

NATIONAL AIDS CONTROL ORGANIZATION (NACO)

24.1 INTRODUCTION

The National AIDS Control Programme (NACP) has been implemented by Government of India as 100% centrally sponsored scheme through State AIDS Control Societies in the states for prevention and control of HIV/AIDS. The first National AIDS Control Programme was launched in 1992, which focused on the national HIV surveillance system, prevention activities among High Risk Groups (HRGs) including information on HIV and the blood safety programme. NACP-II launched in 1999 focused on the scale-up of targeted interventions for HRGs, especially prevention, out-reach, HIV testing & counselling and fostered greater involvement of People Living with HIV (PLHIV) and community networks. The treatment programme was also launched under NACP II. Institutionalization of decentralized programme management through State AIDS Control Society was a key thrust in phase II. NACP-III launched in 2007, showed a rapid expansion of prevention, care, support and treatment efforts across the country with a focus on increasing service access points through institutional scale-up and out-reach.

24.1.1 Currently, the NACP-IV (2012-2017) is mid-way through implementation. It focuses on consolidating the gains made during NACP-III and aims to accelerate the process of reversal of the HIV epidemic. The key strategies under NACP-IV includes intensifying and consolidating prevention services with a focus on HRG and vulnerable population,

increasing access and promoting comprehensive care, support and treatment, expanding IEC services for general population and high risk groups with a focus on behaviour change and demand generation, building capacities at national, state and district levels and strengthening the Strategic Information Management System. Prevention and Care, Support & Treatment (CST) form the two key pillars of all HIV/AIDS control efforts in India.

24.1.2 The package of services provided under NACP-IV includes:

a) Prevention Services:

- Targeted Interventions (TI) for High Risk Groups and Bridge Population, Female Sex Workers (FSW), Men who have Sex with Men (MSM), Transgenders/Hijras, Injecting Drug Users (IDU), Truckers & Migrants;
- Needle-Syringe Exchange Programme (NSEP) and Opioid Substitution Therapy (OST) for IDUs;
- Prevention Interventions for Migrant population at source, transit and destinations;
- Link Worker Scheme (LWS) for High Risk Groups and vulnerable population in rural areas;
- Prevention & Control of Sexually Transmitted Infections/Reproductive Tract Infections (STI/RTI);

- Blood Transfusion Services;
- HIV Counselling & Testing Services;
- Prevention of Parent to Child Transmission;
- Condom promotion;
- Information, Education & Communication (IEC) and Behaviour Change Communication (BCC)–Mass Media Campaigns through Radio & TV, Mid-media campaigns through Folk Media, display panels, banners, wall writings etc., special campaigns through music and sports, flagship programmes, such as Red Ribbon Express;
- Social Mobilization, Youth Interventions and Adolescence Education Programme;
- Mainstreaming HIV/AIDS response and
- Work Place Interventions.

b) Care, Support & Treatment Services:

- Laboratory services for CD4 Testing, Viral Load testing, Early Infant Diagnosis of HIV in infants and children up to 18 months age and confirmatory diagnosis of HIV-2;
- Free first line & second line Anti-Retroviral Treatment (ART) through ART Centres and link ART Centres, Centres of Excellence & ART plus centres;
- Pediatric ART for children;
- Nutritional and psycho-social support through community and support centres;
- HIV-TB coordination (Cross-referral, detection and treatment of co-infections) and
- Treatment of Opportunistic Infections.

24.2 OVERVIEW OF HIV EPIDEMIC IN INDIA

As per the recently released, India HIV Estimation 2015 report, National adult (15–49 years) HIV

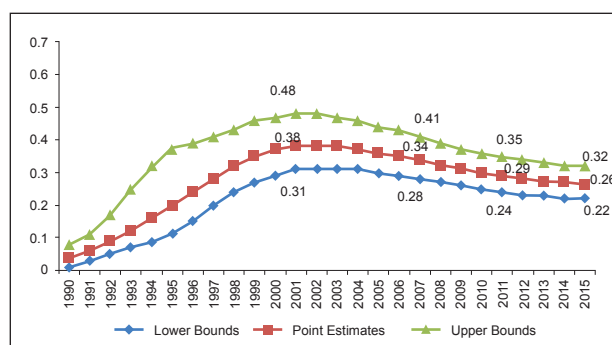
prevalence in India is estimated at 0.26% (0.22%–0.32%) in 2015. In 2015, adult HIV prevalence is estimated at 0.30% among males and at 0.22% among Females.

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 (0.42%) 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/UTs 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 (**Figure 2.1**).

Similar consistent declines are noted both in males and females at the national level.

Figure 2.1: Estimated Adult HIV Prevalence (%) in India, 1990–2015 with Uncertainty Bound

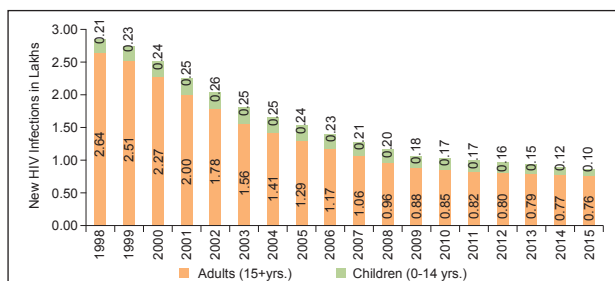


The total number of People Living with HIV (PLHIV) in India is estimated at 21.17 lakhs (17.11 lakhs–26.49 lakhs) in 2015 compared with 22.26 lakhs (18.00 lakhs–27.85 lakhs) in 2007. Children (< 15 years) account for 6.54%.

Undivided Andhra Pradesh and Telangana 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 (1.50 lakhs). These seven States together account for two thirds (64.4%) of total estimated PLHIV. Rajasthan (1.03 lakhs), Tamil Nadu (1.43 lakhs) and West Bengal (1.29 lakhs) 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.

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 (**Figure 2.2**). Children (<15 years) accounted for 12% (10.4 thousand) of total new infections while the remaining (75.9 thousand) new infections were among adults (15+ years).

Figure 2.2: Estimated New HIV Infections in India, 1998–2015

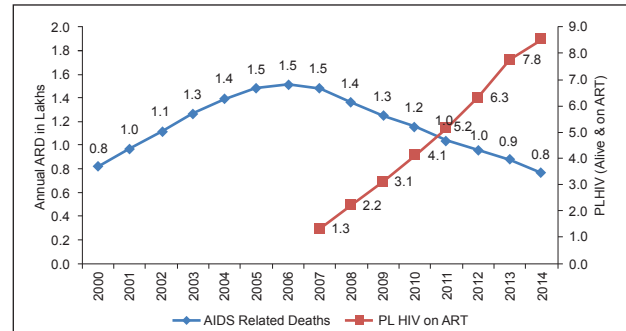


Andhra Pradesh & Telangana, Bihar, Gujarat and Uttar Pradesh currently account for 47% of total new infections among adults with each of these States contributing seven thousand five hundred or more new infections in 2015.

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 2015 an estimated 67.6 (46.4–106.0) thousand people died of AIDS related causes nationally (**Fig. 2.3**).

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.

Figure 2.3: Annual AIDS-related Deaths and ART Scale-up, India, 2000-14



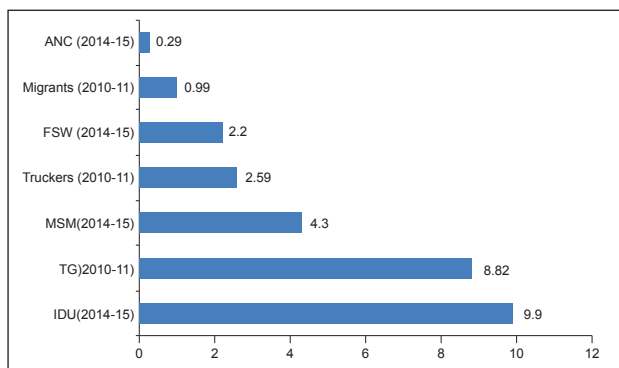
According to HIV Sentinel Surveillance (HSS) 2014-15, the overall HIV prevalence among ANC clinic attendees, considered a proxy for prevalence among the general population, continues to be low at 0.29% (90% CI : 0.28 - 0.31) in the country, with an overall declining trend at the national level (**Fig. 2.4**).

The highest prevalence was recorded in Nagaland (1.29%), followed by Mizoram (0.81%), Manipur (0.60%), Gujarat (0.56%) and Chhattisgarh (0.41%). Telangana (0.39%), Bihar (0.37%), Karnataka (0.36%) and Andhra Pradesh (0.35%) were other States which recorded HIV prevalence of more than the national average.

India continues to portray a concentrated epidemic. HIV prevalence among different risk groups is given in Figure below. National Integrated Behavioural and Biological Surveillance (IBBS) has estimated HIV prevalence among Female Sex Workers (FSWs), nationally, level at 2.2% (95% CI: 1.8 - 2.6). HIV Prevalence among MSM recorded at the national level was 4.3% (95% C I: 3.7 – 5.1) while among IDU, the prevalence of

HIV recorded among IDU at the national level was 9.9% (95% CI: 9.0 - 10.9).

Figure 2.4: HIV Prevalence (%) among ANC Client (HSS 2014-15), FSW, MSM, IDU (IBBS 2014-2015) & other risk groups (HSS 2010-11), India



24.3 TARGETED INTERVENTIONS (TI)

Targeted Intervention (TI) programme is one of the most important prevention strategies under NACP. TIs comprise of preventive interventions working with focused client populations in a defined geographic area where there is a concentration of one or more High Risk Groups (HRGs). The key high risk groups covered through Targeted Intervention (TI) programme include: Core High Risk Groups (HRGs) such as Female Sex Workers (FSW), Men who have Sex with Men (MSM), Transgender/Hijras (TGs), Injecting Drug Users (IDU) and Bridge Populations such as Migrants and Long Distance Truckers. People from high risk communities are engaged to deliver services and act as agents of change, linking services with commodities provision. TI projects provide a package of prevention, support and linkage services to HRGs through outreach-based services delivery model which includes screening for and treatment of Sexually Transmitted Infections (STI), free condom and lubricant distribution among core groups, Social Marketing of condoms, Behaviour Change Communication (BCC), creating an enabling environment with community

involvement and participation, linkages to integrated counseling and testing centers for HIV testing, linkages with care and support services for HIV positive HRGs, community mobilization and ownership building and specifically for IDUs, distribution of clean needles and syringes, abscess prevention and management, Opioid Substitution Therapy (OST) and linkages with detoxification/rehabilitation services.

The national programme continues to provide programme services to be made at the “doorsteps” of the HRGs adopting the peer led approach through partnering with NGOs/CBOs along with State AIDS Control Societies (SACS) and Technical Support Unit taking the role of mentoring and supervising the TIs.

Performance of TI Programme during 2015-16 (up to September 2015):

Coverage of core HRG group: The coverage data for core group HRGs is based on the periodic reports received at NACO, as depicted in Fig. 3.1 the key performance of TIs, shows that FSW coverage compared to the estimates has been the highest among the core groups (77.42%) and from last year coverage for TG has increased from 0.18 to 0.24 lakhs while for others it has slightly decreased.

