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## **Draft global health sector strategies**

### **Sexually transmitted infections, 2016–2021**

#### **Report by the Secretariat**

1. The Executive Board at its 138th session noted an earlier version of this report, which provided a summary of the draft strategy and web links to the full version of the draft strategy in all official WHO languages.<sup>1</sup> The updated version of the strategy presented here (see the Annex)<sup>2</sup> includes a description of populations most affected by sexually transmitted infections, an enhanced focus on *Chlamydia trachomatis* infection, and the concept of prevention in the strategy's vision statement. This version also introduces additional detail describing: the potential impact of the introduction of pre-exposure prophylaxis of HIV infection; country responsibilities; coinfection; primary prevention in the context of comprehensive prevention; alcohol use; the use of the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health; and reporting arrangements.

2. In May 2015, the Sixty-eighth World Health Assembly undertook its final review of progress on the prevention and control of sexually transmitted infections: global strategy, which covered the period 2006–2015.<sup>3</sup> The review highlighted the achievements and progress in prevention interventions and programmes, particularly in human papillomavirus control and global elimination of congenital syphilis. Remaining challenges were also highlighted, such as the provision of human and financial resources for programmes to include sexually transmitted infection services within the context of striving for universal health coverage.

3. During the discussions, a clear need was identified for an updated global strategy on sexually transmitted infections in the post-2015 period. In addition, Member States voiced strong support for WHO's continued work on the prevention and control of such infections, which would, ideally, address specified, achievable targets to measure success and define challenges. Member States also requested that evaluation of the previous strategy be taken further, and that Member States' successes

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<sup>1</sup> Document EB138/31.

<sup>2</sup> Following discussions of the Executive Board (see the summary records of the Executive Board at its 138th session, ninth meeting, document EB138/2016/REC/2) and subsequent review, revisions were made to the introduction and sections 3.0; 4.1; 4.2; 4.3; 4.4 and 5.4.

<sup>3</sup> In resolution WHA59.19 (2006), the Director-General was requested, inter alia, to report to the Health Assembly through the Executive Board in 2009, 2012 and 2015 on progress in implementing the strategy. For the global strategy for the prevention and control of sexually transmitted infections, 2006–2015, see document WHA59/2006/REC/1, Annex 2.

and best practices be shared with regard to the goals articulated in the previous strategy.<sup>1</sup> The Secretariat confirmed that the new draft global strategy on sexually transmitted infections would be aligned with strategy development on HIV and viral hepatitis and would be presented to the Sixty-ninth World Health Assembly.

4. In September 2015, the United Nations General Assembly adopted the 2030 Agenda on Sustainable Development,<sup>2</sup> which endorsed the Sustainable Development Goals, including the targets of particular relevance here, target 3.3: “By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases”; target 3.7: “By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes”; and target 5.6: “Ensure universal access to sexual and reproductive health and reproductive rights as agreed with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences”.

5. WHO has developed a draft global health sector strategy on sexually transmitted infections, 2016–2021, that is in line with the 2030 Agenda for Sustainable Development and that responds to requests by Member States. The proposed strategy is based on achievements and lessons learned from the former global strategy, which covered the period 2006–2015.

6. The process of developing the draft global health sector strategy on sexually transmitted infections was managed together with the draft global health sector strategies on HIV and on viral hepatitis. Three organizing frameworks provided a common structure for the three draft strategies: universal health coverage; the continuum of health services; and the public health approach. Each of the strategies sets out a vision, a goal, targets and actions towards eliminating the diseases as public health threats. To achieve the targets, the actions required were organized under five strategic directions. Under each of the strategic directions, specific actions are described that need to be taken by countries, WHO and partners.

7. The proposed strategy provides a framework for joint WHO and Member State action at the global, regional and country levels.

