REPUBLIC OF ZAMBIA

NATIONAL AIDS COUNCIL

ZAMBIA COUNTRY REPORT

Monitoring the Declaration of Commitment on HIV and AIDS and the Universal Access

SUBMITTED TO THE UNITED NATIONS GENERAL ASSEMBLY SPECIAL SESSION ON HIV AND AIDS

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Foreword

Zambia has been grappling with the HIV and AIDS epidemic for over thirty years. Since then, the country has developed and implemented diverse programmes to prevent new infections and improve the quality of life of those infected and affected by HIV and AIDS. Over the last two decades Zambia has scored tremendous achievements in halting and beginning to reverse the effects of the epidemic.

In prevention, a major success between 2011 and 2014 has been in the prevention of mother to child transmission (PMTCT). Approximately 75,411 women living with HIV delivered in 2014 out of which 68,820 received efficacious ARVs for PMTCT. These efforts have translated into a drop in the HIV transmission rate from mother to child from 24% in 2009 to less than 9% in 2014. Other successes include an increase in uptake in HIV Counselling and Testing (HCT) with more people being tested than the targets set, and a significant increase in voluntary medical male circumcision results, where the number of males circumcised increased from 84,604 in 2011 to 109,846 in 2014.

Under treatment, care and support, more people living with HIV (PLHIV) are living longer given the successful implementation of the Antiretroviral Therapy (ART) programme. In recent years, annual AIDS related mortality has dropped approximately from 58,000 in 2000 to 19,000 in 2014 with increasing access to ART. The number of health facilities dispensing ART has increased from 564 in 2012 to 592 in 2014 higher than the targeted 500 set for 2015, and has make ARVs more accessible to People Living With HIV (PLHIV). With the introduction of Treatment as Prevention (TaSP) for some sub-populations such as TB/HIV co-infected patients and discordant couples, we expect significant gains to be made in lowering HIV transmission and incidence.

Under impact mitigation, focused was on strengthening the capacity of vulnerable households and individuals to cope with the socio-economic impacts of HIV and AIDS. PLHIV, Orphans and Vulnerable Children (OVCs), people with disabilities, and care-givers were recognized as the key vulnerable groups. The multi-sectoral approach of the NASF programmes, through formation of District AIDS Task Force (DATF) in districts countrywide has provided successful achievements in mobilizing a substantial number of community based organizations (CBOs) and other NGOs to respond to the needs of OVCs and vulnerable households by providing health related and other services.

In the area of coordination and management, a number of successes have been scored. The National HIV/AIDS/STI/TB Council (NAC) managed to facilitate integration of HIV&AIDS, Gender and Human Rights in capital projects, continued engaging the Local Authorities and ensured evidence based planning and programming were some of the other successes scored. NAC also developed a devolution plan for District AIDS Coordination Advisors into the local Councils. The plan was approved and the Cabinet Circular No. 10 of 2014 has included HIV/AIDS in the first tranche of the seven sectors earmarked for devolution in 2015.

Finally, I would like to take this opportunity to express my gratitude to our partners, without whom many of these successes would not have been achieved. As we present this report, several developments are taking place in the country which will assist us in dealing with the epidemic. We remain confident that we will continue to make positive strides towards achieving the targets set out both globally and in our own national plans.

Minister of Health
Ministry of Health
30th March 2015

Acknowledgements

The National AIDS Secretariat wishes to acknowledge with gratitude the valuable contributions from different individuals and organisations for their inputs towards writing the Global AIDS Response Progress Report (GARPR).

The NAC Secretariat wishes to express special thanks and appreciation to the GARPR country rapporteurs for their commitment and dedication to accomplishing this mammoth task. Sincere appreciation specifically goes to Ministry of Health, Ministry of Community Development, Mother and Child Health (MCDMCH), UNAIDS and UNICEF for the enormous contributions towards finalising the GARPR.

Finally, I want to express my gratitude to the staff of the National HIV/AIDS/STI/TB Council for their dedication and hard work during the entire process. Without their cooperation and support the GARPR would not have been possible.

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
ALHIV	Adolescents Living with HIV
ANC	Ante Natal Clinic
ANCSS	Ante Natal Clinic Sentinel Surveillance
ART	Antiretroviral Therapy
ARVs	Antiretrovirals
AZT	Azidothymidine
BCC	Behaviour Change Communication
CPS	Combination Prevention Strategy
CSOs	Civil Society Organisations
CTX	Cotrimoxazole
DATF	District AIDS Task Force
DHS	Demographic and Health Survey
EID	Early Infant Diagnosis of HIV
GARPR	Global AIDS Response Progress Reporting
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GII	Gender Inequality Index
GIPA	Greater Involvement of PLHIV
GRZ	Government of the Republic of Zambia
HTC	HIV Testing and Counselling
HDI	Human Development Index
HIV	Human Immune-deficiency Virus
HMIS	Health Management Information System
HSV	Herpes Simplex Virus
IC	Infection Control
IDUs	Intravenous Drug Users
IEC	Information, Education and Communication
IOM	International Organisation for Migration
IPT	Isoniazid Preventive Therapy
MCP	Multiple Concurrent Partners
MDGs	Millennium Development Goals
MOT	Modes of Transmission
MSM	Men having Sex with Men
NAC	National HIV/AIDS/STIs/TB Council
NASA	National AIDS Spending Assessment
NASF	National AIDS Strategic Framework
NCPI	National Commitments and Policy Instrument
NTP	National Tuberculosis Programme
NVP	Nevirapine
OI	Opportunistic Infection
PACA	Provincial AIDS Coordination Advisor
PEP	Post Exposure Prophylaxis
PLHIV	Persons Living with HIV
PMTCT	Prevention of Mother to Child Transmission
R-NASF	Revised National AIDS Strategic Framework
R-SNDP	Revised Sixth National Development Plan
SBC	Social and Behaviour Change
SBCC	Social and Behaviour Change Communication
STIs	Sexually Transmitted Infections
SW	Sex Workers
TaSP	Treatment as Prevention
TB	Tuberculosis
TFR	Total Fertility Rate
UA	Universal Access

UN	United Nations
UNGASS	United Nations General Assembly Special Session on HIV and AIDS
VCT	Voluntary Counselling and Testing
VMMC	Voluntary Medical Male Circumcision
WHO	World Health Organisation
ZDHS	Zambia Demographic and Health Survey
ZSBS	Zambia Sexual Behaviour Survey

I. Status at a Glance

(a) Country Context

The Republic of Zambia is a landlocked country in Southern Africa, neighbouring Zimbabwe and Botswana to the south, Namibia to the southwest, Angola to the west, the Democratic Republic of Congo to the north, Tanzania to the northeast, and Malawi and Mozambique to the east. It covers a land area of 752,612 square kilometres, divided into 10 provinces and 74 districts. Of the 10 provinces, Lusaka and Copperbelt are predominantly urban, while the remaining provinces named Central, Eastern, Luapula, Muchinga, Northern, Northwestern, Southern and Western are predominantly rural. In 2010, the population of Zambia was recorded at 13,092,666 from 9,885,591 recorded in 2000. The average annual population growth rate between the years 2000 and 2010 was 2.8 per cent. At 0.395 in 2010, Zambia's HDI ranking was above the average of 0.389 for sub-Saharan Africa and also slightly above the average of 0.393 for low HDI countries. Lusaka serves as the country's administrative capital, and is also the largest city in the country.

Zambia is classified as a lower middle income country in the medium human development category with a Human Development Index (HDI) value of 0.561 in 2013, positioning the country at 141 out of 187 countries and territories. The country's Gender Inequality Index (GII) is 0.617, ranking it 133 out of 149 countries. 11.5% of parliamentary seats are held by women, and 25.7% of adult women have reached at least a secondary level education compared to 44.2% of their male counterparts. For every 100,000 live births, 44.0 women die from pregnancy-related causes, and the adolescent birth rate is 125.4 births per 1,000 live births. Female participation in the labour market is 73.2% compared to 85.7% for men[1].

Table 1: Demographic characteristics

Indicator	Census Year			
	1980	1990	2000	2010
Population (millions)	5.7	7.8	9.9	13.1
Density (population/km^2)	7.5	10.4	13.1	17.4
Percent urban	39.9	38.0	35.0	39.5
Total fertility rate (number of children)	7.2	6.7	6.0	5.9
Infant mortality rate (per 1,000 live births)	97	123	110	76
Life expectancy at birth – male (years)	50.4	46.1	48.0	49.2
Life expectancy at birth – female (years)	52.5	47.6	52.0	53.4

(b) Inclusiveness of stakeholders in the report writing process

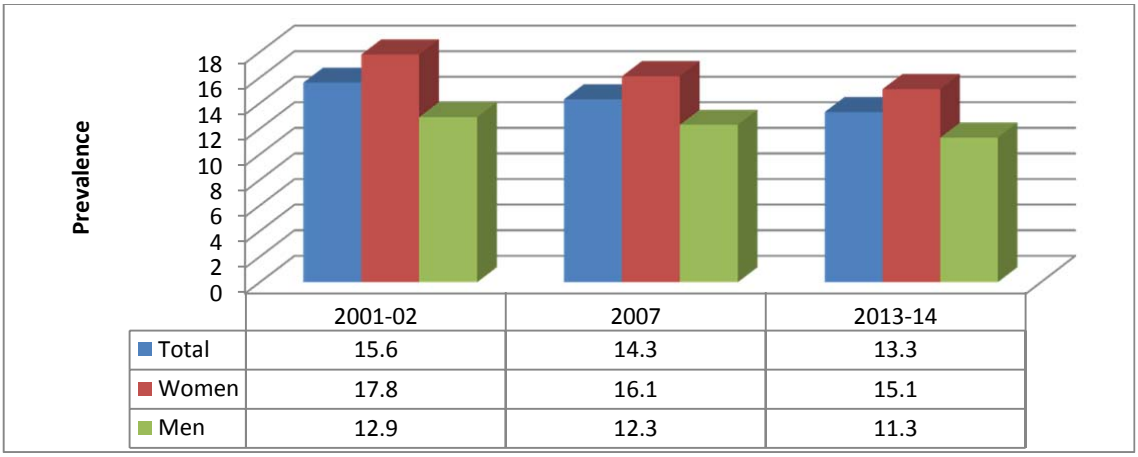
All stakeholders involved in the Response were consulted in the preparation of this report. These stakeholders included Civil Society Organisations, Government, and Cooperating Partners. A validation meeting was held to present the final draft report to these stakeholders.

(c) Summary of status of the epidemic and programmatic response in Zambia

The first case of AIDS was diagnosed in 1984. Zambia now has a generalized epidemic, with HIV spreading throughout the population as opposed to being concentrated in specific populations. Adult HIV prevalence peaked in the 1990s, and was estimated at 13.3% in the Zambia Demographic and Health Study (ZDHS) 2013-14 with prevalence in women higher than in men (15.1% compared to 11.3%). Trends indicate a continuous drop in HIV prevalence.

[1] UNDP and the Government of the Republic of Zambia, 2014. *"Zambia Human Development Report 2014"*. Lusaka.

Figure 1: HIV Prevalence among adults age 15-49, DHS 2002-02, 2007, and 2013-14



	2001-02	2007	2013-14
Total	15.6	14.3	13.3
Women	17.8	16.1	15.1
Men	12.9	12.3	11.3

Current statistics from the ZDHS and HMIS include:

a) The percentage infected with HIV reduced among most groups by sex and area of residence.

b) A reduction in the percentage of young women 20-24 years infected with HIV from 11.8% in 2007 to 11.2% in 2013-14.

c) A reduction in the percentage of young men aged 20-24 years infected with HIV from 8.7% in 2007 to 7.3% in 2013-14.

d) Among children born to mothers infected with HIV, the percentage of infants contracting HIV was 5.5%. National coverage for this programme was 91.3% in 2014.

e) All pregnant women attending ANC in 2014 were tested for HIV and received their results.

f) There were 1,765 health facilities countrywide providing HIV testing and counseling services[2].

g) There were 189,090 children and 2,453,242 adults who received HIV testing and counseling services and knew their results in 2014[3].

h) There were 199,057 male circumcisions carried out in 2014.

i) There were 671,066 adults and children receiving antiretroviral treatment as at 31 December 2014. Out of these, 108,334 were initiated during 2014.

j) 85.4% of adults and children were known to be on treatment 12 months after initiation in the reporting period.

k) There were 592 health facilities providing antiretroviral treatment at the end of the reporting period, with no stock-outs reported at any of the facilities.

The following table provides an overview of indicator data.

[2] Zambia Health Facility Listing 2012
[3] Zambia HMIS

Table 2: Overview of indicator data

Target	Indicator		Estimate	Date & Source
Target 1 Reduce sexual transmission of HIV by 50% by 2015 *General population*	1.1a	Percentage of young women aged 15–24 who correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission.	41.5%	DHS 2013-14
	1.1b	Percentage of young men aged 15–24 who correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission.	46.7%	
	1.2a	Percentage of young women aged 15-24 who have had sexual intercourse before the age of 15	11.7%	DHS 2013-14
	1.2b	Percentage of young men aged 15-24 who have had sexual intercourse before the age of 15	16.2%	
	1.3a	Percentage of women aged 15–49 who have had sexual intercourse with more than one partner in the past 12 months	1.7%	DHS 2013-14
	1.3b	Percentage of men aged 15–49 who have had sexual intercourse with more than one partner in the past 12 months	15.7%	
	1.4a	Percentage of women aged 15–49 who had more than one sexual partner in the past 12 months who report the use of a condom during their last intercourse	29.7%	DHS 2013-14
	1.4b	Percentage of men aged 15–49 who had more than one sexual partner in the past 12 months who report the use of a condom during their last intercourse	29.0%	
	1.5a	Percentage of women aged 15-49 who received an HIV test in the past 12 months and know their results	46.2%	DHS 2013-14
	1.5b	Percentage of men aged 15-49 who received an HIV test in the past 12 months and know their results	37.1%	
	1.6	Percentage of young people aged 15-24 who are living with HIV	6.6%	DHS 2013-14
Sex workers	1.7	Percentage of sex workers reached with HIV prevention programmes	ND	Population survey
	1.8	Percentage of sex workers reporting the use of a condom with their most recent client	ND	Population survey
	1.9	Percentage of sex workers who have received an HIV test in the past 12 months and know their results	ND	Population survey
	1.10	Percentage of sex workers who are living with HIV	ND	Population survey
Men who have sex with men	1.11	Percentage of men who have sex with men reached with HIV prevention programmes	ND	Population survey
	1.12	Percentage of men reporting the use of a condom the last time they had anal sex with a male	ND	Population survey
	1.13	Percentage of men who have sex with men that have received an HIV test in the past 12 months and know their results	ND	Population survey
	1.14	Percentage of men who have sex with men who are living with HIV	ND	Population survey

Target 2 Reduce transmission of HIV among people who inject drugs by 50% by 2015	2.1	Number of syringes distributed per person who injects drugs per year by needle and syringe programmes	ND	Population survey
	2.2	Percentage of people who inject drugs who report the use of a condom at last sexual intercourse	ND	Population survey
	2.3	Percentage of people who inject drugs who reported using sterile injecting equipment the last time they injected	ND	Population survey
	2.4	Percentage of people who inject drugs that have received an HIV test in the past 12 months and know their results	ND	Population survey
	2.5	Percentage of people who inject drugs who are living with HIV	ND	Population survey
Target 3 Eliminate new HIV infections among children by 2015 and substantially reduce AIDS-related maternal deaths	3.1	Percentage of HIV-positive pregnant women who receive antiretrovirals to reduce the risk of mother- to-child transmission	91.3%	ANC/PMTCT & ART Register 2014
	3.1a	Percentage of women living with HIV receiving antiretroviral medicines for themselves or their infants during breastfeeding	99.5%	ART Register
	3.2	Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth	37.1%	EID testing labs 2014
	3.3	Estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months	9%	Spectrum 2014
Target 4 Reach 15 million people living with HIV with life-saving antiretroviral treatment by 2015	4.1	Percentage adults and children currently receiving antiretroviral therapy among all adults and children living with HIV		ART register 2014/Spectrum
	4.2a	Percentage of adults and children with HIV known to be on treatment 12 months after initiating treatment among patients initiating antiretroviral therapy	85.4%	ART register 2014
	4.2b	Percentage of adults and children with HIV known to be on treatment 24 months after initiation of antiretroviral therapy	ND	ART register
	4.2c	Percentage of adults and children with HIV known to be on treatment 60 months after initiation of antiretroviral therapy	ND	ART register
Target 5 Reduce tuberculosis deaths in people living with HIV by 50% by 2015	5.1	Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV	ND	ART register
Target 6 Close the global AIDS resource gap by 2015 and reach annual global investment of US$22 – 24 billion in low and middle income countries	6.1	Domestic and international AIDS spending by categories and financing sources	See NASA	
Target 7 Eliminating gender inequalities	7.1	Proportion of ever-married or partnered women aged 15-49 who experienced sexual violence from a male intimate partner in the past 12 months	10.4%	DHS 2013-14

Target 8 Eliminating stigma and discrimination(*)	8.1a 8.1b	Proportion of women aged 15-49 accepting attitudes toward people with HIV/AIDS Proportion of men aged 15-49 accepting attitudes toward people with HIV/AIDS	18.7% 27.2%	DHS 2013-14
Target 9 Eliminating travel restrictions	9.1	*No reporting needed*	N/A	
Target 10 Strengthening HIV integration	10.1	Current school attendance among orphans and non- orphans aged 10–14	87.8%	MoE Annual School Census 2015
	10.2	Proportion of the poorest households who received external economic support in the last 3 months	ND	

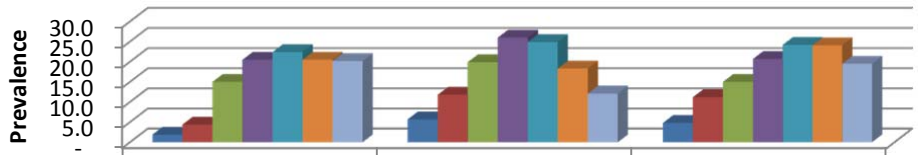
ND = No data available

(*) = Accepting attitudes on all 4 indicators: (i) willing to care for a family member with AIDS in the respondent's home; (ii) would buy fresh vegetables from shopkeeper who has the AIDS virus; (iii) say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching; and (iv) would not want to keep a secret that a family member got infected with the AIDS virus.

