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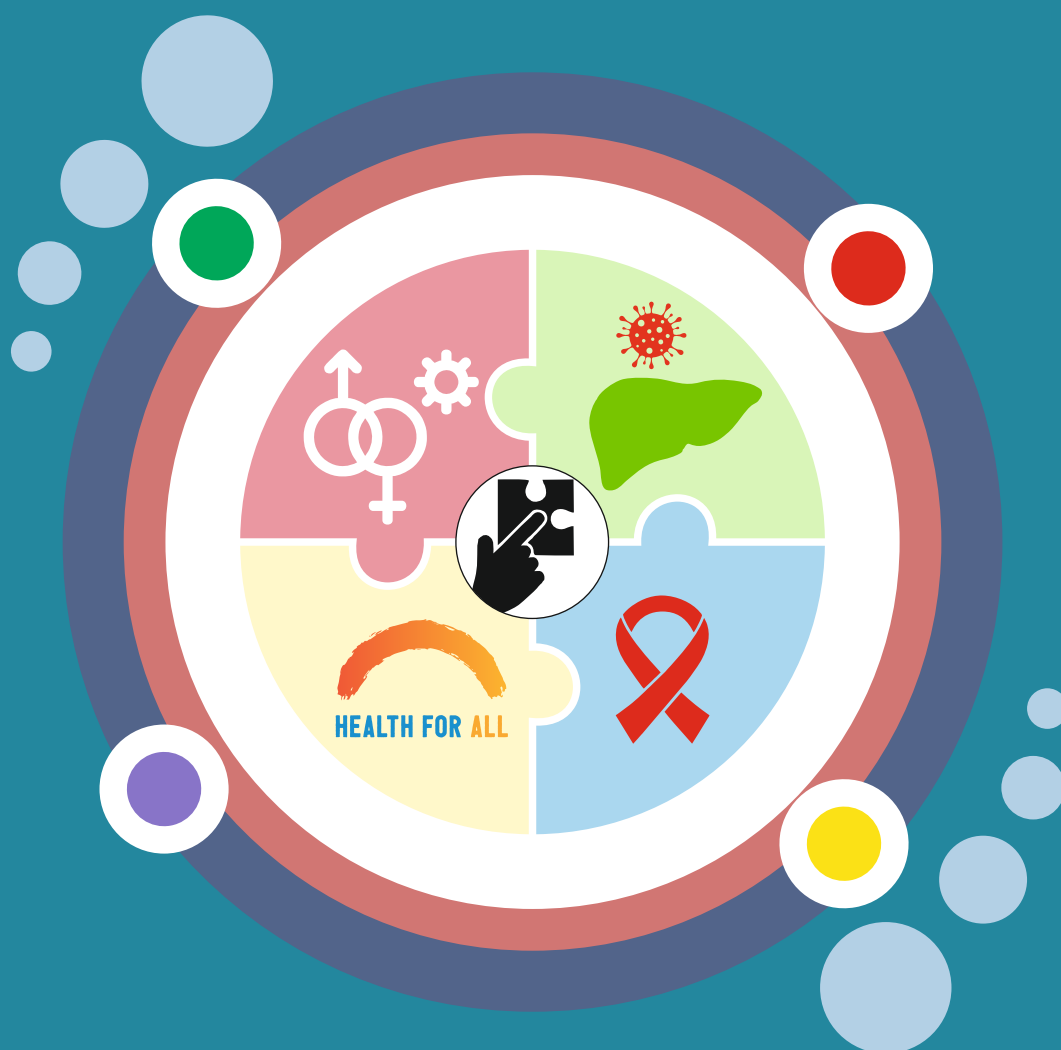
**Key issues arising out of the Seventy-fifth World Health Assembly
and the 150th and 151st sessions of the WHO Executive Board:
Integrated Regional Action Plan for viral hepatitis, HIV and sexually
transmitted infections in South-East Asia, 2022–2026**

The Seventy-fourth session of the WHO Regional Committee for South-East Asia adopted Decision SEA/RC74(4)2 that requested the Regional Director to undertake a consultative process to develop an integrated Regional Action Plan (RAP) on viral hepatitis, HIV and STIs in South-East Asia, 2022–2026, in alignment with the SDGs and GHSS, for the consideration of and endorsement by the Regional Committee at its Seventy-fifth Session in 2022.

Following a detailed consultative process, the integrated Regional Action Plan for viral hepatitis, HIV and sexually transmitted infections in South-East Asia, 2022–2026 has been finalized and is attached to this Working Paper as Addendum.

The 'Integrated Regional Action Plan for viral hepatitis, HIV and sexually transmitted infections in South-East Asia, 2022–2026' is now submitted to the Seventy-fifth Session of the WHO Regional Committee for South-East Asia for its consideration and adoption.

Integrated Regional Action Plan for viral hepatitis, HIV and sexually transmitted infections in South-East Asia, 2022–2026



World Health
Organization

South-East Asian Region

Integrated Regional Action Plan for viral hepatitis, HIV and sexually transmitted infections in South-East Asia, 2022–2026



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Foreword



Viral hepatitis, HIV and STI are major public health problems globally and in the WHO South-East (SE) Asia Region. The WHO SE Asia Region accounts for 20% of the global burden of hepatitis B and C and 10% of the global burden of HIV. It also accounts for 16% of the burden of the four curable STI.

Between 2010 and 2020, the Region achieved a 46% reduction in new HIV infections, a 64% decline in HIV-related deaths, and tripling of the coverage of antiretroviral therapy. Nine countries have achieved more than 90% coverage of the third dose of hepatitis B vaccine and four countries have reached the hepatitis B control target of less than 1% seroprevalence of HBsAg among children 5 years of age. The proportion

of new cases of four curable STI has declined from a third of the total global estimate in the 1990s to 26% in 2019.

Despite this progress, the Region must accelerate action to end the epidemics of viral hepatitis, HIV and STI by 2030, leveraging the full power of universal health coverage (UHC), primary health care (PHC), and meaningful engagement of communities. To do that, the WHO Regional Office for South-East Asia has developed this Integrated Regional Action Plan (I-RAP) on viral hepatitis, HIV and STI for the period 2022–2026, which is aligned with the Sustainable Development Goals, the WHO Global Health Sector Strategies on HIV, viral hepatitis and STI (2022–2030), the Global AIDS Strategy 2021–2026, and the Regional Flagship Priorities on UHC and achieving the elimination of select diseases.

The I-RAP was finalized following wideranging consultations with an array of stakeholders, including national programme managers, infected and affected communities, at-risk and vulnerable populations, civil society, nongovernmental organizations, and partner UN agencies. It strives to increase quality and efficiency and leverage the full power of PHC, UHC and health systems for impact. It promotes equity and innovation, and advances people-centred and community-driven approaches. It draws on the many lessons learnt from the HIV, hepatitis and STI prevention and treatment responses, accelerating a synergistic and integrated public health approach along the entire continuum of care.

The I-RAP provides a comprehensive Regional Framework covering 23 shared and 37 disease-specific actions to guide countries and partners in their efforts to end the epidemics. Individual countries are encouraged to select, set priorities for, and adapt these actions based on local epidemiological and health system contexts. In addition, the I-RAP identifies seven key actions that WHO must take to support implementation.

Together, we must sustain and accelerate progress, harnessing the full impact of innovation, and strengthening political and financial commitments. WHO is committed to supporting all stakeholders and partners to leverage this I-RAP to end the epidemics of viral hepatitis, HIV and STI by 2030, and to achieve a South-East Asia Region that is healthier, more equitable and health-secure, and provides sustainable health care.



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The document has been developed under the overall guidance of Dr Suman Rijal, Director, Department of Communicable Diseases at the Regional Office.

Guidance provided by Dr JVR Prasada Rao, Special Adviser to the Regional Director and Chair of the Technical Working Group (TWG) on the Regional Action Plan, contributed significantly towards shaping the final publication. Comments and inputs provided by members of the TWG (Dr Anoop Bastola, Dr Khin Pyone Ki, Mr Midnight Poonkasetwattana, Dr Nittaya Phanuphak, Dr Nurhalina Afriana, Dr Rachel Baggaley, Dr Rakesh Aggarwal, Dr Richard Steen, Dr Shiv Kumar Sarin and Dr Yanri Wijayanti Subronto) throughout the development process are duly acknowledged. We also express our thanks to all members of the Strategic and Technical Advisory Group (STAG) on hepatitis (Dr Amit Goel, Dr Anchalee Avihingsanon, Dr David Handojo Muljono, Mr Giten Khwairakpam, Ms Jennifer Johnston, Mr K.C. Prawchan, Dr Mamun Al Mahtab, Dr Thilanga Ruwanpathirana) for their contribution.

Inputs provided by communities of infected and affected populations, representatives of various regional- and country-level civil society organizations, networks and NGOs are also hereby acknowledged.

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The contributions by the national programme managers from Member States, WHO country office focal points for HIV hepatitis and STI, the UNAIDS regional support team for Asia and the Pacific, the Clinton Health Access Initiative, and colleagues from the UNICEF Regional Office for South Asia and the World Bank's South Asia Office significantly aided the finalization of disease-specific actions.

Acronyms and Abbreviations

AMR	antimicrobial resistance
ANC	antenatal care
ART	antiretroviral therapy
BD	birth dose
CBO	community-based organization
CHW	community health worker
CLM	community-led monitoring
CSO	civil society organization
EMTCT	elimination of mother-to-child transmission
GHSS	Global Health Sector Strategies
HAV	hepatitis A virus
HBIG	hepatitis B immunoglobulin
HBsAg	hepatitis B surface antigen
HBV	hepatitis B virus
HCV	hepatitis C virus
HepB-BD	birth dose of hepatitis B vaccine
HepB3	third dose of hepatitis B vaccine
HEV	hepatitis E virus
HIV	human immunodeficiency virus
HPV	human papillomavirus
I-RAP	Integrated Regional Action Plan
LDSS	low dead-space syringe
M&E	monitoring and evaluation
MSM	men who have sex with men
MTCT	mother-to-child transmission
NCD	noncommunicable disease
NGO	nongovernmental organization
NSP	national strategic plan
OST	opioid substitution therapy
PEP	post-exposure prophylaxis
PHC	primary health care
PID	pelvic inflammatory disease
PLHIV	people living with HIV

PMTCT	prevention of mother-to-child transmission
PrEP	pre-exposure prophylaxis
PWID	people who inject drugs
PWUD	persons who use drugs
RAP	Regional Action Plan
RDT	rapid diagnostic test
SDG	Sustainable Development Goal
SE	South-East
STI	sexually transmitted infections
SW	sex worker
TB	tuberculosis
TWG	technical working group
UHC	universal health coverage
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
VPD	vaccine preventable disease
WHO	World Health Organization
WUENIC	WHO/UNICEF Estimates of National Immunization Coverage

Glossary

Affected populations	Those members of the community living with the particular infection or disease
Community-based organization	A public or private non-profit organization that is representative of a community or significant segments of a community and provides educational or related health services to individuals in the community
Community health worker (CHW)	CHWs are health-care providers who live in the community they serve. They receive lower levels of formal education and training than professional health-care workers such as nurses and doctors.
Community-led monitoring (CLM)	Community-led or community-based monitoring refers to service users assessing the effectiveness, quality, accessibility and impact of health programmes and services which they receive.
Disability	Disability is an umbrella term for impairments of bodily function or structure, activity limitations or participation restrictions. This can be physical, intellectual or psychological.
Integration	In the context of this action plan, integration refers to the combining of health interventions and health programmes to provide people-centred care, regardless of the disease category experienced by the individual.
Key populations	Key populations are defined groups who, due to specific higher-risk behaviour, are at increased risk of HIV, irrespective of the epidemic type or local context. Also, they often have legal and social issues related to their behaviour that increase their vulnerability to viral hepatitis, HIV or STI.
Social contracting	The process by which government resources are used to fund entities which are not part of government (herein called civil society organizations) to provide health services which the government has a responsibility to provide, to assure the health of its citizenry.

Executive summary

Global action for elimination of viral hepatitis, HIV and sexually transmitted infections (STI) as public health problems began in 2016 when the World Health Assembly agreed to achieve this by 2030. Progress has been mixed to date, with advances in the elimination of mother-to-child transmission (MTCT) of HIV and syphilis, less in overall diagnosis and treatment for hepatitis B and C, and limited progress in addressing these diseases among key populations. The COVID-19 pandemic has further impacted progress in the years following its declaration as a global pandemic in March 2020, through disruption to health systems and service delivery.

With a population of 2 billion people, South-East (SE) Asia accounts for a major proportion of infections, sequelae and deaths from these three major communicable diseases. For example, 20% of global deaths from viral hepatitis occur in SE Asia. Specific to this Region is the disproportionate burden of these infectious and other communicable diseases among key populations. Indeed, both HIV and hepatitis C transmission are ostensibly driven by higher incidence among the highest risk populations in the Region, with more than 90% of new HIV infections occurring among key populations and their partners.

Since 2016 World Health Assembly endorsement of the global strategies for HIV, viral hepatitis and STI, the Region has initiated action plans to provide operational guidance for countries to achieve elimination through the Regional Action Plan for Viral Hepatitis in South-East Asia (2016–2021), the Regional Action Plan for HIV in South-East Asia (2017–2021) and additional regional work on STI. Nevertheless, action to address these major communicable diseases has been heterogeneous, with mixed progress within and between countries. In addition, the goal of elimination is off track, compounded by the disruptive nature of the COVID-19 pandemic.

The WHO Integrated Regional Action Plan for viral hepatitis, HIV and sexually transmitted infections in South-East Asia, 2022–2026 (I-RAP) brings together common strategies, actions and specific targets across health systems to promote synergies in the effective prevention, diagnosis and treatment of these major communicable diseases in a patient-centred approach. Apart from focused interventions among groups which are more vulnerable and disproportionately affected, the Integrated Action Plan actively promotes service delivery at the primary health-care level under universal health coverage (UHC). The I-RAP is aligned with the Sustainable Development Goals (SDGs), WHO Global Health Sector strategies (GHSS) on HIV, viral hepatitis and STI (2022–2030), Global AIDS Strategy 2021–2026 and is synergized with the regional flagship priorities on universal health coverage (UHC) and elimination of diseases.

The I-RAP has set several priority areas of specific and immediate action required in the Region. These are: (i) a focus on populations that are most affected by and at risk of viral hepatitis, HIV and STI; (ii) a reduction in incidence of all three diseases through preventing transmission; (iii) scaling up substantially, access to testing and treatment; (iv) the elimination of MTCT of HIV and syphilis and movement towards triple elimination; (v) the need to develop effective and inclusive governance structures; (vi) the critical requirement for adequate and sustained financing for the integrated programme; (vii) the need to

further build capacity in the health workforce; (viii) the importance of empowering communities and community health workers; and (ix) advocating for an environment where innovations are fostered and new technologies operationalized to optimize delivery of effective interventions.

Shared actions for a people-centred, tailored response include all of the recommended effective interventions and service delivery models across viral hepatitis, HIV and STI under a UHC and primary health-care framework. Health systems are encouraged to implement these irrespective of the targeted disease, given the commonalities and synergies these actions represent, including and importantly for key and vulnerable populations. Areas of implementation include primary prevention in sexual and reproductive health, harm reduction, integrated testing and treatment, addressing stigma and discrimination, strengthening national inter-programmatic linkages, the use of technologies, decentralization, key components necessary for innovation and sustained response and accelerating legal and regulatory policy reform. Community-led monitoring is a key component of necessary actions across all these major communicable diseases to promote engagement of the affected populations and their communities. The I-RAP provides for full engagement with communities and civil society to foster leadership and empower those most vulnerable.

Triple elimination of MTCT of HIV, syphilis and hepatitis B is a specific focus area of the I-RAP. Indeed, it is an example of operationalized integration in the delivery of services using a people-centred approach. This includes strengthening linkages to maternal and child health programmes to extend the reach and penetration of effective interventions for HIV, syphilis and hepatitis B prevention, diagnosis and treatment among pregnant women and the newborn.

The I-RAP outlines key actions necessary to address the heterogeneity of hepatitis responses across the Region, with specific focus on key populations. Key areas of action include: increasing timely birth dose of hepatitis B vaccine to 70% of live births by 2025, thereby reducing hepatitis B incidence; markedly reducing mortality from hepatitis B and C through scaling up access to testing and effective treatment; and markedly increasing combination harm reduction interventions for people who inject drugs (PWID) and persons who use drugs (PWUD). In addition, the I-RAP calls for special measures to optimize outcomes for liver disease including the management of cirrhosis and an early diagnosis and treatment for hepatocellular carcinoma (liver cancer) through strengthening linkages to cancer screening programmes and services.

The Action Plan builds on earlier efforts to address HIV in the Region but calls for urgent attention towards the regional elimination goal. This includes a specific focus on new infections among key populations, renewed efforts to address transmission among youth, continued efforts to address stigma and discrimination including through policy reform, and promoting community-led service delivery as an important adjunct to facilitate access to these populations. The targets of the I-RAP are aligned with other initiatives including the 95-95-95 HIV target for the Region by 2025. The Plan calls for continued efforts to promote addressing the syndemics of HIV–TB, being a leading cause of death among people living with HIV in the Region, and to reduce the proportion of diagnosis made of HIV with advanced disease. Specific interventions include comprehensive HIV prevention, an expansion of self-testing and point-of-care testing in all contexts and rapid initiation of antiretroviral therapy with adherence support to optimize clinical outcomes and minimize resistance.

The STI chapter outlines the key challenges and gaps across the Region. SE Asia has not previously had a separate STI action plan, so the areas for implementation of priority action are directed at promoting

enhanced health sector actions to address the expanding epidemic of STI. It is recognized that there is variability in the prevalence and impact of STI across countries of the Region and heterogeneity in access to appropriate diagnostic and treatment services. The Action Plan recognizes successes in the Region and seeks to leverage these within and between countries. This includes the development of flexible toolkit-proven interventions for countries at different stages of STI control. A key gap is limited data across most countries, and the I-RAP calls for increasing support in STI surveillance including routine reporting and prevalence monitoring in specific populations including pregnant women and key populations, and the monitoring of drug resistance to inform effective case management. A specific difference regarding STI is that of reinfection, and the need for treatment services to promote adherence to prevention to consolidate gains made through early diagnosis and treatment.

WHO's recommended prevention, diagnosis and treatment interventions are not effective unless appropriately implemented in an equitable and timely manner. The I-RAP emphasises the critical importance of political commitment in effective implementation of the Plan, which at the national level means country ownership of the nature and extent of the impact of these major communicable diseases. The Action Plan attempts to bridge the gap between previous regional action and the 2030 SDGs. To provide health system integration, the governance of the response should also be strengthened and integrated at the national, provincial and local levels, which may vary depending on the size of the country. Effective implementation calls for the active participation of key populations including through social contracting. Strategic information and data systems also need to be integrated in time, leveraging existing HIV and integrated surveillance systems with those of other disease categories. This includes identifying common metrics and indicators, and strengthening data collection and analysis at the subnational level. The strengthening of laboratory services across the major disease categories will also promote integrated data systems.

The COVID-19 pandemic has illustrated that risks to progress do exist and can heavily impact action to achieve elimination. The Action Plan seeks to build on some of the lessons learned during the COVID-19 pandemic including that of the utilization of technology to deliver health services, including telemedicine. Nevertheless, risk mitigation strategies are critical for the achievement of the goals of the Plan. These include strategies to foresee and manage potential lack of political support, potential turf issues in integrating action, the withdrawal of international funding, limited progress in policy reform and natural or public health emergencies.

At both the regional and national levels, WHO will closely monitor progress across this plan and commits to advocate for and provide technical support to Member States' national programmes. WHO will support the development and rollout of evidence-based normative guidance and other relevant tools for programmes, and engage partners at the highest level to ensure that all efforts are coalesced around the objectives of this plan. Finally, the Regional Office will support the development and adaptation of the tools required for monitoring progress and ultimately achieving the validation of elimination of viral hepatitis, HIV and STI in SE Asia.



1. Global and regional integrated elimination agenda

The world has made substantial progress on the elimination goal for viral hepatitis, human immunodeficiency virus (HIV) and some sexually transmitted infections (STI) as public health threats by 2030 following the global agreement through a resolution at the Seventy-fourth World Health Assembly in 2016. The global HIV epidemic has now been transformed with the focused prevention interventions and large-scale expansion of antiretroviral therapy (ART), reducing global HIV-related deaths to their lowest since 1994. Global hepatitis birth dose (hep B-BD) coverage has expanded greatly and the number of people receiving treatment for chronic hepatitis C virus infection has increased almost tenfold from 2015, reducing hepatitis C-related mortality (1). Several countries and regions have now embraced the triple elimination agenda for eliminating mother-to-child transmission (MTCT) of HIV, syphilis and hepatitis B.

The achievements to date, both global and in the WHO South-East (SE) Asia Region, have demonstrated that strong leadership, coupled with innovative technologies and practices, financial investment and community engagement can reduce disease transmission, improve treatment outcomes and save lives. The COVID-19 pandemic interrupted progress during the period starting 2020, and a refocus is necessary to bridge the gap and consolidate the gains achieved so far. Strategic and innovative shifts are needed to protect the progress to date and to bring the Region closer to the goal of ending the epidemics of AIDS, viral hepatitis and STI as public health threats, consistent with the Global Health Sector Strategies (GHSS) goal.

Acknowledging the commonalities, differences and potential synergies across these disease areas, the new WHO GHSS 2022–2030 on HIV, viral hepatitis and STI has brought together these three programmes under a common framework, embedded in universal health coverage (UHC) and actioned through a primary health care (PHC) approach. The seventy-fifth World Health Assembly noted with appreciation the three interlinked Global health sector strategies (GHSS) respectively on HIV, viral hepatitis and sexually transmitted infections for the period 2022–2030. These strategies provide broad guidance for this Integrated Regional Action Plan (I-RAP).

The 2022–2026 WHO Integrated Regional Action Plan (I-RAP) for SE Asia provides an operational framework for the Region aligned with the global strategies to implement key actions and combine shared and disease-specific approaches. Those infected and affected are placed at the centre of an integrated health sector response including time-bound actions for shared and individual programmes within a UHC framework to achieve elimination.

Reflecting the complex interaction of health issues associated with viral hepatitis, HIV and STI, this I-RAP is aligned with other global and regional health strategies and plans that address a wide range of related diseases and health concerns.

1.1 Integrated global action to end epidemics

Globally, viral hepatitis, HIV and STI collectively cause 2.3 million deaths and 1.2 million cases of cancer each year,¹ and continue to impose a major public health burden worldwide. More than one million people are newly infected with STI each day, and 4.5 million with HIV, hepatitis B and hepatitis C combined, each year. Although progress has been made in all three disease areas, the global response is off-track and most global health targets for 2020 were missed. The multiple epidemics of STI continue to cause a significant disease burden and the global response has lagged severely, resulting from a lack of visibility, funding and implementation support. The full benefits of available tools and technologies are not being realized, many populations are left behind and structural, systemic and financial barriers to accelerating progress persist. The COVID-19 pandemic has further hampered progress and accelerated action is needed to end these epidemics.

Building on the achievements and lessons learnt from the 2016–2021 GHSS (2-4), the new GHSS (2022–2030) on HIV, viral hepatitis and STI guides the health sector in implementing strategically focused responses to achieve the goals of ending AIDS, viral hepatitis B and C and STI by 2030.

The strategies recommend shared and disease-specific country actions until 2030, supported by actions by the World Health Organization (WHO) and partners. Implementation is grounded in delivery through the PHC system and the utilization of existing forms of care including for TB, HIV and other medical conditions under the context of UHC.

The 2022–2030 strategies underline the critical role of the health sector in ending these epidemics, acknowledging that a multisectoral “health in all policies” approach is required to remove structural and systemic barriers to accelerating progress (5). The strategies call for a more precise focus to reach the people most affected and at risk for each disease and to address inequities. They promote synergies under a UHC umbrella and primary health-care framework and contribute to achieving the goals of the 2030 Agenda for Sustainable Development.

1.1.1 Structure of this document

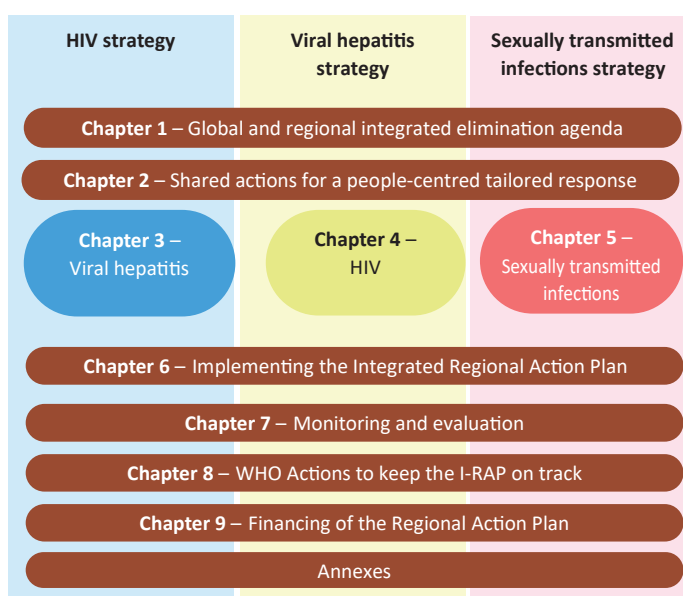
The integrated Regional Action Plan (I-RAP) for viral hepatitis, HIV and STI for 2022–2026 in SE Asia is a single document that includes both shared and disease-specific content. Following this chapter, the document is organized as follows (Fig. 1):

- ◉ Chapter 2 provides details on the shared actions that are common across viral hepatitis, HIV and STI and are necessary for a people-centred tailored response in SE Asia. These include the concrete example of triple elimination – the integrated elimination of MTCT of HIV, syphilis and hepatitis B.
- ◉ Chapters 3, 4 and 5 define the disease-specific actions required across viral hepatitis, HIV and STI, respectively to deliver the coverage targets required to reach the impact targets for the three disease areas by 2025 under a UHC and PHC framework.

¹ Including hepatocellular carcinoma caused by hepatitis B and C, cervical cancer caused by human papillomavirus and other types of cancers caused by viral hepatitis and human papillomavirus.

- Chapter 6 details the key principles for implementation of this I-RAP across 9 key domains.
- Chapter 7 provides the monitoring and evaluation (M&E) framework for the I-RAP aligned with the global framework and existing WHO validation guidance for monitoring and measuring progress towards, and validation of, the elimination of these communicable diseases.
- Chapter 8 provides WHO actions to support Member States in maintaining progress towards elimination through the full implementation of this I-RAP.
- Chapter 9 provides an estimate of financial resources required to support the I-RAP from 2022 to 2026 in the SE Asia Region.
- The annexures provide a consolidated list of all actions and the measurement framework.

Fig. 1. Structure of the I-RAP for viral hepatitis, HIV and STI, 2022–2026



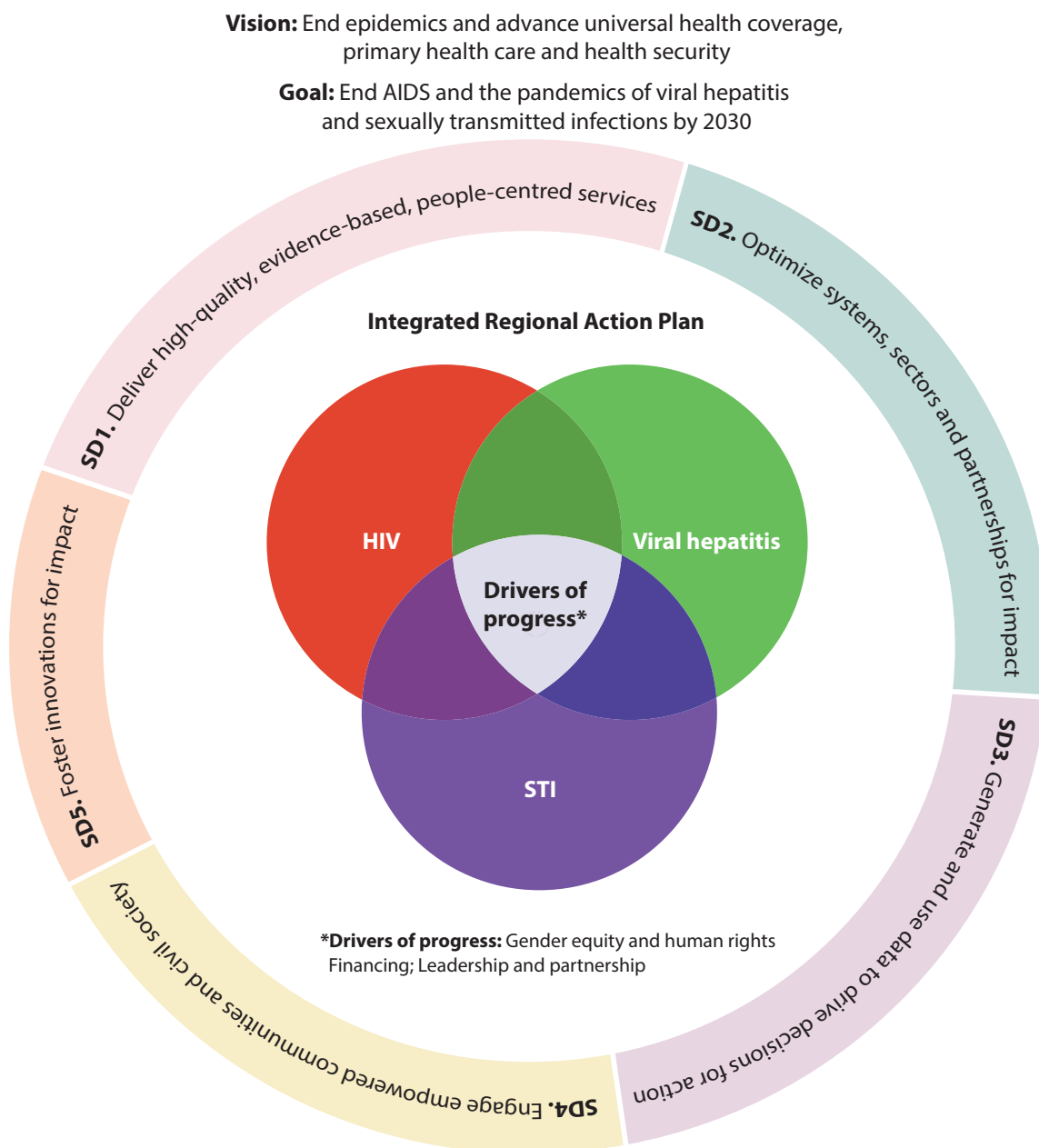
1.2 Vision, goals, strategic directions and targets

This section presents the vision, goals and strategic directions of the I-RAP. It also presents the main impact targets.