Fig 3.1: Coverage of Core HRGs (FSW, MSM, IDU) during 2015-16 (Up to Sept 2015)

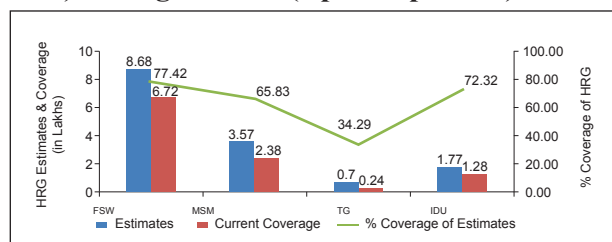
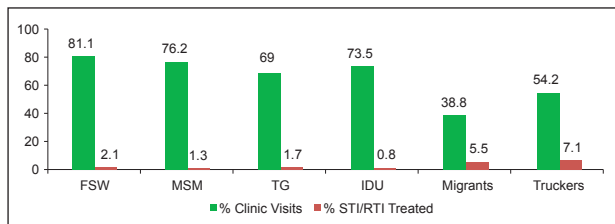


Fig. 3.2 showcases the number of clinic visits made by HRGs during 2015-16 (up to Sept. 2015) along with the proportion of STI clinic attendees diagnosed and treated for STI/RTI during 2015-16. The bridge population is showing higher number of

STI/RTI episodes vis-a-vis FSW/MSM/TG/ Hijra and IDU population. This is due to the fact that the NACO guidelines suggests that HRGs from core groups should visit STI clinics every quarter, especially for regular medical check-up and for treatment of Sexually Transmitted Infection (STI)/ Reproductive Tract Infection (RTI).

Fig 3.2: STI clinic visits during 2015-16 (Up to Sept 2015)



HIV testing and ART linkages among HRGs

As per the NACO guidelines all core HRGs should be tested for HIV once every six months. **Fig 3.4** depicts the number of HIV tests performed among HRGs through referrals from targeted intervention projects. The graph depicts HIV testing done and HIV positivity rate for each typology during 2015-16. Amongst IDU, TGs and Truckers the HIV positivity is higher.

Fig 3.3: HRGs tested for HIV at ICTCs during 2015-16 (Up to Sept 2015)

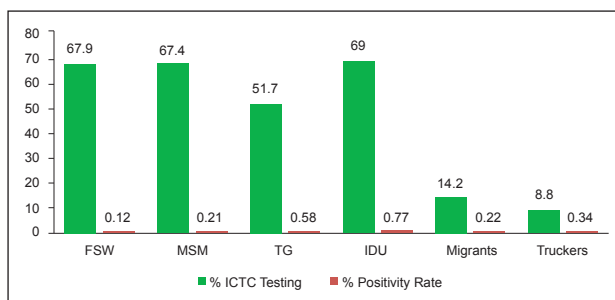
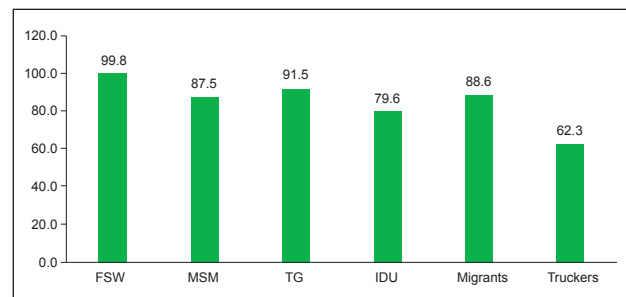


Fig. 3.4 depicts the PLHIV HRG linked to ART centers during the period 2015-16 (Up to Sept 2015). Due to the mobility of long distance truck drivers the percentage of HIV positive truckers being linked to ART centers is low at 62.3%, while

for other HRGs more than 80% of the PLHIV identified are linked to ART centers. As part of increasing the coverage especially amongst bridge group (where the % of HIV testing is hovering around 10-15%) community based testing is being experimented. This year HIV testing through TIs would focus and prioritise on the left out HRG population who could not access HIV testing facility at ICTCs even once as per old strategy. This should pave the way for ease of access for HIV testing facility for HRGs.

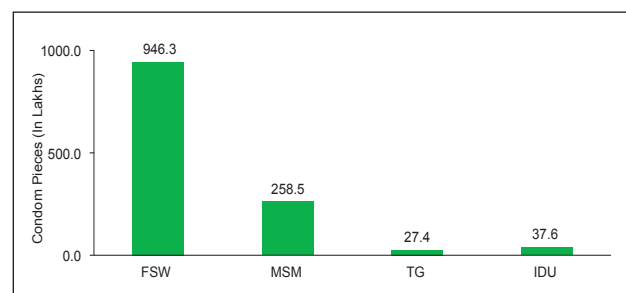
Fig 3.4: PLHIV (%) HRG linked to ART center during 2015-16 (Up to Sept 2015)



Condom distribution among HRGs

As part of the National programme a lot of emphasis is provided on keeping all sexual encounters protected by consistent and correct usage of condoms. To ensure this, condoms are distributed to HRGs as per their requirement. **Fig 3.5** shows the typology-wise number of condoms (free and social marketing) distributed to the HRGs during 2015-16 (Up to Sept 2015).

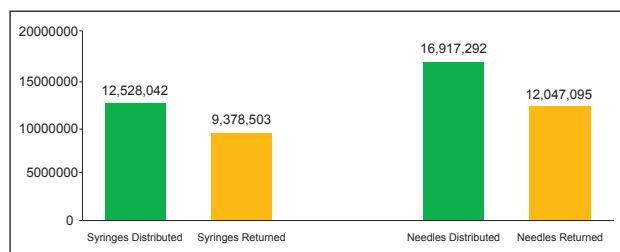
Fig 3.5: Typology-wise condom pieces distributed to HRGs during 2015-16 (Up to Sept 2015)



Needle & Syringe distribution patterns among Injecting Drug Users (IDUs)

As part of preventive services, Targeted Interventions for IDUs distribute free syringes and needles to Injecting Drug Users (IDUs) through peer educators and IDUs are encouraged to return the used syringes and needles. This ensures availability of sterile syringes and needles to IDUs and reduces possibility of sharing injecting equipment, thus decreasing risk for HIV transmission. **Figure 3.6** depicts the number of syringes and needles distributed to IDUs and the number of used syringes and needles returned by them during 2015-2016 (Up to Sept 2015).

Fig 3.6: Distribution and Return of Syringes & Needles, 2015-16 (Up to Sept 2015)



Capacity Building of TIs through State Training Resource Centers (STRCs)

Under NACP-IV, State Training & Resource Centers were envisioned to provide sustained support and enhance quality of interventions through training and developing the capacity of TI projects staff. State Training & Resource Centres (STRCs) work closely with the State AIDS Control Societies and Technical Support Units (TSUs) to build the capacity of the TI staff. While the new staffs are trained on the standardized modules, the old staffs are imparted customized trainings based on needs assessment carried out by STRCs. STRCs build and preserve

local resources to ensure that overall capacity of States improves with respect to programme processes, roles and responsibilities of TI staff.

12 STRCs are on board, covering 21 states as on August 2015, the rest are in the process of procurement which will be completed soon. The training calendar is designed by each STRC in consultation with SACS/TSU to carry out the training activities based on the training modules. During the FY 2015-16 (till October 2015), a total of 1139 TI staff were trained by STRCs and due to shortfall in training budgets at SACS and NACO level, trainings could not be prioritized.



Induction Training Programme for TI Programme Managers in Gujarat

Performance grading of Targeted Interventions

Technical Support Units (TSUs) conduct quarterly assessment of TIs on a comprehensive 18 indicator tool that assesses infrastructure, programme processes and service delivery. **Table 3.1** gives a comparative summary of the half yearly assessments conducted during the period April-Sept. 2014 and Oct 2014-March 2015. As seen in the table the qualitative aspect of TIs have increased as seen where the number of TIs in Good (B) and Very Good (A) category have increased from 860 to 1027 during the two six months period.

Table 3.1: Status of half-yearly assessments grading of TIs for the period April to September-2015

Name of the States/UTs	April - September 2015				
	Number of TI graded				Total number of TIs graded
	Poor (D)	Average (C)	Good (B)	Very Good (A)	
Ahmedabad	8	7	3	1	19
Andhra Pradesh & Telangana	1	26	84	46	157
Arunachal Pradesh	0	5	8	10	23
Assam	0	1	17	36	54
Bihar	0	15	13	2	30
Chandigarh	0	0	1	12	13
Chhattisgarh	1	6	14	20	41
Daman & Diu	1	4	1	1	7
Delhi	0	3	17	67	87
Goa	1	0	4	6	11
Gujarat	4	19	44	30	97
Haryana	30	9	10	4	53
Karnataka	4	10	41	66	121
Kerala	5	5	30	25	65
Maharashtra	5	32	62	54	153
Madhya Pradesh	6	14	28	21	69
Manipur	0	1	23	39	63
Meghalaya	2	2	5	0	9
Mizoram	2	1	24	9	36
Nagaland	0	0	18	35	53
Odisha	3	4	14	16	37
Puducherry	0	0	5	0	5
Punjab	0	3	19	43	65
Rajasthan	4	13	17	11	45
Sikkim	0	0	5	2	7
Tamil Nadu	2	3	28	41	74
Tripura	0	0	2	12	14
Uttarakhand	3	7	15	9	34
Uttar Pradesh	3	14	33	43	93
West Bengal	0	6	10	14	30
Total No. of TIs	85	210	595	675	1565
All India Percent Grading	5.4	13.4	38.0	43.1	100.0

Grading for Jammu and Kashmir, Jharkhand and Mumbai is not included for the period April to September 2015 in above table due to non-availability of data.