8. The broad consultative process that led to the draft strategy involved key partners, including Member States, organizations of the United Nations system and other multilateral agencies, donor and development agencies and initiatives, civil society, nongovernmental organizations, scientific and technical institutions and networks, and the private sector. Numerous stakeholder consultations were held, and more than 100 Member States participated in consultations held in all WHO regions in the period April–July 2015. To supplement these consultations and ensure the broadest participation, the Secretariat hosted a widely-promoted public online consultation for six weeks in the period April–June 2015. An official technical briefing on the three strategies (sexually transmitted infections, HIV and viral hepatitis) was held during the Sixty-eighth World Health Assembly.

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<sup>1</sup> See the summary records of the Sixty-eighth World Health Assembly, twelfth meeting, section 4 and the thirteenth meeting, section 2 (document WHA68/2015/REC/3).

<sup>2</sup> United Nations General Assembly resolution 70/1 – Transforming our world: The 2030 Agenda for Sustainable Development, see [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1) (accessed 22 April 2016).

9. The process was enhanced by input from the WHO civil society reference group and meetings of the Sexually Transmitted Infections Advisory Group and the Scientific and Technical Advisory Group that deals with reproductive health and research. The consultative process was extensive.<sup>1</sup>

10. The proposed strategy articulates WHO's commitments to achieving a series of goals and targets aligned to the objectives described in the three draft strategies, aimed at ending sexually transmitted infections as a public health threat by 2030, within the context of ensuring healthy lives and promoting well-being for all at all ages. Furthermore, the draft strategy on sexually transmitted infections is aligned to the 2030 Agenda for Sustainable Development, and its focus on ensuring financial security and health equity through a commitment to universal health coverage. The proposed strategy seeks to guide national responses, articulates the Secretariat's contributions, and is intended to be adapted by regional offices to meet their specific needs.

11. The draft strategy recognizes that progress can be gauged from the information obtained through the Global AIDS Response Progress Reporting system,<sup>2</sup> the Gonococcal Antimicrobial Surveillance Programme,<sup>3</sup> and a rapid assessment of programmes related to sexually transmitted infections in Member States, conducted by questionnaire. WHO and its partners have published guidance on targeting screening to most-at-risk and vulnerable populations,<sup>4</sup> and most national action plans include interventions targeting for specific populations including sex workers and their clients, men who have sex with men, people who inject drugs, people living with HIV and adolescents.

12. A shortcoming identified in the draft strategy is that screening for sexually transmitted infections is rare in resource-constrained settings, and usually involves testing blood from antenatal care attendees and blood donors for syphilis and for markers of HIV and hepatitis B virus infections.

13. Regional and global surveillance and monitoring systems are in particular need of strengthening. More regular etiological studies are urgently needed to identify prevailing causative organisms.

14. Resistance of *Neisseria gonorrhoeae* to cephalosporins, the last-line treatment, is emerging, although globally only 67 countries, mainly in the European and Western Pacific regions, have reported on antimicrobial resistance. In response, WHO has issued information and a global action plan to control the spread and impact of gonococcal resistance, which is now also included within the broader WHO global action plan for antimicrobial resistance.<sup>5</sup>

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<sup>1</sup> For more information on the consultative process and on a variety of supporting draft strategy documents and summary reports, see: <http://www.who.int/reproductivehealth/ghs-strategies/en/> (accessed 22 April 2016).

<sup>2</sup> For more information on Global AIDS Response Progress Reporting, see: <http://www.unaids.org/en/dataanalysis/knowyourresponse/globalaidsprogressreporting> (accessed 22 April 2016).

<sup>3</sup> For more information on the Gonococcal Antimicrobial Surveillance Programme, see: [http://www.who.int/reproductivehealth/topics/rtis/gonococcal\\_resistance/en/](http://www.who.int/reproductivehealth/topics/rtis/gonococcal_resistance/en/) (accessed 22 April 2016).

<sup>4</sup> See Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations, available at: <http://www.who.int/hiv/pub/guidelines/keypopulations/en/> (accessed 22 April 2016).

