

HIV/AIDS in Goa

SITUATION & RESPONSE

2015



GOA STATE AIDS CONTROL SOCIETY

1st Floor, Dayanand Smruti Building,
Swami Vivekanand Road, Panaji, Goa - 403 001
Ph.: 2427286/2422519/2421381 Fax: 2422518

Email: goaids@gmail.com/projdir-gsacs.goa@nic.in

website : www.goasacs.nic.in



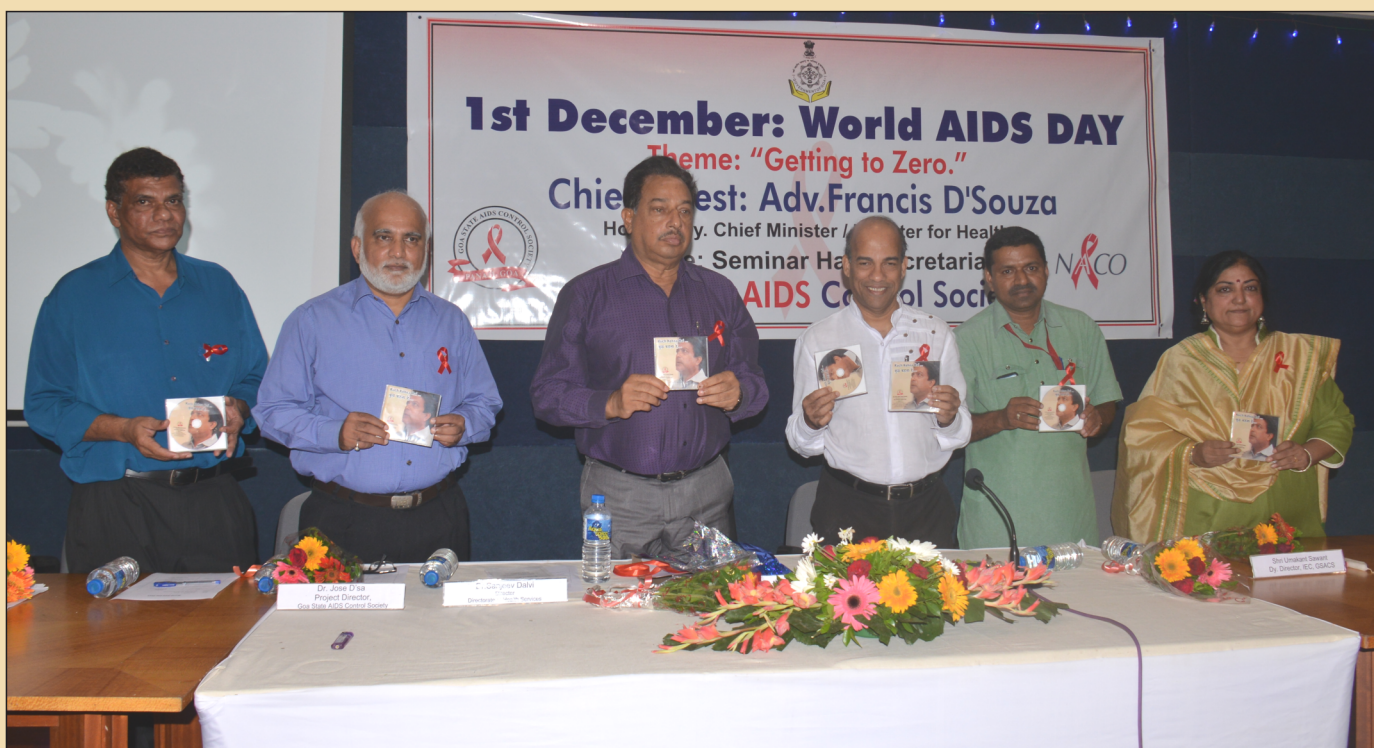
Her Excellency the Honorable Governor of Goa Smt.Mridula Sinha inaugurating the performance of Dance Drama on Drugs and AIDS 'Jagriti'



Dance Drama on Drugs and AIDS 'Jagriti' being performed by Ganesh Natyalaya under the guidance of Dr. Saroja Vaidyanathan.



Hon'ble Minister for AYUSH (independent charge) & M.O.S Ministry of Health & Family Welfare Shri. Shripad Yesso Naik, Hon'ble Chief Minister Shri.Laxmikant Parsekar, Hon'ble Dy. Chief Minister Adv. Francis D'Souza, Hon'ble MLA Shri.Vishnu Wagh, Additional Secretary, NACO, Ministry of Health & Family Welfare, GOI, Shri. N.S. Kang & Deputy Director General (LS) & JD (IEC) NACO Dr. Naresh Goel at the National level function of International Youth Day held in Goa on 19th August 2015, at Shyama Prasad Mukherjee Stadium, Bambolim



Hon'ble Dy.Chief Minister/ Health Minister, Adv. Francis D 'Souza releasing the film "Kuch Kehna Hai" on World AIDS Day 2015 at Seminar Hall, Secretariat, Porvorim.



Government of Goa

HIV/AIDS IN GOA

Situation and Response

2015



GOA STATE AIDS CONTROL SOCIETY

1st Floor, Dayanand Smruti Building,
Swami Vivekanand Road, Panaji, Goa. 403 001

Ph: 2427286/2422519/2421381 Fax: 2422518

Website: www.goasacs.nic.in

Email: goaids@gmail.com/projdir-gsacs.goa@nic.in



Government of Goa

LAXMIKANT PARSEKAR
CHIEF MINISTER, GOA

February 10, 2016



MESSAGE

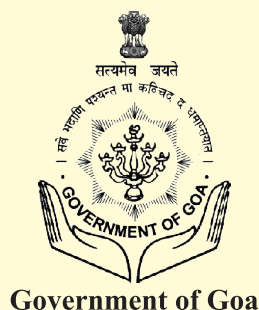
Goa State AIDS Control Society has come a long way from 1998 for effective control and prevention of HIV/AIDS pandemic in Goa.

People living with HIV/AIDS are a part of the society and we should ensure that there is no stigma and discrimination against them. Our acceptance and support should be always made available to them to lead a productive life and avail all the services provided.

I congratulate Goa State AIDS Control Society for their continuous noble efforts for the prevention, cure and rehabilitation in the field and also wish success for the upcoming publication.

(Laxmikant Parsekar)

MINISTER'S BLOCK, SECRETARIAT COMPLEX, PORVORIM, GOA, 403 521. INDIA
PH: 0832 2419841/42, FAX: 0832 2419840 / 46. EMAIL cm.goa@nic.in



Adv. FRANCIS D'SOUZA
Dy. Chief Minister, Goa

February 10, 2016



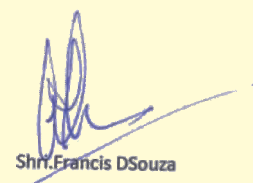
MESSAGE

It takes special dedication and perseverance to work in the challenging field of HIV/AIDS. I am happy to see the success story of Goa State AIDS Control Society in fast track strategy in order to change the HIV landscape in the state and I am sure in the coming years, they will work to achieve the vision of achieving "Getting to Zero", Zero new HIV infections, Zero discrimination and Zero AIDS-related deaths.

Young people themselves can play a key role in helping us to combat HIV and prevent new infections in this group. Their meaningful participation is important and we are committed to see that the youth of the state are free of HIV.

Partnerships are important to help programmes achieve sustainability for the long-term, and this is a priority element of the GSACS strategy to combat the HIV/AIDS pandemic. The partnerships created by GSACS with various Government Departments and private sector to Improve HIV Health Outcomes in the state are commendable.

I congratulate and wish Goa State AIDS Control Society all the success.



Shri. Francis D'Souza

Hon'ble Dy. Chief Minister / Minister for Health
Government of Goa



Government of Goa

MESSAGE

Goa State AIDS Control Society has achieved key goals like reduction in new HIV infections, reduction in HIV/AIDS related mortality, improvement in access to prevention services to key population and providing free treatment services to people living with HIV/AIDS. Therefore contributed to the country to achieve the Millennium Development Goal (MDG) by halting and reversing the HIV/AIDS epidemic.

Mainstreaming and partnerships are the key approaches in the AIDS Control programme and the sustained support of all the stakeholders with new partnership is required to facilitate multi sectoral response to this pandemic. Every sector in society is required to respond, within their mandates and sphere of influence, in a way that will contribute to the goal of achieving "Getting to Zero", Zero new HIV infections, Zero Discrimination and Zero AIDS related deaths.

Acts of discrimination deny people's rights to information, to services, to protect them against HIV infection, and to receive appropriate treatment, care and support when HIV positive. Fear of stigmatisation and discrimination discourages people from seeking information on HIV and AIDS, coming forward for counseling and testing, disclosing their status or accessing AIDS services. We will not achieve universal access without reducing stigma and discrimination. There is a need to actively address stigmatizing attitude and practices that may exist within the society, to create a positive enabling environment.

A lot has been achieved and more daunting tasks lie ahead. The way forward should continue with efficiency full of accelerated achievement. I wish the Goa State AIDS Control Society all success in their endeavors.

Dr. Sharat Chauhan (IAS)
Commissioners Secretary (Health)/
Chairperson Exe. Committee GSACS
Government of Goa

Preface



Dr. Jose D'Sa
Project Director, Goa SACS

HIV/AIDS epidemic is nearly 29 years old in Goa. Now it is time to sit up and take stock of the Situation in Goa: The number of young people and children newly infected with HIV continues to decline. We can now realistically envision dramatic reductions of new HIV infections in children if we collectively implement the “Global Plan for the Elimination of Mother to Child Transmission of HIV”. This will be a way towards achieving an HIV free generation. This has all been possible through the collective responsibility of all stakeholders. To maintain this momentum, several challenges have to be addressed. We need to scale up further the interventions which we know to be effective against the epidemic.

We need to take lessons from the past and plan effective strategies for the future. Goa State AIDS Control Society(GSACS) under National AIDS Control Programme (Phase IV) is committed to the spirit of the international theme for the HIV campaign, “**Getting to Zero**” (i.e. Zero New HIV Infections, Zero Discrimination and Zero AIDS Related Deaths).

HIV prevention is the most effective approach to reducing new infections and minimizing the impact of the epidemic. Since the last decade, GSACS has been expanding coverage and improving the quality of HIV prevention services which combine behavioral, biomedical and structural interventions. These include, among others, behavioral change counseling for individuals, couples and communities; condom promotion, optimizing the benefits of antiretroviral therapy for HIV prevention especially in the prevention of HIV transmission to children and removing HIV related stigmatization and discrimination. The most important lesson we have learnt so far is that we can make a difference. We can prevent new infections and we can improve the quality of care and treatment for People Living with HIV/AIDS .Now we need to find answers to what more can be done to reverse the trends of this epidemic. How to contain the spread of HIV/AIDS from high risk groups to the general population and from urban to rural areas? How to make youth and women less vulnerable? How to ensure better accessibility to various services such as ICTCs, ART, PPTCT, STDs, condom promotion, etc. made available by the Government for the prevention and control of HIV/AIDS? How to improve the quality of services that are being provided? What social benefits can be extended to those infected and affected by HIV?

In Goa, HIV prevalence rate is less than 1%. Government of Goa is fully committed to prevent the spread of HIV/AIDS at the initial stage itself. But Government alone cannot do it. It is everyone's responsibility. It's up to you,

me and us to stop the spread of HIV and end prejudice. People need to respond effectively to the threat that the community is facing Prevention is important. We must never lose sight of doing everything we can do to prevent people from becoming infected in the first place. Further, we need to address stigma and discrimination through all communication channels, as they are the main barriers of AIDS prevention and control efforts which need to be prioritized. Goa resolves to defeat HIV/AIDS by creating total awareness on transmission & prevention, by holding extensive youth education campaigns and curriculum based school AIDS education programme, by creating a partnership across all stakeholders, by saturating targeted intervention in high risk groups, by providing care & support to people living with HIV/AIDS, by removing stigma & discrimination, by providing voluntary counseling & testing facilities at peripheral levels, by providing Anti Retroviral Therapy for PLHAs and by organizing mass mobilization campaigns across Goa. Though we cannot change the past or undo the pain of losing our loved ones to HIV/AIDS-surely we can create a safe future with our efforts. We can create a conducive environment for people living with HIV/AIDS with our united efforts.

I would like to acknowledge the continuous support extended by communities and development partners in preventing new infections, expanding services and in providing social protection to people vulnerable with HIV and those affected by it.

My earnest appeal to one and all be informed about HIV/AIDS to make our state free from new infections and to create a conducive environment for people living with HIV/AIDS with our united efforts.

I would like to place on record my sincere appreciation of the efforts made by all the members of GSACS, in particular Shri.Sandesh Bhagat, Computer Literate steno and Ms. Sunita Arudra AD(IEC), Shri. Umakant Savant, DO(IEC) in bringing out this publication.



Dr. Jose D'Sa
Project Director, Goa SACS

The Governing Body of Goa State AIDS Control Society

1) Chief Secretary	---	Chairman
2) Commissioner, Finance	---	Member
3) Secretary, Health	---	Member
4) Secretary, Planning	---	Member
5) Secretary, Social Welfare	---	Member
6) Secretary, Education	---	Member
7) Secretary, Industry	---	Member
8) Secretary, Women and Child Welfare	---	Member
9) Secretary, Labour	---	Member
10) Secretary, Urban Development	---	Member
11) Secretary, Transport	---	Member
12) Secretary, Tourism	---	Member
13) Dean, Goa Medical College	---	Member
14) Director, Health Services	---	Member
15) Director, Information and Publicity	---	Member
16) Director, Sports & Youth Affairs	---	Member
17) Director, Tourism	---	Member
18) N.S.S Coordinator, Goa University	---	Member
19) Station Director, All India Radio	---	Member
20) Station Director, Doordarshan	---	Member
21) Representative of UNICEF/WHO	---	Member
22) Representative of NACO	---	Member
23) Project Director, Goa SACS	---	Member Secretary

Executive Committee of Goa State AIDS Control Society

1. **Pr. Secretary, Health** **Chairman**
2. Director, Directorate of Health Services Vice-Chairman
3. Dean, Goa Medical College Vice-Chairman
4. Director, Education.....Member
5. Director, Women & Child WelfareMember
6. Joint Secretary, FinanceMember
7. Director, TourismMember
8. N.S.S Coordinator, Goa UniversityMember
9. Director, Social WelfareMember
10. Representative, Kripa Foundation, NGO.....Member
11. Lifeline Foundation (Panaji)Member
12. Sai Life Care (Ponda).....Member
13. Positive People(Margao)Member
14. Prof & Head, Department of Microbiology, GMC.....Member
15. Chairperson, Goa State Social Welfare Board.....Member
16. HOD, Department of PSM, GMCMember
17. President, Goa Psychiatric Society.....Member
18. **Project Director, Goa SACS** **Member Secretary**

Special Invitees:

1. Ms. Radhika Naik, Principal of Srinivassa Sinai Dempo College of Commerce & Economics, Altinho, Panaji.
2. Shri Mangirish Pai Raikar, Chairman, Green Triangular Society, Inspectorate of Factories and Boilers, Altinho, Panaji
3. Dr. Sunil Kakodkar, General Manager, Group Medical Services, Vedanta Limited, EDC Complex, Patto, Panaji.

Core Committee of Goa State AIDS Control Society

- 1) **Dr. Digambar Naik**..... **Chairperson**
- 2) Adv. Vidya Shet Member
- 3) Director, Directorate of Health Services Member
- 4) Shri Jagannath Parsekar Member
- 5) Dean, Goa Medical College..... Member
- 6) Dr. Wisemen Pinto Member
- 7) Joint Secretary, Health..... Member
- 8) **Project Director, Goa SACS** **Member Secretary**

Table of contents

	Page No.
Profile	1
Figures at a Glance	2-4
1. Overview of the AIDS epidemic	
1.1 HIV/AIDS	5
1.2 Global Scenario	5
1.3 HIV/AIDS in India	6
1.4 Situation in Goa	10
2. Goa's Response to HIV/AIDS	
2.1 Introduction	29
2.2 Blood Safety	34
2.3 STI/RTI Control Programme	37
2.4 STD Surveillance	39
2.5 Integrated Counseling and Testing Centres (ICTCs)	42
2.6 Public Private Partnership (PPP)	45
2.7 Prevention of Parent to Child transmission (PPTCT)	45
2.8 Early Infant Diagnosis (EID)	46
2.9 TB HIV Collaborative activities	49
2.10 Information, Education, Communication (IEC) & Mainstreaming Division	51
2.10.1 Condom Promotion	55
2.10.2 Website	55
2.11 Targeted Interventions (TIs)	55
2.12 Care, Support & Treatment (CST)	59
2.12.1 Antiretroviral Therapy (ART) Centre	59
2.12.1.1 Link ART Centres Plus (LAC+)	59
2.12.1.2 Link ART Centres (LACs)	59
2.12.2 Care Support Centre (CSC)	60
2.12.3 CD4 Blood Count Facility	60
2.12.4 Management of Opportunistic Infections (OIs)	62
2.12.5 Post Exposure Prophylaxis (PEP)	62
2.13 Social Security Measures for PLHAs	62
2.14 Strategic Information Management System (SIMS)	63
3. Conclusion	64

List of Tables

Table No.	Particulars	Page No.
1.	Global summary of the AIDS epidemic, 2014	6
2.	Total number of tests conducted for HIV/AIDS in Goa from 1986 to 2015	11
3.	Taluka-wise percentage distribution of HIV+ cases detected in General population in Goa, 1998 to 2015	14
4.	Age / Sex-wise distribution of HIV+ cases detected in General population in Goa, 2009-2015	14
5.	Proportion (%) of HIV+ cases by sex in different age groups, 2009 – 2015	16
6.	Proportion of female infected to total HIV+ cases detected in Goa, 1988 – 2015	18
7.	Route of transmission of sero positive cases detected in Goa, 2000 – 2015	19
8.	Sentinel surveillance for HIV infection in Goa	20
9.	Proportion of direct walk-in to total persons tested at ICTCs, 1999 -2015	22
10.	Proportion of females and those in the age group 15-34 to total walk-in clients	22
11.	Number of persons counseled at ICTCs, 2002 - 2015	23
12.	Sex-wise particulars of person tested at ICTCs, 2002 - 2015	26
13.	Sex-wise reported number of AIDS deaths in Goa, 1993-2015	27
14.	Number of blood units screened for HIV in State Govt. blood banks, 2000 - 2015	35
15.	Number of blood units screened for other transfusion related diseases in State Government Blood Banks 2000 to 2015	36
16.	Blood bank wise number of blood units collected, 2015	36
17.	Blood Collection status of 5 years 2011 to 2015	37
18.	HIV positivity profile among STD patients in Goa, 1994 - 2008	40
19.	Details of sexually transmitted diseases detected in Govt. STD Clinics in Goa, 2008 -2015	41
20.	Sex-wise number of General Client tested and found positive at various ICTC in Goa,2015	44
21.	Data on PPTCT programme in Goa, April 2003 to 2015	47
22.	HIV/TB Co-ordination activities for 2008-2015	49
23.	HRG Target & Coverage Summary (April-Dec-2015)	56
24.	Grants sanctioned to TI - NGOs by Goa State AIDS Control Society, 2014-15	57
25.	Number of patients screened/treated at ART Centre (April 2005 to Dec 15)	60
26.	Year-wise cases of CD4 Count, 2001 to 2015	61

List of Charts

Chart No.	Particulars	Page No.
1.	Adult HIV prevalence in India, 1990-2015	7
2.	Distribution of PLHIV in Select States, 2015	8
3.	Estimated new HIV infections in India, 1998-2015	8
4.	State wise Estimated New HIV Infections among Adults, 2015	9
5.	Annual AIDS-Related Deaths and ART Scale-up, India, 2000-14	9
6.	Trend in number of HIV + cases reported in Goa, 1986-2015	12
7.	HIV positivity rate in Goa, 2000 – 2015	12
8.	Taluka-wise proportion (%) of HIV+ cases detected in Goa, 2015	13
9.	Proportion of HIV + Cases Detected In Different Age Groups as Per Gender 2015	15
10.	Proportion of females to total HIV+ Cases detected in Goa, 2000 to 2015	18
11.	Route of transmission of sero-positive cases detected in Goa, 2015	19
12.	Proportion of direct walk-in to total persons tested, 2000-2015	24
13.	Trend in number of AIDS cases reported in Goa, 2000 to 2015	27
14.	Reported number of AIDS deaths in Goa, 2000 - 2015	28
15.	HIV positivity rate among STD patients in Goa, 1994 - 2008	40
16.	Number of General clients tested and found positive, at ICTCs 2007 – 2015	43
17.	Trends in referral of TB case detection from ICTC to RNTCP referrals 2008-2015	50
18.	Trends in referral of TB case detection from RNTCP to ICTC	50
19.	Goa State – Physical status of Targetted Interventions (TI) NGOs	56
20.	Number of patients screened and treated at ART Centre from April 2005 to December 2015	59

Profile

Goa is India's smallest State in terms of area and the fourth smallest in terms of population. Located on the west coast of India in the region known as the Konkan, it is bounded by the State of Maharashtra to the north and by Karnataka to the east and south, while the Arabian Sea forms its western coast. Goa has a resident population of around 14.59 lakhs (as per Census 2011). Goa has 12 talukas spread over 2 operational districts – North and South Goa respectively.



Area : 3,702 sq. kms	Death rate (per 1,000): 7.2
Population : 14.59 lakh	Total Literacy: 88.70
Males : 7.40 lakh	Female Literacy: 84.66
Females: 7.19 lakh	Urban: 9.06 lakh
Per capita income : Rs. 2,71,091 per annum	Rural: 5.51 lakh
Birth rate (per 1000): 13.3	MMR (per lakh deliveries) : 45

Figures at a Glance

A: Global Scenario

- First case detected among homosexuals in USA in 1981.
- Reported number of AIDS cases in 1991 was 0.37 million.
- Estimated number of people living with HIV/AIDS as on December, 2014 was 36.9 million.
- Worldwide, 2 million [1.9 million–2.2 million] people became newly infected with HIV in 2014, down from 3.1 million [3.0 million–3.3 million] in 2000.
- Worldwide 2.6 million children younger than 15 years were living with HIV upto 2014. During the year 2014, New HIV infections among children (0-14 years) were 2.20 lakh. New HIV infections among children have declined by 58% since 2000
- Every day, 5600 new infections occurred in the world in 2014 despite the fact more is known than ever before about prevention and control of the epidemic.
- Between 2000 and 2015, new HIV infections have fallen by 35%, AIDS-related deaths have fallen by 24% with some 7.8 million lives saved as a result of international efforts that led the global achievement of the HIV targets of the Millennium Development Goals.
- Worldwide women comprise an increasing number of adults living with HIV/ AIDS. Women accounted for about 48 % of the adults infected in 2014. In Sub-Saharan Africa, women represent more than half of all people living with HIV/ AIDS.
- Since the year 2000, around 25.3 million deaths have occurred all over the world. During 2014 alone, there were 1.2 million deaths due to AIDS out of which 1.50 lakh were children (<15 years).
- Tuberculosis-related deaths in people living with HIV have fallen by 33% since 2004. Tuberculosis remains the leading cause of death among people living with HIV, accounting for around one in five AIDS-related deaths. In 2013, the percentage of identified HIV-positive tuberculosis patients who started or continued on anti retroviral treatment reached 70% (up from 60% in 2012).
- It is estimated that currently only 54% of people with HIV know their status. In 2014, approximately 150 million children and adults in 129 low- and middle-income countries received HIV testing services
- AS on March 2015, 15 million people living with HIV were receiving ART globally, up from 13.6 million in June 2014. By end of 2014, 40% [37–45%] of all people living with HIV were on ART.