Table 3.2: State-wise and Typology-wise distribution of Targeted Interventions (TIs) supported by NACO during the FY 2015-16 (As on Sept. 2015)

S. No.	Name of the SACS/MACS	No of TIs functional	FSW	MSM	IDU	TG	Core Composite	Migrant (Destination)	Trucker
1	Ahmedabad	19	3	2	1	1	0	10	2
2	Andhra Pradesh	155	35	5	5	0	89	17	4
3	Arunachal Pradesh	28	4	1	4	0	13	6	0
4	Assam	54	31	2	6	0	11	2	2
5	Bihar	39	6	3	10	0	19	0	1
6	Chandigarh	13	4	2	2	0	1	3	1
7	Chhattisgarh	42	11	0	6	0	15	7	3
8	D&N Haveli	0	0	0	0	0	0	0	0
9	Daman & Diu	7	0	0	0	0	2	4	1
10	Delhi	88	36	12	15	8	0	13	4
11	Goa	15	6	3	1	0	1	2	2
12	Gujarat	99	11	13	2	1	32	34	6
13	Haryana	54	9	9	14	0	6	14	2
14	Himachal Pradesh	24	12	1	2	0	2	6	1
15	Jammu Kashmir	17	3	1	4	0	4	3	2
16	Jharkhand	32	22	2	3	0	1	1	3
17	Karnataka	124	63	28	4	2	3	18	6
18	Kerala	65	20	14	6	8	0	15	2
19	Madhya Pradesh	76	25	4	9	0	27	7	4
20	Maharashtra	180	54	8	3	5	31	65	14
21	Manipur	63	6	2	46	0	7	2	0
22	Meghalaya	10	3	0	4	0	2	1	0
23	Mizoram	37	1	1	23	0	8	4	0
24	Mumbai (MC)	48	17	8	3	5	0	13	2
25	Nagaland	53	2	3	30	0	16	1	1
26	Odisha	54	12	2	6	1	22	9	2
27	Puducherry	5	1	1	0	0	2	1	0
28	Punjab	66	14	0	23	0	20	5	4
29	Rajasthan	45	13	4	4	2	9	10	3
30	Sikkim	7	3	0	4	0	0	0	0
31	Tamil Nadu	74	13	11	1	2	37	6	4
32	Tripura	14	8	0	2	0	1	3	0
33	Uttar Pradesh	93	12	2	13	2	51	6	7
34	Uttarakhand	40	13	1	7	0	8	8	3
35	West Bengal	35	19	4	3	1	1	2	5
INDIA		1775	492	149	266	38	441	298	91

Table 3.3: State-wise and Typology-wise coverage of Key Risk Groups under the programme, 2015-16

(As on Sept 2015)

Name of the SACS	FSW	MSM	IDU	TG	Migrant (Destination)	Trucker
Ahmedabad	3,180	2,829	379	302	150,000	40,000
Andhra Pradesh	137,479	31,449	2,275	-	197,208	67,200
Arunachal Pradesh	3,680	513	2,277	-	30,000	-
Assam	15,748	2,895	2,373	258	20,000	15,000
Bihar	13,606	2,339	5,102	-	-	10,000
Chandigarh	3,948	2,500	1,143	92	30,000	10,000
Chhattisgarh	18,314	2,740	2,860	545	77,000	50,000
D & N Haveli	-	-	-	-	-	-
Daman & Diu	591	688	-	-	60,000	10,000
Delhi	42,749	13,237	9,770	6,672	180,000	50,000
Goa	3,511	3,063	264	-	20,000	10,000
Gujarat	23,144	25,030	716	1,191	331,000	76,000
Haryana	11,576	6,749	5,117	-	140,000	5,000
Himachal Pradesh	-	-	-	-	64,000	-
Jammu and Kashmir	1,145	198	874	-	21,000	20,000
Jharkhand	13,278	1,272	884	54	10,000	45,000
Karnataka	79,677	26,407	2,027	2,002	182,000	80,000
Kerala	21,749	14,417	3,106	2,622	150,000	20,000
Madhya Pradesh	21,918	7,885	5,774	-	82,000	50,000
Maharashtra	66,066	22,613	724	2,150	884,000	220,000
Manipur	5,713	919	19,754	-	15,000	-
Meghalaya	1,564	274	1,713	-	10,000	-
Mizoram	916	472	9,092	-	25,000	-
Mumbai	16,706	11,696	1,081	4,545	130,000	15,000
Nagaland	3,036	1,250	16,394	-	5,000	5,000
Odisha	10,281	4,705	2,123	-	92,000	-
Puducherry	1,801	1,934	-	-	12,000	-
Punjab	18,451	2,412	13,058	-	65,000	35,000
Rajasthan	13,052	4,538	1,326	563	100,000	20,000
Sikkim	881	-	927	-	-	-
Tamil Nadu	43,632	31,831	514	652	60,000	47,000
Tripura	4,555	169	448	-	15,000	-
Uttar Pradesh	21,893	8,262	13,330	2,355	60,000	95,000
Utarakhand	5,458	1,853	1,817	110	95,000	40,000
West Bengal	28,426	1,369	1,022	230	30,000	50,000
All India*	657,724	238,508	128,264	24,343	33,42,208	10,85,200

*These are provisional reports from states as some states are yet to reflect the coverage data.

Opioid Substitution Therapy (OST) Programme for IDUs

For providing and assuring quality services, a continuous process of capacity building is being followed under Opioid Substitution Therapy (OST) Programme for IDUs.

- The operational guideline on Opioid Substitution Therapy (OST) for clinical staff has been revised incorporating new development in the area.
- A training manual on special needs of Female Injecting Drug Users (FIDU) has been developed which aims to address the issue of FIDU.
- Quality Assurance Protocol (QAP-Medical) of Opioid Substitution Treatment in India (A reference guide for mentors) has been developed. The QAP serves as a resource material for mentors, entrusted with the task of carrying out periodic 'Quality Assurance (QA) visits' to OST centres.

Table 3.4: No. of OST centers

Number of OST Centers as on September 2015			
S. No	State	No. of the centers	No. of active clients being covered
1	Ahmedabad	1	20
2	Andhra Pradesh	1	36
3	Arunachal Pradesh	2	61
4	Assam	2	182
5	Bihar	2	158
6	Chandigarh	4	277
7	Chhattisgarh	4	416
8	Delhi	11	1,297
9	Goa	1	43
10	Gujarat	2	27
11	Haryana	9	582
12	Jammu and Kashmir	2	259
13	Jharkhand	2	251

Number of OST Centers as on September 2015			
S. No	State	No. of the centers	No. of active clients being covered
14	Karnataka	3	90
15	Kerala	10	328
16	Madhya Pradesh	7	490
17	Maharashtra	3	133
18	Manipur	23	2,129
19	Meghalaya	4	565
20	Mizoram	17	1,137
21	Mumbai	3	244
22	Nagaland	31	1,665
23	Odisha	3	115
24	Punjab	28	7,182
25	Rajasthan	2	48
26	Sikkim	3	128
27	Tamil Nadu	1	50
28	Tripura	3	194
29	Uttar Pradesh	11	891
30	Uttarakhand	5	253
31	West Bengal	8	376
Total		208	19,627

New Initiatives under Targeted Interventions

This year, several new initiatives were taken and prominence was given to utilize the technology to bring efficiency and arrest data impropriety in the programme. As part of the new initiative the following was done:

1. **“Sustaining the HIV Prevention Impact among Key Populations” in the State of Andhra Pradesh, Telangana, Karnataka, Maharashtra and Tamil Nadu.**

To strengthen and improve community institution, NACO is leading a focused initiative on Vulnerability Reduction and Community System Strengthening (CSS) to concentrate (87 CBOs in the southern states) on Andhra Pradesh, Telangana, Karnataka, Maharashtra and Tamil Nadu for Female Sex Workers programme. The project is

titled as “Sustaining the HIV Prevention Impact among Key Population”, and is operational in five states for 5 years from 2014.

2. Workshop with Law Enforcement Agencies

Strengthening enabling environment is imperative while scaling-up comprehensive HIV prevention, treatment, care and support services to injecting drug users including those who are living in prisons. In this context, NACO has organized the regional workshop for the North Eastern States in September 2015 in continuation of the consultative meeting with the Law Enforcement Agencies held at New Delhi under the chairmanship of Union Secretary (Health), Ministry of Health and Family Welfare (MoHFW). Key representatives from the Narcotics Control Bureau (NCB), Police Commissioners, Prison Authorities, Police Academies, State Health Department, etc. participated in the meeting. The approved Strategy on HIV/AIDS interventions in prison was also shared during the workshop.

3. Project Sunrise

Project Sunrise is the strategic plan developed to upscale HIV interventions in north eastern States of India for augmenting HIV/AIDS response and to curtail the rapid spread of HIV among the High Risk Groups (HRGs) and other vulnerable groups. The strategy was being adopted after a series of consultative meetings with all the stakeholders including the State AIDS Control Societies, State Health Missions, Community Members etc. of the region. The proposed State level plans assess the programmatic gaps and barriers; enhance capacity of state level institutions and improve the quality of IDU package of services amongst other initiatives.

4. Project NIRANTAR (Local Capacity Initiative)

Project Nirantar is a civil society capacity building for advocacy and response to the HIV/AIDS epidemic among key populations (Female Sex

Workers, Men having sex with Men, Transgenders/ Hijras and Injecting Drug User) in three States of Chhattisgarh, Madhya Pradesh and Odisha primarily focusing on building the Local Capacity Initiatives of TINGOs and SACS. The Goal is to enhance the capacity of CSOs (NGOs, CBOs implementing Targeted Intervention projects) and other local institutions to improve access to HIV prevention to care and treatment continuum services including social protection schemes in an enabling environment for KPs. The period for this project is from September 2014 to September 2017.

5. Migrant Interventions

As per NACP-IV strategy the migrant’s population are reached through Targeted Intervention at destination which is the place where migrants come for work and livelihood. The returnee migrants and their spouses are reached at Source villages through Source migrant intervention and periodical health and communication activities. In order to reinforce the prevention messages, the migrants are reached at the transit places which are places from where they board the train or bus to move between source and destination during their journey.

In addition to above, as large no. of migrant labourers which are linked with the industries either as employees or in the supply chains are serviced by the concerned industries under the Employer Led Model. 217 MoUs have been signed with various industries; it is expected to reach around 5.62 lakhs informal workers through these MoUs.

District AIDS Prevention and Control Units

There are 188 District AIDS Prevention and Control Units (DAPCUs) in A and B category districts spread across 22 states of the country for decentralized monitoring and providing programmatic oversight to the implementation of HIV programme. The DAPCUs are led by a District AIDS Control Officer, from the Government Health System and supported by

the District Programme Manager (DPM), District ICTC Supervisor (DIS) and District Assistants for Monitoring & Evaluation, Accounts and Programme implementation.

The main objective of DAPCU is overall monitoring coordination and troubleshooting for NACP facilities at district level, to develop evidence based district specific programme plan and build robust network with District Administration and line departments.

The DAPCU National Resource Team (DNRT) of the NTSU at NACO has been mandated to mentor the DAPCUs and provide support to SACS in review of DAPCU functioning and drawing up appropriate bottom up action plan for improvement of programme, in terms of scale and quality.

Capacity Building of DAPCUs

The DNRT, with support from CDC and VHS carried forward, training of remaining DAPCU staff in Rajasthan. In the training, DAPCU staffs are being trained on all NACP components. Between 14th to 17th October, 2015, 28 staff members from 7 DAPCUs in Rajasthan were trained. Training of remaining DAPCU staff in the States of Andhra Pradesh and Telangana is expected to complete by March 2016.

Key Activities of DAPCUs

In keeping with the key role of strengthening decentralization and building ownership of State and District Administration of NACP, 188 District AIDS Prevention and Control Units, have contributed in streamlining of SIMS reporting with 100% reporting in more than 90% DAPCU districts paving the way for effective and timely data analysis and drawing up strategic follow up action plan by SACS. DAPCUs have conducted 924 Monthly district level reviews of all NACP facilities, enabling reconciliation and strengthening of cross referrals from prevention to care & support

services. DAPCUs have ensured support of district administration in addressing challenges through quarterly meeting of District AIDS Prevention and Control Committee (DAPCC) chaired by the District Collector/Deputy Commissioner. 228 DAPCC meetings have been conducted in the first 2 quarters of 2015-16. DAPCUs ensured mainstreaming of NACP within the General Health set up by regular participation in 456 meetings with National Health Mission (NHM). DAPCU districts have achieved robust HIV-TB cross referral and linkage by conducting 805 HIV-TB coordination meetings.