<sup>5</sup> More information on gonococcal antimicrobial resistance and the publication, Sexually transmitted infections, are available at: <http://www.who.int/reproductivehealth/publications/rtis/articles/en/> (accessed 22 April 2016). The publication, Global action plan to control the spread and impact of antimicrobial resistance in *Neisseria gonorrhoeae*, is available at: <http://www.who.int/reproductivehealth/publications/rtis/9789241503501/en/> (accessed 22 April 2016).

15. The annual global surveillance reports on sexually transmitted infections<sup>1</sup> summarize data on: the number of reported cases of sexually transmitted infections; gonococcal antimicrobial resistance; burdens of disease; and progress towards elimination of mother-to-child transmission of syphilis.<sup>2</sup>

16. The actions outlined in the draft strategy seek to ensure that the health sector response on sexually transmitted infections is strengthened to protect investments made to date and to ensure that people-centred approaches help secure sustainable financing for relevant services, interventions and programmes into the future.

### **ACTION BY THE HEALTH ASSEMBLY**

17. The Health Assembly is invited to adopt the draft global health sector strategy on sexually transmitted infections, 2016–2021.

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<sup>1</sup> The report on global sexually transmitted infection surveillance 2013 is available at: <http://www.who.int/reproductivehealth/publications/rtis/stis-surveillance-2013/en/> (accessed 22 April 2016).

<sup>2</sup> For more information on progress towards the elimination of mother-to-child transmission of syphilis, see: [http://www.who.int/reproductivehealth/topics/rtis/cs\\_global\\_updates/en/](http://www.who.int/reproductivehealth/topics/rtis/cs_global_updates/en/) (accessed 22 April 2016).

## ANNEX

**DRAFT GLOBAL HEALTH SECTOR STRATEGY ON  
SEXUALLY TRANSMITTED INFECTIONS, 2016–2021****INTRODUCTION AND CONTEXT**

1. The present draft global health sector strategy on sexually transmitted infections, 2016–2021 builds on conclusions from the evaluation of the implementation of the global strategy for the prevention and control of sexually transmitted infections 2006–2015<sup>1</sup> and sets out a vision, goals, targets, guiding principles and priority actions for ending the sexually transmitted infections epidemic as a public health problem.
2. The 2030 Agenda for Sustainable Development<sup>2</sup> defines a set of ambitious global health goals and targets. Of particular interest to the proposed strategy is Goal 3: Ensure healthy lives and promote well-being for all at all ages (see Box 1), including its focus on health-related areas.
3. This draft global health sector strategy on sexually transmitted infections describes an important component of the health sector contribution towards the achievement of these targets. It outlines actions for countries and for WHO. If implemented, these actions will accelerate and intensify the sexually transmitted infections response so that progress towards ending the epidemics becomes a reality. Furthermore, the implementation of the global health sector strategy on sexually transmitted infections, once adopted, will require political commitment and resources to rapidly accelerate the response over the next five years and to sustain action through to 2030 and beyond.
4. The draft strategy positions the health sector response to sexually transmitted infection epidemics as critical to the achievement of universal health coverage – one of the key health targets of the Sustainable Development Goals identified in the 2030 Agenda for Sustainable Development. The strategy, once adopted, and its implementation will contribute to a radical decline in new sexually transmitted infections and in deaths related to such infections (including still births and cervical cancer), while improving individual health, men’s and women’s sexual health, and the well-being of all people. It will guide efforts to: accelerate and focus comprehensive prevention efforts through scaling up evidence-based combined behavioural, biomedical and structural approaches; facilitate people’s access to information on their sexually transmitted infection status; improve access to treatment and comprehensive long-term care when needed; and challenge pervasive stigmatization and discrimination. The draft strategy promotes a people-centred approach, grounded in principles of human rights, gender equality and health equity.

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<sup>1</sup> Document A68/36 progress report G.

<sup>2</sup> United Nations General Assembly resolution 70/1 – Transforming our world: The 2030 Agenda for Sustainable Development, see [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E) (accessed 13 April 2016).