B: Indian Scenario

- First case of HIV detected among sex workers in Chennai in 1986.
- It is estimated that India had approximately 86 thousand new HIV infections in 2015 showing 66% decline in new infections from 2000 and 32% decline from 2007.
- Of the 86 thousand estimated new infections in 2015, the six high prevalence States account for only 31% of the cases, while State of Orissa, Bihar, West Bengal, Uttar Pradesh, Rajasthan, Madhya Pradesh account for 41% of new infections.
- The adult HIV prevalence at national level has continued steady decline from an estimated peak of 0.38% in 2001-03 to 0.34% in 2007, 0.28% in 2012 and to 0.26% in 2015.
- The adult HIV prevalence in India is 0.22% among women and 0.30% among men in 2015
- In 2015, among the States/UTs, Manipur has shown the highest estimated adult HIV prevalence of 1.15%, followed by Mizoram 0.80%, Nagaland 0.78%, Andhra Pradesh & Telangana 0.66% Karnataka 0.45%, Gujarat 0.42% and Goa 0.40%
- Maharashtra, Chandigarh, Tripura and Tamil Nadu has shown estimated adult HIV prevalence greater than National prevalence (0.26%). While Odisha, Bihar, Sikkim, Delhi, Rajasthan and West Bengal have shown an estimated adult HIV prevalence in the range of 0.21-0.25%. All other States /UTs have level of adult HIV prevalence below 0.20%.
- As per the latest estimates, 21.17 lakh people are living with HIV/ AIDS in India at the end of year 2015 Compared with 22.26 lakhs in 2007.
- Around 10,400 New HIV infection among children occurred during 2015, which account for 12% of total new infections while remaining 75.9 thousand new infection were among adult (15+ years)
- Since 2007, number of AIDS-related death started to show a declining trend and the annual number of AIDS related deaths has declined by 54%
- The annual number of AIDS deaths has declined by 70-81% during 2007-15 in Karnataka, Maharashtra and Tamil Nadu and 60-70% baseline values of 2007 in Andhra Pradesh & Telangana, Goa, Himachal Pradesh and Nagaland while decline of 40-47% was estimated in Chattisgarh, Gujarat and Punjab.
- In 2015 an estimated 67.6 thousand people died of AIDS related causes nationally. Wider access to ART has resulted in a decline of the number of people dying due to AIDS related causes. The trend of annual AIDS deaths is showing a steady decline since the roll out of free ART programme in India in 2004.

C: Goan Scenario

- First case of HIV+ detected in 1987.
 - ❖ 1987- First Case detected in a Foreigner.
 - ❖ 1988- An Indian but a non Goan
 - ❖ 1989- First Case detected in a Goan Student.
- Total number of HIV+ cases detected in Goa since 1987 till 2015 are 16,025
- Total AIDS cases reported to Goa SACS up to 2015 are 1,694.
- AIDS related deaths reported to Goa SACS up to 2015 is 1090.
- HIV infection is now prevalent in all parts of Goa and majority of the cases are reported in the four coastal talukas viz. Salcete (9.7%), Mormugao (22.2%) in South Goa District and Tiswadi (8.5%) and Bardez (11.9%) in North Goa District during 2015. Out of 329 cases reported in Goa during the year 2015, 26.8 % belong to other States /foreigners/not specified.
- 80.6% of the cases detected in Goa during 2015 belonged to the age group 15-49 years.
- During 2015, out of the total female infected cases nearly 31.2% belong to the age group 15-34 years whereas around 36.7% of the infected males belonged to this age group, out of the total male infected.
- In the age group 35-49, over 43.1% males and about 50.4% females were found infected out of the total male and female cases detected during 2015.
- During 1999-2015, Sexual route is the predominant mode of transmission in the range of 83 to 96% followed by Perinatal 4 to 8%. Transmission through blood and blood products and infected syringes and needles is negligible in Goa.
- Cross referrals of HIV/TB have shown a rise from 1684 in the year 2008 to 4397 in the year 2015

1 - Overview of the AIDS epidemic

1.1 HIV/AIDS

Acquired Immuno Deficiency Syndrome (AIDS) is caused by Human Immune-deficiency Virus (HIV). It is a serious disorder of the Human Immune system in which the body's normal defense system breaks down, leaving it vulnerable to a host of life threatening infections/ conditions including unusual malignancies. HIV / AIDS is not a disease which spreads randomly but is transmitted as a consequence of a specific behavioral pattern and has strong socio-economic implications. It not only costs huge sums of money in terms of controlling the opportunistic infections such as tuberculosis, pneumonia and cryptococcal meningitis, but also seriously affects individuals in their prime reproductive years causing serious economic loss to them, their families and the community; destroying people's lives and in many cases seriously damaging the fabric of societies. AIDS is unique in human history in its rapid spread, its extent and depth of its impact. Since the first AIDS case was diagnosed in 1981, the world has struggled to come to grips with its extraordinary dimensions.

The estimates show that, while significant progress has been made in halting and reversing the epidemic, challenges still remain to be addressed through joint efforts and with renewed impetus.

1.2 Global Scenario

HIV/ AIDS has brought about a global epidemic far more extensive than what was predicted a decade ago. UNAIDS estimates show that the number of people living with HIV/AIDS globally at the end of the year December, 2014 stood at 36.9 million. The HIV/ AIDS epidemic continues its expansion across the globe with about 2.0 million newly infected cases including 2.20 lakh children under the age of 14 years in the year 2014. (Table 1) Approximately, 5600 new infections occur every day in the world despite the fact that more is known than ever before about prevention and control of the epidemic. About 97% of all HIV/ AIDS infected people are living in developing countries least able to afford to care for the infected people but have to cope with the huge burden of suffering and deaths. Although HIV/ AIDS can affect all ages, about half of the new infections occur in young adults before they are 25 years old and who, if untreated, will die within 10 years of contracting the infection. Since the onset of the epidemic, Since the 2000, around 25.3 million deaths have occurred all over the world. During 2014 alone, there were 1.2 million deaths due to AIDS out of which 1.50 lakh were children (<15 years). HIV has more than doubled the adult death rate in some places, and is the single biggest cause of adult deaths in many countries. Indeed HIV/ AIDS is among the top ten killer worldwide and at given current rate of HIV infection it may soon move into the top five. Over 90% of the HIV infected babies are born to positive mothers in Sub-Saharan Africa and worldwide there has also been a cumulative total of over 16.6 million AIDS orphans. AIDS is the most globalized epidemic in history and we are witnessing its growing 'feminization'. Every year brings an increase in the number of women infected with HIV. Globally nearly half of all persons infected between ages of 15-49 are women and in Africa the proportion is reaching 60%. Because of gender inequality, women living with HIV/ AIDS often experience greater stigma and discrimination.

Table No.1: Global summary of the AIDS epidemic, 2014

Global summary of the AIDS epidemic		2014
Number of people living with HIV	Total	36.9 million [34.3 million – 41.4 million]
	Adults	34.3 million [31.8 million – 38.5 million]
	Women	17.4 million [16.1 million – 20.0 million]
	Children (<15 years)	2.6 million [2.4 million – 2.8 million]
People newly infected with HIV in 2014	Total	2.0 million [1.9 million – 2.2 million]
	Adults	1.8 million [1.7 million – 2.0 million]
	Children (<15 years)	220 000 [190 000 – 260 000]
AIDS deaths in 2014	Total	1.2 million [980 000 – 1.6 million]
	Adults	1.0 million [760 000 – 1.8 million]
	Children (<15 years)	150 000 [140 000 – 170 000]

Source UNAIDS

1.3 HIV/AIDS in India

The first case of HIV / AIDS in India was detected in 1986, at Chennai and was a commercial sex worker. Within a period of about 29 years, it has emerged as one of the most serious problems in the country. Though the initial cases of HIV/ AIDS were reported among commercial sex workers in Mumbai and Chennai and injecting drug users in north-eastern States of Manipur, the disease spread rapidly in the areas adjoining these epicenters and by 1997 Maharashtra, Tamil Nadu and Manipur together accounted for over three-fourths of AIDS cases and over two-thirds of HIV infections with Maharashtra reporting almost half the number of cases in the country. HIV infections are now being reported from all States and Union Territories. A shift in the epidemic has been observed from the high-risk population to bridge population (clients of sex workers, STD patients and partners of drug users) and then to the general population.

The 2015 HIV Estimates confirm that the epidemic in India is over all declining. Decreasing trends in HIV prevalence, new HIV infections and AIDS-related deaths persist at national level. However, analysis of estimate results shows that the dynamics and patterns of the epidemic are not uniform across the country.

The Millennium Development Goal 6 has just been achieved in India and the country is gearing up for ending AIDS in the next 15 years.

Adult HIV Prevalence (15-49 years)

National adult (15–49 years) HIV prevalence is estimated at 0.26 % (0.22% - 0.32%) in 2015. Adult HIV prevalence is estimated at 0.30% among males and at 0.22% among females in 2015.

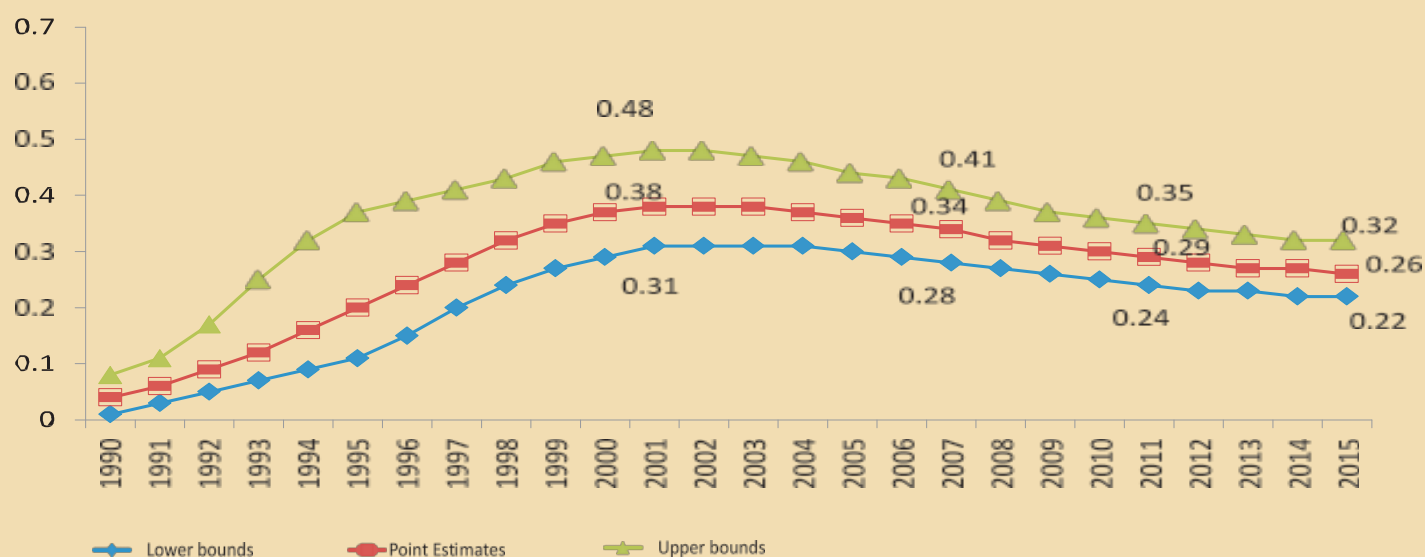
Among the States/UTs, in 2015, Manipur has shown the highest estimated adult HIV prevalence of 1.15%, followed by Mizoram (0.80%), Nagaland (0.78%), Andhra Pradesh & Telangana (0.66%), Karnataka (0.45%), Gujarat (0.4%) and Goa (0.40%). Besides these States, Maharashtra, Chandigarh, Tripura and

Tamil Nadu have shown estimated adult HIV prevalence greater than the national prevalence (0.26%), while Odisha, Bihar, Sikkim ,Delhi, Rajasthan and West Bengal have shown an estimated adult HIV prevalence in the Range of 0.21 – 0.25 %. All other States / UT s have levels of adult HIV prevalence below 0.20%.

The adult HIV prevalence at national level has continued its steady decline from an estimated peak of 0.38 % in 2001-03 through 0.34 % in 2007 and 0.28% in 2012 to 0.26% In 2015 (Chart 1) . Similar consistent declines are noted both in males and in females at the national level.

Declining trends in adult HIV prevalence are sustained in all of the high prevalence States (Andhra Pradesh & Telangana, Karnataka, Maharashtra, Manipur, Nagaland and Tamil Nadu) and other States such as Goa, Odisha and West Bengal. Stable adult HIV prevalence has been noted in States such as Bihar, Chhattisgarh, Gujarat, Mizoram, Rajasthan and Uttar Pradesh. However, rising trends in adult HIV prevalence has been observed in some of the hitherto relatively low prevalence States / UTs like Assam, Chandigarh, Delhi, Jharkhand, Punjab, Tripura and Uttarakhand.

Chart .1 Adult HIV prevalence in India 1990-2015 with Uncertainty Bounds

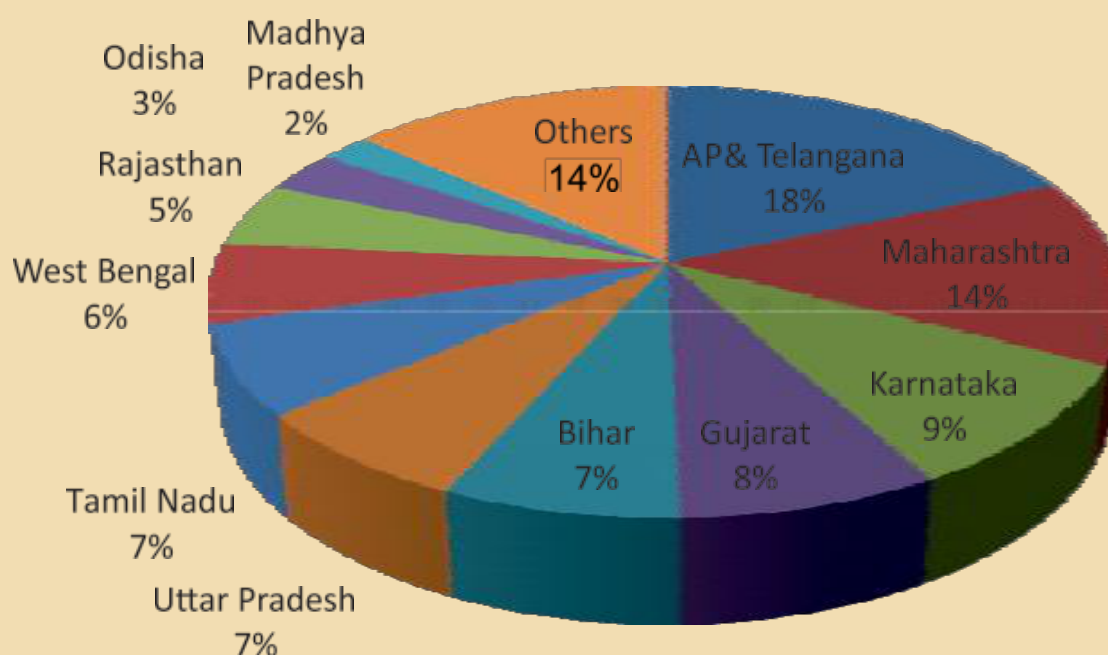


People living with HIV

The total number of people living with HIV(PLHIV) in India is estimated at 21.17 lakhs (17.11lakhs 26.49 lakhs) in 2015 compared With 22.26 lakhs (18.00 lakhs-27.85 lakhs)in 2007. Children (< 15 years) account for 6.54 %, while two fifth (40.5%) of total HIV infections are among females.

Undivided Andhra Pradesh have the highest estimated number of PLHIV (3.95 lakhs) followed by Maharashtra (3.01 lakhs), Karnataka (1.99 lakhs), Gujarat (1.66 lakhs), Bihar (1.51 lakhs) and Uttar Pradesh (1.50lakhs). These seven States together account for two thirds (64.4%) of total estimated PLHIV (Chart 2). Rajasthan (1.03 lakhs), Tamil Nadu (1.43 lakhs) and West Bengal (1.29lakhs) are other States with estimated PLHIV numbers of 1 lakh or more. The estimated number of PLHIV in India has been more or less stable during 2013-15.

Chart 2. Distribution of PLHIV in Select States, 2015



Annual new HIV Infections

India is estimated to have around 86 (56–129) thousand new HIV infections in 2015, showing 66% decline in new infections from 2000 and 32% decline from 2007, the year set as baseline in the NACP-IV (Chart 3). Children (<15years) accounted for 12% (10.4 thousand) of total new infections while the remaining (75.9 thousand) new infections were among adults (15+years).

Andhra Pradesh & Telangana, Bihar, Gujarat and Uttar Pradesh currently account for 47% of total new infections among adults with each of these States contributing 7.5 thousand or more new infections in 2015 (Chart 4). West Bengal and Rajasthan have more than 5 thousand but less than 7.5 thousand new infections, while Maharashtra, Odisha and Tamil Nadu have new infections in the range of 3-4 thousand. Chhattisgarh, Delhi, Haryana, Jharkhand, Karnataka, Madhya Pradesh and Punjab have 1-2.4 thousand new infections.

Chart 3: Estimated new HIV infections in India, 1998-2015

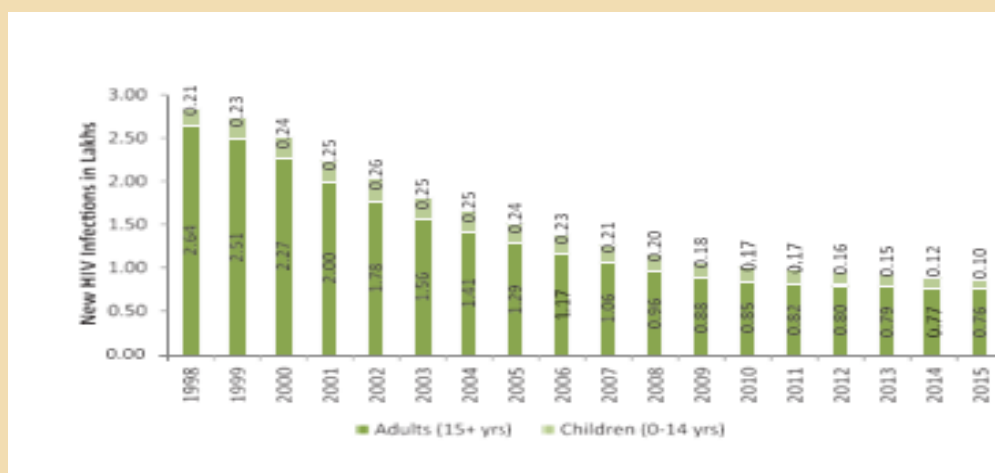
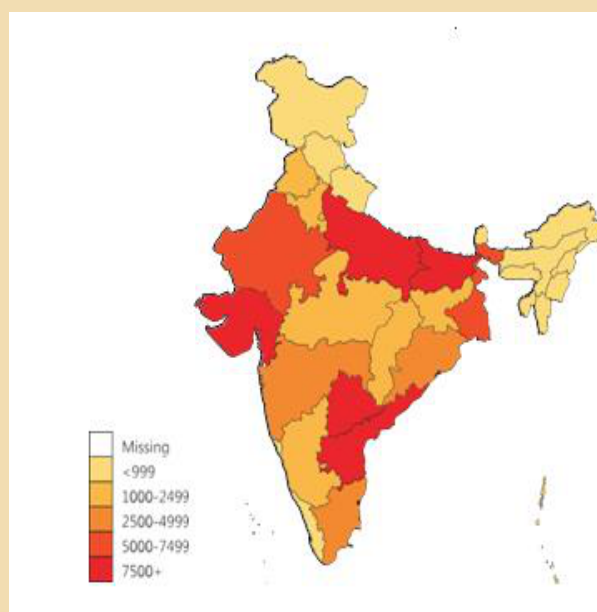


Chart No. 4 State wise Estimated New HIV Infections among Adults, 2015

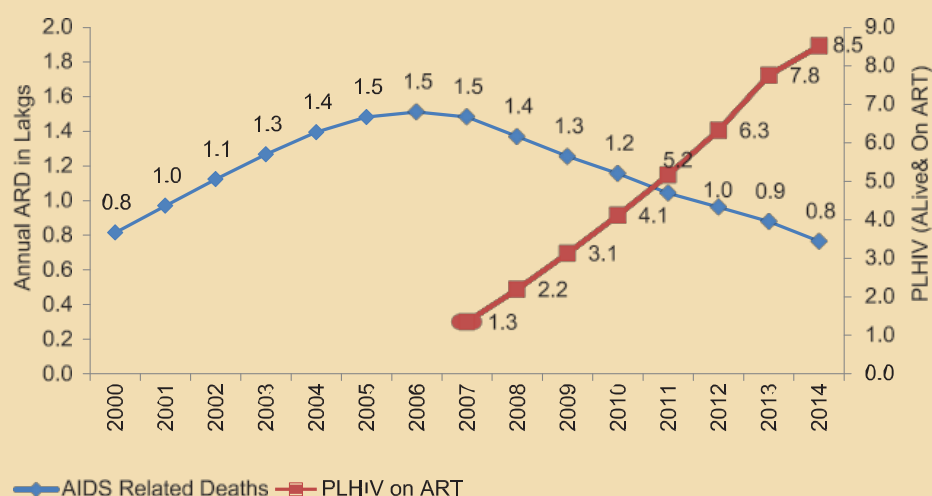


A clear decline in new infections, as noticed at national level has been also observed in most of the States / UTs. New infections among adults have declined by 50% or more in the States of Andhra Pradesh & Telangana, Karnataka, Maharashtra, Manipur and Odisha during 2007-15. Bihar, Jharkhand, Kerala, Mizoram, Nagaland, Rajasthan and Uttarakhand are the other States where annual adult new infections declined by 32-47 % during the same period. However, a rising trend in new infections among adults during 2007-15 has been detected in Assam, Chandigarh, Chattisgarh, Gujarat, Sikkim, Tripura and Uttar Pradesh.

AIDS-Related Deaths

Since 2007, when the number of AIDS-related deaths (ARD) started to show a declining trend, the annual number of AIDS-related deaths has declined by 54 %. In 2014 an estimated 67.6 [46.4–106.0] thousand people died of AIDS-related causes nationally (Chart 5). This decline is consistent with the rapid expansion of access to ART in the country. It is estimated that the scale-up of free ART since 2004 has saved cumulatively around 4.5 lakhs lives in India until 2014.

Chart 5. Annual AIDS-Related Deaths and ART Scale-up, India, 2000-14



The annual number of AIDS-deaths has declined by 70-81% during 2007-15 in Karnataka, Maharashtra and Tamil Nadu. Annual AIDS-related deaths declined by 60-70% from the base line values of 2007 in Andhra Pradesh & Telangana, Goa, Himachal Pradesh and Nagaland while a decline of 40-47% was estimated in Chhattisgarh, Gujarat and Punjab.

Estimated Programme Needs For ART and PPTCT

Based on the assumptions on progression and survival of adults and children infected with HIV as well as current treatment eligibility criteria, it is estimated that around 13.45 lakhs PLHIV needed ART in 2015. This includes 12.71 lakhs adults (15+years) and 75 thousand children (<15years). More than half of this estimated need is in the high burden States of Andhra Pradesh & Telangana (2.6lakhs), Karnataka (1.4lakhs), Maharashtra (2.3lakhs), and Tamil Nadu (1.1lakhs). Bihar (79.9 thousand), Gujarat (92.6 thousand), Rajasthan (57.9 thousand), Uttar Pradesh (79.9 thousand) and West Bengal (71 thousand) are other States with an estimated ART need of 50 thousand or more.

Based on the estimated HIV infections among adult females and assumptions on the effect of HIV on fertility and parent to child transmission rates, it is estimated that around 35 thousand HIV-positive pregnant women needed PPTCT services in 2015. The over all number of pregnant women needing PPTCT has declined in the country from 52.8 thousand in 2007 to 35 thousand in 2015. Twelve States, including Andhra Pradesh & Telangana, Bihar, Gujarat, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal, account for 88% of all PPTCT needs in the country.

Conclusions

2015 HIV Estimates results reaffirm the country's success story in responding to HIV/AIDS epidemic. India has successfully achieved the 6th Millennium Development Goal (MDG6) of halting and reversing the HIV epidemic. Between 2000 and 2015, new HIV infections dropped from 2.51 lakhs to 86 thousand, a reduction of 66% against a global average of 35%. (Source India HIV Estimations 2015 Technical Report)

1.4 Situation in Goa

HIV/ AIDS epidemic in Goa is nearly 29 years old. The first reported case of HIV in Goa was detected in 1987. From 1987 to 2015, as many as 16,025 HIV+ cases have been detected at the Integrated Counseling and Testing Centres (ICTCs). Prior to 1992, very few HIV+ cases ranging between 3 to 30 per year were detected but since 1992, the cases detected were rising steadily and since the year 2008 the cases detected have declined. During the year 2015, out of 47,035 blood samples tested 345 cases (including 16 ANC) were sero-positive. The number of blood samples screened, sero-positive cases detected and reported number of AIDS cases sex-wise during the period from 1986 to 2015 are presented in (Table No. 2).