DAPCU led single window approach for PLHIV/HRG linkage with Social incentive/benefit schemes: DAPCUs made concerted efforts in empowering PLHIV's access to various social benefits and protection schemes through coordination meetings with line departments and key stakeholders viz. PLHIVs/TI NGOs/CSC/Help Desk /District Level Network (DLN).

This has led to an uptake in access of various central and state sponsored schemes. To cite few instances DAPCU Rajkot, in Gujarat had facilitated the availing of educational scholarship by 235 HIV Infected and Affected students under the Foster Care and Approval Committee. Organized in collaboration with the Social Protection Officer, CSC/DLN & DAPCU Rajkot, Gujarat on 7th July 2015, 235 students were sanctioned scholarships of a total amount of INR 6 lakhs by the Committee. DAPCU Ahmadabad, in Gujarat facilitated availing of Medical Aid worth INR 16 lakhs to 562 PLHIVs under the Government sponsored Tabibi Sahai scheme during the FY 2015-16 (till October 2015).

24.4 LINK WORKER SCHEME (LWS)

Under NACP-IV, the Link Worker Scheme (LWS) has been designed to intensify and consolidate the prevention services focusing on at risk population in the rural areas with a mandate to work in 163 districts across 18 States of India. The

Link Worker Scheme aims to address complex needs of rural HIV prevention, care and support through identification and training of village level workforce of Zonal Supervisors, Cluster Link Workers and other stakeholders on issues of HIV/AIDS, gender, sexuality and Sexual Tract Infections (STI). The scheme envisages creation of demand for various HIV/AIDS related services, linking of the target population to existing services (as the scheme itself does not create any service delivery points), creating an enabling and stigma free environment, ensuring the target population continue to access information, services in a sustained manner, creating linkages with services of other departments through ASHA volunteers, anganwadi workers, panchayat heads etc.

The scheme involves highly motivated and trained community members – 20 Cluster Link Workers in each district for clusters of villages (usually 5 villages each) – responsible for establishing linkages between the community on one hand and information, commodities and services on the other. These Cluster Link Workers are supervised by 2 zonal supervisors in each district.

Table 4.1: Link Worker Scheme for the FY 2015-16 (till September 2015)

	Line-listed population	Contacted with non-clinical services	Covered with clinical services	Tested for HIV	Positive detected
High Risk Groups	1,06,467	65,933	39,078	30,478	55
Migrant	10,64,890	3,53,609	1,07,714	76,168	197
Other Vulnerable population	972,431	414,627	1,51,839	1,20,131	234
People living with HIV (PLHIVs)	31,186	17,791	7,318	NA	NA

High Risk Groups consist of Female Sex Workers (FSW), Men who have sex with men (MSM), Injecting Drug Users (IDUs) and Transgender (TG). During the said period, 61.93% of HRGs were contacted for one-to-one or one-to-group sessions

which involves sensitizing the beneficiaries about HIV/AIDS, STI, other health related issues and distribution of commodities. Apart from this, 28.63% of HRGs were tested for HIV, out of which 55 individuals were detected HIV positive. Among the migrants, 33.21% of migrants were contacted for one-to-one or one-to-group sessions or commodity distribution and 7.15% of migrants were tested for HIV, out of which 197 positive cases were found (**Table 4.1**).

Other vulnerable population consists of spouses of HRGs, spouses of migrants, spouses of trucker, pregnant women, TB patients, Truckers, youth with STI symptoms etc. Out of 972431 line-listed, 42.64% of same were contacted for one-to-one or one-to-group sessions or commodity distribution and 12.35% of this population were tested for HIV out of which 234 positive cases were detected. Under Link Worker Scheme, 31,186 PLHIVs are line-listed out of which 17,791 were contacted in the period April-September 2015.



Drug Abused Day 2015 observed by LWS Amritsar at Central Jail

24.5 SEXUALLY TRANSMITTED INFECTIONS (STI) AND REPRODUCTIVE TRACT INFECTION (RTI) CONTROL & PREVENTION PROGRAMME

Sexually Transmitted Infections (STI) and Reproductive Tract Infection (RTI) enhances chances of acquiring and transmitting HIV infection by 4 to 8 times; hence control and prevention of STI/RTI is a key prevention strategy for HIV. Early

diagnosis; appropriate and complete treatment of STI/RTI reduces the transmission rate of HIV infection by more than 40%. Syndromic Case Management (SCM), with minimal laboratory tests is the cornerstone of STI/RTI management under National AIDS Control Programme.

As per 2002-03 ICMR study, the programme estimates occurrence of 30 million episodes of STI/RTI every year in the country. NACO target is to manage 80 lakh episodes of STI/RTI in 2015-16, out of which the programme has achieved 48.48 (60.6%) lakhs till October, 2015.

Progress of STI/RTI Services

Expansion of STI/RTI Service in Government Health Facilities: Presently there are 1152 designated STI/RTI clinic (DSRC) supported by NACO with at least one DSRC per district in the country. The two arms of DSRC are: **a)** Obstetrics & Gynaecology OPD and **b)** STI OPD under Dermato-venereology clinics and provide services through existing public health care delivery system. NACO has provided support to these clinics to provide quality STI/RTI services through audio-visual privacy, furniture and instrument for conducting internal examination, provision of central supply of colour coded STI/RTI drug kits, RPR kits, consumable for conducting basic laboratory tests and computers for maintaining records and for monthly reporting through Strategic Information Management System (SIMS). Each of these clinics is also provided with one trained counsellor. A total of 18,72,391 RPR tests were conducted among attendees of DSRCs of which only 0.4% (7652) were reactive. Number of patients referred to the Integrated Council and Testing Centres (ICTC) were 16,30,294 of which 0.5% (8307) were found tested positive for HIV. Among the pregnant women attending antenatal care, 18,08,120 lakhs were screened for syphilis of which 0.15% (2738) were found reactive for syphilis and were provided treatment. The sero

prevalence of Syphilis is observed to be declining steadily among patients with STI/RTI, pregnant women and high risk groups.

Pre-packed STI/RTI colour-coded kits

The pre- packing of STI/RTI drug kits has helped to standardize the treatment. The colour coded STI/RTI kits have been provided for free supply at all DSRCs and TI NGOs. These colour coded drug kits are procured centrally by NACO and dispatched to all SACS for distributing to facilities for use. The pre-packaging of the drugs is being recognized as one of the global innovation in STI programme management. The drugs used to treat common STI/RTI are included in the National/State List of Essential Drugs.

Regional STI/RTI Training, Research and Reference Laboratories

There are 10 functional Regional STI training, reference and research laboratories supported & strengthened by NACO. These are located at:

1. Osmania Medical College Hyderabad;
2. Medical College Kolkata and Institute of Serology Kolkata;
3. Government Medical College Nagpur;
4. Government Medical College Baroda;
5. Institute of Venereology, Chennai;
6. Maulana Azad Medical College, New Delhi;
7. BYL Nair Hospital, Topiwala National Medical College, Mumbai;
8. Government Medical College, Guwahati, Assam;
9. Post Graduate Institution of Medical Education and Research, Chandigarh and
10. Safdarjung Hospital, New Delhi acts as the Apex Centre as well as Regional Laboratory for the country. The three STI labs at

Mumbai, Guwahati and Chandigarh are made functional from this year.

The key functions of these laboratories are to provide etiologic diagnosis of common STI/RTI syndromes, validation of syndromic diagnosis, monitoring of drug sensitivity of gonococci and implementation of Syphilis EQAS. Operational Research (OR) protocols of Chennai, Hyderabad, Baroda and Nagpur Centres were approved by NACO R & D TRG and Ethics Committee and Baroda and Nagpur centres have completed the activity and in report writing stage. The OR activity at the centres are mentored with the support from CDC through FHI360.

Based on recommendations of STI-TRG and evaluation team a national mentoring committee has been set up to strengthen and oversee the functioning of these centres and to monitor operation research activity.

In addition to 10 Regional STI labs, an additional 45 State STI training and reference laboratories have been identified and their staff trained. These centres function under the mentorship of linked regional STI laboratories and the network of STI labs will implement the STI surveillance protocol. An operational manual was drafted to facilitate and standardize State STI centres functioning. Each of these STI labs were assigned dedicated geographic areas and DSRCs, TI working in these areas are linked with the respective labs. These STI labs are entrusted to oversee the quality of syphilis screening as per national EQAS protocol. These labs will also investigate the congenital syphilis cases reported to programme in addition to monitoring sensitivity of Gonococci.

Training and Capacity Building and regular on site mentoring of STI/RTI service providers

Standardized training curriculum for doctors, staff nurse, laboratory technician and counselor is in

place. The training to these staff is provided in a cascade form through a cadre of national, state and regional resource faculties across all states. All faculty members have been trained using the same training material, following adult learning methods. The state and regional resource faculties in turn have conducted training of STI/RTI clinical staff in the designated clinic and TI NGO. A total of 2556 personnel were trained including 922 doctors, 542 staff nurses, 170 laboratory technicians and 922 preferred providers.

NACO has developed an integrated training module for counselors working at DSRC/ART/ICTC in consultation with TISS, Mumbai. In 6 batches 154 master trainers were trained on content and methodology. The newer training module is for 7 days instead of 12 days in the past, including one day for field visit. All the counsellors working at DSRC/ART/ICTC will be trained with this new comprehensive induction module during the FY 2015-16. Training schedules were prepared and states were informed.

Additionally each district has district resource faculties for training doctors, nurses and laboratory technicians on STI/RTI management for sub district health facilities (PHC, CHC and Sub-divisional Hospital). A total of 10799 person from sub-district health facilities were trained in syndromic case management which includes 3454 doctors and 7345 nursing staff.

Basics of STI programme activities were included in the curriculum developed for trainings of ANM at FICTC and laboratory technicians of ICTC, wherein the related curriculum has been incorporated into their existing curriculum so as to make service delivery comprehensive. To enable screening of pregnant women accessing labour room directly, a training module was designed to orient Labour room nurses for screening of direct walk in pregnant women both for HIV and Syphilis.

Convergence with NHM

STI/RTI services are also an integral part of services provided at all government health facilities including PHC/CHC. At each of these health facilities a standardized service delivery protocol is followed. Medical and paramedical staffs are trained, free STI treatment is provided to patients and monthly reports on STI/RTI indicators are reported by these facilities through existing HMIS.

Convergence has been strengthened at the national level through constitution of a joint working group and development of national operational framework for STI/RTI services delivery at sub-district health facilities. National operational guidelines and training modules for medical officers and paramedical staff for STI/RTI services have been developed jointly and disseminated. A joint convergence meeting between NACO and NHM is conducted once every quarter. STI curriculum is integrated in the training module for nurses and an integrated package of STI/HIV training is imparted by Indian Nursing Council for nursing staff as per the standardized curriculum.