Vision: The 2022–2026 WHO I-RAP shares a common vision to end the epidemics of viral hepatitis, HIV and STI in the SE Asia Region under the umbrella of UHC with a focus on PHC, health security as well as meaningful engagement of communities.

Goal: To end the epidemics of viral hepatitis, HIV and STI as public health threats by 2030 in line with the SDGs and aligned to GHSS (2022–2030) and Joint United Nations Programme on HIV/AIDS (UNAIDS) Global AIDS Strategy (2022–2026) (Fig. 2).

Fig. 2. Vision, goals and strategic directions of the Integrated Regional Action Plan on viral hepatitis, HIV and STI, 2022–2026



Five strategic directions oriented around service delivery, health systems, strategic information, community empowerment and innovations provide the overall guiding framework for country actions to implement the strategies:

- ⦿ **Strategic Direction 1: deliver high-quality, evidence-informed people-centred services.** Member States should use evidence-informed guidance and service delivery innovations to accelerate access to, and the uptake of, a continuum of high-quality essential services for viral hepatitis, HIV and STI and other related health services, tailored to meet the needs of diverse populations and settings, ensuring that no one is left behind.

- ⦿ **Strategic Direction 2: optimize systems, sectors and partnerships for impact.** Countries need to take a systems-oriented approach that promotes synergies with PHC, health governance, financing, workforce, commodities and service delivery while also fostering multisectoral responses to social and structural determinants of health. Align and collaborate with partners including funders, academic and research institutions, professional bodies and private sector entities for maximum impact.
- ⦿ **Strategic Direction 3: generate and use data to drive decisions for action.** It is important to gather, analyse and use evidence and data, with disaggregation by sex, age and other relevant population characteristics to monitor and evaluate progress. This should guide action, innovation and research and development and promote data transparency and accountability.
- ⦿ **Strategic Direction 4: engage empowered communities and civil society.** Countries must take concrete actions to engage communities and civil society including key and affected populations and support their self-empowerment and pivotal role in advocacy, service delivery and policy-making. They should also ensure that services are culturally appropriate and responsive to community needs, address stigma and discrimination and tackle social and structural barriers.
- ⦿ **Strategic Direction 5: foster innovations for impact.** In collaboration with partners, contribute to defining and implementing national, regional and global research and innovation agenda that give priority to developing new technologies, service delivery models and health system practices. These innovations will help to overcome key barriers to achieving desired progress to reduce viral hepatitis, HIV and STI.

1.2.1 Impact of achieving the I-RAP targets

The I-RAP has identified key targets on coverage of different services by 2025 (described later in the document). Achieving these targets will be crucial to producing the desired impact by 2025 to pave the way for elimination by 2030. The impact of achieving the targets is depicted in Figs. 3, 4, 5, 6 and 7.

Fig. 3. HIV incidence from new actions implemented under the I-RAP 2020–2026 vs no new actions, projected to 2030

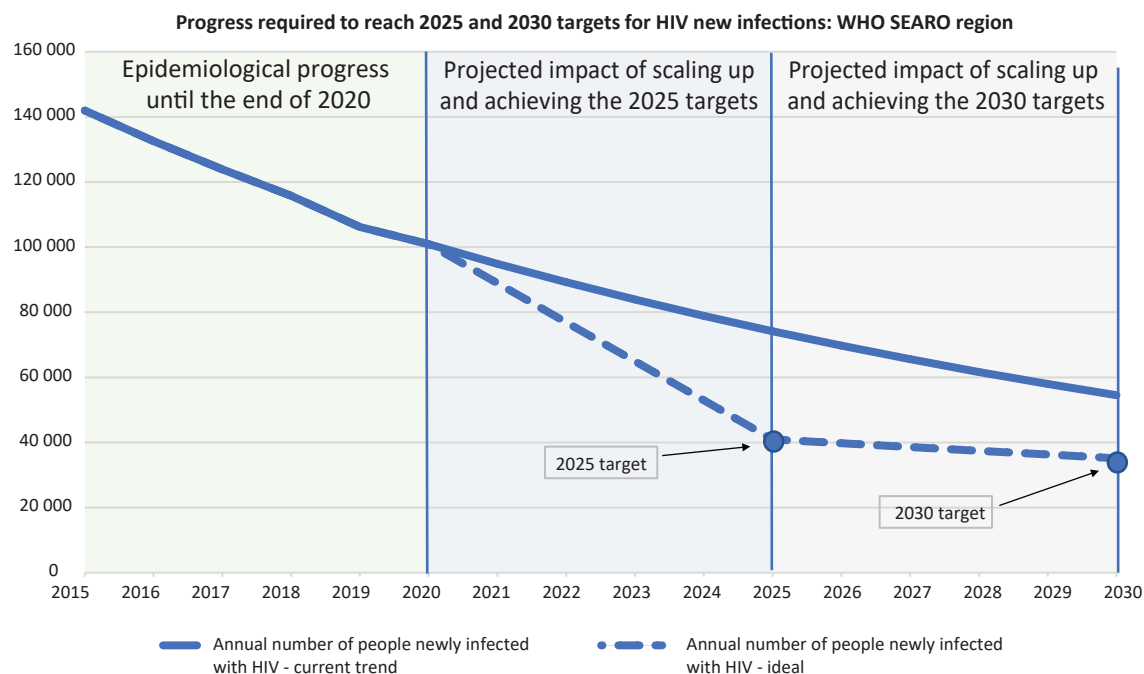


Fig. 4. HIV mortality trends from new actions implemented under the I-RAP 2020–2026 vs no new actions, projected to 2030

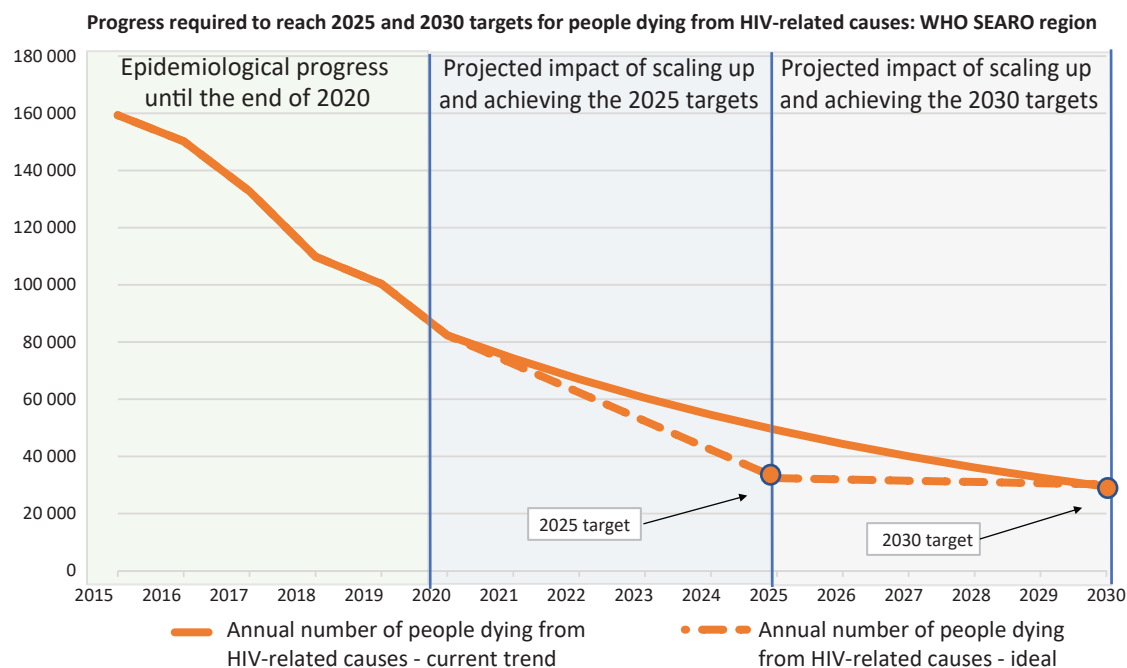


Fig. 5. Incidence and mortality of hepatitis B, WHO SE Asia Region 2020–2030

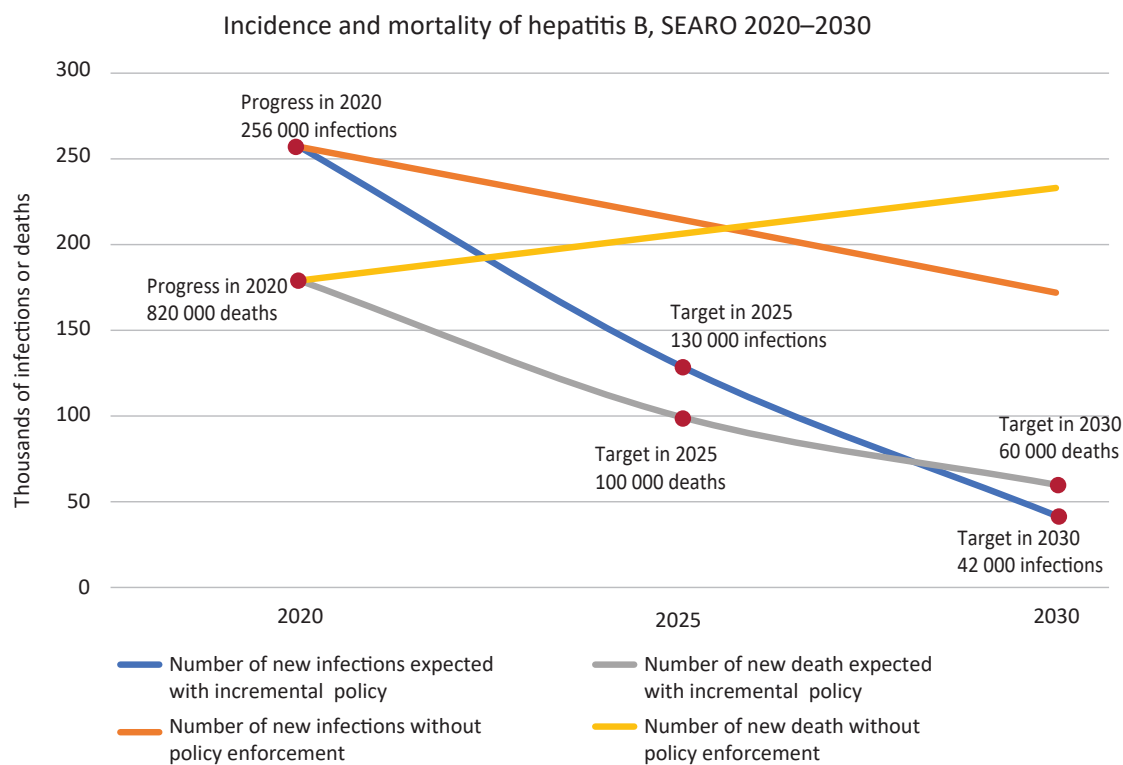


Fig. 6. Incidence and mortality of hepatitis C, WHO SE Asia Region 2020–2030

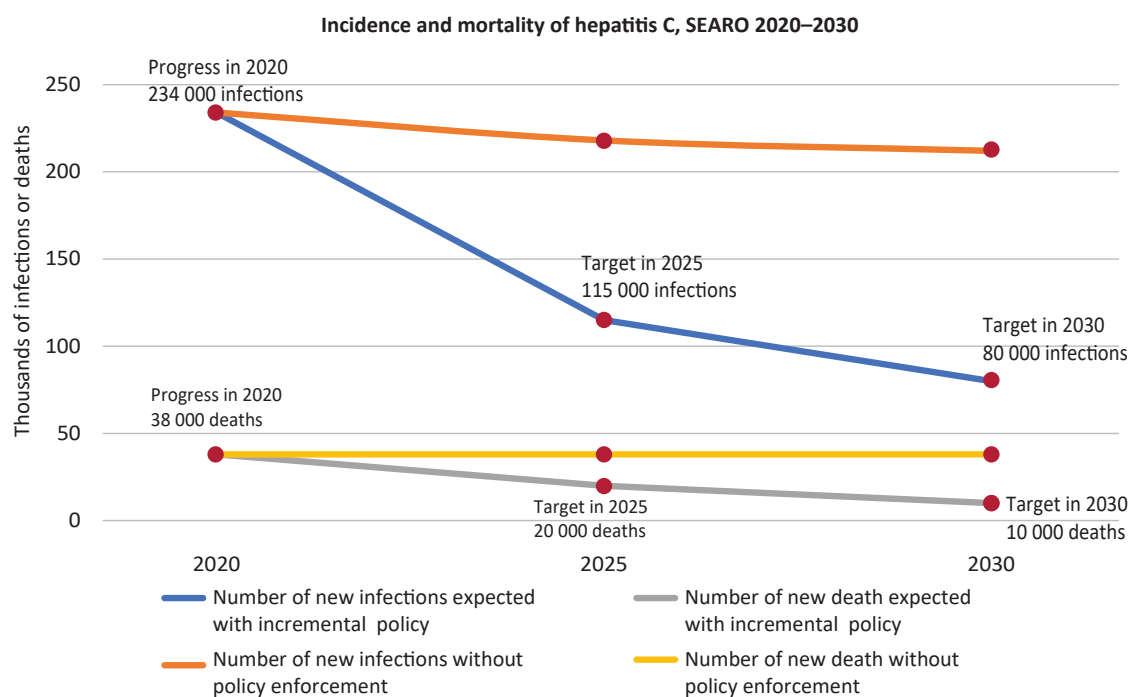
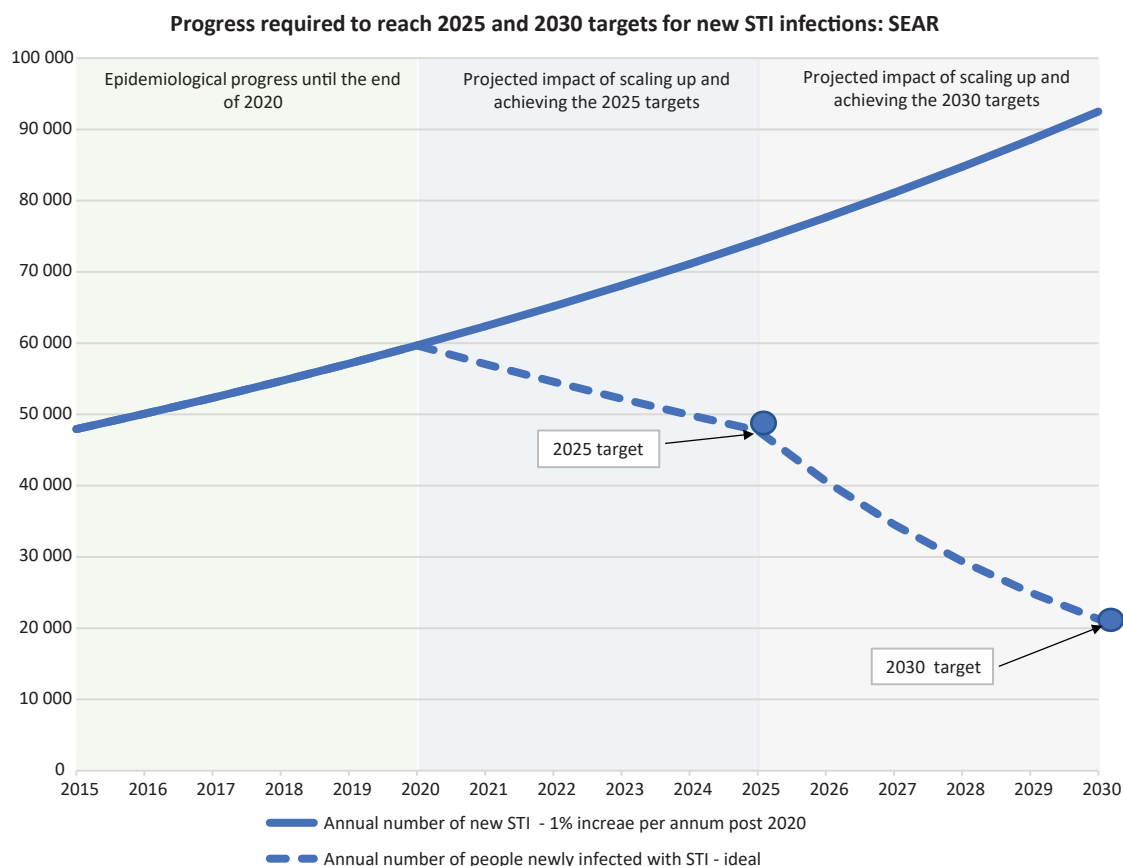


Fig. 7. Incidence of four curable STI and syphilis from new actions implemented under the I-RAP 2020–2026 vs no new action, projected to 2030



The regional targets provide a guide for national targets and should be adapted to each country context. Equitable progress towards the targets is required across all populations, and the I-RAP encourages disaggregated analyses of data by sex, age and other relevant population characteristics to track inequities and ensure that most affected and at-risk populations are not left behind.

The I-RAP provides a comprehensive regional framework of shared and disease-specific actions to guide countries and partners in their efforts to achieve the goals of ending these epidemics. One size does not fit all. Individual countries are encouraged to select, set priorities for, and adapt these actions in relation to local epidemiological and health system contexts, while upholding fundamental human rights, including the cross-cutting principle of equity and non-discrimination in the availability, accessibility, acceptability and quality of health services, products, approaches and interventions. The optimal selection of actions and service delivery models in the country contexts should be aligned with broader national strategies within a UHC framework and be responsive to the needs of individuals and local communities.

1.3 Regional situation and response in SE Asia

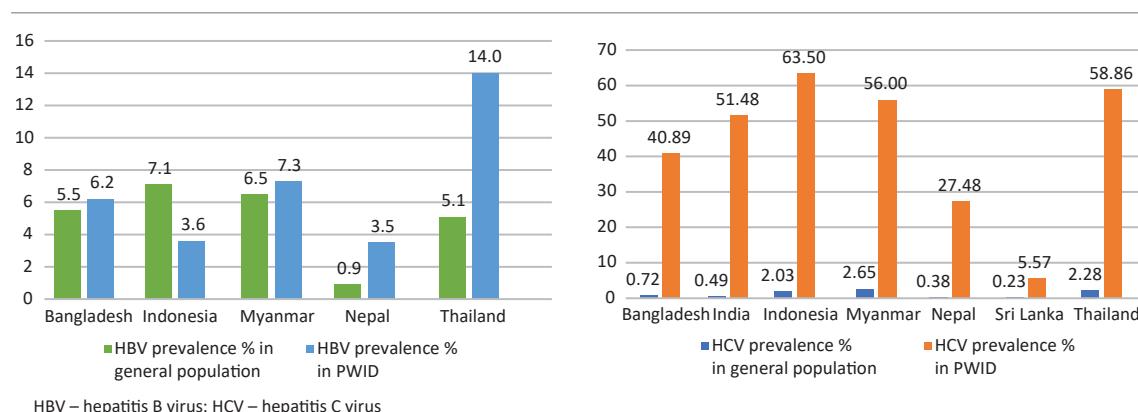
The epidemics of viral hepatitis, HIV and STI and responses thereto are at different stages across the Region.

1.3.1 Progress in viral hepatitis

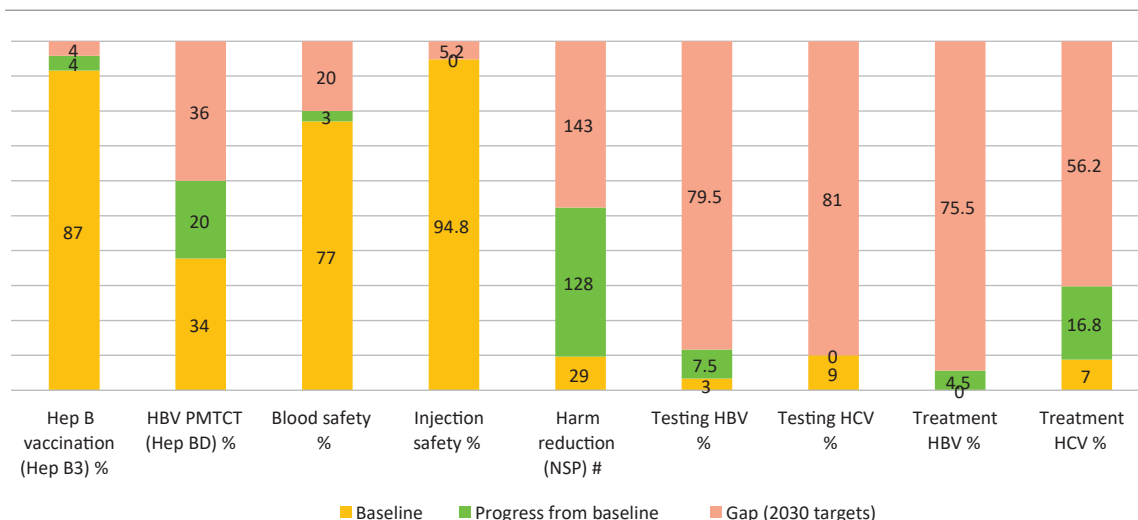
Viral hepatitis is a serious public health problem that can cause chronic and potentially fatal complications, including liver cancer. Among the estimated 1.1 million people dying globally due to hepatitis each year, around 20% are from countries in the WHO SE Asia Region.⁶ The Region has an estimated 60 million [45–121 million] people with chronic hepatitis B and an estimated 10 million [8–19 million] with hepatitis C. Of the estimated 218 000 deaths due to viral hepatitis in 2019 in the Region, 81% are attributable to the chronic complications of hepatitis B and C (6). Unlike other communicable diseases, such as HIV and TB, hepatitis-related mortality has not declined significantly despite the existence of high-impact tools for prevention and treatment.

Most Member States of the Region have an intermediate-to-low prevalence of hepatitis B in the general population. For hepatitis C, most have a prevalence in the range of 0.28–0.75%, except for Indonesia, Myanmar and Thailand, where it is more than 2%. The prevalence of hepatitis B is slightly higher in people who inject drugs (PWID), while for hepatitis C the prevalence is many times higher, with several countries having a prevalence of over 50% of PWID living with hepatitis C, as illustrated in Fig. 8.

Fig. 8. Prevalence of HBV and HCV in PWID in comparison to the general population in Member States of the SE Asia Region (all values are in percentages)⁶



Since 2017, Member States have been implementing the Regional Action Plan (RAP) (2016–2021) for viral hepatitis in SE Asia. This action plan focuses on eliminating viral hepatitis as a public health threat by 2030 by achieving the global targets of 30% and 10% reduction in incidence and mortality, respectively by 2020; and a 90% and 65% reduction for chronic hepatitis B and C, respectively by 2030. The plan provides an actionable framework for evidence-based, prioritized actions along five core interventions on prevention, diagnosis and treatment (Fig. 9).

Fig. 9. Gap analysis of progress in hepatitis B and C prevention, testing and treatment in SE Asia, 2020 (6)

Commendably, almost all countries are now in the process of implementing national strategic plans (NSPs) that provide guidance on key prevention interventions as well as hepatitis testing and treatment. The Region achieved an overall coverage of 91% of three doses of the hepatitis B vaccine in 2019. Bangladesh, Bhutan, Nepal and Thailand have already achieved the 2020 hepatitis B control target. Eight countries now provide the hepatitis B birth dose (HepB-BD). During 2016–2019, the regional hepB-BD coverage increased from 34% to 54%.

A very timely hepatitis B birth dose at the largest maternity hospital in Pyongyang

The Democratic People's Republic of Korea is committed to hepatitis B control through the respective strategy 2017–2025 and uses application of the timely birth dose vaccination as one of the key interventions. Since its introduction in 2003, coverage has been reported at over 95% and the achievements were confirmed in the 2017 Multi Indicator Cluster Survey, when vaccination cards confirmed 99.5% of babies had received the dose.

The Pyongyang Maternity Hospital plays a particularly important role with its dedicated immunization unit and close coordination between the obstetrics and vaccination teams, ensuring that every newborn receives the hepatitis B birth dose within less than 12 hours after delivery. Over 10 000 babies are born every year in this tertiary facility. Being also a teaching hospital, midwives and nurses are educated for work in other parts of the country and women's health-care services can be provided via telemedicine to hospitals and clinics outside of Pyongyang, including the promotion of the timely hepatitis vaccine birth dose and subsequent infant immunizations.

Regional hepatitis B vaccination coverage has, however, been impacted by the COVID-19 pandemic, with the three-dose coverage and birth dose coverage decreasing to 85% and 51% in 2020, respectively (7).

Direct-acting antiviral drugs, which can cure 85–95% of hepatitis C infections, are becoming more affordable in several of the Region's Member States. Most countries in the Region are lagging on coverage of PWID with the number of syringes and needles to be provided as per the target of 300 per year by 2030, the regional average being just 157. Diagnosis and treatment progress are well below that necessary

to reach elimination, with only 10.5% of an estimated 60 million with chronic hepatitis B knowing their status and just 4.5% on treatment at the end of 2018. Similarly, only 6.9% of the estimated population of 11 million with hepatitis C knew their status and 23% of those (1.5% of the estimated population) had received treatment by end-2018 (8).

1.3.2 Progress in HIV against 2020 targets

WHO SE Asia Region is committed to achieving the Sustainable Development Goal (SDG) 3.3 of ending the AIDS epidemic as a public health threat by 2030. Nevertheless, the Region did not reach the 2020 targets and is also currently not on track to end AIDS by 2030 (9). Decades of experience suggests that inequalities are preventing achievement of the targets.

The Region has a concentrated HIV epidemic, with a low HIV prevalence of 0.2% among adults (15–49 years). HIV incidence per 1000 uninfected population has shown a 50% decline during 2010–2020 (from 0.1 in 2010 to 0.05 in 2020).

As at the end of 2020, there were an estimated 3.7 million [2.8–4.4 million] people living with HIV (PLHIV) in the SE Asia Region, including 1.5 million (41%) women aged over 15 years. There were an estimated 100 000 [71 000–130 000] new HIV infections and 82 000 [55 000–130 000] AIDS-related deaths in 2020.

An overwhelming majority of the estimated PLHIV are geographically concentrated in five countries – India, Indonesia, Myanmar, Nepal and Thailand. In addition, more than 90% of new infections in the Region occur in key populations and their partners, including women and girls.

Despite significant progress in the AIDS response in the Region between 2010 and 2020, the 2020 targets have not been achieved. Epidemiological trends show that new HIV infections declined by 46% from 190 000 in 2010 to 100 000 in 2020 (RAP 2017–2021 target: 50 000). Similarly, HIV-related deaths declined by 64% from 230 000 in 2010 to 82 000 in 2020 (RAP 2017–2021 target: 45 000). Tuberculosis (TB) related deaths among PLHIV have also declined substantially by 72% between 2010 and 2020 against the target of 75% (9) (Fig. 10).

At the end of 2020, 2.8 million (75%) PLHIV knew their status, 2.2 million (61%) were on ART and 2.1 million (58%) were virally suppressed. This achievement of 75-61-58 coverage fell short of the 90-90-90 target that translates into 90-81-73 along the care cascade. Fig. 11 shows cascade for children and adults separately. On the first 90, only 75% PLHIV knew their status. On the second 90, ART coverage increased 3.6 times from 17% in 2010 to 61% in 2020, which is still short of the target of 81%. Out of 2.2 million on ART, nearly 1.5 million PLHIV received viral load testing, of whom 96% were virally suppressed.

HIV incidence is highest among key populations, adolescents and young adults. Country-level data showed that the coverage of HIV prevention programmes among sex workers (SWs), PWID, men who have sex with men (MSM) and transgender persons remained below 80% in all countries except in India. Despite mature condom programmes in many countries, condom usage among PWID has remained low (22–66%). Also, the testing coverage among key populations is below 60% on average, with substantial disparity between countries.

