

Progress report on HIV, viral hepatitis and sexually transmitted infections, 2019

Accountability for the global health sector strategies, 2016–2021



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Key messages

1. Accelerating towards elimination

Time is running short. To reach the 2020 targets, we need to accelerate progress, address specific gaps in implementation, and bring innovation to scale across the three diseases.

- The global number of people acquiring HIV is declining, but not rapidly enough. The focus on HIV prevention is insufficient, and the number of people newly infected with HIV would need to decline significantly to achieve global 2020 targets(1).
 Mortality from HIV has declined but is still too high.
- Global targets for reducing mortality from viral hepatitis
 will not be met without massively accelerating universal
 access to testing, hepatitis B treatment and hepatitis C
 cure. The global incidence of hepatitis B virus infection
 is declining overall towards achieving the strategy
 targets, with progress in immunization and prevention,
 but not for people who inject drugs.
- Sexually transmitted infections are not declining globally except for slow declines in congenital syphilis.
 In several countries, sexually transmitted infections are increasing. This report warns that a complete reversal in trend would be required to achieve the targets by 2020.

2. Preventing 1.7 million people from dying and preventing 1.2 million people from developing cancer per year

- HIV, viral hepatitis and sexually transmitted infections cause a staggering 2.8 million deaths per year(2-5), and 1.7 million lives can be saved per year if the global targets to end these three epidemics by 2030 are met.
- Mortality from these diseases is still too high. About 1.4 million people died in 2016 from viral hepatitis(2), and 940 000 people died in 2017 from HIV-related causes(3). Syphilis in pregnancy causes 204 000 fetal and neonatal deaths annually(4).
- HIV, viral hepatitis and sexually transmitted infections are linked to noncommunicable diseases. 1.2 million new cases of cancer, mainly liver and cervical cancer each year(6) are caused by these preventable infectious diseases.

3. Opportunities to fill gaps in implementation to reach the targets

The mid-term progress report for the global health sector strategies highlights major gaps and the need for concrete programmatic actions by disease.

- Testing and treatment for hepatitis B and C is geared for take-off. A comprehensive public health approach to hepatitis epidemics is relatively new. Direct-acting antiviral medicines only available since 2013 and with cure rates >90% and few side-effects have revolutionized the treatment of hepatitis C virus infection. The global response to viral hepatitis must capitalize on recent momentum, build on its success in preventing hepatitis B virus infection through immunization, scale up testing and treatment and leverage synergy with related health programmes. The new costing of the global hepatitis strategy projects US\$ 6 billion per year incremental funding needed to reach hepatitis targets, yet current spending is US\$ 0.5 billion as of 2016(7).
- Filling gaps by population and location, and retaining people on treatment, in the HIV response. The global response to HIV is maturing after years of dedicated action to raise resources and progressively expand service delivery towards achieving the 90–90–90 testing and treatment targets. Nevertheless, the data reveal persistent gaps in the HIV response and the urgent need to boost combination prevention and to improve retention in HIV care, with a particular focus on key populations, men and young women in settings with a high burden of HIV infection.
- Reviving the response to sexually transmitted infections.
 The global response to sexually transmitted infections is in crisis after years of neglect. Opportunities to link with HIV and broader sexual and reproductive health services must be seized to revive progress.

4. Joining forces for health

The progress report highlights eight examples in which the disease programmes can work better together to accelerate towards universal health coverage.

- leveraging a common disaggregated data platform that brings the three disease areas under the universal health coverage data platform;
- scaling up point-of-care diagnostics and self-testing to improve the efficiency and reach of HIV, viral hepatitis and sexually transmitted infection testing;
- achieving triple elimination of mother-to-child transmission of HIV, syphilis and hepatitis B virus;
- improving access to drugs and diagnostics, including through strategies to comprehensively reduce prices (a key element of the WHO flagship initiative on eliminating hepatitis C epidemics);
- protecting against the threat of antimicrobial resistance, to minimize health risks and improve treatment outcomes;
- strengthening joint HIV and TB responses to reduce TB as the leading cause of death among people living with HIV;
- integrating sexual and reproductive health and rights with HIV, viral hepatitis and sexually transmitted infection responses, including links to eliminate cervical cancer (which is also a WHO flagship initiative); and
- addressing social and structural determinants, looking beyond the health sector to boost prevention efforts and treatment and care access and impact.

5. Leaving no one behind

Universal coverage of prevention, diagnosis, treatment and care for key, underserved and overlooked populations must be realized to eliminate HIV, viral hepatitis and sexually transmitted infection epidemics.

Almost half the people newly infected with HIV are members of key populations or their sexual partners: men who have sex with men, sex workers, people who inject drugs, transgender people, migrants and people in prisons. Almost one quarter of the people newly infected with hepatitis C virus globally inject drugs(8), and more than half the people who inject drugs have chronic hepatitis C virus infection(9). STI incidence among adolescents is the highest compared with other age groups. Nevertheless, these groups have the least access to health-care services.

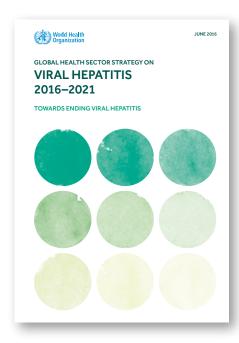


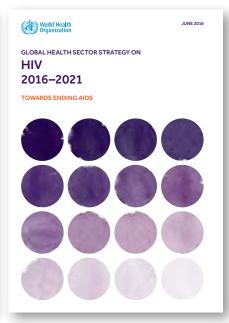
Progress towards impact

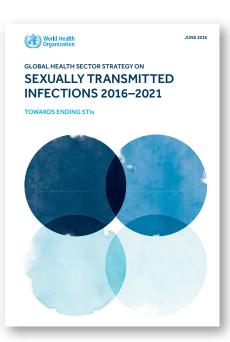
In 2016, at the 69th World Health Assembly, WHO Member States endorsed three aligned global health sector strategies on HIV, viral hepatitis and sexually transmitted infections, respectively, to guide actions over the period of 2016–2021 towards eliminating these diseases by 2030. The strategies were developed jointly, using a common universal health coverage framework.

These diseases share common modes of transmission and social determinants, and their disease burdens overlap among several populations.

