plans of the "Breaking New Ground" sustainable human settlements policy focuses specifically on housing and job creation. At a local level, municipalities should exploit all possible opportunities to optimise the potential of human settlements implementation processes to stimulate employment creation and skills development amongst the local population. This can significantly bolster the incomes of poor households and reduce people's vulnerability to HIV infection and their ability to cope with negative financial and other shocks resulting from HIV/AIDS at a household level.

Linking housing and infrastructure development projects with the Expanded Public Works Programme is noted in the "Breaking New Ground" as one strategic intervention to reduce unemployment and provide livelihoods and skills to the poor, women and youth. Encouraging labour intensive construction methods is a key component of a job creation strategy linked to housing and infrastructure development. Municipalities can also encourage small business development through their procurement policies.

5.3.3 Allocation of units

It is important that all processes relating to the allocation of units within new low-income housing developments are as transparent and as fair as possible, and do not discriminate against particular groups, including households affected by HIV/AIDS. As suggested earlier in the section on informal settlement upgrading, if possible, requests by households for neighbouring plots in a development should be accommodated, as this can help to maintain social cohesion and support networks within newly created settlements. Consideration should also be given to enabling households who run small businesses from home to receive suitably located plots.

It is also important in the context of HIV/AIDS for municipalities to have policies and systems in place to deal with situations where housing subsidy beneficiaries die before taking ownership of their properties. A useful intervention in this regard would be for municipalities to encourage and assist subsidy beneficiaries to draw up wills specifying inheritance rights.

IN YOUR MUNICIPALITY...

- Does your municipality have an HIV/AIDS workplace policy and programme in place?
- Are the impacts of HIV/AIDS visible within the municipality? E.g. are more staff absent due to ill health or has there been an increase in deaths amongst staff?
- What measures have you implemented in order to maximise the potential for housing and infrastructure delivery to stimulate the local economy, promote the development of small, medium and micro enterprises (SMMEs), and to create jobs? Who benefits from these measures (e.g. is there a specific emphasis on women and youth to reduce vulnerability)?
- Do you have a policy on how new housing units are allocated? Does it accommodate requests by households to be given units next to each other?
- What measures does your municipality have in place to deal with situations where housing subsidy beneficiaries die before taking ownership of their properties? Are there measures in place to help protect the occupational and tenure security of households in cases where registered title-holders die (e.g. promoting the use of wills by subsidy beneficiaries)?

5.4 Integrating HIV/AIDS in the post-implementation phase

This final sub-section of the guide deals with the potential impacts of HIV/AIDS on the sustainability of completed greenfields human settlements. It focuses on how HIV/AIDS may potentially affect the revenue base of municipalities, and the consequences for sustainable service delivery, and the ongoing support municipalities should provide, in the form of indigent policies and other programmes, to poor and especially vulnerable households, such as child-headed households.

One of the key challenges facing households that move from informal settlements to formal housing projects is the additional financial burden that is usually associated with formal housing, such as service charges, rates, maintenance costs and, often, higher transport costs to access work and school. The affordability of service charges is thus a critical consideration. There are numerous anecdotal accounts of residents from formal housing projects moving back to informal settlements to cut down costs. This may then place these residents in circumstances where they are more vulnerable to HIV infection.

It is thus critical for municipalities to try to ensure that the costs of rates and service charges remain affordable to residents of formal housing, through the provision of free basic services. The scope of service subsidies offered (e.g. water, sanitation, electricity, solid waste removal, rates etcetera), and whether these services are subsidised on the basis of means tested criteria (i.e. only for "indigent" households) or whether, such as in the case of water and electricity, all households receive a free basic amount, will depend on the municipality. However, what is critical is that all residents, in particular those who are living in poverty, are adequately informed about the assistance they are eligible for, and that the procedures and application processes for accessing assistance are accessible and user-friendly and take into account issues such as illiteracy. A variety of channels, besides the print media, for example local community radio and ward meetings, should be used to widely publicise free basic services and other support the municipality offers.

IN YOUR MUNICIPALITY...