II. Overview of the AIDS epidemic in Zambia

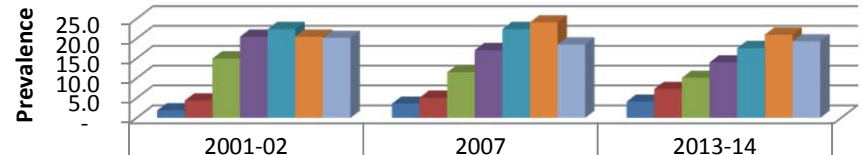
Zambia has a mature, generalized epidemic in which HIV transmission primarily occurs heterosexually. In the latest 2013-14 DHS, HIV prevalence in adults aged 15-49 years was estimated at 13.3%. Spectrum estimates of the HIV prevalence in adults aged 15-49 years suggest that the Zambian HIV epidemic has been fairly stable over the last 15 years with a very modest decline after the initial peak prevalence. The following figures illustrate the trends in prevalence of HIV among women and men aged 15-49.

Figure 2: HIV prevalence among women 15-49 by age, DHS 2001-02, 2007, and 2013-14



	2001-02	2007	2013-14
15-19	1.9	5.7	4.8
20-24	4.4	11.8	11.2
25-29	15.0	19.9	15.0
30-34	20.5	26.0	20.7
35-39	22.4	24.9	24.2
40-44	20.5	18.3	24.1
45-49	20.2	12.1	19.5

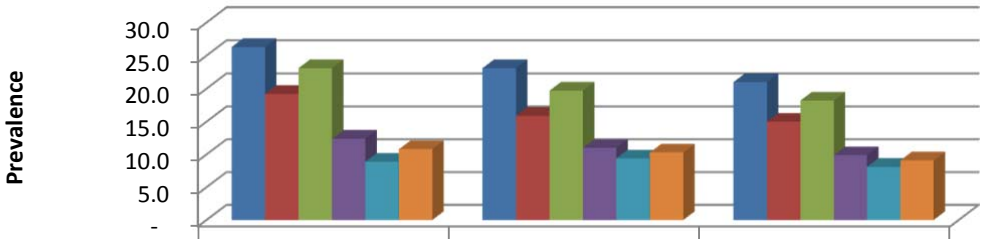
Figure 3: HIV prevalence among men 15-49 by age, DHS 2001-02, 2007, and 2013-14



	2001-02	2007	2013-14
15-19	1.9	3.6	4.1
20-24	4.4	5.1	7.3
25-29	15.0	11.5	10.1
30-34	20.5	17.1	14.0
35-39	22.4	22.4	17.6
40-44	20.5	24.1	21.0
45-49	20.2	18.5	19.3

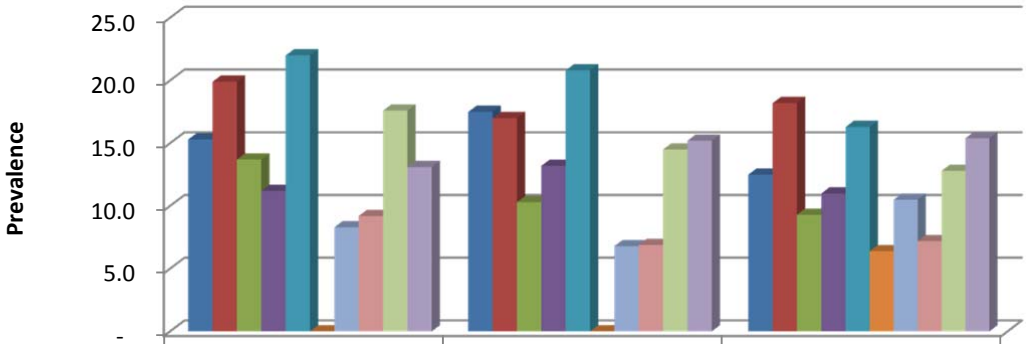
The epidemic also exhibits considerable heterogeneity by residence and geography:

Figure 4: HIV Prevalence among women & men aged 15-49 by Residence, DHS 2001-02, 2007, 2013-14



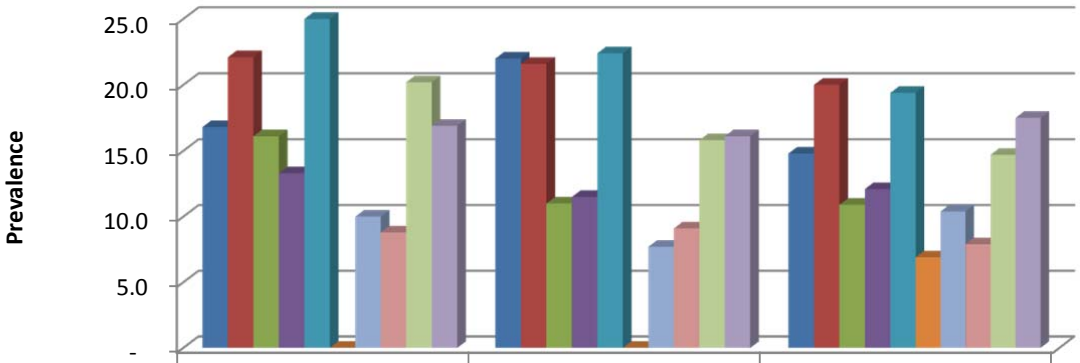
	2001-02	2007	2013-14
Urban Women	26.3	23.1	21.0
Urban Men	19.2	15.9	15.0
Urban Total	23.1	19.7	18.2
Rural Women	12.4	11.0	9.9
Rural Men	8.9	9.4	8.1
Rural Total	10.8	10.3	9.1

Figure 5: HIV Prevalence among women and men aged 15-49 by Province, DHS 2001-02, 2007, 2013-14



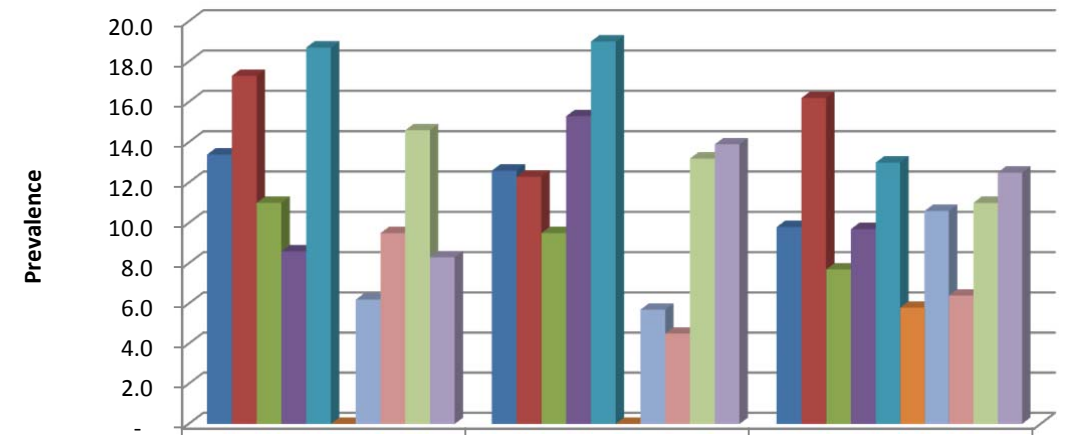
	2001-02	2007	2013-14
Central	15.3	17.5	12.5
Copperbelt	19.9	17.0	18.2
Eastern	13.7	10.3	9.3
Luapula	11.2	13.2	11.0
Lusaka	22.0	20.8	16.3
Muchinga	-	-	6.4
Northern	8.3	6.8	10.5
North Western	9.2	6.9	7.2
Southern	17.6	14.5	12.8
Western	13.1	15.2	15.4

Figure 6: HIV Prevalence by Province for women aged 15-49, DHS 2001-02, 2007, 2013-14



	2001-02	2007	2013-14
Central	16.8	22.0	14.8
Copperbelt	22.1	21.6	20.0
Eastern	16.1	11.0	10.9
Luapula	13.3	11.5	12.1
Lusaka	25.0	22.4	19.4
Muchinga	-	-	6.9
Northern	10.0	7.7	10.4
North Western	8.8	9.1	7.9
Southern	20.2	15.8	14.7
Western	16.9	16.1	17.5

Figure 7: HIV Prevalence by Province for men aged 15-49, DHS 2001-02, 2007, 2013-14



	2001-02	2007	2013-14
Central	13.4	12.6	9.8
Copperbelt	17.3	12.3	16.2
Eastern	11.0	9.5	7.7
Luapula	8.6	15.3	9.7
Lusaka	18.7	19.0	13.0
Muchinga	-	-	5.8
Northern	6.2	5.7	10.6
North Western	9.5	4.5	6.4
Southern	14.6	13.2	11.0
Western	8.3	13.9	12.5

HIV prevalence is lowest among respondents aged 15-19, peaks in the 40-44 age group, and declines thereafter. Other findings of the DHS 2013-14 were that HIV prevalence generally increases with increasing education, especially among women. They are variances in the provinces with the urban provinces of Lusaka and Copperbelt having the highest prevalence (16.3% and 18.2% respectively) while Northwestern and the most recently created (2011) Muchinga Province have the lowest prevalence (7.2% and 6.4% respectively), and the lowest population densities.

The Revised Zambia National HIV & AIDS Strategic Framework (R-NASF) 2014-2016, launched earlier this year, lists the following as the key factors impacting HIV transmission:

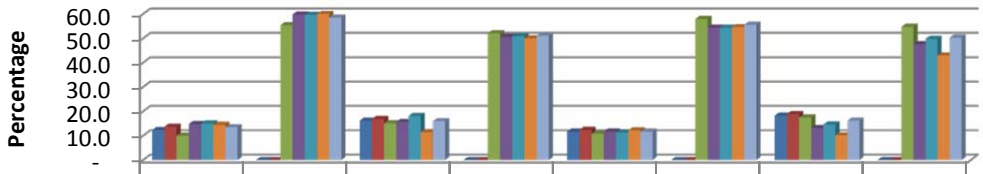
i. Early sexual debut.
ii. Multiple and concurrent partnerships (MCP).
iii. Low and inconsistent use of condoms.
iv. Low levels of male circumcision.
v. Education and HIV and AIDS knowledge.
vi. Marriage patterns and polygamy.
vii. Cultural norms.
viii. Age-disparate relationships.
ix. Transactional and commercial sex.
x. Sexual and physical violence.
xi. Alcohol use.
xii. Mobility and labour migration.
xiii. HIV prevention and care in children.
xiv. Sexually transmitted infections (STIs).

Accordingly, Zambia's overall generalised and stable epidemic has seen considerable heterogeneity by age, gender, geography, migration, education, marital status, couples and sub-populations. The following sections consider some of these factors, as reported by the ZDHS 2001-02, 2007 and 2013-14.

(a) Early sexual debut

Early sexual debut is associated with the risk of acquiring HIV infection and the increased likelihood of engaging in risky sexual practices such as inconsistent condom use and multiple sexual partners. The figure below illustrates the trends in age at first sexual intercourse among young people aged 15-24.

Figure 8: Percentage of young women and men age 15-24 who had sexual intercourse before the ages of 15 and 18, ZDHS 2007 and 2013-14



	2007				2013-14			
	Women who had sexual intercourse before age 15	Women who had sexual intercourse before age 18	Men who had sexual intercourse before age 15	Men who had sexual intercourse before age 18	Women who had sexual intercourse before age 15	Women who had sexual intercourse before age 18	Men who had sexual intercourse before age 15	Men who had sexual intercourse before age 18
15-19 years	12.3	-	16.2	-	11.7	-	18.3	-
15-17 years	13.7	-	16.9	-	12.4	-	18.9	-
18-19 years	10.0	55.4	15.1	52.1	10.8	58.0	17.5	54.8
20-24 years	14.8	59.8	15.7	50.6	11.7	54.4	13.2	47.6
20-22 years	15.0	59.7	18.1	50.9	11.4	54.4	14.6	49.8
23-24 years	14.5	60.0	11.5	50.0	12.2	54.6	10.2	43.0
Total	13.5	58.5	16.0	51.1	11.7	55.6	16.2	50.3

There was an increase in the number of men aged 15-19 who had sexual intercourse before age 15.

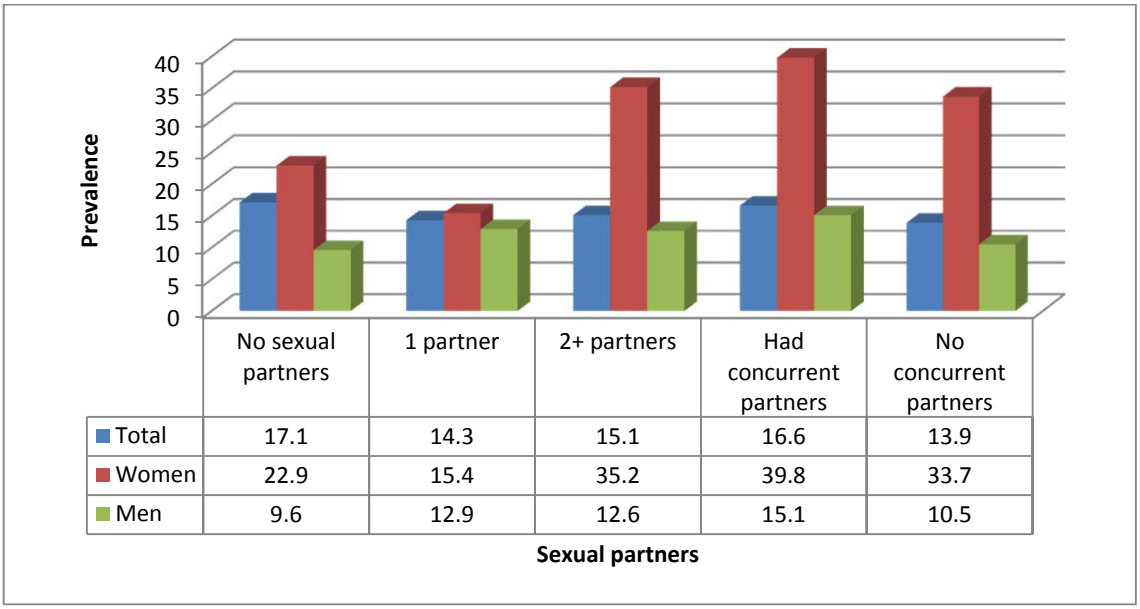
In 2013-14, the proportion with early sexual debut is lowest in the 23-24 age group for young men. Among respondents aged 15-24, a higher percentage of young men (16.2%) than young women (11.7%) have had sex before age 15. This pattern is reversed among youth who had sex before age 18. The DHS also found that rural women and men aged 15-24 (15.9% and 19.5% respectively) are more likely to have inititiated sex before age 15 than their urban counterparts (7.4% and 12.8% respectively). A further finding was that young women and men with no formal education are most likely to have had sexual debut by age 15 while those with more than a secondary education are least likely to have done so.

