



National AIDS Control Organisation



सत्यमेव जयते
Ministry of
Health and Family Welfare



Technical Report

HIV Sentinel Surveillance Plus 2021

Central Prison Sites

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Technical Report
HIV Sentinel Surveillance Plus 2021
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National AIDS Control Organisation and All India Institute of Medical Sciences
Ministry of Health & Family Welfare, Government of India



सत्यमेव जयते

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Foreword

HIV is a major concern for incarcerated people in prisons and other closed settings. Globally, the HIV prevalence among prisoners is estimated at around 3%. Given the evidence, WHO and UNAIDS have recognised prison inmates as one of the groups who are at higher risk of acquiring HIV infection. Accordingly, comprehensive HIV interventions across the spectrums of prevention, detection and treatment have been recommended.

Prison interventions under the National AIDS and STD Control Programme (NACP) were launched in India in 2017. A national consultation to review and strengthen HIV intervention in prisons and other correctional institutions was convened in December 2017. One of the recommendations emanating from the consultation was to set up the HIV Surveillance system (HSS) to acquire a comprehensive picture of the HIV/AIDS epidemic among prison inmates.

In 2019, NACP implemented the first round of the HSS Plus among inmates in central prisons. The findings corroborated the Government of India's decision to launch and expand a comprehensive HIV prevention programme among the prisoners as HIV prevalence among the group was almost 9 times that of the general population.

In 2021, NACP implemented the second round of HSS among inmates in central jails. Bio-behavioural data was collected from 20,700 respondents from 53 surveillance sites across 26 States/Union Territories of India. The findings from the 2021 round are consistent with the previous round showing a higher prevalence of HIV and Syphilis in the group than in the general population. The prevalence of Hepatitis B and Hepatitis C among HIV-infected prisoners are also much higher.

NACP Phase-V has specifically included prisoners as one of the high-risk groups and called for the universalization of the NACP interventions in prisons and other closed settings through a mix of service delivery models. These findings from HSS 2021 must serve as a compass, *inter alia*, to work out models for an integrated service delivery to this extremely vulnerable group.

(V. Hekali Zhimomi)

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Preface

The first round of HIV Sentinel Surveillance (HSS) in 1998 covered five population groups including pregnant women, STD clinic attendees, female sex workers, injecting drug users and people having TB. Later, additional population groups like men who have sex with men, hijra/transgender people, single male migrants and long-distance truckers were included as surveillance sites were gradually expanded across locations and populations. In 2019, inmates in central jails were added as one of the population groups under the robust surveillance system of NACP.

The second round of HSS among inmates in central jails was implemented at 53 jails across 26 States/Union, Territories (UT) of India. The report reveals a higher prevalence of HIV and STI-related risk behaviours, relatively lower knowledge and service uptake and a higher prevalence of HIV and Syphilis among the inmates than in the general population. The prevalence for both biomarkers was higher among the undertrial inmates. The prevalence of Hepatitis C among HIV-infected inmates was alarmingly high. Mizoram has the highest HIV prevalence, followed by Punjab, Nagaland, and Chandigarh. Fifty-five per cent of HIV-infected inmates reported being aware that they are HIV-positive. Among inmates who reported being aware of their HIV-positive status, almost 90% were on ART.

The implementation of one of the world's largest surveillance systems in the sensitive group of the prison population is done through a very robust institutional mechanism under NACP. The system currently engages nine government public health institutes (AIIMS-New Delhi, AIIMS- Bhubaneswar, VMMC and SH-New Delhi, ICMR-NIMS-New Delhi, ICMR-NARI-Pune, ICMR-NIE-Chennai, ICMR-NICED-Kolkata, PGIMER-Chandigarh and RIMS-Imphal) under the able guidance of Dr. Chinmoyee Das (HoD, SI-Surveillance & Epidemiology, National AIDS Control Organisation, MoHFW, GoI). Project Directors of the State AIDS Control Societies provide leadership to the implementation with the help of the HSS nodal person, State surveillance team members, laboratories network and site team adhering to the highest possible quality standards in a time-bound manner.

Findings from HSS among inmates in central jails continue to highlight the importance of having integrated interventions for HIV, Syphilis, and related co-morbidities. NACP Phase-V has called for universalising the NACP interventions in prisons and other closed settings through a mix of service delivery models as one of the strategies under goal 1 of reductions in annual new HIV infections by 80%. I am confident that the epidemiological data on HIV, Syphilis and related co-morbidities presented through this report will be extensively and suitably used to formulate and implement a tailored and integrated packages of services to the population.

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Message

HIV epidemic response in India is guided by data from several sources, among which HIV Sentinel Surveillance (HSS) is one of the most important sources. The HIV epidemic pattern is monitored through HSS among various population groups in the country. Over the past three decades, HSS in India has evolved significantly. The 17th round of HSS conducted from February to June 2021, was one of the most comprehensive and largest rounds in terms of sample collected and biomarkers tested. HSS was conducted among all eight typologies simultaneously in the 17th round, and was done at 1450 sites in 720 districts with collection of more than 5 lakh samples. This round also witnessed the addition of Hepatitis B and C as additional biomarkers along with the existing HIV and Syphilis testing with coordination with the National Viral Hepatitis Surveillance Programme.

The 17th round of HSS was conducted during the extraordinary situation due to the COVID-19 pandemic. Despite this it was implemented in a successful manner with the collective efforts from NACO, Ministry of Health and Family Welfare, National Institutes, Regional Institutes, State AIDS Control Societies, Sentinel sites and a network of HSS testing laboratories. I would like to acknowledge the contribution of the NACO team, which has been ably led by Dr. Chinmoyee Das and Dr. Pradeep Kumar, the ICMR NIMS team under the leadership of Dr. V.V. Rao and Dr. Damodar Sahu and guided by the technical expertise of Dr. D. C. S. Reddy, Dr. Arvind Pandey and Dr. Shashi Kant.

With each round our efforts are continuous for generating the quality surveillance data which is comparable with the previous rounds and is used by policy makers and programme managers. The interpretation of data from 17th round of HSS plus and its documentation in the form of technical brief will guide the programme in planning services and allocating resources. The findings from the data will be of utmost importance in achieving the future goals of programme.

I congratulate all the stakeholders for successful and timely publication of this technical report.

[Sanjay K. Rai]



Message

HIV Strategic Information generation and use to inform impact planning has been the mainstay of various phases of India's National AIDS and STD Control Programme (NACP). In fact, with each phase of NACP, an increasing weightage is given to strengthening data to get more nuanced information available to address local needs by making more granular data available. This has been enabled by the National AIDS Control Organisation, Ministry of Health and Family Welfare (NACO-MOHFW), who leads the AIDS response in India. This endeavour of the Government must truly be recognised.

India's HIV Sentinel Surveillance (HSS) system is a worldwide example. Sero-surveillance started in few sites in 1985 before the first AIDS case was even detected in India, and since, the network of HIV Sentinel Surveillance sites has grown under NACP. Starting with 176 sites in 1998 covering Ante-natal Clinic attendees, female sex workers, and people who inject drugs; it has now expanded to over 1,300 sites covering eight population groups among whom there is a need felt to know HIV trends and risk-behaviours to inform programme planning.

Knowing that people in closed settings are a vulnerable population group, HSS among central prison sites was conducted for the first time in 2019 using science-based methods; and the 2021 HSS round brings forth latest evidence on the level and trend of HIV prevalence and related risk behaviours among them. But, the 2021 HSS round is unique as for the first time, in addition to HIV, the biological markers were also tested for Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) and behavioural data collection expanded to include a section on awareness and service uptake pertaining to HBV and HCV. Furthermore, given that the implementation of the 2021 round coincided with the COVID-19 pandemic; the successful completion of the round is remarkable, and it is a clear sign of commitment by NACO.

On behalf of UNAIDS let me convey congratulations to NACO, the All India Institute of Medical Sciences, Regional Institutes, State AIDS Control Societies, Laboratory Networks, and senior experts from the Technical Working Group (TWG) and Technical Resource Group on HIV Surveillance and Estimations (TRG) who have implemented and led this process.

This technical report provides very rich information on the HIV knowledge levels among prison inmates, whether they know their HIV status, whether they have injected drugs, and HIV, HBV, HCV prevalence levels among them – to provide comprehensive information for prevention, and treatment under prison settings. I encourage all stakeholders to refer to this report.

On behalf of UNAIDS, let me reiterate once again, our full support to NACO, AIIMS, ICMR-NIMS, Regional Institutes, State AIDS Control Societies, TWG and TRG for these critical Surveillance processes which are very important for generating evidence guiding towards the end of AIDS as public health threat by 2030. We encourage India to implement the Mandela rules as defined by UNODC to protect human rights and dignity of prisoners and to ensure that prisons become real educational institutions for inmates to re-emerge as better citizens contributing to the future development of India.



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Acknowledgement

National AIDS Control Organisation (NACO) implemented the second round of HIV Sentinel Surveillance (HSS) among inmates in Central jails in 2021. It was successfully implemented at 53 sites collecting bio-behavioural data from around 20,700 inmates. This was done with ownership and engagement of many stakeholders. NACO gratefully acknowledges the contributions made by various stakeholders towards successful implementation.

The Technical Resource Group for Surveillance and Epidemiology (S&E), chaired by Shri Alok Saxena (the then Addl. Secretary & DG, NACO) and co-chaired by Dr. Sanjay Mehendale (Former Addl. DG, ICMR) provided strategic guidance to the implementation of 2021 round of HSS. We place on record our sincere thanks to the leadership for providing vision, insights and support towards development of a robust methodology for HIV Surveillance in prison settings.

Technical Working Group (S&E), under the Chairpersonship of Dr. DCS Reddy (Former HoD, Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi, Uttar Pradesh, India), and Co-Chairpersonship of Dr. Shobini Rajan (DDG, NACO) was instrumental in reviewing and recommending the method and findings of the second round of HSS among inmates. Prof. Arvind Pandey (Former Director, NIMS-ICMR, New Delhi) and Dr. Shashi Kant (Professor and Head, Centre for community Medicine, AIIMS, New Delhi) provided their continuous guidance and inputs in all phases since conceptualization till publication of results and beyond.

The leadership and guidance of Ms. V. Hekali Zhimomi (Addl. Secretary & DG, NACO) in publication & release of this document is duly acknowledged. Programmatic context for the exercise was provided by Ms. Nidhi Kesarwani (Director, NACO), Dr. Anoop Kumar Puri (DDG, NACO), Dr. Uday Bhanu Das (DDG, NACO), Dr. Shobini Rajan (DDG, NACO), Dr. Bhawani Singh (DD, NACO), Dr. Sai Prasad Bhavsar (DD, NACO), and Dr. Bhawna Rao (DD, NACO). We place on record our sincere thanks to experts and NACO's programme divisions for insights, guidance, and support towards successful implementation of the second round of HSS among inmates.

Dr. Pradeep Kumar (NACO) anchored the implementation of the second round and developed this technical report with support from Dr. Arvind Kumar (Former Associate Consultant, Surveillance & Epidemiology, NACO) and Dr. Subrata Biswas (ICMR-NICED, Kolkata). During the process, HIV Surveillance team at AIIMS, New Delhi (Dr. Sanjay Rai, Dr. Shreya Jha, Dr. Priyanka Kardam, Mr. Nishakar Thakur), ICMR-NARI, Pune (Dr. Sheela Godbole, Dr. Garima Meena, Ms. Jyoti Gaikwad, Ms. Samiksha Wadekar, Mr. Praphulla Lakare), ICMR-NIE, Chennai (Dr. A. Elangovan, Dr. Santhakumar Aridoss), ICMR-NICED, Kolkata (Dr. Shanta Dutta, Dr. Subrata Biswas), PGIMER, Chandigarh (Dr. P.V.M. Lakshmi, Dr. Chandrakanta) and RIMS, Imphal (Dr. H. Sanayaima Devi, Dr. Manihar Singh, Mr. Rishikesh) shared field experiences, critically reviewed the documents and tools towards their finalization and led the field training and supervision. The M&E team at SACS under the leadership of their Project Directors coordinated with all stakeholders ensuring successful implementation. NACO acknowledges the contribution of each towards successful implementation of the second round of surveillance among prison inmates and publication of this technical report.

The publication of the technical report was supported by Dr. Melissa Nyendak (CDC India) and Dr. David Bridger (UNAIDS India). Dr. Upma Sharma (CDC India) and Ms. Nalini Chandra (UNAIDS India) coordinated printing of this report. We thank CDC India and UNAIDS India for their support in publication of this report.

Implementation of the surveillance among prison population would not have been successful without the openness, ownership and excellent support of the prison authorities. NACO gratefully acknowledges Inspector General/Director General (Prisons) in all implementing States and prison wardens of all the implementing sites for their excellent contribution in timely completion of this activity.

Last but not the least, the credit for successful implementation goes to our site personnel which ensured the timely completion of this activity in a very sensitive ecosystem while adhering to best possible quality standards. NACO sincerely thanks all the field personnel engaged in this activity for their contribution in implementing the second round of Surveillance among the inmates in central jails.


(Dr. Chinmoyee Das)



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Abbreviations

AIIMS	All India Institute of Medical Sciences
ART	Anti-Retroviral Therapy
CI	Confidence Interval
DAPCU	District AIDS Prevention and Control Unit
EC	Ethics Committee
FSW	Female Sex Worker
HBsAg	Hepatitis B surface antigen
HBV	Hepatitis B Virus
HCTS	HIV Counselling and Testing Services
HCV	Hepatitis C Virus
HSS	HIV Sentinel Surveillance
H/TG	Hijra/ Transgender people
ICMR	Indian Council of Medical Research
ICTC	Integrated Counselling and Testing Centres
ICF	Informed Consent Form
IDU	Injecting Drug User
MSM	Men having Sex with Men
NACO	National AIDS Control Organisation
NACP	National AIDS and STD Control Programme
NI	National Institute
NARI	National AIDS Research Institute
NICED	National Institute of Cholera and Enteric Diseases
NIE	National Institute of Epidemiology
NIMS	National Institute of Medical Statistics
N/S	Needle-Syringe
NSP	National Strategic Plan

PGIMER	Post Graduate Institute of Medical Education and Research
PIS	Participant Information Sheet
RI	Regional Institute
RIMS	Regional Institute of Medical Sciences
RPR	Rapid Plasma Reagin
SACS	State AIDS Control Society
SIMS	Strategic Information Management System
SRL	State Reference Laboratory
TRG	Technical Resource Group
TWG	Technical Working Group
UT	Union Territory



Executive Summary

HIV sero-surveillance which was initiated in 1985 has evolved over the years as one of the most fundamental strategic information functions, facilitating evidence-based decision-making under the National AIDS and STD Control Programme (NACP) of the Government of India. Inmates at the central jails were included as one of the HIV surveillance population groups under NACP in India during the 2019 round of surveillance. In 2021, the 17th round of HIV Sentinel Surveillance (HSS) was implemented across eight population groups comprising of pregnant women, single male migrants, long distance truckers, prisoners, female sex workers, men who have sex with men, hijra/transgender people and injecting drug users. Almost five lakh bio-behavioural samples were collected and for the first time, in the 17th round, biomarkers for Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV) were integrated in HSS.

Among prison inmates, HSS Plus 2021 was implemented at 53 surveillance sites across 26 States/Union Territories (UTs) of India. Overall, 20,695 bio-behavioural samples were collected among prison inmates and of whom, 59.1% were convicted and rest of them were undertrial. The demographic profiles of the respondents differ significantly by States/UTs and imprisonment types. Overall, the mean age of the inmates recruited in HSS Plus 2021 was 35.8 years. Almost one-third of all the recruited inmates reported to have never been married while a small proportion (4.9%) reported to be divorced/ separated/ widowers. Most (83%) of them were literate with around one-fifth (20%) having more than 10 years of education. Most inmates (86.3% among undertrial and 81.0% among convicted) were literate with around one-fifth having more than 10 years of education.

Overall, three-fourth of inmates recruited in HSS Plus 2021 reported to have heard of HIV/AIDS and two-third of inmates were aware of HIV transmission through reuse of already used needles. This is broadly similar to the findings from the previous round of surveillance. However, there has been a significant improvement in comprehensive and correct knowledge about HIV/AIDS among inmates. Less than half (46.5%) of recruited inmates reported to have ever tested for HIV and half of them reported to be tested in the last 12 months. Fifty five per cent of HIV infected inmates reported to be aware that they are HIV-positive. Among inmates who reported to be aware of their HIV-positive status, 89.7% were on ART. Overall, 47.2% of total HIV infected inmates were on ART.

Around 2.3% of the recruited inmates reported that inmates in their prison inject drugs for pleasure. When asked about their own behaviour of injecting drugs for pleasure, a small proportion (3.7%) of total recruited inmates reported to have had lifetime experience of injecting drug for pleasure. Almost three-fourth (74.6%) inmates with history of injecting drug for pleasures reported to use sterile needle/ syringe during their last injecting episode while one-third (31.3%) of them reported sharing of used needle/ syringe. Overall, around 5.5% of the recruited inmates reported that inmates in their prison do have sexual intercourse with other prisoners. More than three-fourth of inmates reported to ever had sex with a partner. Among the inmates who ever had sex, the last partner with whom they

reported to have had sex was almost universally reported as a female partner. About 6.0% inmates reported that it was with a paid female partner. Reported condom use during last sex act with a paid female partner was 57.3%.

Nationally, among the inmates, the observed HIV sero-prevalence was 1.93% (95% Confidence Interval (CI): 1.75–2.12), while Syphilis sero-positivity was 0.34% (95% CI: 0.26–0.42). The prevalence for both the biomarkers was higher among the undertrial inmates. Highest HIV prevalence was noted in the State of Mizoram [26.00% (95% CI: 21.70–30.30)] followed by Punjab [7.49% (95% CI: 6.00–8.98)], Nagaland [4.59% (95% CI: 1.66–7.52)], Chandigarh [3.47% (95% CI: 1.68–5.25)], Andhra Pradesh [3.25% (95% CI: 2.02–4.48)], Telangana [2.50% (95% CI: 0.97–4.03)], Delhi [2.45% (95% CI: 1.33–3.57)], Manipur [2.26% (95% CI: 0.80–3.72)], and Assam [2.01% (95% CI: 2.02–4.48)]. Among the inmates, in terms of co-infections, the sero-prevalence of HIV-Syphilis among inmates was 0.019% (95% CI: 0.000–0.038) while the sero-prevalence of HIV-HBV was 0.15% (95% CI: 0.10–0.20). The sero-prevalence of HIV-Hepatitis C Virus (HCV) among inmates was 1.07% (95% CI: 0.93–1.21). Among the HIV-positive respondents, the sero-positivity for Syphilis was 1.00% (95% CI: 0.02–1.98). The sero-prevalence for Hepatitis B Virus (HBV) and HCV among the HIV-positive respondents was at 7.75%. (95% CI: 5.13–10.37) and 55.25% (95% CI: 50.38–60.12) respectively.