Goa HIV/AIDS Situation and Response 2015

Table No.2: Total number of tests conducted for HIV/AIDS in Goa from 1986 to 2015										
Year	No. of blood samples tested			HIV +cases			Positivity Rate (%)	No. of AIDS Cases		
	Gen	ANC	Total	Gen	ANC	Total		M	F	T
1986	229	-	229	-	-	-	-	-	-	-
1987	1,255	-	1,255	3	-	3	0.24	-	-	-
1988	3,822	-	3,822	6	-	6	0.16	-	-	-
1989	10,210	-	10,210	18	-	18	0.18	1	-	1
1990	10,071	-	10,071	18	-	18	0.18	1	-	1
1991	8,603	-	8,603	30	-	30	0.35	2	-	2
1992	8,690	-	8,690	144	-	144	1.66	3	1	4
1993	7,978	-	7,978	123	-	123	1.54	3	-	3
1994	4,533	-	4,533	195	-	195	4.30	3	1	4
1995	2,279	-	2,279	203	-	203	8.91	4	2	6
1996	2,959	-	2,959	327	-	327	11.05	11	3	14
1997	3,526	-	3,526	473	-	473	13.41	12	2	14
1998	4,903	-	4,903	522	-	522	10.65	11	4	15
1999	7,804	-	7,804	750	-	750	9.61	12	2	14
2000	7,813	-	7,813	807	-	807	10.33	11	2	13
2001	7,216	-	7,216	801	-	801	11.10	39	9	48
2002	13,848	-	13,848	999	-	999	7.21	51	17	68
2003	11,682	2,567	14,249	1,016	38	1,054	7.40	105	57	162
2004	11,221	3,717	14,938	956	47	1,003	6.71	139	54	193
2005	11,814	3,068	14,882	1,029	41	1,070	7.19	119	61	180
2006	11,023	7,357	18,380	940	75	1,015	5.52	58	23	81
2007	12,485	10,432	22,917	1,029	65	1,094	4.77	79	38	117
2008	15,684	11,053	26,737	954	65	1,019	3.81	74	31	105
2009	21,220	12,253	33,473	901	58	959	2.86	120	64	184
2010	21,627	11,802	33,429	769	52	821	2.46	102	52	154
2011	25,532	14,609	40,141	630	35	665	1.66	68	38	106
2012	30,500	14,053	44,553	532	22	554	1.24	52	26	78
2013	40,827	16,353	57,180*	505	27	532	0.93	34	17	51
2014	47,003	15,818	62,821*	449	26	475	0.75	28	19	47
2015	47,035	15,622	62,657*	329	16	345	0.55	15	14	29
Total	4,13,392	1,38,701	5,52,093	15,458	567	16,025	2.90	1,157	537	1,694

Gen = General ANC =Antenatal Clinic * includes tests conducted in FICTCs.

Chart No. 6 Trend in number of HIV + cases detected in Goa, 1986-2015

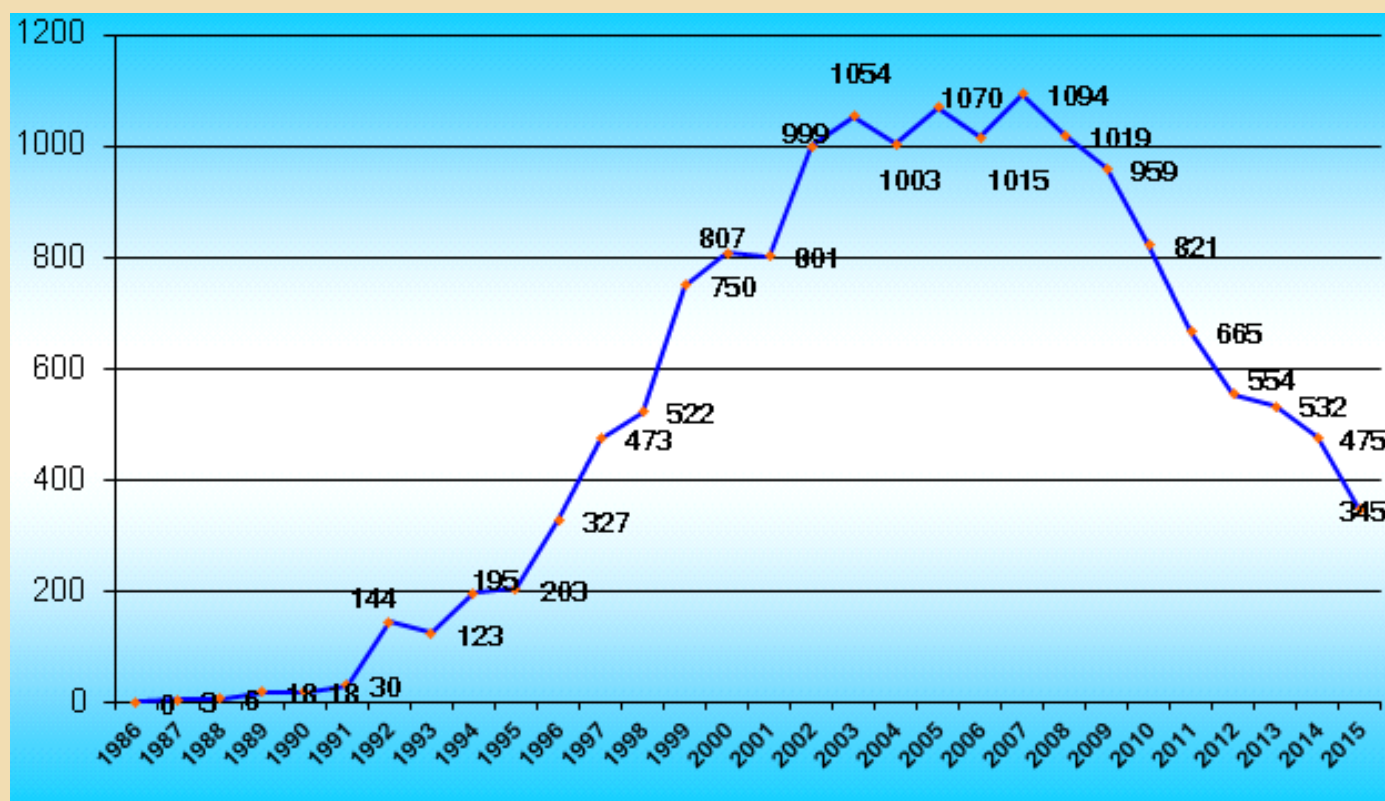
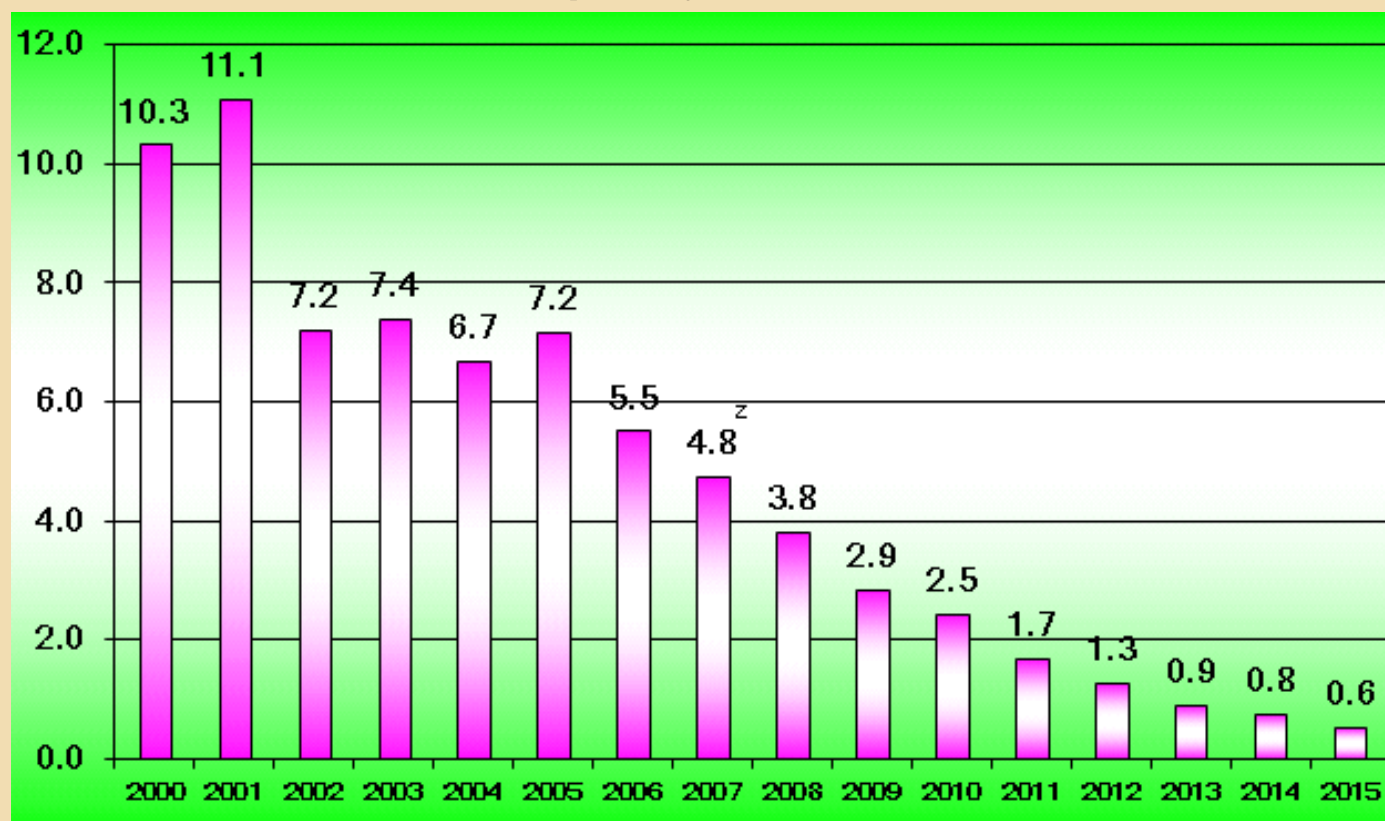
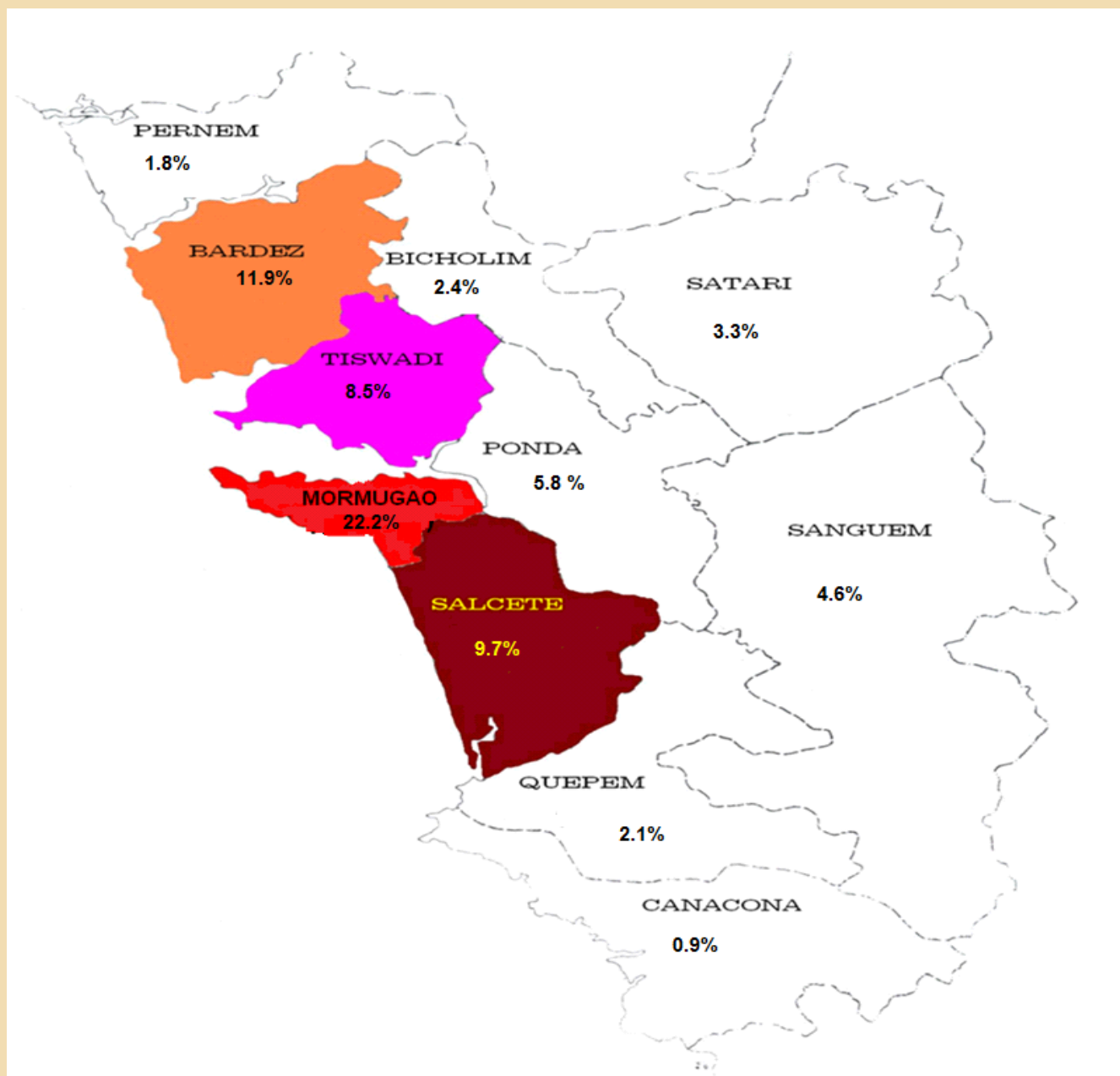


Chart No. 7 HIV positivity rate in Goa, 2000 - 2015



The taluka-wise distribution of the HIV+ cases in the general population (refer Table No.3) shows that the majority of the cases detected are from the four coastal talukas namely Mormugao, Bardez, Salcete and Tiswadi. About three-fourth of the cases are reported from these four talukas. Incidentally, these four talukas are relatively well developed both economically and socially compared to the other talukas.

Chart No. 8 Taluka-wise proportion (%) of HIV+ cases detected in Goa, 2015



About 31.9% of the HIV+ cases detected in Goa during 2015 are from the talukas of Mormugao and Salcete in South Goa District and about 20.4% are from Bardez and Tiswadi talukas in North Goa District.

Table No:3 Taluka-wise percentage distribution of *HIV+* cases detected in General population in Goa, 1998 to 2015

Taluka	Proportion (%) of HIV positive cases detected																	
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Tiswadi	19.2	12.4	15.8	14.4	14.7	13.1	17.4	15.7	11.8	11.0	12.6	11.5	8.9	9.4	7.7	11.4	4.7	8.5
Bardez	11.5	10.3	13.9	14.5	11.1	12.8	15.7	12.3	14.2	14.5	14.0	15.5	15.2	14.6	16.2	14.9	15.4	11.9
Pernem	1.9	2.0	1.2	2.9	2.2	1.6	2.1	1.2	3.5	2.4	1.7	1.6	1.3	1.7	1.3	2.5	1.6	1.8
Bicholim	2.9	2.7	2.7	2.2	3.2	2.8	2.7	2.8	3.7	3.4	2.6	3.3	2.2	2.9	3.4	2.0	1.3	2.4
Satari	1.5	0.5s	0.4	0.6	1.1	0.8	0.7	1.7	1.0	1.1	1.3	2.1	2.1	2.4	3.2	2.8	2.5	3.3
Ponda	6.5	3.8	4.8	6.0	3.9	7.2	5.0	6.0	5.8	4.7	5.8	4.8	4.4	4.1	5.6	5.9	8.7	5.8
Salcete	18.8	17.5	18.5	21.6	19.1	18.9	20.4	18.7	18.6	17.8	18.0	17.1	13.8	13.7	11.1	18.4	14.0	9.7
Mormugao	19.9	18.0	19.3	23.0	26.4	21.4	19.0	19.2	19.5	14.4	16.1	16.5	19.9	18.1	16.6	12.9	12.5	22.2
Sangue m	0.6	1.2	1.4	2.2	1.9	2.9	1.3	3.5	1.6	2.5	1.3	3.3	3.0	2.5	2.6	1.6	1.3	4.6
Quepem	2.3	1.7	2.7	3.1	3.0	2.5	2.4	2.2	1.5	3.8	2.2	2.5	3.0	3.0	1.9	2.4	2.7	2.1
Canacona	0.4	0.8	0.7	1.1	1.7	1.1	1.8	1.9	2.3	2.8	2.4	1.2	3.5	0.6	2.8	1.6	1.1	0.9
Dharbandora	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0
Others #	14.5	29.1	18.6	8.4	11.7	14.9	11.5	14.8	16.5	21.6	22.0	20.8	22.7	27.0	27.6	23.2	33.8	26.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

includes those belonging to other states, foreigners and also those not specified.

Table No. 4 Age / Sex-wise distribution of *HIV+* cases detected in General population in Goa, 2009-2014

Age group	2009			2010				2011				2012				2013				2014			
	M	F	T	M	F	TS/TG	T	M	F	TS/TG	T	M	F	TS/TG	T	M	F	TS/TG	T	M	F	TS/TG	T
<14	20 (3.7)	20 (5.4)	40 (4.4)	24 (4.8)	20 (7.4)	0 (0.0)	44 (5.7)	24 (6.4)	17 (6.7)	0 (0.0)	41 (6.5)	14 (4.2)	16 (8.3)	0 (0.0)	30 (5.6)	8 (2.6)	10 (5.1)	0	18 (3.6)	13 (5.0)	14 (7.4)	0	27 (6.0)
15-24	27 (5.1)	31 (8.5)	58 (6.4)	28 (5.6)	19 (7.1)	0 (0.0)	47 (6.1)	30 (8.0)	20 (7.9)	1 (50.0)	51 (8.1)	22 (6.5)	13 (6.7)	1 (50.0)	36 (6.7)	26 (8.5)	9 (4.6)	0	35 (6.9)	16 (6.2)	17 (8.9)	0	33 (7.3)
25-34	171 (32.0)	137 (37.3)	308 (34.2)	136 (27.3)	100 (37.2)	1 (100.0)	237 (30.8)	105 (28.0)	80 (31.6)	1 (50.0)	186 (29.5)	85 (25.3)	60 (30.9)	0 (0.0)	145 (27.3)	68 (22.1)	65 (33.0)	0	133 (26.4)	52 (21.1)	50 (26.3)	1 (100.0)	103 (23.0)
35-49	270 (50.6)	149 (40.6)	419 (46.5)	263 (52.7)	104 (38.7)	0 (0.0)	333 (47.8)	177 (47.1)	105 (41.5)	0 (0.0)	282 (44.8)	168 (50.0)	82 (42.3)	1 (50.0)	251 (47.2)	152 (49.3)	83 (42.1)	0	235 (46.5)	130 (50.4)	68 (35.8)	0 (0.0)	198 (44.1)
>50	46 (8.6)	30 (8.2)	76 (8.5)	48 (9.6)	26 (9.6)	0 (0.0)	74 (9.6)	39 (10.4)	30 (11.9)	0 (0.0)	69 (10.9)	47 (14.0)	23 (11.8)	0 (0.0)	70 (13.2)	54 (17.5)	30 (15.2)	0	84 (16.6)	47 (18.2)	41 (21.6)	0 (0.0)	88 (19.6)
Not specified	-	-	-	-	-	-	-	-	1 (0.4)	-	1 (0.2)	-	-	-	-	-	-	-	-	-	-	-	-
Total	534 (100.0)	367 (100.0)	901 (100.0)	499 (100.0)	269 (100.0)	1 (100.0)	769 (100.0)	375 (100.0)	253 (100.0)	2 (100.0)	630 (100.0)	336 (100.0)	194 (100.0)	2 (100.0)	532 (100.0)	308 (100.0)	197 (100.0)	0 (0.0)	505 (100.0)	258 (100.0)	190 (100.0)	1 (100.0)	449 (100.0)

Age / Sex-wise distribution of *HIV+* cases detected in General population in Goa, 2015

Age group	2015			
	M	F	TS/TG	T
<14	9 (4.8)	5 (3.5)	0	14 (4.3)
15-24	18 (9.6)	6 (4.3)	0	24 (7.3)
25-34	51 (27.1)	38 (26.9)	0	89 (27.1)
35-49	81 (43.1)	71 (50.4)	0	152 (46.2)
>50	29 (15.4)	21 (14.9)	0	50 (15.1)
Not specified	0	0	0	0
Total	188 (100.0)	141 (100.0)	0	329 (100.0)

Note (Figures within brackets indicate percentage to total)

Chart No.9: Proportion of HIV+ Cases Detected In Different Age Groups As Per Gender 2015

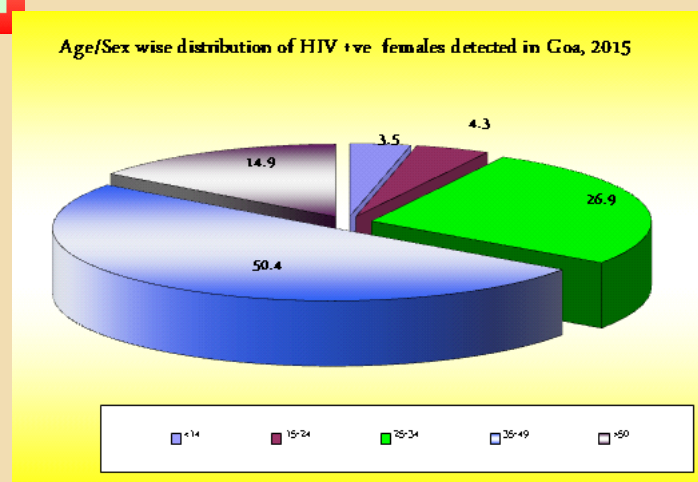
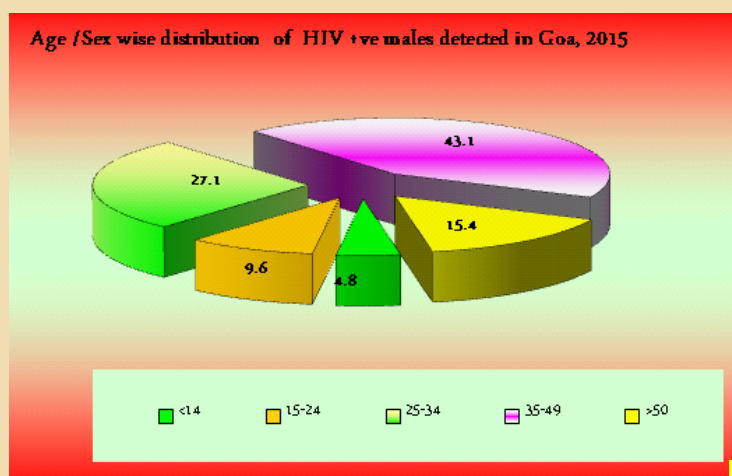


Table No.5 : Proportion (%) of *HIV+* cases by sex in different age groups, 2009 to 2015

Age group	2009			2010				2011				2012				2013				2014			
	M	F	T	M	F	TS/TG	T	M	F	TS/TG	T	M	F	TS/TG	T	M	F	TS/TG	T	M	F	TS/TG	T
<14	50.0	50.0	100.0	54.5	45.5	0.0	100.0	58.5	41.5	0	100.0	46.7	53.3	0	100.0	44.4	56.6	0	100.0	48.1	51.9	0.0	100.0
15-24	46.6	53.4	100.0	59.6	40.4	0.0	100.0	58.8	39.2	2.0	100.0	61.1	36.1	2.8	100.0	74.3	25.7	0	100.0	48.5	51.5	0.0	100.0
25-34	55.5	44.5	100.0	57.4	42.2	0.4	100.0	56.5	43.0	0.5	100.0	58.6	43.4	0	100.0	51.1	48.9	0	100.0	50.5	48.5	1.0	100.0
35-49	64.4	35.6	100.0	71.7	28.3	0.0	100.0	62.8	37.2	0	100.0	66.9	32.7	0.4	100.0	64.7	35.3	0	100.0	65.7	34.3	0.0	100.0
>50	66.5	39.5	100.0	64.9	35.1	0.0	100.0	56.5	43.5	0	100.0	67.1	32.9	0	100.0	64.3	35.7	0	100.0	53.4	46.6	0.0	100.0
Not Specified	-	-	-	-	-	-	-	-	100.0	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-
Total % wise	59.3	40.7	100.0	64.9	35.0	0.1	100.0	59.5	40.1	0.4	100.0	63.2	36.5	0.3	100.0	61.0	39.0	0	100.0	57.5	42.3	0.2	100.0

Age group	2015			
	M	F	TS/TG	T
<14	64.3	35.7	0.0	100.0
15-24	75.0	25.0	0.0	100.0
25-34	57.3	42.7	0.0	100.0
35-49	53.3	46.7	0.0	100.0
>50	58.0	42.0	0.0	100.0
Not specified	0.0	0.0	0.0	0.0
Total % wise	57.1	42.9	0.0	100.0

Epidemiological analysis of the reported HIV cases reveals that:

- The disease is prevalent in all parts of Goa and the majority of the cases are reported in the four costal talukas viz. Mormugao & Salcete in South Goa District and Bardez and Tiswadi in North Goa District.
- One out of three cases detected belonged to age group 15-29 years during 1999 to 2003. However, during 2004 to 2007 it is observed that one out of four cases detected belonged to this age group. From 2008 onwards, the age cohort has been changed by NACO. It is observed that 2012 onwards, one out of three detected cases belonged to the age group 15-34 years.
- During 2015, as much as 80.6 % of detected cases belonged to 15-49 age group.
- This disease is prevalent more among males than females. Of late, out of every five cases detected three are males. Whereas, in 1997 out of four cases detected three were males.
- The proportion of females among the sero-positive cases ranged between 10.1 to 12.3% during the years 1995 to 1998, 30.7 to 42.8% during 1999 to 2008 and declined from 2009 onwards and recorded 35%, 40% and 36% 42.1% in 2010, 2011 and 2012 respectively. During the year 2013, proportion of females among the sero-positive cases was 42.1%. During the year 2015 proportion of females among the sero-positive cases was 45.5%. The corresponding figures for the years prior to 1995 are not strictly comparable because certain high-risk groups like sex workers were targeted during these years. The above data thus reveals that HIV infection in women is on the rise and presently out of every three cases detected one is a female compared to one in eight or ten a few years back.
- Nearly 31.2% of the females infected belong to the age of 15-34 as compared to about 36.7% infected males who belonged to this age group in 2015.
- Sexual route is the predominant mode of transmission and it ranged between 83 to 95% followed by mother-to-child transmission 4 to 8% (refer Table No. 7). Infection through blood and blood products and infected syringes/ needles is negligible in Goa.