Fig. 10. New HIV infections and AIDS-related deaths trends in SE Asia Region, 2010–2020 (9)

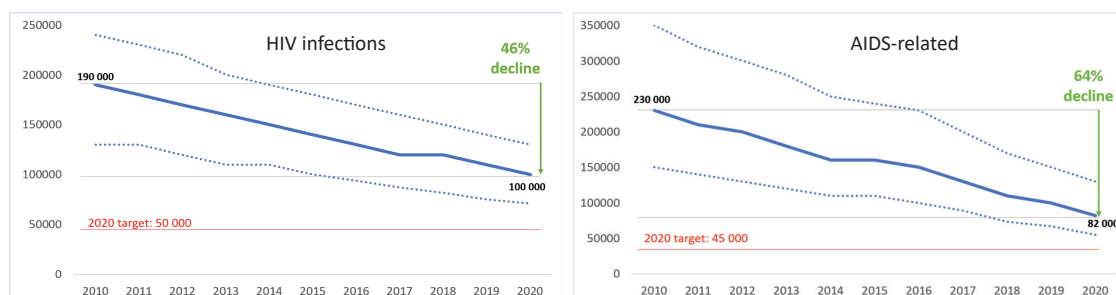
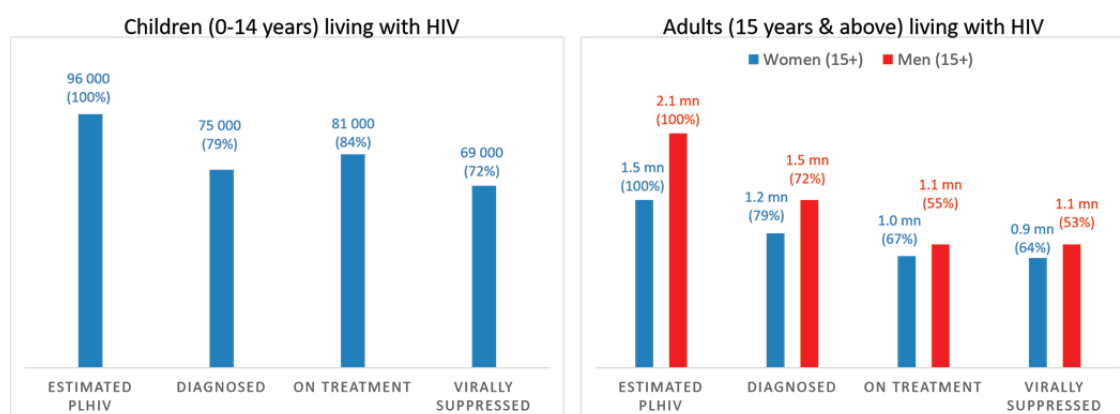


Fig. 11. Progress towards 90-90-90 along the care continuum, 2020, by age and sex (9)



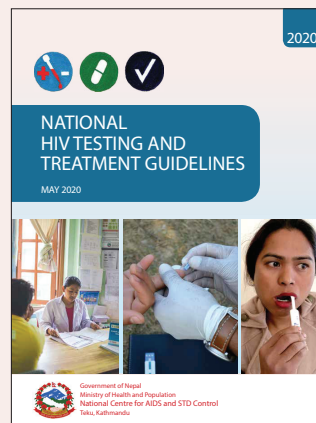
Despite many positive changes in the legal environment, some of the laws and policies that perpetuate stigma, discrimination, violence and other rights violations, especially for PLHIV and key populations, still remain in force across the Region.

Reaching out to the “unreached” and keeping them HIV-negative

Expanding community-led testing

Every year, approximately 180 000 HIV tests are done in Nepal in the community setting by trained lay providers, i.e. community members from key populations. This community-led testing (CLT) approach was first integrated into the national guidelines for HIV testing in 2017 and further strengthened in the 2020 testing guidelines. CLT is recommended as part of community-based testing and the “test for triage” strategy in which at-risk populations are offered HIV testing by trained lay providers.

The outreach workers and care and support providers from different key population networks have been trained on CLT programme to provide HIV testing services to the community. As we work towards the last mile towards ending the AIDS epidemic, community-based interventions are an important method to reach the populations affected the most by the disease. Such approaches have been helpful for those who are otherwise reluctant or not able to access services due to several barriers. HIV self-testing services, innovative peer-based outreach and referral networks and digital platforms have been introduced to further expand the HIV services in the community.



(Photo Credit: NCASC, MoHP, Nepal)

Pre-exposure prophylaxis: towards a comprehensive package of HIV prevention services

Nepal is a country with a concentrated epidemic of HIV among key populations. In 2018, a demonstration study of HIV pre-exposure prophylaxis (PrEP) among key populations – female sex workers (FSWs), men who have sex with men (MSM) and transgender people was conducted, which led to the recommendation of PrEP being included in the National HIV Testing and Treatment Guidelines in 2020.*

HIV PrEP is being currently implemented in 26 districts for FSWs, MSM, transgender people and their partners. More than 2000 clients were initiated on PrEP in the past six months. This innovative preventive service is now being planned on a nationwide scale up to expand coverage and provide a comprehensive package of quality preventive services for populations at risk of HIV.

* National Centre for AIDS and STD Control. National HIV testing and treatment guidelines – May 2020. Kathmandu: Govt of Nepal, Ministry of Health and Population; 2020.

Pic: HIV testing counselling for the client before prescribing PrEP

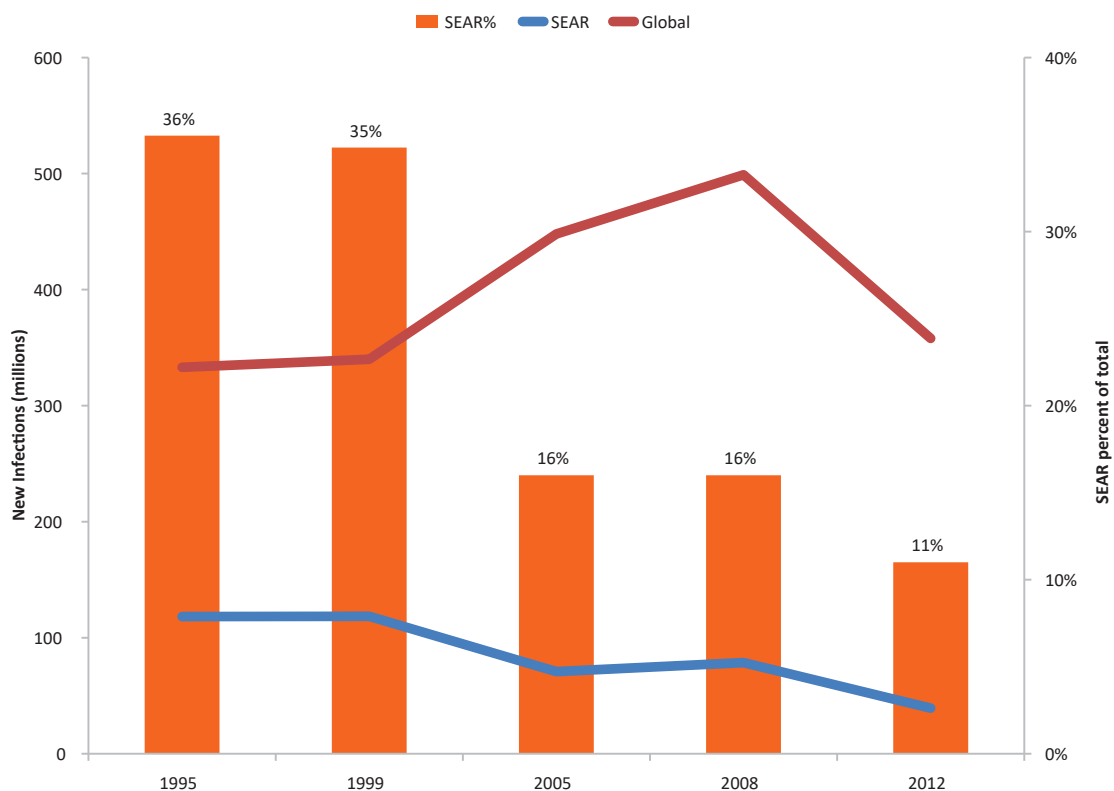


(Photo Credit: NCASC, MoHP, Nepal)

1.3.3 Progress in STI

Untreated STI can lead to long-term and potentially fatal outcomes including chronic pelvic pain, ectopic pregnancies, infertility, adverse pregnancy outcomes and neonatal death. STI are also associated with greater risk of HIV transmission, with ulcerative STI being associated with the highest risk. Most cervical cancers and a high proportion of some other anogenital and oropharyngeal cancers are caused by infection with human papillomaviruses (HPVs). STI have historically been a serious public health problem in SE Asia; and while the proportion of new infections has declined from a third of the total global estimate in the 1990s to 16% in 2019 (from 118 million to 60 million), the epidemiology of STI in the Region is highly heterogeneous. Insufficient data on STI from many countries limits both epidemiological assessment and control efforts (Fig. 12) (10).

Fig. 12. WHO global estimates of four curable STI: proportion from the SE Asia Region



SEAR – SE Asia Region

Data on syphilis are more available and reliable than for other STI and can be used as markers of STI trends in general. Evidence of declining syphilis, as well as progress in eliminating MTCT of syphilis in some countries supports the feasibility of regional elimination of syphilis as a public health problem (10). However, congenital syphilis remains an important cause of adverse birth outcomes across the Region. In 2019 (using 2016 data), WHO estimated that in SE Asia, 78 000 pregnant women were infected with syphilis and there were 53 000 congenital syphilis cases including 28 000 adverse birth outcomes, making an estimated rate of 145 cases per 100 000 live births (11). Recent increases in syphilis among MSM in several countries also emphasises the importance of routinely screening key populations for syphilis and monitoring prevalence trends.

The current programme response to STI varies greatly between countries of the Region. For example, Thailand and Sri Lanka have maintained strong commitment and funding for STI control over many years and have documented high levels of control, while many other countries face challenges in scaling up outreach to key populations, supporting clinical services and conducting basic STI surveillance. A key target in the previous Regional Action Plan for HIV in SE Asia (2017–2021) was the elimination of MTCT of HIV and syphilis (12). Three of 11 countries in the Region, i.e. Thailand, Sri Lanka and Maldives have achieved this.

STI screening coverage among key populations and pregnant women is low. Between 2009 and 2016, only three countries of the Region reported over 90% antenatal clinic syphilis screening in any one year, three others reported almost no antenatal clinic screening and the remaining five countries reported a screening coverage of between 10% and 70%.

Highly effective prevention initiatives including HPV vaccines are available, but access and coverage remain challenges. The last-dose coverage for HPV vaccination in the Region was 2% in 2020 as against a global coverage of 15% (13). Some countries of the Region have introduced HPV vaccination into their national programmes (14). HPV vaccine coverage has been impacted by the COVID-19 pandemic.

The challenges for STI programmes include lack of resources and trained staff specific to STI at the sub-national level with national strategies largely oriented towards HIV; commodity gaps; lack of sustainable funding for community organizations; variable clinical services and lack of contact tracing. Legal and policy barriers to key populations having equitable access to health care, stigma and discrimination remain key concerns. Both domestic and external funding have declined for community organizations at the grassroots level over the past few years and demonstration projects have ceased to function due to lack of core funding support (15).

1.4 An Integrated Regional Action Plan to accelerate response towards elimination in the SE Asia Region

1.4.1 Rationale for integrating viral hepatitis, HIV and STI efforts

The Seventy-fourth Session of the WHO Regional Committee adopted a decision to develop an integrated regional action plan for viral hepatitis, HIV and STI for the period 2022–2026. This I-RAP builds on the previous RAPs on viral hepatitis (2016–2021) (16) and HIV (2017–2021) (12) and has synergy with the regional flagship priorities on UHC and elimination of diseases. This action plan operationalizes the GHSS 2022–2030 and is aligned with a number of other global and regional initiatives including the United Nations General Assembly (UNGA) High-Level Meeting on HIV/AIDS in June 2021 and the SDG target 3.3 for ending the AIDS epidemic and combating viral hepatitis by 2030.

Unlike some other infectious conditions that affect geographical locations as outbreaks and waves, viral hepatitis, HIV and STI mostly remain as silent epidemics. The vulnerabilities, inequities and lack of access to standard health care that persist among communities offer favourable conditions for sustained transmission of these infections. HIV became visible and prioritized for public health in the Region during

the decade 2001–2010. However, with the initial success of the ART programmes in reducing mortality and new infections, HIV programmes were relegated to a lower priority. On the other hand, hepatitis B and C, which affect a larger number of people than HIV and with higher mortality rates are yet to get noticed as a priority area requiring major public health interventions. The opportunity offered by direct acting antiviral drugs that can cure the majority of people with hepatitis C, is yet to be fully utilized.

STI have significant morbidity too, albeit less mortality. Due to similar epidemiological characteristics and transmission dynamics as in HIV, STI were also addressed under the same programmes during the initial years of HIV response. Later, as the HIV programmes evolved to respond to the growing epidemic burden, STI lost importance.

Bringing the three areas together for joint action through a common strategy has been visualized by WHO while formulating the GHSS on viral hepatitis, HIV and STI (2022–2030). As such, the I-RAP aligns with the GHSS for various components such as target setting, integrated implementation approaches and M&E.

For the first time, the I-RAP has integrated three important communicable disease areas, instead of the individual RAPs that were followed till 2021. The need for such an integrated approach has been felt over several years. Moreover, each of them have separately failed to reach the 2020 targets and fully engage political and programmatic attention from Member States. The hepatitis component, specifically, had no donor funding or even dedicated domestic funds in most countries in the Region. While translating to national action plans, countries need to clearly articulate the rationale for integration as well as the process of integration, as these may be unique for each country. This I-RAP offers flexibility within the integrated framework, so that the required focus on specific aspects of the response can be ensured considering the unique issues in each, as well as the different stages of maturity of the disease programmes in Member States.

Integration also refers to integrating efforts not only within these three diseases but also into the existing health infrastructure and health system of the country, including integrated strategies for prevention, testing and treatment across the health system to improve efficiencies and avoid duplication.

Identifying areas of convergence and presenting an integrated model for delivery of services has been the central focus of this I-RAP. As programmes for the three disease areas are conducted under different verticals in most countries, issues of governance and integrated programme delivery assume key importance. Accordingly, the I-RAP has identified key areas that can be integrated or synergized to bring in efficiency in a client-friendly manner and to ensure availability of services closer to where people need them. Several aspects of the service delivery model for HIV programmes, such as community-led and community-based services, decentralisation, etc. could offer a good model for countries to design and successfully implement integrated programmes involving viral hepatitis, HIV and STI. For example, the opportunity to cure the majority of people living with chronic hepatitis C, which is not being fully utilized currently, could be better utilized by leveraging the infrastructure and social capital of existing HIV programmes through integrated approaches.

1.4.2 People-centred action

The burdens of viral hepatitis, HIV and STI overlap among some populations. The diseases share some common modes of transmission, which can be addressed together through common interventions. They are also shaped in similar ways by social and structural determinants of health, such that communities facing poorer socioeconomic conditions or discrimination (including discrimination experienced by key populations) experience greater vulnerability to infection and worse health outcomes.

The I-RAP takes a people-centred approach. People-centred care is an approach to care that consciously adopts the perspectives of individuals, carers, families and communities as participants in, and beneficiaries of, trusted health systems that are organized around the comprehensive needs of people rather than individual diseases and one that respects social preferences (17). Promoting integrated service delivery that can benefit people with multiple health needs not only benefits the individuals but also the health systems. Services will be more sustainable on a longer term by reducing structural silos to enable efficiency gains and bring cost savings to clients and the system. This will also focus on a seamless and comprehensive continuum of services across prevention, testing and treatment as well as expanding and strengthening services through a primary health-care approach and intervention-specific, community-based services.

This I-RAP provides an integrated approach to operationalizing those interventions necessary to best cater to the health needs of those affected, noting that the burden and distribution of viral hepatitis, HIV and STI vary between and within countries, and that health sector responses of both the public and private sector need to be adapted to different epidemiological and health system contexts.

1.4.3 Impact of COVID-19 and lessons for HIV, hepatitis and STI action

Between March to May 2020, at least five Member countries reported significant dips in the number of HIV diagnosis and new treatment initiation. (% change in monthly diagnosis/ART initiation data compared to corresponding month in 2019). Three countries had challenges in maintaining adequate stocks of drugs. Activities related to field visit by outreach workers for prevention activities suffered a big setback due to lockdowns. COVID-19 also affected the key populations in many other ways including loss of earning. WHO provided guidance to countries through an advisory on maintaining essential HIV, hepatitis and STI services during the COVID-19 pandemic. Multiple month dispensing of ARV drugs and take away doses of OST were provided to limit the visits to ART centres. Digital platforms were used for capacity building exercise as well as for patient education and follow up of difficult cases. Community awareness sessions were conducted to remove certain apprehensions among People Living with HIV (PLHIV) and their vaccination was fast tracked through linkages with community peers.

The COVID-19 pandemic altered the landscape of global health by shifting resources, drawing attention to the gaps in health systems and exposing and exacerbating the disparities and inequalities that make some populations more vulnerable to disease, including key populations which face pre-existing barriers to services. Primary prevention services have been impacted, with vaccination coverage, including of hepatitis B and HPV decreasing in 2020. Mental health and sexual and reproductive health service access, in particular, were compromised for key populations during this time. This has drawn attention to the

importance of integrating a rights-based public health response to mitigate the COVID-19 impact on public health and social measures and the need for a strong and well-supported health workforce to maintain service continuity in similar situations in future.

The pandemic demonstrated the vital role of communities in meeting people's needs during crises. It has also catalysed innovations in health and community systems, such as the rapid development and deployment of new vaccines and technologies and the expanded use of integrated diagnostics systems and platforms, health information systems, digital health solutions and self-care approaches.

The challenges and potential opportunities emanating from the COVID-19 pandemic impact and response at the regional level have been detailed in the discussion paper *COVID-19 and measures to 'build back better' essential health services to achieve UHC and the health-related SDGs* and include a sustained focus on achieving UHC and responding to and preparing for health emergencies in order to maintain essential health services (18). Vaccination actions and targets will also be addressed in the Regional Vaccine Implementation Plan 2022–2026.

Many important lessons from the COVID-19 pandemic will inform future responses to infectious diseases. Further, challenges such as demographic shifts, the growing burden of noncommunicable diseases (NCDs), climate change, population displacement and economic insecurity are also currently shaping the health and development context at the regional level.

1.5 The Integrated Regional Action Plan development process

The I-RAP for viral hepatitis, HIV and STI (2022–2026), being the first of its kind in WHO SE Asia Region advocating an integrated response to these three infections, will entail a major policy shift for Member States and UN agencies, including WHO. While developing the I-RAP, the Regional Office for SE Asia has ensured that:

- ⦿ the I-RAP is broadly in alignment with the GHSS (2022–2030) and other global instruments related to SDG 3;
- ⦿ ownership for integration is built-in in the countries at political, administrative and technical levels;
- ⦿ communities living with and affected by the three diseases see merit in an integrated response as one which will address access issues for vulnerable populations by bringing in community system strengthening as an important deliverable;
- ⦿ while broadly indicating the resource requirements for the 5-year period, the I-RAP encourages countries to develop fully-costed NSPs with clear targets identifying the requirement of resources (both domestic and external) for implementation, to realize such national targets;
- ⦿ a critical requirement for integration would be to evolve a unified M&E strategy by integrating the M&E systems for the three diseases, which presently exist in parallel.

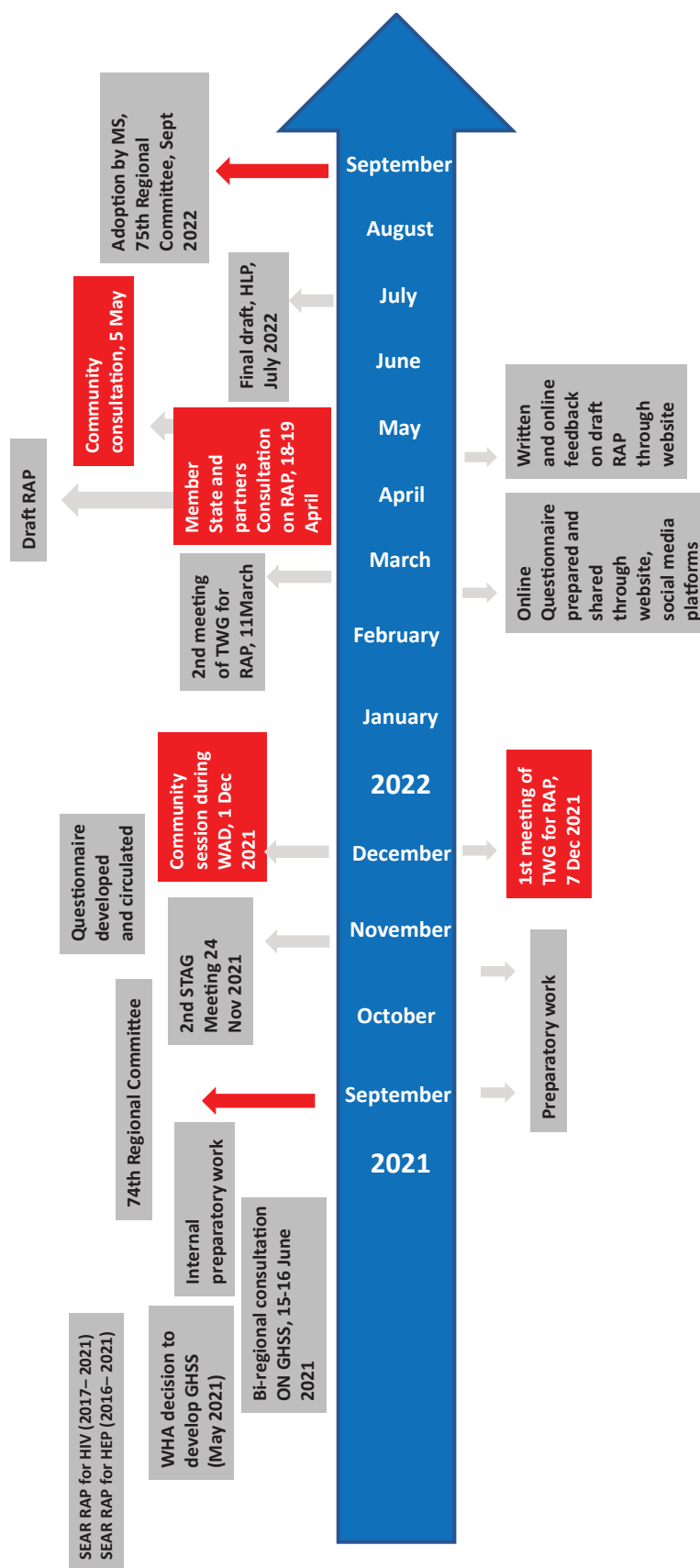
During the Seventy-fourth session of the Regional Committee, one Member State in the Region introduced a resolution titled "Beginning of the decade of action for ending viral hepatitis, HIV and STI as public health threats by 2030 in the South-East Asia Region". After discussions, the Committee decided to request the

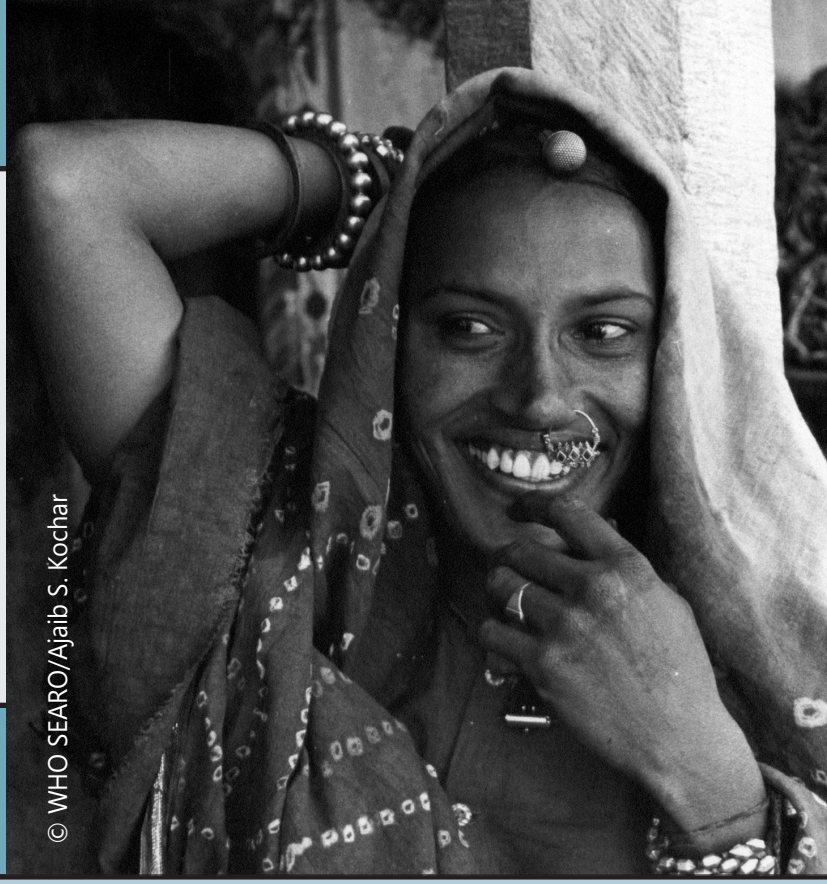
Regional Director to undertake a consultative process with Member States and other relevant stakeholders to develop an I-RAP on viral hepatitis, HIV and STI for the post-2021 period that will build on the current RAPs and be in alignment with the SDGs and the GHSS on viral hepatitis, HIV and STI (2022–2030).

The development of the I-RAP started right after the Seventy-fourth Session of the WHO Regional Committee in September 2021 and has followed a systematic approach, as briefly described below (Fig. 13).

- ⦿ As a background work, Member States and partners had provided their specific inputs on key components of importance to the Region during the SEARO-WPRO bi-regional consultations for developing GHSS on 15–16 June 2021.
- ⦿ The Regional Office prepared an outline and concept paper for the I-RAP that was shared and discussed during the extended meeting of the Strategic and Technical Advisory Group (STAG) on viral hepatitis in November 2021.
- ⦿ An online questionnaire was widely circulated to all stakeholders, put on the website and disseminated through social media for inviting inputs.
- ⦿ A community dialogue was organized in conjunction with the World AIDS Day virtual event on 1 December 2021. This provided the opportunity for interaction with representatives of community-based organizations (CBOs) of key populations and people living with, or survivors of, the infections as well as civil society organizations (CSOs) and get their preliminary inputs. Their feedback on the present stage of response in respect of all three diseases and their suggestions for an integrated response were duly considered while drafting the I-RAP.
- ⦿ A technical working group (TWG) was constituted with experts drawn from all the three disease streams to provide technical inputs for development of the concept paper and preparation of the I-RAP document. Two meetings of the TWG were held, in December 2021 and February 2022, respectively. The inputs from the TWG on the concept paper and the outline led to the development of this draft. Further, TWG members also participated in the virtual consultation with national programme managers and other stakeholders on 18–19 April 2022.
- ⦿ A regional consultation was held on 18–19 April 2022 that included national programme managers of the three diseases from all Member States in the Region, health ministry officials, regional community-based organizations and CSOs and partners including Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Children's Fund (UNICEF), United Nations Office on Drugs and Crime (UNODC), United Nations Development Programme (UNDP), United Nations Population Fund (UNFPA), etc. and WHO country office focal points.
- ⦿ A separate community interaction with a wider group of CBOs of key populations and affected populations was held to ascertain detailed views over and above what had been discussed in preliminary dialogues and online consultations (5 May 2022). The revised draft of the I-RAP was also put up on the website for further inputs in May 2022.
- ⦿ Adoption of the I-RAP by Member States is planned at the Seventy-fifth Session of the Regional Committee in September 2022.

Fig. 13. Process of development of I-RAP





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2. Shared actions for a people-centred tailored response

This chapter describes shared interventions and service delivery models across viral hepatitis, HIV and STI under a UHC and primary health-care framework. All actions in this chapter should be considered in conjunction with disease-specific country actions presented in Chapters 3 (viral hepatitis), 4 (HIVs) and 5 (STI).

Health systems encompass the public health sector as well as key non-state actors such as private sector health-care providers, civil society and CBOs that design and deliver health services.

Health sector decisions regarding the integration of services across these disease areas should be considered in context and be informed by the status of national epidemics, health system priorities and consultation with service providers, individuals and communities. Integration efforts should not have unintended negative consequences. The progress achieved by disease-specific responses must be sustained, especially for the most affected and at-risk populations.

Priority populations across viral hepatitis, HIV and STI

The following populations are at a higher risk of acquiring HIV, viral hepatitis or STI and should be considered priority populations for prevention, diagnosis and treatment:

- ◉ **Key and vulnerable populations**
 - ◉ Key and vulnerable populations include:
 - ◉ people exposed through sexual transmission including young people and adolescents, MSM, SWs and their clients, transgender persons, people in prisons and closed settings, people whose sexual behaviour is mediated by drug or alcohol use and persons at risk of engaging in high-risk behaviour;
 - ◉ people exposed through unsafe blood supplies and unsafe medical injections and procedures;
 - ◉ people who inject and use drugs, especially those who are female children exposed through vertical MTCT or early childhood infection;
 - ◉ pregnant and breastfeeding women; and
 - ◉ women and girls, including adolescent girls and young women who face risks associated with gender inequalities and exposure to violence, in conjunction with increased biological risks on the basis of sex.
- ◉ **Populations often overlooked in HIV, viral hepatitis or STI responses**
 - ◉ The populations often overlooked are:
 - ◉ young people, including young key populations;

- people of all ages who are less likely to use health services frequently;
- haemodialysis patients;
- migrants and mobile populations and people affected by conflict and civil unrest;
- indigenous peoples; and
- persons with disabilities.

Each country should define the specific populations that are most affected and at-risk for viral hepatitis, HIV and STI within the local context. For some populations, intersectionality of challenges faced should be considered.

Countries are encouraged to select, set priorities for and adapt the proposed country actions in relation to local epidemiological and health system contexts, while upholding fundamental human rights, equitable access to health and evidence-based practice.

2.1 Priority areas addressed through the I-RAP

Integrated regional and national actions to address viral hepatitis, HIV and STI are dependent on strong governance at the national, provincial and local levels. As such, a cross-cutting priority area will be political advocacy and commitment from Member States, resulting in stronger governance to support the integrated model of service delivery at national and subnational levels.

Integration of the three national programmes will give rise to a number of challenges that will need to be addressed. Given the multitude of potential actions needed across such a large health space, the I-RAP sets priorities in policy directives, implementation strategies, finding critical resources and developing monitoring indicators for the integrated response.