HSS 2021 Plus among inmates provides updated data on the level of HIV among prison inmates. For the first time, the report also provides data on the current level of sero-prevalence of HBV and HCV among the inmates. While in-depth analysis of data will further enhance the insights into the epidemic of HIV, Syphilis, HBV and HCV, the current report provides critical evidence for shared actions providing holistic and comprehensive care towards prevention, identification, and treatment under prison settings.



Chapter 1

Introduction

1.1 Background

India's response to the HIV/AIDS pandemic started as early as 1985 in the form of initiation of sero-surveillance. As sero-surveillance was expanded, HIV presence was detected in various parts of the country. Given the context, the first phase of the National AIDS and STD Control Programme (NACP) was launched in 1992 to combat the spread of HIV infection, and decrease morbidity, mortality, and impact of HIV/AIDS in the country. Since then, four phases of effective implementation of the programme have been completed in the country. Currently, the fifth phase of NACP is under implementation for a period of five years (from 1st April 2021 to 31st March 2026) with a total outlay of Rs. 15,471.94 crore.

HIV sero-surveillance, launched in 1985, gradually evolved into HIV Sentinel Surveillance (HSS) under NACP. HSS was first launched in 1994 and then formalized into the annual surveillance system in 1998. The system gradually evolved into one of the largest and most comprehensive HIV surveillance systems providing evidences on the level and trends of HIV, Syphilis and related behaviours informing the national programme for suitable actions. The specific objectives of HSS are mentioned below:

1. To provide the latest status of level and trend of the HIV epidemic among the surveillance population;
2. To provide evidence on geographical spread of the HIV infection and to identify emerging pockets;
3. To provide information for prioritization of Programme resources and evaluation of Programme impact; and
4. To contribute into estimation and projection of the HIV epidemic at national, State, and district level.

HSS 2021 was a round of many firsts. The round concurrently covered eight population groups (including pregnant women, single male migrants, long distance truckers, female sex workers, men who have sex with men, hijra/transgender people, injecting drug users, and prison inmates) collecting bio-behavioural data from almost 5 lakhs¹ respondents. This is one of the largest HSS systems across the globe providing evidences on the magnitude and directions of the HIV epidemic in various population groups and thus informing on resource allocation as well as impact assessment.

¹ 1 lakh= 100,000

Table 1.1: State/UT-wise prison sites for HSS Plus 2021 among inmates

State/UT	Total
Andhra Pradesh	2
Assam	2
Bihar	3
Chandigarh	1
Chhattisgarh	2
Delhi	2
Gujarat	4
Haryana	2
Himachal Pradesh	1
Jharkhand	2
Karnataka	3
Kerala	1
Madhya Pradesh	3
Maharashtra	4
Manipur	1
Mizoram	1
Nagaland	1
Odisha	1
Punjab	3
Rajasthan	3
Tamil Nadu	3
Telangana	1
Tripura	1
Uttarakhand	1
Uttar Pradesh	2
West Bengal	3
India	53

The biological specimens were also tested for Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV). The biological specimens were also tested for Hepatitis B Virus (HBV) and Hepatitis C Virus (HCV). The behavioural data collection domains were expanded to include a section on awareness and service uptake pertaining to HBV and HCV. Given that the design and implementation of the 2021 round coincided with the COVID-19 pandemic; the successful completion of the round is noteworthy.

This report presents the findings from HSS Plus 2021 round among prisoners. The round was implemented in 53 central prisons in 26 States/Union Territories (UTs) of India (Table 1.1). Only the Central Prison Dimapur in Nagaland could not achieve minimum sample size becoming an invalid site.

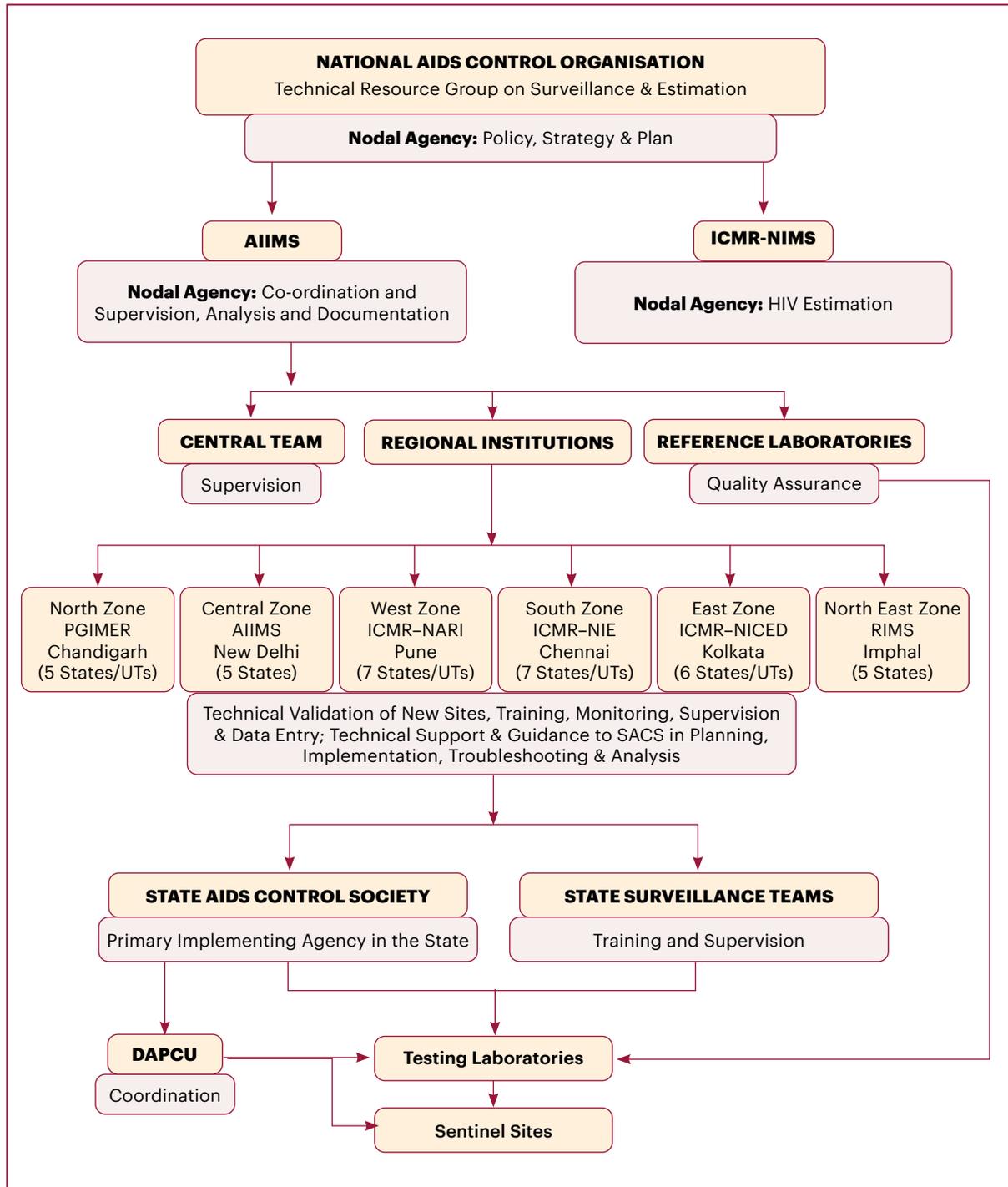
The current report provides descriptive results from the HSS Plus 2021 among inmates at central prison sites. The findings are expected to provide critical inputs to the NACP and its collaborators in planning, implementing, and evaluating national responses among prison inmates in the future. The methodological overview of the HSS Plus 2021 among prisoners has been provided in Chapter 2, while the main findings by State are presented in chapter 3 of the report. Chapter 4 discusses the key findings of the report in context of the NACP.

1.2 Implementation Structure

HIV Surveillance & Epidemiology (S&E) under NACP is designed, implemented, and monitored through robust institutional arrangements at national, regional, State and district levels (Figure 1.1). Surveillance & Epidemiology (Division of Strategic Information Management) at NACO is the nodal division for HIV surveillance, inter alia, under NACP. NACO's Technical Resource Group (TRG) and Technical Working Group (TWG), having multidisciplinary independent and institutional experts, steer the S&E under NACP.

Seven government public health institutes (AIIMS-New Delhi, ICMR-NIMS-New Delhi, ICMR-NARI-Pune, ICMR-NIE-Chennai, ICMR-NICED-Kolkata, PGIMER-Chandigarh and RIMS-Imphal) lead the technical support to the implementation through training and supportive supervision. The institutes ensure high quality of implementation by providing reference materials in the form of operational manuals, wall charts, and data collection tools. The institutes also support the analysis and dissemination of the HIV burden estimations report as one of the final outcomes under each cycle of HSS.

State AIDS Control Societies (SACS) in State/UTs are the primary agency responsible for the implementation of HIV surveillance activities. Under the leadership of SACS, District AIDS Prevention and Control Units (DAPCUs) coordinate the implementation of HSS activities. Laboratory support to surveillance is provided by a network of testing and reference laboratories. The reference laboratories provide external quality assurance by repeat testing of all positive blood specimens and 2-5% of the negative specimens collected during surveillance for a given biomarker.

Figure 1.1: Implementation structure of HIV epidemic monitoring under NACP



Chapter 2

Methodology

The methodology for the second round of HSS among prisoners remained same as that in first round during HSS Plus 2019. However, there were some additions like incorporation of Hepatitis in this round. A section on Hepatitis, having 13 questions in total, was added to the questionnaire. The biospecimen collected was tested for HBV and HCV as additional biomarkers. Key elements of the HSS methodology have been presented in the section below.

2.1 Case Definition

Inclusion criteria:

Male convicted/ undertrial inmates in prisons aged 18 years or above.

Exclusion criteria:

Already approached and administered informed consent once in the current round of surveillance.

2.2 Sample Size

The samples size at each of the prison HSS site was 400 to be achieved during the surveillance period of three months. Central jails were selected as a site for HSS Plus as they were expected to have enough number of inmates to achieve 400 samples. Also, the central jails were expected to have an operational health-care structure to facilitate the establishment of a sustainable biennial surveillance system.

2.3 Sampling Methodology

Simple Random sampling method was adopted for HSS 2021 Plus among prisoners like in the previous round. As part of the process, the surveillance sites shared a master list of male inmates (convicts/ undertrial prisoners). This list contained only the (i) inmate unique prisoner ID number, (ii) inmate type (convicts/ undertrial), and (iii) age of each inmate. The regional institutes for surveillance randomly selected 400 inmates from the master list to be approached for participation in HSS Plus. The selected inmates were approached, assessed for eligibility, and if eligible, they were administered informed consent. All sampled and eligible inmates who provided their consent for participation were recruited in HSS Plus. A copy of the informed consent form is placed at Annexure 1.

At HSS Plus sites where the total number of inmates was 500 or less, a 'Take-All' approach was followed.

2.4 Sampling Period

For each HSS Plus site, the recommended maximum sampling duration was three months. When a site achieved its allotted target sample size in a period less than three months, collection of samples was stopped at that site. However, the data collection period was extended in some sites, on case-to-case basis, after reviewing the reasons for delays and feasibility of achieving the desired sample size in a reasonable extension period.

2.5 Behavioural Data Collection

A brief bilingual data form with 40 questions under six sections was used for collection of information (Annexure 2). Individual data forms were used by facility staff responsible for implementing the HSS Plus to collect the data via one-to-one interviews in a confidential setting. The data form was unlinked anonymous as it did not have any personal identifier and had only the surveillance sample ID.

The first section had six questions pertaining to basic sociodemographic features (age, current marital status, education) and imprisonment characteristics (inmate type, duration of current imprisonment and previous history of imprisonment).

The second section had seven questions pertaining to HIV/AIDS knowledge related to transmission, prevention, and misconceptions.

The third section had four questions pertaining to HIV testing history, result of the last test for those who reported prior HIV testing history, and anti-retroviral therapy (ART) uptake for those who reported to be HIV-positive.

Section four had five questions pertaining to the injecting drug behaviour. As this is illegal, respondents were first asked about the prevalence of this behaviour within their setting. This was done to understand how common this behaviour might be. Subsequently, recruited inmates were asked about their injecting drug behaviours to measure the prevalence of behaviour and related practices among the inmates.

Section five had five questions pertaining to the sexual behaviours and condom use practices. Like the injecting practices, respondents were first asked about the sexual behaviours of the inmates in general, followed more specifically by sexual behaviours and condom use practices.

The sixth section had 13 questions on viral Hepatitis. This included questions on Hepatitis in general, followed by questions on HBV and HCV.

2.6 Blood Specimen Collection Methods and Testing Protocol

From the sampled, eligible, and consented inmates, serum blood specimens were collected. Two aliquots were prepared from the blood specimen collected: one for the integrated counselling and testing centre (ICTC) under the routine HIV counselling and testing services (HCTS) of the programme and the second for HSS Plus.

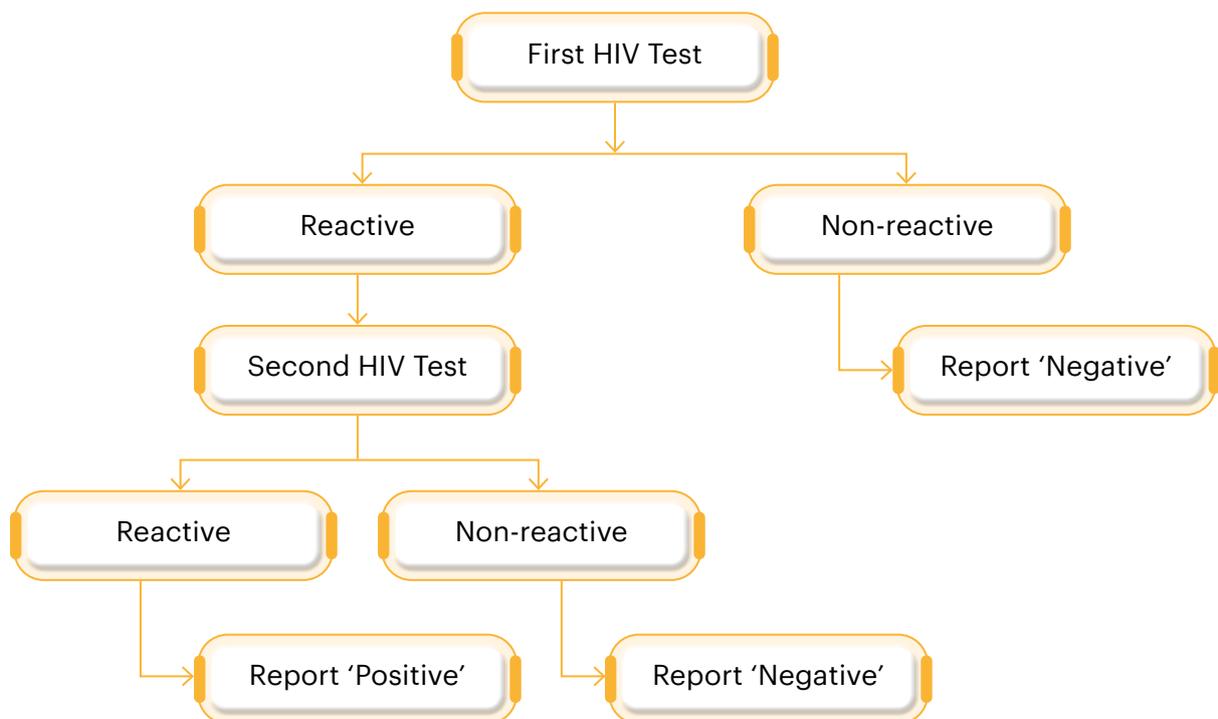
The aliquot for the ICTC was labelled with name, age, ICTC sample number, date of collection, etc. as per the routine practices. It did not have the surveillance sample ID.

The aliquot was tested at the linked ICTC for HIV/ Syphilis. Thereafter, the test report was shared with the inmate, and he was linked with treatment services if the result was positive.

The HSS Plus aliquot was labelled only with the sentinel site code, sample number and date of collection (unlinked anonymous) and transported to the State Reference Laboratory (SRL). The biospecimen collected during HSS Plus among prison inmates were tested for four diseases: HIV, Syphilis, HBV, and HCV. The testing was done at SRLs established under NACP across the country. In exceptional scenarios, depending upon the local need, non-SRL laboratories were used in HSS Plus 2021.

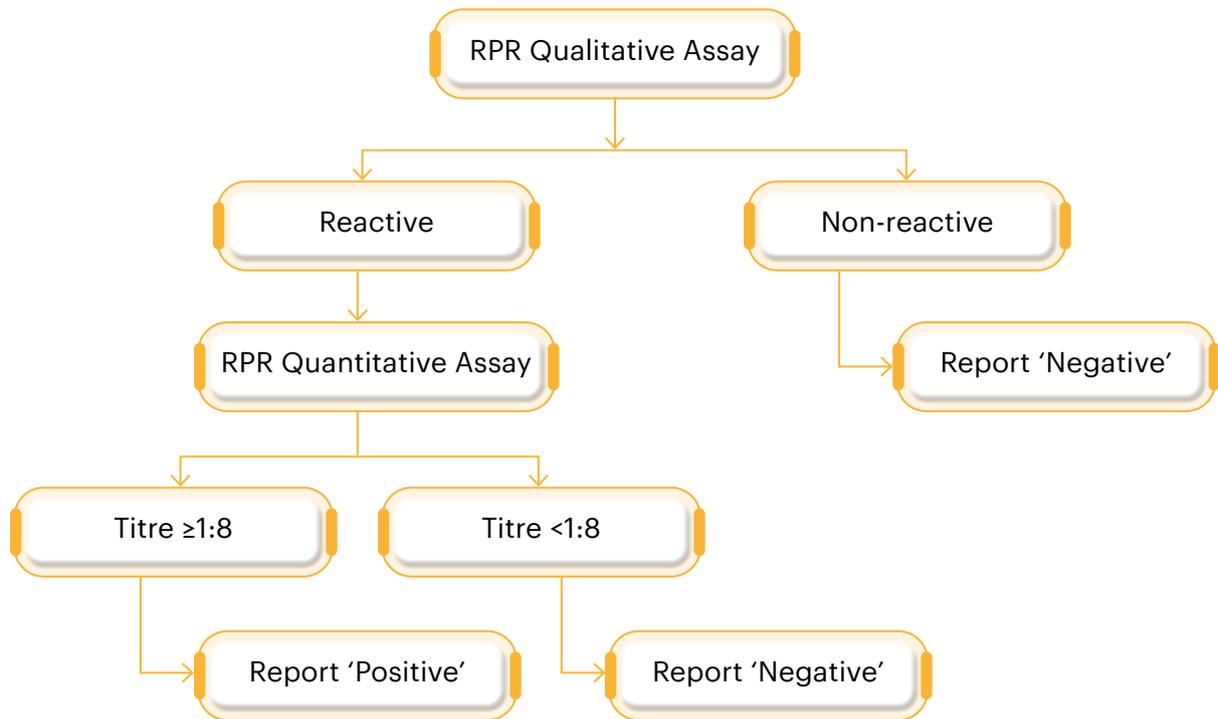
For HIV, a two-test strategy for HIV was adopted, as in the earlier round (Figure 2.1). The first test was of high sensitivity and the second one was of high specificity and confirmatory in nature. The second test was done only if the first test was found to be reactive. A sample was declared as positive only when both the test results were reactive.