Table No.6: Proportion of females infected to total HIV+ cases detected in Goa, 1988 to 2015

Year	Proportion of females to total HIV cases detected (%)
1988	16.7
1989	27.8
1990	33.3
1991	46.7
1992	63.2
1993	56.1
1994	29.2
1995	12.3
1996	10.1
1997	11.2
1998	12.1
1999	34.4
2000	30.7
2001	32.8
2002	34.7
2003	38.7
2004	37.9
2005	40.7
2006	41.4
2007	39.5
2008	42.8
2009	40.7
2010	39.0
2011	43.3
2012	38.9
2013	42.1
2014	45.4
2015	45.5

Chart No.10: Proportion of females to total HIV+ Cases detected in Goa,2000 to 2015

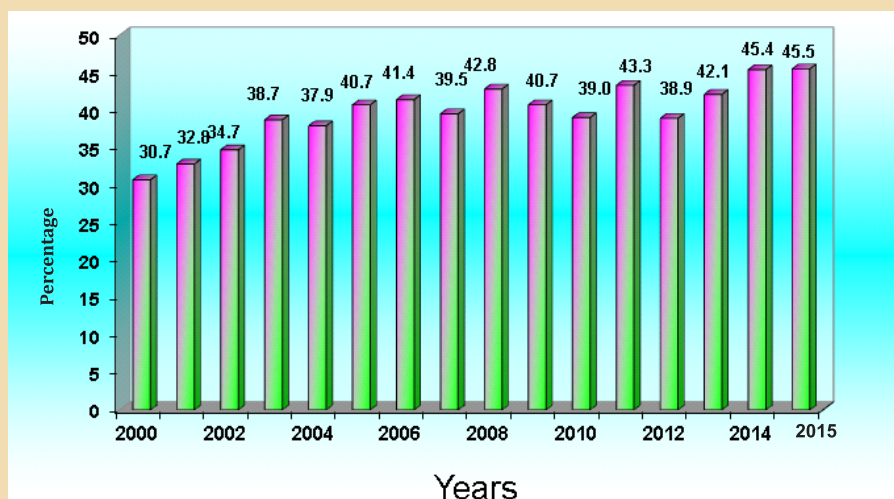


Table No.7: Route of transmission of sero-positive cases detected in Goa, 2000 to 2015

Route of transmission	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Sexual	731 (90.6)	666 (83.2)	903 (90.4)	968 (95.3)	894 (93.5)	952 (92.5)	868 (92.3)	966 (93.9)	882 (92.4)	856 (95.1)	711 (92.5)	587 (93.2)	498 (93.6)	478 (94.7)	416 (92.7)	311 (94.5)
Infected syringes and needles	-	-	6 (0.6)	-	4 (0.4)	7 (0.7)	5 (0.5)	-	-	3 (0.3)	5 (0.7)	1 (0.2)	0 (0.0)	2 (0.3)	1 (0.2)	2 (0.6)
Blood & blood Products	1 (0.1)	-	3 (0.3)	-	3 (0.3)	5 (0.5)	1 (0.1)	2 (0.2)	-	2 (0.2)	3 (0.3)	0 (0)	0 (0.0)	0 (0.0)	1 (0.2)	1 (0.3)
Parent to child	33 (4.1)	45 (5.6)	41 (4.1)	47 (4.6)	55 (5.8)	65 (6.3)	54 (5.8)	58 (5.6)	72 (7.6)	37 (4.1)	44 (5.7)	39 (6.2)	30 (5.6)	19 (3.8)	26 (5.8)	14 (4.3)
Others / not specified	42 (5.2)	90 (11.2)	46 (4.6)	1 (0.1)	-	-	12 (1.3)	3 (0.3)	-	3 (0.3)	6 (0.8)	3 (0.4)	4 (0.8)	6 (1.2)	5 (1.1)	1 (0.3)
Total	807 (100.0)	801 (100.0)	999 (100.0)	1016 (100.0)	956 (100.0)	1029 (100.0)	940 (100.0)	1029 (100.0)	954 (100.0)	901 (100.0)	769 (100.0)	630 (100.0)	532 (100.0)	505 (100.0)	449 (100.0)	329 (100.0)

Chart 11: Route of transmission of sero-positive cases detected in Goa, 2015

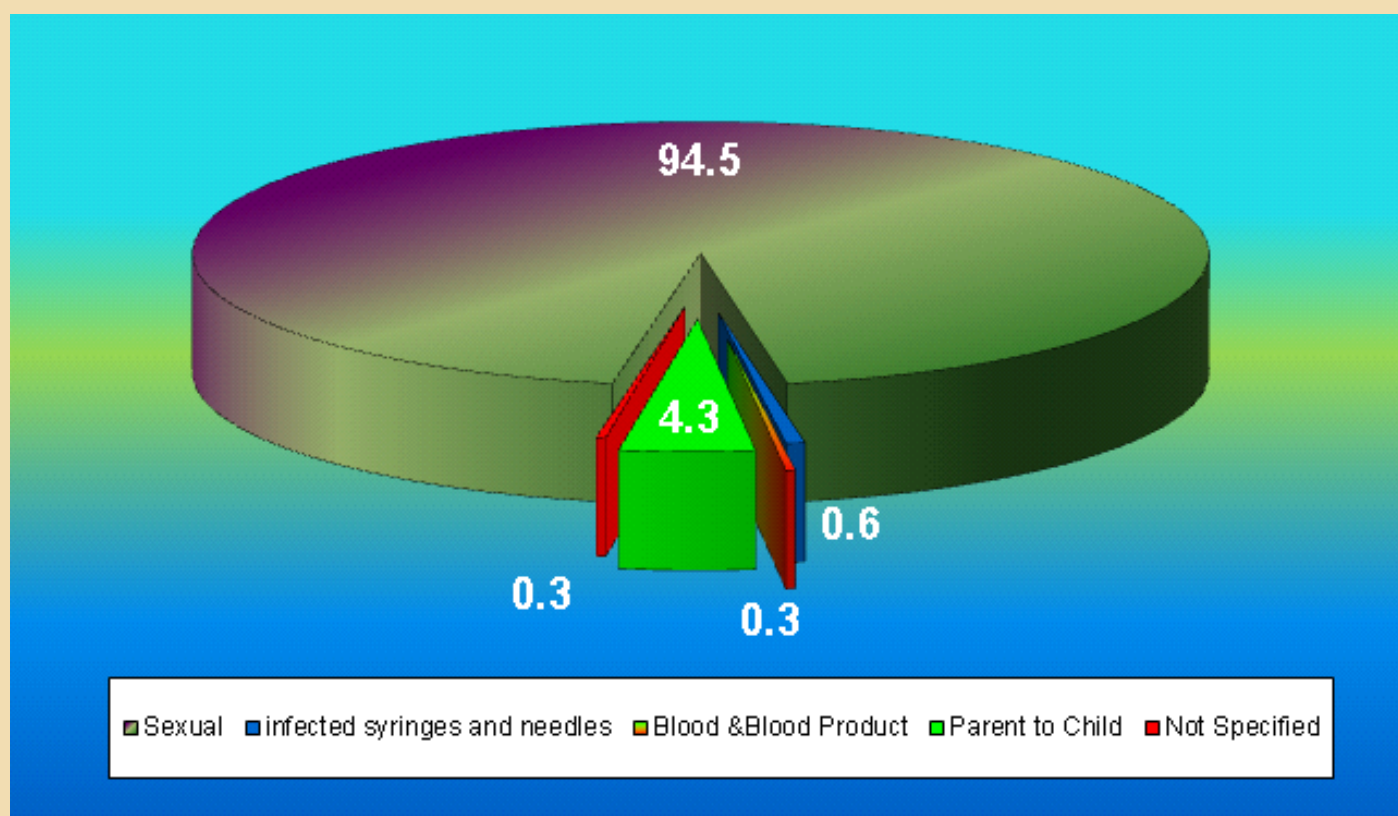


Table No 8. Sentinel Surveillance for HIV infection in Goa

Year	No. of sentinel sites	HIV prevalence (%)
2015	ANC-3	0.08
2012	ANC-3	0.25
2010	ANC-3	0.33
	MSM-1	4.53
	FSW-1	2.70
2008	STD-2	4.80
	ANC-3	0.68
	MSM-1	6.40
	FSW-1	6.40
2007	STD-2	5.60
	ANC-2	0.18
	MSM-1	7.93
2006	STD-2	8.60
	ANC-2	0.50
	MSM-1	4.80
2005	STD-2	14.01
	ANC-2	0.00
	MSM-1	4.90
2004	STD-2	16.02
	ANC-2	1.13
	MSM-1	1.68
2003	SW-1	30.14
	STD-2	14.7
	ANC-4	0.34
	MSM-1	9.1
2002	SW-1	24.00
	STD-2	13.15
	ANC-2	1.38
2001	SW -1	50.79
	STD -2	14.23
	ANC -2	0.50
2000	SW -1	53.20
	STD -2	12.02
	ANC -2	1.17
1999	STD -2	13.47
	ANC -2	0.75
1998	STD -2	19.61
	ANC -2	1.25
1997	STD -1	15.79
	ANC -2	0.67
	TB - 1	10.17
1996	STD -1	20.27
	ANC -1	0.68
1995	STD -1	21.65
1994	STD -1	12.64

In Goa, Annual Sentinel Surveillance to monitor the trends of HIV infection among high-risk groups as well as low-risk groups is being conducted regularly since 1993. Sentinel Surveillance methodology has been standardized by NACO and as such earlier data is not strictly comparable. In Round 2008, there were seven sentinel sites – STD (2), ANC (3), MSM (1) and FSW (1). During the period 2000 to 2003, there was a sentinel site for FSWs. With the demolition of the red light area at Baina in Mormugao taluka, this site has been discontinued since 2004. However, a new FSW site was identified during 2008 covering Mormugao and Salcete talukas. In 2010, there were seven sentinel sites – MSM (1), ANC (3) and FSW (1) and (2) composite site MSM and FSW respectively. The available data presents a varied picture.

- Sero-positivity in STD patients was around 20% during 1995, 1996 and 1998 and in other years it has varied between 12 to 16%. In 2007 and 2008 it has varied between 5.60 to 4.80%. There was no STD site during 2010 HSS Survey.
- In the red light area of Baina the prevalence among sex workers was more than 50% during 2000 and 2001, and in 2002 it was 24% and 30% in 2003. During June 2004, the red light area was demolished and the site has since been discontinued.
- During 2008, a new site of FSW was identified and the prevalence rate was 6.40 %.
- As per Sentinel Surveillance 2010, HIV prevalence among FSW and MSM is 2.70% and 4.53% respectively.
- Rate among antenatal mothers varied from 0.0 to 1.38% and the available trend presents a zig-zag picture. During 2005 to 2010, the rate among antenatal mothers was 0%, 0.5%, 0.18%, 0.67% and 0.33% respectively. During 2012, prevalence rate among antenatal mothers was 0.25% and in the year 2015 the prevalence rate among antenatal has come down to 0.08%.
- Based on the available data, Goa has been classified as a moderate prevalent State.

Table No. 9 presents the proportion of direct walk-in clients to total persons tested at ICTCs during the period 1999 to 2015. As can be seen from this table, the proportion of walk-in clients at the ICTCs ranged between 2.5 to 7.0% during the years 1999 to 2001. The corresponding figure for the year 2002 was to the tune of 42.3%. This steep rise was mainly due to the initiatives taken up for an intensive voluntary test drive during the AIDS Fortnight 1st to 14th December 2002. During the year 2008, the proportion of walk-in clients was 20.8% and in 2009 and 2010, it was about 30%. The HIV prevalence rate amongst walk-in clients ranged between 3.9 to 16.4% during the years 1999 to 2007 and during 2008 to 2015, HIV prevalence declined from 15.6% to 0.8%, whereas the number of persons tested has increased from 15,684 in 2008 to 42,160 in 2015.

Table No. 9: Proportion of direct walk-in to total persons tested at ICTCs, 1999-2015

Year	No. of persons tested for HIV	No. of direct walk-in persons tested	Proportion of direct walk-in to total persons tested (%)	Total persons tested positive		Direct walk-in persons tested positive	
				Number	%	Number	%
1999	7,804	264	3.4	750	9.6	78	10.6
2000	7,813	195	2.5	807	10.3	19	9.7
2001	7,216	506	7.0	801	11.1	83	16.4
2002	13,848	5,857	42.3	999	7.2	230	3.9
2003	11,682	2,948	25.2	1,016	8.7	179	6.1
2004	10,221	3,590	35.1	956	8.5	179	5.0
2005	11,814	4,312	36.4	1,029	8.7	372	8.6
2006	11,023	2,296	20.8	940	8.5	332	14.5
2007	12,485	2,500	20.0	1,029	8.3	391	15.6
2008	15,684	3,260	20.8	953	6.1	365	11.2
2009	21,220	6,362	30.0	901	4.2	401	6.3
2010	21,627	6,455	29.9	769	3.6	328	5.1
2011	25,532	11,917	46.7	630	2.5	282	2.4
2012	30,500	16,755	54.9	532	1.8	228	1.4
2013	38,482*	19,364	50.3	505	1.3	242	1.2
2014	41,685*	13,283	31.8	449	1.1	183	1.4
2015	42,160*	13,964	33.1	329	0.8	111	0.8

* Figure excludes number of clients tested at FICTCs

Table No. 10 Proportion of females and those in the age group 15-34 to total walk-in clients

Year	Proportion (%) of	
	Females among walk-in clients	Clients in the age-group 15-29
1999	33.7	40.5
2000	33.3	41.0
2001	39.5	40.9
2002	42.0	57.2
2003	80.8	62.8
2004	81.1	63.1
2005	78.3	59.4
2006	53.0	37.3
2007	38.5	44.9
Year	Females among walk-in clients	Clients in the age-group 15-34
2008	31.6	41.8
2009	27.4	58.3
2010	33.2	59.5
2011	36.3	60.0
2012	35.4	62.1
2013	37.7	62.6
2014	44.8	59.5
2015	52.0	57.3

Note: From 2008 onwards the age group 15-29 has been compared with 15-34 age groups

Table No. 11 Number of persons counseled at ICTCs 2002-2014

	2002			2003			2004			2005			2006			2007			2008		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Number of persons counseled																					
1.1 Pre-test	6111	5793	11904	6519	5115	11634	5509	5215	10724	5967	5803	11770	5837	5142	10979	7775	4782	12557	9727	6200	15929*
1.2 Post-test	619	843	1462	633	1764	2397	759	2419	3378	844	2762	3606	4892	4155	9047	6934	3996	10930	9556	6049	15607*
1.3 Follow-up	99	71	170	76	65	141	136	114	250	61	67	128	59	44	103	58	46	104	163	158	322
2. Proportion of persons Counseled (%)																					
2.1 Pretest	82.2	90.3	86.0	99.7	99.4	99.6	92.2	99.4	95.6	99.7	99.4	99.6	99.6	99.6	99.6	99.6	99.8	100.0	100.0	100.0	100.0
2.2 Post-test	8.3	13.1	10.6	9.7	34.3	20.5	12.7	46.1	30.1	14.1	47.3	30.5	83.5	80.5	82.1	88.8	85.4	87.5	95.0	97.0	95.5
2.3 Follow-up	15.2	20.5	17.0	11.8	17.6	13.9	21.8	34.2	26.2	1.0	1.1	1.0	1.0	0.9	0.9	0.7	0.9	0.8	0.7	1.6	1.0

	2009			2010			2011			2012			2013			2014						
	Male	Female	Total	Male	Female	Total	Male	Female	Ts/TG	Total	Male	Female	Ts/TG	Total	Male	Female	Ts/TG	Total				
1. Number of persons counseled																						
1.1 Pre-test	15007	6235	21245*	15038	6591	21639*	16124	9422	7	25553	19124	11374	7	30505	23467	15019	0	38486	25576	16107	2	41685
1.2 Posttest	13286	5501	18790*	14531	6356	20897*	15557	9049	7	24613	18840	11093	6	29939	23122	14708	0	37830	25161	15738	2	40901
1.3 Follow-up	149	119	268	254	218	472	278	236	0	514	379	243	5	627	394	315	0	709	349	316	1	666
2. Proportion of persons Counseled (%)																						
2.1 Pre-test	99.9	99.9	99.9	99.9	99.9	100.0	99.8	99.9	100.0	99.8	99.9	99.9	100.0	99.9	100.0	99.9	0	99.9	100.0	100.0	100.0	100.0
2.2 Post test	88.6	88.3	88.5	96.6	96.5	96.6	96.6	96.1	100.0	96.2	98.5	97.5	100.0	98.1	98.5	98.0	0	98.3	98.4	97.7	100.0	98.0
2.3 Follow-up	1.0	1.9	1.3	1.7	3.3	2.2	1.7	2.5	0	1.9	2.0	2.1	71.4	2.1	1.7	2.1	0	1.8	1.4	1.9	50.0	1.6

* including TS/TG

Number of persons counseled at ICTCs, 2015

	2015			
	Male	Female	TS/TG	Total
1. Number of persons counseled				
1.1 Pre-test	25056	17098	6	42160
1.2 Post-test	24826	16900	5	41731
1.3 Follow-up	318	257	0	575
2. Proportion of persons Counseled (%)				
2.1 Pre-test	100.0	100.0	100.0	100.0
2.2 Post-test	99.0	98.8	83.3	99.0
2.3 Follow-up	1.2	1.5	0	1.3

Chart No. 12 Proportion of direct walk-in to total persons tested, 2000 - 2015

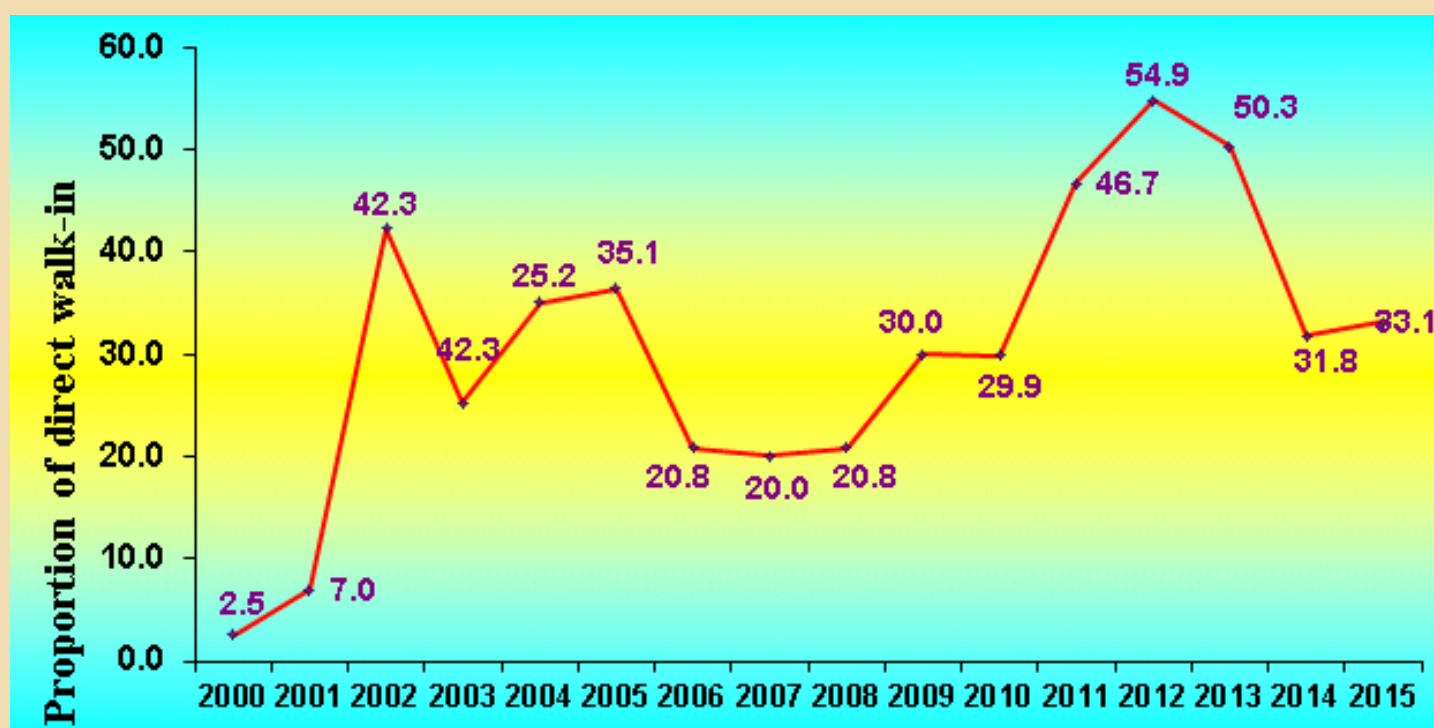


Table No. 10 depicts age-group/ sex-wise composition of direct walk-in persons undergoing HIV testing. It is observed that the proportion of direct walk-in females undergoing HIV testing was around 33 to 42% during the year 1999 to 2002. But these figures have registered a steep rise during 2003 and 2004 being around 81%. This is perhaps mainly due to the fact that with the launching of PPTCT programme, all the antenatal cases referred by the Gynaecology Department were treated as walk-in clients. However, during the year 2007, it declined to around 39%. For reporting purpose, the existing age groups i.e 15-29, 30-44 and 45 & above has been changed to 15-24, 25-34, 35-49 and 50 & above from 2008 onwards. In 2015 the proportion of females among walk-in clients is 52.0% and the clients in the age group 15-34 is 57.3%

Table No.11 presents the number of persons counseled at the ICTCs during 2002 to 2015. The proportion of reported number of clients receiving pre-test counseling was very high ranging between 95 to 100%, The proportion of patients who received post test counseling was 99% in 2015 and in the year 2004 it was only 30%. This achievement is mainly due to active participation of the public and awareness generation among the community.

Table No. 12 presents sex-wise particulars of persons tested at ICTCs for the years 2002 to 2015. It is seen from the data that proportion of females tested positive among walk-in clients as also total females, has registered a marginal fall since 2006 to 2008 and from 2009 a steady rise is observed. Among males, the proportion of tested positive has gradually increased from 8.8% to 10.6 % during 2002 to 2005. But from 2006 onwards the trend has been reversed, i.e. the proportion of positivity among males has decreased from 10.15% to 0.8% during 2006 to 2015. The same trend has been observed in voluntary walk-in clients among males. The proportion of positive among walk-in male clients has decreased from 17.7% in 2006 to 0.8% in 2015.