NACO has revised national STI/RTI technical guidelines, 2014 in consultation with NHM.

Provision of STI/RTI Services in High Risk Group Population

The provision of a standardized package of STI/RTI services to High Risk Group (HRG) population is an important component of the Targeted Intervention projects. All the core group population receives packages of services which include:

- Free consultation and treatment for their symptomatic STI complaints;
- Quarterly medical check-up;
- Asymptomatic treatment (presumptive treatment) and
- Bi-annual syphilis and HIV screening.

Preferred Private Provider approach has been rolled out to scale up STI/RTI services to HRG population under TI Projects. These providers are selected by the community members through group consultation. This approach has enhanced access to services for the HRG. Under this approach, all the HRG receives free STI/RTI treatment and the providers receive a token fee of Rs.75 per consultation. A total of 3565 preferred provider are providing STI/RTI services to the HRG. All these preferred providers are trained using a standardized curriculum on syndromic case management. Colour coded STI/RTI drug kits have also been made available to these providers for free treatment of sex workers, MSM and IDU and data collection tools are also provided to them. A total of about 19.28 lakhs visits have been made by HRG and 13.72 lakhs regular medical check-up have been conducted. The involvement of private practitioners for providing STI services to HRG at such a large scale is one of the few successful initiatives globally.

Partnering with Organized Public Sector, Public Sector Undertaking and Professional Organization

The major proportion of patients with STI/RTI seek services from the vast network of private healthcare delivery systems ranging from freelance private practitioners to large public hospitals. Also, many are accessing services from public healthcare systems under other sectors like railways, ESI, armed forces, CGHS, port hospitals as well as health facilities of public sector undertakings like Coal India Ltd, SAIL etc. It has been felt that reaching out to maximum numbers of people suffering from STI/RTI is not possible without partnership with private sector and organized public sectors. NACO has initiated partnership with organized public sectors and private sectors through professional associations to support the delivery of STI/RTI services with the objective to reach the populations presently not

covered by the public healthcare delivery system. STI/RTI services have been rolled out in major Port hospitals, ESIC and Private Medical Colleges.

New Initiative under STI/RTI Programme

Elimination of Parent to Child Transmission (EPTCT) of Syphilis: The STI/RTI Division in collaboration with the Basic Services Division of NACO with Maternal Health Division under Ministry of Health & Family Welfare and WHO/SEARO has drafted National Strategy on EPTCT of Syphilis and launched this programme initiative in collaboration with the National Health Mission. Under the EPTCT of syphilis NACO and Maternal Health Division are aiming for early registration, early screening for both Syphilis and HIV and treat those found reactive, promote institutional delivery and follow up the new born up to 18 months of age.

Technical Resource Group for STI has met on 28th of September 2015 and recommended that STI programme to liaise with Non communicable division to expand screening for cervical cancer of women attending STI/RTI clinics, ART centres and female sex workers by strengthened referral linkages between these facilities and NCD clinics. TRG also recommended to explore feasibility and introduce vaccination for HBV and HPV to most at risk population by working together with Immunization division. It was further suggested that programme should work towards elimination of Chancroid and Donovanosis in-addition to congenital syphilis.

24.6 CONDOM PROMOTION PROGRAMME

Condom promotion by the Ministry of Health and Family Welfare, Government of India has a long history. In the initial period, condom was promoted under National Family Planning Programme. With the emergence of HIV as a serious health threat, promotion of condom for preventing HIV/AIDS was taken up under National AIDS Control Programme (NACP). With nearly 88% of HIV infection transmitted through unsafe sex,

significant efforts have been made by NACO to increase the awareness and usage of condoms to prevent the transmission of HIV/AIDS.

NACP has consistently focussed on prevention from HIV/AIDS through safe sex practices. Given the significant role of condoms in the prevention of STI/HIV infections, the NACO promotes condom use for controlling the epidemic.

In view of the prevailing status regarding condom usage in the country, a well-focused national level condom programme was implemented that comprised of social marketing of condom and free distribution among the most vulnerable ones. The desired behavioural outcomes of the condom programme are to increase consistent use of condoms among men with the non-regular sexual partners or in commercial sex encounters and among married couples for preventing unwanted pregnancies.

Targeted Condom Social Marketing programme (CSMP)

NACO targeted Condom Social Marketing programme focuses on providing easy accessibility of condoms. The coverage and sustainability of non-traditional outlets is enhanced as they facilitate easy accessibility of condoms in rural and far flung areas. The programme also focus on saturation of high risk areas i.e. truckers halt points and TI sites. All kinds of condom selling outlets located around these high risk areas are also covered in systematic approach under CSMP.



Non-traditional outlets selling condom

NACO has successfully implemented the last phase of its targeted Condom Social Marketing Programme in six States in North East region during the period June 2014 to May 2015. The current programme phase was concluded on June 30th 2015 in states that include Assam, Manipur, Nagaland, Tripura, Meghalaya and Mizoram. Condom Social Marketing Programme was also implemented and concluded in Karnataka, Rajasthan, Gujarat, Maharashtra, Odisha and West Bengal.

Overall 171 districts comprising of 99 High Prevalence High Fertility (HPHF), 38 High Prevalence Below Fertility (HPBF) and 34 Low Prevalence High Fertility (LPHF) districts were covered under this phase of CSMP. Under this phase of Condom Social Marketing programme, the total condom sale has been recorded as 2.8 crores till October 2015. This condom sale was achieved through servicing of more than 1.17 lakhs retail outlets spread over all programme states during this period (**Table. 6.1**).

Table 6.1: Condom sales and outlet coverage in 2015-16 (till October 2015)

Total Condom Sales (pcs)	2,83,50,723
Total Outlets Serviced (nos)	1,16,657

Condom Demand Generation

NACO continued to follow its communication framework devised under the current strategy adopted for long term that is based on promoting condom use by enhancing self-risk perceptions. The primary objective is to motivate the behaviour change among the key target population like high risk groups, bridge population as well as general population especially the youth as a category. Under this strategy, all condom promotion communication activities were developed to focus on to bring about positive behaviour change towards consistent condom use. These promotions are designed to promote condoms for its benefits of triple protection from the risks of HIV/AIDS,

STI and unwanted pregnancy.

NACO promotes safe sex and regular condom use through its campaigns on mass media. These condom promotion campaigns on mass media are aired on national networks of Doordarshan, leading cable & satellite channels, All India Radio and private FM channels to ensure countrywide footprints. This year, a new mass media campaign was developed in Hindi and other regional languages.



New Mass Media Campaign in Hindi

The new campaign is based on theme of 'making regular condom use a habit' to ensure its consistent use. The basic premise of this communication is to encourage audience to adopt safe sex practice by using condom every time. This campaign has been developed in two parts depicting various common incidents and events occurring in daily life of ordinary individuals. The essence of each of these episodes is to highlight benefits of good habits and thus appealing for making condom use a habit in order to play safe while having sex.

This campaign was conceived to be an integrated one encompassing compatibility across various media platforms including television, radio, outdoor, social media sites on the internet, mid-media activities, leaflets and merchandise as promotion material for display at the points of purchase.

The digital cinema screening was also included in condom campaign media plan to reach out to the target population through cinema halls of smaller towns. Only those cinema halls were shortlisted which are located in priority districts.

Optimization of Free Supply of Condoms

Another key objective of the NACO condom programme is to optimize the supply of free condoms to ensure availability to the vulnerable population and minimize the wastage of free condom. NACO, with the assistance of Technical Support Group (TSG) - Condom Promotion, has adopted multi-pronged strategy to increase the efficiency of distribution system at various stages in distribution chain which includes:

- Regular tracking of free condom supply received from Ministry of Health & Family Welfare to State AIDS Control Societies (SACS) every month to avoid stock out situation at SACS.
- Free condom supply analysis from SACS to TI-NGOs and subsequent distribution from various TI-NGOs to Most at Risk Populations (MARPs).
- Free condom annual demand estimation as done at TI-NGO and SACS levels based on previous data analysis.

The annual condom demand is estimated at SACS based on High Risk Group (HRGs) coverage, past condom usage trends and reviews of existing inventory of free condoms at SACS as well as at TI-NGOs covered by SACS. This results in managing available stock in accordance with the projected estimates of free supply of condom requirements as received from the respective SACS.

In order to ensure the free condom availability at various State AIDS Control Societies (SACS), NACO initiated inter-state transfers of free condom

stocks from the states where excess or relatively higher stock inventories were available to other SACSs. Similarly, NACO in close collaboration with respective SACS explored availabilities of free condoms under National Health Mission (NHM) and stocks were transferred from NHM to SACS wherever feasible.

On the other hand, intensive efforts by NACO to induce participation from private organisations also led to increased availability of condoms for free distribution. In this direction, the total 12 lakhs condoms have been committed by private organisation for donation. NACO also ensured concerted social marketing efforts at outlets situated in and around TI sites which could compensated the demand for free condoms to some extent.

Capacity Building

Regular induction and orientation sessions were organized to provide guidelines and road map to TI NGOs and CBOs towards effective implementation of condom training programme. These capacity building sessions are aimed at reaching out to TI-NGOs for training their Project Managers, Counsellors, M&E Officers, ORWs and PEs to enhance their knowledge and bring clarity in their roles and responsibilities towards condom programming. These sessions also help them to adapt to contemporary systems and tools like scientific forecasting of condom demand, effective distribution of condoms to maximize the use of condom and inventory management. Besides, it also helps to build confidence of TI staff in addressing key barriers in condom usage dispelling myths and misconceptions associated with condom use. Overall 395 TI NGOs including core TIs, Bridge, Pehchaan & LWS were trained across 29 States till October 2015.

24.7 BLOOD TRANSFUSION SERVICES

The annual requirement of blood for the country

is estimated at 12 million units of blood and the endeavor is to meet the blood needs of the country through voluntary non-remunerated donation through a well-coordinated and networked blood transfusion service.

An important Supreme Court judgment of 1996 mandated creating of National Blood Transfusion Council and directed stopping of professional blood donation. The National Blood Transfusion Council (NBTC), the apex policy making body for issues pertaining to blood and plasma and for monitoring of blood transfusion services is a part of National AIDS Control Organization. Government of India adopted the National Blood Policy in April 2002 which aims to develop a nationwide system to ensure easy access to adequate and safe blood supply. An Action Plan on Blood Safety was formulated by the Governing Body of National Blood Transfusion Council to address all the objectives of the National Blood Policy.

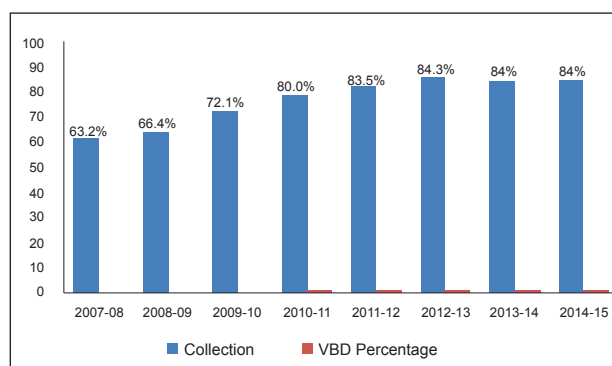
Current Scenario

The blood transfusion services comprise of 2760 licensed blood banks across all states and sectors, of which a network of 1,161 blood banks, including 304 Blood Component Separation Units (BCSU) and 34 Model Blood Banks, 210 Major Blood Banks and 613 district level blood banks are further supported by NACO by way of equipments, manpower and consumables.