Figure 2.1: Testing protocol for HIV among prison inmates, HSS Plus 2021



For Syphilis, non-Treponemal test i.e., Rapid Plasma Reagin test (RPR) was performed. Similar to the HIV test, two-test strategy was used for Syphilis (Figure 2.2). The first test was qualitative, and the second test was quantitative. The second test was done only when first test was reactive. A sample was declared positive for Syphilis only when the titre during second test result was $\geq 1:8$.

Figure 2.2: Testing protocol for Syphilis among prison inmates, HSS Plus 2021



For HBV, a one test strategy was followed. Serum samples were tested for Hepatitis B surface antigen (HBsAg) using rapid test kits. If the test result was reactive, the sample was reported as HBV-positive.

For HCV also, a one test strategy was followed. The samples were tested for anti-hepatitis C virus (HCV) antibodies using rapid test kits. If the test result was reactive, the sample was reported as HCV-positive.

2.7 Inter-laboratory Comparison (ILC)

ILC is a key component of quality assurance mechanism under HSS Plus. Under ILC, all positive specimens for any of the biomarkers (HIV, HBV, HCV, and Syphilis) and 5% of negative specimens is transported to the mapped reference laboratory. At the reference laboratory, all positive specimens are tested for the biomarkers for which it has been reported as positive. The negative samples (not reported positive for any of the four biomarkers) is tested for all four biomarkers following the same testing protocols.

Table 2.1 presents the results of ILC among prison inmates for four biomarkers in HSS Plus 2021. For RPR, among the total positive samples which were subjected to ILC by reference laboratory, only 92.6% of the RPR had concordant results.

Table 2.1: ILC results among prison inmates, HSS Plus 2021

Biomarkers	Positive Samples		Negative Samples	
	Subjected to ILC (Number)	Concordant Results (Percentage)	Subjected to ILC (Number)	Concordant Results (Percentage)
HIV	267	100.0%	1181	100.0%
RPR	81	92.6%	1174	99.8%
HBV	339	99.7%	1184	100.0%
HCV	664	99.5%	1189	99.8%

There were two testing laboratories which had discordant results for samples which were positive for RPR. For a given biomarker, if the discordant results were more than 10% for a given testing laboratory in ILC, the test results for all the sites associated with that laboratory were considered as invalid for the biomarker concerned.

2.8 Ethical Considerations

Under the HSS Plus 2021 among prisoners, written informed consent was obtained from sampled and eligible inmates who were willing to participate in HSS. Participant Information Sheet (PIS), in local language, were used to provide information on objectives of the sentinel surveillance, expectation from the respondent; return of blood sample results, confidentiality, and voluntariness. As a part of the process, respondents were shown all the consumables/ items used for blood sample collection and were assured that confidentiality would be maintained since no individual's name was linked to the HSS Plus specimen or data form. No pressure of any form was put on the eligible inmate, and he was given free choice to agree or refuse to participate in surveillance.

If the eligible inmate was literate, PIS and the informed consent form (ICF) were given to him to read through them. If the eligible inmate was illiterate, PIS and ICF were read out to him in the presence of a literate witness.

A respondent was asked if he had any questions/ doubts or required clarifications. If in case he did have something to clarify, it was done immediately and adequately. After addressing all the concerns raised by the respondent, if the respondent did not agree to participate in the surveillance, the reason for refusal was enquired and documented.

HSS Plus data form of the consented inmate was handled with utmost confidentiality. Neither the filled nor the blank data form was handled by anyone outside the surveillance team. The HSS Plus data form was digitalized at RIs using the Strategic Information Management System (SIMS) under NACP and it was completely unlinked anonymous.

The ethical considerations for HSS Plus for inmates at central prison sites were reviewed by NACO's Ethics Committee (EC). It took a note of the service delivery component of the HSS Plus and recommended that there is no need for EC review in view of it being a service-oriented programme (Annexure 3).

2.9 Data Management

Data collection in HSS Plus 2021 was carried out through paper-based tools. While data recording was done by a counsellor, all data forms were checked for completeness and accuracy in the field by the site in-charge on a day-to-day basis before signing the data forms. These forms were also checked by the field supervisors during their field monitoring and supportive visits. The data forms were then transported to regional institutes periodically where they were first checked for completeness and accuracy and then entered in to the HSS module of Strategic Information Management System (SIMS).

Laboratory results were shared separately by laboratories periodically in a standard format with RIs who in turn entered them into SIMS. The SIMS did the linking of laboratory results with the data forms using the unique sample IDs assigned.

Double data entry of each data form was done by two data entry operators in SIMS; the entries were then compared by an in-built tool in the SIMS and all discrepancies identified between the two entries were corrected by consulting the original paper tool. Following this the database was 'frozen' and a cleaned master file was created. For the analysis, only valid records (age as per the eligibility criteria and HIV test result), were considered.



Chapter 3

Findings

This section presents key findings from the 2021 round of sentinel surveillance among the inmates in central jails. Initially, the respondents' background characteristics has been presented including imprisonment characteristics, age, current marital status, and education status. The HIV/AIDS-related knowledge, HIV/AIDS-related service uptake, injecting drug use practices, sexual behaviour and condom use practices have been presented next followed by the prevalence/sero-positivity of HIV and Syphilis nationally and by State/UTs among inmates in central jails to provide the big picture perspective.

3.1 Response Rate

Table 3.1: Response rate by State/UT-wise, central prison sites, HSS Plus 2021

State/UT	Final sample size achieved	Response Rate (%)
Andhra Pradesh	800	100.0
Assam	798	98.0
Bihar	1196	97.2
Chandigarh	404	94.4
Chhattisgarh	717	100.0
Delhi	735	100.0
Gujarat	1600	94.4
Haryana	799	95.9
Himachal Pradesh	400	98.0
Jharkhand	684	92.9
Karnataka	1200	97.4
Kerala	400	100.0
Madhya Pradesh	1200	99.9
Maharashtra	1600	98.9
Manipur	398	92.8
Mizoram	400	100.0
Nagaland*	196	-
Odisha	372	93.0
Punjab	1202	100.0
Rajasthan	1200	98.4
Tamil Nadu	1200	100.0
Telangana	400	99.5
Tripura	400	99.0
Uttar Pradesh	800	87.1
Uttarakhand	400	99.5
West Bengal	1194	99.7
India	20695	97.5

*In Nagaland, less than 50% of the target sample size was achieved. Finding of the results in Nagaland among inmates shall be interpreted with caution.

Table 3.1 shows State/UT-wise response rates for the 2021 round of HSS Plus at central prison sites. The final sample size of 20,695 was achieved with a response rate of 97.5%. The response rate was more than 90% in every State/UT except for Uttar Pradesh. All the States, except Nagaland, achieved more than 80% of the target sample size. Number of inmates was low in the central prison in Nagaland during the surveillance period. Take-all approach sampling was adopted and more than 90% response rate was reported in Nagaland.

3.2 Respondent's Profile

The percentage distribution of the undertrial inmates vis-à-vis convicted in the HSS Plus 2021 sample was 59.1% and 40.1%, respectively (Figure 3.1). In Uttar Pradesh, the sampled inmates were almost universally convicts as sampled central prisons did not imprison the undertrial inmates. More than 70% of the respondents were convicted inmates in Andhra Pradesh (73.4%), Kerala (72.8%), and Chhattisgarh (72.7%). In Odisha, 94.1% of the recruited inmates were undertrial followed by 93.1% in Delhi, and 83.6% in Punjab (Table 3.2).

Almost two-third of inmates (67.6%) recruited in HSS Plus 2021 were in prison for one year or more. In Uttar Pradesh, where almost all the inmates were convicted, 98.0% were in prison for more than a year. There were also significantly high proportion of the sampled inmates who reported to be in prison for more than one year from Kerala (92.3%), Chhattisgarh (89.4%), Jharkhand (86.0%), Himachal Pradesh (85.3%), and Maharashtra (81.8%). On the other hand, almost half (49.0%) of the inmates in Nagaland were in prison for less than three months followed by 40.5% in Tripura, and 39.6% in Assam.

Figure 3.1: Percentage distribution of convicted and undertrial inmates by State, prison HSS Plus 2021

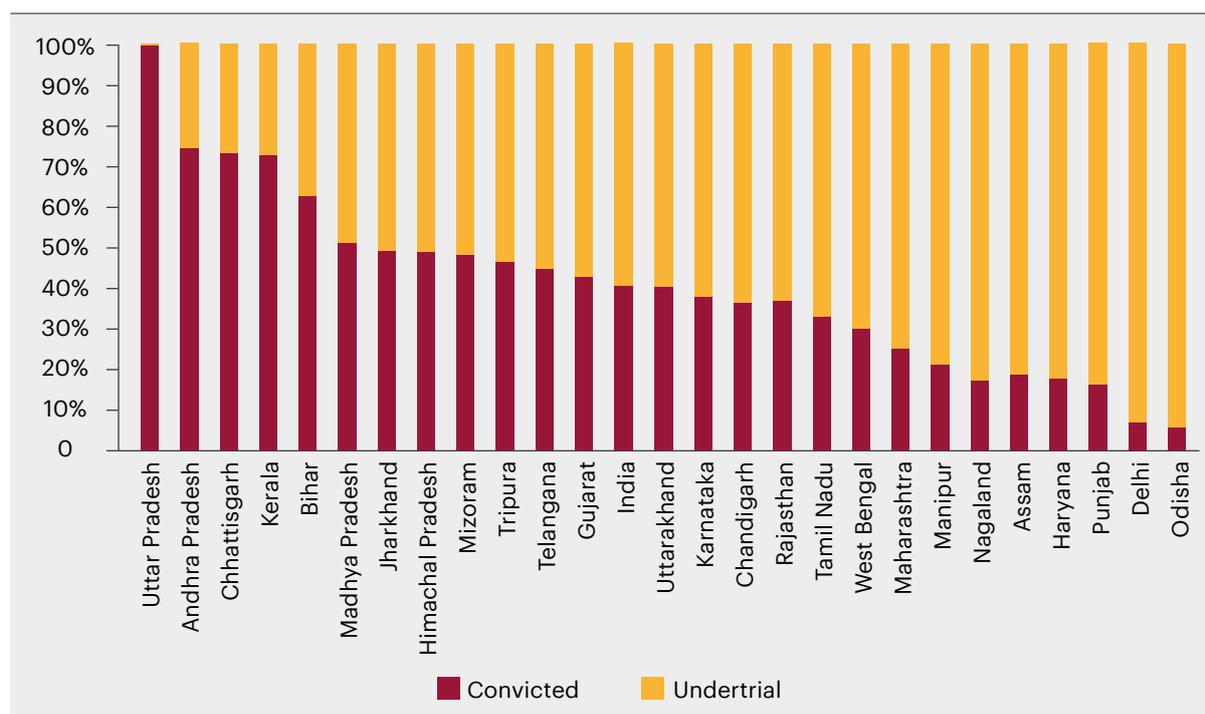
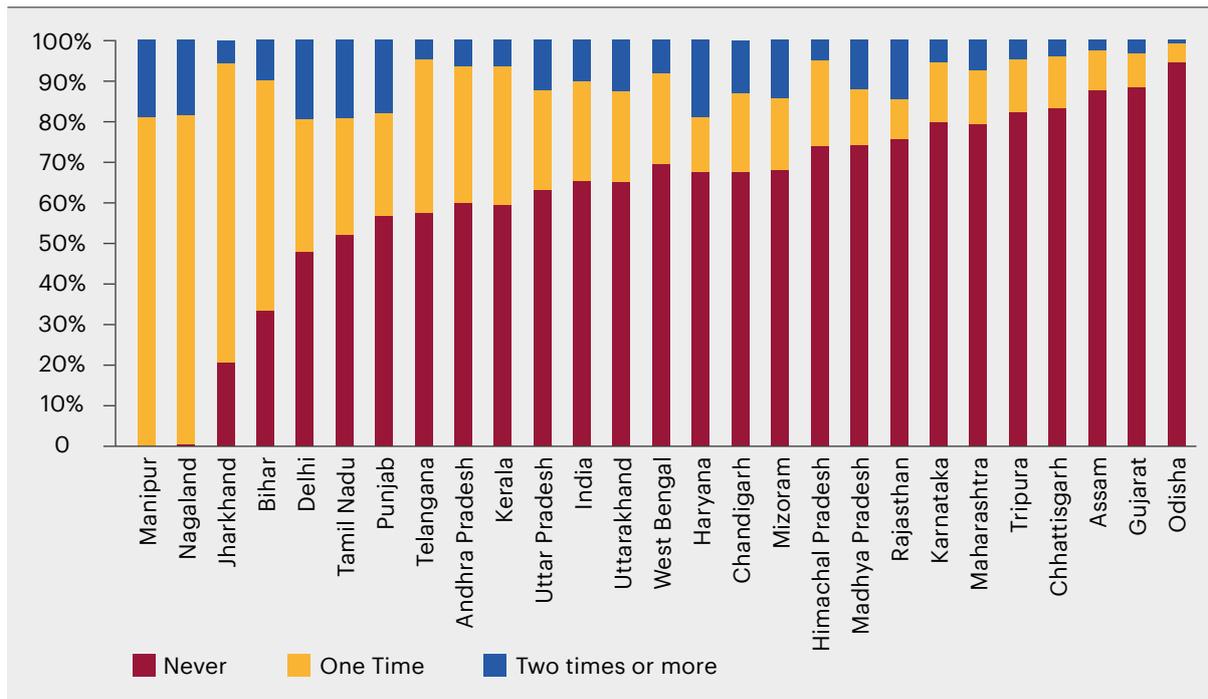


Table 3.2: Imprisonment characteristics of inmates by State and UT, HSS Plus 2021

State/UT	N	Inmate Type (%)*		Duration of Current Imprisonment (%)*			Previous History of Imprisonment (%)*		
		Undertrial	Convict	<3 Months	3 Months to 1 Year	1 Year or more	Never	One time	Two times or more
Andhra Pradesh	800	25.5	73.4	9.3	11.3	76.6	57.4	32.4	6.1
Assam	798	81.2	18.5	39.6	30.1	30.2	87.6	9.6	2.6
Bihar	1196	37.1	62.2	6.4	17.6	75.8	33.2	55.9	9.9
Chandigarh	404	63.1	35.9	12.1	29.7	58.2	67.1	19.6	12.9
Chhattisgarh	717	26.8	72.7	1.3	9.1	89.4	82.8	12.6	4.0
Delhi	735	93.1	6.8	6.5	29.5	63.7	48.0	32.5	19.5
Gujarat	1600	56.3	41.9	5.6	19.9	74.5	88.3	8.2	3.3
Haryana	799	81.9	17.4	2.1	40.4	57.4	66.6	13.1	18.8
Himachal Pradesh	400	50.5	48.0	2.0	12.8	85.3	73.8	21.0	5.0
Jharkhand	684	50.3	48.5	2.0	11.1	86.0	20.5	72.8	5.6
Karnataka	1200	61.3	37.2	12.3	19.3	68.3	78.3	14.6	5.3
Kerala	400	27.3	72.8	0.5	7.3	92.3	59.3	34.0	6.5
Madhya Pradesh	1200	48.7	50.8	7.7	19.8	72.6	74.1	13.6	12.2
Maharashtra	1600	74.3	24.9	1.9	16.0	81.8	78.9	13.1	7.4
Manipur	398	78.6	21.1	15.3	32.9	51.5	0.0	80.2	18.8
Mizoram	400	51.5	48.0	20.3	34.8	44.8	68.0	17.8	14.3
Nagaland	196	81.1	16.8	49.0	19.9	31.1	0.5	81.1	18.4
Odisha	372	94.1	5.6	20.7	53.8	25.5	91.9	4.6	0.8
Punjab	1202	83.6	16.0	6.2	28.3	65.4	56.6	25.1	18.1
Rajasthan	1200	63.2	36.8	8.7	26.8	64.5	75.0	9.8	14.3
Tamil Nadu	1200	66.5	32.6	24.2	35.9	39.3	51.8	28.8	19.1
Telangana	400	55.3	44.8	16.5	32.8	50.5	57.0	37.5	4.8
Tripura	400	53.5	46.5	40.5	9.5	49.8	81.8	13.0	4.8
Uttar Pradesh	800	0.4	99.5	0.1	1.8	98.0	63.1	24.6	12.3
Uttarakhand	400	59.8	40.3	3.5	27.8	68.8	65.0	22.5	12.5
West Bengal	1194	68.3	29.3	6.6	16.0	76.4	66.0	21.2	7.8
India	20695	59.1	40.1	10.0	22.0	67.6	64.8	24.1	10.1

Among the recruited inmates, two-third (64.8%) reported that the current imprisonment was their first time. Almost every recruited inmate in Manipur, and Nagaland, reported to have a previous history of imprisonment (Figure 3.2). On the contrary, more than four-fifth of the recruited inmates reported being in prison for the first time from Odisha (91.9%), Gujarat (88.3%), Assam (87.6%), Chhattisgarh (82.8%), and Tripura (81.8%).