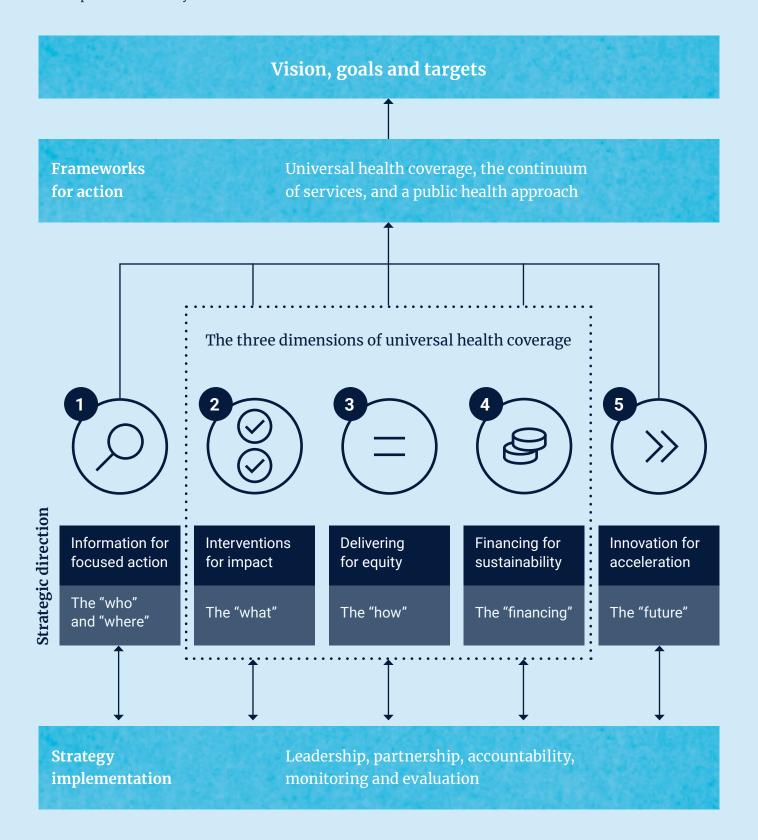
WHO is accountable for reporting back to the World Health Assembly on progress in implementing the strategies based on data received from countries. This report assesses the mid-term progress in 2019 in implementing these global health sector strategies from 2016 to 2021. The timeliness and availability of the data across the three diseases is limited, being for 2016 or 2017 in most cases. Key data, including 2018 impact data on incidence and mortality, were not available for this report, making it difficult to assess and validate overall trends since the launch of the strategies in 2016. For HIV, global data for 2018 will soon become available. The data on the implementation of strategy actions and policies are for 2018. The progress report highlights the need to strengthen data, in particular to update sexually transmitted infection and hepatitis data more regularly and strengthen the disaggregation of data to improve implementation.







The global health sector strategies 2016–2021: a common framework for HIV, viral hepatitis and sexually transmitted infections



Progress and gaps by strategic direction

Each global health sector strategy is organized around five strategic directions. Under each of them, the strategies define Fast-Track priority actions for countries and actions for WHO to accelerate progress towards the goals.

The accountability framework below presents a visual overview of mid-term progress by strategic direction using a traffic-light rating system to represent the current status, achievements and gaps. The annex to this report provides a complete table with individual ratings and technical details on the actions to address each underperforming area.

WHO action

Methods used to derive the ratings of the progress report

The Fast-Track priority actions for countries and for WHO to track progress were extracted from the strategies for HIV, viral hepatitis and sexually transmitted infections respectively. Where there were quantifiable targets, the most recent data were compared with these targets. Ratings were downgraded if there was a lack of key data. The timeliness of the data available across the three diseases is limited, and sexually transmitted infection and hepatitis data especially need to be updated more regularly. For HIV, the data need to be further disaggregated, for example for key populations, to fill gaps in implementation.

Technical teams within WHO reviewed and documented the progress achieved in implementing each of these priority actions, using data available until December 2018, followed by an external review.

The progress achieved was rated using a five-point scale of traffic-light colours:

- dark green: on track, with minor gaps;
- light green: on track, with few major gaps such as for specific populations, locations or interventions;
- · yellow: incomplete, but major efforts are underway;
- orange: incomplete, with only minor efforts underway; and
- · red: no progress.

The ratings by the technical teams within WHO and the underlying evidence were externally reviewed across the diseases, with independent adjustments when necessary. For each action identified as underperforming, a corresponding catch-up action was proposed, and these were also externally reviewed and endorsed.

Dark green	Light green	Yellow	Orange	Red
On track	On track with gaps	Incomplete but major progress	Incomplete, minor progress	No progress



HIV

The reduction in HIV incidence is far behind the targets. HIV mortality has declined but remains too high

Targets: (by 2020)(1)

Impact

- Reduce the annual number of people dying from HIV-related causes to less than 500 000 globally by 2020
- Reduce the number of people living with HIV dying from TB-related causes by 75% by 2020
- Reduce the number of people living with HIV dying from hepatitis B- and C-related causes by 10%, in accordance with the mortality targets for all people with chronic hepatitis B and C infection
- Reduce the annual number of people acquiring HIV infection to less than 500 000 by 2020
- Zero new infections among infants by 2020

Status

- 940 000 [670 000-1 300 000] people died from HIV-related causes globally in 2017(3)
- 300 000 people living with HIV died from TB-related causes in 2017(10)
- No data
- 1.8 million [1.4 million-2.4 million] people acquired HIV infection in 2017(3)
- 180 000 [110 000–260 000] infants acquired HIV infection in 2017(11)

Strong progress towards achieving the 90–90–90 targets: gaps in key population programming, in certain countries and regions, including western and central Africa, eastern Europe and some Asian countries, and in retention in care

Service coverage

- Ensure that 90% of people living with HIV know their HIV status
- Ensure that 90% of the people who know their HIV-positive status receive antiretroviral therapy
- Ensure that 90% of people living with HIV receiving treatment have suppressed viral loads
- 75% of people living with HIV knew their HIV status globally in 2017
- 79% of those who knew that they were HIV-positive were accessing treatment in 2017
- 81% of people receiving treatment had suppressed viral loads in 2017 (11)



Viral hepatitis

Declines in incidence, especially for hepatitis B, because of immunization and prevention, but reducing mortality requires major scale-up in testing and treatment access until 2030

requires major scale-up in testing and treatment access until 2030				
Targets (by 2020 and 2030)(12)	Status			
 Impact 30% reduction in the number of people newly infected with chronic viral hepatitis B and C infection by 2020, 90% reduction by 2030 10% reduction in the number of people dying from viral hepatitis B and C by 2020, 65% reduction by 2030 	 1.1 million people were newly infected with chronic hepatitis B infection in 2017(13) Only baseline data available: 1.75 million people were newly infected with chronic hepatitis C infection in 2015(14) Only baseline data available: 1.4 million people died from infection with all hepatitis viruses, including A and E, in 2016(2) 			
Service coverage in testing and treatment is low and must accelerate massively to achieve the 2030 targets; vaccination coverage is strong and yet birth dose coverage is too low; there are critical gaps in harm reduction				
Service coverage(13) • 90% coverage of hepatitis B virus vaccine (third dose) by 2020	• 84% coverage of hepatitis B vaccine (third dose) in 2017(15)			
 50% coverage of services to prevent the mother-to-child transmission of hepatitis B virus by 2020, 90% coverage by 2030 	43% global coverage for timely birth dose of hepatitis B vaccine in 2017(15)			
 95% of blood donations screened in a quality-assured manner by 2020, 100% screened by 2030 	Only baseline data available: 97% of donations screened with quality assurance in 2015(8)			
 50% of injections administered with safety-engineered devices in and outside health facilities by 2020, 90% by 2030 	• 3.9% reuse of injection equipment in 2017(16)			
 200 sterile needles and syringes provided per person who injects drugs per year by 2020, 300 by 2030 	33 syringes or needle sets per person who injects drugs per year in 2017(17)			
 30% of people with chronic viral hepatitis B and C infection diagnosed by 2020, 90% by 2030 	 Only baseline data available: 27 million (10%) of people living with hepatitis B knew their hepatitis B status in 2016(18) 			
	13.1 million (19%) of people living with hepatitis C knew their hepatitis C status in 2017(14)			
 80% of eligible people with chronic hepatitis B and C infection treated by 2030, respectively 	Only baseline data available: 4.5 million (17%) of people diagnosed with hepatitis B received treatment in 2016(18)			
	• 5 million people diagnosed with hepatitis C infection had been treated using DAAs by the end of 2017(14)			