Priority	Key areas of action for SE Asia
1.	Focus on populations that are most affected by and at risk of viral hepatitis, HIV and STI. These diseases share some common modes of transmission and social determinants and their disease burdens overlap among several populations. Affected populations also experience many forms of discrimination and marginalization. Comprehensive responses to empower affected populations including addressing stigma and discrimination and legislative barriers are needed. These groups may vary from country to country and may include special groups like indigenous peoples. Hence, context-specific populations should be identified and included.
2.	Reduction in incidence of all three diseases through preventing transmission. Countries, and the Region as a whole have missed the incidence targets for 2020 set in the last RAPs. Concrete actions are needed to reduce the number of new infections to achieve 2025 targets.
3.	Access to testing and treatment need to be scaled up substantially. This must be done across all three disease areas. Efforts should be made to maximize the number of people initiated on effective treatment following diagnosis through improved coverage and coordination across the continuum of prevention, testing and treatment services. Simplified guidelines and decentralized services including through the community should be the focus of action plans at the national level.

Priority	Key areas of action for SE Asia
4.	Elimination of MTCT (EMTCT) of HIV and syphilis and movement towards triple elimination. All countries should prioritize elimination of MTCT interventions in their national plans, with special efforts to ensure that these interventions are taken up in all settings where infants are born, including at home and births in the private sector, where up to a third of all deliveries take place in some countries of the Region. Monitoring should also take place in these settings to enable progress, assessment and identification of opportunities for quality improvement. Triple elimination frameworks emphasizing the addition of hepatitis B to the elimination of MTCT of HIV and syphilis must be a priority.
5.	Develop effective and inclusive governance structures. This is a critical determinant for the success of integration efforts. NSPs should prioritize, ab initio, the governance reform process for bringing the three national programmes under a common umbrella of governance. As such, NSPs must explicitly operationalize the process of integration at all levels. Integrated structures should be inclusive and participatory with collaboration across the sector including CSOs, the private sector and communities. Community systems strengthening and community-led monitoring systems should be integrated into governance structures.
6.	Ensure adequate and sustained financing for the integrated programme for viral hepatitis, HIV and STI. Adequate and sustainable financing, especially for viral hepatitis, is challenging due to lack of dedicated donors and requires priority attention. There is need to allocate more domestic financing for prevention to reduce reliance on donors. Currently, viral hepatitis, HIV and STI programmes have separate budget lines utilized and monitored by the different programmes. In the integrated mode, the NSP should reflect a single budget line for all the three diseases with separate funding streams for integrated actions and for individual interventions. Integration can benefit areas which have previously lacked funding, but careful articulation to allow equitable distribution based on need and impact will be required by countries.
7.	Building the health workforce capacity. This will be a critical challenge for countries during integration of the three national programmes. Capacity-building of existing staff for increase of skill sets across three disease areas beyond regular work will have to form a fundamental part of health system strengthening. Training and retaining health co-workers need to be focused on.
8.	Empower/strengthen community system strengthening. Differentiated service delivery approach need to adopted across all disease areas. Community health workers, including key population peer workers play a key role at the grassroots level and are resilient to working across various programmes. Their capacity should be strengthened through training programmes. Major gaps in service provision require expansion of community capacity to provide services to unreached populations. Adequate regulatory measures should be adopted to regulate their services, as is done for formalized health-care workers. They should be adequately compensated and protective equipment should be provided for infection control and maintenance of hygiene standards at par with formally qualified health workers.
9.	Fostering innovations and embedding new technologies. This should be an area of priority for governments. In the last decade, several new technologies have been brought into the programmes, such as HIV pre-exposure prophylaxis (PrEP), self-testing for HIV and viral hepatitis and use of digital technologies in implementation and monitoring of programmes. A technical sub-plan should become a part of the NSP identifying such emerging technologies for timebound operationalization. In addition, operational research should accompany the implementation of new initiatives to allow real-world evaluation.

2.2 Key targets across viral hepatitis, HIV and STI

The I-RAP has identified key targets across the three disease areas in terms of regional coverage and impact targets.

Tables 1 and 2 present the shared and disease-specific impact indicators and targets across viral hepatitis, HIV and STI. Additional disease-specific indicators and targets are presented in Chapter 3 (viral hepatitis), Chapter 4 (HIV) and Chapter 5 (STI), respectively.

Table 1. Regional Impact indicators and targets for viral hepatitis, HIV, and STI by 2025 and 2030

Disease area	Indicator	Baseline –2020	Targets –2025	Targets – 2030
Viral hepatitis	HBsAg prevalence among children younger than 5 years of age (proxy for incidence)	0.94%	0.5%	0.1%
	Number of new hepatitis B infections per year (incidence)	256 700 (13 per 100 000)	130 000 (5 per 100 000)	42 000 (2.5 per 100 000)
	Number of new hepatitis C infections per year (incidence)	234 100 (12 per 100 000)	115 000 (6 per 100 000)	80 000 (4 per 100 000)
	Number of new hepatitis C infections among PWID per year	8 per 100	3 per 100	2 per 100
	Number of people dying from hepatitis B per year	179 000 deaths (9 per 100 000)	100 000 deaths (5 per 100 000)	60 000 deaths (3 per 100 000)
	Number of people dying from hepatitis C per year	38 000 deaths (2 per 100 000)	20 000 deaths (1 per 100 000)	10 000 deaths (0.5 per 100 000)
HIV	Number of people newly infected with HIV per year	140 000	41 000	35 000
	Number of people newly infected with HIV per 1000 uninfected population per year (SDG 3.3.1)	0.05	0.04	0.025
	Number of children 0–14 years of age newly infected with HIV per year	9000	3000	1500
	Number of people dying from HIV/related causes per year (including disaggregation by HIV, cryptococcal meningitis, TB and severe bacterial infections)	94 000	32 000	30 000
STI	Number of new cases of four curable STI in adults (15–49 years) per year ('000)	59 677	47 742	21 273
	Number of new cases of syphilis in adults (15–49 years) per year ('000)	354	283	35
	Number of new cases of gonorrhoea in adults (15–49 years) per year ('000)	21 059	16 847	2106
	Congenital syphilis cases per 100 000 live births per year	145	<75	<50

HBsAg – hepatitis B surface antigen

Table 2. Regional Integration indicators and targets for viral hepatitis, HIV and STI by 2025 & 2030

Integration indicator	Baseline 2020	2025 target	2030 target
Number of countries that have taken a political decision to integrate the three national programmes of HIV, hepatitis and STI	2	8	11
Countries which have prepared fully-costed NSPs for the integrated response and identified finances for funding the NSPs	0	8	11
Countries where the three programmes have been brought under a common umbrella of governance	4	8	11
Countries where the health workforce of the three programmes have been retrained to work across all the three programmes	0	8	11
Countries where the community health workers (CHWs) have been given legal status and recognition at par with government health workers	1	3	11

2.3 Strategic Direction 1: deliver high-quality, evidence-based, people-centred services

This section describes shared country actions across viral hepatitis, HIV and STI and other related health areas that can be integrated or are replicable across multiple disease areas for a more effective people-centred response. Actions in this section should be implemented by countries in conjunction with disease-specific country actions with a specific focus on including key populations.

2.3.1 Integrated actions across viral hepatitis, HIV and STI

No.	Areas of implementation	Country actions
1	Primary prevention intervention in sexual and reproductive health	<p>Primary prevention interventions are scaled up to eliminate sexual transmission of viral hepatitis, HIV and STI.</p> <ul style="list-style-type: none"> ⊙ The minimum set of necessary prevention interventions include: <ul style="list-style-type: none"> ○ providing family planning services; ○ correct and consistent use of male and female condoms and lubricants, with innovative programming; ○ addressing the harmful use of alcohol and drugs in the context of transmission risk behaviour, including opioid substitution therapy (OST) and effective and evidence based substance use treatment; ○ vaccination for vaccine preventable diseases (VPDs), HPV and hepatitis B with a focus on key and affected populations; ○ promotion of sexual and reproductive health and well-being, with a focused approach for specific high-risk populations including MSM, transgender persons and PWUD; ○ antiretrovirals for PrEP and PEP. ⊙ Primary prevention includes comprehensive education and information about sexual and reproductive health and HIV prevention (19) consistent with global guidance adapted to local contexts and needs.
2	Harm reduction	<p>The national plan should include accessible harm reduction services as part of a comprehensive package of interventions for the prevention, treatment and care of HIV and viral hepatitis among PWID and for people who use stimulant drugs.</p> <ul style="list-style-type: none"> ⊙ The minimum harm reduction component package² includes: <ul style="list-style-type: none"> ○ provision of sterile injecting equipment through needle and syringe programmes, including low dead-space syringes (LDSSs); ○ OST for people dependent on opioids; ○ community distribution and provision of opioid antagonist medication (naloxone) to those likely to witness acute opioid overdose; ○ targeted information and communication with a focus on key populations; ○ testing, diagnosis and management of HBV, HCV, HIV, STI and other common infections, including for partners. ⊙ Harm reduction interventions should be easily accessible and community friendly to promote acceptability. Some of the specific measures in this direction include take-home dosing, flexible timings, task sharing with community/lay providers, satellite OST centres in the community and secondary distribution of needles and syringes at community sites with trained collection of used needles and syringes by community members.

² It is noted that the specific harm reduction requirements may vary depending on the key population. Harm reduction interventions also include those which reduce sexual transmission as detailed in Implementation Area 1 and as well as diagnosis and treatment detailed throughout this document.

No.	Areas of implementation	Country actions
3	Integrated testing	<p>National programmes should implement integrated testing for HIV, viral hepatitis, STI, TB and other relevant communicable diseases as appropriate, feasible and cost effective for patient care.</p> <ul style="list-style-type: none"> ⊙ Integrated testing should be promoted through: <ul style="list-style-type: none"> ⊙ use of multiplex diagnostic tools to streamline the collection and screening of biological specimens; ⊙ rapid point-of-care multiplex tests for HIV, hepatitis B and C to assist in integrated testing and screening; ⊙ community-based and self-administered integrated testing services; ⊙ the use of common laboratory systems and networks; ⊙ linking different laboratory networks through technological systems to promote national integration; and ⊙ promoting use of self-testing for HIV/HCV/STI. ⊙ Include implementation of human rights-based and gender-sensitive strategies for voluntary partner notification, including partners of key populations.
4	Integrated treatment	<p>National programmes should enhance opportunities for integrated viral hepatitis, HIV and STI care and treatment. This should include micro elimination efforts in specific populations such as:</p> <ul style="list-style-type: none"> ⊙ universal testing for viral hepatitis among HIV-infected individuals with referral to care and treatment; ⊙ micro elimination of hepatitis C infection among PLHIV and in closed settings; ⊙ ensuring that all individuals with hepatitis B–HIV, hepatitis C–HIV coinfection are receiving appropriate regimens to treat both infections; ⊙ initiating screening programmes in key populations for STI, especially those affected or living with viral hepatitis or HIV; ⊙ operationalizing integrated treatments with shared prescriptions and dosing, including substance use pharmacotherapy programmes; ⊙ promoting and implementing treatment as prevention for all diseases.

No.	Areas of implementation	Country actions
5	Stigma and discrimination in health-care settings	<p data-bbox="603 398 1402 539">National programmes should work to eliminate stigma and discrimination in health-care settings and strengthen accountability for discrimination-free health care, with particular focus on the stigma and discrimination experienced by affected people including key populations, or based on sex, gender, sexual orientation, drug use, sex work or other factors.</p> <p data-bbox="603 566 1002 593">National programmes should include:</p> <ul data-bbox="651 611 1402 1084" style="list-style-type: none"> ⦿ regular training for all health-care staff to enhance their knowledge of these diseases, address misconceptions and underlying fears and raise awareness about the harmful consequences of stigma and discrimination, including delayed health service utilization and health inequalities; ⦿ development and monitoring of standards for health-care workers to ensure that all patients are treated with respect, dignity and compassion; ⦿ health-care workers should be educated about patients' rights as well as their own, and about how to sensitively provide care to all patients, especially key and most-affected populations; ⦿ increased efforts to address stigma and discrimination experienced by health-care workers, including those who may themselves be living with HIV, viral hepatitis or STI; ⦿ consideration of referral in the case of discrimination for those seeking redressal, including access to legal and mental health services.

PEP – post-exposure prophylaxis; PWID – people who inject drugs

Hepatitis B community outreach

A community-based outreach activity carried out in Timor-Leste on hepatitis B and C screening among the adult key populations demonstrated that they could achieve a high testing coverage to the tune of 84% for hep B (4196/5000) among key populations including people living with HIV (PLHIV) and uniformed personnel/National Police of Timor-Leste (PNTL). Hepatitis B positivity rate ranged at 3% for uniformed personnel/PNTL, 5% among key populations (female sex workers [FSWs], men who have sex with men [MSM], and transgenders [TGs]) to as high as 7% among PLHIV.



Also, community-based organizations achieved an overall 71% coverage of the first dose of hep B vaccination. A coverage of around 82% among FSWs and 89% among PLHIV was achieved among those found to be hepatitis B negative. All 4196 participants were negative for hepatitis C.

The high burden of hepatitis B, as demonstrated by this project, paved the way towards getting more attention in supporting the viral hepatitis programme.

Currently, the country has moved towards an Integrated HIV, Hepatitis and STI National Strategic Plan (2022–2026).

Besides, to ensure continuity of services during the COVID-19 emergency, and as per the earlier request from MoH for support for ARV, hepatitis B vaccines and viral load cartridges, hepatitis B treatment, HIV self-testing kits, and HIV pre-exposure prophylaxis (PrEP) drugs among key populations, WHO facilitated procurement and supply of these essential health products for the National AIDS Programme.



Viral Hepatitis Project 2019-20: Targeting Key Population (KPs)



Photo Credit: WHO country office, Timor-Leste

2.3.2 Linking integrated HIV, hepatitis and STI action to other health areas

No.	Areas of implementation	Country actions
6	National Inter-programmatic linkage strengthening	<p>The national programme should include structural linkages to other disease-specific programmes to promote a people-centred approach to prevention, diagnosis, care and treatment of viral hepatitis, HIV and STI to enhance integrated management and early diagnosis and treatment of coinfections.</p> <ul style="list-style-type: none"> Implement national health workforce literacy in prevention, diagnosis and treatment of viral hepatitis, HIV and STI across the health sector to promote coordinated care and management across these diseases. Linkages should be provided to national or state-based social welfare programmes. <p>Key health programmes to be linked are as below:</p> <ul style="list-style-type: none"> Communicable and noncommunicable diseases <ul style="list-style-type: none"> individuals with chronic viral hepatitis or HIV are linked to care for other NCDs including cardiovascular disease, diabetes, chronic lung disease, hypertension, etc. integration between viral hepatitis and cancer programmes as well as strengthened surveillance cervical cancer among women living with HIV; VPD programmes including HBV, HPV and COVID-19; TB <ul style="list-style-type: none"> prevention, diagnosis and treatment for TB in HIV and viral hepatitis-affected communities and the reverse, given shared population links; co-management of treatment where there is coinfection, to improve outcomes and reduce adverse clinical events during treatment; Hepatitis C <ul style="list-style-type: none"> People who use drugs are at much higher risk of Hepatitis C and HIV coinfection and there is need to focus on the same with close linkages across the intervention programme for both Sexual and reproductive health services integrated with or having programmatic linkages to HIV, viral hepatitis and STI services, including provision of integrated services; Mental health services <ul style="list-style-type: none"> strong linkages between services for mental health and HIV, hepatitis and STI should be established and maintained; prevention, screening, care, and referral to mental health services for further treatment and support can be integrated into services for viral hepatitis, HIV and STI; Substance use treatment services, including OST, treatment for stimulant and alcohol use disorders as well as rehabilitation programmes.

No.	Areas of implementation	Country actions
7	Principles of service delivery across viral hepatitis, HIV and STI	<p>Particular attention should be paid to the needs of individuals with disabilities and those affected by violence and gender equality across all areas of service delivery.</p> <p>To achieve these aims, national programmes should include various aspects.</p> <ul style="list-style-type: none"> ⊙ Promote disability-inclusive programming and ensure that HIV, viral hepatitis and STI services are accessible to people with disabilities through the active participation and engagement of people with disabilities in planning and decision-making. ⊙ Prevent and respond to all forms of gender-based violence, including sexual violence, through: <ul style="list-style-type: none"> ○ implementation of the four pillars of action specified in the WHO global plan of action on health systems response to violence (20) including: <ul style="list-style-type: none"> ○ preventing all forms of gender-based violence; ○ provision of comprehensive health services for survivors (21); ○ Implementation of these evidence-based interventions should be guided by the WHO and UN package on RESPECTING women: preventing violence against women for policy-makers, which has been endorsed by 12 other UN, bilateral and multilateral agencies (22). ⊙ Promote gender equity by integrating its promotion across all actions through: <ul style="list-style-type: none"> ○ addressing key issues resulting in inequities that generate risk of infection, including female genital mutilation, child marriage and lack of sexual and reproductive decision-making autonomy; ○ disaggregation of programmatic data of prevention, diagnosis and treatment services by gender; ○ implementing national policies on viral hepatitis, HIV and STI that include specific references to addressing the gender needs of those living with or at risk for these communicable diseases, including transgender persons through gender-affirming care. ⊙ Promote a human rights-based approach to implementing integrated action across the three diseases, including within the context of human rights obligations in law and practice. Implement this through: <ul style="list-style-type: none"> ○ availability of voluntary and accessible testing and treatment; ○ evidence of confidentiality and privacy in disease status and treatment; ○ evidence of absence of discrimination (for employment status, access to education, housing and social benefits); ○ evidence of the absence of drug use, sexual orientation status, incarceration experience, immigration status or profession as a criterion for exclusion from testing and especially treatment; ○ decriminalization of populations at risk or most affected by viral hepatitis, including PWUD, SWs and MSM.

2.4 Strategic Direction 2: optimize systems, sectors and partnerships for impact

This section describes UHC and PHC framing integrated actions to strengthen health service delivery and optimize health system functioning in collaboration with partners.

The actions in this section should be implemented in conjunction with disease-specific actions.

No.	Areas of implementation	Country actions
8	UHC	Essential viral hepatitis, HIV and STI services are included as part of UHC. These essential services are included in national priority health benefit packages, supported by adequate financing, resulting in access for clients without financial hardship.
9	Primary health care and decentralization	<p>Incorporation of viral hepatitis, HIV and STI services into PHC systems is critical to decentralizing the essential components of prevention, diagnosis and treatment packages. This will optimize the health system's ability to implement action towards elimination.</p> <ul style="list-style-type: none"> Integrated viral hepatitis, HIV and STI services and their key coinfections and comorbidities are to be incorporated into PHC platforms. Viral hepatitis, HIV and STI services are to be decentralized so that they are easily accessible through community-based service delivery. Develop simplified testing and treatment protocols to support task shifting/sharing between health-care professions. Develop hub-and-spoke models from tertiary and specialized services to support shared care and supported models at lower levels of the health system. For this, internet-based systems including telemedicine can be used.
10	Health-care Infection prevention and control	<p>Infection prevention and control initiatives seeks to prevent disease transmission, especially HIV and viral hepatitis in formal and informal health-care settings and other service settings.</p> <ul style="list-style-type: none"> National health systems must ensure: <ul style="list-style-type: none"> safe medical injections and blood supplies; standard precautions, especially relating to hand hygiene, blood screening, personal protective equipment and waste management; airborne infection control measures for the prevention of diseases such as TB and COVID-19. National health systems should work towards reduction of transmission risk by: <ul style="list-style-type: none"> eliminating unnecessary injections; providing safety-engineered syringes for all medical injections; using established WHO-aligned protocols for the decontamination of medical devices; providing universal and comprehensive screening of blood products so that sources of potentially unsafe blood products are eliminated. Outside of health facilities, interventions and national regulations are implemented to prevent unsafe injections and transmission through contact with bodily fluids in the informal health sector and in services such as tattooing, piercing and beauty care.

No.	Areas of implementation	Country actions
11	Use of digital technology and telemedicine	<ul style="list-style-type: none"> Implement telemedicine within the health system for service delivery. Use innovative methods to better understand the health needs of target populations, including virtual mapping and online surveys. Enhance the use of targeted client communication, such as for young people or individuals who may avoid in-person gatherings because of concerns about stigma and discrimination. Provide linkages across the digital health architecture of the national health system to enhance efficiencies and communication. Implement opportunities to access digital services for people who may not have access to digital technologies.
12	Equitable access in closed, humanitarian and other emergency settings	<ul style="list-style-type: none"> Access to HIV, viral hepatitis and STI services should be ensured for mobile and displaced populations, or for those dislocated from regular services. Ensure continued access for affected persons in emergencies and in humanitarian settings when health service delivery is disrupted. Health-care services in prisons and other closed settings, such as detention centres, should be equivalent to those available to the broader community, in accordance with the United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules) (23). Continuity of these services should be ensured when people move within and between these settings and the broader community.
13	Sustained and targeted national financing³	<p>National financing for viral hepatitis, HIV and STI should avoid fragmented funding, maximize the efficient use of resources and minimize overall catastrophic health expenditures for households.</p> <p>The following actions can optimize financing:</p> <ul style="list-style-type: none"> health budget should include optimized domestic funding, complemented, where necessary, by external sources; aligning of domestic funding for viral hepatitis, HIV and STI packages with essential interventions for each disease area; budgeting for viral hepatitis, HIV and STI should be reflected in the costing planning and budgeting of essential health services including in the health insurance benefit packages; financing efficiencies be integrated into health service financing, including pooling funds from multiple financing sources; price reduction strategies should be implemented with a focus on diagnostics and medicines, including use of pooled purchasing mechanisms and partnership with the private sector.

³ More details available in Chapter 9 “Financing of the Regional Action Plan”.

No.	Areas of implementation	Country actions
14	Essential health commodities	<p>National health systems require availability of essential health commodities for viral hepatitis, HIV and STI.</p> <p>The following actions are suggested to ensure availability of essential health commodities:</p> <ul style="list-style-type: none"> expediting a national registration mechanism for new products, where recommended; supporting generic domestic markets in commodities, including medicines; promoting voluntary technology sharing on mutually agreed terms and addressing intellectual property-related barriers by leveraging the use of Trade-Related Aspects of Intellectual Property Rights (TRIPS) flexibilities; engaging in direct price negotiations with manufacturers and the sharing of product prices; implementing integrated supply chain management and logistics information systems to ensure timely and accurate data regarding commodity needs and consumption for decision-making and accountability.
15	Health system strengthening	<p>National systems require the availability of health workers with the required competencies and training at all levels of care to deliver people-centred prevention, clinical and supportive services across the continuum of care, tailored to the epidemic and country context.</p> <p>The following actions support this goal:</p> <ul style="list-style-type: none"> comprehensive national health workforce plans should optimize the utilization of the existing workforce including CHWs and advance multi-disciplinary team-based care; disease-specific needs should be quantified and balanced against the need for generalist health service provision, ensuring the quality of care; national capacity-building, ongoing training and supportive supervision for health workers, including initial and postgraduate training of facility-based workers and CHWs at all levels on sexual health and the needs of people affected by viral hepatitis, HIV and STI; provide continuing professional development to the health workforce on viral hepatitis, HIV and STI consistent with up-to-date clinical practice guidelines (including e-learning opportunities) and enhance supportive supervision systems.

No.	Areas of implementation	Country actions
16	Legal, regulatory and policy reform	<p data-bbox="533 398 1316 454">An enabling legal and regulatory environment is critical for implementation of policies that will allow disease elimination.</p> <p data-bbox="533 477 1316 533">The following actions will help to achieve such an enabling environment, where appropriate:</p> <ul style="list-style-type: none"> <li data-bbox="580 555 1316 674">⦿ Undertake review and reform of any restrictive legal and policy frameworks to enable equitable access to health services for viral hepatitis, HIV and STI, especially to the most affected and at-risk populations. <li data-bbox="580 685 1316 775">⦿ Undertake legal, regulatory and policy reform and provide alternatives to coercive sanctions for PWID, SWs and people in same-sex relationships seeking care, including harm reduction services. <li data-bbox="580 786 1316 904">⦿ Create an enabling, safe environment for key populations by reorienting towards evidence-based legal frameworks and policies that promote human rights, harm minimization and discourage stigmatization and discrimination. <li data-bbox="580 916 1316 1005">⦿ Provide mechanisms and support for legal redress for individuals living with viral hepatitis, HIV or STI when it impacts prevention diagnosis and treatment access or quality. <li data-bbox="580 1016 1316 1153">⦿ New initiatives should be implemented through supportive legislation that upholds the implementation of evidence-based interventions, promotes and protects human rights and gender equity and reduces stigma and discrimination. These initiatives should support the provision of legal aid for people in need.

2.5 Strategic Direction 3: generate and use data to drive decisions for action

This section describes shared approaches to strengthen health information systems for better data availability, use and accountability, including person-centred monitoring. The actions in this section should be implemented in conjunction with disease-specific actions.

No.	Areas of implementation	Country actions
17	Strategic information and other data	<ul style="list-style-type: none"> There must be regular national reporting on prevention, including vaccination, testing, treatment, financing and performance across the three diseases, including in decentralized systems using DHIS 2 platform. Implement disaggregation of HIV, viral hepatitis and STI surveillance data by sex, disability, age and other relevant population characteristics, supplemented by information from community-led monitoring. Utilize standardized reporting or data tools where possible. Existing WHO tools could be adapted for local use. Work towards the use of digital data reporting systems to facilitate integration and information exchange, including between clinical data management platforms or facility-based reports and population-level data. Strengthen public–private partnerships in data and promote data sharing in compliance with security and data protection standards to ensure harmonized service quality standards. Ensure systems maintain data confidentiality and security. Data collection efforts should not compromise confidentiality, cause distress or exacerbate stigma. Develop adequate information dissemination systems such that data from the three disease areas are used to drive evidence-based programme planning, advocacy and quality service delivery.

No.	Areas of implementation	Country actions
18	Community-led monitoring (CLM)	<p>Community led or community-based monitoring is any type of monitoring led by communities. CLM is an accountability mechanism for viral hepatitis, HIV and STI services and the health system in general to provide civil society participation in reporting as a key quality feedback mechanism for programmes (24). This may include:</p> <ul style="list-style-type: none"> ⦿ programme monitoring ⦿ community scorecards ⦿ patient satisfaction surveys, compliant and other feedback mechanisms from the end-user groups ⦿ treatment observations and social audits ⦿ engagement of patient groups or peer educators. <p>These community led or community-based feedback systems should be:</p> <ul style="list-style-type: none"> ⦿ headed by someone from the community and community led, including and ensuring diversity within the community groups; ⦿ focused on action and accountability; ⦿ independent, empowering and sustainable; ⦿ collaborative – promoting good partnerships; ⦿ technically supported in terms of data collection, analysis and sharing; ⦿ routine, systematic and standardized; ⦿ integrated with mainstream national responses; ⦿ show results; ⦿ Be systematically reviewed.

2.6 Strategic Direction 4: engage empowered communities and civil society

This section describes approaches to engage and support the empowerment of communities, CSOs and affected populations in advocacy, service delivery and policy-making and initiatives to enhance service delivery and tackle social and structural barriers.

Civil society and CBOs have played a leading role in HIV-related advocacy, service delivery and accountability since the early stages of the HIV response. More recently, they have also successfully advocated for stronger responses to viral hepatitis and STI. The COVID-19 pandemic spurred CBOs worldwide to step up their innovative efforts to bring services closer to people in need within an environment of trust.

The meaningful participation of people with HIV, viral hepatitis or STI and their families and communities is of critical importance in determining, developing and implementing national and subnational policies for affected communities and should be actively promoted.

No.	Areas of implementation	Country actions
19	Foster community and civil society leadership	<p>Full engagement with communities and civil society is necessary for elimination goals to be realized.</p> <ul style="list-style-type: none"> ⦿ Ensure meaningful involvement of key populations, community organizations and people, including women living with HIV and hepatitis in advocacy, service delivery, policy-making, M&E and initiatives to address social and structural barriers to services. ⦿ Ensure affected community representation in the national HIV, viral hepatitis and STI taskforce or equivalent. ⦿ Drawing on community engagement and empowerment strategies in the HIV field, health systems should elevate the role of communities and community-based service providers as partners in promoting sexual health. ⦿ National programmes should include peer-led or peer navigation interventions for key populations who are not reached effectively through traditional approaches, including rural and marginalized populations. ⦿ Make domestic resources available to support, build capacity and ensure sustainability of CBOs. ⦿ Ensure that the community-based health workforce operates within an environment of adequate regulation, training, supervision and support and is strongly linked to formal health services. ⦿ Learn from innovative approaches introduced as part of care during the COVID-19 pandemic to simplify service delivery and meet the needs of communities. ⦿ Include social contracting as a mechanism for engaging communities and delivering services to affected communities.

2.7 Strategic Direction 5: foster innovations for impact

This section describes shared approaches to foster and disseminate innovations for accelerated impact. The points in this section should be implemented in conjunction with disease-specific actions.

No.	Areas of implementation	Country actions
20	Strengthening development and adoption of innovations	<ul style="list-style-type: none"> ⊙ Across viral hepatitis, HIV and STI, countries should foster the early adoption and inclusion of innovations, including: <ul style="list-style-type: none"> ⊙ new diagnostic technology which enhances screening and testing programmes, including HIV and hepatitis self-testing and the use of dried blood spots; ⊙ new technologies to improve adherence to treatment of viral hepatitis, HIV and STI, including but not limited to such interventions as web-based refills, remote testing and adherence reminders; ⊙ new preparations of existing treatments, including long-acting formulations; ⊙ innovations in roll out for testing, prevention, care and treatment, including PrEP scale up, the use of telemedicine and other internet-based technologies. ⊙ Adopt, evaluate and rapidly scale up innovative testing and treatment technologies and approaches which are effective for key populations, e.g. utilizing one-stop or single window services. ⊙ Data-driven and evidence informed innovations must also be community-friendly.
21	Build partnerships to support innovation and research	<ul style="list-style-type: none"> ⊙ National programmes should encourage participation in collaborative research with national and international research partners to drive innovation in therapeutics, vaccines and HIV and HBV cure. ⊙ Support operational research/implementation science to make delivery of interventions through health systems more efficient and impactful for countries. ⊙ Build partnerships in the domestic and international innovation space across the three disease areas, including with the private sector, to support the roll out of innovations in the Region.