Table No.12: Sex-wise particulars of number of persons tested at ICTCs, 2002 to 2015

S. No.	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1. Total number of persons tested														
1.1 Male	7,434	6,538	5,974	5,980	5,860	7,806	11,215	14,988	15,031	16,107	19,121	23,467	25,576	25,056
1.2 Female	6,414	5,144	5,245	5,834	5,163	4,679	4,467	6,229	6,586	9,418	11,372	15,015	16,107	17,098
1.3 TS/TG	0	0	0	0	0	0	2	3	10	7	7	0	2	6
1.4 Total	13,848	11,682	11,221	11,814	11,023	12,485	15,684	21,220	21,627	25,532	30,500	38,482	41,685	42,160
2. Number tested positive														
2.1 Male	652	646	623	634	595	662	582	534	499	375	336	308	258	188
2.2 Female	347	370	333	395	345	367	371	367	269	253	194	197	190	141
2.3 TS/TG	0	0	0	0	0	0	1	0	1	2	2	0	1	0
2.4 Total	999	1,016	956	1,029	940	1,029	954	901	769	630	532	505	449	329
3. Proportion tested positive														
3.1 Male	8.8	9.9	10.4	10.6	10.15	8.5	5.2	3.6	3.3	2.3	1.8	1.3	1.0	0.8
3.2 Female	5.4	7.2	6.3	6.7	6.7	7.8	8.3	5.9	4.1	2.7	1.7	1.3	1.2	0.8
3.3 TS/TG	0	0	0	0	0	0	0	0	10.0	28.5	28.5	0	50.0	0.0
3.4 Total	7.2	8.7	8.5	8.7	8.5	8.3	6.1	4.2	3.6	2.5	1.8	1.3	1.1	0.8
4. Total number of walk-in clients tested														
4.1 Male	2,225	570	677	934	1,078	1,536	2,231	4,616	4,321	7,581	10,630	12,060	7323	6694
4.2 Female	3,632	2,378	2,912	3,378	1,218	964	1,032	1,746	2,125	4,330	6,119	7,304	5958	7268
4.3 TS/TG	0	0	0	0	0	0	0	0	9	7	6	0	2	2
4.4 Total	5,857	2,948	3,590	4,312	2,296	2,500	3,263	6,362	6,455	11,912	16,755	19,364	13,283	13,964
5. Number tested positive among walk-in clients														
5.1 Male	132	107	92	192	191	228	186	209	181	162	131	156	98	58
5.2 Female	98	78	87	180	141	163	179	192	146	120	96	86	84	53
5.3 TS/TG	0	0	0	0	0	0	0	0	1	2	1	0	1	0
5.4 Total	230	265	179	372	332	391	365	401	328	284	228	242	183	111
6. Proportion tested positive among walk-in clients														
6.1 Male	5.9	18.8	13.6	20.5	17.7	14.8	8.3	4.5	4.2	2.1	1.2	1.3	1.3	0.8
6.2 Female	2.7	3.3	3.0	5.3	11.5	16.9	17.3	11.0	6.9	2.8	1.6	1.1	1.4	0.7
6.3 TS/TG	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	28.5	16.7	0	50.0	0
6.4 Total	3.9	9.0	5.0	8.6	14.4	15.6	11.2	6.3	5.1	2.4	1.4	1.2	1.4	0.8

Goa HIV/AIDS Situation and Response 2015

The number of AIDS cases and AIDS deaths reported to Goa State AIDS Control Society in 2015 is 29 and 39 respectively. The reported number of AIDS cases during the period from 1989 to 2015 were 1,694 and AIDS related deaths during the period from 1993 to 2015 were 1090.

Chart No.13: Trend in number of AIDS cases reported in Goa, 2000 to 2015

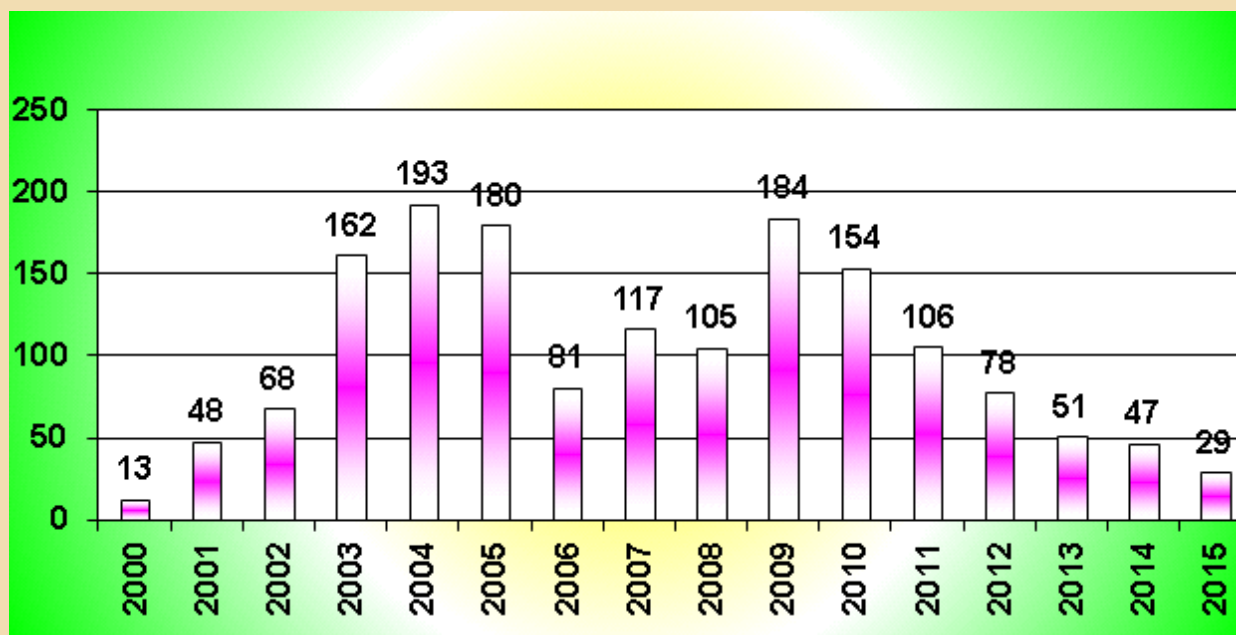
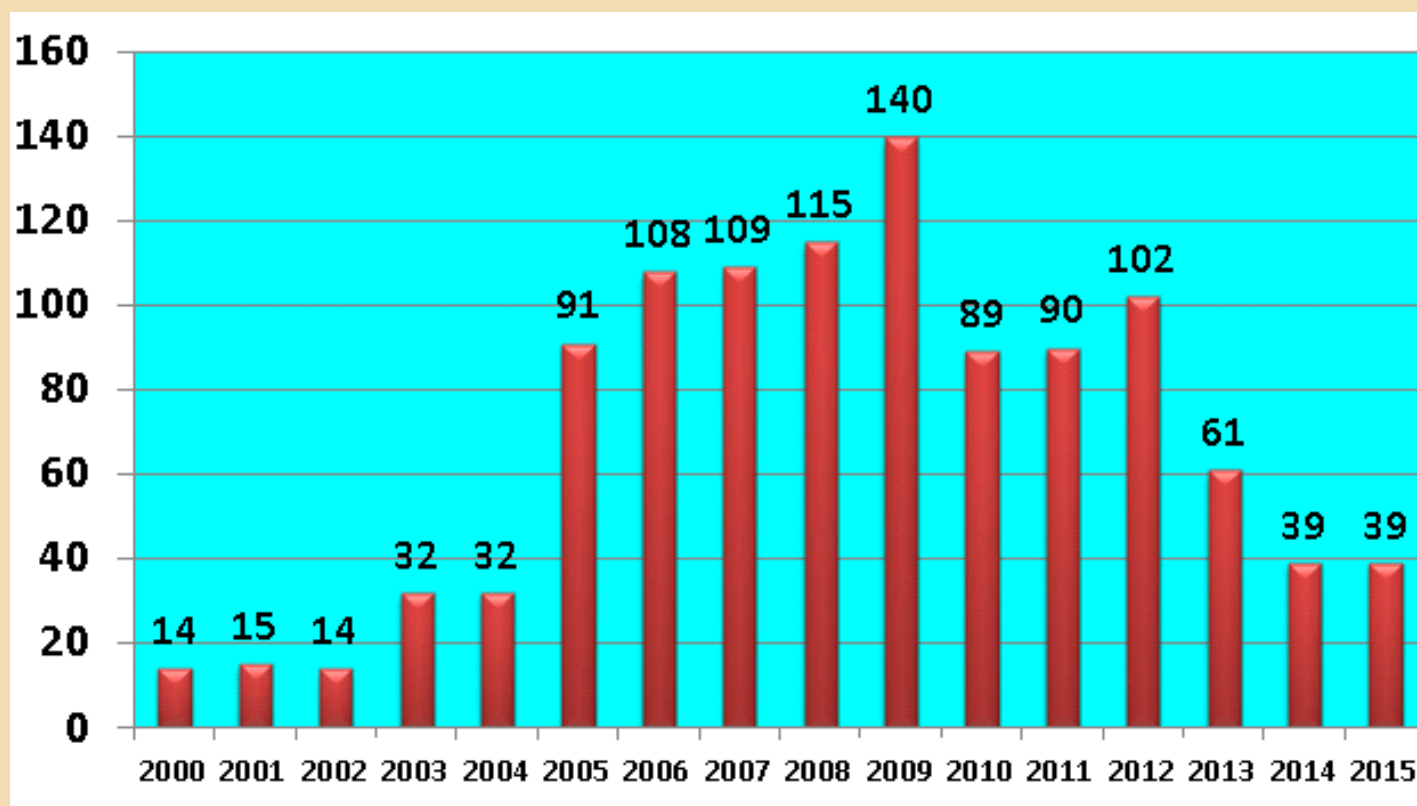


Table No.13: Sex-wise reported number of AIDS Deaths, 1993-2015

Year	Male	Female	TS/TG	Total
Cumulative figures (1993-2000)	11	3	0	14
2001	11	4	0	15
2002	12	2	0	14
2003	21	11	0	32
2004	23	9	0	32
2005	67	24	0	91
2006	75	33	0	108
2007	67	42	0	109
2008	88	27	0	115
2009	91	49	0	140
2010	60	29	0	89
2011	55	35	0	90
2012	67	34	1	102
2013	34	27	0	61
2014	28	11	0	39
2015	19	20	0	39
Total	729	360	1	1090

Chart No.14: Reported AIDS Deaths in Goa, 2000 to 2015



2. Goa's Response to HIV/AIDS

2.1 Introduction

When the first reported cases of HIV/AIDS were detected in 1987, Government of Goa initiated steps to target population at risk of infection with HIV screening and prevention efforts. In Goa, AIDS control programme was launched in May 1992 with the setting up of the 'AIDS Cell' under the Directorate of Health Services. As per the guidelines of Government of India, for smooth flow of funds to the programme and for greater functional autonomy, Goa State AIDS Control Society (GSACS) was established in April 1999. For effective control and prevention of the epidemic, GSACS primarily facilitates and directs various activities at the State and local levels. The first phase of the National AIDS Control Programme (NACP) was implemented during 1992-1999 mainly to slow down the spread of HIV, to reduce future morbidity, mortality and the impact of AIDS by initiating a major effort in the prevention of HIV transmission. The second phase of NACP (1999-2006) had two key objectives viz. (i) Reduce the spread of HIV infection in Goa and (ii) Strengthen Goa's response to HIV/AIDS on a long-term basis. Some of the strategies adopted in its efforts to prevent and control HIV/AIDS were:

- Prevent further spread of the disease by:
 - ❖ Improving HIV/AIDS awareness and providing necessary skills/tools to protect themselves.
 - ❖ Controlling STDs including condom promotion.
 - ❖ Ensuring availability of safe blood and blood products.
- Creating a socio-economic environment that enables individuals to protect themselves from infection and allows families and communities to provide care and support to people living with HIV/AIDS.
- Improve services at all levels – hospitals and community based home care – that provide care for people living with HIV/AIDS.

The Phase-III (2007-12) of National AIDS Control Programme has no doubt built on the strengths developed, lessons learnt, gaps identified and experiences gained in the previous two phases of NACP and consolidate the achievements. However, HIV can no more be the sole agenda of one organization or department. Mainstreaming HIV/ AIDS into the exiting responses of various development processes and Government/ non-Government responses is a cost effective and efficient approach to address the direct and indirect causes and impact of the epidemic. Strengthened partnerships with traditional and non-traditional stakeholders from Government, civil society and private sector were a critical strategy for facilitating sustained outreach and coverage. The long-term vision of NACP III was to make HIV/ AIDS everybody's responsibility and move towards the goal to stabilize HIV prevention- **Zero New HIV infection.**

Some of the visions envisaged in the NACP-III

- To create an enabling environment conducive for mobilization and empowerment and achieving saturated coverage (80%) of high-risk population towards reducing the risk of HIV infection by 2012.

This included addressing the core issue of capacity building among all constituencies involved in the planning and implementation of TI.

- To have a holistic approach to service delivery and provide all the required services at one stop centre in an integrated mode. Improve quality of care, enhance and support initiatives for HIV infected ensuring sustained care and support with 90% coverage for OIs/ ART.
- To have a cohesive training strategy to translate the overall objectives of strategic planning for HIV/ AIDS prevention and control into reality with capacity building as the guiding principle.
- Decentralization of the entire planning and implementation process down to district/ taluka/ grass root levels to match the ground realities.
- To protect all sexual acts having risk of HIV/ STI transmission and unintended pregnancies by enhancing knowledge and behavior change, increasing access and minimizing wastage of condoms and directing specific condom promotion strategies.
- To prevent further spread of HIV to the general population based on the vulnerability. The vision is: 'Together we will win against HIV/ AIDS through social ownership and social action.'
- Greater Involvement of People living with HIV/AIDS (GIPA) i.e. empowered involvement of people living or affected by HIV/ AIDS, which is critical for appropriate and effective responses.
- Everyone is having access to rights without any discrimination, including the highest standard of health, living, services, information, support structures, facilities and networks.
- To mitigate the vulnerabilities of children, adolescents, young people, women and other gendered identities in relation to HIV/ AIDS by enhancing their access and participation to comprehensive and appropriate HIV/ AIDS programme in the prevention of HIV, care and support continuum through rights based gender sensitive approach.
- To have evidence based strategic planning and better programme management, Strategic Information Management Unit (SIMU) to be set up at the State level and M & E units to be set up at the district level with requisite capacity building training for M & E Officer and Project Managers on how to use data for management and in conducting self assessment of service quality & client satisfaction.

NACP – IV (2012-2017)

National AIDS Control Programme Phase III (NACP III) was launched in July 2007 with the goal of Halting and Reversing the Epidemic by the end of project period in mid 2012. The National AIDS Control Organization (NACO) has initiated the process to start the next phase of the program. The program will build on the successes of the robust NACP III and ensure completion of the reversal of the epidemic through enhanced prevention linked with care support and treatment.

The NACP III strategy and implementation plan was developed based on the synthesis of evidence with wide range of consultations with government departments, civil society, public and private sector partners, NGOs, PLHA networks. The entire process was a home grown yet world class program that was appreciated by the global community.

Program reviews indicate that most of the targets set for NACP III would be achieved by mid 2012 in terms of scale-up of coverage of HRG, safe blood supply, testing services, scale-up of ART and various interventions with community ownership and following principles such as GIPA. However, consolidating the gains and ensuring quality and coverage will require attention in the next few years.

The process to develop the plan for the next phase of the programme is being initiated. The next phase will continue to be inclusive and focussed on marginalised, weaker sections and hard-to-reach population. NACP has explored various approaches towards this. NACP IV will continue to provide care, support and treatment to all eligible population along with focused prevention services for the high-risk groups and vulnerable populations.

The NACP IV planning is adopting the inclusive, participatory and widely consultative approach similar to that of NACP III and is further strengthening on the globally acclaimed and successful planning efforts of NACP III. The process will essentially involve a wide range of consultations with a large number of partners including government departments, development partners, non-governmental organizations, civil society, representatives of people living with HIV, positive networks and experts in various subjects. NACP IV development will use specific mechanisms and follow a structured process.

Goals & Objectives

Objective 1: Reduce new infections by 50% (2007 Baseline of NACP III)

Objective 2: Comprehensive care, support and treatment to all persons living with HIV/AIDS

Components

Component 1: Intensifying and Consolidating Prevention services with a focus on HRG and vulnerable populations

This component will support the scaling up of TIs with the aim of reaching out to the hard to reach population groups who do not yet access and use the prevention services of the program, and saturate coverage among the HRGs. In addition, this component will support the bridge population, i.e. migrants and truckers. Component 1 includes the following two subcomponents:

1.1 Scaling up coverage of TIs among HRG

The interventions under this sub-component will include: (i) the provision of behavior change interventions to increase safe practices, testing and counseling, and adherence to treatment, and demand for other services; (ii) the promotion and provision of condoms to HRG to promote their use in each sexual encounter; (iii) provision or referral for STI services including counseling at service provision centers to increase compliance of patients with treatment, risk reduction counseling with focus on partner referral and management; (iv) needle and syringe exchange for IDUs as well as scaling up of Opioid Substitution Therapy (OST) provision. This sub-component also includes the financing of operating costs for about 25 State Training Resource Centers as well as participant training costs over a period of 5 years.

1.2 Scaling up of interventions among other vulnerable populations

The activities under this subcomponent will include: (i) risk assessment and size estimation of migrant population groups and truckers at transit points and at workplaces; (ii) behavior change communications (BCC) for creating awareness about risk and vulnerability, prevention methods, availability and location of services, increase safe behavior and demand for services as well as reduce stigma; (iii) promotion and provisioning of condoms through different channels including social marketing; (iv) development of linkages with local institutions, both public and NGO owned, for testing, counseling and STI treatment services; (v) creation of “peer support groups” and “safe spaces” for migrants at destination; (vi) establishment of need-based and gender-sensitive services for partners of IDUs; and (vii) strengthening networks of vulnerable populations with enhanced linkages to service centers and risk reduction interventions, specifically condom use.

Component 2: Expanding IEC services for (a) General population and (b) High risk groups with a focus on behavior change and demand generation

IEC has been an important component of the NACP. With the expansion of services for counseling and testing, ART, STI treatment and condom promotion, the demand generation campaigns will continue to be the focus of the NACP-IV communication strategy. IEC will remain an important component of all prevention efforts and will include:

- Behavior change communication strategies for HRGs, vulnerable groups and hard to reach populations
- Increasing awareness among general population, particularly women and youth.

Component 3: Comprehensive Care, Support and Treatment

NACP IV will implement comprehensive HIV care for all those who are in need of such services and facilitate additional support systems for women and children affected and infected with HIV / AIDS. It is envisaged that greater adherence and compliance would be possible with wide network of treatment facilities and collaborative support from PLHIV and civil society groups. Additional Centers of Excellence (CoEs) and upgraded ART Plus centers will be established to provide high-quality treatment and follow-up services, positive prevention and better linkages with health care providers in the periphery.

With increasing maturity of the epidemic, it is very likely that there will be greater demand for 2nd line ART, OI management. NACP IV will address these needs adequately. It is proposed that the comprehensive care, support and treatment of HIV/AIDS will inter alia include: (i) anti-retroviral treatment (ART) including second line (ii) management of opportunistic infections and (iii) facilitating social protection through linkages with concerned Departments/Ministries. The program will explore avenues of public-private partnerships. The program will enhance activities to reduce stigma and discrimination at all levels particularly at health care settings.

Component 4: Strengthening institutional capacities

The objective of NACP IV will be to consolidate the trend of reversal of the epidemic seen at the national level to all the key districts in India. Programme planning and management responsibilities will be strengthened at state and district levels to ensure high quality, timely and effective implementation of field level activities and desired programmatic outcomes.

The planning processes and systems will be further strengthened to ensure that the annual action plans are based on evidence, local priorities and in alignment with NACP IV objectives. Sustaining the epidemic response through increased collaboration and convergence, where feasible, with other departments will be given a high priority during NACP IV. This will involve phased integration of the HIV services with the routine public sector health delivery systems, streamlining the supply chain mechanisms and quality control mechanisms and building capacities of governmental and non-governmental institutions and networks.

Component 5: Strategic Information Management Systems (SIMS)

The roll-out of SIMS is ongoing and will be firmly established at all levels to support evidence based planning, program monitoring and measuring of programmatic impacts. The surveillance system will be further strengthened with focus on tracking the epidemic, incidence analysis, identifying pockets of infection and estimating the burden of infection. Research priorities will also be customized to the emerging needs of the program. NACP IV will also document, manage and disseminate evidence and effective utilization of programmatic and research data. The relevant, measurable and verifiable indicators will be identified and used appropriately.

For the control and prevention of HIV/AIDS in Goa, GSACS has initiated various measures and has also developed certain infrastructure facilities/ services, which are listed below:

2.2 Blood Safety

- All the blood banks under the State Government i.e. those attached to the Goa Medical College and the two district hospitals viz. Hospicio and North Goa District Hospital (Asilo) have been modernized and suitably strengthened with requisite blood bank equipments, trained manpower, consumables, chemicals and other infrastructure.
- Testing of every unit of blood for detecting infections for diseases like Hepatitis B & C, Syphilis and Malaria apart from testing for HIV has been made mandatory to ensure that only safe blood is released for transfusion as per the National Blood Safety Policy. For this purpose, necessary kits, equipment, reagents, glassware and blood bags are supplied to the above three blood banks by Goa State AIDS Control Society and Directorate of Health Service.
- Goa State Blood Transfusion Council has been set up to oversee blood transfusion services and ensure effective implementation of the programme and better management of blood banking services at State/District levels.
- Professional donors have been totally banned in Goa and efforts are being made to gradually phase out replacement donors and achieve 100% voluntary donation programme. Voluntary donation has increased from 28.7% in 2000 to 78.3% in 2015.

- Regular blood donors and organizations/ Institutions who organize blood donation camps on a regular basis were felicitated by the Goa State Blood Transfusion Council at the State level functions on Voluntary Blood Donation Day i.e. 1st October and 14th June, World Blood Donors Day in recognition of their contribution.
- Replacement donors are being motivated to become regular voluntary donors. Young people are being encouraged to form voluntary blood donation clubs in colleges, etc.
- Sustained awareness campaigns to educate and motivate people to donate blood voluntarily using various media are being undertaken.
- A Blood Component Separation Unit (BCSU) has been set up at Goa Medical College in October 2002, for proper and optimal clinical use of blood for transfusion. The BCSU also helps to improve availability of adequate blood components and their use instead of whole blood.

Blood Safety Programme in NACP-IV

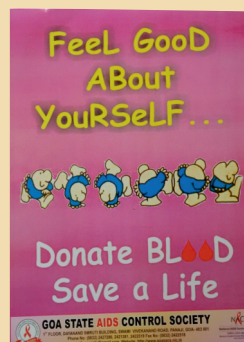
Although Blood Safety is currently an integral component of NACP, it has been recommended by the Working Group to change the nomenclature from Blood Safety to Blood Transfusion Service, in view of the expanded scope with inclusion of other elements of Blood Transfusion Services. Further, in view of the changing role of this component, till the time, it is recognized as a separate programme under Department of AIDS Control, it will continue to be reflected under NACP - IV.

During NACP-IV, the aim of this activity is to achieve 90% of the annual requirement of blood exclusively through voluntary non-remunerated donation.

- Educating the society for recruitment and retention of low-risk blood donors.
- Training of voluntary organizations in donor recruitment and retention.
- Integrate messages on blood donation in the school curricula.
- One dedicated donor motivator cum counselor to be provided up to district level blood bank.
- Augment partnerships with government departments and non-governmental organizations such as national Red Cross Society, voluntary blood donor organizations, National Service Scheme, various institution and Youth. For targeting rural areas, co-ordinate with Nehru Yuva Kendra's to promote voluntary blood donation.
- Computerization up to district level blood bank will be required for implementation of networking with one data entry operator in each blood bank and a nodal officer at the state level.
- The mechanism of transportation of blood and blood products to be strengthened.
- There is a need to introduce a phase wise automation in large volume blood banks.
- To institute EQAS programme for blood bank serology; Proficiency testing (EQAS) will be initiated to improve quality.
- Implementation of quality management systems in all blood banks which includes support accreditation of blood; and develop quality policy, procedures & reporting formats to ensure uniformity in documentation and traceability.

Appropriate use of blood and blood products

- Hospital transfusion committees would be set up in all medical colleges and district hospitals so that regular performance audit is preformed and feedback given to health providers on use of blood and blood products.
- Haemo-vigilance to be piloted in select centres and then scaled up in a phased manner



In Goa there are in all five blood banks - three under the State Government and two private. Table No.14 presents the number of blood units collected in the blood banks attached to Goa Medical College, North Goa District Hospital (Asilo Hospital) and Hospicio Hospital. As can be seen from the table, about 8 to over 19 thousand units of blood are collected annually in these blood banks of which Goa Medical College alone accounts for 80 to 90%, followed by Hospicio Hospital with about 8 to 15 %. The number of blood units collected by the private blood banks is relatively very less in Goa.