Sexually transmitted infections

Sexually transmitted infections are not declining globally except for slow declines in congenital syphilis. In several countries, infections are increasing.

Targets (by 2020 and 2030)(19)	Status				
 Impact, by 2030 90% reduction of the incidence of <i>Treponema pallidum</i> infection globally (2018 global baseline) 	6.3 million people newly infected with <i>Treponema pallidum</i> in 2016(20)				
 90% reduction in the incidence of Neisseria gonorrhoeae infection globally (2018 global baseline) 	86.9 million people newly infected with Neisseria gonorrhoeae in 2016(20)				
 50 or fewer cases of congenital syphilis per 100 000 live births in 80% of countries 	 473 [385–561] congenital syphilis cases per 100 000 live births in 2016(4), a decline of 12% in 4 years 				
 Sustain 90% national coverage and at least 80% in every district (or equivalent administrative unit) in countries with the human papillomavirus vaccine in their national immunization programme 	Of 51 countries surveyed, 14 (27%) reported >80% human papillomavirus vaccine coverage				
Major gaps in the availability of diagnosis and treatment for the four curable sexually transmitted infections					
Service coverage, by 2020 70% of countries have sexually transmitted infection surveillance systems in place that can monitor progress towards the relevant targets	132 (of 185) countries had prevalence reporting for syphilis among adult women enabling a national estimate of the prevalence of syphilis among women and global estimation of congenital syphilis for monitoring progress towards eliminating the mother-to-child transmission in 2016(4, 21)				
70% of countries have at least 95% of pregnant women screened for HIV and/or syphilis; 95% of pregnant women screened for HIV and/or syphilis with free, prior and informed consent; 90% of pregnant women living with HIV receiving effective treatment; and 95% of syphilis-seropositive pregnant women treated with at least one dose of intramuscular benzathine penicillin or other effective regimen	 100% of low- and middle-income countries included syphilis screening in their antenatal care package in 2017 18 (9%) countries screened at least 95% of pregnant women for syphilis and treated 95% of syphilis-positive pregnant women in 2016–2017(22) 				
 70% of key populations for HIV have access to a full range of services relevant to sexually transmitted infections and HIV, including condoms 	No data				
 70% of countries provide sexually transmitted infection services or links to such services in all primary, HIV, reproductive health, family planning and antenatal and postnatal care services 	No data				
 70% of countries deliver human papillomavirus vaccines through the national immunization programme 	85 (46%) of countries reported having human papillomavirus vaccine incorporated into their national immunization programmes in 2018				
 70% of countries report on antimicrobial resistance in Neisseria gonorrhoeae 	60 (31%) of countries monitored antimicrobial resistance in Neisseria gonorrhoeae in 2017(22)				





Information for focused action

Robust health information systems are necessary to inform policies and programme implementation for sustainable impact.
Robust data allow programmes to identify needs, design a high-impact response, allocate resources effectively, guide implementation and strengthen accountability.

- Global reporting processes are well established. Mechanisms
 for global accountability on core indicators are in place for
 HIV with regular reporting. They have been developed more
 recently for viral hepatitis and sexually transmitted infections,
 and the completeness of reporting is improving.
- The estimates of the burden of disease are improving. The
 methods used to estimate disease prevalence, incidence and
 mortality are well established for HIV and are being developed
 for viral hepatitis and sexually transmitted infections. The
 lack of prevalence surveys on sexually transmitted infections
 among men is of particular concern, limiting the ability to
 generate reliable estimates.
- Greater efforts are needed to generate data for specific populations. High-quality data are persistently lacking on the population size, service coverage and access barriers for key populations for all diseases. Without such data, services cannot be effectively designed and delivered to those most in need.
- Improving the use of granular, routine data to improve programmes. Major efforts have been made to disaggregate data by population and location and to use these data at the local level to identify gaps and improve programmes.

HIV

Global reporting mechanisms are well established, and major investments have been made in granular, routine data systems.

Challenges: Strengthening data on key populations; and improving the governance of data use for improving programmes.

Viral hepatitis

A global reporting system was established in 2018, and the first baseline estimates of disease burden were developed for 2015.

Challenges: Improving the completeness of reporting and the regular review of national targets and progress; and strengthening synergies to include hepatitis in country health information systems and the estimates of the underserved population.

Sexually transmitted infections

Efforts have been made to strengthen global reporting mechanisms, disease burden estimates and, recently, Spectrum modelling.

Challenges: Country capacity for surveillance and monitoring remains insufficient and has not benefited from investment in HIV data systems.

ACTIONS TO ADDRESS GAPS

- 1 Leverage a common disaggregated data platform
- 2 Simplify and invest in data on key populations
- 3 Monitor drug toxicity and resistance
- 4 Streamline the governance of data reviews

of countries had functioning health information systems in 2017

90% of countries reported data through Global AIDS Monitoring

Improving the use of granular, routine data to improve programmes



Interventions for impact

The essential package of high-impact interventions for HIV, viral hepatitis and sexually transmitted infections is well identified. The challenge is to deliver them at high coverage, to retain people and to leave no one behind. By outlining what services are needed along the continuum of prevention, diagnosis, treatment and care, this strategic direction addresses the first dimension of universal health coverage.