Figure 3.2: Percentage distribution of previous history of imprisonment of recruited inmates by State, prison HSS Plus 2021



The mean age of the convicted inmates was 41.3 years whereas that of the undertrial was 32.1 years (Table 3.3). Overall, the mean age of the inmates recruited in HSS Plus 2021 was 35.8 years. The age distribution pattern is broadly similar to the pattern seen in the previous round (Figure 3.3). Recruited inmates in Uttar Pradesh were oldest with mean age of 47.3 years followed by those in Kerala (mean age 45.4 years). Haryana had the youngest inmate among central prison HSS Plus sites with mean age of 31.0 years. State/UT-wise, respondents' profile, is presented in Table 3.3.

The similar pattern of distribution on marital status of convicted as well as undertrial inmates was observed between HSS Plus 2019 and HSS Plus 2021 (Figure 3.4). Almost one-third of all the recruited inmates reported to be never married while a small proportion (4.9%) were divorced/ separated/ widowers. In Chandigarh, more than half (55.7%) reported to have never been married while in Delhi, and Haryana, 49-54% respondents reported this. In Tripura, Uttar Pradesh, Bihar, Jharkhand, and Odisha, 70-76% of the respondents reported to be currently married. In Mizoram, almost half (45.3%) of the inmates reported to be divorced/ separated/ widowers. In Kerala, 16.8% of inmates were divorced/ separated/ widowers at the time of their interview.

Figure 3.3: Distribution (in %) of convicted and undertrial inmates by age group, prison HSS Plus 2019 and 2021

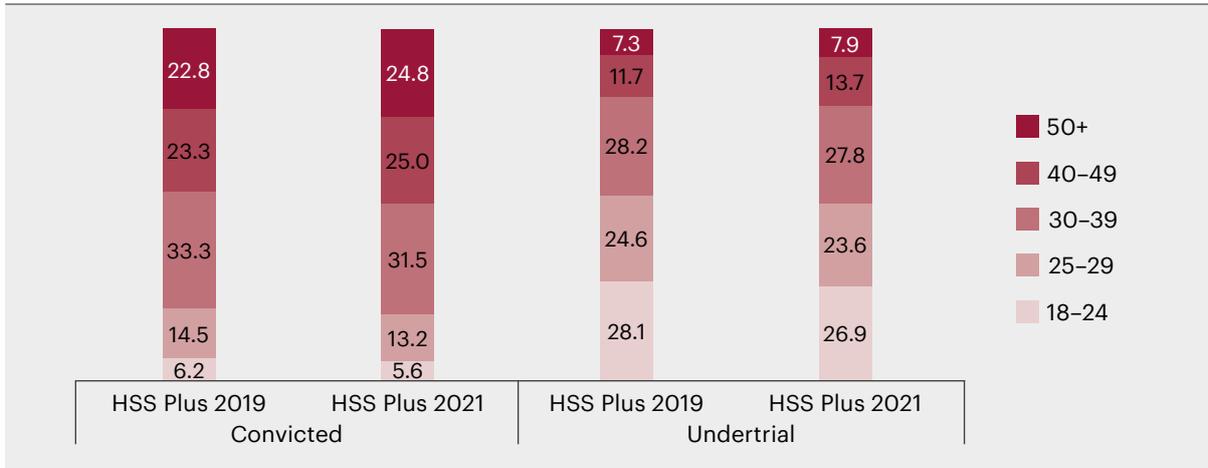


Figure 3.4: Distribution (in %) of convicted and undertrial inmates by current marital status, prison HSS Plus 2019 and 2021

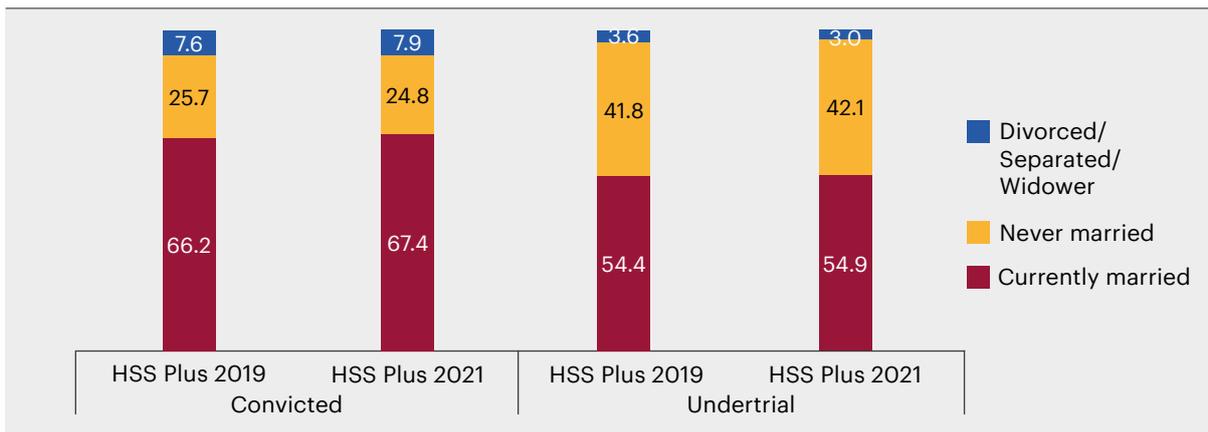


Figure 3.5: Distribution (in %) of convicted and undertrial inmates by education status, prison HSS Plus 2019 and 2021

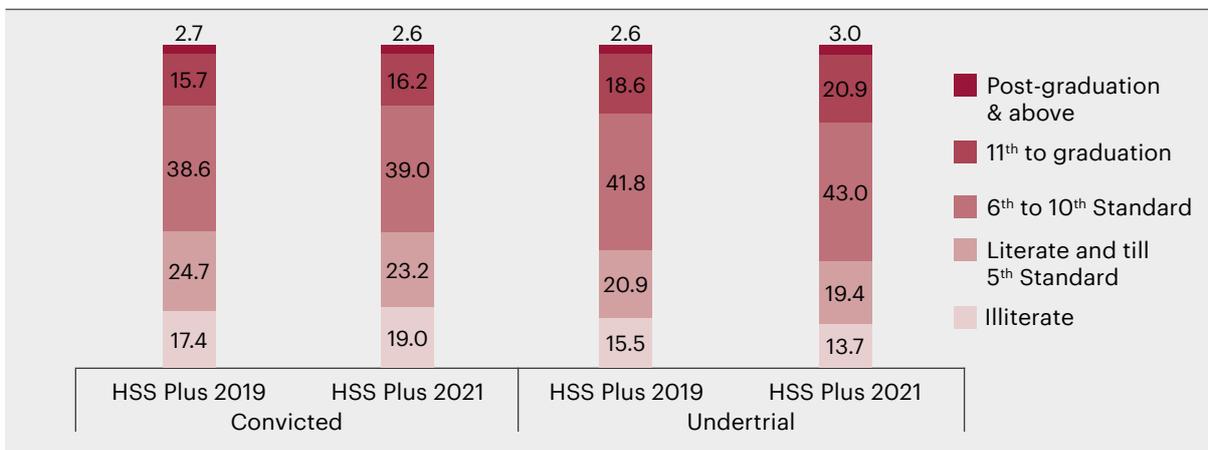


Table 3.3: Background characteristics of inmates by State and UT, HSS Plus 2021

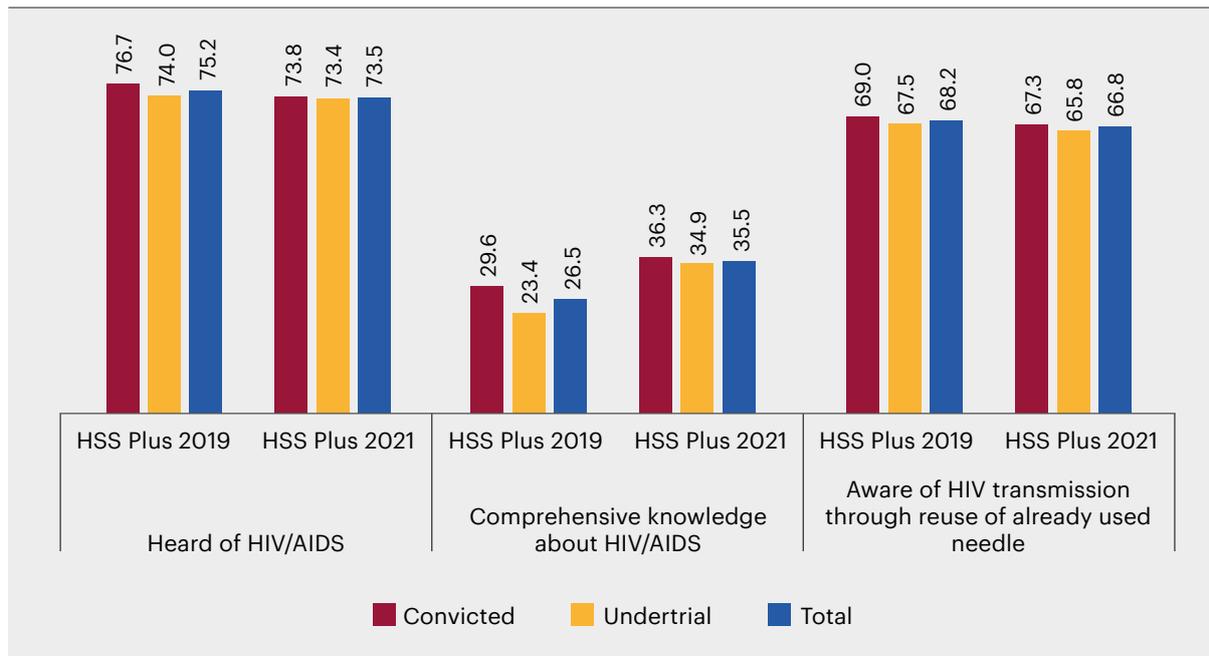
State/UT	N	Mean age (In completed years)	Marital status (%)			Education Status (%)				
			Currently Married	Never married	Divorced/ Separated/ Widower	Illiterate	Literate and till 5th Standard	6th to 10th Standard	11th to graduation	Post-Graduation & above
Andhra Pradesh	800	38.9	75.1	20.1	4.1	36.8	14.1	38.9	7.0	3.0
Assam	798	33.1	55.9	40.1	3.9	14.3	28.3	42.9	13.9	0.6
Bihar	1196	40.3	73.9	19.1	5.7	16.1	27.0	40.0	15.1	1.2
Chandigarh	404	31.6	43.3	55.7	0.7	13.6	13.4	40.3	30.0	2.7
Chhattisgarh	717	36.3	60.5	33.3	5.9	12.4	25.9	44.2	14.8	1.8
Delhi	735	31.1	49.8	49.4	0.8	16.7	19.5	43.1	17.8	2.9
Gujarat	1600	35.4	57.8	35.4	6.6	15.4	20.4	44.0	13.1	7.1
Haryana	799	31.0	45.9	53.3	0.6	10.8	13.1	43.7	30.7	1.8
Himachal Pradesh	400	36.6	62.0	36.0	1.8	13.0	18.8	42.8	22.8	2.8
Jharkhand	684	36.1	74.1	24.3	0.3	6.6	46.1	22.7	14.9	0.4
Karnataka	1200	33.9	53.2	43.3	1.8	13.1	21.2	39.8	20.7	4.5
Kerala	400	45.4	53.5	29.8	16.8	6.5	17.5	55.3	19.5	1.3
Madhya Pradesh	1200	34.3	54.0	37.2	8.8	13.9	29.8	41.1	12.8	2.4
Maharashtra	1600	34.4	52.3	42.9	4.4	9.9	21.3	44.5	22.7	1.4
Manipur	398	36.6	63.3	32.7	4.0	3.3	15.3	46.5	33.4	1.0
Mizoram	400	37.7	26.5	28.0	45.3	7.0	21.5	55.0	15.8	0.8
Nagaland	196	32.5	55.6	41.3	2.6	21.4	28.1	34.7	14.8	1.0
Odisha	372	36.9	74.5	22.8	2.7	0.3	8.1	45.4	42.7	3.5
Punjab	1202	32.4	51.2	47.2	1.4	17.0	13.7	38.7	23.9	6.7
Rajasthan	1200	33.5	58.6	33.8	7.4	24.9	14.0	38.5	18.5	4.0
Tamil Nadu	1200	36.3	64.4	33.6	1.6	5.3	17.5	53.4	20.5	3.1
Telangana	400	34.3	64.3	35.0	0.3	22.5	16.5	39.0	19.5	2.5
Tripura	400	37.0	70.3	27.5	1.5	18.3	11.3	46.8	21.0	2.8
Uttar Pradesh	800	47.3	73.3	19.3	7.4	35.0	12.4	30.5	20.4	1.8
Uttarakhand	400	36.4	62.5	37.5	0.0	14.0	17.5	33.8	29.8	5.0
West Bengal	1194	36.8	69.8	23.1	4.1	24.5	29.1	30.9	10.8	0.9
India	20695	35.8	59.6	34.9	4.9	15.7	20.7	41.1	18.9	2.9

Most inmates (86.3% among undertrial and 81.0% among convicted) were literate with around one-fifth (23.9% among undertrial and 18.8% among convicted) reportedly having more than 10 years of education (Figure 3.5). More than one-third of the inmates in Andhra Pradesh (36.8%), and Uttar Pradesh (35.0%) were illiterate followed by 24.9% in Rajasthan, 24.5% in West Bengal, 22.5% in Telangana, and 21.4% in Nagaland. In Odisha and Manipur, only 0-5% of the inmates were illiterate (Table 3.3).

3.3 HIV/AIDS-related Knowledge

Overall, three-fourth (73.5%) of the inmates recruited in HSS Plus 2021 reported to have heard of HIV/AIDS and two-third (66.8%) were aware of HIV transmission through reuse of an already used needle – which are broadly similar to the results in the previous round of surveillance. However, there was an improvement in terms of comprehensive knowledge about HIV/AIDS among inmates. Having one uninfected sexual partner and consistent condom use as a mode of HIV prevention was identified by 55.4% and 63.5% of the respondents respectively. Misconception about HIV transmission through mosquito-bites, or through sharing of a meal with an HIV infected person was reported by 44.1% and 42.0% of the inmates respectively. Almost around half of the inmates (53.0%) reported that a healthy-looking person may have HIV/AIDS. Overall, only around one-third (35.5%) had comprehensive and correct knowledge about HIV/AIDS². The pattern of HIV/AIDS awareness, transmission risk through used needle and comprehensive knowledge was almost similar among convicts vis-à-vis undertrials (Figure 3.6). State/UT-wise status of inmates' HIV/AIDS-related knowledge is presented in Table 3.4.

Figure 3.6: Knowledge about HIV/AIDS among inmates, prison HSS Plus 2019 and 2021



² Comprehensive correct HIV/AIDS knowledge (CCAK) is defined as ability to correctly knowing the two major ways of preventing the sexual transmission of HIV (i.e., consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV/AIDS), rejecting two most common misconceptions about HIV transmission and knowing that a healthy-looking person can have HIV/AIDS.

Table 3.4: HIV/AIDS-related knowledge by State and UT, HSS Plus 2021

State/UT	N	Heard of HIV/AIDS	Awareness about HIV prevention (%)		Had Misconception about HIV transmission (%)		Aware that healthy-looking person may have HIV (%)	HIV can be transmitted through reuse of already used needle (%)	Comprehensive knowledge about HIV (%)
			Having one uninfected partner	Use of condom during sex act	Mosquito bite	Sharing meal with HIV infected person			
Andhra Pradesh	800	79.1	61.1	66.4	24.3	23.9	51.0	73.8	42.0
Assam	798	72.7	72.1	71.6	50.6	46.2	44.4	70.7	39.0
Bihar	1196	63.6	62.9	62.1	50.2	44.6	60.1	63.0	47.3
Chandigarh	404	85.9	81.7	82.9	43.1	33.4	70.5	84.7	41.3
Chhattisgarh	717	68.3	58.3	61.8	57.2	56.3	54.8	64.6	22.6
Delhi	735	67.5	52.4	52.0	49.0	46.8	46.3	49.7	42.3
Gujarat	1600	64.9	39.4	59.4	49.4	53.1	49.4	60.2	20.2
Haryana	799	72.3	62.2	65.7	50.6	35.2	65.0	67.3	45.1
Himachal Pradesh	400	89.0	84.8	84.0	45.5	33.3	65.5	75.8	41.3
Jharkhand	684	49.7	35.5	39.2	65.5	68.4	40.5	42.1	16.1
Karnataka	1200	67.7	60.3	56.5	48.6	46.8	51.2	58.3	39.9
Kerala	400	88.5	69.8	65.0	23.0	29.5	74.0	74.0	39.0
Madhya Pradesh	1200	73.3	64.1	64.9	44.3	36.4	57.0	68.8	40.5
Maharashtra	1600	63.7	53.9	60.1	54.9	45.2	44.4	62.0	31.8
Manipur	398	94.2	90.7	93.0	7.0	12.1	92.2	93.2	82.4
Mizoram	400	86.0	85.0	85.8	14.5	14.5	85.0	85.8	84.3
Nagaland	196	87.8	86.7	86.7	12.8	13.8	86.7	86.7	85.7
Odisha	372	96.0	92.5	94.4	16.1	29.3	91.1	95.4	65.3
Punjab	1202	75.7	10.4	46.6	40.3	34.7	22.6	55.5	2.1
Rajasthan	1200	60.6	55.6	55.6	54.5	48.3	48.8	58.7	34.5
Tamil Nadu	1200	90.3	49.5	72.6	24.3	28.7	52.9	83.5	29.3
Telangana	400	97.8	38.5	92.3	28.0	44.5	59.8	93.0	18.8
Tripura	400	81.8	26.3	42.0	62.0	48.8	2.5	69.8	0.3
Uttar Pradesh	800	76.5	71.4	69.6	35.6	38.1	65.5	68.4	52.5
Uttarakhand	400	98.8	98.8	98.8	2.0	1.3	98.3	98.8	98.0
West Bengal	1194	62.8	29.2	46.0	69.0	74.0	36.3	44.4	12.7
India	20695	73.5	55.4	63.5	44.1	42.0	53.0	66.8	35.5

Comprehensive knowledge about HIV/AIDS was significantly high among the prison inmates from Uttarakhand (98.0%), Nagaland (85.7%), Mizoram (84.3%), and Manipur whereas poor comprehensive knowledge was observed from Tripura (0.3%), Punjab (2.1%), West Bengal (12.7%), and Jharkhand (16.1%). In Jharkhand, 40.5% of inmates reported to be aware of transmission risk through used needles while in West Bengal, (44.4%) and Delhi (49.7%), around one-half were aware of the same. Inmates from Manipur (93.2%), Mizoram (85.8%), and Nagaland (86.7%) reported greater awareness about the risk of transmission using shared needles/syringe while the awareness in Punjab (55.5%) and Tripura (68.4%) was relatively less.