Table No.14: Number of blood units screened for HIV in State Government Blood Banks 2000 to 2015

Year	No. of blood units collected			HIV reactive			%age reactive		
	Voluntary	Replacement	Total	Voluntary	Replacement	Total	Voluntary	Replacement	Total
2000	2,292 (28.7)	5,699 (71.3)	7,991 (100.0)	22	93	115	0.96	1.63	1.44
2001	2,720 (30.9)	6,088 (69.1)	8,808 (100.0)	35	82	117	1.29	1.35	1.33
2002	3,120 (33.3)	6,254 (66.7)	9,374 (100.0)	47	120	167	1.51	1.92	1.78
2003	4,453 (45.3)	5,373 (54.7)	9,826 (100.0)	25	77	102	0.56	1.43	1.04
2004	6,105 (55.8)	4,837 (44.2)	10,942 (100.0)	52	55	107	0.85	1.14	0.98
2005	6,231 (53.4)	5,440 (46.6)	11,671 (100.0)	27	58	85	0.43	1.07	0.73
2006	6,777 (58.6)	4,781 (41.4)	11,558 (100.0)	8	23	31	0.11	0.48	0.26
2007	7,764 (62.6)	4,632 (37.4)	12,396 (100.0)	26	21	47	0.34	0.45	0.38
2008	8,512 (61.4)	5,350 (38.2)	13,862 (100.0)	24	35	59	0.28	0.65	0.42
2009	9,910 (65.8)	4,266 (34.2)	14,176 (100.0)	19	15	34	0.19	0.35	0.23
2010	12,053 (76.5)	3,706 (23.5)	15,759 (100.0)	29	16	45	0.24	0.43	0.29
2011	11,612 (76.5)	3,571 (23.5)	15,183 (100.0)	23	7	30	0.20	0.20	0.20
2012	12,937 (85.8)	2,141 (14.2)	15,078 (100.0)	13	3	16	0.10	0.14	0.11
2013	13,885 (84.3)	2,578 (15.7)	16,463 (100.0)	12	1	13	0.08	0.04	0.08
2014	15745 (82.7)	3274 (17.3)	19019 (100.0)	18	4	22	0.11	0.12	0.11
2015	15265 (78.3)	4166 (21.7)	19431 (100.0)	17	2	19	0.09	0.04	0.09

Table No. 15: Number of blood units screened for other transfusion related diseases in State Government Blood Banks 2000 to 2015

Year	No. Tested	Reactive				%age reactive			
		Hep. B	Hep. C	VDRL	Malaria	Hep. B	Hep. C	VDRL	Malaria
2000	7,490	99	N.A.	14	0	1.32	N.A.	0.19	0.00
2001	8,726	142	N.A.	33	0	1.63	N.A.	0.38	0.00
2002	9,429	109	20	13	0	1.16	0.21	0.14	0.00
2003	9,826	101	125	10	1	1.03	1.27	0.10	0.01
2004	10,942	102	92	14	0	0.93	0.84	0.13	0.00
2005	11,671	92	57	22	0	0.79	0.49	0.19	0.00
2006	11,558	78	54	21	0	0.67	0.46	0.18	0.00
2007	12,396	84	56	19	0	0.68	0.45	0.15	0.00
2008	13,862	106	60	18	0	0.76	0.43	0.13	0.00
2009	14,176	108	27	11	0	0.76	0.19	0.08	0.00
2010	15,759	114	31	17	0	0.72	0.20	0.10	0.00
2011	15,183	106	26	5	0	0.70	0.17	0.03	0.00
2012	15,078	70	13	15	0	0.46	0.09	0.10	0.00
2013	16,463	91	15	4	0	0.55	0.09	0.02	0.00
2014	19,019	112	33	10	0	0.58	0.17	0.05	0
2015	19431	82	25	1	1	0.42	0.12	0.005	0.005

*Covers three Blood banks under Goa Government only

Table No. 16: Blood bank wise number of blood units collected, 2015

Reporting unit	Voluntary Collection	Replacement Collection	Total Collection	% of Voluntary Collection	Collection in Camps	Camps Organised	% camp collection	HIV positive	%HIV positivity
Blood Bank, Goa Medical College, Bambolim	12285	3956	16241	75.64	10288	234	63.3	5	0.03
Blood Bank, North Goa District Hospital, Mapusa	460	18	478	96.23	400	24	83.7	4	0
North Goa	12745	3974	16719	76.2	10688	258	63.9	9	0.05
Blood Bank, Hospicio Hospital, Margao	2520	192	2712	92.9	1842	69	67.9	10	0.37
Blood Bank, SMRC/Vivus, Marmugao	59	128	187	31.6	0	0	0	0	0.00
Apollo Victor Hospital, Margao	21	49	70	30.0	0	0	0		
South Goa	2600	369	2969	87.6	1842	69	62.0	10	0.34
Total	15345	4343	19688	77.9	12530	327	63.6	19	0.10

- Proportion of Blood units collected in the three blood banks under State Government was 19431 of which 16241 was from GMC.
- Voluntary donation accounted for nearly **15345** blood units collected. In the State Government blood banks the proportion of voluntary donation was 78 %.
- In all, 327 bloods donation camps were organized, 234 by GMC, 69 by Hospicio and 24 by North Goa District Hospital
- 12530 units of blood were collected in the camps by the three Blood Banks, which constituted 78% of the total blood units collected by these three Blood Banks.

Average number of blood units collected per camp during 2015

GMC	Hospicio	North Goa District Hospital
43.96	26.69	16.66

Table No.17: Blood Collection status of 5 years 2011 to 2015

Year	Total collection	Voluntary collection	Voluntary percentage	Number of VBD camps	HIV Seropositivity
2011	16188	11559	71%	202	0.2
2012	16172	13113	81%	231	0.09
2013	17294	14089	82%	273	0.08
2014	19668	15885	81%	313	0.11
2015	19668	15345	78%	327	0.09

2.3 Sexually Transmitted Infection (STI) / Reproductive Tract Infection (RTI) Control Programme

In view of the importance of treatment and control of STIs/RTIs in relation to HIV infection, STD Control Programme has been made an integral component of AIDS control policy for which Government of India has accorded top priority.

In Goa, the STD Control Programme was being implemented as a part of the National STD Control Programme since mid sixties by the Directorate of Health Services. With the arrival and spread of HIV infection and because of its strong relation with STD, the programme was brought under the purview of National AIDS Control Programme in the year 1992 as per the national pattern. With this, the programme has received the much needed boost as follows:

The STI/RTI Prevention & Control Programme, as it is known now is implemented through the following systems in the State of Goa:

- SACS funded Designated STI/RTI Clinics
- All NRHM supported CHCs/PHCs
- TI NGOs for High-Risk Groups

Goa SACS has made budgetary provision for STI/RTI Prevention & Control Programme for trainings, supportive supervision, salaries, consumables, procurement including IEC etc.

Adequate and comprehensive guidelines have been devised for case management including diagnosis, treatment, individual counseling, partner notification, testing, provision of condoms, etc.

STI/RTI management has been further simplified by syndromic management with the availability of STI/RTI colour coded drugs which are uniform across the country.

Orientation trainings, both induction and refresher trainings have been conducted every year for all the medical and paramedical workers engaged in providing STI/RTI services through syndromic approach have been conducted every year. Trainees include Resource faculty, DSRC Medical Officers, Lab. technicians, Counsellors, NRHM health facilities personnel and private practitioners who have been trained in STD syndromic case management i.e. management of STIs/RTIs based on specific symptoms and not dependent on laboratory investigations.

All the four Government Designated STI/RTI Clinics (DSRCs) in Goa have been branded as “Suraksha Clinics” for standardization and greater visibility. These Clinics are located in the Department of Skin and V.D., Goa Medical College; Hospicio Hospital, Margao; North Goa District Hospital (Asilo), Mapusa & Cottage Hospital, Chicalim and have been strengthened by providing technical support, equipment, reagents, drugs and manpower in the form of STD Counsellor in each clinic.

SACS has good convergence activities with NRHM as well as TI NGOs so that there is efficient service delivery at all level.

Management of STI/RTI has been incorporated/ integrated into the general health service/peripheral health system; so that patients are able to access treatment at any health centre convenient to them and also unnecessary referrals can be avoided leaving the specialized service free for management of complicated cases.

For High-Risk Groups (HRGs) such as FSWs, MSM, IDUs, Migrant labour, Truckers, etc. the TI NGOs working in coordination with Preferred Private Providers (PPPs) provide comprehensive STI care with special emphasis on early detection and prompt treatment of STIs/RTIs, regular quarterly medical checkup to screen for asymptomatic infections and presumptive treatment for new HRGs and those who are met after 6 months and biannual screening for HIV and Syphilis. These PPPs are those doctors who are preferred by the HRGs and have been trained in STI/RTI syndromic management to ensure standardized quality service delivery. At present, 14 such PPPs have been identified.

Development of appropriate laboratory services for the diagnosis of STI/RTI including the State Reference Centre at Department of Microbiology, GMC, Bambolim.

Early diagnosis and treatment of especially asymptomatic infections through case finding and regular screening has been advocated/ encouraged.

Prevention and transmission of STD/HIV infection through IEC activities to raise awareness and educate the people regarding responsible sexual behavior, safer sex, risk reduction including condom usage and promotion of appropriate health care seeking behaviour.

Regular surveillance of ongoing programmes in order to assess epidemiological situation, monitor and evaluate the programmes through SIMS.

Greater emphasis is placed on strategies to prevent STI/RTI through integration of STD prevention in “IEC for HIV prevention” as well as service related activities.

Sensitization of community about the problems related to STIs/ RTIs through regular IEC activities including TV, Radio and Mass media.

Lessons learnt in NACP-III

Strengthening of cross referrals/ linkages between TI NGOs, DSRCs, NRHM and ART Centre is important for the success of STD Control Programme as well as HIV Prevention Programme.

There is no data available regarding STI/RTI patients undergoing treatment in Public & Private Sector Undertakings and hence, a MOU has been signed with ONGC, Railways, Professional organization like IADVL, FOGSI and IMA at National level. Accordingly, in the State of Goa, advocacy programmes were conducted in GSL, MPT, Sesa Goa for both the health care providers and their staff and also with professional organization like IMA.

Action points

- Making gynaecologists and surgeons an integral part of STI /RTI Prevention Programme. Although linkages and coordination activities have been initiated they have to be further strengthened.
- Better convergence between SACS and NRHM in RCH activities
- Coordination with other agencies like IMA, ESI, MPT (Mormugao Port Trust),Goa Shipyard Ltd., Railways, Mining and Industrial Estates, defense etc. in the form of training of Doctors, Nurses, Lab. technicians in STI/RTI service delivery programme and monitoring of the programme so as to have standardized treatment and reporting protocols.

2.4 STD Surveillance

The HIV Positivity profile among STD patients in Goa during 1994 to 2008 is presented in Table No. 18. The details of STDs detected in the Government STD Clinics during the period 2008 to 2015 are presented in Table No.19. In Goa, the most common STD among males is Chancroid and Syphilis and among females Candidiasis.

Table No. 18: HIV positivity profile among STD patients in Goa, 1994 - 2008

Year	Prevalence rate (%) among STD attendees	Sentinel Sites
1994	12.64	STD clinic Baina
1995	21.65	STD clinic Baina
1996	20.27	STD clinic Baina
1997	15.79	STD clinic Margao
1998	19.61	STD clinic Baina and Margao
1999	13.47	STD clinic Baina and Margao
2000	12.02	STD clinic Margao and GMC
2001	14.23	STD clinic Margao and GMC
2002	13.15	STD clinic Margao and GMC
2003	14.70	STD clinic Margao and GMC
2004	16.02	STD clinic Margao and GMC
2005	14.01	STD clinic Margao and GMC
2006	8.60	STD clinic Margao and GMC
2007	5.60	STD clinic Margao and GMC
2008	4.80	STD clinic Margao and GMC

Note: Since 2009, NACO has not selected STD HSS sites from Goa.

Chart No. 15: HIV positivity rate among STD patients in Goa, 1994 - 2008

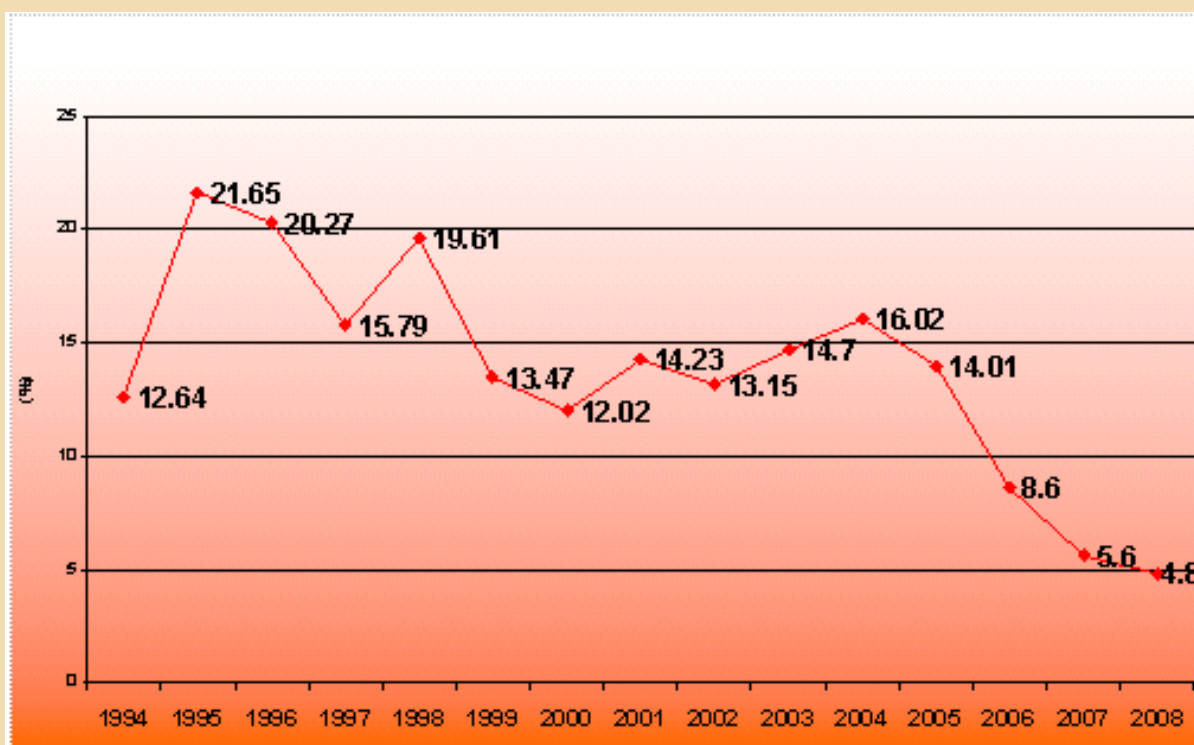


Table No. 19 Details of Sexually Transmitted Diseases detected in Government STD Clinics in Goa, 2008 to 2015

	2008				2009				2010				2011				2012				2013				2014				
	M	F	O	T	M	F	O	T	M	F	O	T	M	F	O	T	M	F	O	T	M	F	O	T					
1. Vaginal/ Cervical Discharge(VCD)		267	0	257			303	0	303		518	0	518		865	0	865	0	1064			982	0	982			850	0	850
2. Genital Ulcer (GUD)-non herpetic	54	19	0	73	24	17	0	41	31	17	0	48	18	17	0	35	15	3	0	18	14	4	0	18	65	11	0	76	
3. Genital ulcer (GUD) – herpetic	23	24	0	47	22	10	0	32	27	11	0	38	38	17	0	55	43	27	0	70	40	15	0	55	41	25	0	66	
4. Lower abdominal pain(LAP)		44	0	44		66	0	66		87	0	87		170	0	170		154	0	154		188	0	188		191	0	191	
5. Urethral discharge(UD)	243			243	80				80	79		79	95			95	123			123	141			141	79			79	
6. Ano-rectal discharge (ARD)	12	0	1	13	1	0	0	1	3	0	0	3	1	0	0	1	0	0	0	0	1	1	0	2	4	0	0	4	
7. Inguinal Bubo(IB)	20	0	0	20	7	2	0	9	2	1	0	3	13	3	0	16	20	3	0	23	8	1	0	9	8	1	0	9	
8. Painful scrotal swelling (SS)	21		0	21	15			0	15	21		0	21	37			28		0	28	37			37	38		0	38	
9. Genital warts	13	8	1	22	15	14	0	29	12	9	0	21	9	7	0	16	7	13	0	20	14	2	0	16	12	5	0	17	
10. Other STIs	163	56	2	221	184	88	0	272	201	103	0	304	135	98	0	233	250	57	0	307	421	84	0	505	370	83	0	453	
11. Asymptomatic STI treatment	46	31	0	77	114	92	0	206	338	116	0	454	160	60	0	220	24	14	0	38	74	47	0	121	56	72	0	128	
12 No of people living with HIV/ AIDS (PLHAs) attended with STI/RTI during the month	13	11	0	24	13	18	0	31	12	14	0	26	5	9	0	14	6	15	0	21	6	11	0	16	4	8	0	12	
Total No of cases	608	460	4	1072	475	610	0	1085	726	876	0	1602	511	1246	0	1757	516	1350	0	1866	756	1335	0	2091	677	1246	0	1923	

Type of Diseases	2015			
	M	F	O	T
1. Vaginal/ Cervical Discharge (VCD)		724	0	724
2. Genital Ulcer (GUD)-non herpetic	23	11	0	34
3. Genital ulcer(GUD) – herpetic	41	24	0	65
4. Lower abdominal pain(LAP)		165	0	165
5. Urethral discharge(UD)	98			98
6. Ano-rectal discharge (ARD)	1	0	0	1
7. Inguinal Bubo(IB)	6	2	0	8
8. Painful scrotal swelling (SS)	34		0	34
9. Genital warts	21	8	0	29
10. Other STIs	270	136	0	406
11. Asymptomatic STI treatment	6	18	0	24
12 No of people living with HIV/AIDS (PLHAs) attended with STI/RTI during the month	1	8	0	9
Total No of cases	501	1096	0	1597

2.5 Integrated Counseling and Testing Centres (ICTCs)

In order to help people know their HIV status, so that early access to care and treatment, to prevent HIV related illness, to maintain safe sexual practices, etc. HIV testing facilities are available at 11 Integrated Counselling and Testing Centres (ICTCs), 4 Prevention of Parent to Child Transmission (PPTCT) Centres, 18 Facility Integrated Counselling and Testing Centres at (Primary Health Centres) and 8 Public Private Partnership Hospitals. At present, on an average about 4,000 blood samples are screened per month. The proportion of walk-in clients at the ICTCs ranged between 2.5 to 7.0 per cent during the years 1999 to 2001. The corresponding figure for the year 2002 was to the tune of 43 per cent. This steep rise was mainly due to the initiative taken up for an intensive voluntary test drive during the AIDS Fortnight 1st to 14th December 2002. During the year 2015, the proportion of walk-in clients was 33.1%. From 2007, the Voluntary Counseling and Testing Centres (VCTCs) have been changed to Integrated Counseling and Testing Centres (ICTCs). Integrated because, it caters to both pregnant and direct walk- in clients. ICTC services have been made available at all the CHCs, coverage of spouses of pregnant mothers attending the ANC has been positively increased.

Chart No.16: The number of General clients tested and found positive, 2007-2015

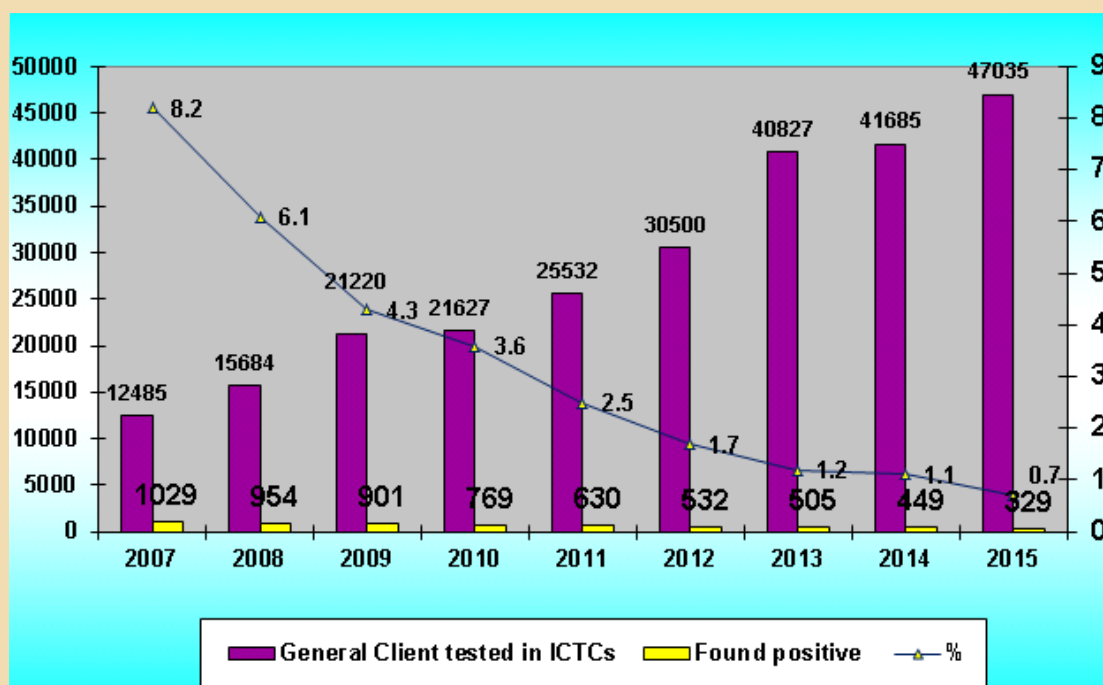


Table no. 20 Proportion of direct walk-in to total persons tested at ICTCs, 1999-2015

Table no. 20 Sex-wise number of General Client tested and found positive at various ICTC in Goa, 2015

Reporting Unit Name	No. of person counselled					No. of persons tested					No. of persons found positive					% Positive			
	M	F	TS/TG	T		M	F	TS/TG	T		M	F	TS/TG	T		M	F	TS/TG	T
ICTC, Goa Medical College, Bambolim	4616	2367	1	6984		4616	2367	1	6984		99	84	0	183		0.2	3.5	0.0	2.6
ICTC (General), Asilo Hospital, Mapusa	1621	1601	0	3222		1621	1601	0	3222		9	8	0	17		0.0	0.5	0.0	0.5
ICTC Centre, TB & Chest Diseases	1011	535	0	1546		1011	535	0	1546		13	10	0	23		0.1	1.9	0.0	1.5
ICTC Centre, Ponda	2652	1973	0	4625		2652	1973	0	4625		11	6	0	17		0.0	0.3	0.0	0.4
ICTC Centre, PHC Candolim	1404	1758	1	3163		1404	1758	1	3163		1	5	0	6		0.0	0.3	0.0	0.2
ICTC, CHC, Pernem	1626	867	0	2493		1626	867	0	2493		2	0	0	2		0.0	0.0	0.0	0.1
ICTC, CHC, Valpoi	1632	2370	0	4002		1632	2370	0	4002		0	3	0	3		0.0	0.1	0.0	0.1
North Goa District	14562	11471	2	26035		14562	11471	2	26035		135	116	0	251		0.1	1.0	0.0	1.0
ICTC, Hospicio Hospital, Margao	2784	1915	0	4699		2784	1915	0	4699		23	11	0	34		0.8	0.6	0.0	0.7
ICTC, CHC, Canacona	715	212	0	927		715	212	0	927		1	1	0	2		0.1	0.5	0.0	0.2
ICTC, Cottage Hospital	6365	2504	4	8873		6365	2504	4	8873		22	10	0	32		0.3	0.4	0.0	0.4
ICTC, Curchorem	630	996	0	1626		630	996	0	1626		7	3	0	10		1.1	0.3	0.0	0.6
South Goa District	10494	5627	4	16125		10494	5627	4	16125		53	25	0	78		0.5	0.4	0.0	0.5
Total	25056	17098	6	42160		25056	17098	6	42160		188	141	0	329		0.8	0.8	0.0	0.8

2.6 Public Private Partnership (PPP)

Under the PPP model, the Goa SACS provides logistic support like HIV test kits and disposable delivery kits. There will also be technical support in terms of capacity building, regular monitoring and evaluation. The following eight private nursing homes/Clinics/Hospitals have consented to be the partners in this scheme.