(b) Multiple and concurrent partnerships (MCP)

MCP is prevalent among all sexually active age groups. Findings of the DHS 2013-14 include:

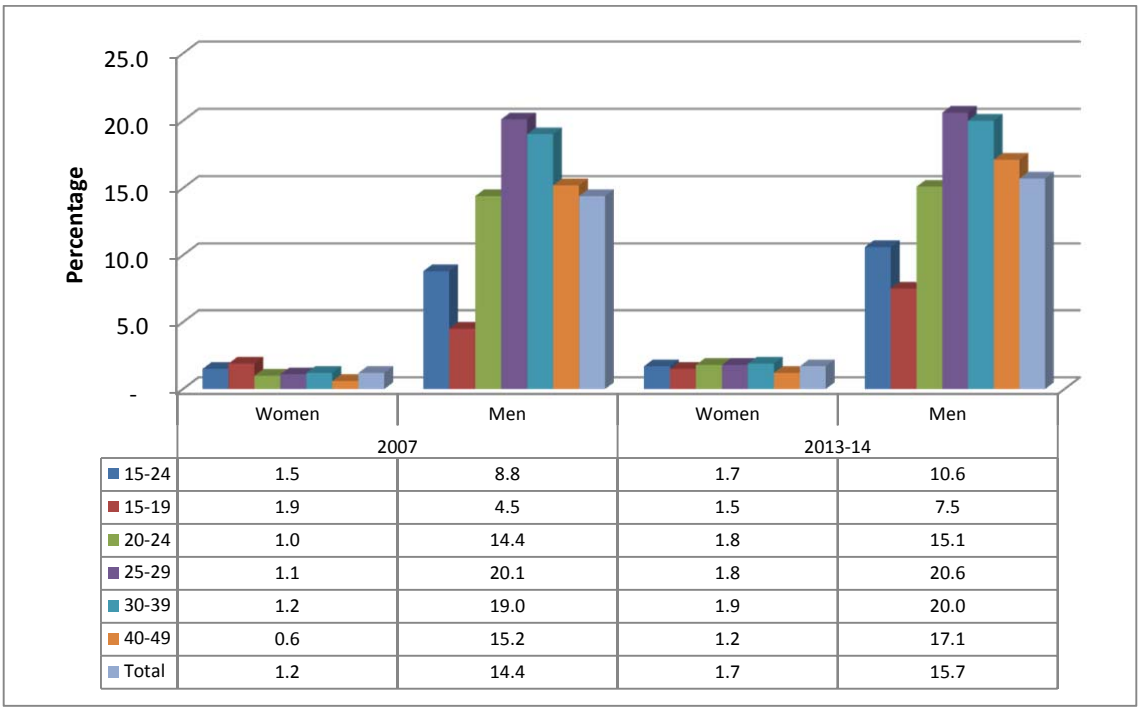
i. Among women, HIV prevalence is highest among those who had two or more sexual partners in the past 12 months and lowest among those who had one sexual partner.
ii. HIV prevalence is higher among woman who had concurrent partners than among those who did not.
iii. Among men, HIV prevalence is lower among those with no sexual partners in the past 12 months than among those with one or more partners.
iv. Among men with multiple partners, HIV prevalence is higher among those who had concurrent partners than among those who did not.

Figure 9: HIV Prevalence among women and men aged 15-49 by number of sexual partners and concurrency in past 12 months, DHS 2013-14



	No sexual partners	1 partner	2+ partners	Had concurrent partners	No concurrent partners
Total	17.1	14.3	15.1	16.6	13.9
Women	22.9	15.4	35.2	39.8	33.7
Men	9.6	12.9	12.6	15.1	10.5

Figure 10: Percentage of women and men age 15-49 who had more than one sexual partner in the past 12 months by age, ZDHS 2007 and 2013-14

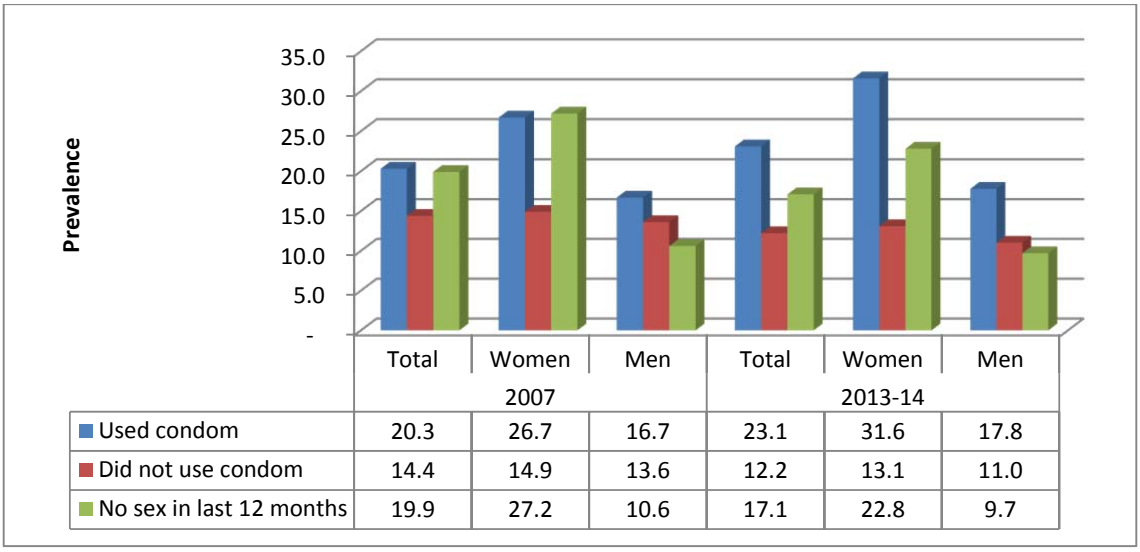


	2007		2013-14	
	Women	Men	Women	Men
15-24	1.5	8.8	1.7	10.6
15-19	1.9	4.5	1.5	7.5
20-24	1.0	14.4	1.8	15.1
25-29	1.1	20.1	1.8	20.6
30-39	1.2	19.0	1.9	20.0
40-49	0.6	15.2	1.2	17.1
Total	1.2	14.4	1.7	15.7

(c) Low and inconsistent condom use

In both DHS 2007 and 2013-14, men and women who used a condom during their most recent sexual intercourse in the past 12 months were more likely to be HIV positive than those who did not use a condom.

Figure 11: Percentage HIV +ve among women and men age 15-49 who used condom at last sexual intercourse in past 12 months, DHS 2007 and 2013-14



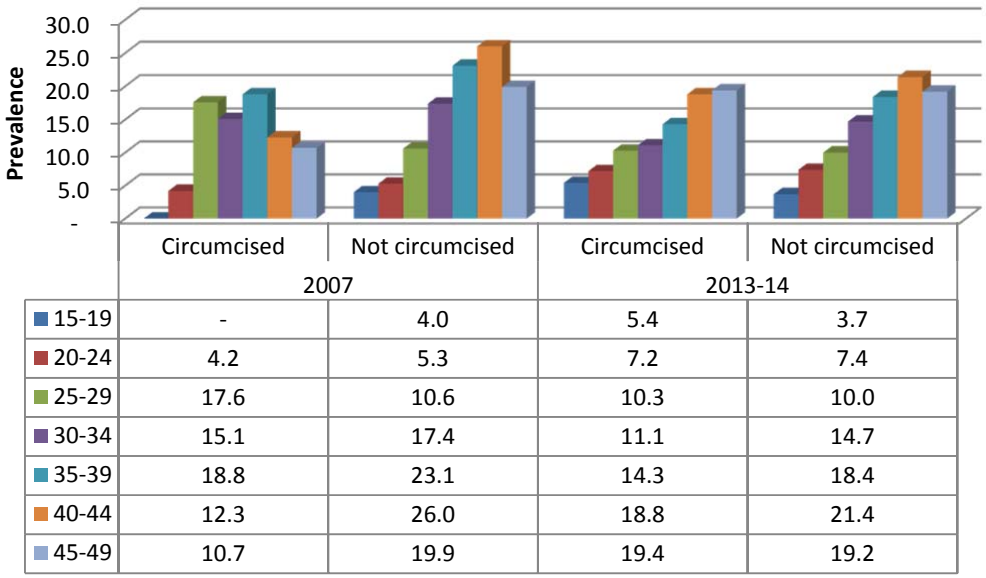
	2007			2013-14		
	Total	Women	Men	Total	Women	Men
Used condom	20.3	26.7	16.7	23.1	31.6	17.8
Did not use condom	14.4	14.9	13.6	12.2	13.1	11.0
No sex in last 12 months	19.9	27.2	10.6	17.1	22.8	9.7

(d) Male circumcision

Male circumcision offers biological protection against HIV acquisition. The NASF promotes MC for all young boys and adults aged one year and above; and for neonates.

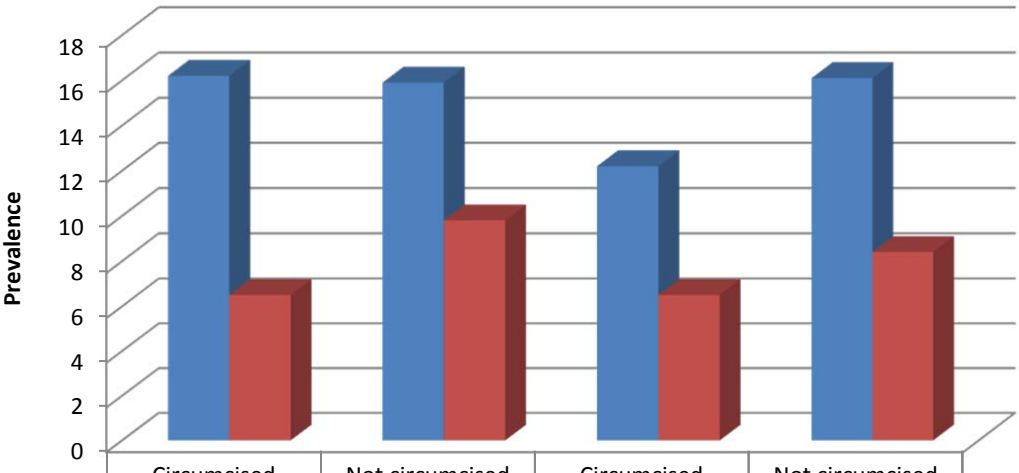
The figures below show HIV prevalence among men circumcised and uncircumcised men aged 15-49 by age, residence and province.

Figure 12: HIV Prevalence among circumcised men aged 15-49 by age, DHS 2007 and 2013-14



	2007		2013-14	
	Circumcised	Not circumcised	Circumcised	Not circumcised
15-19	-	4.0	5.4	3.7
20-24	4.2	5.3	7.2	7.4
25-29	17.6	10.6	10.3	10.0
30-34	15.1	17.4	11.1	14.7
35-39	18.8	23.1	14.3	18.4
40-44	12.3	26.0	18.8	21.4
45-49	10.7	19.9	19.4	19.2

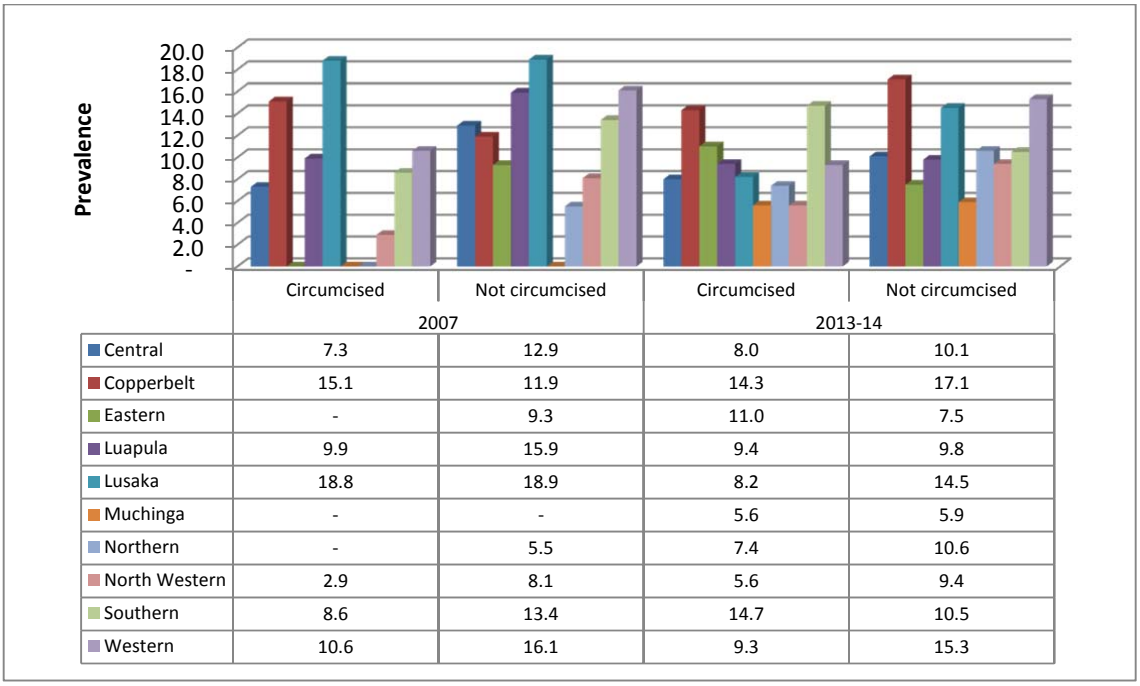
Figure 13: HIV Prevalence among circumcised and uncircumcised men aged 15-49 by residence, DHS 2007 and 2013-14



	2007		2013-14	
	Circumcised	Not circumcised	Circumcised	Not circumcised
Urban	16.2	15.9	12.2	16.1
Rural	6.5	9.8	6.5	8.4

HIV prevalence is slightly lower among men who are circumcised (10.1%) than among uncircumcised (11.7%) men. This pattern is more pronounced between urban and rural residence. The pattern is observed across most subgroups, except among men without education, and men from Southern and Eastern provinces, where circumcised men are more likely to be HIV positive than uncircumcised men.

Figure 14: HIV Prevalence among circumcised men aged 15-49 by Province, DHS 2007 and 2013-14

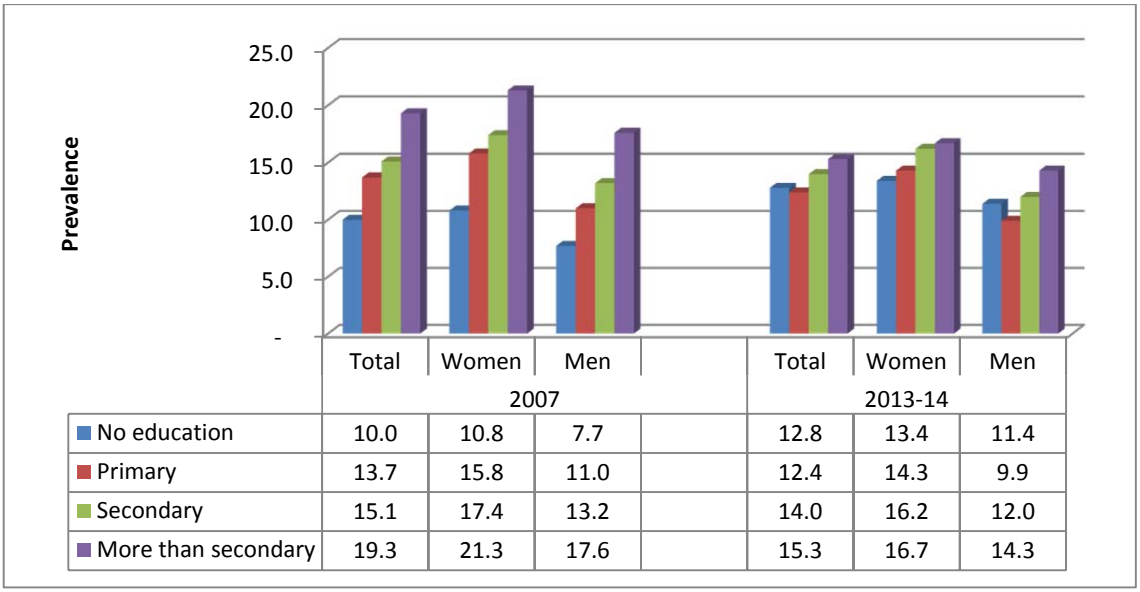


	2007		2013-14	
	Circumcised	Not circumcised	Circumcised	Not circumcised
Central	7.3	12.9	8.0	10.1
Copperbelt	15.1	11.9	14.3	17.1
Eastern	-	9.3	11.0	7.5
Luapula	9.9	15.9	9.4	9.8
Lusaka	18.8	18.9	8.2	14.5
Muchinga	-	-	5.6	5.9
Northern	-	5.5	7.4	10.6
North Western	2.9	8.1	5.6	9.4
Southern	8.6	13.4	14.7	10.5
Western	10.6	16.1	9.3	15.3

(e) Education and HIV and AIDS knowledge

HIV prevalence generally increases slightly with increasing education, especially among women.