The challenge is to deliver at high coverage, retain people, and leave no one behind

- Prevention is lagging behind. Prevention efforts must be accelerated and focused more efficiently and effectively, especially for HIV and sexually transmitted infections. Effective coverage of voluntary medical male circumcision among adults is limited yet provides an opportunity to reach men with multiple prevention services. Pre-exposure prophylaxis (PrEP) scale-up has been slow, and the lack of effective condom programming has led to poor uptake by the adolescent boys and young men at greatest risk of acquiring HIV. The timely use of the infant hepatitis B vaccine is preventing mother-to-child transmission in many regions, but sub-Saharan Africa is lagging behind, with coverage of only 10%. Sexually transmitted infections are stagnant or reducing slowly, with some evidence of increases. Strong progress has been made in reducing vertical transmission of syphilis during pregnancy through antenatal care programmes.
- Not enough people are getting tested and retained in treatment. Three of four people living with HIV are aware of their HIV status, but young people and men in settings with a high burden of HIV infection and key populations globally are less likely to be tested. Only 10% of people with hepatitis B infection and 19% with hepatitis C infection knew their status in 2016. Comprehensive testing that includes curable sexually transmitted infections is not incorporated into HIV testing in most low- and middle-income countries, where the burden of these diseases is high. Common approaches for key populations are needed to expand diagnosis and link people to care(23). For HIV, the major challenge is retaining the large number of people in treatment over their lifetime.
- Harm reduction has critical gaps in coverage and quality. Globally, about 10.6 million people inject drugs. Of these, 1.3 million are living with HIV, 5.5 million are living with hepatitis C virus, and 1 million are living with both HIV and hepatitis C virus infections(9). Injecting drug use accounts for about 10% of HIV infections globally and 30% outside sub-Saharan Africa. In 2018, less than 1% of the people who inject drugs were living in countries with sufficient coverage of harm-reduction services(24). There are gaps in services related to testing and treatment for people who use drugs and for prisoners for HIV, sexually transmitted infections and viral hepatitis.
- The needs of children and adolescents are not being met adequately. Only about 50% of HIV-exposed infants are tested in the first two years of life(25). Of those identified, only half are currently receiving treatment, and many are receiving suboptimal regimens and formulations. Treatment options for hepatitis B and C for infants and young children are lacking. The risk of acquiring sexually transmitted infections is high among adolescents, but services and data are not widely available for this population.
- Laboratory services need to be strengthened. Significant
 investments and efforts have been made to introduce and
 expand viral load testing to monitor HIV treatment better, with
 more than 14 million tests performed in 2017; however, coverage
 rates remain less than 60%. Integrated platforms can be used
 to test for viral load for HIV and hepatitis B and C viruses.
 Laboratory infrastructure is also lacking for sexually transmitted
 infections. The quality of testing can also be improved, including
 by adopting WHO testing algorithms and strategies.

HIV

Strong progress has been made towards achieving the 90–90–90 targets and improvements in life expectancy among people living with HIV in countries with a high burden of HIV infection. Service delivery has been diversified with new testing approaches and differentiated care.

Challenges: Implementing effective HIV prevention to reduce incidence and improving the targeting and quality of testing. There are gaps in reaching key populations and underserved areas and critical gaps in harm reduction.

Viral hepatitis

Strong progress has been made in delivering prevention interventions such as the hepatitis B vaccine together with early but expanding testing and treatment access, including a cure for hepatitis C.

Challenges: Providing timely birth doses of the hepatitis B vaccine in Africa and the need to massively expand access to diagnosis, treatment and cure.

Sexually transmitted infections

Strategy actions to update the completed treatment guidelines and global surveillance of antimicrobial resistance are in place. Momentum is increasing to tackle human papillomavirus and cervical cancer.

Challenges: Implementation of available diagnostics and treatment has stalled, and synergy with HIV has been weak, including tackling HIV as a sexually transmitted infection.

ACTIONS TO ADDRESS GAPS

- 1 Boost testing and treat all for the three diseases and retain people in care where long term chronic treatment is needed
- 2 Renew prevention across HIV and sexually transmitted infections
- 3 Joint diagnostic platforms

- 4 Implement differentiated care and retain people in care
- 5 Simplify testing
- 6 Boost harm reduction
- 7 Improve laboratory capacity







3 Delivering for equity

Equity is a core principle of universal health coverage and means that everyone receives the services they require, without financial hardship. The third strategic direction addresses how services should be delivered to ensure that an essential package is available to everyone regardless of their circumstances and with adequate quality.

- Inequities in access persist. Progress in reaching key, overlooked and underserved populations with equitable services remains uneven and insufficient for all three diseases, including among sex workers and their partners, people who inject drugs, transgender people, prisoners, gay men and other men who have sex with men, migrants, internally displaced people and low-income and disenfranchised people and adolescents. In particular, people who inject drugs and people who are criminalized are often the hardest to reach and have the lowest access to services. A rights-based response - including nondiscriminatory access to health services and priorities set, where appropriate, based on burden and on engaging affected populations in decision-making processes is essential to achieve true universal coverage. Service coverage among key, underserved and overlooked populations is an important tracer for monitoring the achievement of universal health coverage.
- Discrimination in health-care settings remains a major barrier.
 Key, overlooked and underserved populations continue to encounter numerous barriers to accessing services within health-care settings, including stigma, mistreatment, refusal of services, inferior quality of care or denial of consent, further compromising their ability to access the services they need.
 Health-care workers living with HIV often face discrimination themselves in the workplace.
- Differentiated service delivery can enhance and simplify access. A one-size-fits-all approach to service delivery is not sufficient to achieve universal access. Client-centred delivery models that are tailored to the population and location such as testing services provided through a combination of facility-based testing (stand-alone or integrated), community-based testing (home-based or through outreach), partner testing services, testing based outside health facilities (such as workplaces or closed settings) and self-testing are key to ensure that no one is left behind. Innovative approaches are being tried to reduce the voluntary medical male circumcision coverage gap among adults. There is also a major need for simplifying the delivery of hepatitis diagnosis and treatment.

Progress for key, underserved populations is a key tracer for achieving true universal health coverage

HIV

Differentiated and client-centred models of service delivery are helping to improve outreach; HIV commodity prices have declined and civil society has supported access globally.

Challenges: Making universal health coverage work for key, overlooked and underserved populations and integrating HIV into emergency plans, closed settings and policies for retaining human resources.

Viral hepatitis

Progress in price reductions and initiatives to expand access make it feasible to rapidly scale up diagnosis, treatment and cure from 2020 to 2030.

Challenges: Harm-reduction services and access to treatment for people who inject drugs are particularly lacking. Task-shifting will be needed to support the massive projected scale-up of services.

Sexually transmitted infections

Progress has been made among pregnant women for syphilis screening, treatment and dual elimination with HIV. Strong progress in reducing vertical transmission of syphilis. There is stagnation for many sexually transmitted infections and among many populations.

Challenges: Marginalized populations face difficulties in accessing services, and community delivery of services needs to be accelerated.

ACTIONS TO ADDRESS GAPS

- 1 Strengthen universal health coverage for key and underserved populations
- 2 Boost community services

- 3 Integrate triple elimination
- 4 Legal reforms and rights
- 5 Invest in cross-cutting human resources



Financing for sustainability

The third dimension of universal health coverage seeks to ensure that everyone can receive the services they need without incurring financial hardship. Financing for a sustainable response requires action in three areas: raising revenue, providing financial protection to everyone and finding efficiency in the use of health system resources.