NACO has been primarily responsible for ensuring provision of safe blood for the country since 1992. During NACP, the availability of safe blood increased from 44 lakh units in 2007 to 100 lakh units by 2014-15. During this phase, incidence of donor HIV sero-reactivity has declined from 1.2% to less than 0.2% in NACO supported Blood Banks. NACO supported blood banks are functional across the country in all barring 72 districts, but access to safe blood continues to be limited especially in rural areas in states like

Uttar Pradesh, Uttarakhand, Jharkhand, Bihar, Chhattisgarh. Till Sept. 2015, 28.4 lakh units were collected among these NACO supported Blood Banks, 78% of these blood units were collected through Voluntary Blood Donation (VBD). HIV sero-reactivity has remained low in tune of 0.14% in these blood banks.

Table 7.1: Units Collected and VBD Percentage in NACO Supported Blood Banks



Government has adopted a comprehensive approach towards strengthening blood transfusion services, key strategies for which include:

- Increasing regular voluntary non-remunerated blood donation to meet the safe blood requirements of safe blood in the country;
- Promoting component preparation and availability along with rational use of blood in health care facilities and building capacity of health care providers to achieve this objective;
- Enhancing blood access through a well networked regionally coordinated blood transfusion services;
- Establishing Quality Management Systems to ensure safe and quality blood and
- Building implementation structures and referral linkages.

National Blood Transfusion Council (NBTC)

The primary function of NBTC as the policy formulating apex body in relation to all matters pertaining to operation of blood centers is as follows:

- Commitment to provide safe and adequate quantity of blood, blood components and blood products through an organized blood transfusion service in the country;
- Formulate and implement National Blood Policy and implement National Blood Programme in the country;
- Make latest technology available for operating the blood transfusion services and encourage the appropriate use of blood and blood product and encourage the research and development of field transfusion medicine and related technology and
- Take adequate regulatory and legislative steps in blood transfusion steps and provide adequate resource policy framework of blood bank services in the country.

NBTC and SBTC are the apex bodies responsible for blood transfusion services at national and state level. They are supported by National and State Transfusion Services Core Coordination Committee created in compliance to directions of governing body of NBTC in its 24th meeting held in January 2014.

The 25th meeting of Governing Body of NBTC was conducted on August 5, 2015 with following major policy decision:

- Standardized policy guidelines for SBTC for set up of new blood banks, grant of No-Objection Certificate and status of Regional Blood Transfusion Centre;
- Policy on permitting transfer of blood units and blood components between blood banks and

- Approval of exchange value of plasma and guidelines for sending plasma for fractionation.

These decisions of National Blood Transfusion Council, will specially step up the utilization and availability of negative and rare blood group units and support disaster management and enable utilization of surplus plasma available with blood banks for fractionation to reduce import dependence for plasma derived medicines.

Promotion of Voluntary Blood Donation

It has been recognized world over that collection of blood from regular (repeat) voluntary non remunerated blood donors should constitute the main source of blood supply. The definition of Voluntary Blood Donor has been revised as per recommendations of NBTC governing body to exclude family donors. Special days such as World Blood Donor Day and National Voluntary Blood Donation Day were observed at national and state level recognizing the contribution of repeat non-remunerated repeat voluntary blood donors. 14th June 2015 was celebrated as World Blood Donor Day with theme 'Thank you for saving my life'. The celebrations were marked by the presence of Joint Secretary NACO along with other dignitaries including Secretary General IRCS, WHO representative to India and Country director of CDC.



World Blood Donor Day with theme 'Thank you for saving my life'

During the celebrations, awards were given to organisations who have contributed voluntarily to IT enabling of blood transfusion services. A mobile app to locate the nearest blood bank was launched on 14th June 2015 by the National Blood Transfusion Council (NBTC) in collaboration with National Health Portal (NHP), Ministry of Health and Family Welfare.

National Voluntary Blood Donation day was observed on 1st October 2015 by all states with the Theme – “Blood Donors bring a ray of Hope, Be a regular Blood Donor.”



National Voluntary Blood Donation day

A national level short film contest was held from June - September 2015. More than 800 participants submitted 2-3 minutes short films to promote voluntary blood donation. There were submissions in regional languages with English subtitles and also participation from across the borders. The sensitization of public at large to this humanitarian cause of Blood donation was seen in this enthusiastic response in participation.

In addition, State Blood Transfusion Councils also receive support to conduct activities for promotion of voluntary blood donation and conduction of Blood Donation Camps.



Blood Donation Camps

New initiatives under Blood Transfusion Services

2711 out of 2760 (98.22%) blood banks across the country are enrolled on Digital Platform – The NHP site provides location and contact details along with GPS coordinates of these blood banks. This serves to locate the nearest blood bank across the entire country on the NBTC microsite at NHP portal as well as a mobile app on Android platform.

A successful pilot study was conducted from 16th August - 15th September to assess the feasibility of display of stock availability on the same application in Delhi and Mizoram. 100% blood banks of Mizoram and 91% blood banks of Delhi reported their daily blood stock status to NBTC, proving the operational feasibility of the application even in far flung difficult terrains despite the fact that internet facility is not always available within the blood bank premises. This endeavour is scalable across all the licensed blood banks of the country and would enable the community at large to have authentic information.



Scheme for Modernization

Scheme for modernization of blood banks has been an integral part of all three phases of NACP through provision of one time equipment grant to selected blood banks in government and charitable sector for collection, testing and storage, as well as annual recurrent grant for support of manpower, kits and consumables. Total NACO supported blood banks increased to 1137 in 2013-14 to 1161 in 2014-15.

Model Blood Banks

Model Blood Banks help to improve upon the standards of blood transfusion services and function as demonstration centers for the States. 34 model blood banks continue to function across the country. These were made functional in 2010.

Blood Component Separation Units (BCSU)

In order to promote rational use of blood, BCSU

are established as an active part of BTS. Practice of appropriate clinical use of blood amongst the clinicians has seen a definite rise due to the increased component preparation and usage during seasonal epidemics and training of clinicians on rational use of blood. At present, component separation is around 60%.

Major Blood Banks (MBB) and District Level Blood Banks (DLBB)

Government and charitable blood banks collecting less than 5000 units per year are supported as MBB and DLBB in various districts of the country.

Blood Transportation Vans

Blood needs to be transported under proper cold chain maintenance from the linked mother blood bank to the Blood Storage Centre (BSC). NACO has provided 250 refrigerated blood transportation vans to the RBTC/District blood banks, which are being maintained through provisioning of fuel & manpower cost. These vans transfer blood units to the BSC on a regular basis and also on demand/emergency situations.

Capacity Building, Quality Management and Research

Education and training is fundamental to every aspect of Blood Transfusion Services. 3 Apex and 15 other centers have been identified across the country as training centers to impart training on all aspects of blood transfusion services involving Blood Bank Medical Officers, Technicians, Counselors, Nurses, Clinicians, Donor Motivators and Programme Officers of SACS. The blood transfusion services training programme aims to:

- Strengthen national capacity in education and training in all aspects of blood transfusion and voluntary blood donation;
- Support the establishment of sustainable national education and training programmes in blood transfusion and

- Strengthen inter and intra-regional collaboration in training in blood transfusion between NACO and its Collaborating Centers, national blood transfusion services, education and training institutions and NGOs.

The following modules were revised and printed to have uniform training curriculum across all training centres, which were field tested in a national level workshop held in February 2015 at Mahabalipuram:

- Training Module for Blood Bank Medical Officers and Lab Technicians;
- Training Module for Blood Bank Nurses;
- Handbook on Component Separation for BCSU;
- Facilitator’s Guide for Blood Bank Medical Officers (Non-BCSU);
- Facilitator’s Guide for Blood Bank Lab Technicians and BCSU Medical Officers and
- Facilitator’s Guide for Blood Bank Nurses.



Training Modules of Blood Bank

Three regional trainings for all training institute

faculty to orient them to the revised modules and training methodology were conducted in June and July 2015, after which trainings for doctors, nurses and laboratory technicians have been rolled across all states. The training programme for all the above is on-going as per the revised standardized curriculum all across the country. Till September 2015, 13 trainings have been completed.



Regional Trainings

The focus of BTS is to ensure access to safe and quality blood and blood products in the country. In order to plan and develop appropriate strategies, programmes and policies related to BTS, knowledge on the requirement of blood in the country is essential. Looking towards the need of the estimation of the blood requirement in the country, it was proposed to undertake the “Estimation of National Blood requirement in India” through CDC- CMAI project. The protocol for the study was designed with assistance from National Institute of Medical Statistics, CMC Vellore and other transfusion Medicine experts. The pilot study has been conducted till date.

Monthly programmatic data from all blood banks is reported on Strategic Information Management System (SIMS) on a web based format to National AIDS Control Organization. Presently, more than 2000 blood banks are registered and reporting on SIMS. The information procured and data generated from SIMS forms the backbone for spelling out the Annual Action plans and programme management. India is amongst the very few countries that have

such a comprehensive national level reporting in transfusion services

Monitoring and supervision of Blood Transfusion Services (BTS)

State Transfusion Services Core Coordination Committee teams have been constituted in every state to carry out the periodic supervision of all NACO supported blood banks and voluntary blood donation camps. Standardized supervisory tools and reporting formats are developed and officers from BTS division of NACO have visited 16 states and supervised 55 blood banks to facilitate their functioning as per NBTC guidelines.

The National Blood Transfusion Council is mandated with the task of regular review and monitoring of blood transfusion services of the country. In this regard quarterly visits by the officers from NACO/NBTC are conducted in different States and regions with the following objectives:

- Assess current situation of BTS infield practice;
- Perform gap analysis from recommendation and existing practices;
- Programme planning;
- Review programme implementation;
- Provide necessary support, capacity building and mentoring to program and field personnel and
- Review the functioning of SBTC.

During the FY 2015, the states visited include Uttar Pradesh, Punjab, Uttarakhand, Jammu & Kashmir, Chandigarh, Odisha, Chhattisgarh, Maharashtra, Tamil Nadu, Puducherry, Assam, Jharkhand, Rajasthan, Kerala, Himachal Pradesh and Mizoram which received guidance for strengthening Blood Transfusion Services.

Metro Blood Banks

It is proposed to set up four state-of-the-art Centres of excellence in Transfusion Medicine in Chennai, Delhi, Kolkata and Mumbai. First phase of project has been approved by Hon'ble Minister for Health and Family Welfare for two such centres and memorandum of understanding is to be signed with respective state governments.