1. Vrundavan Hospital and Research Centre, Mapusa
2. Anandi Nursing Home, Marcel
3. MPT Hospital, Vasco
4. Govind Kamat Hospital, Panaji
5. Vrundavan Shalby Hospital, St. Cruz
6. Chodankar Nursing Home, Porvorim
7. Mandovi Clinic, Porvorim.
8. Kamat Maternity & Surgical Hospital, Miramar.

2.7 Prevention of Parent-to-Child Transmission (PPTCT)

The sentinel survey data in Goa indicated that the prevalence rate among antenatal mothers varied from 0.0 to 1.38%. The efficacy of mother-to-child transmission ranges from 20 to 40%. Antiretroviral prophylaxis can reduce the maternal viral load and bring down transmission by more than 50%. PPTCT being a cost-effective strategy for prevention and control of the epidemic, PPTCT programme was launched at GMC in April 2003.

In Goa, about 21,000 live births occur annually and it is expected that about 70 infants will acquire HIV infection every year. During the period 1999 to 2010, the number of HIV-infected children (<15 years) detected in Goa at the ICTCs ranged between 33 to 69 in a year accounting for 4.1 to 7.3% of the total cases detected.

- During 2015, out of the total female infected cases nearly 31.2% belong to the age group 15-34 and whereas around 36.7% of the infected males belonged to this age group. 50.4% females were found infected in the age group 35-49. There by indicating that young women in the reproductive age are being infected equally or more than women in older age group. Needless to point out, Mother-to-Child transmission will become a greater problem unless aggressive and effective preventive measures are undertaken now. It is pertinent to point out here that rise in pediatric AIDS cases has the potential to undermine the infant/ child survival gains made in Goa in the last few decades through comprehensive maternal and child health programme. PPTCT programme was extended to the two District Hospitals during 2006. As per new guidelines from NACO, Multi Drug Regimen (MDR) has been implemented for positive mothers and their babies. Coverage for surveillance of antenatal mothers has increased because of the availability of ICTCs at all the CHCs, thus the positive antenatal from all ICTCs are referred for the PPTCT facility at the District /GMC hospitals.

Some of the critical components of PPTCT programme are:

- The programme envisages effective reduction of MTCT of HIV infection by providing quality antenatal care including preventive services.
- Provision of reproductive health related interventions in couple-setting.
- Promotion of rational use of blood.
- Voluntary Counseling and Testing for HIV infection.
- Health education to pregnant mothers covering nutrition, infant feeding practices, exclusive breastfeeding, birth spacing methods, etc.
- Interventions to reduce MTCT including antiretroviral drugs.
- Care and support to HIV infected mothers and children and reducing their vulnerability.

Some of the salient features of the PPTCT programme are:

- About 99 per cent of the antenatal mothers accepted HIV test after counseling.
- HIV prevalence rate among antenatal mothers who accepted HIV test has decreased from 1.34 % in 2005 to 0.12 in 2015.
- HIV prevalence rate (%) in partners is 100%
- Nearly 100% of women counselled arrived in labour without ANC.

2.8 Early Infant Diagnosis (EID)

Infant born to HIV positive mother is called “Exposed Infant” until the infant is no longer breastfed and it can be established that the infant is not infected. In order to establish if the infant has acquired HIV infection or not PCR (Polymerase Chain Reaction) testing is made available. This test will be done in infants from 6 wks to 18 months through the PPTCT Centres at GMC, North Goa District Hospital, Mapusa, Asilo Hospital, Hospicio Hospital and ICTC Chicalim.

Table no. 21 Data on PPTCT programme in Goa, April 2003 to 2015

Item	2003 (w.e.f. April)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
1.1 Total number of new ANC registered	2,903	3,755	3,208	8,139	12,758	12,705	12,981	13,743	17,328	16,242	17,381	17,246	16,987	1,55,376
1.2 Total number of women counseled	2,707	3,714	3,073	7,387	10,489	11,117	12,355	11,847	14,625	14,054	14,558	13,344	12,995	1,32,265
1.3 %age of women counseled among new ANC registered	93.2	98.9	95.8	90.8	82.2	87.5	95.1	86.2	84.4	86.5	83.8	77.4	76.5	85.1
1.4 Total number of women who accepted HIV test	2,567	3,717	3,068	7,357	10,432	11,053	12,250	11,801	14,490	14,053	14,555	13,344	12,989	1,31,676
1.5 Proportion of women accepting HIV test among those counseled	94.8	100.1	99.8	99.6	99.5	99.4	99.1	99.6	99.0	99.9	99.9	100.0	99.9	99.6
1.6 Total number of women found HIV positive	38	47	41	75	65	65	58	52	35	22	27	26	16	567
1.7 HIV prevalence rate (%)	1.48	1.26	1.34	1.02	0.62	0.59	0.47	0.44	0.24	0.16	0.18	0.19	0.12	0.43
1.8 Total number of women who received post test counseling	2,411	3,373	2,631	6,049	8,602	9,938	11,599	11,202	13,710	13,213	14,061	12,967	12,571	1,22,327
1.9 %age of women who received post test counselling among those tested	93.9	90.7	85.8	82.2	82.5	89.9	94.7	94.9	94.6	94.0	96.6	97.2	96.8	96.7
1.1.2 Total number of HIV positive women who collected HIV results	37	44	33	60	50	50	39	32	27	14	18	21	11	436
1.1.3 Percentage of HIV+ve women who collected the result	97.4	93.6	80.5	80.0	76.9	76.9	67.2	61.5	77.1	63.6	66.7	80.1	68.7	77.0
2.1 Number of spouses/ partners of HIV positive women counseled	31	44	25	50	46	30	19	13	10	10	10	10	2	300
2.2 %age of partners of +ve women counseled among those collected the report	83.8	100.0	75.8	83.3	92.0	60.0	48.7	40.6	37.0	71.4	55.6	47.6	18.2	68.8
2.3 %age of partners of +ve women counseled to all +ve women	81.6	93.6	61.0	66.7	70.8	46.2	32.8	25.0	28.6	45.5	37.0	38.5	12.5	53.1
2.4 Number of spouses/ partners of HIV positive women accepted HIV test	29	44	25	50	46	30	19	13	10	10	10	10	2	298
2.5 %age of partners of +ve women counselled accepting the test	93.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.6
2.6 Number of spouses/ partners detected HIV positive	19	35	21	44	46	30	19	13	10	10	10	10	2	269
2.7 HIV prevalence rate (%) of partners	65.5	79.5	84.0	88.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	90.0

Goa HIV/AIDS Situation and Response 2015

Item	2003 (w.e.f. April)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total
3.1 Number of Women directly in labour without ANC registration	147	1,257	1,857	2,526	2,822	2,657	2,792	601	1,207	826	542	327	325	17,886
3.2 Number of women counseled who arrived in labour without ANC	122	1,201	1,772	2,239	2,423	2,285	2,473	601	1,207	826	542	327	325	16,343
3.3 %age of women counseled who arrived in labour without ANC	83.0	95.5	95.4	88.6	85.9	86.0	88.6	100.0	100.0	100.0	100.0	100.0	100.0	91.3
3.4 Number of women accepted HIV test (out of 3.2)	122	1,201	1,772	2,239	2,423	2,285	2,473	601	1,207	826	542	327	325	16,343
3.5 %age pf women (without ANC) accepting the test among those counseled	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
3.6 Number of women detected HIV positive (out of 3.4)	3	11	11	8	12	1	3	0	0	0	0	0	0	49
3.7 HIV prevalence rate (%)	2.46	0.92	0.62	0.36	0.49	0.04	0.12	0	0	0	0	0	0	0.31
4.1 Total number of deliveries	4,039	4,947	4,116	7,191	9,571	7,049	7,231	8,778	8,256	9,975	10,457	9,196	8,451	99,257
4.2 Total number of live births to positive women (out of 1.6 and 3.6)	24	43	25	51	62	46	58	27	17	22	29	22	15	441
4.3 Total number of mother-baby pair received NVP	18	40	21	46	65	53	64	27	17	22	29	9	15	426
4.4 Number of mother-baby pairs received NVP who were registered for ANC (out of 1.6)	16	29	10	40	47	44	56	27	17	22	29	9	0	346
4.5 Number of mother-baby pairs received NVP who come directly in labour without ANC (out of 3.6)	2	11	11	6	11	1	2	0	0	0	0	0	0	44
4.6 Proportion of mother-baby pairs receiving NVP among live births to +ve women	75.0	93.0	84.0	90.2	104.8	115.2	110.3	100.0	100.0	100.0	100.0	100.0	0	97.0
Number of babies received NVP (out of 4.2)	20	41	19	40	49	41	56	27	17	22	29	19	15	395

2.9 TB/HIV Collaborative activities

TB/HIV collaborative activities were started in the year 2001 in the six high prevalence States with the objectives to establish mechanisms for Co-ordination between RNTCP & GSACS at State and District level, decrease morbidity and mortality due to tuberculosis among Persons Living with HIV/AIDS, decrease the impact of HIV in tuberculosis patients and provide access to HIV related care and support to HIV infected TB patients. The activities are now extended to the entire country.

Table No. 22 HIV-TB Coordination activities from 2008-2015

Year	No. of persons Suspected to have TB referred to RNTCP unit			Of referred TB Suspect, No Diagnosed as having TB	RNTCP to ICTC	Number of person Suspects to have TB Diagnosed HIV positive	Total Cross Referrals
	HIV+	HIV -	Total				
2008	115	30	145	10	1539	124	1684
2009	414	508	922	44	1777	96	2699
2010	466	474	940	47	1628	89	2568
2011	354	550	904	31	1460	36	2364
2012	351	900	1251	35	1052	34	2303
2013	467	1193	1660	27	1758	31	3418
2014	1171	1567	2738	17	3067	53	5805
2015	328	878	1206	33	3191	35	4397
Total	3666	6100	9766	244	15472	498	25238



Chart No.17 Trends in referral of TB case detection from ICTC to RNTCP referrals (2008-2015)

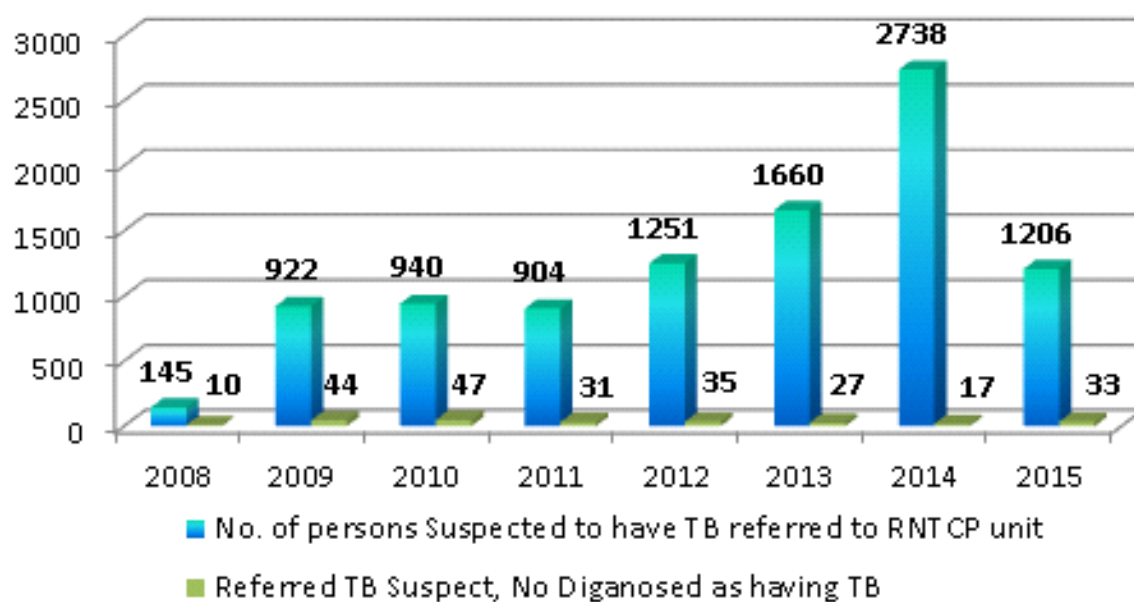
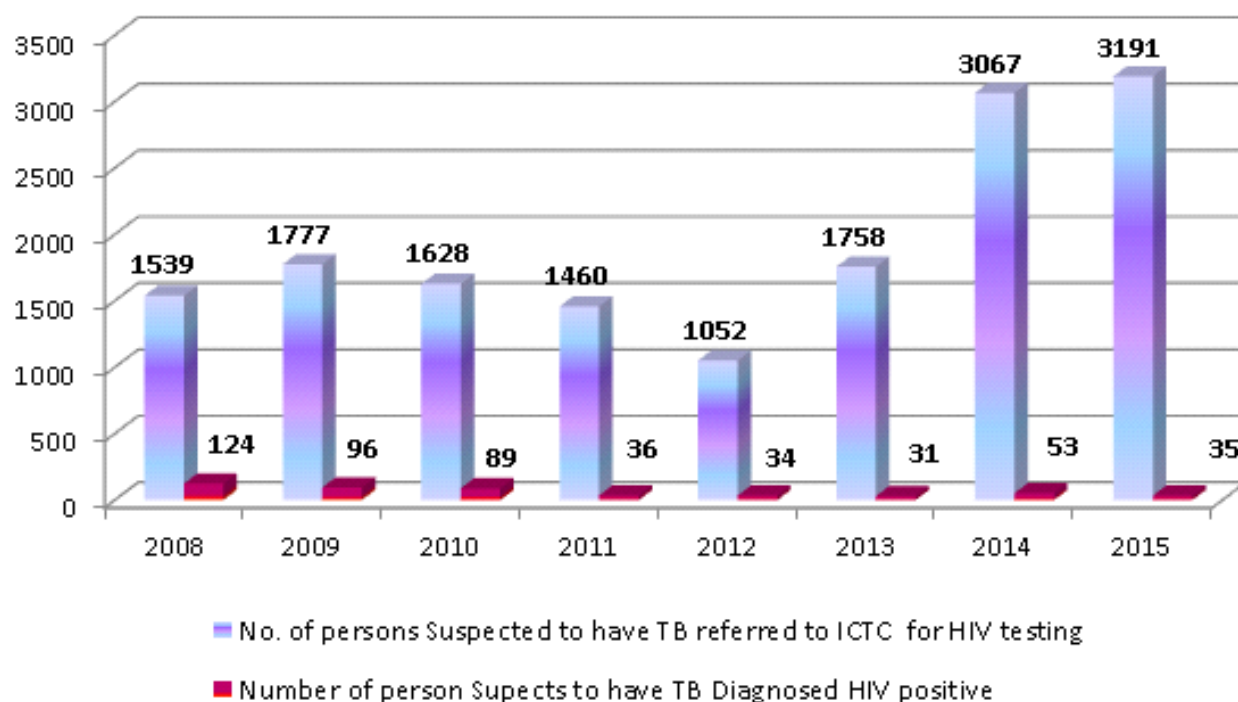


Chart No. 18 Trends in referral of TB case detection from RNTCP to ICTC (2008-2015)



2.10 Information Education Communication (IEC) and Mainstreaming divisions

IEC interventions during NACP-III focused on promoting safe behaviour practices, generating demand for services and fostering an enabling environment for accessing information and services. A number of new and innovative initiatives were taken up during NACP-III

The challenges faced during NACP-III are summarized below:

Strategic Communication plays a vital role in the spectrum from HIV prevention to treatment, care and support in NACP IV, building on learning's from the first three phases, and taking into account the context and environment of Phase IV. Information, Education and Communication (IEC) is strategically positioned and integrated with all programme components to achieve the goal of 'Accelerating Reversal and Integrating Response'.



The Goa state Legislative Forum on HIV/AIDS was formed with the Hon'ble Minister of Defence Shri.Manohar Parrikar (Ex. CM), Hon'ble Chief Minister Shri. Laxmikant Parsekar (Ex. Health Minister), Hon'ble Minister of Panchayat Raj Shri.Rajender Arlekar (Ex.Speaker), Speaker Shri. Anant Shet (Ex.Deputy speaker), Hon'ble MLAs Shri Subhash Phaldessai & Shri. Rohan Khaunte, Dr. Madhu Sharma, NACO.

The key strategies are:

- A large population of young and adolescents in 15 years + age group is added every year. A sustained programmatic approach is required to reach them with information on HIV/ AIDS.
- Protocols for using a variety of emerging media such as messaging through mobiles and internet, use of facebook and twitter are yet to be developed.

- An intensive channel such as folk media requires continuous and hands-on-oversight for content development, selection of troupes, training, consistency of performances, roll out and monitoring.
- Documentation needs to be scaled up so that best practices and initiatives can be properly documented.
- The declining epidemic poses advocacy challenges in convincing opinion leaders and other stakeholders on the need for supporting NACP interventions.
- Enhancing awareness and knowledge levels in General Population to promote safe behaviours focusing specially on Youth and Women;
- Motivating and sustaining Behaviour Change in a cross-section of identified populations at risk, including Most at Risk and Bridge Populations;
- Generating demand for quality services; and
- Strengthening the enabling environment by facilitating appropriate changes in societal norms that reinforce positive attitudes, beliefs and practices. The shift to a Strategic Communication approach in NACP IV will also be reflected in innovation, evidence based programming, and in ensuring synergy between communication and programme priorities.

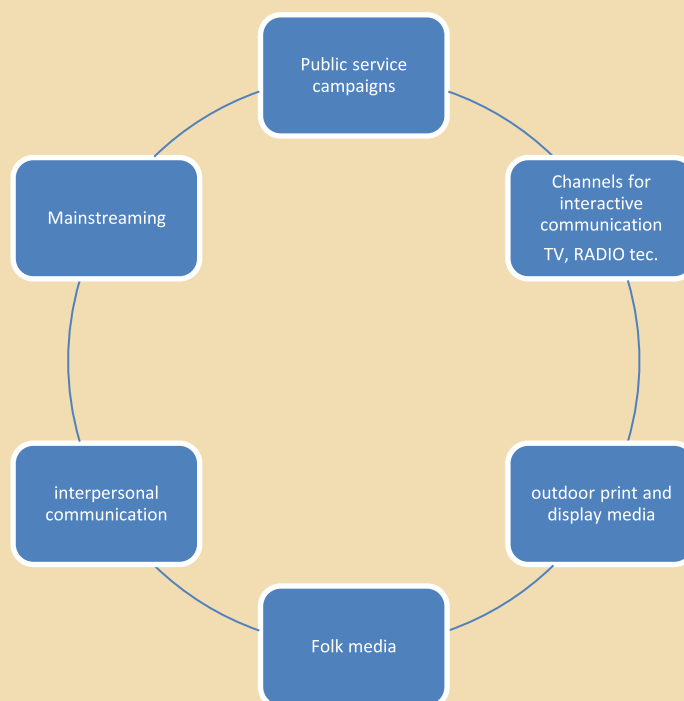
The NACP IV communication strategies are based on the following principles:

- **Enhancing momentum/accelerating pace of change**
- **Evidence-based IEC interventions**
- **Deepening Community Engagement**
- **Integrated and comprehensive approach** - Networking and convergence with NRHM and other health and relevant ministries will be another key strategy in NACP IV.
- **Gender based response to HIV** – The communication strategy will consider gendered experiences of living with HIV/AIDS, gender norms and stereotypes, care giving roles and intra-household dynamics. Messages will be tailored to all genders so that the onus is not only on women and sexual minorities, especially in issues such as condom negotiation, and other aspects of safer behaviors.
- **Based within a framework of Rights** - Communication recognizes that the promotion and protection of human rights is necessary to empower individuals and communities to respond to HIV/AIDS.

Program Priorities: The programmatic thrust will be on

- The General Population, specially the Youth and Women;
- Identified populations at risk, including the Most-at Risk Populations and Bridge Populations;
- Demand generation for uptake of services; and strengthening the enabling environment generation for uptake of services; and strengthening the enabling environment.

Communication Channels used for outreach



Some of the activities undertaken by Goa State AIDS Control Society:

1. General education programmes on HIV/AIDS are conducted for the youth organizations, voluntary bodies, Government departments, PRI members, AWW, women, high-risk groups, schools, colleges, workers from various industries, etc.
2. Legislative Forum on HIV/AIDS was established in State Assembly for stepping-up advocacy efforts
3. To catalyze an expanded response towards HIV/AIDS epidemic, Goa SACS has inter-sectoral collaboration with all the Government Departments, NGOs, industries, political leaders, etc. by networking and advocacy. A Joint working group has been formed with Mormugao Port Trust and activities being carried out In the port area.
4. Awareness messages on HIV/AIDS and services provided by Goa SACS are displayed on panels of KTC buses, Bus stops and hoardings.
5. The website has been made active with regular updates, the e bulletin has been started and all resources of GoaSACS have been uploaded on the at the HIV resource site which is linked to GSACS website.
6. Alliances have been built with organizations that work specifically with youth, such as NSS, and NYKS to reach out-of-school youth also.



7. Electronic media continues to be a major source of information on HIV/ AIDS. According to BSS 2006, exposure to HIV communication in mass media was reported by 78% of the general population. harnessing the same through Public Service Advertising. Thematic mass media campaigns focused on imparting knowledge on HIV transmission and prevention, ICTC & PPTCT, condom use, STIs, Voluntary Blood Donation, and issue of stigma and discrimination. Spots, long format programmes such as panel discussions and interactive programmes such as phone-in shows were aired on television as well as radio channels.



8. Slides were displayed in Cinema halls.
9. folk media campaigns were conducted selected troupes were trained and used for performances at various locations in both the districts as well as some educational institutions.
10. Televisions are installed in-patient and out-patient departments of all Government hospitals for screening of spots on HIV/AIDS during the OPD hours.
11. Handbills and pamphlets on STD and HIV/AIDS produced in different languages.
12. Posters on STD/HIV/AIDS/Blood Safety/Post Exposure Prophylaxis, etc. are produced and distributed to all the Hospitals, Health Centres, NGOs, etc.

13. Various events like World AIDS Day, Voluntary blood donors day, National youth day were observed. Goa was the venue for the national event on International Youth Day.

B: Awareness in Educational Institutions

- Red Ribbon Clubs (RRCs) have been established in educational Institutions in order to generate awareness on HIV/AIDS and promote voluntary blood donation among youth. 140 RRCs have been established in various educational Institutions in Goa till date.



- Adolescence Education Program has been initiated through SCERT where Sexual Health Education and Life Skill Education are imparted in schools.
- Various activities are conducted from at School, Higher Secondary School and College level.
- Talks on HIV/AIDS are given by the Health Officers/Medical Officers from the Directorate of Health Services in schools and colleges in their jurisdiction.
- Programmes on HIV/AIDS are being carried out at the PTA meetings in different schools in Goa.
- Question-answer sessions are held in different educational institutions where a panel of resource persons from the GSACS and Health centres under Directorate of Health services, answer the questions asked by the students anonymously.

2.10.1 Condom Promotion

Condom promotion strategies aim to position condoms for dual benefits of prevention of STD including HIV and prevention of unwanted pregnancies. Communication messages towards normalization of condom are developed and disseminated to the population using varieties of media vehicles. The TI sites have mid-media activities like street plays and condom demonstrations to ensure correct and consistent use of condoms.

2.10.2 Website

The Goa State AIDs Control Society launched its own website on the eve of the world AIDs Day i.e. on 1st December 2008. The url of the website is <http://www.goasacs.nic.in>. It provides updated information in detail of all the activities carried out by the Goa SACS. All reports, advertisements, statistics, publications, expression of interests, etc., are uploaded on the website. The E bulletin of GSACS is also uploaded here. The website is linked to the India HIV/AIDS Resource Centre Website wherein all resources including resources from Goa also available.

2.11 Targeted Interventions (TIs)

Since particular groups of people such as female sex workers (FSWs), men having sex with men (MSM), truckers, migrants etc. are more vulnerable than others to the HIV/ AIDS epidemic, direct intervention programmes among these groups through a comprehensive and integrated approach beginning from behaviour change communications, counseling, providing health care support, referrals, condom promotion and creating an enabling environment that will facilitate behaviour change have been undertaken through NGOs funded by Goa SACS since October 1999.

During the year 2014-15 in all, 16 Targeted Intervention (TI) projects have been funded by Goa SACS. (IDU Project South Goa discontinued from July 2015) Out of 16 TIs, six projects for Female Sex Workers (FSWs), three for Men having Sex with Men (MSM), two each of Truckers and Injecting Drug Users (IDUs), one group covering the Core Composite groups and two projects covering Migrants.

As per National Integrated Biological and Behavioural surveillance 2015-16 HIV prevalence among FSW is 1.1%, MSM is 6.8%, IDU is 1.5%.