- All programmes continue to face funding gaps. HIV
 programmes have benefited from increasing domestic
 funding and supplemented this with funding sources through
 international partners such as the Global Fund to Fight AIDS,
 Tuberculosis and Malaria and the United States President's
 Emergency Plan for AIDS Relief, but there is still a shortfall,
 and new commitments are declining. The hepatitis response
 has had little funding from domestic or external sources,
 and the sexually transmitted infection response is critically
 underfunded.
- High user fees and opportunity costs create financial barriers. HIV programmes have been able to provide core services free of charge in resource-limited settings, yet gaps remain in many countries and regions for example in western and central Africa. The costs of treatment for chronic hepatitis B and hepatitis C infections have also been declining. However, the costs of chronic care for HIV remain high, and the costs of treating hepatitis C virus infection are prohibitive in many middle- and high-income countries that cannot access generics.

billion US dollars per year incremental funding needed to reach hepatitis targets

0.5

billion US dollars available in 2016

HIV

Funding for HIV has benefited from major resource mobilization efforts, supported by strong investment frameworks and estimates of the resources needed. Access to basic HIV services is free of user charges in most countries with a high burden of HIV infection.

Challenges: Sustaining funding and civil society support and monitoring health expenditure and costs within programmes.

Viral hepatitis

The first global costing of hepatitis has been completed. Drug prices have declined significantly in the past three years, supported by generic manufacturing.

Challenges: Chronic lack of funding for hepatitis programmes and the need for additional civil society advocacy, including to include hepatitis in domestic health funding.

Sexually transmitted infections

International funding and domestic resource allocation for sexually transmitted infections have been limited, resulting in large funding gaps despite the high levels of morbidity and mortality these diseases cause.

Challenges: Despite the relative affordability of many interventions, funding for sexually transmitted infections is in crisis and has not benefited from synergy with the HIV response.

ACTIONS TO ADDRESS GAPS

- Advocate for domestic investment
- 2 Leverage access and price reductions

- 3 Improve costing data
- Universal health coverage Investment in shared costs, for example human resources

Action in raising revenue, providing financial protection and finding efficiency



Innovation for acceleration

Looking ahead, ongoing investment in research and innovation is required to overcome barriers and shift the curve closer towards the strategy targets. Since business as usual with existing technologies and service delivery models will not be sufficient, all three strategies acknowledge the importance of improvements along the continuum to enhance the efficiency, quality and impact of the response.

Business as usual will not be sufficient

- Continued investment in research and innovation is needed to find new ways to accelerate the response.
 HIV research is focusing on improved drug formulations for pre-exposure prophylaxis, for first-, second- and thirdline treatment and for searching for a functional HIV cure.
 Hepatitis programmes are looking for a functional cure for hepatitis B virus infection and affordable point-of-care tests for diagnosing infection. Research on sexually transmitted infections is investigating cost-effective point-of-care tests, screen and treat algorithms, vaccines, and more robust treatment regimens that reduce the risk of drug resistance.
- Vaccines, an important prevention technology for all programmes, are at various stages of development.
 The search for an effective HIV vaccine continues to be an important part of the HIV research agenda. The hepatitis B vaccine has been the mainstay of hepatitis B prevention so far, and research to develop a vaccine for hepatitis C is ongoing. A vaccine against hepatitis C virus infection would greatly help in reducing the incidence in high-risk population groups, including people who inject drugs.
- Polyvalent vaccines against oncogenic human papillomavirus types were introduced in 2006 and are being rolled out for adolescents to prevent cervical cancer and other types of cancer related to human papillomavirus. Vaccines for genital herpes and gonorrhoea are entering clinical trials.
- Meeting the needs of children and adolescents requires
 more innovation. More simple and palatable formulations
 of medicines are still needed such as antiretroviral medicines
 for children. New approaches, including those using social
 media platforms and youth-friendly service delivery models,
 are needed to address the health-seeking behaviour of
 adolescents at high risk of infection and provide the right
 incentives for the prevention and care of infections linked
 to social desirability.



HIV

There has been a strong focus on innovation, especially in treatment, testing and diagnostics.

Challenges: Implementation of innovations at scale for testing and further innovations in HIV prevention and vaccines, including addressing the social determinants of health.

Viral hepatitis

The main approaches and tools to eliminate viral hepatitis are already available, but implementation varies.

Challenges: Additional research to find a functional cure for hepatitis B virus, affordable point-of-care tests and a vaccine for hepatitis C.

Sexually transmitted infections

Several innovations are in use or in the pipeline to improve the response to sexually transmitted infections, including new rapid and point-of-care tests and new treatments and vaccines.

Challenges: Further innovation in new, rapid and affordable pointof-care tests and new approaches to tackle social and behavioural determinants of sexually transmitted infections and HIV, adapted to each generation.

ACTIONS TO ADDRESS GAPS

1 Progress with cure (for hepatitis B) and vaccines (for HIV, hepatitis C, herpes and gonorrhoea)

2 Affordable point-of-care tests

3 Formulations for children

Working across disease programmes

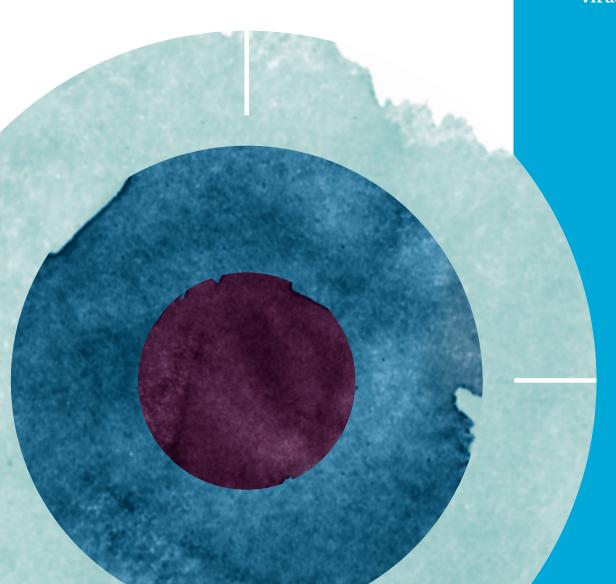
More detailed assessment of the progress by strategic direction of the three health sector strategies highlighted opportunities for joining forces for health across the disease programmes. Building on these opportunities will strengthen the catch-up actions to fill gaps in the strategies and accelerate towards universal health coverage.

51%

of the estimated number of people living with HIV who acquire TB know their HIV status

80%

of cases of cervical cancer can be prevented through human papillomavius virus vaccination



1

Leverage common disaggregated data platforms

that bring the three disease areas under the universal health coverage data platform. Accelerating joint action to strengthen district health information systems across the national, subnational and facility levels provides an opportunity to tackle data gaps across multiple disease programmes. WHO released joint guidelines across health and communicable diseases in 2018(26), with a menu of indicators and analysis dashboards and applications to translate these into country data systems across national, district and health facility levels. WHO is now supporting countries in developing granular, disaggregated data.