2.8 HIV, syphilis and hepatitis B triple elimination

Triple elimination refers to the elimination of major communicable diseases associated with MTCT, specifically HIV, syphilis and hepatitis B.

Triple elimination targets can be achieved only when access to quality reproductive, maternal and child health-care services is ensured and used by all women, children and their families. Mother-to-child or vertical transmission of HIV, hepatitis B and syphilis can be effectively prevented by similar strategies, including antenatal screening for HIV, syphilis and HBV, syphilis treatment of mothers and their infected infants, HBV and HIV antiviral treatment or HBV prophylaxis for eligible mothers, and HBV infant prophylaxis (including birth dose vaccination). The funding and organization of antenatal care (ANC) services and programmes at the national level provides an opportunity for concrete integrated service delivery to optimize programme efficiencies, deliver quality people-centred care and improve outcomes for both mother and child.

The I-RAP impact and programme targets for HIV, syphilis and hepatitis B are consistent with those of the global criteria for countries to validate the elimination of MTCT detailed in the recent WHO guidance. The

global validation criteria for elimination are listed in Annexure 2. In all three areas, it is the combination of antenatal screening and treatment combined with care of the neonate that results in the elimination of transmission. In addition, for hepatitis B, there also is a safe and effective vaccine that assists in stopping transmission when given within 24 hours of birth.

Provision of the criteria and processes for measuring progress towards and achieving elimination through assessment of impact and programmatic indicators for triple elimination are detailed in the *Global guidance on criteria and processes for validation: global guidance for the elimination of MTCT of HIV, syphilis and hepatitis B virus (Third edition)* (25) and the Governance guidance for the validation of EMTCT of HIV and syphilis (26).

No.	Areas of implementation	Country actions
22	Triple elimination of HIV, syphilis and hepatitis B virus and the prevention of new infections among children and adolescents	<ul style="list-style-type: none"> ⊙ National programmes include key essential services to promote triple elimination of HIV, syphilis and hepatitis, specifically: <ul style="list-style-type: none"> ⊙ rights-based and gender-sensitive family planning; ⊙ testing for HIV, syphilis and hepatitis B virus in ANC; ⊙ prompt and efficacious interventions to treat pregnant women who test positive and to prevent transmission of the infection(s) to their infants; ⊙ counselling for pregnant women and their partners; ⊙ safe delivery; ⊙ follow-up timely hep-B BD +/- hepatitis B immunoglobulin (HBIG) and completion of the 3-dose series of hepatitis B vaccine for all children, with particular emphasis on follow up for exposed infants; ⊙ follow up of HIV-exposed infants and early infant diagnosis; ⊙ assessment, treatment and follow up of syphilis-exposed infants – optimal infant feeding; ⊙ follow-up treatment and care for mothers and families. ⊙ National action should have the goal of preventing all new infections due to viral hepatitis, HIV and STI among children. ⊙ National programmes should promote integrated approaches with sexual and reproductive health programmes for HIV prevention and family planning. ⊙ Measuring of progress and validation of elimination should be undertaken in line with WHO guidelines
23	Linkages to maternal and child health programmes	<p>Triple elimination targets can be achieved only when access to quality services for sexual and reproductive health care and maternal and child health are assured and all women, children and their families use these services.</p> <ul style="list-style-type: none"> ⊙ National programmes for HIV, syphilis and hepatitis B should implement concrete linkages towards integration with maternal and child health programmes at all levels of the health system. ⊙ Access to these services should be offered to all women of reproductive age before or between pregnancies to reduce transmission of HIV, syphilis and hepatitis B during pregnancy.



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3. Viral hepatitis

This chapter presents the aspects of viral hepatitis in the I-RAP 2022–2026. While acknowledging the importance of viral hepatitis A and E (27,28), both of which cause acute viral hepatitis, the strategy focuses primarily on chronic viral hepatitis B and C, given that these two infections, which may lead to cirrhosis and hepatocellular cancer, account for 96% of all viral hepatitis mortality. Hepatitis D coinfection or superinfection accelerates the progression of chronic liver disease, but only among people living with hepatitis B.

Actions for countries in this chapter should be implemented in conjunction with and in addition to the integrated shared actions detailed at Chapter 2.

3.1 Key areas for urgent attention towards the regional elimination goal

There is an urgent need to address the heterogeneity of hepatitis responses between countries, promote greater public and political literacy and awareness about viral hepatitis B and C prevention, testing and treatment and undertake mathematical modelling for epidemiological and economic impact assessment of national actions, i.e. “investment cases” for viral hepatitis B and C. This will help in advocacy with countries to allocate increased financial resources to viral hepatitis B and C including funding of testing and treatment through essential national health benefit packages. Urgent scale up of timely hepB-BD and linkage to mother-to-child triple elimination initiatives with HIV and syphilis are essential.

A specific focus is needed on: (i) engagement of key populations through addressing structural barriers; (ii) urgent scale-up of harm reduction measures (needle and syringe programme and OST) to reach coverage targets; (iii) implementation of decentralized and simplified service delivery; and (iv) active participation of the community and civil society at all levels of policy and service delivery.

3.1.1 Viral hepatitis targets

Table 3 presents the impact and programmatic coverage indicators and targets as well as policy milestones for viral hepatitis.

Table 3. Regional impact and coverage indicators, targets and milestones for viral hepatitis by 2025 & 2030

	Indicator	Baseline–2020 ^a	Targets–2025	Targets–2030
Impact indicators	HBsAg prevalence among children younger than 5 years of age ^b (proxy for incidence)	0.94%	0.5%	0.1%
	Number of new hepatitis B infections per year (incidence)	256 700 (13 per 100 000)	130 000 (5 per 100 000)	42 000 (2.5 per 100 000)
	Number of new hepatitis C infections per year (incidence)	234 100 (12 per 100 000)	115 000 (6 per 100 000)	80 000 (4 per 100 000)
	Number of new hepatitis C infections among PWID per year	8 per 100	3 per 100	2 per 100
	Number of people dying from hepatitis B per year	179 000 deaths (9 per 100 000)	100 000 deaths (5 per 100 000)	60 000 deaths (3 per 100 000)
	Number of people dying from hepatitis C per year	38 000 deaths (2 per 100 000)	20 000 deaths (1 per 100 000)	10 000 deaths (0.5 per 100 000)
Coverage indicators	Hepatitis B – percentage of people living with hepatitis B diagnosed ^c / and treated (initiated vs viral load suppression)	10.5%/4.5%	60%/50%	90%/80%
	Hepatitis C – percentage of people living with hepatitis C diagnosed/ cured	9%/7%	60%/50%	90%/80%
	Percentage of neonates who have benefitted from a timely hepB-BD vaccine ^d	54%	70%	90%
	Hepatitis B vaccine coverage among children (third dose) in those <1 year of age	91%	90%	90%
	Number of needles and syringes distributed per PWID ^e (common HIV/viral hepatitis indicator)	157	200	300
	Percentage of opioid-dependent PWID who receive OST	2.8–19.5% ^f	40%	40%
	Blood safety – proportion of blood units screened for bloodborne diseases	80%	100%	100%
	Safe injections – proportion of safe health-care injections	94.8%	100%	100%

	Indicator	Baseline–2020 ^a	Targets–2025	Targets–2030
Milestones	Planning – number of countries with costed hepatitis elimination plans	2	11	11
	Surveillance – number of countries reporting burden and cascade annually	3	8	11
	Elimination of vertical (mother-to-child) transmission – number of countries validated for the elimination of vertical transmission of either HIV, hepatitis B or syphilis	3	5	11
	Elimination – number of countries validated for elimination of hepatitis C and/or hepatitis B	0	2	11
	Integration – proportion of PLHIV tested for/and cured from hepatitis C	Unreported	60%/50%	90%/80%

^a Latest data for end 2020. Some targets use data from 2019 because of COVID-19 related service disruptions in the data reported for 2020.

^b Please note that the targets in this table are based on global targets and should be adapted to set targets for countries in relation to the national context. For example, in some countries a target for HBsAg prevalence among children younger than 5 years may be less than 0.1% or 0.2%, although the overall regional target should be 0.1%. Baseline data may not be available in all countries.

^c Denominator is estimated number of people living with hepatitis B virus (standardized population estimate).

^d In addition, the proportion of infants younger than 12 months of age who received the third dose of hepatitis B vaccine should also be measured as well as for other indicators for preventing vertical transmission such as maternal testing and prophylaxis, antiviral, as well as HBIG to the neonate. Note that the hepatitis B vaccination coverage achievements here are for 2019.

^e As part of a comprehensive harm reduction strategy and in line with national priorities.

^f Wide variation between countries in the Region (not all countries reporting).

3.2 Core regional hepatitis targets and additional targets for 2025

- ⊙ Increase timely birth dose to 70% of live births by 2025
- ⊙ Reduce HBsAg prevalence in 5-year-olds to 0.5% by 2025
- ⊙ Reduce the number of new HBV infections to 130 000 (7/100 000) and new HCV infections to 115 000 (6/100 000)
- ⊙ Reduce deaths from HBV to 100 000 (5/100 000) and HCV to 20 000 (1/100 000)
- ⊙ Increase markedly from baseline, coverage of combination harm reduction interventions to PWID and PWUD
- ⊙ Increase – through integration – the proportion of PLHIV tested for and cured from hepatitis C and those with HBV and HIV on treatment with HBV active regimens.

3.3 Strategic Direction 1: deliver high-quality, evidence-based, people-centred services

This section describes viral hepatitis-specific areas of implementation and necessary country actions along the continuum of viral hepatitis prevention, diagnosis, care and treatment services.

Service delivery must be tailored to the needs of different affected populations and in accordance with different epidemiological contexts.

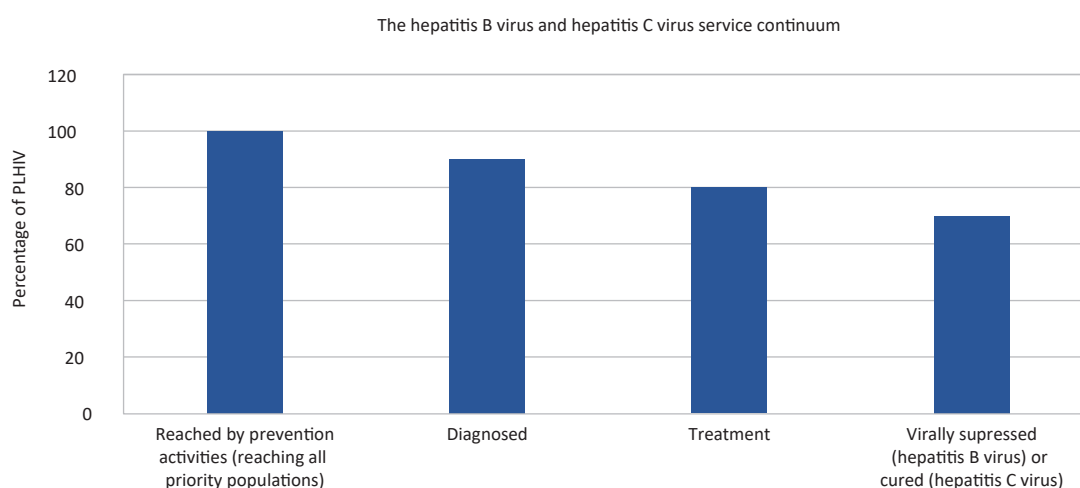
Populations at higher risk for viral hepatitis in SE Asia

- ⦿ PWID
- ⦿ People in prisons and other closed settings
- ⦿ Gay men and other MSM, especially those living with HIV
- ⦿ Sex workers
- ⦿ Children of mothers with chronic hepatitis B or hepatitis C infection, especially if living with HIV
- ⦿ Family members of persons living with hepatitis B
- ⦿ Mobile and migrant populations from high and intermediate endemic countries
- ⦿ People with historical health-care exposure through unsafe blood supplies, unsafe medical injections and other health procedures including haemodialysis.

3.3.1 Delivering the continuum of viral hepatitis services

The continuum of viral hepatitis services provides an organizing framework for implementing essential interventions that comprehensively address people's needs. Services should be organized in ways that promote early engagement in care, maximize retention and treatment adherence; and in the case of HCV, prevention reinfection. The retention cascade should be monitored to identify areas in which programmatic improvements are needed (Fig. 14).

Fig. 14. The service engagement cascade for hepatitis B virus and hepatitis C virus



No.	Areas of implementation	Country actions
24	Viral hepatitis intervention packages	<p>National programmes should define the core viral hepatitis intervention package which is aligned with UHC benefits packages and linked with PHC, where feasible and relevant.</p> <ul style="list-style-type: none"> ⊙ National programmes should review data to determine the optimal mix of prevention interventions for different populations and locations. ⊙ Core interventions of the viral hepatitis package include: <ul style="list-style-type: none"> ⊙ timely newborn and childhood hepatitis B vaccination to achieve national targets, including subnational coverage; ⊙ EMTCT for HBV including universal testing of pregnant women, with universal timely birth-dose for their neonates; ⊙ harm reduction (needle and syringe programme including LDSSs and OST for PWUD/PWID); ⊙ screening for HBV and HCV followed by confirmation of viraemia and linkage to care where positive; ⊙ Screening for HIV and other STI as part of viral hepatitis care; ⊙ antivirals for HBV and HCV; ⊙ targeted prevention, including HBV vaccine and programmes for key populations – MSM, transgenders, SWs and PWUD; ⊙ efforts to build prevention, diagnosis and treatment literacy for hepatitis A, B, C, D and E across the general population, key and other vulnerable populations and health-care workers.
25	Elimination of viral hepatitis transmission through vaccination (HBV, hepatitis A virus [HAV])	<p>The elimination of HBV through vaccination, both hepB-BD and B3 schedules, is critical for stopping HBV transmission.</p> <p>Full implementation of HBV vaccine programming includes the following:</p> <ul style="list-style-type: none"> ⊙ implementation of universal timely (< 24h) birth dose and HBIG to exposed neonates; ⊙ treatment of pregnant women with high HBV DNA with antivirals (tenofovir) and HBIG to all exposed neonates; ⊙ implementation of universal third dose of hepatitis B vaccine (hepB3) infant vaccine schedule (a total of three/four doses, including the birth dose); ⊙ targeted HBV catch-up vaccination of key populations, health-care workers, those having frequent medical procedures (blood products, dialysis) and other non-infant populations, where cost effective; ⊙ rapid (0, 7, 21 days and 1 year) and accelerated (0, 1, 2 months) hepatitis B vaccine schedules for specific populations where necessary to boost HBV vaccine coverage, including for catch-up programmes.

No.	Areas of implementation	Country actions
		<p>Hepatitis A and E are endemic in many areas of SE Asia.</p> <ul style="list-style-type: none"> ⦿ HAV vaccine should be offered under the following conditions: <ul style="list-style-type: none"> ⦿ single dose administration in HAV outbreak contexts according to local epidemiology; ⦿ consideration of implementation of single-dose HAV vaccine as part of routine infant vaccination programming in endemic areas, or in areas of transitioning epidemiology; ⦿ consideration of approved hepatitis E virus (HEV) vaccine should be made in line with national guidance, where epidemiologically indicated. ⦿ There is no vaccine available for HCV.
26	Viral hepatitis testing	<p>National programmes to include optimal combination of HBV and HCV testing approaches, including through clinical settings, community-based approaches or self-testing appropriate to the local context and available evidence. This entails the following:</p> <ul style="list-style-type: none"> ⦿ national plans to include HBV and HCV testing algorithms appropriate to the epidemiologic context, including for the general population and key populations; ⦿ implement public awareness campaigns educating endemic and at-risk populations and health-care workers; ⦿ implement simple, standardized and evidence-based viral hepatitis testing algorithms across all levels of the health system including non-specialists to support task sharing and shifting; ⦿ expand access to testing through effective people-centred approaches and link people who are found to be positive to treatment and care services; ⦿ offer hepatitis screening for family members of people living with chronic hepatitis; ⦿ implement targeted HBV and HCV testing in key populations, including provider-initiated and self-testing with linkages to care and treatment and retesting for PWID (and other high-incidence populations); ⦿ laboratory- and clinic-based reflex testing for viral hepatitis, e.g. to establish rapid diagnosis of HCV ⦿ include viral hepatitis testing in integrated testing platforms for multi-disease approaches; ⦿ ensure a reliable supply of quality-assured (e.g. WHO-prequalified and/or national regulator approved) diagnostics; ⦿ implement timely reporting of testing results, centralized where appropriate, with interoperability between test reporting IT systems.

No.	Areas of implementation	Country actions
27	Viral hepatitis treatment	<p data-bbox="544 394 1318 483">National programme to include treatment for all those with HCV and all those eligible for HBV treatment, especially persons with advanced disease and pregnant mothers with high viral load.</p> <p data-bbox="544 506 954 535">This may include the following actions:</p> <ul data-bbox="592 557 1318 1155" style="list-style-type: none"> ⦿ strengthen linkages across the health sector to drive diagnosed individuals to early timely initiation of HBV and HCV treatment; ⦿ implement national guidelines for treatment aligned with WHO guidelines for treating chronic viral hepatitis B and C infection and promote a simplified public-health approach; ⦿ implement and scale up targeted treatment for populations with high HCV incidence including PWID to augment prevention measures; ⦿ include treatment initiatives to cater for treatment of children and adolescents in accordance with WHO treatment guidelines, including adolescent-friendly services that also address psychosocial support and management of stigma for children and adolescents with hepatitis B and hepatitis C virus infection; ⦿ programmatic focus on the elimination of HCV among PLHIV through a HCV-HIV coinfection micro-elimination initiative; ⦿ build capacity at PHC level for HBV and HCV treatment, including through hub-and-spoke models of shared care and supervision; ⦿ monitor the cascade of treatment and care to identify and address barriers to early linkage and retention in care.
28	Support for chronic hepatitis comorbidities, advanced liver disease and liver cancer	<p data-bbox="544 1167 1318 1225">Liver diseases requires special measures to optimize outcomes, including the management of comorbidities.</p> <ul data-bbox="592 1247 1318 1865" style="list-style-type: none"> ⦿ Implement screening for common comorbidities in people with chronic hepatitis B or C infection, including for cirrhosis and hepatocellular carcinoma (primary liver cancer) and extrahepatic manifestations including diabetes. ⦿ Screen for and offer treatment for medical conditions that exacerbate liver disease such as problematic alcohol use and metabolic syndrome, including obesity and hypertension. ⦿ Make available more specialized services for individuals with advanced liver disease, including decompensated cirrhosis, transplantation and palliative services for end-of-life care. ⦿ implement routine screening for primary liver cancer in individuals with chronic HBV and HCV infection; ⦿ implement HBV, HCV and HDV screening for liver cancer patients where the primary cancer source is unknown; ⦿ improve hepatitis diagnosis and treatment literacy among cancer services. ⦿ Establish strong linkages between viral hepatitis and cancer screening programmes to allow early detection and effective treatment of hepatocellular cancer (HCC).

3.4 Strategic Direction 2: optimize systems, sectors and partnerships for impact

This section describes viral hepatitis-specific priority actions to strengthen health service delivery and other health system functions including multisectoral collaboration.

No.	Areas of implementation	Country actions
29	Decentralize hepatitis services	<p>Elimination of hepatitis requires widespread decentralization of hepatitis prevention, testing and treatment services to reach the whole population.</p> <ul style="list-style-type: none"> ⦿ Implement hepatitis services at the PHC level. ⦿ Include hepatitis prevention, testing and treatment in prisons and other closed settings. ⦿ Build capacity in non-specialists through capacity-building and task sharing in hepatitis testing and treatment. ⦿ Encourage shared care for the management of complex cases, including through telemedicine services. ⦿ Maximize the availability of harm reduction interventions to all subnational areas.
30	Scale up hepatitis financing in national budgets	<p>Elimination targets are dependent on access to and demand for hepatitis services. Adequate domestic financing is critical to maximizing access.</p> <ul style="list-style-type: none"> ⦿ Undertake a national investment case for hepatitis B and C to advocate for increased national budget allocation and inclusion of interventions, along with primary prevention interventions, in essential health benefit packages. ⦿ Advocate for expanded international financing mechanisms for low- and middle-income countries for hepatitis commodities, especially in coinfection. ⦿ Ensure national programmes pursue cost efficiencies, including integrating services, reducing costs, improving efficiencies and following price reduction strategies for hepatitis services. ⦿ Where state or provincial level budget allocation is an important contributor, ensure that such funding is sufficient to meet viral hepatitis service needs for the state or province.
31	Essential hepatitis commodities	<p>Equitable and reliable access to viral hepatitis commodities is essential to support consistent and effective national action. The following are the key elements:</p> <ul style="list-style-type: none"> ⦿ make available low-cost quality-assured rapid diagnostic tests (RDTs) for hepatitis; ⦿ consider innovative financing mechanisms to reduce the cost of molecular tests for HBV and HCV; ⦿ encourage generic medicine markets, greater market transparency and pooled purchase mechanisms to reduce costs for medical products; Implement effective pricing policies for market price control Improve availability of essential medical products and reduce stock-outs

No.	Areas of implementation	Country actions
32	Health workforce for viral hepatitis	<p>Decentralization of hepatitis services with maintenance of quality and outcome requires a hepatitis-literate workforce. National programmes should implement various actions to this end.</p> <ul style="list-style-type: none"> ⦿ Actively build health-worker literacy in viral hepatitis risk factors, prevention and management and in essential hepatitis interventions. ⦿ The specific focus should be on the primary health-care level with the use of mentoring, remote supervision and support from specialist services, including through virtual systems. Implement occupational health and safety programmes, including testing and routine hepatitis B vaccination of health-care workers and testing and treatment for HCV.

3.5 Strategic Direction 3: generate and use data to drive decisions for action

This section describes viral hepatitis-specific actions to strengthen health information systems for better data availability, use and accountability. The actions in this section should be implemented in conjunction with the relevant integrated actions.

No.	Areas of implementation	Country actions
33	Person-centred monitoring and information systems for viral hepatitis	<p>Economies of scale and existing infrastructure should be utilized for viral hepatitis, including national surveillance and HIV surveillance systems.</p> <p>Where absent, establish national baseline data for prevalence, incidence, prevention and treatment cascades. Leverage existing national population-based or targeted surveys where possible. Use existing reporting systems to capture aggregated and disaggregated data for hepatitis cascades of care by sex, socioeconomic status (where possible) and geography, made available to monitor both quality and equity and inform decision-making.</p> <p>Viral hepatitis information systems should be integrated with HIV/STI/TB systems and enable data triangulation for analysis, including with vital statistics, cancer registries and immunization registries.</p> <p>Prepare data measurement systems to enable WHO to validate the elimination of viral hepatitis.</p>

3.6 Strategic Direction 5: foster innovations for impact

This section describes viral hepatitis-specific actions to foster and disseminate innovations for accelerated impact.

No.	Areas of implementation	Country actions
34	New diagnostics and treatment approaches	<p>Innovations are necessary to expand testing to improve the Region's hepatitis care cascade. These may include:</p> <ul style="list-style-type: none"> ⦿ simple, affordable and reliable diagnostics, including point-of-care technologies to confirm the presence of viraemic hepatitis C virus infection; ⦿ availability and use of RDT HCV core antigen test and RDT e-Ag for HBV where polymerase chain reaction (PCR) is not available; ⦿ use of polyvalent or integrated diagnostic platforms that include hepatitis; ⦿ self-testing for hepatitis C virus; ⦿ implement affordable methods for staging liver disease, including bio-algorithms such as APRI or FIB-4; ⦿ standardized care and treatment pathways to the minimal time and tests while increasing efficiency including the "one-stop shop" model of viral hepatitis prevention, testing, care and treatment for vulnerable populations needing comprehensive care.

Triple elimination

Get tested. Get treated
Protect yourself, your partner and your baby



Look after your sexual health

Visit www.who.int/westernpacific/health-topics/sexually-transmitted-infections

Source: https://www.who.int/docs/default-source/wpro---documents/wpro---pdf-infographics/hiv/syphilis-20190320.pdf?sfvrsn=e88c0209_2

4. HIV

This chapter presents the actions for HIV as part of I-RAP (2022–2026). It builds on the successes and lessons learnt from the RAP for HIV in SE Asia (2017–2021) and details the key actions necessary for the Region to end AIDS as a public health threat by 2030 with priority targets, interventions and innovations. These actions fully align with the UNAIDS Global AIDS Strategy (2021–2026) and other related global strategies.

Actions for countries in this chapter should be implemented in conjunction with and in addition to the integrated actions for countries defined in Chapter 2.

4.1 Key areas for urgent attention towards the regional elimination goal

- ⦿ The HIV epidemic in the Region continues to predominantly affect the key populations and their partners. Hence, improving coverage of interventions among key populations, including youth, should be a key focus.
- ⦿ A renewed focus on prevention and education for the youth is needed.
- ⦿ EMTCT needs focus, especially following the interruption during the COVID-19 pandemic. Interventions like PrEP need to be scaled up urgently.
- ⦿ The major causes of HIV-related deaths need to be addressed, including TB.
- ⦿ There is a continuous need to focus on diagnosing and managing advanced HIV disease.
- ⦿ The use of newer diagnostic innovations like HIV self-testing and newer prevention tests such as PrEP need to be scaled up urgently.
- ⦿ Stigma and discrimination deter key populations from accessing prevention and treatment services and are still present in countries where the laws and policies institutionalize such behaviour. This needs to be addressed.
- ⦿ Community-led service delivery is important to facilitate access for these populations.
- ⦿ The mental health of PLHIV should be given priority.
- ⦿ Large data gaps remain in strategic information. Further disaggregated granularity is necessary.

HIV targets

Table 4 presents the impact and programmatic coverage indicators and targets and policy milestones for HIV.

Table 4. Impact and coverage indicators, targets and milestones for HIV, by 2025 and 2030

	Indicator	Baseline–2020^a	Targets–2025	Targets–2030
Impact indicators	Number of people newly infected with HIV per year	140 000	41 000	35 000
	Number of people newly infected with HIV per 1000 uninfected population per year (SDG 3.3.1)	0.05	0.04	0.025
	Number of children 0–14 years of age newly infected with HIV per year	9000	3000	1500
	Number of people dying from HIV/related causes per year ^b (including disaggregation by HIV, cryptococcal meningitis, TB and severe bacterial infections)	94 000	32 000	30 000
	Number of countries validated for the elimination of vertical (mother-to-child) transmission of HIV, hepatitis B, or syphilis	3	5	11
Coverage indicators	Percentage of PLHIV who know their HIV status ^c	77%	95%	95%
	Percentage of people who know their HIV-positive status and are accessing ART ^c	78%	95%	95%
	Percentage of PLHIV receiving treatment, who have suppressed viral loads ^c	91%	95%	95%
	Percentage of people at risk of HIV who use a combination prevention with a defined service package	Varies by key population. It is <50% on average	95%	95%
	Condom/lubricant use at last sex with a client or non-regular partner	Varies by key population ^d	90%	90%
	Number of needles or syringes distributed per PWID ^e – common HIV/viral hepatitis indicator	157	200	300
	Percentage of PLHIV and people at risk who are linked to integrated health services, including STI and viral hepatitis	Unreported	95%	95%

Milestones	Stigma and discrimination – percentage of people living with viral hepatitis, HIV and STI and priority populations who experience stigma and discrimination	Partially reported	Less than 10%	Less than 10%
	Laws and policies – number of countries that have punitive laws and policies	Varied by population	<3	<1
	Gender – prevalence of recent (past 12 months) intimate partner violence among people aged 15–49 years	Unreported	<20%	Less than 10%
	Integration – percentage of people living with viral hepatitis, HIV and STI linked to other integrated health services	Unreported	95%	95%
	Advanced HIV disease – percentage of people starting ART with a CD4 count of less than 200 cells/mm ³ (stage III or IV) ^f	30%	20%	10%
	Differentiated service delivery – percentage of countries that have implemented a 6-monthly refill of drugs	0	50%	80%

^a Latest data for end-2020. Some targets use data from 2019 because of COVID-19 related service disruptions in the data reported for 2020.

^b Disaggregated by disease coinfection.

^c Achieved in all ages, sexes and focus populations.

^d SW [67–83%]; MSM [57–95%]; PWID [22–66%]; TG [68–92%] in reporting countries.

^e As part of a comprehensive harm reduction strategy and in line with national priorities.

^f So all PLHIV should receive a CD4 test result. Core regional targets and additional targets for 2025.

Core regional HIV targets for 2025

- ◉ Reduce new HIV infections by 2025 with a target of 41 000.
- ◉ Advance towards 95-95-95 targets for the Region by 2025.
- ◉ The combination prevention services package, including self-testing, condoms, clean needles and syringes, OST and PrEP should be made available to 95% of SWs, PWID, transgender persons and MSM by 2025
- ◉ Scale up testing resources using HIV self-test, community-based services, virtual space interventions to reach first 95.
- ◉ Increase the percentage of PLHIV who are offered preventive therapy for TB with a target of 95%, by 2025.
- ◉ Increase the percentage of PLHIV and people at risk who are linked to integrated health services, including STI and viral hepatitis, with a target of 95%.
- ◉ Reduce the proportion of HIV diagnoses with advanced disease.