Goa is a tourist destination and invites domestic as well as foreign tourists all 365 days. Goa receives around 27 lakh domestic tourists and about 3 lakh foreign tourists every year. During the tourist season

from October to May/June, a large number of FSWs and MSMs are also present in the state. A seasonal strategy was initiated in 2013-14 for better outreach to the FSWs and MSMs.

Dealing with HIV is much more than just creating awareness or use of condom. Since the awareness levels are already very high in Goa, we need to go beyond awareness and bring about attitudinal and behavioural change, empowerment, negotiating skill and creation of enabling environment that will facilitate behaviour change. For effective implementation of the targeted intervention, efforts are being made for capacity building of NGOs through regular workshops, training programmes, exposure visits, etc.

Chart No. 19 GOA STATE -Physical status of Targetted Interventions NGOs

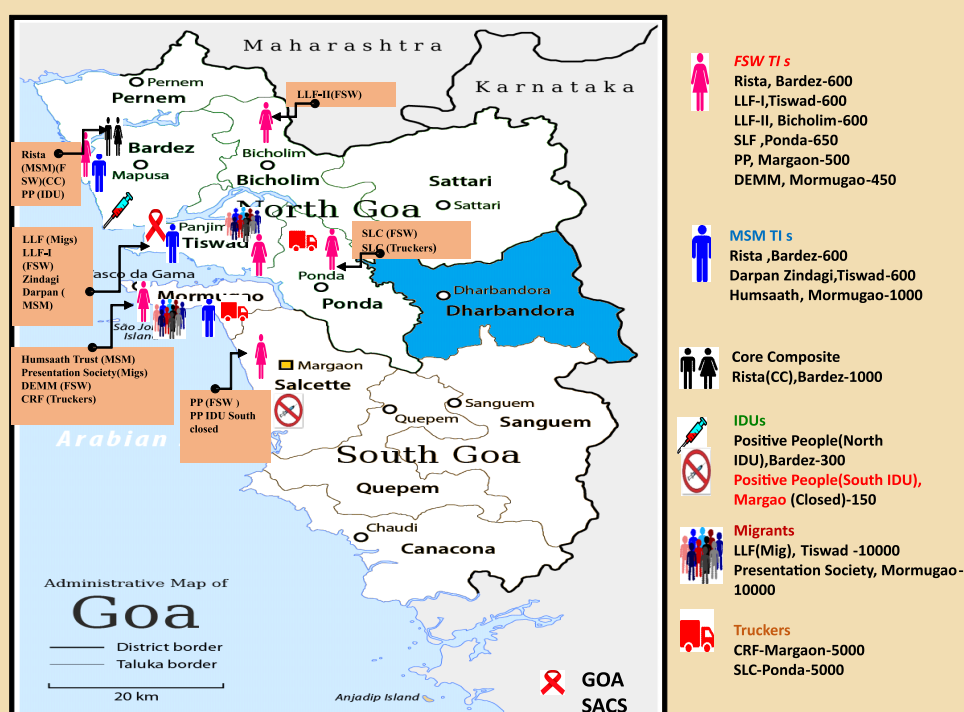


Table No. 23. HRG Target & Coverage summary (April -December) 2015

Particulars	Estimates as per mapping (IHAT-)	Estimates as per AAP (2015-16) Targets	TI Coverage	No. of New HRG/OST clients registered	Registered population
FSW	1667	3900	4005	107	4150
MSM	1595	2700	3080	142	3216
IDU	676	550	418	14	514
Migrants (D)	33220	20000	18261	12480	18261
Truckers	25233	10000	31267	12686	31267
OST clients	50	50	47	9	237

Table No. 24: Grants sanctioned to TI - NGOs by Goa State AIDS Control Society, 2014-15

Name & address of TI - NGO	Amount (Rs. in lakh)	Target Group & Population to be covered	Area of intervention
1. Rishta Flat S-1, 2nd Floor, Zeib Reina Complex, Near Hotel Maria Rosa, Naikavaddo, Calangute, Goa-403 516. Tel : 2275843 Email: rishta_vcare@hotmail.com	22.26	Composite (FSW + MSM 1000)	Calangute, Baga, Candolim, Sinquerim, Arpora, Vagator and Anjuna
	16.84	FSW (600)	Mapusa, Karaswada, Tivim, Parra, Guirim, Saligao, Verla and Canca.
	17.65	MSM (600)	Betim, Verem, Nerul, Mapusa, Pernem and Bicholim.
2. Life line Foundation Dada Building, Near Loja Mucunda, Rua Duarte Pacheco Road, Panaji-Goa Email: llfgoa@bsnl.in llfgoa@gmail.com	16.84	FSW (1) (600)	Old Goa, Marcel, Bicholim (Sanquelim) & Sattari (Valpoi)
	16.84	FSW (2) (600)	KTC bus stand, Below Mandovi Bridge, Cortim, Market Area, St. Inez, Taleigao, Bambolim and Dona Paula
	18.75	Migrants (10000)	Dona Paula, Taleigao Plateau, Bambolim, Chimbél, Old Goa, Patto, St. Inez, Tonca, Caranzalem, Miramar, Amona, Bicholim and Sanquelim
3. Humsaath Trust C/o Pratap Dhargalkar, 1st floor, Uma Shankar Bldg., Near MPT ground, Patrong, Vasco-da-Gama, Goa - 403 802. Ph. No: 2500144 Email: humsaathgoa@gmail.com deephumsaath@rediffmail.com	26.66	MSM (1000)	Vasco, Cortalim, Zuarinagar, Margao, Quepem, Sarvordem, Sada & Mangor Hill
	15.16	FSW (500)	Margao City, Quepem, Colva, Benaulim, Sanvordem and Canacona
4. Positive People Head Off: Positive People C/o Francis Braganza, 1st Bungalow, Opp. CMM Showroom, Mercess Wadi, Ilhas Goa 403 005 Email: pp.idunorth@gmail.com pp.idusouth@gmail.com pp.fswsouth@gmail.com	19.18	IDU (North) (300)	Calangute, Baga, Candolim, Vagator, Anjuna, Sinquerim, Morjim, Arambol, Panaji City, Miramar, Bambolim and Dona Paula
	17.31	IDU (South) (150)	Margao, Vasco and South Coastal belt (Discontinued since July 2015)

5. Sai Life Care Sai Sports and Cultural Association, 2nd Floor, Yeshwant Samruddhi Bldg., Opp. Goa State Co-op Bank, Tisk, Usgao, Ponda, Goa – 403 406 Email: saiorganization@yahoo.com saitruckers@rediffmail.com	17.39	FSW (650)	Tisk, Ponda, Pale, Usgao, Velguem, Sanquelim, Mollem and Honda
	13.46	Truckers (5000)	Tisk, Ponda, Usgao, Belgaum bypass, Dhavali, Mollem and Honda
6. Community Resource Foundation Opp. Police outpost Near Goa State Co.op bank Zuarinagar Birla. Email: sharmsunil1510@gmail.com	13.46	Truckers (5000)	Margao, Birla, Vasco and Verna Ind. Estate
7. Desterro Eves Mahila Mandal, 21 Sapna Terraces, Swatantra Path, Vasco-da-Gama, Goa – 403 804. Ph. No: 2500483, Fax: 5650407/2500483 Email: adhar_goa@rediffmail.com	14.58	FSW (450)	Vasco City Area, Birla, Baina, Mangor Hill, New Vaddem, Bogda Jetty and Chicalim
8. Presentation Society 2nd Floor, Flat no. 6, Casa Monteiro Building, Vasco-da-Gama, Goa Ph. No: 2510317 Email: jeevanjyothi@sancharnet.in	18.75	Migrants (10000)	Vasco City, Bogda, Baina, Mangoor Hill, Shantinagar, Margao city, Betul Jetty, Birla and Zuari Nagar
9. Zindagi – Darpan H.No.958, C/o Villa Pereira, Raulo Band, St. Cruz, Ihlas Goa – 403 005 Ph. No: 2514902 Email: goa_zindagi@yahoo.com goazindagi@gmail.com	17.65	MSM (600)	Tiswadi and Ponda talukas

2.12 Care, Support and Treatment (CST)

- Antiretroviral Therapy (ART) Centre
- Two Link ART Centres Plus (LAC+)
- Two Link ART Centres Plus (LAC)
- Care Support Centre (CSC)

2.12.1 Anti Retroviral Therapy (ART) Centre

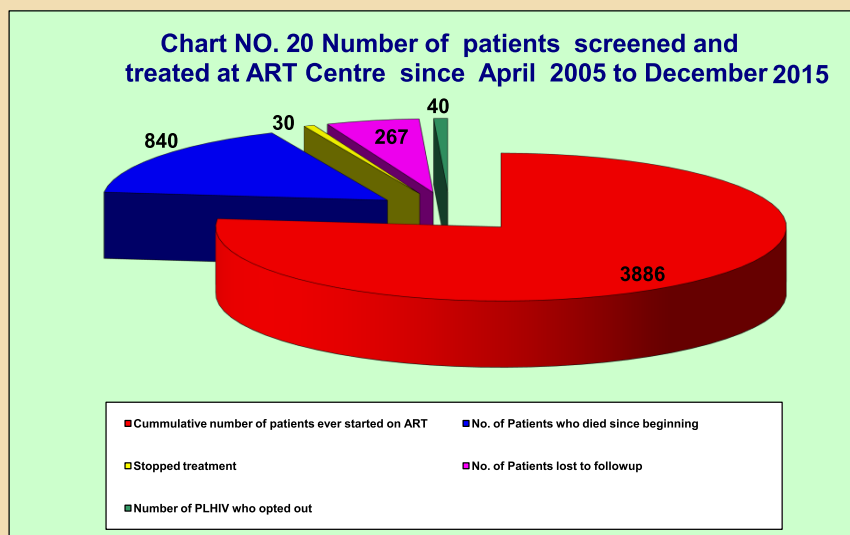
Free anti retroviral drugs are being provided at the ART Centre, Goa Medical College since April 2005. To start with, the beneficiaries comprised of symptomatic patients with CD4 count of less than 200 but at present ART is initiated as early as CD4 < 350. During the period from April 2005 to December 2015, **6700** patients were screened for ARV eligibility and 3886 patients were put on ART out of which 2313 are alive and on ART. Stavudine has been phased out of the programme and combination of Zidovudine, Lamivudine and Nevirapine is being used as 1st line Art. All patients attending ART centre are screened for Opportunistic Infections like TB, Herpes Zoster, PCP etc and all HIV/TB co-infected patients are started on ART irrespective of their CD4 count. Existing ART center has been upgraded to ART Centre Plus with availability of alternate 1st line and 2nd line treatment. State AIDS Clinical Expert Panel (SACEP) meets every week to screen resistance cases.

2.12.1.1 Link ART Centres Plus (LAC+)

The existing Link ART Centres at District Hospital (Asilo), Mapusa and Hospicio Hospital, Margao have been upgraded to Link ART Centre Plus wherein facility for collection of CD4 samples and ART drugs are made available for PLHIVs.

2.12.1.2 Link ART Centres (LACs)

Two Link ART Centres have been established at Cottage Hospital, Chicalim and Sub District Hospital, Ponda for the convenience of PLHIVs wherein ART drugs are made available.



2.12.2 Care Support Centre (CSC)

A Care Support Centre (CSC) “Vihaan” has been set up at St. Cruz for establishing the linkages of PLHIVs with various service providers and to assist the ART Centre in tracking the missing /lost to follow-up patients.

Table No. 25 :Number of patients screened/treated at ART Centre (April 2005 to Dec 15)

1.	Number of patients screened for ARV eligibility	
	1.1 Adult males	3667
	1.2 Adult Females	2599
	1.3.TG	9
	1.4 Children (<14 years)	425
	1.5 Total	6700
2.	Number of patients enrolled for ARV treatment	
	2.1 Males	2175
	2.2 Females	1507
	2.3 Children (<14 years)	200
	2.4 TG	4
	2.5 Total	3886
3.	Number of patients who discontinued	
	3.1 Died	840
	3.3 Stopped treatment	30
	3.4 Lost to follow-up	267
	3.5 MIS during the month	60
	3.6 Opted Out	41
	3.7 Total	1238
4.	Total number of patients alive and on ART	2313

2.12.3 CD4 blood count facility

For management of HIV/ AIDS patients, CD4 count facility has been established at Goa Medical College since July 2001. With the setting up of ART centre at Goa Medical College on an average 9 patients are screened per day for CD4 blood count to verify and assess the immune status of a HIV patient.

Table no. 26 Year-wise cases of CD4 Count, 2001 to 2015

Activity	2001 (From March)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Total (Mar' 01 to Dec '15)
1. No. of New cases	100	98	91	112	587	717	708	818	696	627	495	426	405	401	275	6556
2. No. of Old cases for repeat of counts	8	34	30	35	187	650	999	1468	1980	2754	3199	3343	4182	4365	4688	27,922
3. No. of cases performed within 6 months of previous estimation.	7	4	2	1	28	22	20	63	45	21	6	4	0	0	0	223
4. No. of tests performed free of charge	-	1	-	5	660	1358	1537	2276	2414	3307	3689	3768	4579	4082	4889	32,565
5. No. of tests performed on payment	108	131	121	142	54	9	168	12	8	6	8	4	11	8	6	796

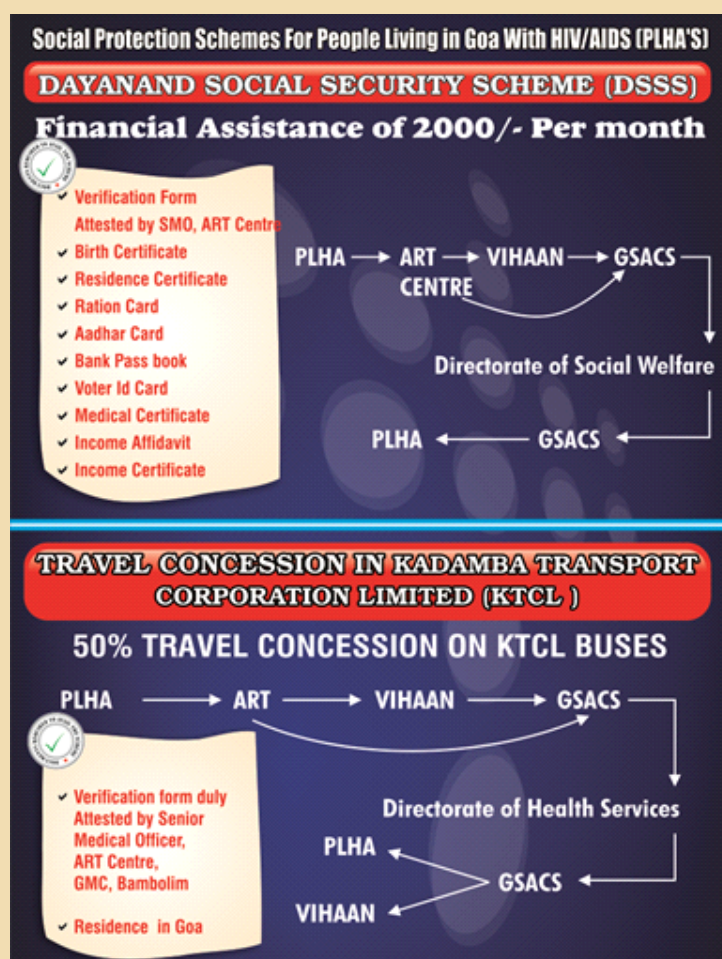
2.12.4 Management of Opportunistic Infections (OIs)

The facilities for the management of the Opportunistic Infections are provided at Goa Medical College Hospital at tertiary level and two District Hospitals at secondary level. The Goa SACS supports all the activities undertaken by Goa Medical College Hospital and the hospitals under Directorate of Health Services for OI management. There is absolute co-ordination between the National TB Control Programme, TB and Chest Diseases Hospital and Goa SACS when it comes to management of TB-HIV co-infections. Monthly meetings of Goa SACS and Goa State TB Control Society are conducted for proper co-ordination and management of data.

2.12.5 Post Exposure Prophylaxis (PEP)

Goa SACS conducts training sessions and Continuing Medical Education (CME) programmes for Government as well as private sector medical professionals and others in Universal Work Precaution and Post Exposure Prophylaxis (PEP). Department of AIDS Control guidelines are provided to the participants during the training programme. Health Care Providers working in GMC having exposure to infections receive PEP from ART Centre, Goa Medical College Hospital. However, for those under Directorate of Health Services, provision is made for PEP under emergency drugs budget, from State Government funds.

2.13 Social Security Measures for PLHAs



Government of Goa has extended the benefit of financial assistance under Dayanand Social Security Scheme (DSSS) through Directorate of Social Welfare to HIV/AIDS patients. The State Government has also extended the benefit of Antodaya Anna Yojana (AAY) scheme to HIV positive people who are in the BPL list of the State through Directorate of Civil Supplies and extended 50 % concession to PLHAs for traveling by KTCL buses. The total number of PLHIV availing DSSS upto 2015 is 241 and 920 PLHIV have availed 50% benefits of travel concession.

2.14 Strategic Information Management System (SIMS)

NACO, in its third HIV/AIDS programme introduced Strategic Information Management System (SIMS) at national and state levels to focus on strategic planning, monitoring, evaluation, surveillance and research. It is aimed to provide effective tracking and response to HIV epidemic. The system assigns clear responsibilities to all programme officers and facilitates data flow and feedback at various levels.

NACP IV will also document, manage and disseminate evidence and effective utilisation of programmatic and research data. The relevant, measurable and verifiable indicators are identified and used appropriately.

The SIMS web based software was developed by Vayem Tech and was launched by NACO on 26th August 2010. Reporting Units started reporting the data through SIMS software as well as CMIS format. Refresher trainings were conducted by Goa SACS for all the concerned staff of RUs twice and all staff of the RUs are now well trained. During 2014-15, the reporting by ICTCs, blood banks, IEC, STD clinics and TI-NGOs is nearly 100%.

3. Conclusion

HIV/AIDS is immensely preventable provided each one of us recognizes it as an important public health and developmental threat and each of us respond to our maximum capacity. The main obstacles that undermine effective response for allowing the AIDS disease to spread are:

- Widespread denial and complacency - the attitude that AIDS only happens to some one else, somewhere else and not to us - leading to low level of risk perception.
- Myths and misconceptions about its cause, spread and methods of prevention.
- Absence of either a preventive vaccine or cure.

HIV/ AIDS is still in early stages in Goa and effective responses are possible now. Unless more is done today and tomorrow and the epidemic is left to run its natural course, it is sure to cause devastation on an unprecedented scale and would reverse the achievements of the last few decades. One of the biggest lessons learnt globally as well as in the country is that responses should not wait for HIV/ AIDS cases to soar. Policies should not wait till crucial prevention and care information and services are needed. Another important lesson learnt is that a multi-sectoral response must be designed in the context of the overall development strategy to ensure its sustainability and effectiveness. There is no room for complacency. Government of Goa is fully committed to prevent the spread of HIV/ AIDS at the initial stage itself. But Government alone cannot do it. It is everyone's responsibility. Making a token towards one's own safety is not enough. People should effectively respond to the threat that the community is facing. NGOs and private sector have an equally critical role to play in an effective response. The challenge is to identify appropriate, locally relevant interventions and reach out to the people. By following a concerted policy and an action plan that emerges out of it, Government hopes to control the epidemic and slow down its spread in the general population within the shortest possible time.

ACRONYMS

AIDS	Acquired Immuno-deficiency Syndrome
ANC	Antenatal Clinic
ART	Anti Retroviral Therapy
BCSU	Blood Component Separation Units
CVM	Condom Vending Machine
CCC	Community Care Centre
CSMP	Condom Social Marketing Programme
CST	Care, Support & Treatment
FSW	Female Sex Worker
GIPA	Greater Involvement of People Living with HIV/AIDS
GSBTC	Goa State Blood Transfusion Council
HRG	High Risk Group
HLFPPT	Hindustan Latex Family Planning Promotion Trust
HSS	HIV Sentinel Surveillance
HIV	Human Immuno-deficiency Virus
ICTC	Integrate Counselling and Testing Centre
IDU	Injecting Drug User
IEC	Information, Education & Communication
KABP	Knowledge, Attitude, Belief & Practice
LAC	Link ART Centre
LWS	Link Worker Scheme
MOHFW	Ministry of Health & Family Welfare
MSM	Men who have Sex with Men
MTCT	Mother to Child Transmission
NACO	National AIDS Control Organisation
NACP	National AIDS Control Programme
NRHM	National Rural Health Mission
NGO	Non Governmental Organisation
NVP	Nevirapine
OI	Opportunistic Infection
PCR	Polymerase Chain Reaction
PEP	Post Exposure Prophylaxis
PLHA	People Living with HIV/AIDS
PPTCT	Prevention of Parent to Child Transmission
PPP	Public Private Partnership
RRE	Red Ribbon Express
RRC	Red Ribbon Club
RTI	Reproductive Tract Infection
RNTCP	Revised National Tuberculosis Control Programme
SACS	State AIDS Control Society
SIMU	Strategic Information Management Unit
SMO	Social Marketing Organisation
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infection
TI	Targetted Intervention
TSG	Technical Support Group
TS/TG	Trans Sexual /Trans gender
UNAIDS	Joint United Nations Programme on HIV/AIDS
EQUAS	External Quality assurance Service

SERVICES/ FACILITIES of Goa State AIDS Control Society

- **Integrated Counseling and Testing Centres at:**
 - Goa Medical College, Bambolim
 - Tuberculosis and Chest Diseases Hospital, St. Inez, Panaji
 - Hospicio Hospital, Margao
 - North Goa District Hospital, Mapusa
 - Cottage Hospital, Chicalim
 - CHCs at Canacona, Curchorem, Pernem and Valpoi
 - Sub District Hospital, Ponda and PHC, Candolim.
- **Facility Level Integrated Counseling and Testing Centers at:** All Primary Health Centers and Urban Health Centers under Directorate of Health Services.
- **CD4 cell count testing facility of HIV/AIDS patients is available at** Goa Medical College (Dept. of Microbiology), Bambolim.
- **Sexually Transmitted Diseases/ Infections related services at :**
 - Cottage Hospital, Chicalim
 - STD clinic, Hospicio Hospital, Margao
 - STD clinic, North Goa District Hospital, Mapusa
 - Skin and V.D. Dept., Goa Medical College, Bambolim.All Health Centers under Directorate of Health Services
- **Free drugs for treatment of Opportunistic Infections in HIV/ AIDS patients is available at** Goa Medical College, Bambolim; North Goa District Hospital, Mapusa; Hospicio Hospital, Margao.
Prevention of Parent-to-Child Transmission of HIV infection during pregnancy: Programme includes counseling, testing and drug administration to HIV positive pregnant ladies & Syrup NVP to babies born to HIV+ve positive mothers at
 - OBG Dept., Goa Medical College;
 - Hospicio Hospital, Margao
 - North Goa District Hospital, Mapusa.
 - Sub District Hospital, Ponda
- **Early Infant Diagnosis:** As early as six weeks, babies born to HIV positive mothers can be tested to rule out HIV infection in the babies at the below mentioned centers.
 - Goa Medical College, Bambolim
 - North Goa District Hospital, Mapusa
 - Hospicio Hospital, Margao
 - Cottage Hospital, Chicalim
- **Antiretroviral Treatment Centre** at Goa Medical College (Opp. Paediatric OPD): Free antiretroviral drugs for eligible HIV +ve adults and children.
- **Facility Integrated ART Centre at Hospicio Hospital for South Goa District**
- **Link ART Centre plus:** North Goa District Hospital, Mapusa & Hospicio Hospital, Margao.
- **Link ART Centre:** Sub District Hospital, Ponda, and Cottage Hospital, Chicalim.
- **Post Exposure Prophylaxis (PEP)** is available in all Government Health facilities for Health Care Providers.
- **Availability of free condoms** at all health facilities for prevention of STIs including HIV/AIDS and pregnancy.
- **Targeted Intervention (TI)** projects are undertaken through the following NGOs funded by Goa SACS to create awareness among High Risk Groups and Core Groups.

Life Line Foundation, Sai Life Care, Desterro Eves Mahila Mandal, Positive People, Rishta, Community Resource Foundation, Presentation Society, Humsaath trust Goa & Zindagi Goa.



Hon'ble Dy. Chief Minister/Minister for Health, Adv. Francis D'Souza addressing the gathering on World AIDS Day 2015



Hon'ble Dy. Chief Minister/Minister for Health, Adv. Francis D'Souza felicitating a blood donor on National Voluntary Blood Donation Day 2015. Director DHS, Dr. Sanjeev Dalvi, Dean GMC, Dr. Pradeep Naik, Project Director, GSACS, Dr. Jose D'Sa, DD(IEC) Shri. Umakant Sawant are also seen



HIV IS A VIRUS STIGMA IS A DEADLY DISEASE