Scale up point-of-care diagnostics and self-testing

to improve the efficiency and reach of testing for HIV, viral hepatitis and sexually transmitted infections. Client-centred services, including self-testing and integrated delivery platforms, provide important opportunities to facilitate access to services. In 2017, WHO released guidance for countries to adopt multiuse diagnostic platforms such as GeneXpert® machines, with capability to use multiple disease-specific tests, including for HIV, viral hepatitis, chlamydia, gonorrhoea and TB, on the same device(27). Another such example is the dual HIV/syphilis rapid test. The challenge is to align diagnostics to support integrated service delivery at the point of care. Increasing experience with HIV self-testing, with 2 million kits delivered in six countries, has shown that it is acceptable and effective in reaching people at high risk who have not tested through clinical services.



Achieve triple elimination

of the mother-to-child transmission of HIV, syphilis and hepatitis B virus by harmonizing policies and using common maternal and newborn service delivery platforms. Recognizing the tremendous opportunity to reach these objectives through integrated approaches, many countries have moved ahead to integrate HIV and syphilis screening into maternal and child health services, in accordance with WHO guidelines. The WHO South-East Asia Region and Western Pacific Region took this commitment one step further in 2017 by integrating hepatitis B virus infection in these efforts and became the first region to endorse a regional framework for the triple elimination of mother-to-child transmission(28). China has initiated a triple elimination pilot programme in three provinces.



Improve access to drugs and diagnostics

including through comprehensive strategies for reducing prices, a key element of the WHO flagship initiative on eliminating hepatitis C epidemics. Steep price reductions for HIV commodities over the past 10 years and for hepatitis B and C commodities over the past 4 years, supported by public health licensing and generic manufacturing, have played a major role in promoting equitable access to treatments.

Strengthening procurement processes in low-income countries to access generics, facilitating negotiations with originators for price volume reductions for middle- and high-income countries, addressing common patent issues, facilitating competition and promoting market transparency will allow programmes to further expand medicine availability(18).



Protect against the threat of antimicrobial resistance

to minimize health risks and improve treatment outcomes. Joint efforts to address emerging resistance to drugs that treat viral, parasitic and bacterial diseases are essential to mitigate the risk and sustain programme quality. The WHO Global Action Plan on Antimicrobial Resistance provides an opportunity to align efforts to monitor, prevent and respond to resistance and, in particular, to raise awareness, upgrade laboratory capacity, improve surveillance, address counterfeit drug manufacturing and optimize the use of antimicrobial medicines.



Strengthen the joint HIV and TB responses

to reduce TB as the leading cause of death among people living with HIV. A person living with HIV is about 16 to 27 times more likely to develop active TB than people without HIV(29). The management of HIV and TB coinfection has been significantly strengthened in recent years, but in 2017 only 51% of the total estimated number of people living with HIV developing TB knew their HIV status(10). A priority will be to further strengthen joint HIV and TB programming.



Integrate sexual and reproductive health and rights

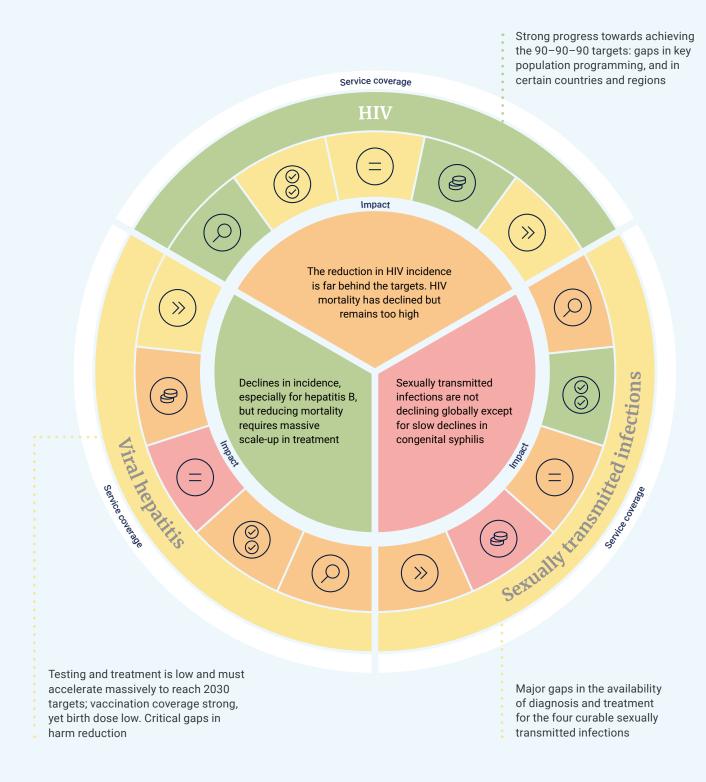
with the HIV, viral hepatitis and sexually transmitted infection responses, including links to eliminate cervical cancer, which is also a WHO flagship initiative. For example, the human papillomavirus vaccine, integrated with other prevention strategies, early treatment and tackling reproductive health and rights can prevent up to 80% of cases of cervical cancer(5). Accelerating progress towards the global elimination of cervical cancer as a public health problem is a flagship initiative for WHO.



Address social and structural determinants,

looking beyond the health sector to boost prevention efforts and treatment and care access and impact. Trends in sexually transmitted infections remind us that we have neglected sexually transmitted infections and prevention that addresses HIV as a sexually transmitted infection. HIV incidence is also not declining quickly enough to reach the 2020 targets. Such trends require action that addresses individual risk behaviour and the wider context of physical, social, cultural, political and legal context within which this behaviour occurs, including barriers to reaching key and underserved populations.

Accountability scorecard



Dark green	Light green	Yellow	Orange	Red
On track	On track with gaps	Incomplete but major progress	Incomplete, minor progress	No progress











Impact



Implementation in regions and countries

The global health sector strategies on HIV, viral hepatitis and sexually transmitted infections were rapidly adopted and regional implementation plans agreed within a year, led by WHO regional and country offices. The mid-term review of implementation highlights progress and challenges by WHO region.





African Region



Highlights of strategy implementation

• The coverage of HIV services in the African Region is at the same level as the global average, and progress has been particularly noteworthy in reaching pregnant women in eastern and southern Africa, highlighting the importance of leveraging a combination of domestic and external funds. The first national strategic plans for viral hepatitis have also been approved, and there is progress towards eliminating the mother-to-child transmission of syphilis, yet massive scale-up of hepatitis and sexually transmitted infection services is needed, and priorities need to be set according to population group.