4.2 Strategic Direction 1: deliver high-quality, evidence-based people-centred services

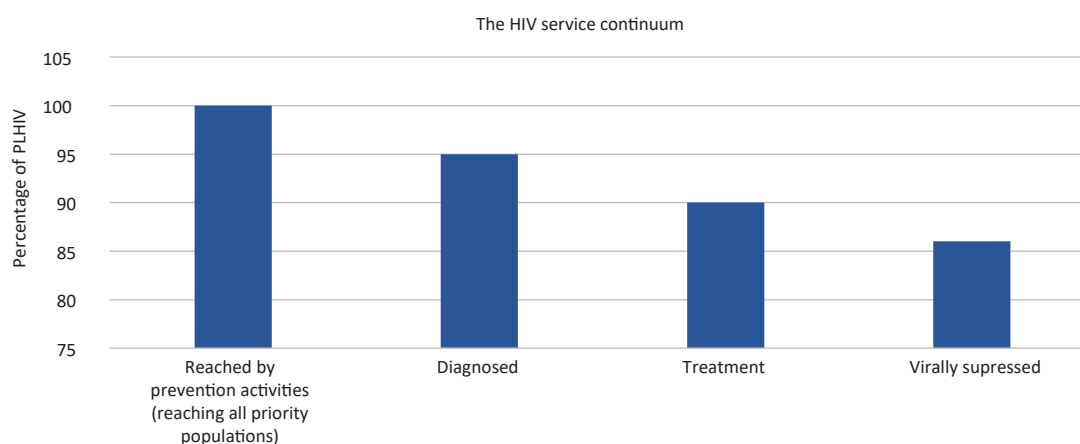
This section describes HIV-specific priority actions for countries along the continuum of HIV prevention, diagnosis, care and treatment services.

Country-specific strategic information on risk groups according to demographics and behaviour should inform the development of a list of priority populations for national plans.

4.2.1 Delivering the continuum of HIV services

The continuum of HIV services provides an organizing framework for implementation of essential interventions that comprehensively address people's needs relating to HIV prevention, testing, treatment and chronic care. Service access may be interrupted at each stage as people move along the continuum. Health services must be client-centred rather than service-centred and organized such that individuals can be continuously engaged in care, including through community access points where appropriate to optimize outcomes across the life course. Stigma must be actively addressed in all HIV services, including through training, community engagement and provision of peer-led services for key populations. The retention cascade should be monitored to identify areas in which programmatic improvements are needed (Fig. 15).

Fig. 15. The HIV service engagement cascade



No.	Areas of implementation	Country actions
35	Comprehensive HIV prevention	<p data-bbox="608 376 1321 465">National programmes should make available a strategic combination of biomedical, behavioural and structural interventions. These include the following:</p> <ul data-bbox="655 488 1321 801" style="list-style-type: none"> ⊙ offer PrEP as an additional prevention choice for all individuals with a self-assessed risk of acquiring HIV; ⊙ offer PEP to all people who have had a significant exposure to HIV and support transition to PrEP. ⊙ promote treatment as prevention and the concept of U=U; ⊙ targeted prevention programmes for key populations, including MSM, transgenders, SWs and PWUD; ⊙ make available and promote male and female condoms and safe injecting equipment. <p data-bbox="608 813 1321 902">National programmes should make available comprehensive interventions for HIV prevention for PWUD, including stimulants. These are:</p> <ul data-bbox="655 925 1321 1272" style="list-style-type: none"> ⊙ condoms, lubricants and safer sex programmes; ⊙ needle and syringe programmes and other commodities; ⊙ evidence-based psychosocial interventions and drug dependence treatments; ⊙ prevention, diagnosis and treatment of STI, hepatitis and TB; ⊙ targeted information, education and communication for people who use stimulant drugs and their sexual partners; ⊙ risk mitigation including legal risk mitigation, especially in countries which criminalize specific key populations to support access to services.
36	Expanded people-centred HIV testing/screening	<p data-bbox="608 1283 1321 1373">National programmes should include an optimal combination of HIV testing approaches, including through clinical settings, community-based approaches or self-testing.</p> <p data-bbox="608 1395 823 1429">Specific tasks are to:</p> <ul data-bbox="655 1451 1321 1787" style="list-style-type: none"> ⊙ expand HIV testing to meet coverage targets at national and subnational levels; ⊙ engage in targeted HIV case finding among infants and children to increase HIV diagnosis coverage in these populations; ⊙ expand use of point-of-care testing for HIV in all health-care contexts; ⊙ offer peer-led or self-testing for key populations and for persons with a self-perceived risk of acquiring HIV; ⊙ consider social network strategies to reach persons not routinely tested for HIV.

No.	Areas of implementation	Country actions
37	Safe, effective and responsive HIV treatment and care	<p>National HIV treatment should include rapid and effective ART with support to boost adherence, optimize clinical outcomes and minimize resistance.</p> <ul style="list-style-type: none"> ⦿ Ensure rapid initiation (within seven days of HIV diagnosis) of HIV treatment with WHO-recommended treatment regimens for all PLHIV,⁴ using agents with a high barrier to resistance such as integrase inhibitors. ⦿ Offer treatment through delivery models that provide people-centred care, monitoring and support for adherence and retention and re-engagement in care, with service differentiation tailored to the country context. ⦿ Increase availability of viral load testing through standard means, while also including point-of-care viral load testing and laboratory-based testing for monitoring to promote optimal treatment outcomes. ⦿ Expand laboratory capacity to monitor HIV drug resistance. ⦿ Consider innovative solutions to address resistance including early or e-consultation referral mechanisms, e.g. clinical expert panels such as e-SACEP⁵ for second- and third-line treatment in India. ⦿ Make available tailored adherence support to maximize retention in care, including: <ul style="list-style-type: none"> ⦿ once a day fixed-dose WHO recommended regimens; ⦿ offering patients the option of multi-month dispensing; ⦿ expanding availability of long-acting injectable antiretrovirals initiated through regulatory approval mechanisms. ⦿ Optimize adherence in combination with supply chain integrity to ensure uninterrupted availability of test kits, test reagents and medical products and minimize the public health impact of HIV treatment resistance. ⦿ Strengthen pharmacovigilance system for patient safety monitoring. ⦿ Make available interventions to trace people who have disengaged from care and support their re-engagement.
38	Reduce prevalence and impact of advanced HIV disease	<p>Late HIV diagnosis is universally associated with poorer clinical outcomes, poorer quality of life and substantially increased mortality. Late diagnoses are often made through other services such as NCD clinics.</p> <ul style="list-style-type: none"> ⦿ National programmes should design and offer a specific care package for advanced HIV disease including diagnostic workup, treatment and/or prophylaxis for major causes of morbidity and mortality among PLHIV such as TB and cryptococcal meningitis. ⦿ Laboratory capacity for CD4 monitoring will be required as part of this package for advanced HIV dosage.

⁴ Noting target is 95%.

⁵ Driven by the COVID-19 pandemic, the e-SACEP (State AIDS Clinical Expert Panel) mechanism in targeted districts caters for e-consultations with tertiary and ART centres.

No.	Areas of implementation	Country actions
39	Holistic care to improve quality of life in PLHIV	<p>Well-managed HIV is now a chronic infection and is associated with noncommunicable (chronic) disease, impacting quality of life over the longer term. Many populations that are affected by HIV also have high levels of mental health disorders. Disability in the context of HIV includes physical, cognitive and mental health related disability.</p> <p>The key areas of focus for national programmes are:</p> <ul style="list-style-type: none"> screening and integrated care for mental health; the quality of life of adults and children living with HIV should be monitored and their health and well-being needs addressed holistically over their lifetime; provide rehabilitation services, including physical, cognitive and emotional services as part of comprehensive HIV services; the provision of palliative care must be included as an essential component of comprehensive clinical management for PLHIV.
40	Reduce and eliminate vertical HIV transmission	<ul style="list-style-type: none"> Promote integrated approaches with sexual and reproductive health programmes for HIV prevention and family planning. Screen all pregnant women for HIV, syphilis and hepatitis B. Incorporate the use of multiplex point-of-care testing where possible. Link HIV and ANC programmes to ensure treatment continuity between service delivery points for preventing MTCT. Make available a package of care for HIV-exposed infants including infant testing and prophylaxis.

4.3 Strategic Direction 2: optimize systems, sectors and partnerships for impact

This section describes HIV-specific priority actions to strengthen health service delivery and other health system functions including multisectoral collaboration.

No.	Areas of implementation	Country actions
41	People centred, decentralized and integrated services	<p data-bbox="624 394 1407 533">Integration with primary care</p> <p data-bbox="624 450 1407 533">The goal of the SE Asia Regional Strategy for PHC 2022–2030 is to achieve UHC, health security and the health-related SDG targets by 2030 through a PHC-oriented health system. This includes actions as below.</p> <ul data-bbox="671 555 1407 1693" style="list-style-type: none"> <li data-bbox="671 555 1407 674">⦿ Develop a package of HIV services which can be delivered as part of primary care, including in areas of low HIV prevalence. This could include dual HIV and syphilis point-of-care testing, hepatitis B vaccination and a syndromic approach to STI treatment. <li data-bbox="671 685 1407 1178">⦿ Core interventions of the package include: <ul style="list-style-type: none"> <li data-bbox="719 730 1407 808">⦿ EMTCT for HIV including universal testing, with universal treatment for HIV-infected pregnant women and their neonates, aligned with triple elimination; <li data-bbox="719 819 1407 887">⦿ harm reduction (needle and syringe programme including LDSSs and OST for PWUD/PWID); <li data-bbox="719 898 1407 965">⦿ HIV self-testing, peer-led partner and contact tracing and rapid HIV testing including at non-HIV services; <li data-bbox="719 976 1407 999">⦿ screening and treatment for viral hepatitis and STI at HIV services; <li data-bbox="719 1010 1407 1032">⦿ universal male and female condom access; <li data-bbox="719 1043 1407 1077">⦿ antiretrovirals for both prevention and treatment of HIV; <li data-bbox="719 1088 1407 1178">⦿ comprehensive single-window services for transgender persons including gender-affirming care, hormone replacement and mental health. <li data-bbox="671 1189 1407 1308">⦿ Expand sexual health and HIV education and training of all health-care workers to ensure that all individuals who seek sexual health services can do so in an environment free from stigma and discrimination and receive high quality, acceptable care. <li data-bbox="671 1319 1407 1375">⦿ Stigma in health-care settings and communities and self-stigma must be addressed to enable access to care in a range of settings. <li data-bbox="671 1386 1407 1442">⦿ Peer-led services for marginalized key populations should remain an important component of HIV services. <li data-bbox="671 1453 1407 1509">⦿ Integrated person-centred HIV care also encompasses addressing reproductive health needs including contraception and fertility. <li data-bbox="671 1520 1407 1576">⦿ Countries should develop appropriate models for integration and linkage based on their context and health system characteristics. <li data-bbox="671 1588 1407 1693">⦿ Provide linkages for care of people with chronic HIV to NCD services for early diagnosis, care and effective and timely management of these comorbidities.
42	HIV and TB	<ul data-bbox="671 1693 1407 1899" style="list-style-type: none"> <li data-bbox="671 1693 1407 1749">⦿ Implement systematic screening for TB symptoms among PLHIV and provide TB preventive treatment (particularly with short regimens). <li data-bbox="671 1760 1407 1816">⦿ Undertake, with national TB programmes, HIV testing of all people diagnosed or presumed to be having TB. <li data-bbox="671 1827 1407 1899">⦿ Implement timely initiation of ART and WHO-recommended chemoprophylaxis for people with TB coinfection.

No.	Areas of implementation	Country actions
43	Essential HIV health commodities	<ul style="list-style-type: none"> ⊙ Ensure equitable and reliable access to quality-assured and affordable commodities. This includes: <ul style="list-style-type: none"> ○ medicines for ART including for children; ○ PrEP and PEP; ○ diagnostic testing supplies; ○ other health products including male and female condoms, lubricants, commodities for voluntary medical male circumcision and needles and syringes for harm reduction and opioid substitution treatment. ⊙ Expedite the availability of new products such as HIV rapid point-of-care tests, HIV self-tests and new antiretroviral drugs and long-acting preparations, where available.

4.3.1 Tuberculosis and HIV

TB is the leading cause of death among PLHIV. Although the number of TB deaths among PLHIV in SE Asia has seen a 74% reduction from 76 100 in 2010 to 19 600 in 2019, less than one third of the estimated number of people coinfecting with HIV and TB were reported to be receiving both HIV and TB treatment in 2019 (29). The global End TB Strategy (30) gives priority to collaborative activities to jointly address TB and HIV through integrated people-centred care. This includes systematic screening for TB symptoms among PLHIV, TB preventive treatment, HIV testing of all people diagnosed with or presumed to be having TB, timely initiation of ART for people with TB, WHO-approved chemoprophylaxis and the treatment of drug-susceptible and drug-resistant TB. The regional strategic plan towards ending TB in the WHO SE Asia Region 2021–2025 is in line with the global targets of the End TB Strategy, which calls upon Member States to achieve an 80% reduction in the TB incidence rate by 2030 (compared with the 2015 baseline), 90% reduction in TB deaths by 2030 (compared with 2015) and 100% TB-affected families to be protected from facing catastrophic costs due to disease from 2020 onwards.

The Regional TB Strategy has the goal that ≥90% of PLHIV newly enrolled in care will receive treatment for latent TB.

There are opportunities for programme collaboration, such as joint planning, surveillance and financing. Common approaches to address the inequalities that drive both HIV and TB are also important to prevent and manage HIV-associated TB. This includes the use of new points-of-care diagnostics and innovative treatment, e.g. newer short course therapy for TB preventive treatment (TPT).

4.4 Strategic Direction 3: generate and use data to drive decisions for action

This section describes HIV-specific actions to strengthen health information systems for individual patient care and national and subnational surveillance, aiming for interoperable, interconnected, electronic real-time reporting systems.

No.	Areas of implementation	Country actions
44	Integrated person-centred monitoring and surveillance	<ul style="list-style-type: none"> Utilize existing infrastructure for HIV monitoring to optimize outcomes, including use of unique identifiers to allow individualized outcome analysis and management and to avoid duplicate entries for individuals. Enable confidential data sharing across health services to support patient care. Strengthening surveillance will require investments in data capacities and strengthening in-country laboratory capacity. Utilize WHO-developed tools including SCORE data collection tools (31) to build on existing national surveillance capacity. Data should be disaggregated by sex, age, socioeconomic status, geography and other relevant population characteristics to monitor equity in access and outcomes. Undertake regular population size estimates for key populations (including virtual key populations) to allow estimation of the HIV cascades of care in these groups. Consider the utilization of HIV surveillance and monitoring systems for other disease categories to drive integration, e.g. expanding STI surveillance and integrating with HIV reporting systems including integrated behavioural and biological surveys. Consider recent infection surveillance to facilitate early identification of outbreaks. Institutionalize regular systems of data quality assurance and establish M&E frameworks. Integrate data systems for HIV, STI and viral hepatitis.

4.5 Strategic Direction 5: foster innovations for impact

This section describes HIV-specific actions to foster and disseminate innovations for accelerated impact.

No.	Areas of implementation	Country action
45	New HIV diagnostics technologies and testing approaches	<ul style="list-style-type: none"> Make available polyvalent or integrated diagnostic platforms for the combined diagnosis of HIV and comorbidities such as TB, viral hepatitis and syphilis. Offer HIV self-testing and rapid point-of-care tests in a range of settings to improve access.

No.	Areas of implementation	Country action
46	Optimized use of antiretroviral drugs and HIV vaccines, including for prevention and cure	<ul style="list-style-type: none"> Support research on optimal doses and formulations of emerging antiretroviral and non-antiretroviral drugs to minimize drug-drug interactions and reduce costs. Expand access to novel ARV based prevention, i.e. treatment as prevention (TasP) by offering this as an option to all affected persons. Expand access to PrEP and PEP including long-acting injectable preparations and other new technologies as they become available. Support research into improved HIV therapeutics including vaccine and cure through international collaboration. Support research on implementation technologies to facilitate adherence including web-based refills, remote testing and adherence reminders and offer the same in programmes.





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5. Sexually transmitted infections

Actions for STI given in this chapter should be implemented by countries in conjunction with and in addition to the integrated actions described at Chapter 2.

Key challenges and gaps identified across the Region include:

- ⦿ national strategies oriented towards HIV, with little attention to STI control;
- ⦿ a general heterogeneity in services available to diagnose and treat STI across countries of the Region;
- ⦿ a lack of resources specific to STI programmes;
- ⦿ commodity gaps including a lack of reliable supply of STI diagnostics and treatment;
- ⦿ variable clinical service and contact tracing including guidelines, training and supervision to manage cases and contacts;
- ⦿ inadequate surveillance systems for STI and antimicrobial resistance (AMR) monitoring (10);
- ⦿ remaining legal and policy barriers to key populations that impede equitable access to health care, along with stigma and discrimination.

5.1 Key shifts required to strengthen STI control in the Region

It is recognized that there is variability in prevalence and impact of STI across countries of the Region. There is also wide variety in the access to appropriate diagnostics laboratory services and treatment within and between countries. There has not been a RAP for STI to date and as such countries of the Region may be at different stages of implementation of actions suggested in this chapter.

Key shifts to remedy this situation are enumerated below.

- ⦿ Reposition STI control as a public health priority for the Region and advocate for resources, staffing and planning potential synergies in STI/HIV control efforts, e.g. offering STI screening/comprehensive periodic treatment at quarterly PrEP visits.
- ⦿ Recognize successes in the Region and leverage the considerable experience and expertise from countries such as Sri Lanka and Thailand and from key population community learning sites like Durbar Mahila Samanwaya Committee (DMSC) and Ashodaya Samithi in India. Develop a flexible toolkit of proven interventions for countries at different stages of STI control including the above.
- ⦿ Advocate for and support progress towards STI elimination, continuing with EMTCT and preparing elimination cases for infectious syphilis, chancroid and possibly gonorrhoea, recognizing that there are strong candidate countries for each of these STI elimination targets in the Region.

- ◉ Address the considerable STI data gaps and limitations in most countries, advocating for and supporting basic STI surveillance components including routine reporting (syndromic/aetiological), routine prevalence monitoring (ANC and key population syphilis screening) and leveraging regional experience and expertise including for drug resistance patterns to inform effective case management.
- ◉ Rapid response methods to identify and control STI outbreaks (this is particularly important as countries move towards elimination).

5.2 STI targets

Tables 5 and 6 present impact and coverage targets and policy milestones for STI in the Region.

Table 5. Impact and coverage indicators, targets and milestones for STI, by 2025 and 2030

Indicator	Baseline – 2020 ^a	Targets – 2025	Targets – 2030
Number of new cases of four curable STI in adults (15–49 years) per year ('000)	59 677	47 742	21 273
Number of new cases of syphilis in adults (15–49 years) per year ('000)	354	283	35
Number of new cases of gonorrhoea in adults (15–49 years) per year ('000)	21 059	16 847	2106
Congenital syphilis cases per 100 000 live births per year	145	<75	<50
Percentage of girls fully vaccinated with HPV vaccine by 15 years of age	14%	50%	90%
Percentage of pregnant women attending ANC who were screened for syphilis/percentage treated if positive	65%/71%	>85%/>90%	>95%/>95%
Percentage of priority populations ^b screened for syphilis/percentage treated if positive	No data/no data	>80%/>90%	>90%/>95%
Percentage of priority populations ^b screened for gonorrhoea/percentage treated if positive	No data/no data	>20%/>90%	>90%/>95%
Percentage of women screened for cervical cancer using a high-performance test by the age of 35 and again by the age of 45. Percentage having the pre-cancer treated or invasive cancer managed	No data/no data	>40%/>40%	>70%/>90%
Number of countries reporting AMR in <i>Neisseria gonorrhoeae</i> to GASP	36%	>60%	>70%
Planning: number of WHO Member States with national STI plans updated within the past 5 years	50%	>70%	>90%
Policies: number of WHO Member States with national STI case management guidelines updated within the past 3 years	40%	>70%	>90%
Surveillance: number of countries with strong STI surveillance systems ^c	No data	5	11

GASP – Gonococcal Antimicrobial Surveillance Programme

^a Latest data for end 2020. Some targets use data from 2019 because of COVID-19 related service disruptions in the data reported for 2020.

^b Priority populations are defined by individual countries. For screening include MSM, SWs and PLHIV.

^c A strong surveillance system for sexually transmitted infections incorporates four core competencies: case reporting; regular prevalence assessments among ANC, men and priority populations; regular annual reviews of the causation of STI syndromes and symptomatic data corrected for underreporting; and monitoring of AMR for *Neisseria gonorrhoea*.

Table 6. Syphilis EMTCT targets (25)

EMTCT impact target	A case rate of CS of ≤ 50 per 100 000 live births
EMCT process targets	<ul style="list-style-type: none"> ANC coverage (at least one visit) of $\geq 95\%$ Coverage of syphilis testing of pregnant women of $\geq 95\%$ among those who attended at least one ANC visit Adequate syphilis treatment of syphilis-seropositive pregnant women of $\geq 95\%$

CS – congenital syphilis

5.3 Core Regional syphilis targets and additional targets for 2025

- Reduce incidence and prevalence of the four key curable STI: syphilis, gonorrhoea, chlamydia and trichomonas in line with mentioned targets
- Eliminate MTCT of syphilis in all countries ($< 50/100\ 000$ live births)
- Increase HPV vaccination coverage
- Increase proportion of key populations receiving regular medical care including screening for syphilis and gonorrhoea and treatment if positive
- Increase number of Member States with STI surveillance systems
- Increase number of Member States with STI programmes, including M&E mechanisms.

5.4 Strategic Direction 1: deliver people-centred evidence-based services

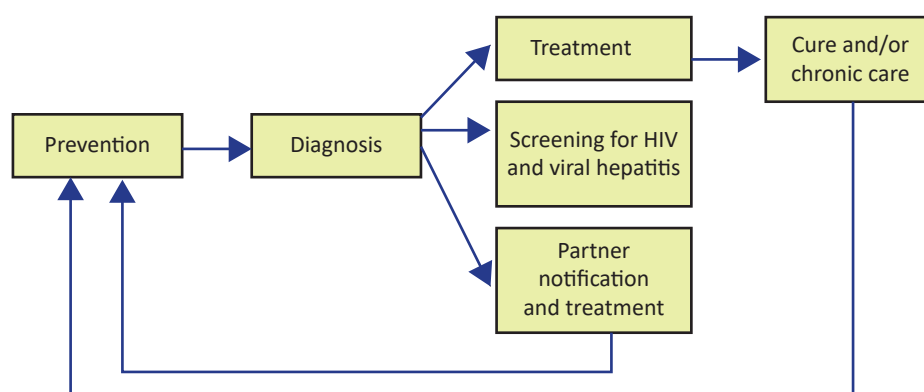
Priority populations for STI include SWs and their clients, MSM, transgender persons, young people, PLHIV and pregnant women and their exposed infants.

Other groups that are especially vulnerable to STI in many settings include people who have experienced gender-based violence, indigenous peoples, children and young people living on the street, people affected by conflict and civil unrest and people with disabilities.

No.	Areas of implementation	Country actions
47	Expand primary prevention	<ul style="list-style-type: none"> Develop, implement and scale up effective primary prevention interventions tailored to different populations and locations, including provision of HPV vaccines and other vaccines as they become available. Develop primary prevention initiatives for key populations and implement and evaluate these in collaboration with affected populations, community groups and NGOs. Free access to condoms in a variety of settings to which key populations have access is a key intervention. Take prevention initiatives for STI integrated with HIV, PrEP and hepatitis prevention through HBV vaccination for key populations. Build STI literacy across populations to seek care for symptoms of STI and prevent reinfection. A range of health promotion initiatives for key populations and the general population should be used, including: <ul style="list-style-type: none"> mass media campaigns education in schools targeted health promotion activities conducted by community groups. Information and education campaigns should adopt positive approaches to promoting sexual health, normalize discussion of sexual health and teach individuals to recognize symptoms of STI. Effective vaccines exist for preventing HPV infections, but coverage is low. Wider provision of these vaccines will drastically reduce new cases of cervical, penile and anal cancers. Address barriers to uptake and vaccine hesitancy.
48	An effective STI service continuum	<p>Provide a comprehensive continuum of STI services based on the needs of populations (Fig. 16).</p> <ul style="list-style-type: none"> Each country needs to define a package of essential STI interventions along the service continuum aligned with UHC benefit packages and linked to PHC. All services must be non-stigmatizing, rights-based, quality services. Health systems must identify and remove physical and information barriers that hinder vulnerable populations from accessing STI information and services. Self-care strategies, including self-collection of specimens and telemedicine, can reduce barriers to accessing STI services and should be made available where possible. Services should utilize evidence-based interventions including same-day treatment, evidence-based guidelines and partner notification. STI services should be accessible in settings where individuals are more likely to seek care such as at PHCs and community health services. <p>Testing and diagnosis</p> <ul style="list-style-type: none"> Develop national STI policies and guidelines, including screening strategies based on available epidemiological data, considering the following: <ul style="list-style-type: none"> all individuals tested for HIV should also be tested for syphilis; as technology becomes available, expand screening opportunities for <i>Chlamydia trachomatis</i> and <i>Neisseria gonorrhoeae</i> with next generation lower cost point-of-care diagnostic tests;

No.	Areas of implementation	Country actions
48	An effective STI service continuum (contd.)	<ul style="list-style-type: none"> laboratory capacity should be developed to improve diagnosis of symptomatic and asymptomatic STI. Quality assurance systems should be established. <p>Treatment</p> <ul style="list-style-type: none"> Evidence-based national guidelines on managing STI should be developed based on WHO guidelines (32). Guidelines should include consideration of asymptomatic screening and/or treatment based on risk in line with WHO recommendations. Same-day treatment for curable STI should be made available. Hesitancy to IM benzathine penicillin for syphilis should be addressed. Retention and referral mechanisms for those needing ongoing care should be established. <p>Partner notification and contact tracing</p> <ul style="list-style-type: none"> Strategies for establishing voluntary partner notification and treatment should be developed and implemented, ensuring that services are accessible and confidential. Such strategies are crucial to avert further transmission of STI and reinfection. Evidence-based strategies, such as expedited partner treatment and voluntary provider-assisted referral of sexual partners could be adapted to local contexts. Social network-based approaches developed for HIV testing could be adapted to reach and offer partner management services for the sexual partners of those diagnosed with other STI. Innovations in contact tracing for COVID-19 should be explored, including through the use of digital platforms to support partner testing. <p>The care cascade</p> <ul style="list-style-type: none"> The care cascade should be monitored to determine where loss to follow up is occurring. This needs to be addressed. Services were disrupted substantially during the COVID-19 pandemic, and some are yet to reach pre-pandemic levels of functioning. Efforts to improve resilience of services and regular monitoring will be required.

Fig. 16: The STI reinfection service process



No.	Areas of implementation	Country actions
49	Reduce and eliminate vertical transmission	<ul style="list-style-type: none"> ⊙ Several STI, including HIV, syphilis, gonorrhoea, chlamydia, herpes simplex virus, and HTLV-1 can be transmitted vertically. ⊙ National programmes should reduce vertical transmission of STI with a focus on triple elimination, through: <ul style="list-style-type: none"> ⊙ implementation of STI services at the PHC level, taking a syndromic approach to diagnosis and treatment, with secondary and tertiary facilities providing diagnostics-driven treatment; ⊙ screening for maternal syphilis early in pregnancy, using recommended point-of-care tests in ANC and prompt treatment of seropositive women (at least four weeks prior to delivery with intramuscular benzathine penicillin G, a long-acting penicillin). This cures syphilis in both mother and foetus and prevents congenital syphilis (25); ⊙ for syphilis, screening and treatment should ideally be in the first ANC visit; ⊙ follow up infants born to untreated mothers with syphilis, or mothers not treated with benzathine penicillin G; ⊙ coverage of prevention of mother-to-child transmission (PMTCT) programmes should be prioritized to achieve the objectives of triple elimination of MTCT of HIV, syphilis and hepatitis B; ⊙ provide timely identification and treatment of pregnant women, their sexual partners and their exposed infants and young children (25); ⊙ undertake primary prevention of new infections in women and girls of reproductive age and their sexual partners. ⊙ Other actions to be considered after triple elimination interventions are: <ul style="list-style-type: none"> ⊙ administer routine prophylaxis for ophthalmia neonatorum where prevalence of chlamydia and gonorrhoea is high and mothers are not routinely screened; ⊙ implement suppressive herpes simplex virus therapy for women with suspected primary genital herpes during the last trimester of pregnancy.

5.5 Strategic Direction 2: optimize systems, sectors and partnerships

No.	Areas of implementation	Country actions
50	People-centred and decentralized services (contd.)	<p>Provide people-centred, decentralized and integrated STI services and improve coverage of services.</p> <p>Integration into primary health care</p> <ul style="list-style-type: none"> Integrating STI services into PHC is essential. This is in line with the goal of the SE Asia Regional Strategy for PHC 2022–2030 to achieve UHC, health security and the health-related SDG targets by 2030 through a PHC-oriented health system (33). Develop a package of services which can be delivered in primary care, including in areas of low STI prevalence. This could include dual HIV and syphilis point-of-care testing, hepatitis B vaccination and a syndromic approach to STI treatment. Develop clear pathways and indications for primary-care referral to secondary or tertiary facilities where further services such as chlamydia and gonorrhoea testing may be available. Expand sexual health education and training of all health-care workers to ensure that all individuals who seek sexual health services can do so in an environment free from stigma and discrimination and receive high quality, acceptable care. Providing non-stigmatizing, rights-based, high quality STI services in a range of settings including primary care will improve coverage. <p>Other areas for integration</p> <ul style="list-style-type: none"> Countries should develop appropriate models for integration and linkage based on their context and health system characteristics. The HIV service delivery model could be adapted for integration and decentralization of STI services. Linkages, collaboration and integration between STI services and other health services may include: <ul style="list-style-type: none"> adolescent health services and school health education services family planning maternal and neonatal care immunization NCDs, mental health, and health promotion strong referral mechanisms with cancer services. Encourage and work with the private sector, nongovernmental organizations (NGOs) and community groups to develop innovative approaches and collaborations to scale up the prevention initiatives, access to vaccines, laboratory services, treatment and care.