- Is there an indigent support policy in place? Is the policy implemented and monitored? Are its provisions adequate in the face of the HIV/AIDS epidemic?
- What communication channels does the municipality use to widely publicise free basic services and other assistance provided to poor residents?
- Are the requirements and procedures for accessing indigent support sensitive to the constraints faced by individuals and households affected by HIV/AIDS?
- Are frontline staff in the municipality trained to understand the special needs of individuals (such as orphans) affected by HIV/AIDS?

6. Conclusion

In recent years in South Africa, there has been a welcome reinvigorated emphasis on the meaning and creation of "sustainable human settlements." This holds the promise of generating living environments that significantly improve the quality of life for all South Africans, but especially those living in poverty. At the same time, however, the country faces an HIV/AIDS epidemic on a scale that threatens to undermine and reverse the significant developmental achievements of recent years, and the future developmental aspirations of the country. No sector is unscathed by the epidemic, and every sector has a role to play in addressing the spread of HIV/AIDS and its impacts. Arguably, the role of human settlements in relation to HIV/AIDS has not received enough attention, despite the fact that human living environments have a fundamental impact on human health, well-being and livelihoods.

The primary purpose of this document was to provide practical guidance to municipal practitioners and policy-makers on how HIV/AIDS can be integrated into housing and human settlements development processes within their municipalities. The guide has attempted to encourage those who would not ordinarily have much engagement with HIV/AIDS as an issue in their day-to-day jobs to see HIV/AIDS as a developmental issue and not merely as a health issue and as it is conventionally regarded.

Part A of the guide explained the linkages between sustainable human settlements and HIV/AIDS, in terms of reducing vulnerability to HIV infection and preventing the spread of the epidemic, providing treatment, care and support, and mitigating the socio-economic consequences of the epidemic at an individual, household, community and societal level. How HIV/AIDS potentially impacts negatively on the ability of municipalities to meet their obligations in terms of the provision of housing, basic services and a community facility was also discussed.

Part B of the guide aimed to offer more practical suggestions for how municipal planners and housing professionals can integrate HIV/AIDS into their work. Upgrading informal settlements was dealt with as a priority intervention, since these settlement types typically have the highest HIV prevalence and incidence rates. Suggestions for how HIV/AIDS can be included as a consideration in assessing the quantitative and qualitative demand for housing, basic services and community amenities were then offered, along with suggestions for issues to be considered in the design of various elements that constitute sustainable human settlements. Finally, the guide offered suggestions for integrating an HIV/AIDS perspective into the implementation and post-implementation phases of human settlement development processes.

As noted in the introduction to this guide, this introductory document should be considered a work in progress. Any comments and suggestions towards developing and improving this document and making it more useful for its intended audience will be greatly appreciated.

References

Ambert, C. 2006a. "Spatial Planning, land development and land use management in a context of HIV/AIDS," in *South African Cities Network HIV and AIDS Research Series – challenges and responses for developmental local government.* Johannesburg: SACN:61.

Ambert, C. 2006b. "An HIV and Aids lens for informal settlement policy and practice in South Africa," in M. Huchzermeyer and M. Karam (eds). *Informal Settlements: A perpetual challenge?* Cape Town: UCT Press.

Ambert, C, Jassey, K, Thomas, L. 2006. *HIV, AIDS and urban development issues in sub-Saharan Africa. Beyond sex and medicines: Why getting the basics right is part of the response!* SIDA.

Davids, I (ed). *Learning About Local Government: A fist step towards active engagement.* Cape Town: Foundation for Contemporary Research.

Department of Health. 2007. *HIV and AIDS and STI Strategic Plan for South Africa 2007-2011.* Pretoria: Department of Health.

Department of Housing. 1998. *Norms and Standards in Respect of Permanent Residential Structures.* Pretoria: Department of Housing

Department of Housing. 2004. *"Breaking New Ground." A Comprehensive Plan for the Development of Sustainable Human Settlements.* Pretoria: Department of Housing.

Department of Housing. 2006. *National Housing Programme for Housing Sections of Integrated Development Plans.* Pretoria: Department of Housing.

Department of Provincial and Local Government. 2007. *Framework for an Integrated Local Government Response to HIV and AIDS*. Pretoria: Department of Provincial and Local Government.

Department of Social Development. 2005. *Policy Framework for Orphans and Other Vulnerable Children Made Vulnerable by HIV and AIDS,* DOSD, Pretoria

Holden, S. 2004. *Mainstreaming HIV/AIDS in Development and Humanitarian Programmes.* Oxford: Oxfam GB.