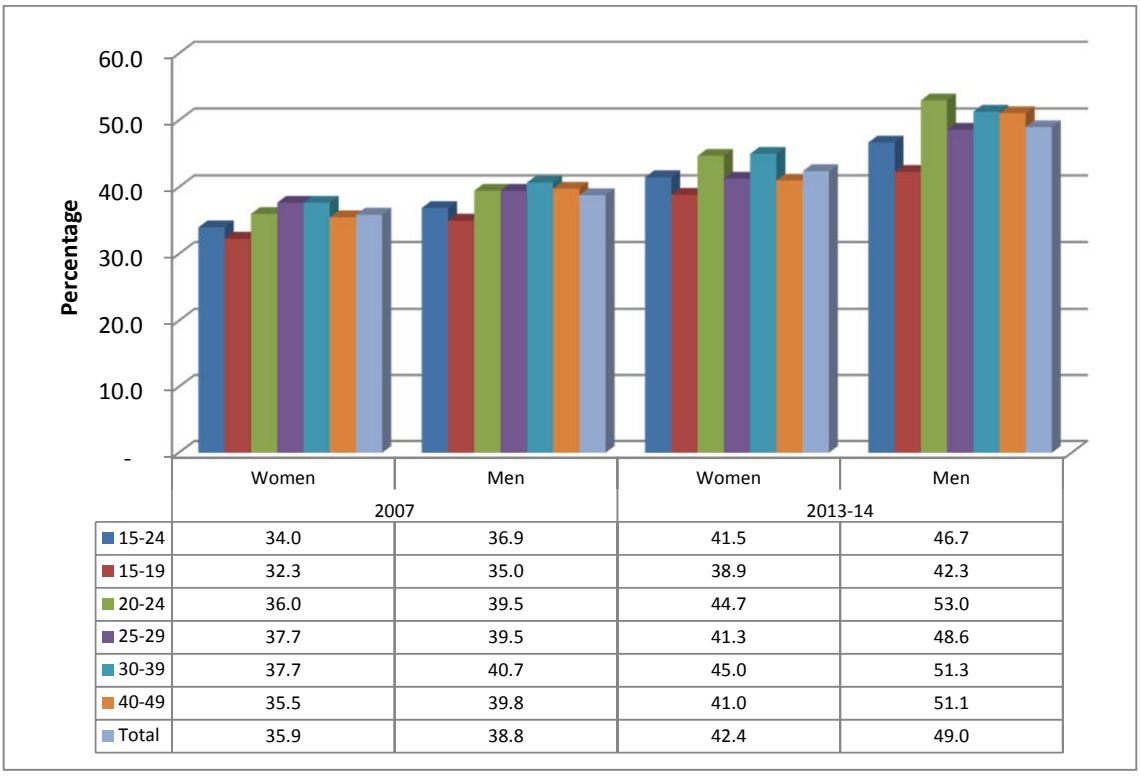
Figure 15: HIV Prevalence among women and men aged 15-49 by education status, DHS 2007 and 2013-14



	2007				2013-14		
	Total	Women	Men		Total	Women	Men
No education	10.0	10.8	7.7		12.8	13.4	11.4
Primary	13.7	15.8	11.0		12.4	14.3	9.9
Secondary	15.1	17.4	13.2		14.0	16.2	12.0
More than secondary	19.3	21.3	17.6		15.3	16.7	14.3

Comprehensive knowledge about HIV and AIDS is higher for men (48.9%) than for women (42.4%).

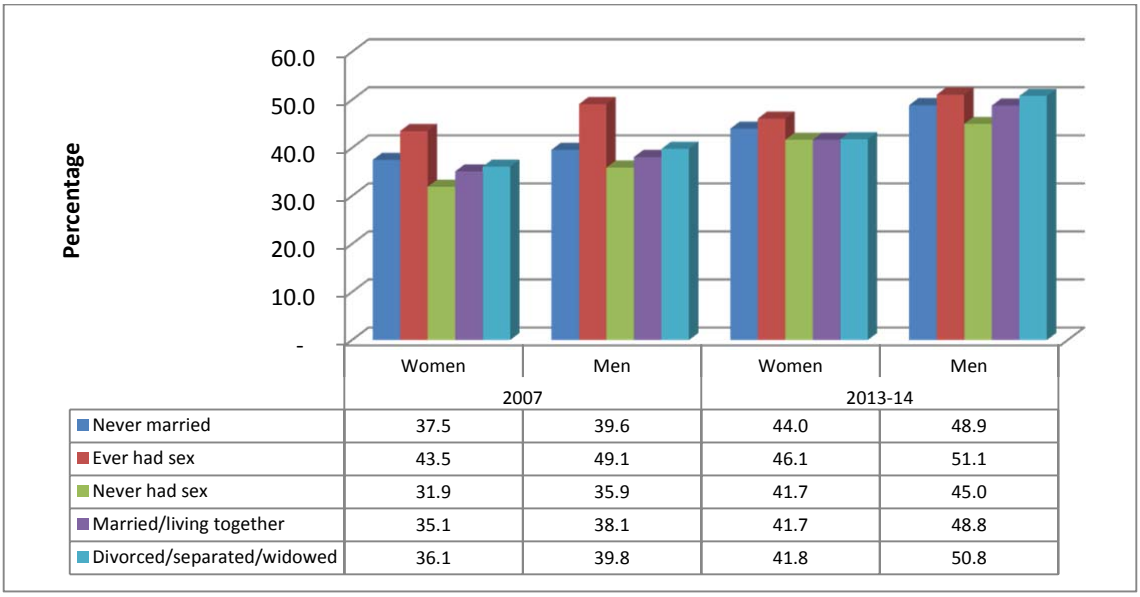
Figure 16: Percentage of women and men 15-49 with comprehensive knowledge about AIDS by age, DHS 2007 and 2013-14



	2007		2013-14	
	Women	Men	Women	Men
15-24	34.0	36.9	41.5	46.7
15-19	32.3	35.0	38.9	42.3
20-24	36.0	39.5	44.7	53.0
25-29	37.7	39.5	41.3	48.6
30-39	37.7	40.7	45.0	51.3
40-49	35.5	39.8	41.0	51.1
Total	35.9	38.8	42.4	49.0

Women aged 15-19, those who have never had sex, who are currently married, or who are divorced, separated or widowed are less likely to have comprehensive knowledge of HIV and AIDS than their male counterparts.

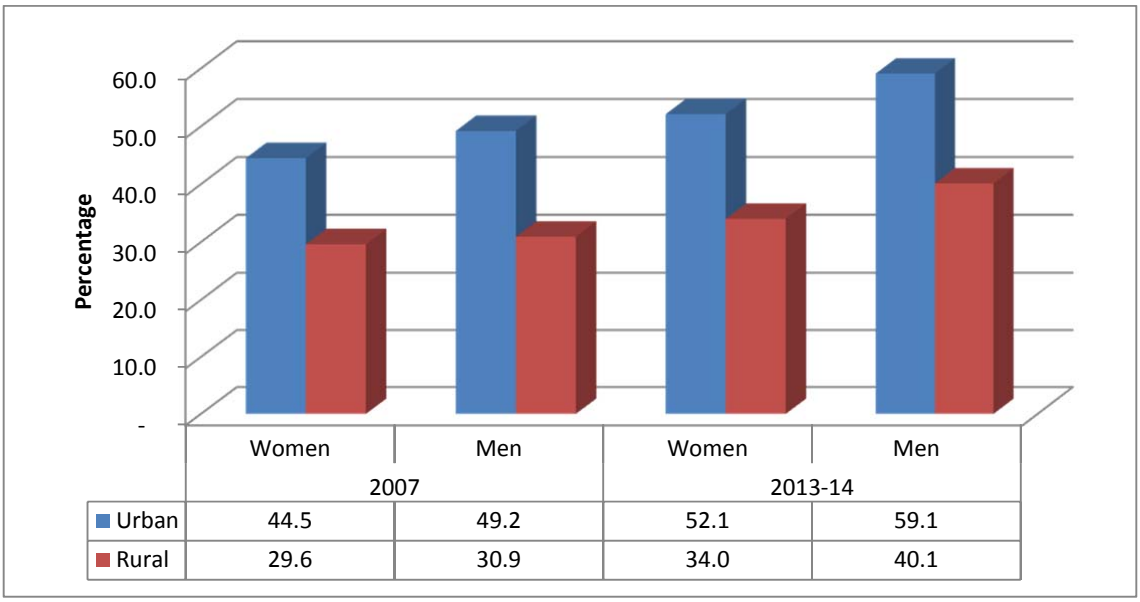
Figure 17: Percentage of women and men 15-49 with comprehensive knowledge about AIDS by marital status, DHS 2007 and 2013-14



	2007		2013-14	
	Women	Men	Women	Men
Never married	37.5	39.6	44.0	48.9
Ever had sex	43.5	49.1	46.1	51.1
Never had sex	31.9	35.9	41.7	45.0
Married/living together	35.1	38.1	41.7	48.8
Divorced/separated/widowed	36.1	39.8	41.8	50.8

Men and women living in rural areas are least likely to have comprehensive knowledge of HIV and AIDS.

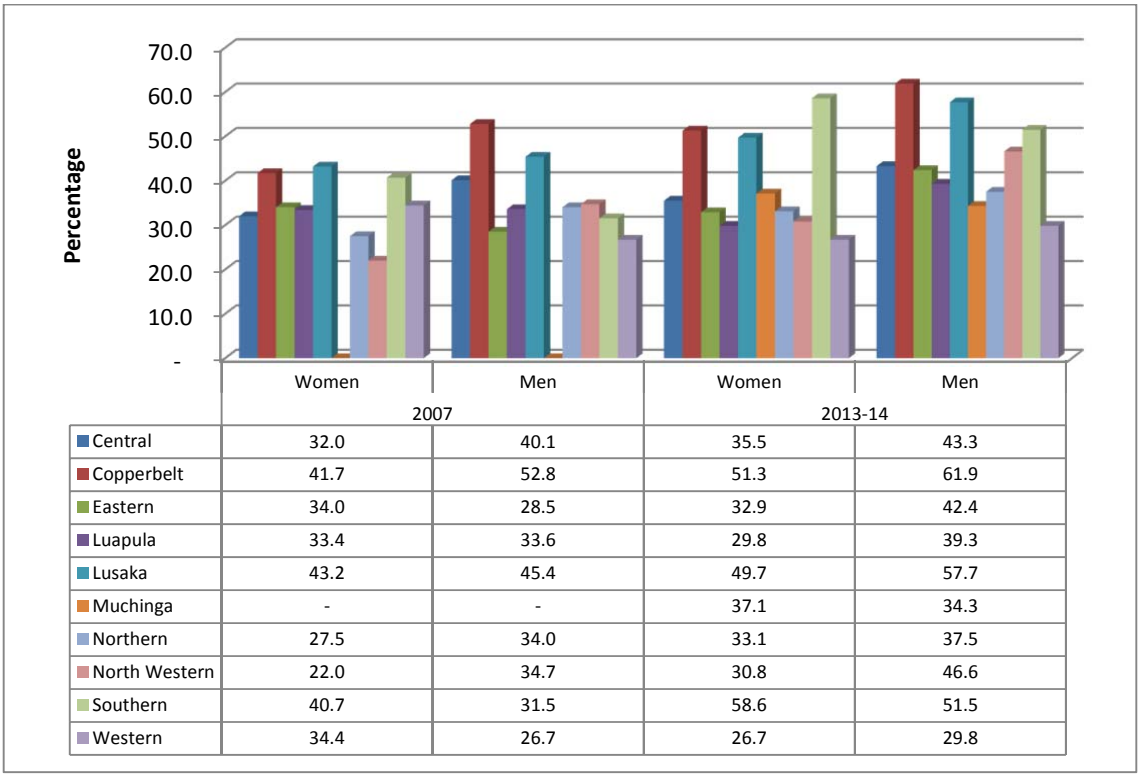
Figure 18: Percentage of women and men 15-49 with comprehensive knowledge about AIDS by residence, DHS 2007 and 2013-14



	2007		2013-14	
	Women	Men	Women	Men
Urban	44.5	49.2	52.1	59.1
Rural	29.6	30.9	34.0	40.1

By province, comprehensive knowledge is highest among women in Southern Province and men in Copperbelt Province; it is lowest for both women and men in western Province.

Figure 19: Percentage of women and men 15-49 with comprehensive knowledge about AIDS by province, DHS 2007 and 2013-14

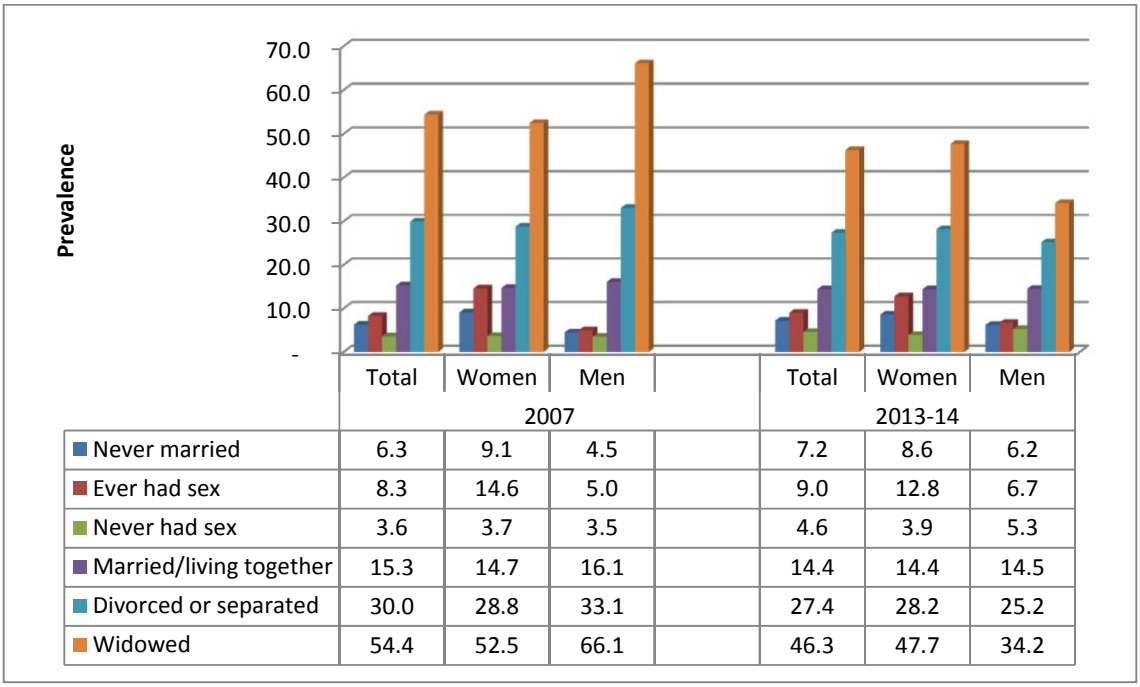


	2007		2013-14	
	Women	Men	Women	Men
Central	32.0	40.1	35.5	43.3
Copperbelt	41.7	52.8	51.3	61.9
Eastern	34.0	28.5	32.9	42.4
Luapula	33.4	33.6	29.8	39.3
Lusaka	43.2	45.4	49.7	57.7
Muchinga	-	-	37.1	34.3
Northern	27.5	34.0	33.1	37.5
North Western	22.0	34.7	30.8	46.6
Southern	40.7	31.5	58.6	51.5
Western	34.4	26.7	26.7	29.8

(f) Marriage patterns and polygamy

HIV prevalence in Zambia also shows heterogeneity by marital status and type of union. Widowed and divorced respondents are more likely to be HIV positive (46.3% and 27.4% respectively). Women not currently in a union (16.1%) and men not in non-polygynous unions (14.7%) are more likely than those in unions to be HIV positive.