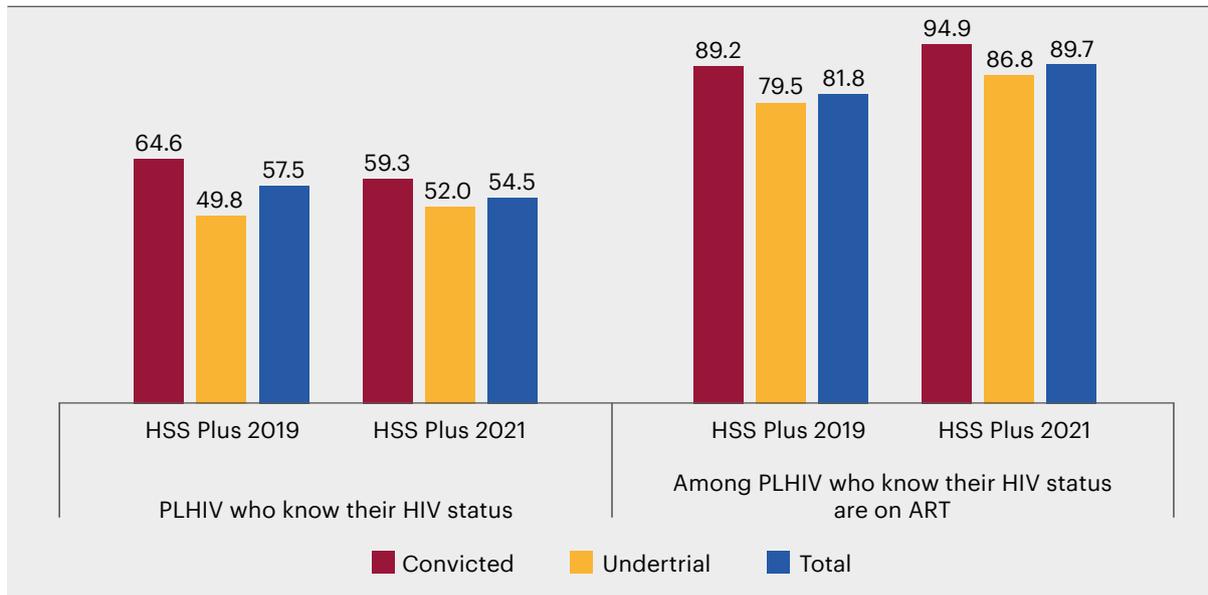
3.4 HIV/AIDS-related Services Uptake

This section describes State/UT-wise information on HIV/AIDS-related service uptake in the context of the history of HIV testing among all recruited inmates as well as status of anti-retroviral therapy (ART) among HIV-positive inmates (Table 3.5).

Table 3.5: HIV testing history among inmates by State and UT, HSS Plus 2021

State/UT	N	Ever Tested for HIV (%)	Tested for HIV in last 12 months (%)
Andhra Pradesh	800	17.5	2.1
Assam	798	10.8	1.8
Bihar	1196	44.6	36.5
Chandigarh	404	56.2	8.9
Chhattisgarh	717	37.7	3.6
Delhi	735	48.4	37.1
Gujarat	1600	19.0	12.8
Haryana	799	31.3	4.1
Himachal Pradesh	400	66.8	19.8
Jharkhand	684	27.0	8.5
Karnataka	1200	48.1	29.3
Kerala	400	82.3	60.0
Madhya Pradesh	1200	67.4	54.8
Maharashtra	1600	42.7	19.6
Manipur	398	29.9	29.1
Mizoram	400	77.0	33.8
Nagaland	196	52.6	50.0
Odisha	372	47.0	3.8
Punjab	1202	53.8	50.2
Rajasthan	1200	49.2	20.3
Tamil Nadu	1200	84.0	74.3
Telangana	400	97.5	87.5
Tripura	400	43.3	11.5
Uttar Pradesh	800	75.5	24.1
Uttarakhand	400	0.0	0.0
West Bengal	1194	41.0	23.8
India	20695	46.5	27.6

Figure 3.7: HIV/AIDS-related service uptake among inmates, prison HSS Plus 2019 and 2021



Overall, less than half (46.5%) of recruited inmates were ever tested for HIV. Less than one-third (27.6%) reported to be tested in the last 12 months. There was no significant difference in the results between 2021 and 2019 HSS Plus rounds. In Telangana, 87.5% of the inmates reported to have been tested for HIV in the last 12 months preceding the survey. In Tamil Nadu, and Kerala, 74.3% and 60.0% of the respondents reported doing so respectively.

Overall, there were 400 (1.93%) inmates who were reactive for HIV in HSS Plus 2021. Out of these, 54.5% reported to be aware that they are HIV-positive. Among inmates who reported to be aware that they are HIV-positive, 89.7% were on ART. Almost similar proportions were reported for both the indicators under HSS Plus 2019 and HSS Plus 2021 (Figure 3.7). Overall, 47.2% of total HIV infected inmates were on ART.

Out of the total 8,299 sampled inmates who reported to be convicts at the time of interview, 1.5% were HIV-positive, and 59.3% of them were aware that they were HIV-positive. Around 94.9% of the HIV infected convicted inmates, who knew that they are HIV-positive, reported to be on ART. Around 54.5% of total HIV infected convicted inmates were on ART.

On the other hand, 12,226 of the sampled inmates were undertrial. Of them, 2.2% were HIV-positive and half (52.0%) of the HIV infected undertrial inmates were aware that they were HIV-positive. Around 86.8% of the HIV infected undertrial inmates, who knew that they were HIV-positive, reported to be on ART. Around 43.5% of total HIV infected undertrial inmates were on ART.

3.5 Injecting Drug Use Practices

Under HSS Plus 2021 at central jails, inmates were asked about their injecting drug use practices. As the injecting drug behaviour is illicit, respondents were first asked about the prevalence of this behaviour, in general, in their setting. This was done to understand how common the behaviour might be. Subsequently, recruited inmates were asked about their injecting drug use behaviours to measure the prevalence of the same along with its related

practices among the inmates. State/UT-wise findings on injecting drug use practices are presented in Table 3.6.

Overall, around 2.3% of the recruited inmates (1.7% of convicts and 2.7% of undertrial) reported that inmates in their prison injected drugs for pleasure (Figure 3.8). This was significantly lower than the levels reported in the earlier HSS Plus 2019. In Punjab, however, 20.2% of respondents reported that inmates in their prison were injecting drugs for pleasure.

When asked about their own behaviour of injecting drugs for pleasure, a small proportion (3.7%) of total recruited inmates (2.0% of convicts, and 4.8% of undertrials) reported to have had a lifetime experience of injecting any drug for pleasure. In Mizoram, 38.5% of respondents reported doing so followed by 12.1% in Chandigarh, and 10.8% in Punjab.

Almost three-fourth (74.6%) of the inmates with history of injecting drugs for pleasures reported to use sterile needle/syringe during their last injecting episode (73.0% among convicts, and 74.9% among undertrials) while 31.3% of them reported sharing of used needle/ syringe (25.8% among convicts, and 32.8% among undertrials) (Figure 3.9). There was significantly higher proportion of inmates who reported use of sterile needle-syringe and lower proportion of inmates reporting shared needle-syringe in their last episode of injecting drugs compared with behaviour reported during HSS Plus 2019. Among inmates who had a lifetime experience of injecting any drug for pleasure in Assam, only 30.0% of them reported use of sterile needle-syringe and about 66.7% had shared needle-syringe in their last episode (Table 3.6).

Almost two-third (67.6%) of the recruited inmates were in prison for one year or more. Among them, around 2.5% reported to have had a lifetime experience of injecting drugs for pleasure. However, about 7.8% of those with lifetime experience reported last injecting episode within three months preceding the survey. More than two-third (69.4%) of them reported use of sterile needle-syringe during their last injecting episode while 29.8% reported sharing of used needle-syringe in their last episode.

Figure 3.8: Knowledge about injecting drug use behaviour in prison in general and their own injecting drug experiences among inmates, prison HSS Plus 2019 and 2021

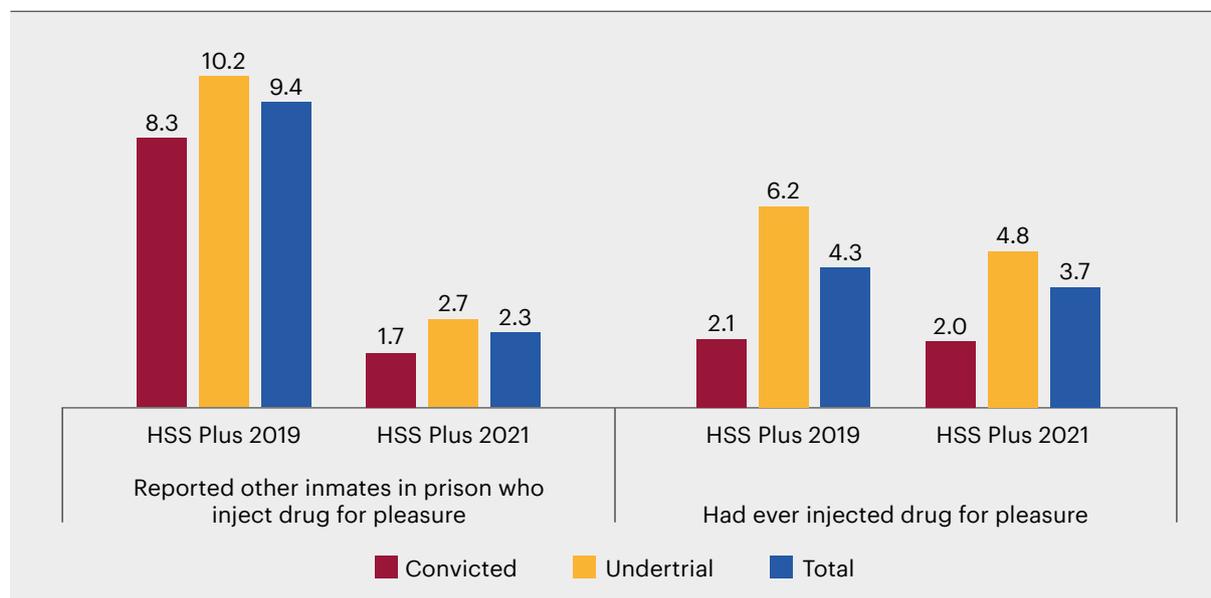
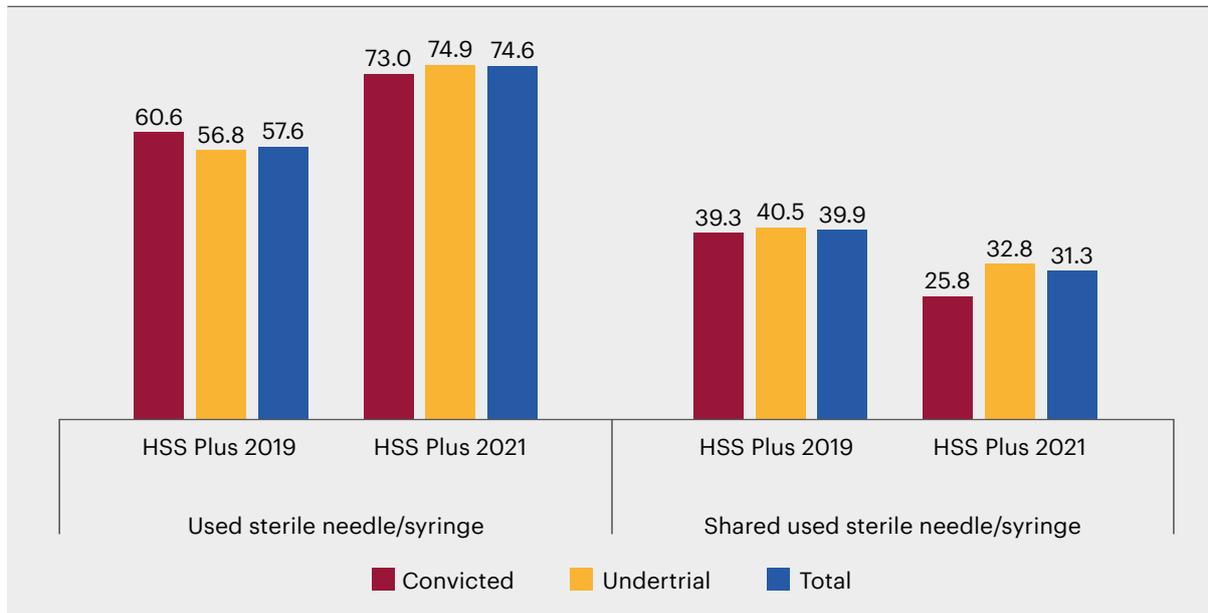


Table 3.6: Injecting drug use practices among inmates by State and UT, HSS Plus 2021

State/UT	N	Inmates in prison inject drug for pleasure (%)	Ever injected drug for pleasure (%)	When injected last time (%) **@			Use of sterile N/S when injected last (%)	Sharing of N/S when injected last (%)
				Less Than a month ago	Between 1 month to less than 3 months ago	Between 3 months to less than 12 months ago		
Andhra Pradesh	800	1.6	1.4	0.0	16.7	16.7	66.7	16.7
Assam	798	0.3	7.5	5.0	33.3	58.3	3.3	66.7
Bihar	1196	0.2	0.3	33.3	0.0	0.0	66.7	0.0
Chandigarh	404	0.7	12.1	0.0	14.9	34.0	51.1	12.8
Chhattisgarh	717	2.0	1.0	0.0	16.7	0.0	83.3	16.7
Delhi	735	0.3	4.6	0.0	11.8	26.5	61.8	50.0
Gujarat	1600	0.4	0.6	12.5	0.0	12.5	75.0	12.5
Haryana	799	1.5	8.5	0.0	5.9	41.2	52.9	50.0
Himachal Pradesh	400	0.5	3.3	0.0	0.0	15.4	84.6	30.8
Jharkhand	684	0.7	1.2	0.0	0.0	14.3	85.7	14.3
Karnataka	1200	1.2	1.1	0.0	0.0	23.1	76.9	7.7
Kerala	400	1.8	2.3	0.0	0.0	22.2	77.8	33.3
Madhya Pradesh	1200	0.3	2.2	0.0	7.7	7.7	84.6	46.2
Maharashtra	1600	0.3	1.9	0.0	6.9	17.2	75.9	6.9
Manipur	398	3.3	4.3	0.0	6.7	0.0	93.3	20.0
Mizoram	400	7.0	38.5	5.8	26.0	37.0	31.2	16.3
Nagaland	196	0.0	6.6	0.0	0.0	15.4	84.6	15.4
Odisha	372	0.0	0.0	-	-	-	-	-
Punjab	1202	20.2	10.8	0.8	10.0	41.5	47.7	39.8
Rajasthan	1200	2.7	1.6	0.0	27.8	27.8	44.4	16.7
Tamil Nadu	1200	0.2	3.0	0.0	5.7	34.3	60.0	17.1
Telangana	400	0.3	0.3	0.0	0.0	0.0	100.0	0.0
Tripura	400	4.3	5.3	22.7	40.9	18.2	18.2	50.0
Uttar Pradesh	800	0.0	0.1	0.0	0.0	0.0	100.0	0.0
Uttarakhand	400	0.3	0.3	-	-	-	-	-
West Bengal	1194	3.9	1.8	0.0	10.5	5.3	84.2	31.6
India	20695	2.3	3.7	2.7	15.3	32.6	49.4	31.3

* Among those who reported to be had history of injecting drug for pleasure; # Except for Assam, Haryana, Mizoram and Punjab, less than 50 sampled inmates reported to inject drug for pleasure in all other States/UT. In these States/UT, finding on injecting drug practices among inmates shall be interpreted with caution, @ responses may not add to 100% due to missing values

Figure 3.9: Injecting practices among convicted and undertrial inmates, prison HSS Plus 2019 and 2021



3.6 Sexual Behaviour and Condom Use Practices

During HSS Plus 2021 at central jails, inmates were asked about their sexual behaviour and condom use practices. Respondents were first asked about the sexual behaviour of inmates in general followed by their own sexual behaviour and condom use. State/UT-wise findings on sexual behaviour and condom use practices are presented in Table 3.7.

Overall, around 5.5% of the recruited inmates (6.8% of convicts and 4.6% of undertrial) reported that inmates in their prison do have sexual intercourse with other prisoners (Figure 3.10). In West Bengal, 22.6% of inmates reported such practice whereas 12.9% and 10.2% respondents reported doing so in Uttar Pradesh and Jharkhand, respectively.

When recruited respondents were asked if they were sexually active, about three-fourth (81.5% of convicts and 71.7% of undertrials) of the inmates confirmed this. More than 90.0% of the respondents from Mizoram, Telangana, Himachal Pradesh, and Chhattisgarh reported being sexually active, whereas only one-fifth of the inmates from Punjab (20.5%) reported doing so.