Ismail, S. 2007. SA Housing appals UN's rapporteur. Mail & Guardian Online. http://www.mg.co.za/articlePage.aspx?area=/breaking_news/breaking_news__national/&articleid=305261. Retrieved 20 April 2007.

Kahn, L. 2007. *Playing the "Love Game": Sexual Decision-making Amongst African Girls in a Cape Town Community.* Cape Town: Centre for Social Science Research.

Needle, R, Kroeger, K, Belani, H and Hegle, J. 2006. "Substance abuse and HIV in sub-Saharan Africa" in African Journal of Drug and Alcohol Studies, 5(2).

Office of the Public Service Commission, 2003. Report on the Evaluation of the National Housing Subsidy Scheme, OPSC, Pretoria, pg 10

Rehle, T, Shisana, O, Pillay, V, Zuma, K, Puren A, Parker, W. 2007. National HIV incidence measures – new insights into the South African epidemic. *South African Medical Journal*, Volume 97, No 3.

Rugalema, Weigang and Mbwika. 1999, quoted in Collins and Rau. 2000: Collins, J. and B. Rau. 2000. *AIDS in the Context of Development.* Paper No 4. Geneva: UNRISD Programme on Social Policy and Development.

Shisana, O, Rehle, T, Simbayi, LC, Parker, W, Zuma, K, Conolly, C, Jooste, S, Pillay, V (eds). 2005. *South African National HIV Prevalence, HIV Incidence, Behaviour and Communication Survey, 2005.* Cape Town: HSRC Press.

Smit, W. 1999. *Towards the Right to Adequate Housing.* Durban: Built Environment Support Group.

Smit, W. 2003. *Expanding Socio-Economic Rights and Access to Housing.* Pretoria: Mega-Tech/South Africa.

Smit, W. 2006. "Understanding the complexities of informal settlements: Insights from Cape Town," in M. Huchzermeyer and M. Karam (eds). *Informal Settlements: A perpetual challenge?* Cape Town: UCT Press.

Smith, T and Stanford, P. 2003. *The Msunduzi HIV/AIDS Strategy: A Partnership Response at Local Government Level.* Pietermaritzburg: Built Environment Support Group.

South Africa. 2000. *Local Government: Municipal Systems Act.* Act 32 of 2000. Cape Town and Pretoria: Government Printer.

Stephen, J. 21 May 2007. *Budget worries as government tries to hike housing quality.* Cape Town: Cape Times.

Tomlinson, R. 2004. *HIV/AIDS in the City of Johannesburg. Document prepared for the Corporate Planning Unit in the Office of the City Manager of the City of Johannesburg.* Johannesburg: City of Johannesburg:49.

UNAIDS. 2004. *Report on the Global AIDS Epidemic 2004.* Geneva: UNAIDS

Van Donk, M. 2004. *Development planning and HIV/AIDS in sub-Saharan Africa.* Final report prepared for the UNDP Regional Project on HIV and Development in sub-Saharan Africa.

Van Donk, M. 2006. "Positive" urban futures in sub-Saharan Africa: HIV/AIDS and the need for ABC (A Broader Conceptualization). *Environment & Urbanization,* Volume 18, No. 1.

Zulu, E, Dodoo, F. 2003. "Urbanization, Poverty and Sex: Roots of Risky Sexual Bahaviours in Slum Settlements in Nairobi, Kenya" in E. Kalipeni, S. Craddock, J. Oppong, and J. Gosh (eds.). *HIV/AIDS in Africa: Beyond Epidemiology.* Oxford: Blackwell Publishers.