Plasma Fractionation Centre

It was proposed to set up a Plasma fractionation centre at Chennai with a capacity of processing 150,000 litres of plasma per annum and prepare plasma products for use within the country. Keeping in view that large volume of unutilized plasma is being discarded; plasma policy has been formulated, as an addendum to national blood policy, so as to utilize this plasma by existing fractionators. NBTC has also approved modalities including exchange value for plasma exchange with indigenous fractionators.

24.8 BASIC SERVICES DIVISION (BSD)

The Basic Services Division of the National AIDS Control Organisation provides HIV counselling and testing services for HIV infection, the critical first step in detecting and linking people with HIV to access, treatment cascade and care. It also provides an important opportunity to reinforce HIV prevention. The national programme is offering these services since 1997 with the goal to identify as many people living with HIV, as early as possible (after acquiring the HIV infection), and linking them appropriately and in a timely manner to prevention, care and treatment services. The introduction of ART services for people living with HIV/AIDS in 2004, gave a major boost to counselling and testing services in India. The HIV counselling and testing services include the following components:

- I. Integrated Counseling and Testing Centres (ICTC)

II. Prevention of Parent-to-Child Transmission of HIV (PPTCT)

III. HIV/Tuberculosis collaborative activities

Diverse models of HIV Counselling and Testing services are available to increase access to HIV diagnosis; these include testing services in healthcare facilities, standalone sites, and community-based approaches at various levels of public health systems in India from State, District, Sub-district and village/community levels.

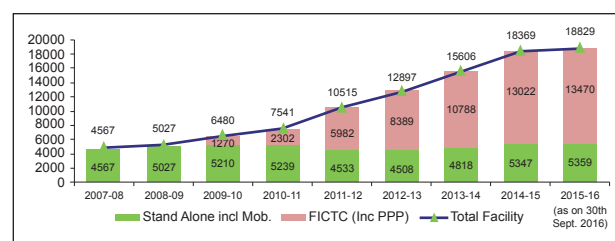
I. Integrated Counselling and Testing Centre (ICTC)

Types of facilities for HIV counselling and testing services: There are different types of HIV counselling and testing services in India which include Standalone ICTC (SA-ICTC), Mobile ICTC, Facility Integrated Counselling and Testing Centres (F-ICTCs) and Public Private Partnership & ICTCs (PPP & ICTCs). In order to offer HIV testing to every pregnant woman in the country, so as to detect all HIV positive pregnant women and eliminate transmission of HIV from parent to child, the community-based HIV screening is conducted by frontline health workers (Auxiliary Nurse Midwives) at the Sub-Centre level.

During 2015-16 (till September 2015), 107 new ICTC staffs have received induction training and 11 have undergone refresher training. In addition to these, 1039 ICTC staff (medical & paramedical) were received sensitization training on different ICTC components viz. HIV-TB, PPTCT, EID, Whole blood screening etc.

There is an increase in the number of ICTCs in the country, clearly portraying integration of counselling and testing services under general health services, increase in geographical coverage of these services below block level, better accessibility and addressing sustainability (**Fig 8.1 below**).

Fig 8.1: Scale-up of ICTCs during the period from 2007-08 to 2015-16 (till September 2015)



II. Prevention of Parent to Child Transmission of HIV (PPTCT)

The Prevention of Parent to Child Transmission of HIV/AIDS (PPTCT) programme was started in the country in the year 2002. Currently there are more than 18,000 ICTCs in the country which offer PPTCT services to pregnant women. The aim of the PPTCT programme is to offer HIV testing to every pregnant woman (universal coverage) in the country, so as to cover all estimated HIV positive pregnant women and eliminate transmission of HIV from mother-to-child. During the FY 2015-16, NACO has decided to implement EID service through 5,237 SAICTCs (fixed) all over India.

In India, PPTCT interventions under NACP started in 2002 using single dose Nevirapine prophylaxis for HIV positive pregnant women during labour and also for her newborn child immediately after birth. With the National AIDS Control Organisation adopting “Option B” of the World Health Organisation (WHO) recommendations (2010), India has also transitioned from the single dose Nevirapine strategy to that of multi-drug ARV prophylaxis from September, 2012. In the beginning stage, this strategy was executed in the three southern high HIV prevalence States of Andhra Pradesh, Karnataka and Tamil Nadu. The National Strategic Plan for PPTCT services using multi-drug ARVs in India was developed in May-June 2013 for nationwide implementation in a phased manner. Based on the new WHO guidelines (June 2013) and on the suggestions from the Technical

Resource Groups during December 2013, NACO is implementing lifelong ART (using the triple drug regimen) for all pregnant and breastfeeding women living with HIV, regardless of CD4 count or WHO clinical stage or duration of pregnancy, both for their own health and to prevent vertical HIV transmission and for additional HIV prevention benefits. In December 2013 the Basic Services Division published the “Updated guidelines for Prevention of Parent to Child Transmission of HIV using Multi-drug Anti-Retroviral Regimen in India” and the National Strategy Plan for its roll-out in a phased manner. The NACO is implementing lifelong triple ARV drugs to pregnant women infected with HIV, irrespective of CD4 count nationwide, w.e.f January, 2014.

The comprehensive ICTC/PPTCT package of services is depicted below:

- **Counselling and Testing Services of General Clients:** During the FY 2015-16, the number of ICTCs offering HIV counselling and testing services went up to more than 18,000 centres in India (Standalone ICTCs including FICTC & PPP & ICTCs). About 68.5 lakhs general clients were tested for HIV in April - September 2015, out of against the annual target of 124 lakhs and out of which 88,642 general clients were detected HIV positive.
- **Counselling and Testing of High Risk Groups and STI Clinic Attendees:** Intensifying and consolidating prevention services, with focus on HRGs and vulnerable populations is one of the key strategies of NACP IV. Guidelines on targeted interventions specify that all core groups and high risk groups should be tested for HIV once every six months. In India 7.34 lakhs HRGs and 4.3 lakhs STI Clinic attendees were tested for HIV during the FY 2015-16 (till September 2015).

Prevention of Parent to Child Transmission of HIV services (PPTCT)

a) Detection of HIV infected pregnant women and children

Government of India is committed to work towards achievement of the global target of “Elimination of new HIV infection among children” by 2015. National AIDS Control Organisation is implementing lifelong ART (triple drug regimen) for all pregnant and breastfeeding women living with HIV, regardless of CD4 count or WHO clinical stage or duration of pregnancy, both for their own health and to prevent vertical HIV transmission and with additional HIV prevention benefits.

In the FY 2015-16 (till September 2015), out of the target of 90 lakhs pregnant women, 53.2 lakhs were tested for HIV. Among total tested, 5856 (included known HIV positive) were found HIV positive. Out of that, 5711 (97.5%) were initiated on lifelong ART. And out of total 4202 HIV exposed babies, 4088 (97%) received NVP prophylaxis for a minimum period of 6 weeks.

b) Early Infant Diagnosis (EID)

HIV exposed infants born to infected pregnant women have to undergo DNA-PCR tests using dried blood spot and whole blood specimen. Details on EID programme are mentioned in the section on Laboratory Services.

During the FY 2015-16 (till September 2015), total 5286 HIV exposed babies were initiated on CPT and 5796 babies were tested under the EID Programme and out of that, 4011 (69.2%) were tested using DBS DNA PCR & 1785 (30.8%) were tested using antibody at first visit. During the FY 2015-16 (till September 2015), 216 (3.7 %) babies were found to be reactive with DBS DNA PCR test and 51 babies had undergone confirmatory PCR test & 106 were initiated on Pediatric ART.

III. HIV/TB Collaborative Activities

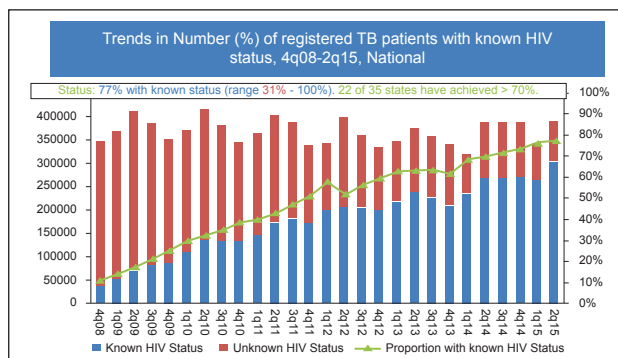
TB disease is the commonest opportunistic infection among HIV-infected individuals. Further it is also known that TB being a major public health problem in India accounts for 20-25% of deaths among PLHIV. It is known that nationally about 5% TB patients registered under the Revised National Tuberculosis Control Programme (RNTCP) also have HIV infection. In high prevalent states and districts, positivity among TB patients is more than 10% and is as high as 40% in selected districts. Thus, while the country is dealing effectively with HIV burden, TB associated HIV epidemic is posing a great challenge.

Broadly the national HIV/TB response includes intensified TB case finding at HIV care settings, intensified TB-HIV package and strategy for TB prevention among PLHIV.

These activities are closely guided through duly constituted National HIV-TB Coordination Committee, National Technical Working Group and State and District Level Coordination Committees.

National AIDS Control Organization and Revised National TB Control Programme has been successful in increasing access and uptake of HIV testing and counselling for all TB patients.

Fig 8.2: Trends of Number of registered TB patients with Known HIV status (%), 4th quarter 2008 to 2nd Quarter 2015



The trend of known HIV status is increasing, in 2014-15, out of the total 1517728 registered cases,

1083527 of TB patients i.e. 71% knew their HIV status. During 2015-16 (till June 2015) it has increased up to 77% (i.e. out of 3,92,242 registered TB cases 3,02,026 TB patients know their HIV status (Fig 8.2). In 2014-15 there were 13,654 Designated Microscopic Centres (DMCs) with 9179 co-located HIV/TB testing facilities i.e. 67% and now out of 13654 DMCs 9558 are collocated in the country till June, 2015 i.e. 70%. The linkage of TB HIV co-infected patients to CPT and ART is also showing increasing trend in India. 93% of co-infected patients received CPT in 2014-15 and 91% of co-infected patients received ART in 2014-15.



Innovative mechanism of "Missed call number" at the back of the strip for tracking patients pill intake and treatment adherence

Quality Improvement Initiatives under Basic Services

Technical Resource Groups (TRG) meeting on PPTCT: In the FY 2015-16, PPTC TRG meeting, was conducted in the month of September 2015 to review the key operational and service delivery issues pertaining to PPTCT of HIV, Syphilis, and EID programme in the country and discussed the strategies towards universal coverage of HIV & Syphilis testing among pregnant women. The TRG meeting on ICTC is going to be conducted in the month of December 2015.

Quality assurance and EQAS: The diagnostic services provided through ICTCs across the country are strictly monitored by a strong Internal and External Quality Assurance Scheme (EQAS).

Supervision and Monitoring Mechanism

Officers from NACO along with the State AIDS Control Societies and partners visit States/UTs and

service delivery centres as part of routine monitoring. During 2015-16, NACO officers visited the States of Karnataka, Madhya Pradesh, West Bengal, Rajasthan, Maharashtra, Chhattisgarh, Telangana, Andhra Pradesh, Uttarakhand and Delhi.