No.	Areas of implementation	Country actions
50	People-centred and decentralized services (contd.)	Community-centred care for key populations <ul style="list-style-type: none"> Develop service delivery models to make high-quality, non-stigmatizing STI services accessible and acceptable to priority populations. Develop decentralized and differentiated service delivery models of ensuring equity in service access for key populations and reaching those who are not yet linked to services, such as in rural areas. Integration of service delivery for key populations should involve representatives of affected communities and be separately addressed with a clear definition of coverage and impact targets. Services should be delivered within/alongside comprehensive single window services for transgender persons.
51	Mobilize funding	<p>Mobilize additional funding to support the expansion of STI prevention and treatment services.</p> <ul style="list-style-type: none"> Political support and effective advocacy are needed, with the involvement of key populations. Increase awareness of the public health impact of STI and secure adequate funding to address this impact. STI programmes need to be costed and included in the NSP for hepatitis, HIV and STI. STI services need to be included in the PHC service package funded by governments and health insurance. Key medications need to be included in essential medicines lists.
52	Equitable and reliable STI commodities	<p>Ensure equitable and reliable access to high-quality and affordable medicines, diagnostics, vaccines, condoms and other health products for STI.</p> <ul style="list-style-type: none"> Leverage integrated procurement and supply chain mechanisms by: <ul style="list-style-type: none"> pooled procurement of essential STI medicines including benzathine penicillin, diagnostics and reagents; optimization of technical resources, training and capacity enhancement across HIV, hepatitis and STI.

5.6 Strategic Direction 3: generate and use data to drive decisions for action

No.	Areas of implementation	Country actions
53	Strengthen STI laboratory capacity	<p>Enhance laboratory capacity to improve case management and surveillance of STI.</p> <ul style="list-style-type: none"> Improved screening for asymptomatic infections is needed to monitor and control disease, as STI are often asymptomatic. While syndromic management strategies are highly effective, targeted antibiotic treatment will become more important in an era of accelerating AMR. Develop country-specific, risk-based screening strategies targeted at key populations and vulnerable communities, considering laboratory requirements for the different health-care levels, resourcing, staff training and commodities. Syphilis screening should be prioritized. Gonorrhoea and chlamydia screening should be undertaken where feasible. Laboratory capacity should be expanded at all levels including laboratory workforce capacity through training and adoption of new technologies
54	AMR monitoring	<p>There is widespread resistance to most medicines used to treat gonorrhoea in many parts of the world. Other STI pathogens with potential AMR include <i>Mycoplasma genitalium</i> and <i>Trichomonas vaginalis</i>.</p> <p>National programmes should monitor the patterns of AMR to inform treatment recommendations and policies.</p> <ul style="list-style-type: none"> Strengthen and expand surveillance and monitoring of treatment failures and participate in building regional networks of laboratories to perform gonococcal culture and antimicrobial susceptibility testing. Use data obtained through antimicrobial surveillance to regularly update national treatment guidelines and policies. Strengthen national drug regulations and prescription policies and increase awareness of the correct and standardized use of antimicrobial agents among health-care providers and consumers, especially in priority populations.
55	STI surveillance	<p>Strengthen STI surveillance and monitoring.</p> <ul style="list-style-type: none"> There are four core components of STI surveillance: case reporting, prevalence assessments, assessment of the aetiology of STI syndromes and monitoring of AMR. In many countries, STI surveillance systems rely on syndromic case reporting. Strengthening surveillance will help ensure that countries have the relevant data to inform decision-making. Combinations of syndromic and aetiological reporting have been used in several countries and could be adapted elsewhere.

No.	Areas of implementation	Country actions
		<ul style="list-style-type: none"> STI surveillance systems should be developed by expanding on and integrating with HIV reporting systems including integrated behavioural and biological surveys (IBBS). Strengthening surveillance will require investments in data capacity and strengthening in-country laboratory capacity. In countries where private sector laboratories, pharmacies and clinicians provide a substantial proportion of STI services, it is important to promote regular reporting from these providers. Data should be disaggregated by sex, age, socioeconomic status, geography and other relevant population characteristics in alignment with national priorities to monitor equity in access and outcomes. Reporting systems should also collect data on other health outcomes related to STI such as congenital syphilis.

5.7 Strategic Direction 5: foster innovations for impact

This section describes STI-specific actions required to foster and disseminate innovations for accelerated impact. The actions in this section should be implemented in conjunction with the relevant integrated actions.

While countries may be able to support all of the below, collaboration with partners within and outside of the Region will allow early exposure and access to new innovations.

No.	Areas of implementation	Country actions
56	Innovations in prevention	<p>Identify, evaluate and scale up best practices in preventing STI.</p> <ul style="list-style-type: none"> Advances in health promotion and care such as HIV prevention services and dissemination of health information using social media should be assessed for their relevance to STI and scaled up as appropriate.
57	Innovations in diagnosis and treatment	<p>Monitor development of and adopt innovations in STI diagnostics and treatment to address local challenges.</p> <ul style="list-style-type: none"> Consider implementation of self-sampling, which has been shown to increase testing uptake. This should be considered where possible for diagnostic testing. Use low-cost, rapid point-of-care diagnostic tests for asymptomatic screening where access to diagnostic laboratory facilities is limited, as well as for new point-of-care and home-based diagnostics. Support rapid multiplex diagnostic platform development. increase access to molecular diagnostic tests to identify and characterize AMR.



6. Implementing the Integrated Regional Action Plan

Effective implementation of the I-RAP for viral hepatitis, HIV and STI requires strong leadership, partnerships, solidarity and accountability, including multisectoral action through a whole-of-government and whole-of-society “health in all policies” approach. This chapter presents the key operational considerations for implementation of the Action Plan.

6.1 Political advocacy and commitment

Political commitment is of critical importance for effective implementation of the I-RAP. At the national level, this means country ownership on the nature and extent of the problem and the programmatic solutions required to address viral hepatitis, HIV and STI.

At the regional level, the Action Plan will bridge the gap between the 2021 and 2030 SDGs. Each epidemic requires strengthened political commitment and a renewed strategic focus to guide the final push to reach the SDGs. This should be reflected in active leadership of the political executive in formulation of policies, NSPs and implementation strategies and providing financial support at the national and subnational levels. Apart from the political executive, the active participation of affected persons’ representatives at the national and subnational levels will be critical. It will seek to preserve an individualized approach to each disease area while also emphasizing important synergies to be found in combating viral hepatitis, HIV and STI collectively to achieve elimination.

6.2 Governance supporting the integrated model of service delivery

Integrated regional and national action to address viral hepatitis, HIV and STI is dependent on strong governance at the national, provincial and local levels. National task forces responsible for the development and implementation of integrated national action plans must ensure that integration promotes impact, especially for viral hepatitis and STI programmes, which have traditionally attracted less attention and funding. Integration must be defined so that the concept is similarly understood across the health sector and by partners.

The governance of integrated national action should fall under the broader UHC agenda, including through PHC platforms. This includes UHC for key populations. Integration should encompass the national and subnational policy level, the service level and the community impact.

Triple elimination of vertical transmission of HIV, syphilis and hepatitis B infection as detailed in Chapter 2 is a strong example of integration, possessing policy, service impact and M&E with an associated validation mechanism.

No.	Areas of implementation	Country actions
58	Effective and inclusive governance	<p>Political commitment to national governance structures and costed strategic plans are necessary to guide integrated national responses to viral hepatitis, HIV and STI.</p> <ul style="list-style-type: none"> Encourage national approaches to governance through the establishment and maintenance of national task forces for integrating viral hepatitis, HIV and STI action, implying collaboration across sectors and stakeholders including state or provincial governments, diverse CSOs, the private sector and communities, in a whole-of-government and whole-of-society approach. Conduct structural integration of Ministry of Health organograms on viral hepatitis, HIV and STI, with inclusion of key populations as a focus across all three disease areas. Ensure meaningful engagement of communities and civil society including all key populations in national policy formulation and implementation, promoting synergies with broader health governance structures and plans. Provide leadership that is representative across the health system and specifically in HIV, hepatitis and STI to include women and people from affected communities.

The HIV and STI programmes are integrated in a number of countries as most of the populations vulnerable to these infections are common. Almost 90% of new infections of HIV in the Asia-Pacific are among key populations and their partners. It is therefore relatively easier to carry on horizontal integration from the top level of governance to field service delivery .

In the case of viral hepatitis, programmes are designed and implemented through the PHC system and national health missions as a part of the general health system. It is noticed that in this process, the genuine needs of key populations get affected, as many of them do not have access to health system-based services such as testing, treatment, vaccination, etc. The level of involvement differs even within hepatitis between hepatitis B and C. In some of the SE Asian countries, hepatitis C treatment is available as a part of health care or national programmes but not for hepatitis B.

While attempting an integrated model of governance, it is therefore important to build in adequate flexibility for countries to adopt a model suitable to their needs that fits into their sociopolitical context. The answer lies in adopting a client-centred approach rather than a disease-centred one for integration. While hepatitis B and C programmes for general populations can continue to be delivered through the general health-care system, these services for key populations need to be organized with strong community participation, integrating these with HIV and STI services. Keeping these requirements in mind, the following structures of governance are suggested for countries to adopt based on their needs.

Total integration (for smaller countries)

The three programmes should be brought under a single senior level functionary as Director of hepatitis, HIV and STI programmes. The three programme lines can be managed through senior level technical deputies under the director. This arrangement can be replicated at the provincial/district level as well. Budgets for the three programmes should be gradually brought under a single budget line. This could be an evolving process stretched over a year or two. Fund flow to the implementation level should take place through a single budgetary channel.

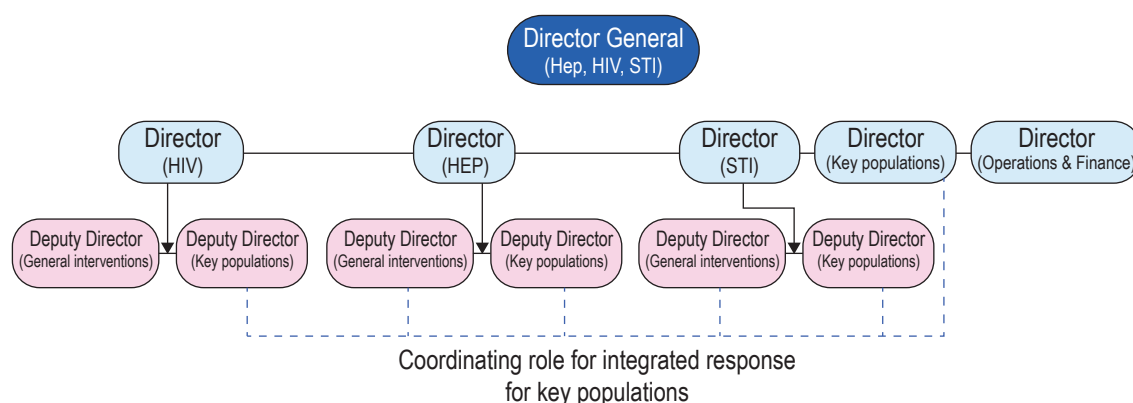
At the field level, the technical staff working on the three programmes should be retrained and redeployed as composite teams, sharing accommodation and testing services and dispensation of medicines. Their salary levels should be redefined to avoid frustration and demotivation due to redeployment.

This model works out well for smaller countries with a limited number of technical functionaries and technical service facilities at the field level. Running parallel line programmes for all the three diseases will not be cost effective in such countries.

Partial integration

In the partial integration model, the political decision to bring the three disease control programmes under a single umbrella of governance would still be necessary, both at the federal and provincial levels. At the senior management level, a senior functionary in the Health Ministry should be designated as the Director General (DG) of the three programmes. The DG should act as the chief coordinating agency for the integrated programme with the assistance of three senior-level functionaries as the directors for each of the three programmes. For the hepatitis programme, a separate functionary should look after linkages to the national health mission and health systems for programmes dealing with general populations such as vaccination of children, testing and treatment at the PHC level, blood safety, infection control, etc. For key populations, such services should be coordinated by the second-level functionaries who will ensure involvement of communities of key populations through community-based programmes and also establish linkages with the PHC for providing hepatitis related services (Fig. 17).

Fig. 17. Example organogram for ministries of health implementing Integrated viral hepatitis, HIV and STI programmes, including focused actions to address these among key populations



A similar pattern should be replicated at the provincial level. In countries like India where autonomous state AIDS control societies are functioning for HIV and STI programmes, a separate functionary for hepatitis should be added to the team to service the needs of key populations and establish linkages with state health systems and the PHC system. General population services for hepatitis should continue to be delivered through the health system.

At the district level, the district medical/health officer responsible for disease control should coordinate the activities of the field level functionaries of all the three programmes through a reporting system established under the integrated programme. A district-level action plan should be prepared to look at the technical needs of the integrated programme and to retrain and redeploy the technical staff.

6.3 Active participation of communities of key populations in delivery of services

Addressing viral hepatitis, HIV and STI in key populations in the SE Asia Region is critical to attaining the elimination goals of 2030, particularly regarding the incidence of these infectious diseases. This has been elaborated under shared actions (Chapter 2) and in individual disease chapters. In addition, the following actions are warranted to strengthen community involvement in the response.

No.	Areas of implementation	Country actions
60	Active participation by key populations	<ul style="list-style-type: none"> ⦿ National actions should include clear guidance on community system strengthening and the differences between community-led, community-based and community-friendly approaches. ⦿ Social contracting of CBOs and NGOs for delivery of prevention and treatment services should be actively pursued by respective countries. ⦿ The COVID-19 context has impacted programmes in all countries but has also accelerated the use of various innovative approaches to simplify service delivery and meet the needs of people in the context of the pandemic, including with extensive engagement of all communities. These should be effectively pursued further even in the post-pandemic period.

6.4 Strategic information – integrated data systems

Strategic information should be positioned as an important cross-cutting area for the three diseases. There is a need to strengthen surveillance and M&E systems for all disease areas and to promote digital systems and data analysis and use at the central and local levels. Drawing on three generations of HIV surveillance, there is a need to strive towards integrated disease surveillance for viral hepatitis, HIV and STI, with person-centred monitoring supported by a digitally-enabled M&E framework through open source platforms, where possible.

The general principles for strategic information across viral hepatitis, HIV and STI within the I-RAP are:

- ⦿ leverage existing HIV and integrated surveillance systems to include viral hepatitis and STI;
- ⦿ identify common metrics and indicators that are feasible to collect and utilize;

- ⦿ strengthen overall health information and surveillance systems to support integration at national and subnational levels;
- ⦿ improve reporting on all three disease areas, including strengthening local data availability and granularity by population and location.

Strategic Direction 3 details shared actions and actions by disease category across this document.

6.5 Optimization of technical resources, training and capacity enhancement

Technical and equipment resources available for the three diseases can be optimally used for the integrated delivery of services. Capacity enhancement of technical personnel should be implemented in a phased manner to enable the health workforce to manage testing, treatment and other services in an integrated model.

6.6 Integration and strengthening of laboratory services

Integration of laboratory services for viral hepatitis, HIV and STI should occur through the effective and efficient use of existing infrastructure. Integration of laboratory services includes the utilization of multiplex and traditional testing modes, both rapid and platform based. It includes the integration of test reporting, reporting of tests to central registries which are themselves integrated and the use of unique identifiers to prevent duplication and allow integration with and linkages to existing reporting systems. This includes integrating with or linking to other disease reporting and surveillance systems to ensure data linkage and optimize patient care while at the same time providing informed health and disease surveillance.

6.7 Procurement and logistics

Economies of scale and resultant price reductions can be secured by pooled procurement of essential medicines, diagnostics and reagents. Countries are encouraged to pool procurement, at least at the subnational level and ideally at the national level and consider exploration of supranational pooled procurement mechanisms.

6.8 Innovations and how they help in strengthening the regional response

Countries are encouraged to take an evidence-based approach to the adoption of new technologies, including ensuring accelerated regulatory approval pathways are in place to expedite access to affected populations. Technological solutions to improving access including developments during the COVID-19 pandemic should be utilized to optimize the effective rollout of key interventions and reduce the cost-of-service delivery.

6.9 Risk mitigation strategies for implementation of the Integrated Regional Action Plan

The success of the I-RAP depends to a large extent on the extent of political commitment and ownership of governments in the Region to achieve the goals set out in the Plan. Competing demands and priorities (such as those witnessed during the COVID-19 emergency) from other health and developmental issues could continue to divert the attention of the political and administrative leadership away from an organized response to the three diseases. Integration of these, and the new I-RAP must also focus on overcoming challenges. This can pertain to general issues such as the need for adequate funding, or overcoming specific programme challenges, e.g. the availability and maintenance of cold-chain infrastructure.

Risk mitigation for the I-RAP will be supported by WHO and will include a risk analysis outlining various threats to the realization of the Action Plan targets. These may include:

- ⦿ lack of political support for the integrated strategy
- ⦿ lack of ownership for the integration model at the implementation level – turf issues with existing line managers
- ⦿ withdrawing of international funding (GF and PEPFAR for HIV)
- ⦿ continuing criminalization and stigmatization of key populations
- ⦿ natural and public health emergencies engaging policy-makers' attention.



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7. Monitoring and evaluation

Currently, viral hepatitis, HIV and STI have separate M&E frameworks. In an integrated model, a national unified M&E framework should be developed and operationalized at both the national and provincial levels, using packages such as DHIS2. This M&E framework should follow recommended guidelines by WHO and other technical agencies, including preparing monitoring systems and measuring tools required to support progress towards elimination and its validation. A position of Director (M&E) can function under the overall direction of the Director General of the integrated programme to coordinate the monitoring functions across all the three programmes (see organogram at Fig. 17).

At the regional level, data collection and analysis efforts will be aligned with the Global AIDS Monitoring process led by UNAIDS and partner processes and the Global Hepatitis Reporting System. In all monitoring and reporting activities, WHO will ensure that data are sufficiently disaggregated by sex, age and other population characteristics to track inequalities, identify gaps and give priority to efforts to reach the populations that are being most left behind.

Progress reports will be made to the Regional Committee for SE Asia in 2024 (mid-term review) and a final report following the completion of the plan will be shared in 2026.

Towards an integrated DHIS-2-based system for HIV, hepatitis B and C monitoring and reporting in Bhutan

Until 2019, Bhutan relied on paper-based recording and reporting for HIV. As there was no well-defined, structured reporting for hepatitis, monitoring individual patient data by health-care providers at the local level and the aggregate data by public health programme officials at the national level were challenging. As a way forward from the WHO regional workshop on the development of costed action plans for viral hepatitis in South-East Asia Region in August 2019, Bhutan decided to have an integrated reporting and monitoring mechanism for HIV and hepatitis using the DHIS-2 platform.

Bhutan carried out an extensive review of the current recording and reporting system of HIV and hepatitis and revised all the necessary formats needed for the development of the integrated DHIS-2 system. Accordingly, with the financial and technical support of WHO Regional Office, the country was able to develop a comprehensive integrated DHIS-2 system in 2021. The integrated DHIS-2 system encompasses HIV prevention, testing, treatment and case-based surveillance to carry out a detailed risk assessment of the diagnosed HIV cases. Similarly, for hepatitis, the integrated DHIS-2 system includes a DHIS-2 tracker for registering and maintaining individual patient data and its monitoring over a period of time by health-care providers. As a part of the rollout, the country has trained all the end users on the new integrated DHIS-2 system and entered the data for the last three years retrospectively to set the baseline information into the new system. This will help the country in generating the required strategic information on a timely basis to improve the overall programme planning towards ending the epidemics of AIDS and viral hepatitis by 2030.

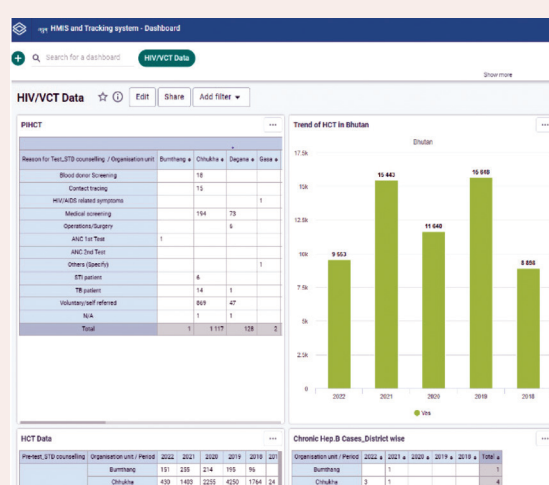


Photo Credit: Ministry of Health, Government of Bhutan



8. WHO Actions to keep the Integrated Regional Action Plan on track

WHO will play a key role both at regional and national levels in closely monitoring progress across all the three programmes and advocacy and technical support to the national programme directors.

The Regional Office has to work closely with WHO headquarters to ensure that regional action is fully aligned with the GHSS for HIV, viral hepatitis and STI for the period 2022–2030, including those systems supporting the measuring of progress towards the elimination goal.

WHO will support all forms of partnership across the Region to maximize synergies and collective momentum to support full implementation of the I-RAP.

WHO will implement the actions as listed below in support of the country actions outlined in respective chapters.

No.	Areas of implementation	WHO Actions
1	Integration of viral hepatitis, HIV and STI	<p>At the regional and country levels, WHO will support full integration of efforts to address viral hepatitis, HIV and STI through:</p> <ul style="list-style-type: none"> ◉ leadership ◉ partnership ◉ driving awareness ◉ boosting effectiveness ◉ maintenance of norms and standards ◉ direct technical assistance ◉ supporting and driving innovation through partnerships ◉ supporting countries in their efforts to measure progress towards ultimate elimination. <p>WHO will define the key elements of integration at the political level and within health systems and work to obtain country level buy-in, in conjunction with other stakeholders.</p>

2	Leadership and partnership	<p>WHO will provide regional leadership across viral hepatitis, HIV and STI by:</p> <ul style="list-style-type: none"> continuing to working closely with Member States and programmes; conducting advocacy for adequate and sustained funding in the international and domestic space through convening of funding agencies to leverage financing; supporting dedicated expertise and capacity on viral hepatitis, HIV and STI at the regional and country offices to ensure that support is provided in and for the countries with the highest disease burden; lead advocacy efforts on the need to address the disease burden in key populations and those disproportionately affected.
3	Advocacy and awareness	<p>WHO will strongly advocate for integrated action and building of awareness to address viral hepatitis, HIV and STI in the Region through all its activities including:</p> <ul style="list-style-type: none"> driving thematic development and partnership for World Hepatitis Day and World AIDS Day to raise awareness in the affected and general communities; developing communications toolkits and providing guidance; partnering with the World Hepatitis Alliance and other agencies to pool messaging resources and maximise reach; working with partners in strong advocacy to convince governments that legal regulatory reforms are essential for the achievement of elimination; partnering with civil society and community organizations and other stakeholders to eliminate the stigma and discrimination associated with viral hepatitis, HIV and STI in the Region.
4	Norms and standards	<p>Through collaboration with WHO headquarters and country offices, the WHO Regional Office for SE Asia will:</p> <ul style="list-style-type: none"> contribute to the development of evidence-based normative guidance and other relevant tools and service delivery approaches for viral hepatitis, HIV and STI and aid their dissemination to countries in the Region; support countries to align their national guidance in viral hepatitis, HIV and STI with recommended WHO norms and standards; support countries to develop tools and systems for measuring progress towards the ultimate validation of the elimination of viral hepatitis, HIV and STI in accordance with global 2030 goals; support the development of regional laboratory networks and standards to support quality management systems for laboratories.

5	Innovation	<p>WHO will engage at the highest levels with partners including research institutes to ensure that the Region has access to the most recent innovations in viral hepatitis, HIV and STI. This includes but is not limited to the following:</p> <ul style="list-style-type: none"> ⦿ innovations in service delivery, including the use of new digital technologies; ⦿ innovations in testing, including new rapid tests and other means to improve access to screening, especially among key populations; ⦿ innovations in treatment including new formulations for hepatitis antivirals, HIV antiretrovirals and the deployment in innovative ways newer PrEP products; ⦿ supporting efforts to ensure that all new innovations are adapted and implemented with a people-centred approach; ⦿ supporting the engagement of civil society and communities in the adoption of any innovation.
6	Technical support	<p>WHO will continue to provide technical support to Member States in SE Asia for adoption, adaption and implementation of the I-RAP at the country level by the following measures:</p> <ul style="list-style-type: none"> ⦿ support tailored technical assistance to individual countries to promote equity and sustained integrated action across viral hepatitis, HIV and STI; ⦿ Identify key gaps in research and support collaboration across the Region; ⦿ work within WHO to support inter-programmatic collaboration for countries and other UN agencies working on immunization and combating of NCDs; ⦿ support national programmes to strengthen regulatory and procurement mechanisms to support reductions in cost and maintenance of product quality, including through the WHO prequalification mechanism.
7	Monitoring, reporting and validation of progress	<p>WHO Regional Office for SE Asia will use global standards for regional adoption for collecting, analysing and using health data related to viral hepatitis, HIV and STI and support countries to build the capacity of national health data platforms to measure progress.</p> <ul style="list-style-type: none"> ⦿ Support the standardized assessment on the situation and response to viral hepatitis, HIV and STI including the development of national investment cases and other means of assessing the population-level, epidemiological and economic impact of national responses. ⦿ Work with countries to prepare the tools necessary to measure progress in preparation for the validation of the elimination of viral hepatitis, HIV and STI by 2030. ⦿ Support monitoring of progress to obtain domestic funding for an integrated response to viral hepatitis, HIV and STI. <p>WHO Regional Office for SE Asia, in close collaboration with Member States, will report to the Regional Committee regarding progress in implementing the I-RAP in 2024 and 2026.</p>



9. Financing of the Regional Action Plan

For a sustainable response, the I-RAP must be fully funded as part of the broader efforts to increase overall investments in health at the national level. Country responses to viral hepatitis, HIV and STI face different financing challenges, which national financing systems must address. WHO Regional Office for SE Asia supports countries to achieve continued and predictable funding, reduction of catastrophic expenditures on health and affordable access to health commodities.

The following costings have been drawn from an analysis of costs of implementing the Global Health Sector Strategies on viral hepatitis, HIV and STI (2022–2030) (1). These estimates are developed through aggregated costs associated with implementation of the interventions to achieve agreed global elimination program and impact targets. These estimates provide some indication of the finance resources required for implementation of the I-RAP, consistent with the GHSS, over the coming years. These estimates are not economic impact analyses using mathematical modelling, and should not be interpreted as such.

9.1 HIV

WHO developed HIV costing based on the UNAIDS Global AIDS Strategy (2021–2026) unit costs, national population size estimates and UNAIDS Global AIDS Monitoring System findings. Most unit costs are assumed to remain constant from 2021 to 2030. However, ART costs are dynamic and are likely to continue changing in the next few years. For the countries of the Region, estimated annual resource needs are projected as US\$ 4.1 billion by 2025. Of this, 44% is estimated for prevention programmes and 25% for testing and treatment programmes.

(Source: UNAIDS HIV Financial dashboard December 2021.)

Table 7 gives the predictive costs for various key populations for the Region under various expenditure heads.

Table 7. HIV estimated unit costs by service for WHO SE Asia Region (in million US\$)

Key population	Expenditure	2022	2023	2024	2025	2026	2027	2028	2029	2030
Sex workers	Services	77	89	102	114	115	115	115	116	116
	PrEP	4	6	8	10	10	10	10	10	10
GBMSM	Services	159	186	215	243	244	244	245	246	247
	PrEP	88	132	177	222	223	224	225	226	227
Transgender people	Services	128	145	162	180	181	181	182	183	184
	PrEP	21	31	42	53	54	5	23	54	26

Key population	Expenditure	2022	2023	2024	2025	2026	2027	2028	2029	2030
PWID	Outreach/peer education	115	132	150	168	169	169	170	171	172
	PrEP	10	14	20	25	25	25	25	25	5
	NSEP	82	83	84	85	85	86	86	86	87
	OST	209	241	274	307	309	310	312	313	315
Prisoners and others in confined settings	Condoms	0	0	0	1	1	1	1	1	1
	NSEP	33	47	62	76	76	76	77	77	77
Adults (15+)	Condoms	236	244	253	261	263	265	266	268	270
PLHIV	Adult ART SD/labs	238	259	280	299	298	296	295	293	291
	Adult ARVs	584	567	541	508	505	502	498	495	492
	Paed ART SD	5	5	5	5	5	4	4	3	3
	Paed ARVs	27	27	27	27	24	22	19	17	15
Pregnant women	PMTCT	7	8	9	10	10	9	9	8	8
	Testing	151	163	176	189	2	2	2	2	2
	Societal enablers	273	289	310	333	328	338	345	350	352
	Above site level	394	433	472	512	484	478	482	488	478
	Programme management	305	335	365	396	374	369	373	377	370
	Total health sector RNM	3146	3440	3734	4024	3782	3732	3763	3809	3745

NSEP – Needle Syringe Exchange Programme; GBMSM – gay, bisexual and other men who have sex with men; ARV – antiretroviral; SD – standard deviation; RNM – resource needs model

Costs for programme management and above site-level costs include functions such as surveillance, information management, human resources, laboratory systems strengthening, procurement and supply chain management, law and policy.

Table 8 gives the predictive overall financial needs by country and year.