Figure 20: HIV Prevalence among women and men aged 15-49 by marital status, DHS 2007 and 2013-14

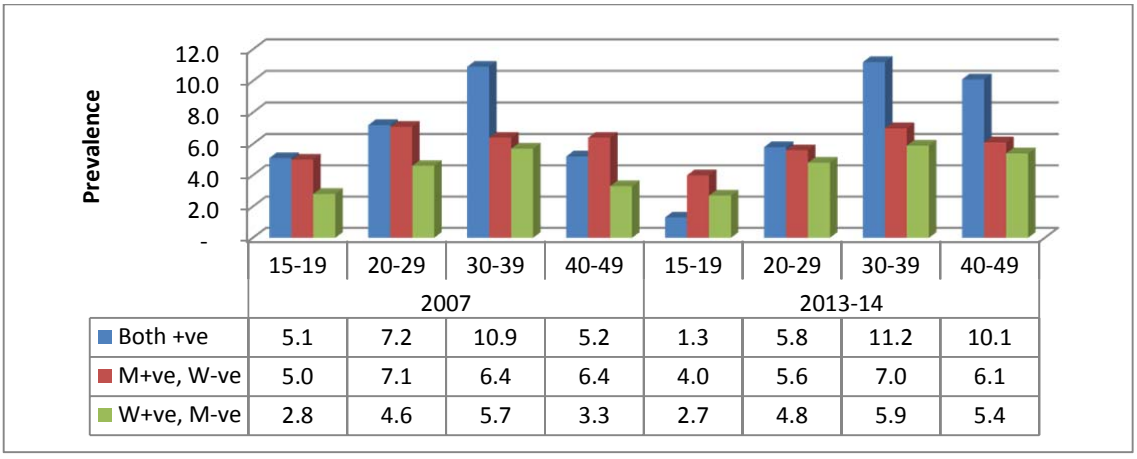


	2007				2013-14		
	Total	Women	Men		Total	Women	Men
Never married	6.3	9.1	4.5		7.2	8.6	6.2
Ever had sex	8.3	14.6	5.0		9.0	12.8	6.7
Never had sex	3.6	3.7	3.5		4.6	3.9	5.3
Married/living together	15.3	14.7	16.1		14.4	14.4	14.5
Divorced or separated	30.0	28.8	33.1		27.4	28.2	25.2
Widowed	54.4	52.5	66.1		46.3	47.7	34.2

(g) Co-habiting and Age-disparate relationships

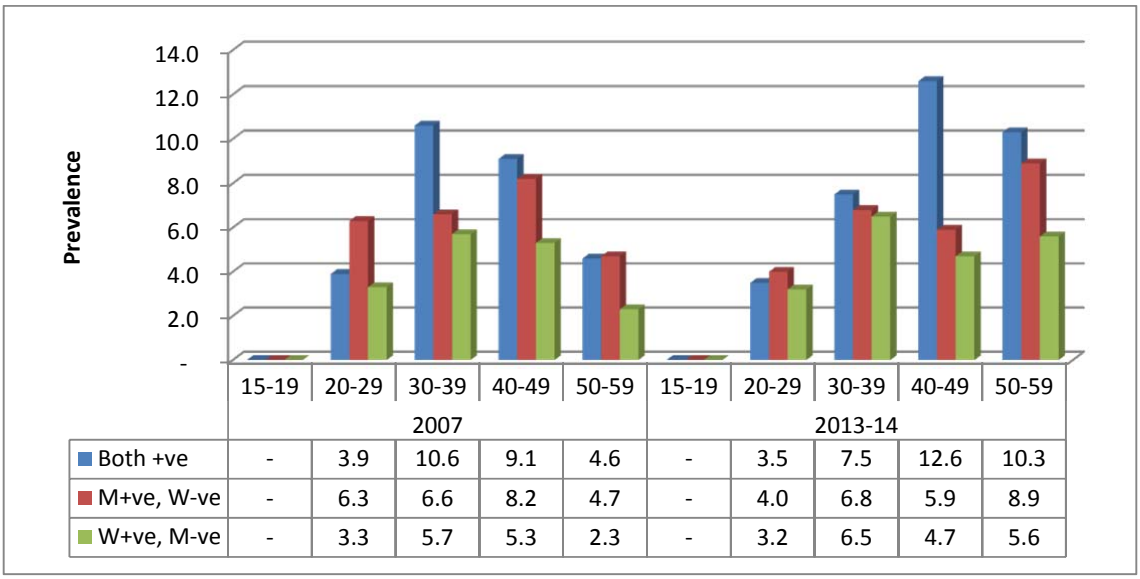
Among cohabiting couples who tested for HIV, both partners tested negative for HIV in a high proportion of couples (80.5%). Both partners were HIV positive in 8.2%, highest in the 30-39 age group for women and 40-49 age group for men, while the rest (11.3%) were discordant. The male partner was positive and the female was negative in 54% of the discordant cases.

Figure 21: HIV prevalence among couples living in the same household by woman's age, DHS 2007 and 2013-14



	2007				2013-14			
	15-19	20-29	30-39	40-49	15-19	20-29	30-39	40-49
Both +ve	5.1	7.2	10.9	5.2	1.3	5.8	11.2	10.1
M+ve, W-ve	5.0	7.1	6.4	6.4	4.0	5.6	7.0	6.1
W+ve, M-ve	2.8	4.6	5.7	3.3	2.7	4.8	5.9	5.4

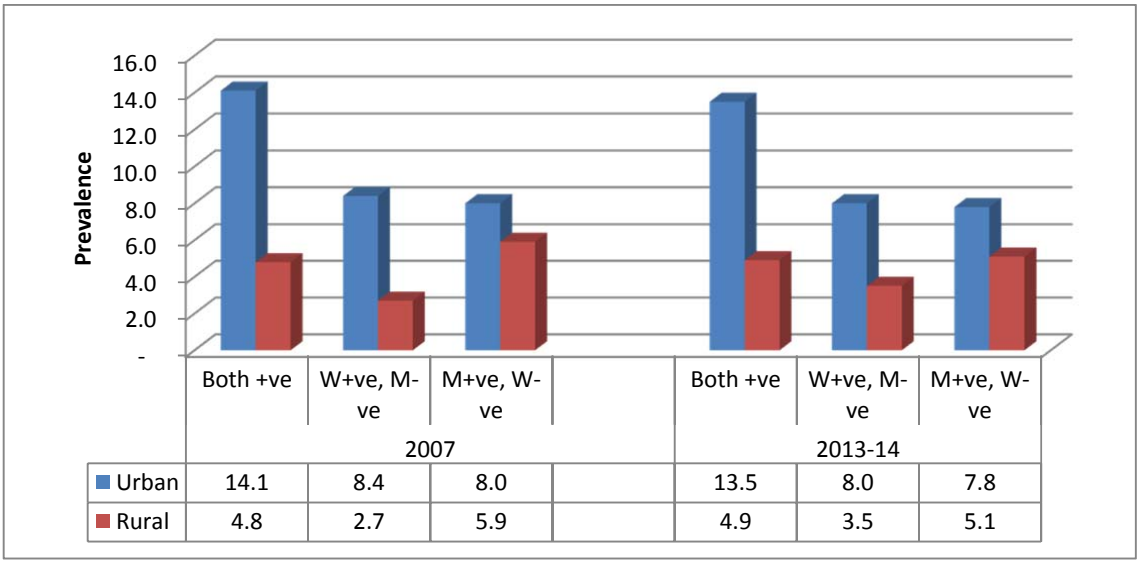
Figure 22: HIV prevalence among couples living in the same household by man's age, DHS 2007 and 2013-14



	2007					2013-14				
	15-19	20-29	30-39	40-49	50-59	15-19	20-29	30-39	40-49	50-59
Both +ve	-	3.9	10.6	9.1	4.6	-	3.5	7.5	12.6	10.3
M+ve, W-ve	-	6.3	6.6	8.2	4.7	-	4.0	6.8	5.9	8.9
W+ve, M-ve	-	3.3	5.7	5.3	2.3	-	3.2	6.5	4.7	5.6

Couples in urban residences are most likely to be both HIV positive or discordant than their rural counterparts.

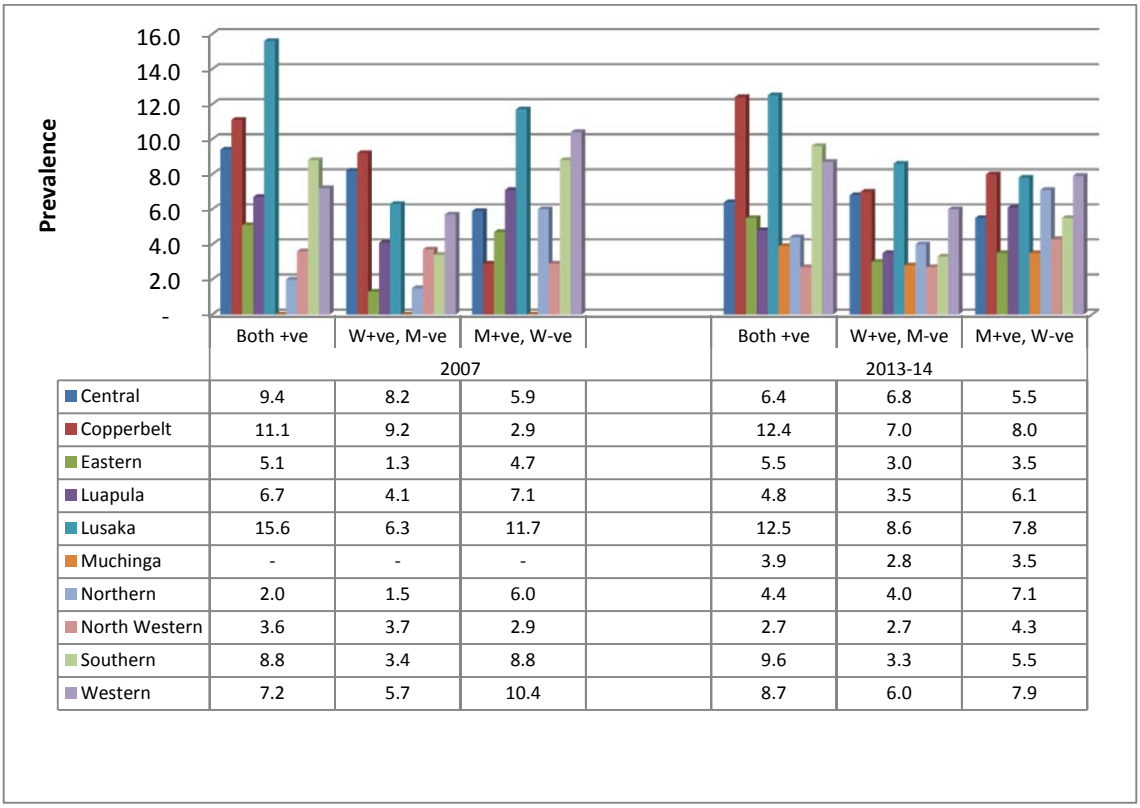
Figure 23: HIV prevalence among couples living in the same household by residence, DHS 2007 and 2013-14



	2007				2013-14		
	Both +ve	W+ve, M-ve	M+ve, W-ve		Both +ve	W+ve, M-ve	M+ve, W-ve
Urban	14.1	8.4	8.0		13.5	8.0	7.8
Rural	4.8	2.7	5.9		4.9	3.5	5.1

Copperbelt and Lusaka provinces have the highest prevalence rates for couples who were both HIV positive and discordant, while Muchinga and Northwestern provinces have the lowest.

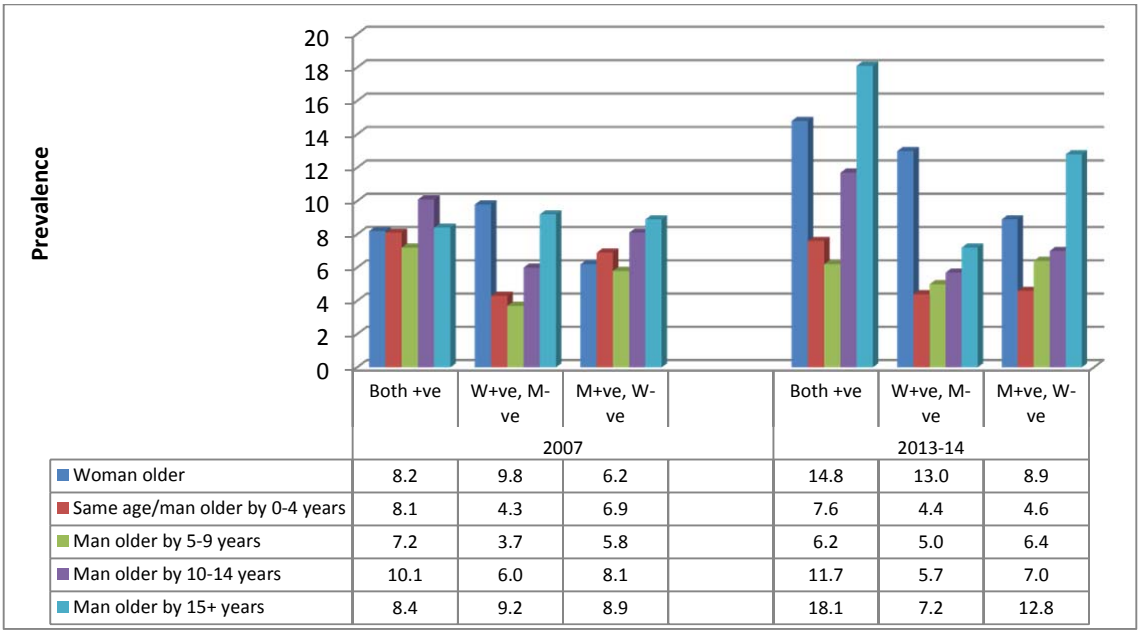
Figure 24: HIV prevalence among couples living in the same household by Province, DHS 2007 and 2013-14



	2007				2013-14		
	Both +ve	W+ve, M-ve	M+ve, W-ve		Both +ve	W+ve, M-ve	M+ve, W-ve
Central	9.4	8.2	5.9		6.4	6.8	5.5
Copperbelt	11.1	9.2	2.9		12.4	7.0	8.0
Eastern	5.1	1.3	4.7		5.5	3.0	3.5
Luapula	6.7	4.1	7.1		4.8	3.5	6.1
Lusaka	15.6	6.3	11.7		12.5	8.6	7.8
Muchinga	-	-	-		3.9	2.8	3.5
Northern	2.0	1.5	6.0		4.4	4.0	7.1
North Western	3.6	3.7	2.9		2.7	2.7	4.3
Southern	8.8	3.4	8.8		9.6	3.3	5.5
Western	7.2	5.7	10.4		8.7	6.0	7.9

The rate of discordance is highest among couples where the woman is older than the man, and the where the man is older than the female partner by more than 15 years. The same holds true for couples where both partners are HIV positive.

Figure 25: HIV prevalence among couples living in the same household by age difference between partners, DHS 2007 and 2013-14

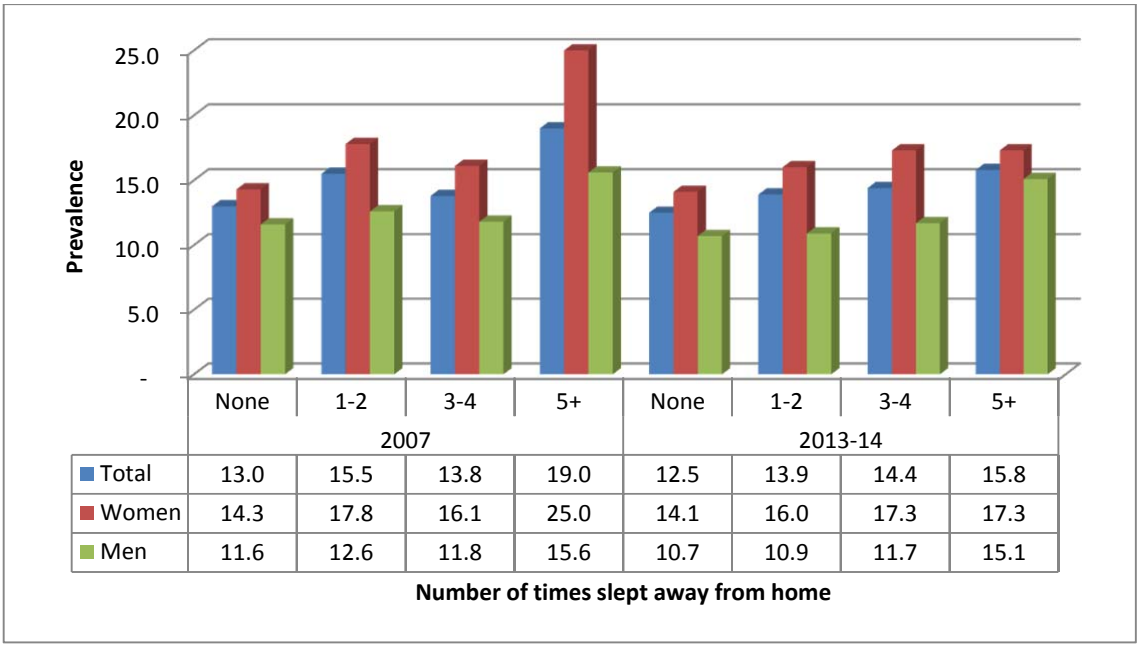


	2007				2013-14		
	Both +ve	W+ve, M-ve	M+ve, W-ve		Both +ve	W+ve, M-ve	M+ve, W-ve
Woman older	8.2	9.8	6.2		14.8	13.0	8.9
Same age/man older by 0-4 years	8.1	4.3	6.9		7.6	4.4	4.6
Man older by 5-9 years	7.2	3.7	5.8		6.2	5.0	6.4
Man older by 10-14 years	10.1	6.0	8.1		11.7	5.7	7.0
Man older by 15+ years	8.4	9.2	8.9		18.1	7.2	12.8

(h) Mobility and labour migration

A possible proxy for the prevalence rates due to mobility and labour migration can be provided by the number of times slept away from home and time away from in the past 12 months.