Endnotes

1 Department of Social Development. 2005. Policy Framework for Orphans and Other Vulnerable Children Made Vulnerable by HIV and AIDS. Pretoria: DOSD.
2 Department of Social Development. 2005. 3 In most instances in this document the abbreviation, 'HIV/AIDS,' has been used. However, it is noted that in some publications the preferred reference is to 'HIV and AIDS,' in recognition of the differential nature and impacts of infection with HIV versus its progression to AIDS, with its associated illnesses. In some places where there has been a need to emphasise this distinction in the report, the term 'HIV and AIDS' has been used.
4 Department of Health. 2007. *HIV and AIDS and STI Strategic Plan for South Africa 2007-2011.* Pretoria: Department of Health:19.
5 Department of Health: 2007:13. 6 Ismail, S. 2007. SA Housing appals UN's rapporteur. Mail & Guardian Online. http://www.mg.co.za/articlePage.aspx?area=/breaking_news/breaking_news__national/&articleid=305261. Retrieved April 20 2007.
7 Department of Housing. 2004. "Breaking New Ground." A Comprehensive Plan for the Development of Sustainable Human Settlements. Pretoria: Department of Housing:11.
8 Smit, W. 1999. Towards the Right to Adequate Housing. Durban: Built Environment Support Group:14.
9 Smit, W. 2003. Expanding Socio-Economic Rights and Access to Housing. Pretoria: Mega-Tech/South Africa:4.
10 For a full discussion on relevant court rulings, see Smit, W. 2003.
11 Smit, W. 2003:13.
12 Council for Scientific and Industrial Research. 2002. Guidelines for Human Settlement Planning and Design. Pretoria: CSIR:2.
13 http//:www.housing.gov.za. Retrieved April 21 2007.
14 Stephen, J. 21 May 2007. Budget worries as government tries to hike housing quality. Cape Town: Cape Times.
15 South Africa. 2000. Local Government: Municipal Systems Act. Act 32 of 2000. Cape Town and Pretoria: Government Printer:44.
16 Department of Housing. 2006. National Housing Programme for Housing Sections of Integrated Development Plans. Pretoria: Department of Housing:8.
17 Davids, I (ed). Learning About Local Government: A fist step towards active engagement. Cape Town: Foundation for Contemporary Research:21.
18 Ambert, C. 2006a. "Spatial Planning, land development and land use management in a context of HIV/AIDS," in South African Cities Network HIV and AIDS Research Series – challenges and responses for developmental local government. Johannesburg: SACN:61.
19 Shisana, O, Rehle, T, Simbayi, LC, Parker, W, Zuma, K, Conolly, C, Jooste, S, Pillay, V (eds). 2005. South African National HIV Prevalence, HIV Incidence, Behaviour and Communication Survey, 2005. Cape Town: HSRC Press.
20 Shisana et al. 2005:49 –50.
21 Holden, S. 2004. Mainstreaming HIV/AIDS in Development and Humanitarian Programmes. Oxford: Oxfam GB:10-11; Van Donk, M. 2006. "Positive" urban futures in sub-Saharan Africa: HIV/AIDS and the need for ABC (A Broader Conceptualization). Environment & Urbanization, Volume 18, No 1:166.
22 Van Donk, M. 2004. *Development planning and HIV/AIDS in sub-Saharan Africa.* Final report prepared for the UNDP Regional Project on HIV and Development in sub-Saharan Africa:32.
23 Van Donk, M. 2006; Kahn, L. 2007. Playing the "Love Game": Sexual Decision-making Amongst African Girls in a Cape Town Community. Cape Town: Centre for Social Science Research:2.
24 It should also be acknowledged that it certain circumstances, for example, where couples wish to fall pregnant, the ABC message may not be deemed appropriate.