Review meetings

The Basic Services Division conducts review meetings on BSD components at regular intervals both at National and State level. State AIDS Control review meetings, PPTCT review meeting, National TB HIV Joint review meetings, National TB HIV Coordination committee, National TB HIV technical working group meetings were conducted in 2014-15 & 2015-16.



Review meeting of JD BSD SACS conducted at NACO

Capacity Building Workshop on TB/HIV

NACO Basic Services Division (HIV/TB), Central TB Division, Ministry of Health & Family Welfare and National TB Institute, Bengaluru jointly conducted capacity building workshop on TB-HIV collaborative activities at National Tuberculosis Institute, Bengaluru during 23rd – 24th November 2015. State TB-HIV co-ordinators and RNTCP consultants from States & UT's participated in workshop. Director NTI Bengaluru, WHO NPO (DRTB), Programme Officer (HIV/TB), NC (HIV/TB) facilitated the workshop. The objectives of the workshop were as follows:

- Familiarize trainees on new TB/HIV framework and guidelines.
- Capacity building of consultants and TB-

HIV coordinator on analysis of routine data (including NIKSHAY, SACS data).

- To demonstrate importance of comprehensive approach (3 I sites analysis).
- Prepare trainees on rolling out daily regimen including RNTCP recording and reporting.



Workshop of Programme Officers (HIV/TB), NC (HIV/TB) & other participants from States/UTs

National Consultation on HIV Testing Service (HTS) approaches in India

Basic Services Division, NACO in collaboration with WHO India, organized a National Consultation on “HIV Testing Service (HTS) approaches in India” on 26th & 27th, November 2015, at New Delhi. The main aim of the national consultation was to identify the feasibility of adopting the various HTS strategies proposed by WHO in their consolidated guidelines to accelerate coverage to achieve the first 90 of 90-90-90 global HIV target. Members of SACS, NACO, Community representatives and Developmental partners attended the National Consultation. This consultation was chaired by Dr. Soumya Swaminathan, Secretary, DHR & DG, ICMR and AS & DG, NACO chaired the concluding session involving group work presentations.

The objectives of the consultations are:

- Discuss the progress and challenges of HIV testing services in India;
- Share the experiences of implementing the

Community Based HIV testing services in India;

- Discuss the modalities of adopting the new WHO guidelines related to: consent, demystifying counseling and disclosure, partner tracing and index testing including couple counseling, TI- Outreach and lay worker screening including self-testing and role of community based organization and DAPCU and
- State key recommendations to be implemented in India for accelerating HIV testing services to achieve first 90.

NACO is keen to expedite the acceleration of the HIV testing services to achieve the first 90. It is planning for a scale up HIV testing services for high-risk and vulnerable populations and more specifically to reach the unreached. It plans to adopt the new World Health Organization (WHO) consolidated guidelines that are relevant to the India's epidemic and context. The new WHO consolidated guidelines aims to address issues and elements for effective delivery of HTS that are common in a variety of settings, contexts and diverse populations. In addition, the WHO consolidated guidelines provides a new recommendation to support HTS by trained lay providers, considers the potential of HIV self-testing to increase access to and coverage of HIV testing and outlines focused and strategic approaches to HTS that are needed to support the new 90 –90 –90 global HIV targets – the first target being diagnosis of 90% of people with HIV. Moreover, this guidance will assist national programme managers and service providers, including those from community-based programmes, in planning for and implementing HTS.

Supply Chain Management: A strong monitoring mechanism for inventory management is in place. The inventory status for all commodities at the

state, district and facility level is monitored on a weekly basis at the National level.

Other New Initiatives under Basic Services

- 'Innovative Intensified TB case finding and appropriate treatment at high burden ART centres in India' project to support the three I's for HIV/TB (Intensified case finding, Isoniazid Preventive Therapy (IPT) and Infection Control) to reduce the burden of TB among people living with HIV was launched on World TB day 2015.
- National AIDS Control Organisation - Central TB Division with support from WHO has initiated a project which diagnoses TB and Rifampicin resistance among People living with HIV in 90 minutes time using Cartridge Based Nucleic Acid Amplification Test (CBNAAT). CBNAAT is used as primary diagnostic tool established in Designated Microscopic Centres located near to selected 30 ART centres in five states (Andhra Pradesh, Telangana, Karnataka, Maharashtra & Tamil Nadu). Patient diagnosed with Tuberculosis are linked to first line anti TB drugs daily regimen for TB patients diagnosed in these centers. Project components also include airborne infection control at HIV care settings and Isoniazid Preventive Therapy. Salient features of the project include:
 - o Single window service delivery for TB & HIV;
 - o Intensified case finding using CBNAAT;
 - o TB & HIV patients receive daily anti-TB therapy drugs in Fixed Dose Combination;
 - o Innovative drug intake tracking mechanism using missed call at a toll free number on the strip is used under this project;

- o Better management of side effects- Pharmacovigilance;
- o Isoniazid Preventive Therapy;
- o Air borne infection control at HIV care settings;
- o Digital training mechanisms including National Distance Learning Services (NDLS) webinar session for ART MOs for Infection Control training and video dialogues with DAPCUs were conducted for strengthening HIV TB activities at State and district level;
- o 76 CBNAAT sites have been linked for early diagnosis of TB among PLHIVs. New rapid diagnosis are yielding 12% TB cases and 8 % Rif Resistant TB cases and
- o Daily regimen for HIV/TB co-infected patients through single window services at ART centres has been started at 3 IS project sites. 99 DOTS has improved adherence due to innovative missed call system in the Fixed Drug Combination (FDCs).
- NACO in collaboration with Tata Institute of Social Sciences (TISS) has developed an integrated induction and refresher training module for all the counsellors working in ICTC, ART & STI facilities. This induction training of the counsellors has been commenced for all the States/UTs.
- India's case study for HIV/TB collaborative activities has been published by WHO Geneva as knowledge sharing document for resources limited countries.

24.9 CARE, SUPPORT AND TREATMENT

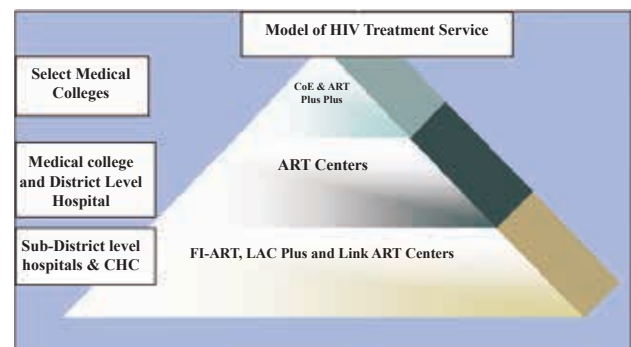
The Care, Support and Treatment (CST) component of the NACP aims to provide comprehensive

management to PLHIV with respect to free Anti-Retroviral Therapy (ART), psychosocial support to PLHIV, prevention and treatment of Opportunistic Infections (OI) including TB and facilitating home-based care and impact mitigation in stigma free environment. The overall goal is to improve the survival and quality of life of PLHIV.

A. Service Delivery Mechanism for Care, Support & Treatment

Care, Support and Treatment (CST) services are provided through a spectrum of service delivery models including ART Centers, Centers of Excellence (CoE), Pediatric Centers of Excellence (PCoE), Facility Integrated ART Centers (FI-ART), Link ART Centers (LAC), Link ART Plus Center (LAC Plus) and Care & Support Centers (CSC) established by NACO in health facilities across the country with aim to provide universal access to free and comprehensive CST Services. There are active linkages and referral mechanism for monitoring, mentoring, decentralization and specialized care. CST Services are also linked to ICTCs, STI clinics, PPTCT services and other clinical departments in the institutions of their location as well as with the RNTCP programme in order to ensure proper and comprehensive care and management. Fig. No. 9.1 gives a graphic view of this service delivery model.

Fig. 9.1: Model of HIV Treatment Service



A.1 Anti-retroviral Therapy Centers: Provision of free Anti-Retroviral Therapy (ART) for eligible

persons living with HIV/AIDS was launched on 1 April, 2004 in eight Government hospitals located in six high prevalence states. Since then, the programme has been scaled up significantly both in terms of facilities for treatment and number of beneficiaries. The ART centers are established in the medicine department of Medical colleges and District Hospitals mostly in the Government sector. However, some ART centers are functioning in the sub-district and area hospitals also, mainly in high prevalence states. The ART centers are set up based on prevalence of HIV in the district/region, volume of PLHIV detected and capacity of the institution to deliver ART related services. Till September 2015, there are 519 functional ART centers across the country.

A.2 Link ART Centers (LAC): In order to facilitate the delivery of ART services nearer to the beneficiaries, LACs are set up and located mainly at ICTC in the district/sub-district level hospitals nearer to the patients' residence. They are linked to a Nodal ART center within accessible distance. The LAC helps in reducing cost of travel; time spent at the center and hence helps in improving clients adherence to treatment. Presently, there are 1073 Link ART Centers functional.

A.3 Link ART Plus Centers: It was observed that nearly 25-30% of persons detected HIV positive at ICTC are not linked to care, support & treatment services. Reasons for this included, among others, persons being asymptomatic at the time of detection and long distances to reach the ART center for registration and basic investigations, which may lead them to postpone/delay their visit to ART centers till they become symptomatic. It was also observed that nearly 20% patients reach ART centers at a very late stage (CD4 count <50), when the risk of mortality is nearly 2-3 times higher.

In view of the above facts, the scope and functions of select Link ART centers were expanded to include Pre-ART registration and HIV care at

LAC itself. The LACs which perform Pre-ART management also are designated as "LAC plus". This helps to bridge the linkage loss between ICTC and CST services and also to reduce the travel cost and travel time of PLHIV in accessing ART services. PLHIV registered in LAC plus are followed up at LAC plus till they become eligible for ART or till referred to ART center for any other clinical references.

A.4 Centers of Excellence (CoE): CoE are established to facilitate provision of tertiary level specialized care and treatment, second line and alternative first line ART, training & mentoring and operational research. Ten Centers of Excellence have been established in different parts of the country. They are located in Bowring & Lady Curzon Hospital, Bangalore; BJ Medical College, Ahmedabad; Gandhi Hospital, Secunderabad; Post Graduate Institute of Medical Education and Research, Chandigarh; School of Tropical Medicine, Kolkata; Institute of Medical Sciences, BHU, Varanasi; Maulana Azad Medical College, New Delhi; Sir J. J. Hospital, Mumbai, Regional Institute of Medical Sciences, Imphal and Government Hospital of Thoracic Medicine, Tambaram.

A.5 Paediatric Centers of Excellence: The Regional Paediatric ART Centers established under NACP III have been upgraded now as Paediatric Centers of Excellence for paediatric care including management of complicated opportunistic infections, training and research activities. These centers have varying roles and responsibilities for delivery of care and support to infected children including specialized laboratory services, early diagnosis of HIV among infants, ART to children infected with HIV, counseling on adherence and nutrition etc. These centers also provide technical support to the other ART centers in paediatric care. Currently, seven Paediatric Centers of Excellence are functional in the country. They are located at Niloufer Hospital, Hyderabad; Indira Gandhi