Figure 26: HIV Prevalence among women and men aged 15-49 by number of times spent the night away from home, DHS 2007 and 2013-14

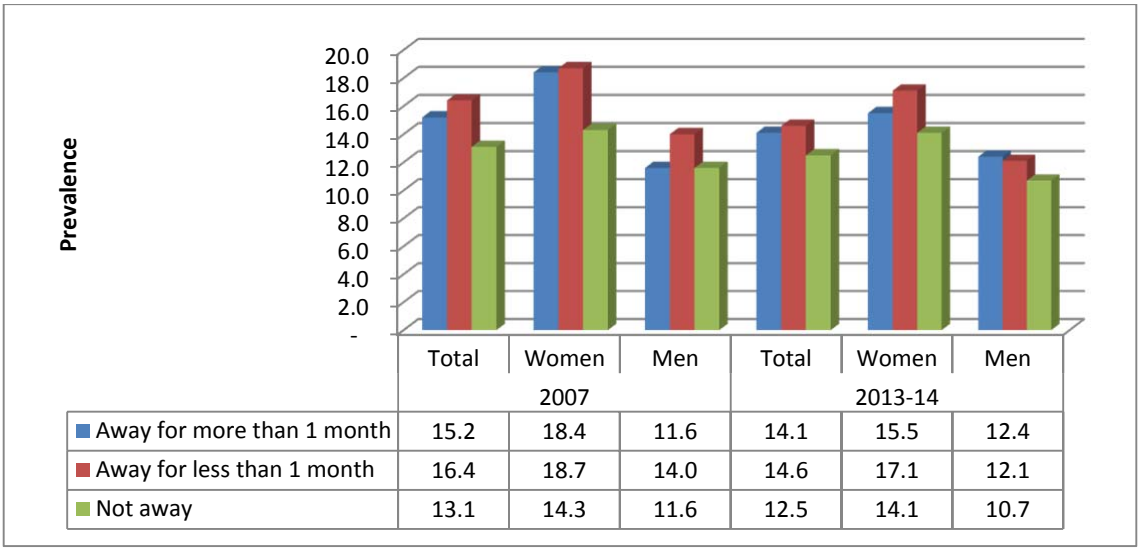


	None	1-2	3-4	5+	None	1-2	3-4	5+
	2007				2013-14			
Total	13.0	15.5	13.8	19.0	12.5	13.9	14.4	15.8
Women	14.3	17.8	16.1	25.0	14.1	16.0	17.3	17.3
Men	11.6	12.6	11.8	15.6	10.7	10.9	11.7	15.1

The prevalence rate increases as the number of times slept away from home increases for both women and men (higher for women than men).

Both women and men who were away but for less than one month are more likely to be HIV positive (higher for women than for men).

Figure 27: Percentage HIV positive among women aged 15-49 by time spent away from home in the past 12 months, DHS 2007 and 2013-14



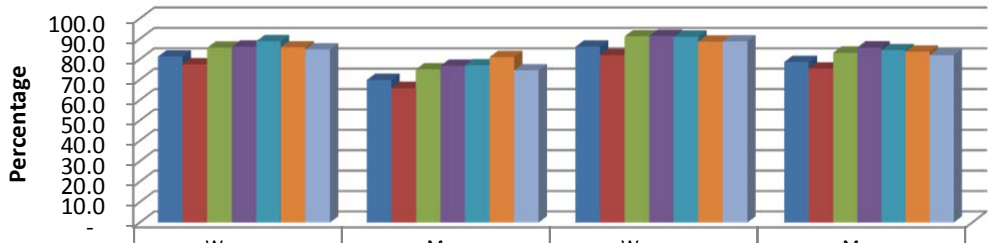
	Total	Women	Men	Total	Women	Men
	2007			2013-14		
Away for more than 1 month	15.2	18.4	11.6	14.1	15.5	12.4
Away for less than 1 month	16.4	18.7	14.0	14.6	17.1	12.1
Not away	13.1	14.3	11.6	12.5	14.1	10.7

(i) HIV prevention and care in children

Vertical transmission of the HIV virus from mother to child at birth or during breastfeeding accounts for 90% of HIV infection in children. Increasing the level of knowledge about HIV transmission from mother to child and reducing the risk of transmission by using antiretrovirals before delivery are critical in reducing mother to child transmission (MTCT).

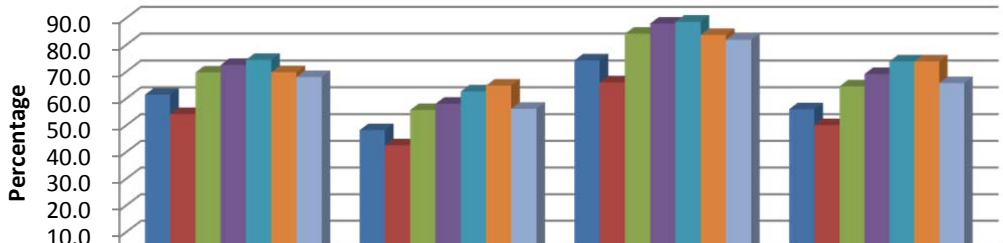
Among respondents aged 15-49, women (88.8%) are more aware than men (82.1%) that HIV can be transmitted through breastfeeding, and that the risk of MTCT can be reduced by taking special drugs during pregnancy (82.0% and 65.8% respectively).

Figure 28: Percentage of women and men age 15-49 who know that HIV can be transmitted by breastfeeding, DHS 2007 and 2013-14



	2007		2013-14	
	Women	Men	Women	Men
15-24	81.4	69.9	86.2	78.7
15-19	77.6	65.9	82.0	75.5
20-24	85.7	75.1	91.3	83.2
25-29	86.2	76.8	91.5	85.8
30-39	88.9	77.1	91.1	84.5
40-49	85.9	81.1	88.7	83.8
Total	84.9	74.6	88.8	82.1

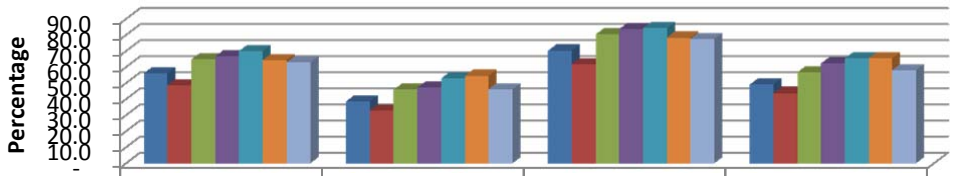
Figure 29: Percentage of women and men age 15-49 who know that the risk of MTCT can be reduced by the mother taking special drugs during pregnancy, DHS 2007 and 2013-14



	2007		2013-14	
	Women	Men	Women	Men
15-24	61.5	48.3	74.3	56.1
15-19	54.3	42.6	66.1	50.2
20-24	69.8	55.8	84.2	64.6
25-29	72.6	58.1	88.0	69.2
30-39	74.5	62.7	88.7	73.9
40-49	69.9	64.9	83.8	73.9
Total	68.1	56.3	82.0	65.8

These proportions drop when the number of respondents who know about both the risk of transmission during breastfeeding and the reduction of risk by taking special drugs during pregnancy. MTCT knowledge is lowest among the youngest respondents (15-19 years), those who have never been married, and those who have never had sex. It is also lowest for women and men living in rural areas and by those with least education.

Figure 30: Percentage of women and men age 15-49 who know that HIV can be transmitted during breastfeeding and the risk of MTCT can be reduced by the mother taking special drugs during pregnancy, DHS 2007 and 2013-14

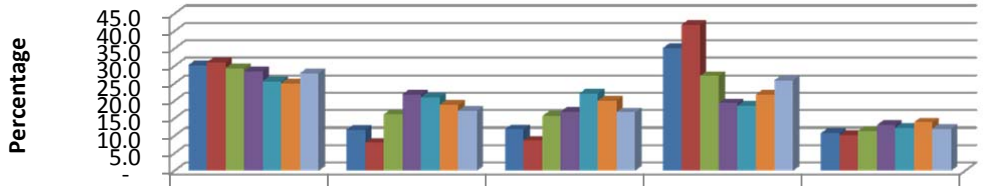


	2007		2013-14	
	Women	Men	Women	Men
15-24	56.2	38.6	70.3	49.2
15-19	48.8	33.1	62.0	43.9
20-24	64.8	45.9	80.4	56.8
25-29	66.7	47.2	83.8	62.4
30-39	70.0	53.0	84.3	65.4
40-49	64.5	54.6	78.4	65.6
Total	62.9	46.3	77.7	58.2

(j) Perceived risk of HIV infection

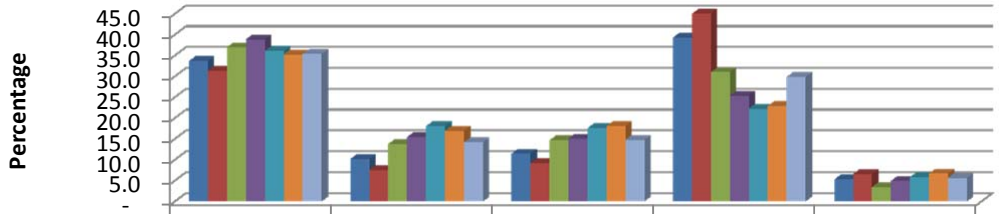
Individuals' knowledge of HIV transmission set against an accurate assessment of their own risk seems to be among the key factors in the adoption of safer sexual practices. The DHS 2013-14 collected information on perceived risk of HIV infection among women and men aged 15-49.

Figure 31: Percentage distribution of women aged 15-49 by perceived risk of HIV infection by age, DHS 2013-14



	Low	Medium	High	No risk	Other/don't know
15-24 years	30.3	11.8	11.9	35.2	10.8
15-19 years	31.1	8.1	8.7	41.9	10.2
20-24 years	29.4	16.2	15.7	27.2	11.4
25-29 years	28.5	21.9	17.0	19.4	13.1
30-39 years	25.7	21.1	22.2	18.6	12.3
40-49 years	25.1	18.9	20.1	21.9	13.9
Total	28.0	17.2	16.8	26.0	12.1

Figure 32: Percentage distribution of men aged 15-49 by perceived risk of HIV infection by age, DHS 2013-14



	Low	Medium	High	No risk	Other/don't know
15-24 years	33.7	10.2	11.5	39.3	5.3
15-19 years	31.4	7.6	9.3	45.0	6.6
20-24 years	37.0	13.8	14.7	31.0	3.5
25-29 years	38.9	15.5	15.1	25.4	5.0
30-39 years	36.1	18.1	17.6	22.3	5.9
40-49 years	35.3	17.0	18.1	22.9	6.7
Total	35.4	14.2	14.8	29.9	5.7

A higher percentage of men than women perceived themselves to be at no risk (29.9% as against 26.0% respectively). By contrast, a higher percentage of women (16.8%) than men (14.8%) considered themselves to be at high risk for HIV infection. Other findings included:

i. Women (22%) and men (18%) aged 30-49 perceive themselves as being at high risk of HIV infection.

ii. Women (22%) and men (25%) who are divorced, separated or widowed perceive themselves as being at high risk of HIV infection.

iii. The percentage of women who perceive themselves to be at high risk of HIV infection is highest in Western province and lowest in Copperbelt province.

iv. The percentage of men who perceive themselves to be at high risk of HIV infection is highest in western province and lowest in Southern and Central provinces.

v. Women with more than secondary education are most likely to perceive themselves as being at high risk of HIV infection while men in the same category are least likely to perceive that they are at high risk.

vi. More women and men in urban areas perceive themselves to be at low risk of HIV infection than their rural counterparts.

III. National response to the AIDS epidemic

The national response to HIV and AIDS in Zambia adopts a multi-sectoral approach and is guided by the Revised National HIV and AIDS Strategic Framework (R-NASF) 2014 - 2016.This framework is aligned to various local and international frameworks, including the Revised Sixth National Development Plan (R-SNDP) 2014-2016. At the time of it's preparation, no new evidence was available, and the framework continued to rely on findings from the Zambia Demographic Health Survey (ZDHS) 2007 and the Modes of Transmission (MOT) Study 2009. However, latest programme data from the Health Management Information System (HMIS), Spectrum modelling software and findings of the Joint Mid-Term Review (JMTR) of the NASF 2011-2015 conducted in 2013 were taken into account wherever possible to update the epidemiological analysis and inform programming. Consequently, the factors impacting the transmission of HIV remained the same as those identified in the NASF 2011-2015.

The ZDHS 2013-14 was released earlier this year, and findings from this survey will be taken into account in order to revise implementation of the R-NASF. It is planned to undertake a MOT study later this year to further strengthen latest evidence.

The R-NASF prioritised the implementation of six high impact interventions, focusing on reaching key populations as part of its strategy to reduce new infections and improve life expectancy of PLHIV. The list of key populations was expanded in a deliberate attempt to ensure that populations with historical and disproportionate lack of service access are identified and considered for programming. These high impact interventions are:

i. Treatment.
ii. HIV Testing and Counselling (HTC).
iii. Elimination of Mother to Child Transmission (eMTCT).
iv. Voluntary Medical Male Circumcision (VMMC).
v. Condom Programming.
vi. Social and Behaviour Change.

Critical enablers (which are essential for the effective and efficient implementation of basic programme activities and whose sole or primary objective is an HIV-specific outcome) are included in the R-NASF. These are:

i. Gender Equality and Empowerment.
ii. Laws, Legal Policies and Practices.
iii. Leadership Commitment and Good Governance.
iv. Resource Mobilisation and Sustainable Financing.
v. Coordination and Management Structures – Decentralised Response.
vi. Community Systems Strengthening.

Finally, development synergies (which represent linkages between HIV and some of the most important development sectors) are taken into account. These are:

i. Post-Exposure Prophylaxis (PEP).
ii. Blood Safety.
iii. Education Sector.
iv. Social Protection.
v. Poverty Alleviation and Livelihoods.
vi. Mainstreaming HIV into Capital Projects.

The R-NASF objectives and targets are listed below:

Objectives

i. Reduce new HIV infections by 50%.
ii. Reduce AIDS related mortality by 50%.
iii. Reduce HIV related stigma and discrimination by 50%.
iv. Increase domestic financing of the HIV response to 20%.

Impact Targets

i. Avert between 170,000 and 360,000 new HIV infections by 2030.
ii. Avert between 60,000 and 123,000 AIDS-related deaths by 2030.

Outcome Targets

i. Reduce the rate of annual new infections from 53,000 in 2012 to 38,662 in 2016.
ii. Reduce the percentage of infants born HIV-positive to less than 5% by 2016.
iii. Increase the percentage of PLHIV alive 36 months after initiating antiretroviral therapy from 81% in 2013 to 95% by 2016.

(a) Treatment

Significant progress has been made in increasing and improving access to and the use of HIV treatment services.

In February 2014, Zambia started implementing the 2013 Zambia Consolidated Guidelines for Treatment and Prevention, which are based on the 2013 World Health Organization (WHO) treatment guidelines and will increase many patients' eligibility for treatment, and expand the use of antiretroviral drugs for HIV treatment and prevention. In these new guidelines, the eligibility for life-long ART access includes:

i. HIV-positive individuals with a CD4 less than 500;
ii. HIV-positive pregnant women regardless of CD4 count (Option B+);
iii. HIV-positive partners in sero-discordant couples;
iv. Patients with active Tuberculosis (TB) disease;
v. Patients with Hepatitis B Virus (HBV) co-infection with severe liver disease; and
vi. All confirmed HIV infected children and adolescents <15 years regardless of CD4 count.

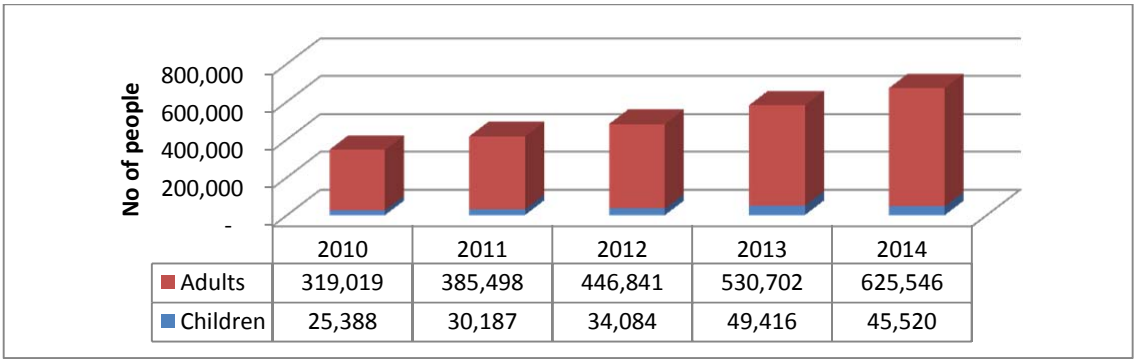
The new guidelines also introduced a new, preferred, simplified first-line cART regimen (TDF + XTC + and EFZ) and accelerated the phasing out of stavudine (d4T) and zidovudine (AZT) in first-line cART for all populations.