Table 8. Overall estimated resource needs by country per year for HIV (in US dollars)

Country	2022	2023	2024	2025	2026	2027	2028	2029	2030
India	1 808 613 120	1 986 555 914	2 172 585 934	2 366 317 209	2 213 874 732	2 193 200 518	2 229 328 171	2 270 354 965	2 202 644 033
Indonesia	589 154 278	691 769 430	793 158 157	891 429 814	852 279 107	849 295 349	853 731 830	865 902 634	884 054 640
Thailand	467 435 200	473 655 575	480 370 754	487 409 992	462 317 209	454 725 299	450 928 171	447 340 924	441 890 055
Myanmar	131 072 284	132 526 958	134 807 443	136 932 120	138 190 396	139 692 454	141 937 667	142 180 130	141 348 340
Bangladesh	93 137 645	106 528 001	122 232 543	139 639 606	143 662 113	147 417 914	149 736 082	150 852 583	151 846 777
Democratic People's Republic of Korea	45 564 002	48 592 068	51 511 784	54 422 348	53 736 027	53 423 960	53 786 805	54 146 891	54 922 506
Sri Lanka	37 791 204	42 514 711	47 571 900	52 924 009	52 640 020	53 026 437	53 294 681	53 216 816	53 232 056
Nepal	40 182 607	42 738 086	45 417 689	48 374 064	48 265 355	48 493 472	49 422 258	49 982 584	50 052 082
Timor-Leste	4 592 781	4 826 963	5 040 400	5 262 631	5 229 144	5 322 668	5 410 126	5 490 412	5 563 137
Bhutan	4 456 979	4 862 417	5 339 709	5 849 024	4 894 659	4 923 212	4 949 394	4 963 555	4 985 331
Maldives	3 070 143	3 078 387	3 158 878	3 268 935	3 234 490	3 242 077	3 247 167	3 251 245	3 236 516

9.2 Viral hepatitis

WHO used the Global Hepatitis Report, 2017 (34) as the baseline for all indicators except HBV incidence, which was obtained from the CDA Foundation's (CDAF) Polaris Observatory. Incidence and mortality measures were calculated against a denominator of the total population in 2019. Current average number of diagnostic tests and prices for diagnosis and treatment were applied.

For hepatitis C, treatment costs reflect the full course (3 months) of therapy. Sustained virological response (SVR) is assumed to be 95% and mortality rate 1.45%. Target diagnosis and treatment rates are shown in Tables 9 and 10, respectively.

Table 9. HBV estimated annual costs per person per intervention and treatment coverage

Cost, Rate	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cost (US\$)									
Screening cost	1.99	0.87	0.86	0.79	0.78	0.75	0.73	0.69	0.65
Laboratory costs – treatment eligible	18	15	15	15	15	15	15	15	15
Laboratory costs – treatment ineligible	18	15	15	15	15	15	15	15	15
Treatment cost (annual)	55.99	86.61	83.62	68.22	64.02	58.72	52.08	43.81	33.60
Rate (%)									
Target diagnosis rate	10	17	27	39	54	68	79	86	90
Target treatment eligible rate	33	35	39	43	48	53	56	59	60
Target treatment rate	102	100	97	94	90	86	83	81	80
Mortality change	93	88	81	72	61	51	43	38	35
Mortality rate – all causes	0.86	0.88	0.91	0.94	0.91	0.94	0.96	0.99	1.03
Incidence change	75	70	62	51	39	28	19	13	10

Table 10. HCV estimated annual costs per person per intervention and treatment coverage

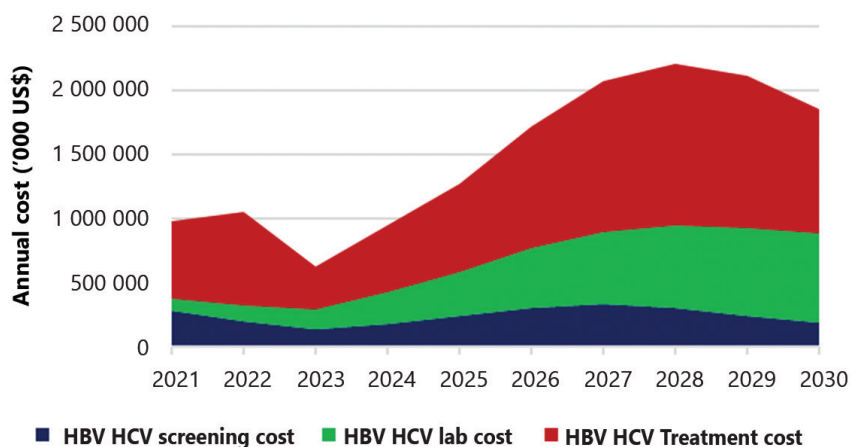
Cost, rate	2022	2023	2024	2025	2026	2027	2028	2029	2030
Cost (US\$)									
Screening cost	1.07	0.77	0.77	0.73	0.72	0.71	0.69	0.67	0.65
Laboratory costs	18	15	15	15	15	15	14	14	14
Treatment cost per person	95	77	77	75	74	74	73	71	70
Treatment cost total	671.15	405.97	405.97	373.35	364.44	353.21	339.14	321.63	300.00
Rate (%)									
Target diagnosis rate	13	19	27	36	46	58	71	81	90
Target treatment rate	14	19	26	33	42	53	63	73	80
Average SVR	95	95	95	95	95	95	95	95	95
Mortality change	105	100	93	85	75	64	53	43	35
Mortality rate (all causes)	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Incidence change	81	75	68	60	50	39	28	18	10

SVR – sustained virological response

Table 11 and Fig. 18 give the HBV and HCV elimination programme cost till 2030.

Table 11. HBV and HCV elimination programme cost in WHO SE Asia Region: 2020–2030 ('000 US\$)

	2020	2025	2028	2030
HBV HCV screening cost	9202	240 499	302 019	190 809
HBV HCV lab cost	11 778	343 913	644 709	697 375
HBV HCV treatment cost	81 096	684 719	1 259 941	966 482
Total HBV & HCV programme cost	102 076	1 269 131	2 206 670	1 854 666

Fig. 18. HBV and HCV elimination programme estimated cost in WHO SE Asia Region: 2020–2030 ('000 US\$)

9.3 STI

WHO used interim 2020 estimates for incidence and prevalence rates of four curable STI. Treatment of complications of untreated STI, such as pelvic inflammatory disease (PID), was quantified as 20% of untreated female incident gonorrhoea and chlamydia episodes (35,36).

Clinical STI management was costed according to WHO STI treatment guidelines, with increasing aetiological management over time. Most unit costs were held constant from 2020 to 2030, with price declines for gonorrhoea and chlamydia testing assumed. Additional costs of 14% were applied for intervention implementation costs. For all interventions and activities, a linear coverage scale-up from 2020 baseline to 2025 targets and between 2025 and 2030 targets was assumed. Unit costs for STI diagnostics and medicines were obtained from UNICEF's Supply Catalogue. Tables 12 and 13 give the service delivery unit costs for STI.

Table 12. Service delivery estimated unit costs for STI – stable

Service	Unit cost (US\$)	Time trend
Syphilis screening: RDT (SD bio line)	0.71	Constant
Syphilis RPR confirmation	0.09	Constant
Wet mount microscopy: trichomonas	0.39	Constant
Herpes GUD treatment: acyclovir 400 mg	1.05	Constant
Syphilis treatment: benzathine penicillin 2.4 MU	0.86	Constant
Chlamydia (and mycoplasma) treatment: azithromycin 500 mg	0.47	Constant
TV and BV treatment: metronidazole 500 mg	0.30	Constant
Mild/moderate PID treatment: ceftriaxone + 2 outpatient visits	3.21	Constant
Severe PID treatment: ceftriaxone + doxycycline + metronidazole + 2 inpatient days	9.01	Constant
Treatment of antibiotic resistant gonorrhoea after first-line treatment failure	25	Falling to 15 by 2030
Outpatient visit to test or treat for primary prevention and partner notification	4.7	Constant
Inpatient hospital day: apply two inpatient days per treatment of a severe PID episode	34	Constant
HPV vaccination, 2 dosages per patient	42.7	Constant
HPV screening, 1 woman 30-49 years of age:		
⊙ HPV DNA test	10.1	Constant
⊙ Visual inspection with acetic acid	2.0	
⊙ Papanicolaou test	1.8	

RDT – rapid diagnostic test; RPR – rapid plasma reagin; GUD – genetic ulcer disease; TV – *Trichomonas vaginalis*; BV – *Bacterial vaginosis*

Table 13. Service delivery estimated unit costs for STI – time varying

Year	NAAT/GenExpert NG+CT	Gonorrhoea treatment	Drug for gonorrhoea treatment
2020	16.9	0.95	Ceftriaxone 250 mg
2021	16.9	0.95	Ceftriaxone 250 mg
2022	15.7	1.92	Ceftriaxone 500 mg
2023	14.7	1.02	Ceftriaxone 500 mg
2024	13.7	1.08	Ceftriaxone 1 g
2025	12.7	10.5	50/50 ceftriaxone and new drug
2026	5.7	20	New drug
2027	5.7	20	New drug
2028	3.7	15	New drug price lowered
2029	3.7	15	New drug price lowered
2030	3.7	15	New drug price lowered

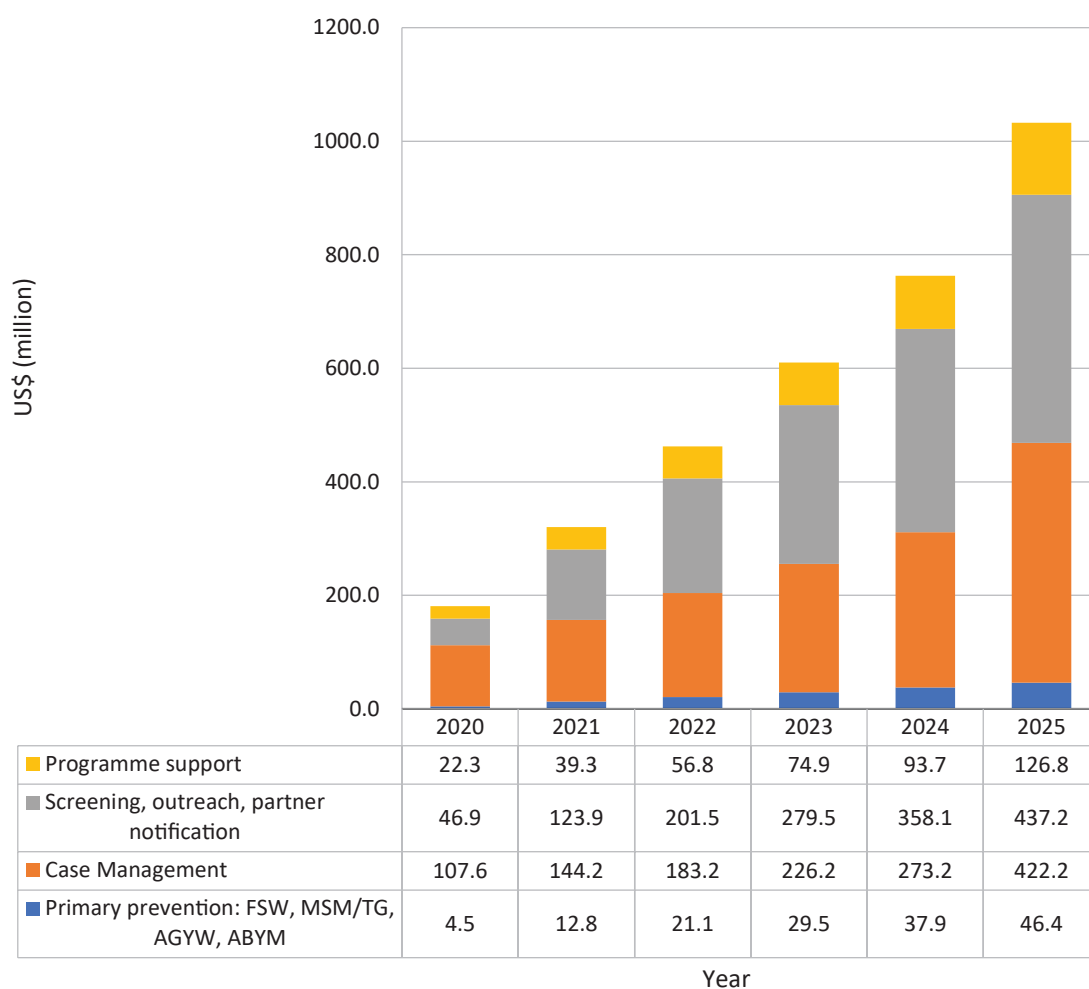
NAAT – nucleic acid amplification test; NG – *Neisseria gonorrhoeae*; CT – *Chlamydia trachomatis*

Table 14 gives the treatment resources for the Region.

Table 14. Estimated treatment resources for WHO SE Asia Region (million US\$)

Resource	Year	Million US\$
NAAT testing NG/CT clinic patients	2025	72
Metronidazole treatment, clinics	2025	12
Acyclovir treatment, GUD patients	2025	18
HPV vaccination	2025	78
HPV screening	2025	129
All STI and HPV services	2021	491
	2025	1063
	2030	1241

Fig. 19 gives the cost projections for the Region for the period 2022–2030. The graph estimates do not include HPV screening or vaccination.

Fig. 19. STI estimated cost projections for South East Asia, based on GHSS 2022–2030

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Annexures

Annex 1: Measurement framework

Tables A1–A6 present the shared and disease-specific impact indicators and targets across viral hepatitis, HIV and STI and the sources for these data. Additional disease-specific indicators and targets are also presented in Chapter 3 (viral hepatitis), Chapter 4 (HIV) and Chapter 5 (STI), respectively.

Table A1. Regional Impact indicators and targets for viral hepatitis, HIV and STI by 2025 and 2030

Disease area	Indicator	Baseline–2020 ^a	Targets–2025	Targets–2030
Viral hepatitis	HBsAg prevalence among children younger than 5 years of age (proxy for incidence)	0.94%	0.5%	0.1%
	Number of new hepatitis B infections per year (incidence)	256 700 (13 per 100 000)	130 000 (5 per 100 000)	42 000 (2.5 per 100 000)
	Number of new hepatitis C infections per year (incidence)	234 100 (12 per 100 000)	115 000 (6 per 100 000)	80 000 (4 per 100 000)
	Number of new hepatitis C infections among PWID per year	8 per 100	3 per 100	2 per 100
	Number of people dying from hepatitis B per year	179 000 deaths (9 per 100 000)	100 000 deaths (5 per 100 000)	60 000 deaths (3 per 100 000)
	Number of people dying from hepatitis C per year	38 000 deaths (2 per 100 000)	20 000 deaths (1 per 100 000)	10 000 deaths (0.5 per 100 000)
HIV	Number of people newly infected with HIV per year	140 000	41 000	35 000
	Number of people newly infected with HIV per 1000 uninfected population per year (SDG 3.3.1)	C0.05	0.035	0.025
	Number of children 0–14 years of age newly infected with HIV per year	9000	3000	1500
	Number of people dying from HIV/related causes per year (including disaggregation by HIV, cryptococcal meningitis, TB and severe bacterial infections)	94 000	32 000	30 000

Disease area	Indicator	Baseline–2020 ^a	Targets–2025	Targets–2030
STI	Number of new cases of four curable STI in adults (15–49 years) per year ('000)	59 677	47 742	21 273
	Number of new cases of syphilis in adults (15–49 years) per year ('000)	354	283	35
	Number of new cases of gonorrhoea in adults (15–49 years) per year ('000)	21 059	16 847	2106
	Congenital syphilis cases per 100 000 live births per year	145	<200	<50

Table A2. Regional Integration indicators and targets for viral hepatitis, HIV and STI for SE Asia by 2025 & 2030

Integration indicator	Baseline 2020	2025 target	2030 target	Source(s)
Number of countries that have taken a political decision to integrate the three national programmes of HIV, hepatitis and STI	2	8	11	MoH
Countries which have prepared fully-costed NSPs for integrated response and identified finances for funding the same	0	8	11	MoH
Countries where the three programmes have been brought under a common umbrella of governance	4	8	11	MoH
Countries where the health workforce of the three programmes have been retrained to work across all the three programmes	0	8	11	MoH
Countries where the CHWs have been given legal status and recognition at par with government health workers	1	3	11	MoH

Table A3. Regional Impact and coverage indicators, targets and milestones for viral hepatitis in SE Asia by 2025 & 2030

Indicator	Baseline – 2020 ^a	Targets – 2025	Targets – 2030	Disaggregation	Source(s)
Impact					
HBsAg prevalence among children younger than 5 years of age ^b (proxy for incidence) –	0.94%	0.5%	0.1%	Age, sex, geography	See source details and methodology in WHO Country Guidelines for the validation of the elimination of viral hepatitis (25)
Number of new hepatitis B infections per year (incidence)	256 700 (13 per 100 000)	130 000 (5 per 100 000)	42 000 (2.5 per 100 000)	Age, sex, geography	
Number of new hepatitis C infections per year (incidence)	234 100 (12 per 100 000)	115 000 (6 per 100 000)	80 000 (4 per 100 000)	Age, sex, geography, priority population	
Number of new hepatitis C infections among PWID per year	8 per 100	3 per 100	2 per 100	Age, sex	
Number of people dying from hepatitis B per year	179 000 deaths (9 per 100 000)	100 000 deaths (5 per 100 000)	60 000 deaths (3 per 100 000)	Age, sex, cirrhosis or cancer status	
Number of people dying from hepatitis C per year	38 000 deaths (2 per 100 000)	20 000 deaths (1 per 100 000)	10 000 deaths (0.5 per 100 000)	Age, sex, cirrhosis or cancer status	
Coverage					
Hepatitis B – percentage of people living with hepatitis B diagnosed ^c /and treated (initiated vs viral load suppression)	10.5%/4.5%	60%/50%	90%/80%	Age, sex, priority population	National programme
Hepatitis C – percentage of people living with hepatitis C diagnosed/cured	9%/7%	60%/50%	90%/80%	Age, sex, priority population	National programme
Percentage of neonates who have benefitted from a timely hepB-BD vaccine and from other interventions to prevent the vertical (mother-to-child) transmission of hepatitis B virus ^d	54%	70%	90%	Age, sex, priority population	WUENIC
Hepatitis B vaccine coverage among children (third dose) in those <1 year of age	91%	90%	90%	Age, sex, priority population	WUENIC
Number of needles and syringes distributed per PWID ^e (common HIV/viral hepatitis indicator)	157	200	300	Sex	National programme

Percentage of opioid-dependent PWID who receive OST	2.8% - 19.5% ^f	40%	40%	Age, sex	National programme
Blood safety – proportion of blood units screened for bloodborne diseases	80%	100%	100%	Geography	National programme
Safe injections – proportion of safe health-care injections	94.8%	100%	100%	Geography	National programme
Milestones					
Planning – number of countries with costed hepatitis elimination plans	2	11	11	N/A	MoH
Surveillance – number of countries reporting burden and cascade annually	3	8	11	N/A	MoH
Elimination of vertical (mother-to-child) transmission – number of countries validated for the elimination of vertical transmission of either HIV or hepatitis B or syphilis	3	5	11	N/A	MoH
Elimination – number of countries validated for elimination of hepatitis C and/or hepatitis B	0	2	11	N/A	MoH
Integration – proportion of PLHIV tested for/and cured from hepatitis C	Unreported	60%/50%	90%/80%	N/A	MoH

WUENIC – WHO/UNICEF estimates of national immunization coverage

^a Latest data for end 2020. Some targets use data from 2019 because of COVID-19 related service disruptions in the data reported for 2020.

^b Please note that the targets in this table are based on global targets and should be adapted to set targets for countries in relation to the national context. For example, in some countries a target for HBsAg prevalence among children younger than 5 years may be less than 0.1% or 0.2%, although the overall regional target should be 0.1%.

^c Denominator is estimated number of people living with hepatitis B virus (standardized population estimate).

^d In addition, the proportion of infants younger than 12 months of age who received the third dose of hepatitis B vaccine should also be measured as well as other indicators for preventing vertical transmission, such as maternal testing and prophylaxis.

^e As part of a comprehensive harm reduction strategy and in line with national priorities.

^f Wide variation between countries in the Region (not all countries reporting).

Table A4. Regional impact and coverage indicators, targets and milestones for HIV in SE Asia, by 2025 and 2030

Indicator		Baseline – 2020 ^a	Targets – 2025	Targets – 2030	Disaggregation	Source(s)
Impact indicators	Number of people newly infected with HIV per year	140 000	41 000	35 000	Age, sex, priority population, province/state	WHO/UNAIDS reporting
	Number of people newly infected with HIV per 1000 uninfected population per year (SDG 3.3.1)	0.05	0.035	0.025	Age, sex, priority population, province/state	WHO/UNAIDS reporting
	Number of children 0–14 years of age newly infected with HIV per year	9000	3000	1500	Age, sex, priority population, province/state	WHO/UNAIDS reporting
	Number of people dying from HIV/related causes per year^b (including disaggregation by HIV, cryptococcal meningitis, TB and severe bacterial infections)	94 000	32 000	30 000	Age, sex, priority population, province/state	WHO/UNAIDS reporting
	Number of countries validated for the elimination of vertical (mother-to-child) transmission of HIV, hepatitis B, or syphilis	3	5	11	Age, sex, priority population	WHO
Coverage indicators	Percentage of PLHIV who know their HIV status^c	77%	95%	95%	Age, sex, priority population, province/state	National programmes, community-led monitoring
	Percentage of people who know their HIV-positive status and are accessing ART^c	78%	95%	95%	Age, sex, priority population, province/state	WHO/UNAIDS reporting
	Percentage of PLHIV receiving treatment, who have suppressed viral loads^c	91%	95%	95%	Age, sex, priority population, province/state	WHO/UNAIDS reporting
	Percentage of people at risk of HIV who use combination prevention with a defined service package^d	Varies by key population. It is <50% on average		95%	Age, sex, priority population, province/state	WHO/UNAIDS reporting

Indicator	Baseline – 2020 ^a	Targets – 2025	Targets – 2030	Disaggregation	Source(s)
Condom/lubricant use at last sex with a client or non-regular partner	Varies by key population	90%	90%	Age, sex, priority population	WHO/UNAIDS reporting, community-led monitoring
Number of needles or syringes distributed per PWID^e – common HIV/viral hepatitis indicator	157	200	300	Province/state	WHO/UNAIDS reporting
Percentage of PLHIV and people at risk who are linked to integrated health services, including STI and viral hepatitis	Unreported	95%	95%	Priority population	National programmes
Milestones					
Stigma and discrimination – percentage of people living with viral hepatitis, HIV and STI and priority populations who experience stigma and discrimination	Partially reported	Less than 10%	Less than 10%	Priority group	MoH, community led monitoring
Laws and policies – percentage of countries that have punitive laws and policies	Varied by population	<3	<1	By law and priority population	Published regulations
Gender – prevalence of recent (past 12 months) cases of intimate partner violence among people aged 15–49 years	Unreported	<20%	Less than 10%	Age, priority population	Survey
Integration – Percentage of people living with viral hepatitis, HIV and STI linked to other integrated health services	Unreported	95%	95%	Age, sex, priority population	National programmes

Indicator	Baseline – 2020 ^a	Targets – 2025	Targets – 2030	Disaggregation	Source(s)
Advanced HIV disease – percentage of people starting ART with a CD4 count of less than 200 cells/mm ³ (or stage III or IV) ^f	30%	20%	10%	Age, sex, priority population	National programmes
Differentiated service delivery – percentage of countries that have implemented a 6-monthly refill of drugs	0	50%	80%		National programmes

^a Latest data for end 2020. Some targets use data from 2019 because of COVID-19 related service disruptions in the data reported for 2020.

^b Disaggregated by disease coinfection.

^c Achieved in all ages, sexes and focus populations

^d SW [67–83%]; MSM [57–95%]; PWID [22–66%]; TG [68–92%] in reporting countries.

^e As part of a comprehensive harm reduction strategy and in line with national priorities.

^f so all PLHIV should receive a CD4 test result.

Table A5. Impact and coverage indicators, targets and milestones for STI by 2025 and 2030

Indicator	Baseline – 2020 ^a	Targets – 2025	Targets – 2030	Disaggregation	Source(s)
Number of new cases of four curable STI in adults (15–49 years) per year ('000)	59 677	47 742	21 273	Age, sex, priority population, geography	National programmes
Number of new cases of syphilis in adults (15–49 years) per year ('000)	354	283	35	Age, sex, priority population, geography	National programmes
Number of new cases of gonorrhoea in adults (15–49 years) per year ('000)	21 059	16 847	2106	Age, sex, priority population, geography	National programmes
Congenital syphilis cases per 100 000 live births per year	145	<200	<50	Age, male partners, priority population, geography	National programmes
Percentage of girls fully vaccinated with HPV vaccine by 15 years of age	14%	50%	90%	Priority population, geography	WUENIC
Percentage of pregnant women attending ANC who were screened for syphilis/percentage treated if positive	65%/71%	> 85%/>90%	> 95%/>95%	Age, sex, priority population, geography (district)	National programmes
Percentage of priority populations ^b screened for syphilis/percentage treated if positive	No data/no data	> 80%/>90%	> 90%/>95%	Age, sex, priority population, geography	National programmes, community-led monitoring
Percentage of priority populations ^b screened for gonorrhoea/percentage treated if positive	No data/no data	> 20%/>90%	> 90%/>95%	Age, sex, priority population, geography	National programmes, community-led monitoring
Percentage of women screened for cervical cancer using a high-performance test, by the age of 35 and again by 45	No data/	>40%/>	> 70%/	Age, sex, priority population, geography	National programmes
Number of countries reporting AMR in <i>Neisseria gonorrhoeae</i> to GASP	36%	>60%	>70%	Country	MoH AMR programme

Indicator	Baseline – 2020 ^a	Targets – 2025	Targets – 2030	Disaggregation	Source(s)
Planning: number of WHO Member States with national STI plans updated within the past 5 years	50%	>70%	>90%	Country	MoH
Policies: number of WHO Member States with national STI case management guidelines updated within the past 3 years	40%	>70%	>90%	Country	MoH
Surveillance: number of countries with strong STI surveillance systems ^c	No data	5	11	Country	MoH

GASP – Gonococcal Antimicrobial Surveillance Programme

^a Latest data for end 2020. Some targets use data from 2019 because of COVID-19 related service disruptions in the data reported for 2020.

^b Priority populations are defined by individual countries; for screening include men who have sex with men, sex workers and people living with HIV.

^c A strong surveillance system for sexually transmitted infections incorporates four core competencies: case reporting, regular prevalence assessments among antenatal care, men and priority populations, regular annual reviews of the causation of sexually transmitted infection syndromes and symptomatic data corrected for underreporting, and monitoring of antimicrobial resistance for *Neisseria gonorrhoea*.

Table A6. Syphilis EMTCT targets (25)

Indicator	Target	Disaggregation	Source(s)
EMTCT impact target	A case rate of CS of ≤50 per 100 000 live births	NA	National programmes
EMTCT process targets	<ul style="list-style-type: none"> ANC coverage (at least one visit) of ≥95% Coverage of syphilis testing of pregnant women of ≥95% among those who attended at least one ANC visit Adequate syphilis treatment of syphilis-seropositive pregnant women of ≥95% 	NA	National programmes

CS – congenital syphilis

Annex 2: Summary of required impact and process targets for country validation of EMTCT of HIV, syphilis and HBV (25)

Summary of required impact and process targets for country validation of EMTCT of HIV, syphilis and HBV is given below.

1. EMTCT impact targets

- ⊙ MTCT rate of HIV of <2% in non-breastfeeding populations or <5% in breastfeeding populations
- ⊙ a population case rate of new paediatric HIV infections due to MTCT of ≤50 cases per 100 000 live births
- ⊙ a case rate of congenital syphilis of ≤50 per 100 000 live births
- ⊙ HBsAg prevalence of ≤0.1% in the ≤5-year-old birth cohort (and older children)^a
- ⊙ in countries that provide targeted and timely HepB-BD, an additional impact target of HBV MTCT rate of ≤2% should be utilized.

2. EMTCT PROCESS targets

(Must be the most recent verified data and must be achieved for two consecutive years)

3. Maternal ANC and testing coverage

- ⊙ ≥95% ANC coverage (at least one visit) (ANC-1)
- ⊙ ≥95% coverage of HIV testing of pregnant women
- ⊙ ≥95% coverage of syphilis testing of pregnant women in ANC
- ⊙ ≥90% coverage of HBsAg antenatal testing among pregnant women.

4. Maternal treatment

- ⊙ ≥95% ART coverage of pregnant women living with HIV
- ⊙ ≥95% adequate treatment of syphilis-seropositive pregnant women
- ⊙ ≥90% coverage with antivirals for eligible HBsAg-positive pregnant women with high viral loads (plus coverage of HBV-exposed babies with HBIG, where available).

5. Infant HBV vaccination

- ⊙ ≥90% coverage with three doses of HBV infant vaccinations (HepB3)^b
- ⊙ ≥90% HepB timelyc BD coverage (with universal programme) or infants at riskd (with targeted and timely HepB-BD).

Explanatory notes

- ^a Childhood prevalence is a proxy for HBV incidence. The ≤0.1% HBsAg prevalence can be measured among either 5-year-olds, 1-year-olds or those in ages 1–5 years, according to existing country surveillance and data collection practices. For regions and countries with a long history of high hepatitis B vaccination coverage, e.g. the WHO Region of the Americas and those that already conduct school-based serosurveys, there could be flexibility to conduct serosurveys in older children, >5 years of age.
- ^b Generally for vaccination, a 5-year period of sustainability is required to be able to measure impact via serosurveys (39).
- ^c Timely birth dose (HepB-BD) is defined as within 24 hours of birth.
- ^d At-risk infants are neonates of HBsAg-positive mothers

The Integrated Regional Action Plan for viral hepatitis, HIV and sexually transmitted infections in South-East Asia, 2022–2026 (I-RAP) shares a common vision to end the epidemics of viral hepatitis, HIV and STI in the South-East (SE) Asia Region by 2030. The five strategic directions oriented around service delivery, health systems, strategic information, community empowerment and innovations provide the overall guiding framework for country actions to implement the strategies. The integrated approach will help increase quality and efficiency and leverage the full power of primary health care, universal health coverage (UHC) and health systems for impact. It will promote equity and innovation, and advance people-centred and community-driven approaches. The I-RAP provides a comprehensive regional framework of shared and disease-specific actions to guide countries and partners. Individual countries can adapt these actions in relation to local epidemiological and health system contexts, upholding fundamental human rights, including the cross-cutting principle of equality and non-discrimination in the availability, accessibility, acceptability and quality of health services, products, approaches and interventions. The optimal selection of actions and service delivery models should be aligned with broader national strategies within a UHC framework and be responsive to the needs of individuals and local communities without any stigma or discrimination.