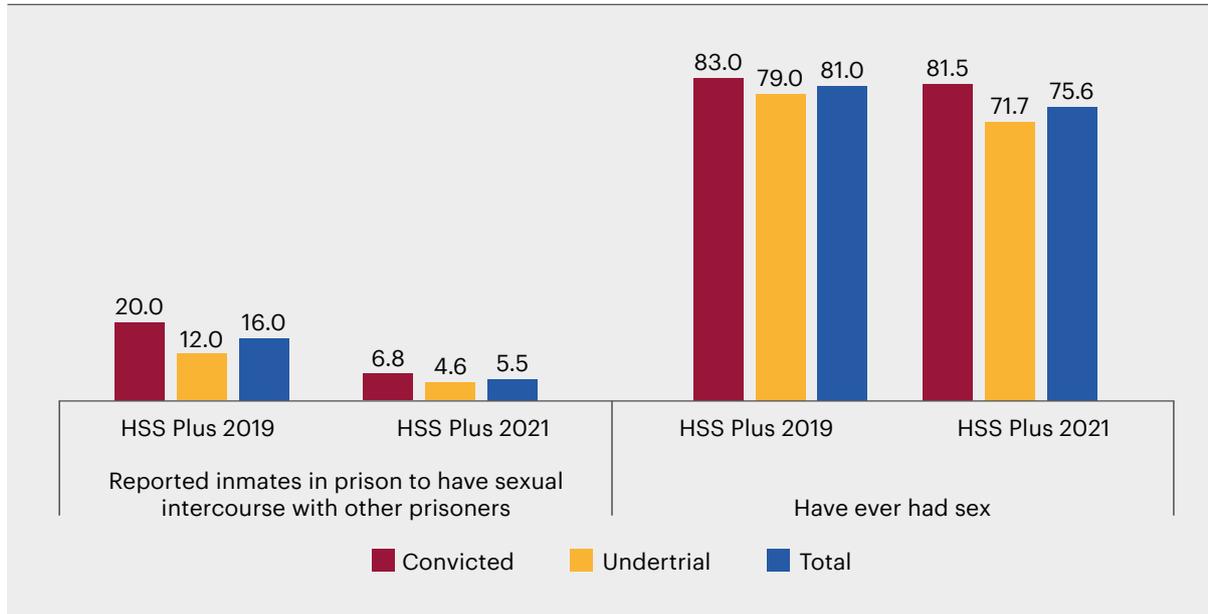
Among the sexually active inmates, the last partner with whom the recruited inmates reported having sex was almost universally reported as a female partner (including 6.0% paid female partner and 2.8% casual female partner) nationally. In Karnataka, Delhi, and Telangana, 11-17% of the respondents reported that their last sexual intercourse was with a paid female partner. In Telangana, 22.3% of recruited inmates reported that their last sexual intercourse was with a casual female partner.

Table 3.7: Sexual behaviour among inmates by State and UT, HSS Plus 2021

State/UT	N	Inmates have sex with other inmates in the prison	Have ever had sex	When had sexual intercourse last time (%)**				Last Sexual Partner (%)**				
				Less than a month ago	Between 1 month to less than 3 months ago	Between 3 months to less than 12 months ago	More than a year ago	Regular Female Partner	Paid Female Partner	Non-paid non-regular female partner	Male Partner	Hijra/Trans-gender partner
Andhra Pradesh	800	1.9	89.1	0.1	3.7	7.6	88.6	97.2	1.8	1.0	0.0	0.0
Assam	798	0.1	79.1	7.3	23.6	27.7	41.4	78.7	8.0	13.4	0.0	0.0
Bihar	1196	0.2	83.7	0.4	3.3	8.3	88.0	99.7	0.2	0.0	0.1	0.0
Chandigarh	404	1.7	85.6	1.7	11.3	29.2	57.8	91.9	7.5	0.0	0.6	0.0
Chhattisgarh	717	9.1	91.5	1.4	2.9	20.7	75.0	92.6	6.6	0.5	0.3	0.0
Delhi	735	1.4	88.4	0.2	0.9	20.1	78.8	84.7	11.7	3.4	0.0	0.2
Gujarat	1600	1.6	50.1	1.5	6.2	32.0	60.3	90.4	9.6	0.0	0.0	0.0
Haryana	799	1.3	82.4	0.2	1.8	31.3	66.7	87.4	10.4	0.5	1.5	0.3
Himachal Pradesh	400	3.8	91.5	1.6	2.2	15.9	80.2	86.0	5.2	8.5	0.3	0.0
Jharkhand	684	10.2	78.4	0.0	0.6	8.5	91.0	97.0	1.1	1.9	0.0	0.0
Karnataka	1200	8.5	53.2	1.3	7.1	24.1	67.6	80.7	16.2	2.5	0.5	0.2
Kerala	400	6.8	85.0	0.9	0.3	2.6	96.2	94.1	5.9	0.0	0.0	0.0
Madhya Pradesh	1200	7.3	89.8	0.7	2.4	15.7	81.2	89.3	9.7	0.9	0.0	0.0
Maharashtra	1600	7.4	86.8	0.1	0.9	12.2	86.8	84.5	9.0	6.3	0.1	0.1
Manipur	398	1.0	67.1	6.0	18.4	27.3	48.3	100.0	0.0	0.0	0.0	0.0
Mizoram	400	1.8	96.0	1.3	10.7	31.8	56.3	91.1	0.5	8.3	0.0	0.0
Nagaland	196	0.0	86.7	21.3	22.5	25.4	30.8	99.4	0.0	0.6	0.0	0.0
Odisha	372	0.3	83.6	0.0	17.9	48.4	33.8	97.1	0.6	2.3	0.0	0.0
Punjab	1202	7.1	20.5	0.4	4.9	32.2	62.4	84.4	7.8	7.8	0.0	0.0
Rajasthan	1200	4.6	85.6	0.1	4.6	24.5	70.9	96.4	3.4	0.2	0.0	0.0
Tamil Nadu	1200	2.8	65.1	0.9	13.5	45.6	40.0	92.8	6.0	1.2	0.0	0.0
Telangana	400	2.0	93.0	0.5	13.7	21.0	64.8	65.3	12.4	22.3	0.0	0.0
Tripura	400	1.5	88.8	5.4	16.3	15.5	62.8	97.7	2.0	0.0	0.3	0.0
Uttar Pradesh	800	12.9	81.8	0.0	0.0	0.3	99.7	98.2	1.4	0.5	0.0	0.0
Uttarakhand	400	0.0	74.3	0.3	3.0	21.5	75.1	99.7	0.3	0.0	0.0	0.0
West Bengal	1194	22.6	81.2	3.2	6.1	20.4	70.4	94.2	4.1	0.8	0.9	0.0
India	20695	5.5	75.6	1.4	6.1	20.6	71.9	90.9	6.0	2.8	0.2	0.0

* Among inmates who reported to ever had sex. # Total may not add up to 100% due to missing values

Figure 3.10: Knowledge about sexual activities in prison in general and their own sexual experiences among inmates, prison HSS Plus 2019 and 2021



Reported condom use, when the last sexual act was with a regular female partner, was 21.4% (Table 3.8). It was 42.8% with a casual female partner and 57.3% with a paid female partner. Only a very negligible proportion (0.2%) of inmates reported their last sexual act with a male partner.

A significant proportion of inmates in Delhi (11.7%) and in Haryana (10.4%) reported to have had their last sexual act with a paid female partner. Among them, only 27.6% from Delhi, and 32.4% from Haryana, reported to use condom in this act. Similarly, 13.4% of the inmates in Assam reported to have had sex with a casual partner, and among them only 22.6% reported to use a condom.

Table 3.8: Condom use practices with last female partners among inmates who reported to ever had sex, HSS Plus 2021

State/UT	Partner type (%)			Condom use (%) during last sex act with the partner		
	Had regular female partner	Had paid female partner	Had casual female partner	Condom use in last sex act with regular partner	Condom use in last sex act with paid partner	Condom use in last sex act with Casual partner
Andhra Pradesh	97.2	1.8	1.0	10.4	69.2	57.1
Assam	78.7	8.0	13.4	17.2	54.0	22.6
Bihar	99.7	0.2	0.0	19.8	100.0	-
Chandigarh	91.9	7.5	0.0	46.7	84.6	-
Chhattisgarh	92.6	6.6	0.5	11.8	16.3	0.0
Delhi	84.7	11.7	3.4	23.1	27.6	36.4
Gujarat	90.4	9.6	0.0	22.7	63.6	-
Haryana	87.4	10.4	0.5	14.8	32.4	0.0
Himachal Pradesh	86.0	5.2	8.5	22.0	42.1	22.6
Jharkhand	97.0	1.1	1.9	13.3	50.0	20.0
Karnataka	80.7	16.2	2.5	16.9	81.6	56.3
Kerala	94.1	5.9	0.0	2.2	30.0	-
Madhya Pradesh	89.3	9.7	0.9	23.5	39.0	30.0
Maharashtra	84.5	9.0	6.3	50.8	80.5	90.8
Manipur	100.0	0.0	0.0	41.0	-	-
Mizoram	91.1	0.5	8.3	11.7	0.0	25.0
Nagaland	99.4	0.0	0.6	46.2	-	100.0
Odisha	97.1	0.6	2.3	36.7	100.0	100.0
Punjab	84.4	7.8	7.8	17.5	5.3	5.3
Rajasthan	96.4	3.4	0.2	20.9	68.6	0.0
Tamil Nadu	92.8	6.0	1.2	19.0	87.0	44.4
Telangana	65.3	12.4	22.3	6.6	89.1	37.3
Tripura	97.7	2.0	0.0	9.5	28.6	-
Uttar Pradesh	98.2	1.4	0.5	7.9	55.6	33.3
Uttarakhand	99.7	0.3	0.0	34.4	0.0	-
West Bengal	94.2	4.1	0.8	12.2	56.4	37.5
India	90.9	6.0	2.8	21.4	57.3	42.8

3.7 Levels of HIV and Syphilis

Among the prison inmates, nationally, the observed HIV prevalence was 1.93% (95% CI: 1.75-2.12), whereas Syphilis sero-positivity was 0.34% (95% CI: 0.26-0.42). The surveillance aliquot from the recruited inmate was tested for Syphilis using non-treponemal Rapid Plasma Reagin (RPR) test. Figure 3.11 and Table 3.9 depicts the sero-prevalence of HIV and sero-positivity for Syphilis at national level.

Table 3.9: Magnitude of HIV and Syphilis among inmates, HSS Plus 2021

Biomarker	Total Sample Tested ³	Sero-prevalence/Sero-positivity (in %) with 95% Confidence Interval
HIV	20,695	1.93 (1.75-2.12)
RPR (Syphilis)	19,895	0.34 (0.26-0.42)

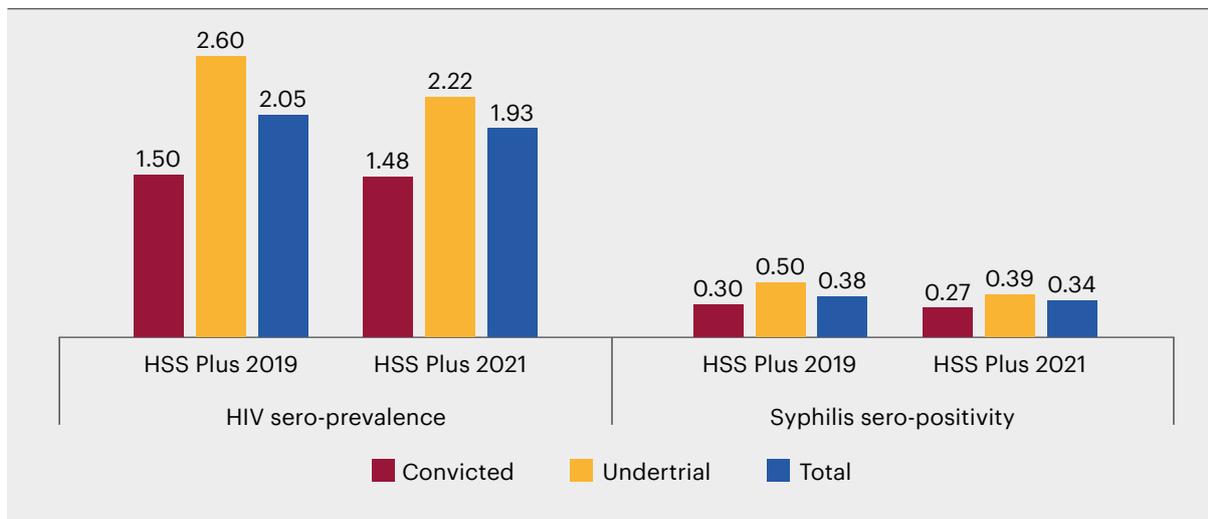
In terms of co-infections, the prevalence of HIV-Syphilis among inmates was 0.019% (95% CI: 0.000-0.038) while the sero-prevalence of HIV-HBV was 0.15%. (95% CI: 0.10-0.20). The sero-prevalence of HIV-HCV among inmates was 1.07% (95% CI:0.93-1.21).

Among the HIV-positive respondents, the sero-positivity for Syphilis was 1.00% (95% CI: 0.02-1.98). The sero-prevalence for HBV and HCV among the HIV-positive respondents was 7.75% (95% CI:5.13-10.37) and 55.25% (95% CI:50.38-60.12), respectively.

Highest HIV prevalence was noted in the State of Mizoram (26.0%), followed by Punjab (7.5%), Nagaland (4.6%), Chandigarh (3.5%), Andhra Pradesh (3.3%), Telangana (2.5%), Delhi (2.4%), Manipur (2.3%), and Assam (2.0%) (Figure 3.12 and Table 3.10).

In both the biomarkers, the sero-prevalence of undertrial inmates were found significantly higher than that of corresponding results of convicted inmates: for HIV sero-prevalence (2.22% versus 1.48%) and for Syphilis sero-positivity (0.39% versus 0.27%).

Figure 3.11: Magnitude of HIV, Syphilis sero-prevalence among convicted and undertrial inmates, prison HSS Plus 2019 and 2021



³ The test results from two sites for RPR (Syphilis) were not included in this analysis because of the quality issues.

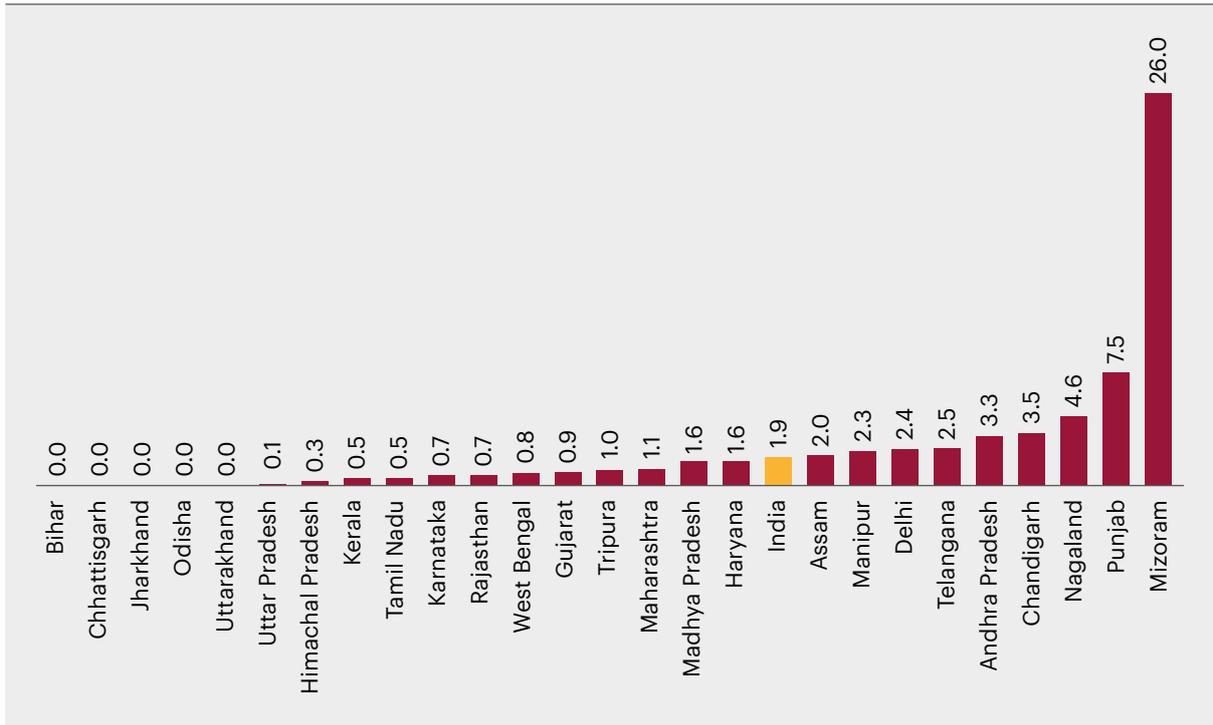
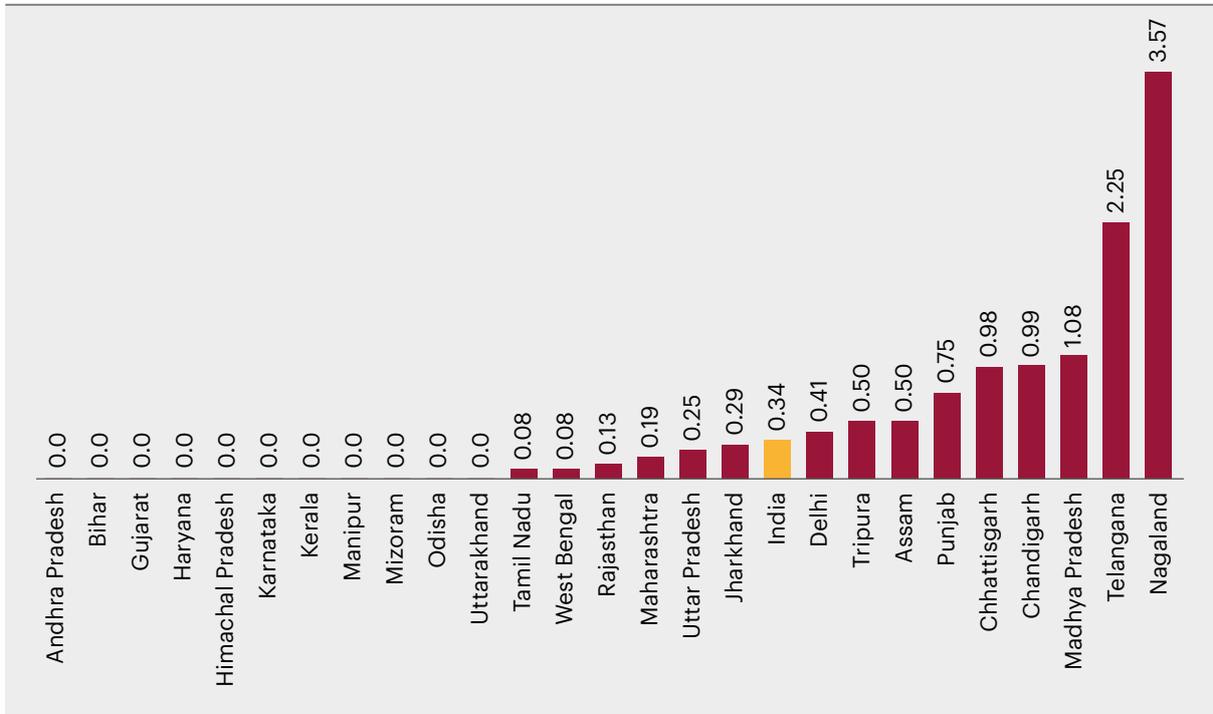
Figure 3.12: State/UT-wise HIV prevalence (%) among inmates, prison HSS Plus 2021**Figure 3.13:** State/UT-wise Syphilis sero-positivity (%) among inmates, prison HSS Plus 2021