Other initiatives prompted by the new guidelines included:

- ✓ Use of viral load testing as the preferred approach to monitoring cART and diagnosing treatment failure, in addition to immunological and clinical monitoring.
- ✓ Adoptions of community-based HIV testing and counseling to diagnose early people infected with HIV and link them to care and treatment.
- ✓ Use of lifelong ART treatment as prevention for all pregnant and breastfeeding women to prevent MTCT and also reduce transmission of HIV to uninfected sexual partners.

The ART programme continues to show impressive performance. In 2014, a total of 671,066 adults and children (267,092 male and 403,974 female) were receiving antiretroviral. Of these, 108,334 were newly initiated during the year. 625,546 were adults 15 years old and above, which exceeded the target of 569,567.

Figure 33: Number of children and adults receiving ART 2010 - 2014



	2010	2011	2012	2013	2014
Adults	319,019	385,498	446,841	530,702	625,546
Children	25,388	30,187	34,084	49,416	45,520

This high uptake is partly attributable to the implementation of the new guidelines; it has also been possible due to regular supply of ARVs and OIs drugs in the country through the support of the GRZ, the Global Fund, USG and other partners.

In spite of the number of children receiving ART (45,520) exceeding the target of 42,115, the number has dropped from 49,416 in 2013.

There were improvements in abiding to ART treatment guidelines, and also ensuring systematic enrolment of all HIV/TB co-infected patients on ART, reported at 73% in 2014 from 66% achieved in 2013. The program also reported an increased percentage of TB patients who tested for HIV from 91% in 2013 to 93% in 2014.

Access to treatment within and between provinces varies considerably. Sub-national distribution is shown in the table below:

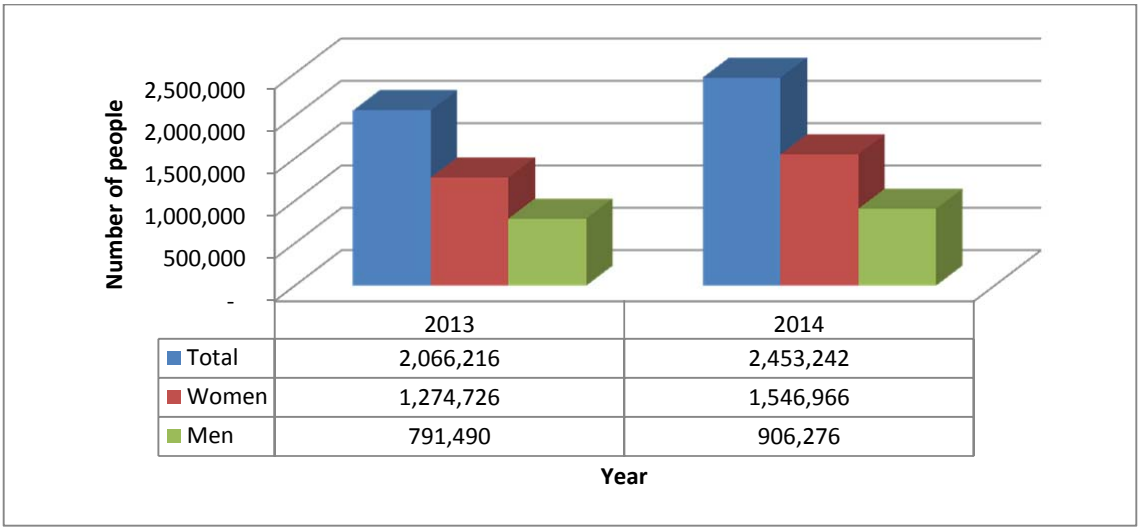
Table 3: Number of adults and children on ART as at 31 December 2014 by province

Province	On ART All	On ART <15	On ART Adults
Central	80,352	5,127	75,225
Copperbelt	141,724	9,752	131,972
Eastern	60,639	4,170	56,469
Luapula	24,830	1,562	23,268
Lusaka	175,679	11,564	164,115
Muchinga	15,990	985	15,005
Northern	25,766	1,636	24,130
Northwestern	16,238	1,248	14,990
Southern	87,618	6,587	81,031
Western	42,230	2,889	39,341

(b) HIV testing and counseling

The proportion and number of people tested and counseled for HIV and received their results increased significantly from 2,066,216 in 2013 to 2,453,242 in 2014. This figure was below the target of 2,951,793.

Figure 34: Number of women and men age 15 and older who received HIV Testing and Counselling in the past 12 months and know their results, GARPR 2014 and 2015



These results could be attributed largely to an adequate supply of test kits which enabled health care workers to perform tests to as many people as possible opting-in to know their HIV status. Throughout the reporting period, the country had un-interrupted supply of HIV test kits. By the end of December 2014, stock-levels at

MSL were well above one month's stock for both UNIGOLD HIV 1/2 rapid test and DETERMINE HIV 1/2 rapid test, at 10 months and 4.2 months of stock respectively.

The MoH and MCDMCH, in collaboration with partners, have continued to strengthen universal HTC through mass campaigns, and integration of HTC services with VMMC, PMTCT, TB, Cancer and MCH (family planning) services, including the training of health care workers in HTC. Outreach mobile VCT services were also expanded targeting hard-to-reach areas and school youth.

(c) Elimination of mother to child transmission (eMTCT)

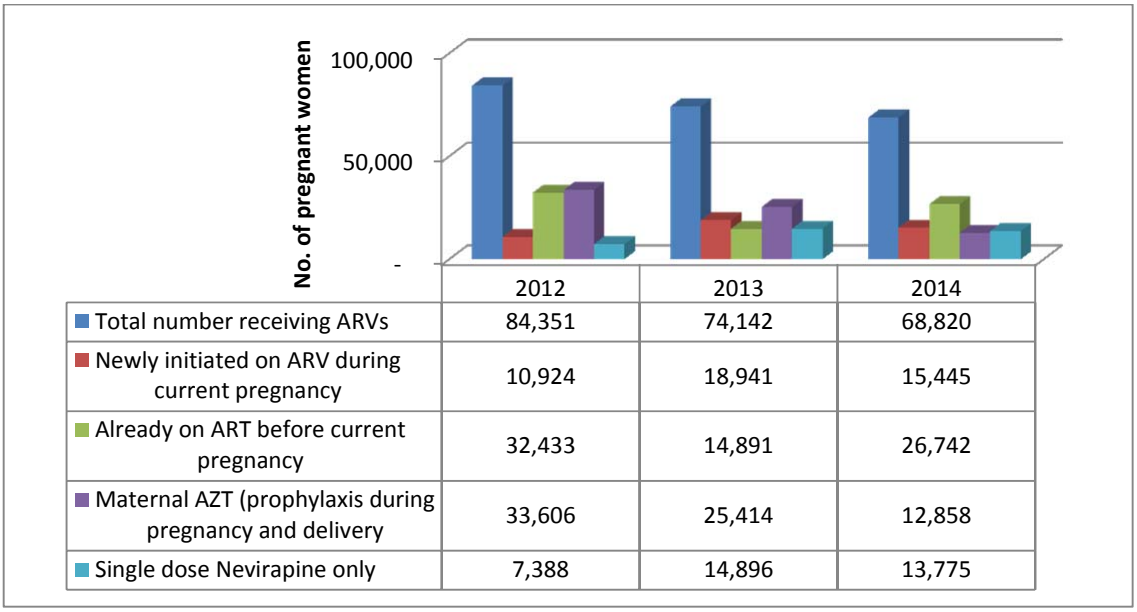
The four-pronged approach to achieving eMTCT has been adopted in Zambia. These four prongs are listed below:

i. Preventing HIV in women of reproductive age.
ii. Preventing unintended pregnancy in women with HIV.
iii. Preventing HIV transmission from mother to child.
iv. Providing on-going care and support to mothers, their children and their families.

The eMTCT programme has been introduced into clinic-based services throughout the country. To increase eMTCT coverage, the intervention has been successfully integrated into mother and child health programming, HIV treatment centres, HTC, STI clinics and other reproductive health service centres. The eMTCT package offers comprehensive services, including health education, HTC, prophylaxis to prevent vertical transmission, partner testing, screening and treatment of STIs and cervical cancer and family planning. This approach explicitly links with the country's 8-year Family Planning Scale-up Plan, and has strong political support. Integration with other services has significantly increased women's access to PMTCT and improved the life opportunities for both mothers and their babies.

The chart below shows the trend in pregnant women receiving ARVs to reduce the risk of MTCT over the last three years.

Figure 35: Number of HIV +ve pregnant women who received ARVs in the last 12 months to reduce the risk of MTCT



	2012	2013	2014
Total number receiving ARVs	84,351	74,142	68,820
Newly initiated on ARV during current pregnancy	10,924	18,941	15,445
Already on ART before current pregnancy	32,433	14,891	26,742
Maternal AZT (prophylaxis during pregnancy and delivery	33,606	25,414	12,858
Single dose Nevirapine only	7,388	14,896	13,775

The percentage of HIV-positive pregnant women receiving ARVs was 93.72%, 96.65% and 91.26% in 2012, 2013 and 2014 respectively.

During 2014, the MCDMCH and MoH intensified the rollout of Option B+ across the country, and endorsed implementation of ART task-shifting, which provides for nurses to be certified as prescribers to provide ART.

The GRZ, in collaboration with development partners, supported the training of health care workers and community health workers in Option B+ to support rollout at facility levels.

The table below shows selected indicators for the PMTCT programme over the three years.

Table 4: Selected PMTCT indicators

Indicator	2012	2013	2014
%age of HIV +ve pregnant women who received anti-retroviral medicine to reduce the risk of MTCT	93.72	96.65	91.26
%age of infants born to HIV +ve women receiving a virological test for HIV within 2 months of birth	73.50	71.58	37.11
Estimated percentage of child HIV infections from HIV +ve women delivering in the past 12 months	11.36	14.90	9.00
%age of pregnant women who were tested for HIV and received their results - during pregnancy, during labour and delivery, and during the post-partum period (<72 hours), including those with previously known status	93.93	100.00	100.00
%age of pregnant women attending ANC whose male partner was tested for HIV in the last 12 months	36.41	38.90	42.80
%age of HIV-infected pregnant women assessed for ART eligibility through either clinical staging or CD4 testing	80.20	77.34	58.93
%age of infants born to HIV-infected women who received antiretroviral prophylaxis to reduce the risk if early MTCT in the first 6 weeks	51.95	52.10	36.20
%age of infants born to HIV-infected women started on CTX prophylaxis within 2 months of birth	50.28	51.00	39.50

Once again, implementation at sub-national level shows considerable variance between provinces. The table below illustrates this.

Table 5: Distribution of number of pregnant women who received ARVs to reduce the risk of MTCT by province, 2014

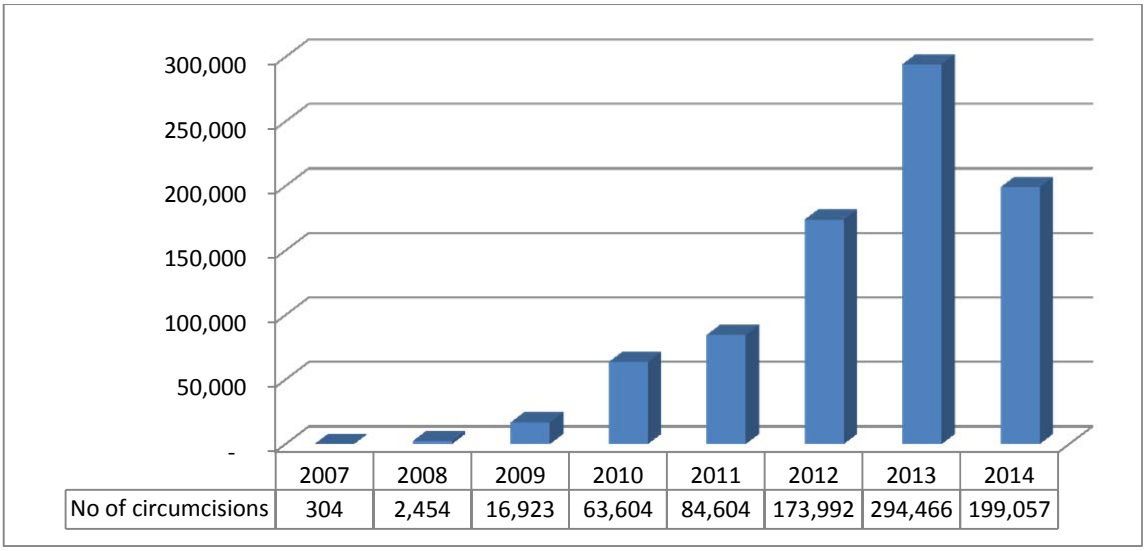
Province	Percentage	Total receiving ARVs	Newly initiated on ARVs	Already on ART	Maternal AZT prophylaxis	Single dose nevirapine only	Estimated no. of HIV+ve pregnant women
Central	93.8	7,937	1,204	2,338	2,075	2,320	8,459
Copperbelt	158.6	15,194	3,547	5,812	3,144	2,691	9,579
Eastern	41.3	4,095	1,009	1,805	614	667	9,916
Luapula	173.9	19,057	3,870	8,497	3,205	3,485	10,956
Lusaka	63.2	4,112	1,131	1,420	712	849	6,507
Muchinga	29.3	1,237	421	487	145	184	4,223
Northern	35.7	2,467	818	1,027	286	336	6,915
Northwestern	45.4	2,170	586	662	464	458	4,785
Southern	77.9	6,605	1,555	2,685	914	1,451	8,474
Western	106.2	5,946	1,304	2,009	1,299	1,334	5,597

As can be noted, percentage coverage between provinces varies from as low as 35.7% in Muchinga province to 173.9% in Luapula province. Two reasons have been advanced for this: inaccurate estimates of the total number of HIV-positive pregnant women in each province (denominator), and high mobility and migration between provinces including an influx of pregnant women from neighbouring countries in some border provinces.

(d) Voluntary Medical Male Circumcision (VMMC)

VMMC has been scaling up rapidly over the past eight years with 2013 having recorded the highest number of male circumcisions.

Figure 36: Number of male circumcisions performed in the last 12 month according national standards, 2007 - 2014, MCDMCH



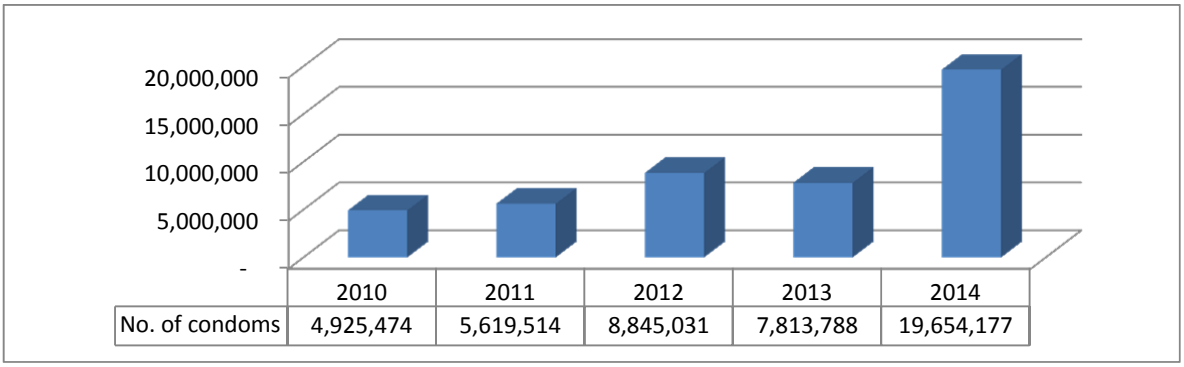
	2007	2008	2009	2010	2011	2012	2013	2014
No of circumcisions	304	2,454	16,923	63,604	84,604	173,992	294,466	199,057

The targets were not achieved in 2014 largely because USG funding for this programme scaled down. However, the GRZ is engaging development partners to ensure that more resources are available to implement the MC operational plan. VMMC is currently provided in 472 static health facilities.

(e) Condom programming

The provision of condoms in health facilities has been intensified by the GRZ, with support from development partners. The chart below illustrates the trend in condoms distributed in health facilities.

Figure 37: Condoms distributed in health facilities



	2010	2011	2012	2013	2014
No. of condoms	4,925,474	5,619,514	8,845,031	7,813,788	19,654,177

Nationwide campaigns to promote the use of condoms have been carried out during 2014.