Challenges

- Late diagnosis and poor retention on treatment lead to high mortality for HIV, and the diagnosis of hepatitis and sexually transmitted infections needs to be improved at the facility level.
- Additional focused efforts are needed for western and central Africa, which lags behind in both service coverage and funding levels.

Region of the Americas

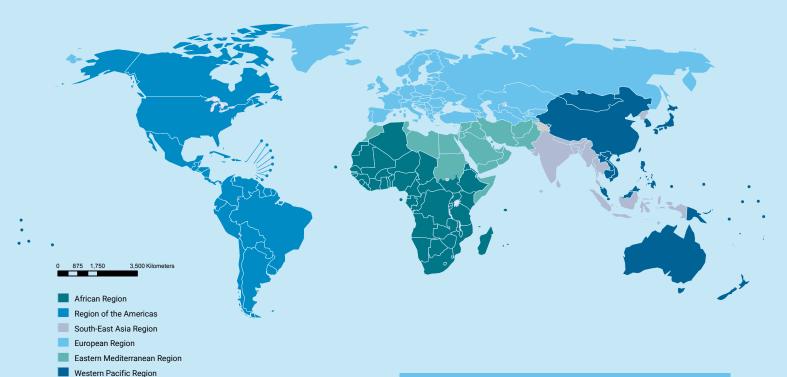


Highlights of strategy implementation

- Of the 33 countries in the Region, 27 have adopted the WHO "treat all" recommendation for HIV antiretroviral therapy, and the remaining countries are updating national guidelines. In addition, 61% of the countries have included dolutegravir in their guidelines.
- National policies on HIV pre-exposure prophylaxis (PrEP) are in place in seven countries, and five additional countries are in a planning phase, but access remains limited.
- Treatment coverage for syphilis among pregnant women increased to nearly 90% in the last estimate (2016-17).
- National action plans for hepatitis have been implemented in 15 countries. Three countries have the stated goal of eliminating hepatitis as a public health problem by 2030, and 12 countries have the stated goal of eliminating mother-to-child transmission of hepatitis B infection.

Challenges

- Access to low-cost generic antiretroviral medicine remains a challenge.
- Most countries have legal and normative barriers to introducing different modalities of HIV testing, including testing by lay providers and HIV self-testing.
- Countries are highly dependent on external funding for HIV prevention activities and community participation.
- High medicine prices for hepatitis C treatment have impeded national commitment to hepatitis action. In addition, the hepatitis response has been hampered by a lack of international funding and thus depends almost entirely on the availability of domestic resources.
- Shortages of benzathine penicillin have hampered treatment of pregnant women with syphilis in this region and in others.



South-East Asia Region

Not applicable



Highlights of strategy implementation

- India, Indonesia, Myanmar and Thailand have developed national plans for eliminating viral hepatitis following the global strategy on elimination.
- A refocus of the HIV response on key populations, specifically on combination prevention and empowering communities to collect and use local data for action, was launched in 2018. The number of gay men and other men who have sex with men acquiring HIV has risen steeply in some countries.

Challenges

- The number of people acquiring HIV and the number of people dying from AIDS-related causes have declined, but the decline has plateaued.
- Only 10% of the people living with hepatitis B and C know their status.

European Region

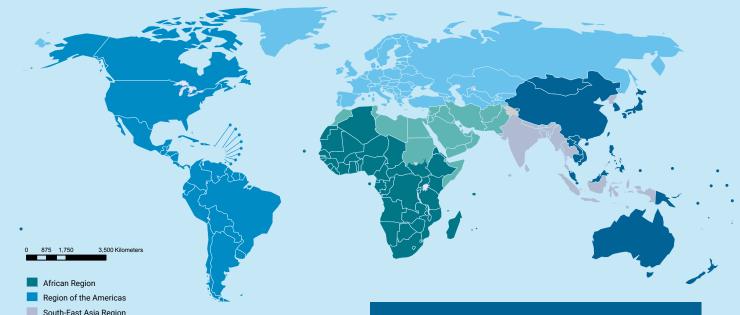


Highlights of strategy implementation

 A new action plan on HIV and the first-ever action plan for the viral hepatitis response in the Region were approved in 2016, and 15 countries had developed and/ or updated national plans with the support of WHO and partners by the end of 2018.

Challenges

- The increasing trend in the number of people newly infected with HIV and being diagnosed late is a cause of concern, especially in countries in eastern Europe and central Asia, with 53% of people living with HIV initiating treatment with a CD4 count of less than 350 cells/mm3 in 2017.
- Low HIV treatment coverage remains a challenge, especially in eastern Europe and central Asia (37%), linked to the high costs of antiretroviral medicine and slow transition to new antiretroviral medicines. Access to treatment of hepatitis C is still limited in many countries because of the high costs of diagnostics and medicines, and many of the people living with hepatitis C remain undiagnosed.



Eastern Mediterranean Region

European Region

Eastern Mediterranean Region

Western Pacific Region



Highlights of strategy implementation

- Twelve countries have developed national strategic plans for viral hepatitis.
- Access to HIV testing and treatment has been rising steadily but slowly. The coverage of antiretroviral therapy has doubled since 2010.
- Partnerships with civil society organizations and regional networks have supported resource mobilization for HIV and sexually transmitted infections.

Challenges

- Half the countries in the Region face or are affected by protracted emergency situations compromising the responses to HIV, viral hepatitis and sexually transmitted infections.
- Access to prevention, diagnosis and treatment remains limited, especially for key populations – mainly because of criminalization, stigmatization and discrimination.
- Most countries with the highest burden of the diseases in the Region depend on external funding, mostly from the Global Fund to Fight AIDS, Tuberculosis and Malaria.

Western Pacific Region



Highlights of strategy implementation

- With increased momentum to address viral hepatitis, 17 countries have developed country profiles or situation analyses, 12 countries have completed investment cases and 17 countries are drafting national comprehensive action plans on viral hepatitis. Several countries, including Australia and Mongolia, have shown a model of public health leadership with plans for eliminating viral hepatitis epidemics.
- A regional plan for the triple elimination of motherto-child transmission of HIV, congenital syphilis and hepatitis B virus was endorsed. In October 2018, Malaysia received WHO official validation that the mother-to-child transmission of HIV and congenital syphilis has been eliminated.
- Mongolia has developed a plan to implement same visit treatment with benzathine penicillin for pregnant women with a positive rapid syphilis test.

Challenges

- The Region has the highest burden of sexually transmitted infections among all WHO regions, with 142 million cases in 2016. Several countries with high levels of gonococcal antimicrobial resistance have reported increasing numbers of syphilis cases.
- The Region also has the highest number of people dying from viral hepatitis—related causes, exceeding the combined annual mortality rate for HIV, TB and malaria. Liver cancer is the sixth leading cause of death in the Region, and 60% of liver cancer cases were attributed to chronic hepatitis B virus or hepatitis C virus infection.