25 Kahn, L. 2007:3.
26 Department of Health. 2007:26.
27 Department of Health. 2007:28.
28 Van Donk, M. 2004:32.
29 Department of Health. 2007:28.
30 Department of Provincial and Local Government. 2007. Framework for an Integrated Local Government Response to HIV and AIDS. Pretoria: Department of Provincial and Local Government:6.
31 Department of Health. 2007:28.
32 Department of Health. 2007:34.
33 Department of Health. 2007:29.
34 Some of the following points have been adapted from Department of Provincial and Local Government. 2007:5; Ambert, C. 2006.
35 Ambert, C, Jassey, K, Thomas, L. 2006. HIV, AIDS and urban development issues in sub-Saharan Africa. Beyond sex and medicines: Why getting the basics right is part of the response! SIDA:9.
36 Ambert, C et al. 2006:9.
37 Ambert, C et al. 2006:8.
38 See, for example, Zulu, E, Dodoo, F. 2003. "Urbanization, Poverty and Sex: Roots of Risky Sexual Behaviours in Slum Settlements in Nairobi, Kenya" in E. Kalipeni, S. Craddock, J. Oppong, and J. Gosh (eds.). HIV/AIDS in Africa: Beyond Epidemiology. Oxford: Blackwell Publishers.
39 Ambert, C et al. 2006.
40 Ambert, C et al. 2006:8.
41 Ambert, C et al. 2006:8.
42 Ambert, C et al. 2006:10.
43 Needle, R, Kroeger, K, Belani, H and Hegle, J. 2006. "Substance abuse and HIV in sub-Saharan Africa" in African Journal of Drug and Alcohol Studies, 5(2).
44 Rugalema, Weigang and Mbwika. 1999, quoted in Collins and Rau. 2000: Collins, J. and B. Rau. 2000. *AIDS in the Context of Development*. Paper No 4. Geneva: UNRISD Programme on Social Policy and Development.
45 Some of the examples have been adapted from Department of Provincial and Local Government. 2007; Ambert, C. 2006a.
46 Ambert, C et al. 2006:9.
47 Smit, W. 1999:12.
48 Smit, W. 1999:12.
49 Department of Housing. 2004.
50 Shisana et al. 2005:40.
51 Rehle, T, Shisana, O, Pillay, V, Zuma, K, Puren A, Parker, W. 2007. National HIV incidence measures – new insights into the South African epidemic. South African Medical Journal, Volume 97, No 3.
52 Van Donk, M. 2006:163.
53 Van Donk, M. 2006:163.
54 It should be noted that multiple sexual relationships are not restricted to migrant workers. Studies (for example Lurie et. al. quoted in UNAIDS. 2004. Report on the Global AIDS Epidemic 2004. Geneva: UNAIDS) have suggested that spouses left behind by migrant workers may also engage in other sexual relationships while the migrant spouse is away.
55 Of course, economic dependence on a spouse may not be the only reason for women to remain in such relationships. Other social and cultural factors may also have an important influence on their decision not to leave the relationship.
56 Smit, W. 2006. "Understanding the complexities of informal settlements: Insights from Cape Town," in M. Huchzermeyer and M. Karam (eds). Informal Settlements: A perpetual challenge? Cape Town: UCT Press:114.
57 Smit, W. 2006:111.
58 Smit, W. 2006:111.
59 Ambert, C. 2006a:67.
60 For an elaboration of each of these elements, see Smit, W. 2006:104.
61 Smit, W. 2006:111.
62 Smit, W. 2006:119.
63 Ambert, C. 2006b. "An HIV and Aids lens for informal settlement policy and practice in South Africa," in M. Huchzermeyer and M. Karam (eds). Informal Settlements: A perpetual challenge? Cape Town: UCT Press:154.
64 Smit, W. 2006:117.
65 Ambert, C. 2006a:59.
66 Department of Housing. 2004:3.
67 For more information on these pilot projects, visit http://www.oliveodt.co.za/programs.asp#2 and www.cindi.org.za/BESG
68 The following points regarding the implications of HIV/AIDS for water were adapted from the following: www.law.wits.ac.za/cals/phiri/martin%20affidavit/20Final.pdf. Retried May 3 2007.
69 Tomlinson, R. 2004. HIV/AIDS in the City of Johannesburg. Document prepared for the Corporate Planning Unit in the Office of the City Manager of the City of Johannesburg. Johannesburg: City of Johannesburg:49.
70 Abt Associates Inc. & Health Economics and HIV/AIDS Research Division. 1999. AIDS Toolkits. HIV/AIDS and Housing & Public Works. Durban: HEARD.
71 Abt Associates Inc. & Health Economics and HIV/AIDS Research Division. 1999.
72 Department of Social Development. 2005:40.
73 Smith, T and Stanford, P. 2003. The Msunduzi HIV/AIDS Strategy: A Partnership Response at Local Government Level. Pietermaritzburg: Built Environment Support Group.
74 Compiled from Department of Housing. 1998. Norms and Standards in Respect of Permanent Residential Structures. Pretoria: Department of Housing; CSIR. 2002. Smit, W. 1999.
75 Copies of the guide can be obtained from SALGA on 012 369 8000.