IV. Best Practices

Decentralisation of the HIV Response

In 2014, the NAC progressively invested in the devolution of response coordination and management from the district administration to Local Authorities. HIV and AIDS is one of the functions to be devolved to Local Authorities in accordance with the Decentralization Implementation Plan (DIP). The NAC submitted revised TORs for the District AIDS Coordination Advisors (DACAs) as part of the sector devolution plan to the Decentralization Secretariat. To this effect, the Secretary to the Cabinet issued a Cabinet Circular No. 10 of 2014 directing NAC structures at district level to migrate to local authorities effective 1st January, 2015. This was important for the country because it demonstrates Government's resolve to take responsibility for the HIV response. Further, this initiative will strengthen strategic planning focusing on high impact interventions, identifying and taking full advantage of local critical enablers, and creating synergies with other development sectors to maximize domestic planning, resourcing and management of the local response.

Sustainable Financing of the HIV Response

In view of dwindling resources for the HIV and AIDS response at international level, the NAC continued to engage the Ministry of Health on the need to facilitate the establishment and operationalisation of the Health Fund. This was in view of HIV and AIDS being a component of the Health Fund.

Furthermore, integration of HIV and AIDS into the Environmental Impact Assessment (EIA) process provided another source of domestic financing of the local response which can be harnessed. Working with partners such as the Road Development Agency (RDA), the Zambia Environment Management Authority (ZEMA), The United Nations Development Programme (UNDP) and Government through the Ministry of Transport, Works, Supply and Communications, the contract clause on HIV has been revised to allow for the HIV and AIDS funds to be channelled through NAC structures, to ensure efficiency and effective use of the available resources. It is anticipated that the DATFs and local Community Based Organizations could easily be sustained on these funds from the road sector and other capital projects if properly harnessed and equitably distributed.

Knowledge Exchange

In order to learn how other countries were coordinating the HIV and AIDS response, an exchange visit to Brazil was undertaken from 11th to 19th October 2014 by a delegation of Zambian Government Officials and Civil Society Representatives. The delegation visited the State of Brasilia, the national capital of Brazil and interacted with both Government officials and Civil Society Organisation representatives. Some of the best practices learnt included the following:

a) The need for a strong relationship between the Government, Civil Society groups and NGOs: Despite the fact that the department responsible for HIV and AIDS in Brazil is a department within the Ministry of Health, the department appears to be highly effective in mainstreaming human rights due to the participation of other relevant institutions carrying a human rights mandate. Additionally, the department is fully resourced in terms of human resource with clearly defined mandates for each unit.

b) Forum for Dialogue: The idea of conventions for various development issues at the level of municipal council, state and national/federal level is enshrined in the democratic governance system of Brazil. This makes planning and evaluation of the development processes much easier.

c) Citizen Participation: Strong institutions require people's participation and recognition on the part of those charged with the responsibility of carrying out the institutions' mandates that citizens are partners in development. This also requires the citizenry to be informed about Human Rights and all violations that impact on the rights of the individual.

d) Strong Political Leadership and the will to fight the epidemic: Strong political leadership is central to fighting the epidemic. It is possible for institutions like the offices of the Director of Public Prosecution and the Investigator General to open their doors to Civil Society and play a more proactive role in the defence of the rights of citizens (especially the marginalized ones) to access social services. A tolerant and non-judgmental approach to HIV prevention is important. Accordingly, existence of a supportive legal system that focuses on reducing social and institutional vulnerabilities of people living with HIV is important. The legal system in Brazil helps to receive, forward and process charges, supports victims

who are prejudiced and discriminated, provides information about legislation and AIDS, and follows up the legal process up to its' conclusion.

e) Decentralization and focus of interventions: Decentralization empowers people to participate and share in sustaining services provided by institutions by making demands and providing feed-back. A strong focus on condom promotion and the provision of free treatment to all, and aggressive efforts to minimise the cost of ARVs is paramount.

f) Support to Civil Society: The enthusiasm by Civil Society to participate in fighting the epidemic should be complimented by provision of financial support to deserving CSOs. However, this requires strong CSO coordination for a country like Zambia.

Condomize! Campaign

The Condomize! campaigns were aimed at increasing access to knowledge, and information on the benefits of both male and female condoms amongst the sexually active sections of the population. The youths, both male and female, were the primary targets of the campaigns because they are the most sexually active age groups and current evidence shows that new HIV infections are on the increase in these age groups.

The campaigns were conducted in an interactive manner in which information was exchanged between the audience and the Condomize! team. Over 16,000 female and 14,000 male youths were reached with messages on risk reduction, condom use and HIV/STI/pregnancy prevention. A social media platform was set up for Condomize! Zambia Campaign which recorded over 500 hits of people accessing and exchanging information on Condom, condom use, and reproductive health related information.

Civil Society National Dialogue

Civil Society Organisations and their involvement in the national response is a very critical component of the multi-sectoral response to the epidemic. Drawing lessons from the Leadership Coalition's previous effort to create a CSO self-coordinating mechanisms, the NAC, working with UNAIDS, organized a national dialogue for civil society organizations. The dialogue had two main objectives: to provide an opportunity for civil society organizations to provide in-put into the Global Fund proposal which was being developed at the time and, secondly, to come up with self-coordinating mechanisms for each of the invited three constituencies (youths, People Living with HIV, human rights and LGBTI constituencies).

The activity brought together over 100 civil society representatives across the nation to deliberate and provide input into the Global Fund proposal, and explored ways for civil society constituents to be self-coordinated. As a result of this dialogue, representatives of CSOs successfully contributed to the Global Fund proposal writing which met the Fund's civil society consultation requirements. Further, constituencies represented came up with mechanisms for self-coordination. This has paved the way for the creation of an overall national self-coordination mechanism for HIV and AIDS responsive civil society constituents.

V. Major challenges and remedial actions

(a) Treatment

A number of challenges in treatment care and support for PLHIV and TB patients who are HIV positive continued through the reporting period while others were successfully dealt with.

Inadequate HIV testing facilities: In some health centres, diagnosis for HIV is only done on specific days of the week and therefore limits the accessibility of VCT. In addition screening of PLHIV for TB is limited by the lack of diagnostic equipment. There is also insufficient reporting on IPT. Most rural health centres depend on general hospitals for TB diagnosis. ICF for TB in PLHIV is not active in most rural areas. In addition, some rural health centres do not stock TB drugs.

Limited numbers of ART centres in rural areas: Although the number of facilities providing ART increased from 582 in 2013 to 592 in 2014, their still remains an inadequate number of such facilities in rural areas. Efforts will continue to be made by the GRZ to increase the number of facilities providing ART services countrywide.

The limited implementation of the task shifting of ART initiative: The policy now allows nurses to initiate ART. In an effort to address human resource challenges, HIV nurse practitioners have been trained to initiate patients on ART for patients with non- complicated HIV. However, the current legal framework does not allow nurses to prescribe drugs. The General Nurses are only allowed to maintain patients on ART. Community Health Workers can perform rapid HIV tests but are not licensed or allowed to re-supply patients with ARVs. *This specific issue is mainly responsible for delays in fully implementing Option B+ for PMTCT, where newly testing HIV-positive pregnant women are required to be initiated on triple combination ARVs.*

Low stock levels of ARV drugs experienced by majority of health centres in Zambia in 2013: This was successfully dealt with in 2014 with no health centres reporting stock outs of both adult and paediatric ARV drugs.

Services for Adolescents Living with HIV/AIDS (ALHIV) not meeting the needs of adolescents in most areas of the country: The 2nd ASRHR and HIV in Africa Symposium, was held at Mulungushi International Conference Centre in Lusaka, from 7th to 10th December, 2014 attracting delegates from 25 African countries numbering approximately 1,500 people. The conference was hosted by the Government of Zambia under the auspices of Society for AIDS in Africa (SAA) and Society for Women and AIDS in Africa (SWAA). Among the participants were cabinet ministers, deputy ministers, and permanent secretaries from various countries. Other high ranking officials were UN, AU and SADC regional and national representatives. The symposium was graced by the wife of the acting president of Zambia, Dr. Charlotte Scott. More importantly there were hundreds of adolescents and young people from all over Africa. The symposium, thus, drew together experts, policy makers and various stakeholders to address Adolescent Sexual Reproductive Health Rights and HIV in Africa issues comprehensively and strategically, to foster stronger responses, national and regional collaboration, high level commitment and accountability. The symposium, also, provided a platform for policy makers and programme implementers to share information on policy issues, programme implementation and demand and delivery of SRHR and AIDS services; a platform for scientific, social, and cultural new evidence and knowledge exchange in SRHR and HIV and AIDS focusing on adolescents including marginalised and vulnerable adolescents. The symposium also reviewed progress on global and regional commitments on SRHR and HIV and AIDS in order to determine progress as well as define the way forward for emerging and new issues from the evidence.

The NAC continued to implement the Zambia U-Report Platform in 2014. The Zambia U-Report platform provides confidential, free of charge, individualized and interactive counselling services on HIV and STIs to adolescents and youth. The platform enables tailored SMS demand creation for available services, and referral to the U-Reporter's closest location for HIV Testing and Counselling, Voluntary Medical Male Circumcision and Anti-Retroviral Treatment. Incoming SMS traffic is tracked and reports generated periodically on key knowledge gaps and emerging issues related to HIV and STIs among young people. By February 2014, the Zambia U-Report had grown dramatically with 41,000 U-reporters joining the programme. Out of this number, 27% were children aged 10–19 years old and 45% were aged 20–24 years old. All the 10 provinces were part of this programme with 52% in Lusaka, and 28% in the Copperbelt. Furthermore, it was reported that the number of conversations initiated on U-Report in 2014 were 51,757 while the total number of incoming messages reached 279,093 with 2,113 referrals made through platform.

Inadequate tracking system of PLHIV on treatment in certain areas: Several factors underlie the inadequate tracking of patients, including lack of transport for health facility workers to distant places, shortage of adherence supporters, change of residence by PLHIV on treatment without notifying the health facility, and lack of designated financial resources by health facilities for tracking patients on treatment. This continued to be a challenge in 2014.

Loss to follow-up: The proportion of people lost to follow up remains considerable. Some of the contributing factors to loss to follow-up are stigma, denial of HIV status by patients, excessive alcohol consumption by patients on treatment, inadequate counselling for those needing continued counselling, high poverty levels, and migration to other areas. In some rural areas, geographical and natural barriers like perennial streams and the fear of wild animals in areas near game parks are also responsible for defaulting.

(b) Prevention

Inadequate human resources remain a major challenge in implementation. There is a shortage of trained staff in some of the departments and units of the health delivery system. The capacity of existing trained staff is limited by the available numbers. HIV has increased workload exposing the health sector to systemic weaknesses. Community mobilization is being accelerated, which is a key element of the investment framework and has been recognized as a cornerstone of HIV programmes. This leads to improved uptake of HIV services and promotes local-level ownership and accountability, as well as relieving some pressure in human resource constraints.

Despite progress towards universal access to HIV services, the uptake of HCT is still low including low rates of couples counselling and testing. There is still limited coverage of prevention with positives (PwP) or prevention services for PLHIV especially for pre-ART clients. In concert with a combination prevention strategy (CPS), HIV and AIDS awareness and sensitization campaigns have been expanded resulting in improved health seeking behaviour. Through the campaigns, the demand for biomedical HIV prevention services has increased.

The other obstacle to prevention services is the fragmented nature of the interventions and efforts. There is a duplication of efforts by implementing organizations leading to inefficient use of limited resources. Similarly, HIV prevention messages are not often harmonized to ensure that clear and non-conflicting messages are disseminated to community members including young people.

Key Populations

Several studies on key populations are still being conducted in the country, with findings expected to be released later during the year.

VI. Support from development partners

The national response to HIV and AIDS is still heavily dependent on external support. However, the GRZ has continued to increase spending on HIV and AIDS as previously committed. No other NASA has been undertaken since the last one reported in 2013, and therefore data on AIDS spending remains unchanged.

VII. Monitoring and evaluation environment

Data collection and analysis is currently being undertaken using the following tools:

Health Management Information System (HMIS): This is the largest and most important M&E tool in Zambia. It provides for all clinical health related data on all diseases including HIV and AIDS. This tool has in the recent past been undergoing some upgrading to conform to latest developments in data capture and indicator tracking. During 2014, the functioning of the national HIMIS/DHIS.2 has improved remarkably. The HMIS system's data completion rate is now at 95%. The quality of data reported has also improved.

NACMIS and E-Mapping System: E-Mapping (www.zambianacmisonline.org) is an online Stakeholder Management and Activity Reporting system, which helps NAC and its partners to understand a number of M & E information details. The development of the E-mapping system has been supported throughout by NAC, the United Nations Joint Team, the World Bank and VOC. The system also includes an online Stakeholders' Activity Reporting Form (SARF) tool that automatically generates graphs which compare the SARF data (at district, provincial and national levels) against the Millennium Development Goals (MDG) for Zambia.

The Zambia Demographic and Health Survey (ZDHS): This is a robust instrument for tracking changes in knowledge and behaviours at a national level. It is conducted every 5 years, with the last having been conducted in 2013-14.

Stakeholders' Activity Report System (SARF): This refers to the generation of information from standard forms received by NAC on a regular basis from sub-national structures, including PATFs, DATFs, and Government line ministries implementing HIV and AIDS interventions. The relevance of the form arises out of the fact that it summarises the coverage achieved by organisations implementing HIV and AIDS interventions in the areas of prevention, care and support, M&E, impact mitigation and coordination and management. These forms, which are generic data reporting forms for HIV and AIDS activities, are collated at district, provincial and national levels on a quarterly basis.

Cohort Studies: Cohort studies are conducted for various purposes to monitor a group of individuals with similar characteristics to monitor the effectiveness of a service delivery programme or behaviours that may occur to a particular group of individuals when exposed to a specific even or situation.

Education Management Information Systems (EMIS): The EMIS system collects HIV and AIDS information. The primary output is the percentage/proportion of teachers who have been trained in life skills education and who taught it during the previous academic year.

National Commitments and Policy Instrument (NCPI): The NCPI covers four broad areas of policy, strategic planning, prevention, human rights, and care and support. A separate index is calculated for each policy area using specific policy indicators and calculating the overall percentage score. The relevance of this tool is in the computation of the National Composite Policy Index covering gender, workplace stigma and discrimination, human rights, CSO involvement, prevention, TCS, integration, mitigation services and M&E.

Sentinel Surveillance Surveys: Biological surveillance of HIV has been primarily tracked through surveillance of sentinel populations. Surveillance data is collected from a sample of urban, rural and transitional rural sentinel sites in the country distributed throughout the provinces. Specified minimum samples for each type of site are set in advance and vary from year to year. Blood samples are drawn, and testing for syphilis is done on site while the rest of the samples are sent to the University Teaching Hospital and the Tropical Diseases Research Centre (TDRC) for HIV testing. These surveys are relevant because they help in the determination of the incidence and prevalence of syphilis in women of reproductive age group in sentinel populations.

Financial Expenditure Tracking: Financial surveys are useful for showing how efficiently and effectively HIV and AIDS funds are utilised to achieve set national targets.

Workplace Surveys: These surveys provide information on the extent to which workplaces develop policies to protect and mitigate the impact of HIV and AIDS on their respective employees. These surveys, which are relevant and critically important for the preservation of people's human rights, are conducted on an annual basis.

Zambia Health Facility Survey (ZHFS): The ZHFS is conducted to better understand provider/household linkages, provider performance, costs, quality and effectiveness, links between providers, and Government-provider linkages, where the relevance lies.

Zambia Sexual Behavioural Survey (ZSBS): The ZSBS is carried out to monitor the extent to which the programmes to prevent HIV are successful.

Quarterly SARF Report: NAC produces the Quarterly SARF Report to provide information on coverage statistics per HIV programme area. The production of this report also ensures that NAC meets the Global Fund to Fight Tuberculosis, AIDS and Malaria (GFTAM) requirements in terms of minimum reporting standards and reports to its other basket donors.

Biennial GARPR Report: The Biennial GARPR Report is prepared to report on 17 specific indicators in a manner defined in the *UNAIDS Guidelines for the Construction of Core Indicators.* The report is one fulfilment of Zambia's signatory status to the 2001 Declaration of Commitment on HIV/AIDS at the United Nations Special Assembly Session on HIV/AIDS (UNGASS).

The Joint Annual Review Process (JAPR): The JAPRs bring the Government of the Republic of Zambia, NAC, and its partners together to review, on a regular basis, the performance of the national HIV response. The last review was conducted in 2013.

SPECTRUM: SPECTRUM is a suite of easy to use policy models which provide policymakers with an analytical tool to support the decision making process. Spectrum as a software has seven sub- components - *DemProj*, *FamPlan*, *Project Child Survival*, *AIDS Impact Model*, *Costs Implementing an HIV/AIDS programme*, *Resources for the Awareness of Population Impacts on Development*, and *the Safe Motherhood Model.* The Spectrum tool is relevant in the determination of the indicators with respect to determining the number of new infections annually.