Country examples

African Region

- Nigeria has assessed the availability of services for viral hepatitis, leading to the federal government providing hepatitis C virus treatment to 800 people. Nigeria also conducted a joint survey of hepatitis B and C virus as part of the National AIDS Incidence and Impact Survey.
- Rwanda has introduced multi-disease diagnostic platforms to diagnose HIV, sexually transmitted infections, viral hepatitis and TB at the point of care. Rwanda has also introduced a domestic funding initiative for viral hepatitis through health insurance and increased domestic funding in the absence of external funding support.

Region of the Americas

- Countries have been able to access dolutegravir and the fixed-dose combination of tenofovir + lamivudine + dolutegravir through the Strategic Fund of the Pan American Health Organization, with a regional reference price of 88% of the price for low- and middle-income countries. Countries have also accessed PrEP, rapid diagnostic tests and HIV self-tests through the Strategic Fund.
- Countries have incorporated other infectious diseases (such as hepatitis B virus and congenital chagas disease) into the framework for eliminating mother-to-child transmission as a public health problem.
- Brazil, Chile and Colombia have conducted cost-effectiveness analyses for an investment case for hepatitis and have made available key diagnostics and medicines at affordable prices through the Strategic Fund.

South-East Asia Region

- Myanmar has developed a national strategic plan and operational plans for viral hepatitis and has launched treatment for hepatitis C virus in seven general hospitals in 2018 provided free of user charges. This was expanded to nine general hospitals in 2018 to treat 20 000 people.
- Thailand has provided PrEP free under the Princess PrEP programme. PrEP pilot programmes in India showed good adherence, retention and zero transmission among sex workers.

European Region

- Four countries have strengthened links between viral hepatitis and harm-reduction services, including services for opioid substitution treatment.
- Belarus has validated the dual elimination of mother-tochild transmission of HIV and syphilis and strengthened surveillance. The Republic of Moldova has engaged in an external HIV and syphilis serology proficiency programme.

Eastern Mediterranean Region

- Egypt is implementing a test-treat-cure campaign, with an unprecedented rapid scale-up of hepatitis testing and treatment and the goal of elimination by 2020. More than 20 million people have been tested, and more than 2 million people have been treated.
- Pakistan has developed a plan for providing decentralized HIV treatment services to expand service delivery in the country.

Western Pacific Region

- China completed an investment case for hepatitis B and C and, after policy changes, included hepatitis B treatment in its health insurance package. China is piloting the subnational estimation of the disease burden for hepatitis C virus to focus its response and has progressed with harm reduction.
- Cambodia has been a global leader in addressing HIV and is planning to eliminate new HIV infections with WHO support on reviews and plans.





WHO's approach to country support to accelerate impact

Each of the strategies defines actions WHO undertakes to support countries in accelerating progress.

Forty-five focus countries have been identified for intensified HIV support, representing 87% of the global burden. For hepatitis, the list includes 28 countries, representing 71% of the global burden. For STIs, 52 countries have been identified for intensified support. By focusing on the countries that carry disproportionately higher burdens of disease, this approach will enable WHO to concentrate its efforts where it can have the greatest impact on the epidemics.

WHO routinely monitors the extent to which its global guidelines are adopted and implemented through policy changes at the country level. Based on this analysis, WHO is targeting its country support to fill these gaps. A census of WHO country actions to support HIV, viral hepatitis and sexually transmitted infection responses was completed for 2017 and country implementation of WHO guidelines for the end of 2018.

- WHO provided extensive global scope of support to 104 countries across programme areas. WHO provided support for 101 countries for HIV, 70 countries for viral hepatitis and 82 countries for sexually transmitted infections. The support was tailored to the needs of individual countries, ranging from support for upstream policy integration to direct technical assistance for delivering programmes.
- WHO strengthened its differentiated and focused approach
 to country support, to drive impact where the disease burden
 and needs are greatest. Up to 89% of the 45 focus countries
 received intensified support for HIV, 93% of the 28 focus
 countries for viral hepatitis and 81% of the 52 focus countries
 for sexually transmitted infections.

- WHO support has also been more based on results, focusing
 on priority gaps in country implementation of WHO guidelines,
 which are assessed every six months, and for this report
 assessed at the end of 2018. For example, 124 low- and
 middle-income countries had adopted the WHO HIV policy
 of "treat all", 127 routine viral load monitoring and 59 countries
 HIV self-testing by the end of 2018. Having promoted policy
 change in many countries, WHO is focusing special support
 on such gaps as those in western and central Africa.
- Where relevant, WHO provided support to countries for a programme area across the different diseases, enabling greater alignment and maximizing the effectiveness of the support provided. Examples include the following.
 - Ethiopia received support for integrating both HIV and viral hepatitis indicators into its subnational health information system.
 - Ghana received support for implementing "treat all" for HIV and for developing national treatment guidelines for viral hepatitis.
 - The Russian Federation received support for national strategic planning for HIV and for viral hepatitis.
 - Viet Nam received support for rolling out community-based testing of both HIV and syphilis.
 - The United Republic of Tanzania strengthened links between HIV and noncommunicable diseases with WHO support, strengthening workplace interventions and reaching more men with HIV testing and screening for prostate cancer, diabetes and reproductive health services for male partners of women attending antenatal care.



Looking ahead: accelerating towards universal health coverage

The progress report highlights the many achievements made to date. To reach the 2020 targets, we need to accelerate progress, address specific gaps in implementation, and bring innovation to scale across the three diseases.

The major opportunity is a short five-year window period through 2023 to accelerate progress towards universal health coverage, to get back on track with the targets of the 2030 Agenda for Sustainable Development. Missing this opportunity will create increasing difficulty in reaching the health-related goals by 2030. This five-year time frame aligns with the implementation of WHO's strategic priorities of the 13th General Programme of Work for 2019–2023, and this progress report provides a baseline to identify actions towards universal health coverage. Implementing the health sector strategies requires a major effort to achieve universal health coverage that critically leaves no population behind.

The impact framework for WHO's 13th General Programme of Work for 2019–2023

WHO's triple billion goals aim to reach 1 billion more people with universal health coverage, protect 1 billion more people from health emergencies and enable 1 billion more people to enjoy better health and well-being. The impact framework for these goals comprises a three-layered measurement system.

- 1. Healthy life expectancy, an overarching summary measure of population health aligned with the health-related Sustainable Development Goal 3
- 2. The triple billion targets measured with indicators:
 - a. A combined index of universal health coverage
 - b. An index to measure protection from health emergencies
 - c. An index to measure healthier populations
- 3. Programmatic targets aligned with those of the Sustainable Development Goals and the resolutions of the World Health Assembly

This report informs the baseline for the 13th General Programme of Work for 2019–2023 and priority actions to accelerate progress across the diseases.





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List of online annexes

- 1. Key data at a glance
- 2. Accountability for the strategic directions: additional analysis
- 3. Further reporting on antimicrobial resistance

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