Table 3.10: State/UT-wise sero-prevalence (%)/sero-positivity (%) of HIV and Syphilis among inmates, HSS Plus 2021

State/UT	HIV		Syphilis	
	N	Sero-prevalence	N	Sero-positivity
Andhra Pradesh	800	3.25 (2.02–4.48)	800	0.00 (0.00-0.00)
Assam	798	2.01 (1.03–2.98)	798	0.50 (0.01-0.99)
Bihar	1196	0.00 (0.00–0.00)	1196	0.00 (0.00-0.00)
Chandigarh	404	3.47 (1.68–5.25)	404	0.99 (0.02-1.96)
Chhattisgarh	717	0.00 (0.00–0.00)	717	0.98 (0.26-1.70)
Delhi	735	2.45 (1.33–3.57)	735	0.41 (0.00-0.87)
Gujarat	1600	0.88 (0.42–1.33)	1600	0.00 (0.00-0.00)
Haryana	799	1.63 (0.75–2.50)	799	0.00 (0.00-0.00)
Himachal Pradesh	400	0.25 (0.00–0.74)	400	0.00 (0.00-0.00)
Jharkhand	684	0.00 (0.00–0.00)	684	0.29 (0.00-0.70)
Karnataka*	1200	0.67 (0.21–1.13)	800	0.00 (0.00-0.00)
Kerala	400	0.50 (0.00–1.19)	400	0.00 (0.00-0.00)
Madhya Pradesh	1200	1.58 (0.88–2.29)	1200	1.08 (0.50-1.67)
Maharashtra	1600	1.13 (0.61–1.64)	1600	0.19 (0.00-0.40)
Manipur	398	2.26 (0.80–3.72)	398	0.00 (0.00-0.00)
Mizoram	400	26.00 (21.70–30.30)	400	0.00 (0.00-0.00)
Nagaland	196	4.59 (1.66–7.52)	196	3.57 (0.97-6.17)
Odisha	372	0.00 (0.00–0.00)	372	0.00 (0.00-0.00)
Punjab	1202	7.49 (6.00–8.98)	1202	0.75 (0.26-1.24)
Rajasthan*	1200	0.67 (0.21–1.13)	800	0.13 (0.00-0.37)
Tamil Nadu	1200	0.50 (0.10–0.90)	1200	0.08 (0.00-0.25)
Telangana	400	2.50 (0.97–4.03)	400	2.25 (0.80-3.70)
Tripura	400	1.00 (0.02–1.98)	400	0.50 (0.00-1.19)
Uttar Pradesh	800	0.13 (0.00–0.37)	800	0.25 (0.00-0.60)
Uttarakhand	400	0.00 (0.00–0.00)	400	0.00 (0.00-0.00)
West Bengal	1194	0.84 (0.32–1.35)	1194	0.08 (0.00-0.25)
India	20695	1.93 (1.75–2.12)	19895	0.34 (0.26-0.42)

*One each testing laboratory in Karnataka and Rajasthan which had discordant results for Syphilis more than 10%, test results for all the sites associated with those laboratories were considered as invalid.



Chapter 4

Discussion

HSS Plus among inmates at the central prisons under the National AIDS and STD Control Programme (NACP) in India is one among the few countries with large-scale systematic HIV/AIDS-related bio-behavioural surveillance systems across globe. The latest figures from National Crime Records Bureau on prison statistics 2020 reported 4.88 lakh (0.49 million) prisoners as of December 2020. In the same year, around 16.51 lakh (1.65 million) people were admitted in various prisons of the country. Findings from the HSS Plus 2021 would be helpful to augment evidence-driven national AIDS response aiming to reach to more than 16.50 lakh inmates.

This second round of HSS Plus 2021 among inmates was implemented in 53 selected central prisons across 26 States/Union Territories (UTs) of India. In this round, additional two biomarkers for Hepatitis B Virus and Hepatitis C were integrated. This offers a comprehensive understanding of these diseases geographically. The prevalence of HIV infection among prisoners was observed to be about 1.93% in 2021. This is almost nine times higher than that in the general population and comparable to HIV prevalence observed among female sex workers in India. Importantly, although prevalence is much higher, the knowledge about HIV/AIDS is much below the desired levels. Only one-third of the inmates had comprehensive correct knowledge of HIV/AIDS. In Punjab, the awareness about HIV transmission through reuse of already used needle-syringe is reported by only half of the respondents.

The findings show suboptimal coverage of HIV testing in a population where HIV prevalence is much higher than the general population. Only 3 in 10 prison inmates reported to have been tested for HIV in the last 12 months. As a result of suboptimal testing coverage, three out of five HIV-positive inmates were on ART. This is a critical gap and a priority area of future interventions designing as the national programme aims to achieve the fast-track treatment target of 95-95-95 by 2025.

The findings establish over-representation of injecting drug users in Indian prison than the general population. In Mizoram, almost 4 out of every 10 inmates, and in Punjab, 1 out of every 10 inmates reported to have ever injected drugs for pleasure. Less than 75% of IDU inmates reported use of sterile needle-syringe during their last injecting episode in comparison with 85% by IDU in general (National Integrated Biological Behavioural Surveillance Survey, India, 2015). Clearly, the inmates with IDU history are less likely to follow safe injecting drug practices.

The findings also indicate presence of sexual activities in prison with 5 out of every 100 inmates reporting the same. Also, the clients of sex workers are represented in central prisons in a significant proportion with only three-fifth reporting use of condoms during their last sexual act with paid partners.

Highest HIV prevalence was noted in the State of Mizoram (26.0%), followed by Punjab (7.5%), Nagaland (4.6%), Chandigarh (3.5%), Andhra Pradesh (3.3%), Telangana (2.5%), Delhi

(2.4%), Manipur (2.3%), and Assam (2.0%). HSS Plus 2021 documented lower prevalence of co-infections in general. However, prevalence of HBV and HCV among HIV infected inmates was significantly higher. Thus, HSS Plus 2021 corroborates the need for regular screening for HBV and HCV infection among HIV infected patients as a part of the client centric services under NACP.

The report from the HSS 2021 Plus provides data on the level of HIV and Syphilis among central prison inmates as in the previous round. For the first time, the report also provides data on the current level of sero-prevalence of HBV and HCV among them. Overall, 2021 round of HSS Plus also establishes that people at higher risk of HIV infection are over-represented in Indian prisons. The prison population are not completely isolated from the general community as majority return to their villages, towns, or cities from where they come. The comprehensive package of services, across prevention-detection-treatment continuum in prisons and other closed settings, being launched and expanded under the NACP is a critical step in the right direction as the country moves towards achieving 'End of AIDS' as a public health threat by 2030.

While in-depth analysis of data will further enhance the insights into the epidemic of HIV, Syphilis and related co-morbidities, the current report provides critical evidence for shared actions providing holistic and comprehensive care as reflected under NACP-Phase V.



Annexures

Annexure 1: Informed Consent Form

CONSENT FORM FOR TAKING INFORMED CONSENT FROM AN ELIGIBLE INMATE FOR PARTICIPATING IN HIV SENTINEL SURVEILLANCE PLUS

This form explains the purpose and details of HIV surveillance (survey) activity for which information and blood sample is proposed to be collected from you. On reading/ understanding the following information, if you agree to take part in this survey, you will be interviewed using a data sheet as well as blood sample will be collected. You are requested to sign or make a thumb impression at the end of form. If you have any questions/ queries, you can ask us before giving the consent.

HIV/AIDS disease is one of the major public health problems in India. National AIDS Control Organization (NACO), Ministry of Health and Family Welfare, Govt. of India, the nodal national agency for control of HIV/AIDS disease in India, conducts biennial HIV surveys in different population groups to know how prevalent the HIV/AIDS disease is in different groups and overall. This biennial survey is called HIV Sentinel Surveillance. Inmates in central jail are one of the groups among whom this survey is being implemented. The results of this survey will help NACO to understand how big the HIV/AIDS disease among inmates is in India and develop and augment appropriate services for HIV/AIDS disease among them. 400 inmates have been randomly selected (**like a lottery method**) for the survey in this prison and you are one among them. All the data collected under this HIV Survey will be completely confidential and will not be shared with anyone outside the surveillance survey team. The complete survey process will take around 15-20 minutes.

Some of the questions appear sensitive but it is important that you answer them all. Your answers will help improving policies and programs related to services". Please be assured that personal identifier like name, Prison ID (Kaidi number), identification marks, contact details etc. are not mentioned on Surveillance survey data forms. The consent form and data forms will be stored separately and hence the information provided by you will be completely confidential and anonymous. You do not have to answer any question that you do not wish to answer. However, your honest answer to these questions will help us better understand the risk factors associated with HIV, Syphilis or Hepatitis B (HBV) and Hepatitis C (HCV) infections.

After completion of data forms, the survey team will also collect about 5 ml (approximately one teaspoon) of blood sample. The equipment used to take the blood is clean and completely safe. It has never been used before and will be discarded after each collection. The blood sample will be tested for HIV and Syphilis, Hepatitis B and Hepatitis C. As a part of this survey, the results of these tests will not be provided to you. In order to maintain your confidentiality in this survey, but to ensure your medical care, the HIV and Syphilis test results will be provided to you through testing at ICTC and Hepatitis B & C test results through the programme for Hepatitis control and prevention. Hence you will be required to provide a consent at ICTC too for HIV, Syphilis, Hepatitis B and C testing. All the information that you provide, and your test results will be kept confidential and anonymous. The government programmes will also offer referrals to necessary free of cost follow-up services for treatment of HIV, Syphilis, Hepatitis B and

Hepatitis C if you need them.

I hope the aforesaid information answers all your questions and you agree to participate in this HIV survey. Though there is no other direct benefit to you, except for those mentioned above, your participation and results of this survey will help the national health system to develop appropriate programs to prevent these diseases among prison inmates in India as a whole. You are free to refuse to participate in the survey. Your decision to agree or refuse to participate in the survey will not affect the provision of any services to you in any way at the prison.

Do you have any Questions?

Contact Details - If you have any questions about this research study, please contact:

Name and address of Focal person

Dr.....,

Dr. Pradeep Kumar,
 Program Officer (Surveillance)
 National AIDS Control Organization,
 New Delhi – 110001
 Tel. No. – 01143509906

If you have any questions about your rights as study participant you can contact:

Name and contact details of chairperson of Institutional Ethics Committee

Dr.....,

Chairperson
 Ethics Committee
 Institute, Phone No:

I, _____, aged _____yrs*, have fully understood the content and agree to participate in this survey and give my blood for HIV / Syphilis / HBV / HCV test by my own volition. I know that the data collected under this survey will be used by the National AIDS Control Programme to improve the HIV/AIDS services with full confidentiality.

Signature/ thumb impression: _____ Date: _____

(This is the left thumb impression of _____ .Counsellor'sSignature: _____)

Name of witness: _____ Signature: _____ Date: _____

Name of Counsellor: _____ Signature: _____ Date: _____

Annexure 2: Data Form for Prison Sites

National AIDS Control Programme and All India Institute of Medical Sciences
Ministry of Health & Family Welfare, Govt of India

HSS 2021: DATA FORM FOR PRISON SITES

HSS 2021: जेल साइटों के लिए डेटा फॉर्म

[Please fill the site details in the box below/ Paste the sticker with site details/ Stamp the site details in the empty box/ कृपया सेंटिनल साइट की जानकारी यहाँ लिखें/छापें/चिपकाएं]

State / राज्य: _____ District / ज़िला: _____			
Site / Sub-site Name / साइट / सब-साइट का नाम: _____			
(Site Code) (साइट कोड)	(SSN) (सब-साइट नंबर)	(Sample No) (सैंपल नंबर)	(Date DD/MM/YY) (दिनांक- DD/MM/YY)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Section 1: Background Characteristic / भाग 1: पृष्ठभूमि का विवरण

Statement: Thank you very much for agreeing to participate in this surveillance. As I mentioned, this survey is completely anonymous, confidential and will help the government of India to design and enhance HIV/AIDS services in prison and other correctional institutions. So, we will now start the interview.

बयान: इस सर्वेक्षण में भाग लेने की सहमति देने के लिए आपका धन्यवाद। जैसा की मैंने आपको बताया है, यह सर्वेक्षण पूर्ण रूप से नामरहित एवं गोपनीय है और इससे भारत सरकार को जेल व सुधार केन्द्रों में एच.आई.वी. /एड्स सम्बंधित सुविधाओं की योजना बनाने और सुधारने में मदद मिलेगी। अब हम साक्षात्कार/ इन्टरव्यू शुरू करेंगे।

1. How old are you? / आप कितने साल के हैं? (Age in completed years / आयु सम्पूर्ण वर्षों में)

<input type="text"/>	<input type="text"/>
----------------------	----------------------

2. What is your current marital status? / आपकी वर्तमान वैवाहिक स्थिति क्या है?

1. Never Married / कभी शादी नहीं हुई 2. Currently Married / विवाहित
3. Divorced / Separated / Widower / तलाकशुदा / अलग रह रहे हैं / विधुर

3. What is the highest grade/class you have completed? / आजतक आपने कितनी उच्चतम शिक्षा प्राप्त की है?

1. Illiterate / निरक्षर 2. Literate and till 5th Standard / साक्षर और पांचवीं तक
3. 6th to 10th Standard / छठी से दसवीं तक 4. 11th to graduation / ग्यारहवीं से स्नातक
5. Post-Graduation & above / स्नातकोत्तर और उससे ज्यादा

4. What is your current prisoner status? / आपकी अभी की कैदी अवस्था क्या है?

1. Convicted / अपराधी 2. Under trial / विचाराधीन

5. Since how long you are in this prison? / आप कितने समय से इस जेल में हैं?

1. Less than one month / एक महीने से कम
2. One month to less than three months / एक महीने से तीन महीनों के बीच
3. Three months to less than 12 months / तीन महीनों से 12 महीनों के बीच
4. One year to less than three years / एक साल से लेकर तीन साल के बीच
5. Three years or more / तीन साल या ज्यादा

6. How many times you had been in prison before the present imprisonment? / इससे पहले आप कितनी बार जेल में कैदी रह चुके हैं?

1. Never / कभी नहीं 2. One Time / एक बार 3. Two times or more / दो बार या ज्यादा

Section 2: HIV/AIDS related knowledge / भाग 2: एच.आई.वी. / एड्स से संबंधित ज्ञान

Statement: As we mentioned before, the focus of the current survey is to augment the healthcare services among the prison population further. So, now I would like to ask you some questions about awareness about the health programme for which this survey is being done.

बयान: जैसा की हमने पहले बताया है, इस सर्वे का मुख्य उद्देश्य कैदियों में स्वास्थ्य सुविधाओं को बढ़ावा देना है। मैं अब आपसे स्वास्थ्य प्रोग्राम की जानकारी से सम्बंधित सवाल पूछूंगा/पूछूंगी जिसके लिए ये सर्वेक्षण किया जा रहा है।

7. Have you heard of HIV or AIDS? / क्या आपने एच.आई.वी. या एड्स के बारे में सुना है?

1. Yes / हाँ

2. No / नहीं

Note: If the response for question no 7 is "No" (i.e. code '2'), then skip the rest of section 2 and whole of section 3 and go to the section 4 please. / अगर प्रश्न 7 का उत्तर "नहीं" (अर्थात '2') है तो भाग 2 के बाकी प्रश्न और भाग 3 के सभी प्रश्न छोड़ दे और भाग 4 पर जाएँ।

8. Is it possible to reduce the risk of HIV infection by having sexual relations with just one uninfected faithful sexual partner? / क्या एक ही विश्वसनीय यौन साथी से यौन सम्बंध रखने से / सेक्स करने से एच.आई.वी. संक्रमण का खतरा कम किया जा सकता है?

1. Yes / हाँ

2. No / नहीं

99. Don't know / पता नहीं

9. Is it possible to reduce the risk of HIV infection by using a condom every time one has sex? / क्या हर बार यौन सम्बंध / सेक्स के समय कंडोम के इस्तेमाल से एच.आई.वी. संक्रमण का खतरा कम किया जा सकता है?

1. Yes / हाँ

2. No / नहीं

99. Don't know / पता नहीं

10. Can a person get HIV from mosquito bites? / क्या किसी व्यक्ति को मच्छर के काटने से एच.आई.वी. संक्रमण हो सकता है?

1. Yes / हाँ

2. No / नहीं

99. Don't know / पता नहीं

11. Is it possible to become HIV infected by sharing a meal with a person infected with HIV? / क्या एच.आई.वी. से संक्रमित व्यक्ति के साथ खाना खाने से एच.आई.वी. संक्रमण हो सकता है?

1. Yes / हाँ

2. No / नहीं

99. Don't know / पता नहीं

12. Is it possible for a healthy-looking person to have HIV/AIDS? / क्या स्वस्थ दिखने वाले व्यक्ति को एच.आई.वी. / एड्स हो सकता है?

1. Yes / हाँ

2. No / नहीं

99. Don't know / पता नहीं

13. Can a person get HIV by using an injection needle that was already used by someone else? / क्या किसी और के द्वारा प्रयोग किये हुए इंजेक्शन की सुई के प्रयोग से एच.आई.वी. हो सकता है?

1. Yes / हाँ

2. No / नहीं

99. Don't know / पता नहीं

Section 3: HIV/AIDS related testing & treatment services uptake /

भाग 3: एच.आई.वी. / एड्स सम्बंधित जांच और इलाज सेवाओं का प्रयोग

Note: Section 3 is applicable only for the respondents who are aware of HIV/AIDS, i.e. who responded "Yes" for question no 7. If the response for question no 7 is "No" (i.e. code '2'), then skip this section and go to the section 4 please.

नोट: भाग 3 केवल उन्ही प्रतिभागियों के लिए उपयुक्त है जिनको एच.आई.वी. / एड्स की जानकारी है, जिन्होंने प्रश्न 7 का उत्तर 'हाँ' (अर्थात '1') दिया है, अगर प्रश्न 7 का उत्तर 'नहीं' (अर्थात '2') है तो भाग 3 के सभी प्रश्न छोड़ दे और भाग 4 पर जाएँ।

Statement: As we told, the focus of the current survey is to augment the healthcare services among the prison population further. So, as you are aware of HIV/AIDS disease, now I will like to ask you some questions about the uptake of the HIV/AIDS-related services for which this survey is being done.

बयान: जैसा की हमने पहले बताया है, इस सर्वेक्षण का मुख्य उद्देश्य कैदियों में स्वास्थ्य सुविधाओं को बढ़ावा देना है। जैसे की आप एच.आई.वी. / एड्स की बीमारी के बारे में जानते हैं, मैं अब आपसे एच.आई.वी. से सम्बंधित स्वास्थ्य सुविधाओं के प्रयोग के बारे में सवाल पूछूंगा/ पूछूंगी जिसके लिए ये सर्वेक्षण किया जा रहा है।

14. Have you ever been tested for HIV before? / क्या आपने कभी पहले एच.आई.वी. की जांच कराई है?

1. Yes / हाँ 2. No / नहीं 99. Don't know / No Response / पता नहीं / कोई जवाब नहीं

Note: If the response for question no 14 is "No" (i.e. code '2') or Don't know / No Response (i.e. code '99'), then skip the rest of section 3 and go to the section 4 please. / यदि प्रश्न 14 के लिए उत्तर "नहीं" (अर्थात '2') या 'पता नहीं / कोई जवाब "नहीं" (अर्थात '99') है, तो भाग 3 के शेष प्रश्न छोड़ दें और कृपया भाग 4 पर जाएँ।

15. Have you been tested for HIV in last 12 months? / क्या पिछले 12 महीनों में आपकी एच.आई.वी. के लिए जाँच की गयी है?

1. Yes / हाँ 2. No / नहीं 99. Don't know / No Response / पता नहीं / कोई जवाब नहीं

16. What was the result of your last HIV test? / आपके आखिरी एच.आई.वी. जाँच का परिणाम क्या था?

1. Positive / पॉजिटिव (एच.आई.वी. है)
2. Negative / निगेटिव (एच.आई.वी. नहीं है)
3. Did not collect the test result / जाँच परिणाम नहीं लिया
99. Don't know / No Response / पता नहीं / कोई जवाब नहीं

Note: If the response for question no 16 is "Yes" (i.e. code '1'), then ask the question '17'. Otherwise, skip the question '17' and go to the section 4 please. नोट: यदि प्रश्न 16 का उत्तर "हाँ" (अर्थात '1') है, तो प्रश्न '17' पूछें, अन्यथा प्रश्न '17' को छोड़ दें और कृपया भाग 4 पर जाएँ।

17. You mentioned that your last test result was HIV positive. Are you currently taking antiretroviral medications/HIV tablets? / आपने बताया कि आपके आखिरी जाँच का परिणाम एच.आई.वी. पॉजिटिव था। क्या आप वर्तमान में एंटीरेट्रोवाइरल दवाएं / एच.आई.वी. के लिए टैबलेट / ए. आर. टी. ले रहे हैं?

1. Yes / हाँ 2. No / नहीं 99. Don't know / No Response / पता नहीं / कोई जवाब नहीं

Section 4: Injecting Drug Use Practices / भाग 4: इंजेक्शन द्वारा नशीली दवाइयों का उपयोग

Statement: Now, I would like to ask some questions related to injecting drug use. I will like to reassure you that the sentinel survey is fully anonymous and confidential. An honest response to these questions will be of extreme help to the national health programme. Please feel to stop me and ask your doubts at any time if you desire so.

बयान: अब मैं आपसे इंजेक्शन द्वारा नशीली दवाओं के प्रयोग पर कुछ प्रश्न पूछना चाहूंगा/चाहूंगी। जैसा कि आपको बताया गया है, यह सर्वेक्षण पूर्ण-रूप से नामरहित व गोपनीय है। इन प्रश्नों के ईमानदारी से दिए उत्तर हमारे राष्ट्रीय कार्यक्रम के लिए बहुत मददगार होंगे। आप किसी भी समय मुझे रोककर आपके प्रश्न पूछ सकते हैं। मैं उन्हें समझाने कि कोशिश करूंगा/करूंगी।

18. In your opinion, do inmates in this prison inject drugs for pleasure? / आपकी राय में, क्या इस जेल में अन्य कैदी आनंद के लिए सुई या इंजेक्शन से नशीली दवा लेते हैं?

1. Yes / हाँ 2. No / नहीं 99. Don't know / No Response / याद नहीं / कोई उत्तर नहीं

19. Have you ever injected yourself with any drug for pleasure in your lifetime? / क्या आपने कभी अपने जीवन में आनंद के लिए खुद से सुई/इंजेक्शन से नशा किया है/ नशीली दवा ली है?

1. Yes / हाँ 2. No / नहीं

Note: If the response for question no 19 is "Yes" (i.e. code '1'), then ask the question 20, 21 and 22. If the response for question '19' is "No" (i.e. code '2'), then skip the rest of section 4 and go to the section 5.

नोट: यदि प्रश्न 19 के लिए उत्तर 'हाँ' (अर्थात '1') है, तो अगला प्रश्न 20, 21 और 22 को पूछें | यदि प्रश्न संख्या 19 का उत्तर 'नहीं' (अर्थात '2') है, तो भाग 4 के शेष प्रश्न को छोड़ दें और कृपया भाग 5 पर जाएँ |

20. When was the last time you injected yourself with any drug for pleasure? / आपने आखिरी बार आनंद के लिए खुद से सुई / इंजेक्शन से नशा कब किया था/ नशीली दवा कब ली थी?

1. Less than a month / एक महीने से कम
2. One month to less than three months / एक महीने से तीन महीनों के बीच
3. Three months to less than 12 months / तीन महीनों से 12 महीनों के बीच
4. One year or more / एक साल या ज्यादा

21. When you injected last for pleasure, did you use a sterile needle / syringe for injecting yourself? / जब आपने आखिरी बार आनंद के लिए खुद से सुई/इंजेक्शन से नशा किया था तब आपने नयी सिरिंज/ सुई का उपयोग किया था?

1. Yes / हाँ
2. No / नहीं
99. Don't remember / याद नहीं

22. When you injected last, did you share needle/syringe already used by you with a fellow injecting drug user? / जब आपने आखिरी बार सुई/इंजेक्शन से नशा किया था/ नशीली दवा ली थी, तो क्या आपने खुद इस्तमाल की हुई सुई नशा करने वाले दूसरे इंसान को सांझा करने के लिए दी थी?

1. Yes / हाँ
2. No / नहीं
99. Don't remember / याद नहीं

Section 5: Sexual Behaviour and Condom Use Practices / भाग 5: यौन व्यवहार और कंडोम के उपयोग का आचरण

Statement: Thank you very much for all the support provided till now. In this section, we would like to ask you some questions regarding sexual behaviour. I understand how personal those questions are, but at the same time, I would like you to note once again that confidentiality is fully maintained in this survey. The same questions are being asked to all the participants.

बयान: अब तक दिए गए आपके सहयोग के लिए धन्यवाद। हम आपके यौन संबंधित व्यवहार के बारे में कुछ प्रश्न पूछेंगे। हम ये समझते हैं की ये प्रश्न व्यक्तिगत हैं, लेकिन मैं आपको फिर से बताना चाहूँगी/चाहूँगा की यह सर्वे पूर्णता गोपनीय है और सभी प्रतिभागियों से समान प्रश्न पूछे जा रहे हैं, जिनके लिए ये सर्वे किया जा रहा है।

23. In your opinion, do inmates in this prison have sexual intercourse with other prisoners? / आपकी राय में, क्या इस जेल में कैदी अन्य कैदियों के साथ यौन संबंध रखते हैं / सेक्स करते हैं?

1. Yes / हाँ
2. No / नहीं
99. Don't know / No Response / पता नहीं / कोई जवाब नहीं

24. Have you ever had sexual intercourse in your lifetime? / क्या आपने अपने ज़िंदगी में कभी संभोग/ सेक्स किया है?

1. Yes / हाँ
2. No / नहीं

Note: If the response for question no 24 is "Yes" (i.e. code '1'), then ask the question 25, 26 and 27. If the response for question no 24 is "No" (i.e. code '2'), then skip the rest of section 5 and go to the section 6.

नोट: यदि प्रश्न 24 के लिए उत्तर 'हाँ' (अर्थात '1') है, तो अगला प्रश्न 25, 26 और 27 को पूछें। यदि प्रश्न संख्या 24 का उत्तर 'नहीं' (अर्थात '2') है, तो भाग 5 के शेष प्रश्न को छोड़ दें और कृपया भाग 6 पर जाएँ।

25. When was the last time that you had sexual intercourse? / आपने आखिरी बार कब संभोग/ सेक्स किया था?

1. Less than a month / एक महीने से कम
2. One month to less than three months / एक महीने से तीन महीनों के बीच
3. Three months to less than 12 months / तीन महीनों से 12 महीनों के बीच
4. One year or more / एक साल या ज्यादा

Hepatitis B / हेपेटाइटिस बी

Statement: Thank you very much for your response. It was very useful to understand your awareness about hepatitis. Now I will ask some questions pertaining to Hepatitis B. Will request for your kind patience and response to these questions

बयान: आपके जवाबों के लिए बहुत-बहुत धन्यवाद। हेपेटाइटिस के बारे में आपकी जागरूकता को समझना हमारे लिए बहुत उपयोगी था। अब मैं हेपेटाइटिस बी से सम्बंधित कुछ प्रश्न पूछूँगी/पूछूँगा। आपसे अनुरोध है की धीरज बनाये रखें और प्रश्नों का उत्तर दें।

32. Have you ever received the Hepatitis B vaccine? / क्या आपको कभी हेपेटाइटिस बी का टीका लगा है?

1. Yes / हाँ

2. No / नहीं

99. Don't know / No response / पता नहीं / कोई जवाब नहीं

33. Have you ever been tested for Hepatitis B? / क्या आपकी कभी हेपेटाइटिस बी की जाँच हुई है?

1. Yes / हाँ

2. No / नहीं

99. Don't know / No response / पता नहीं / कोई जवाब नहीं

Note: If the inmate has reported "Yes" in question number '33', then ask the questions '34-36' as per instructions provided. If the answer to above question '33' is "No", or "Don't know/No Response", please skip question numbers '34' to '36' and go to the question number '37'.

नोट: यदि कैदी ने प्रश्न '33' का उत्तर 'हाँ' दिया है, तो दिए गए निर्देशों के अनुसार प्रश्न '34-36' पूछें। यदि उपरोक्त प्रश्न '33' का उत्तर 'नहीं' या "पता नहीं" / "कोई उत्तर नहीं" है, तो प्रश्न '34-36' को छोड़ दें और प्रश्न '37' पूछें।

34. You mentioned that you have been tested for Hepatitis B. When was the last time you were tested for Hepatitis B? / आपने बताया कि आपकी हेपेटाइटिस बी की जाँच की गयी थी। आखिरी बार हेपेटाइटिस बी की जाँच कब की गयी थी?

1. Less than or equal to 12 months ago / 12 महीने या उससे पहले

2. More than 12 months and less than three years ago / 12 महीने से ज्यादा और तीन साल से कम

3. Three years or more ago / तीन साल या उससे भी ज्यादा

35. What was the result of your last Hepatitis B test? / आपके आखिरी हेपेटाइटिस बी जाँच का परिणाम क्या था?

1. Positive / पॉजिटिव (हेपेटाइटिस बी था)

2. Negative / निगेटिव (हेपेटाइटिस बी नहीं था)

3. Did not collect the test result / जाँच का परिणाम नहीं लिया

99. No Response / कोई उत्तर नहीं

Note: If the inmate has reported option 1, i.e. "Positive" in question number '35', then ask question '36' to the inmate. If the response is anything else, please skip question number '36' and go to question number '37'.

नोट: यदि कैदी ने प्रश्न '35' का उत्तर "पॉजिटिव" दिया है, तो प्रश्न '36' पूछें। यदि उत्तर कुछ और है, तो कृपया प्रश्न '36' को छोड़ दें और प्रश्न '37' पूछें।

36. You mentioned that your last test result was positive for Hepatitis B. Did you take any medicine to treat your Hepatitis B infection? / आपने बताया कि आपकी हेपेटाइटिस बी की आखिरी जाँच का परिणाम पॉजिटिव था। क्या आप ने इसके इलाज के लिए कोई दवाई ली थी?

1. Yes / हाँ

2. No / नहीं

99. Don't know / No response / पता नहीं / कोई जवाब नहीं

Hepatitis C/ हेपेटाइटिस C

Statement: Thank you very much for all your support so far. Now we have reached to the last segment of this interview where I will ask some questions pertaining to Hepatitis C. I would like you to state once again that confidentiality is fully maintained in this surveillance survey, and the same questions are being asked to all the participants of this group.

बयान: अब तक आपके सहयोग के लिए बहुत-बहुत धन्यवाद। अब हम इस साक्षात्कार के अंतिम भाग में पहुंच गए हैं, जहाँ मैं हेपेटाइटिस सी से संबंधित कुछ प्रश्न पूछूँगा / पूछूँगी। मैं एक बार फिर से दोहराना चाहूँगी/चाहूँगा कि यह सर्वेक्षण पूर्ण रूप से गोपनीय है, और सभी प्रतिभागियों से समान प्रश्न पूछे जा रहे हैं।

37. Have you ever been tested for Hepatitis C? / क्या आपकी कभी हेपेटाइटिस सी की जाँच हुई है?

1. Yes / हाँ

2. No / नहीं

99. Don't know / No response / पता नहीं / कोई जवाब नहीं

Note: If the inmate has reported option 1 "Yes" in question number '37', then ask questions '38' to '40' as per instructions provided. If the answer to above question '37' is option 2 "No", or option 99 "Don't know/No response" please skip questions '38' to '40'. Thank the inmate and end the interview.

नोट: यदि कैदी ने प्रश्न '37' का उत्तर 'हाँ' दिया है, तो दिए गए निर्देशों के अनुसार प्रश्न '38-40' पूछें। यदि उपरोक्त प्रश्न '37' का उत्तर "नहीं" या "पता नहीं / कोई उत्तर नहीं" है, तो प्रश्न '38-40' को छोड़ दें, और साक्षात्कार के अंत में जाएँ। कैदी का धन्यवाद करें और साक्षात्कार समाप्त करें।

38. You mentioned that you have been tested for Hepatitis C. When was the last time you were tested for Hepatitis C? / आपने बताया कि आपकी हेपेटाइटिस सी की जाँच की गयी थी। आखिरी बार जाँच कब की गयी थी?

1. Less than or equal to 12 months ago / 12 महीने या उससे पहले

2. More than 12 months and less than three years ago / 12 महीने से ज्यादा और तीन साल से कम

3. Three years or more ago / तीन साल या उससे भी ज्यादा

39. What was the result of your last Hepatitis C test? / आपकी आखिरी हेपेटाइटिस सी की जाँच का परिणाम क्या था?

1. Positive / पॉजिटिव (हेपेटाइटिस सी था)

2. Negative / निगेटिव (हेपेटाइटिस सी नहीं था)

3. Did not collect the test result / जाँच का परिणाम नहीं लिया

99. No Response / कोई उत्तर नहीं

Note: If the inmate has reported option 1 "Positive" in question number '39', then ask question '40' to the inmate. If the response is anything else, please skip question number '40'. Thank the inmate and end the interview.

नोट: यदि कैदी ने प्रश्न '39' का उत्तर "पॉजिटिव" दिया है, तो प्रश्न '40' पूछें। यदि अन्य कोई उत्तर दिया है तो प्रश्न '40' को छोड़ दें और साक्षात्कार के अंत में जाएँ। कैदी का धन्यवाद करें और साक्षात्कार समाप्त करें।

40. You mentioned that your last test result was positive for Hepatitis C. Did you take any medicine to treat your Hepatitis C infection? / आपने बताया कि आपकी हेपेटाइटिस सी की आखिरी जाँच का परिणाम पॉजिटिव था। क्या आपने हेपेटाइटिस सी के इलाज के लिए कोई दवाई ली थी?

1. Yes / हाँ

2. No / नहीं

99. Don't know / No response / पता नहीं / कोई उत्तर नहीं

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गोपनीय: केवल एच.एस.एस. साइट कर्मचारी के उपयोग के लिए

Note: Thank the inmate for his support and cooperation and reassure him about the anonymity and confidentiality of answers. Take him to the lab technician for blood specimen collection. Ensure that the sample number on data form and blood specimen vial is same. / कैदी के समर्थन और सहयोग के लिए उसका धन्यवाद करें और उत्तर की गुमनामी और गोपनीयता के बारे में उसे आश्वस्त करें। ब्लड/रक्त सैंपल संग्रह के लिए उसे लेब तकनीशियन के पास ले जाएँ। सुनिश्चित करें की डेटा फॉर्म और HSS सैंपल वाइअल/शीशी पर सैंपल नंबर समान हैं।

Signature / हस्ताक्षर:

Name / नाम:

(Person who filled the form / फॉर्म भरने वाले व्यक्ति)

Signature/ हस्ताक्षर:

Name / नाम:

(Sentinel Site in-charge/ सेंटिनल साइट प्रमुख)

Annexure 3: Recommendations from Ethics Committee on HIV Sentinel Surveillance Survey among Prisoners



Government of India
Ministry of Health & Family Welfare
National AIDS Control Organisation
6th Floor, Chandralok Building,
36 Janpath, New Delhi – 110 001
Tel.: 011-23731810

T-11020/48/2019-NACO(R&D)
12th September, 2019

To,

National AIDS Control Organisation (NACO),
Ministry of Health and Family Welfare,
Government of India, 9th Floor, Chandralok Building,
36 Janpath, New Delhi-110001

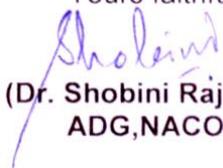
Subject: Recommendations of 15th Ethics Committee Meeting on Project titled, 'HIV Sentinel Surveillance Survey among Prisoners' – reg.

I am directed to convey the recommendations of the 15th meeting of the NACO-Ethics Committee held on 30-31 July, 2019. The recommendations of the NACO-Ethics Committee are as follows:

DECISION:

1. The NACO Ethics Committee opined that since this is a service oriented programme, there is no need for Ethics Committee review.

Yours faithfully,


(Dr. Shobini Rajan)
ADG,NACO

Copy for information:

1. PS to JS, NACO/GOI

Inmates in prisons are considered one of the groups who are at higher risk of acquiring HIV infection. The group was included as the 8th population group for the first time in the 2019 round of HIV surveillance under India's National AIDS and STD Control Program to monitor the level and trend of HIV/AIDS prevalence and related risk behaviours among them. This technical report presents the results from the 2021 round of surveillance among the inmates.



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RESEARCH INSTITUTE