**Box 1. Sustainable Development Goal 3**

Ensure healthy lives and promote well-being for all at all ages

- 3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100 000 live births
- 3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births
- 3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
- 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
- 3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
- 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents
- 3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
- 3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
- 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
- 3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate
- 3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
- 3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
- 3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

5. This draft strategy is fully aligned with the 2030 Agenda for Sustainable Development, and the drive towards universal health coverage. It is also aligned with other key WHO global health strategies and plans, including those for sexual and reproductive health, HIV, violence against women and girls,

adolescent health, maternal, newborn and child health, noncommunicable diseases, integrated people-centred health services, viral hepatitis, tuberculosis, and blood safety.<sup>1</sup>

6. Broad partnerships and strong links with other health and development issues must be emphasized in the next phase of the sexually transmitted infection response. The draft strategy takes into consideration the global health strategies of key development partners, including the Global Fund to fight AIDS, Tuberculosis and Malaria; the United States President's Emergency Plan for AIDS Relief; GAVI Alliance; and the Global Strategy for Women's Children's and Adolescents' Health (2016–2030).<sup>2</sup>

7. The draft strategy defines the quality-assured sexually transmitted infection services that are essential for meeting people's needs and preferences, and proposes actions to address the underlying determinants of sexually transmitted infection epidemics, including stigmatization and discrimination, and inequities that put people at greater risk for infection and limit access to effective prevention and treatment services. Further, the draft strategy describes how to ensure equitable coverage of services and maximum impact for all people in need, which includes a focus on both the general population and specific population groups (see Box 2).

**Box 2. Specific populations**

Each country needs to define the specific populations that are most affected by sexually transmitted infection epidemics. The response should be based on the epidemiological and social context. Specific populations that focus on sexually transmitted infections will include populations most likely to have a high number of sex partners, such as sex workers and their clients. Other populations for consideration include men who have sex with men, transgendered people, and people with an existing sexually transmitted infection, including people living with HIV. Many of these groups overlap with groups recognized as key populations for HIV. Other groups considered to be particularly vulnerable to sexually transmitted infections include young people and adolescents, women, mobile populations, children and young people living on the street, prisoners, drug users and people affected by conflict and civil unrest.

8. The draft strategy also recommends approaches to minimize the risk of financial hardship for people requiring services, and embraces innovation to drive accelerated progress. Many of the priority actions highlighted draw on the strong body of evidence generated by the implementation of the 2006–2015 strategy on sexually transmitted infections<sup>3</sup> and responses around the world.<sup>4</sup>

<sup>1</sup> Some of the key WHO global health strategies and plans are available online, including: three global health sector strategies for the period 2016–2021 for HIV, viral hepatitis, and sexually transmitted infections, see <http://www.who.int/reproductivehealth/ghs-strategies/en/> and <http://www.who.int/hiv/strategy2016-2021/online-consultation/en/> (accessed 24 April 2016); another is the End TB strategy, see <http://www.who.int/tb/strategy/en/> (accessed 20 April 2016). In addition, information is available on WHO's advocacy role and on current online consultations, for example, Giving "voice to youth", see <http://www.who.int/reproductivehealth/en> (accessed 20 April 2016); and the WHO Global action plan on antimicrobial resistance [http://www.who.int/drugresistance/global\\_action\\_plan/en/](http://www.who.int/drugresistance/global_action_plan/en/) (accessed 24 April 2016).

<sup>2</sup> The Global Strategy for Women's, Children's and Adolescents' Health (2016–2030) is available at: <http://www.everywomaneverychild.org/global-strategy-2> (accessed 22 April 2016);

<sup>3</sup> Global strategy for the prevention and control of sexually transmitted infections: 2006–2015, see [http://www.who.int/hiv/pub/toolkits/stis\\_strategy\[1\].en.pdf](http://www.who.int/hiv/pub/toolkits/stis_strategy[1].en.pdf) (accessed 22 April 2016).

<sup>4</sup> See document A68/36 progress report G (2015).

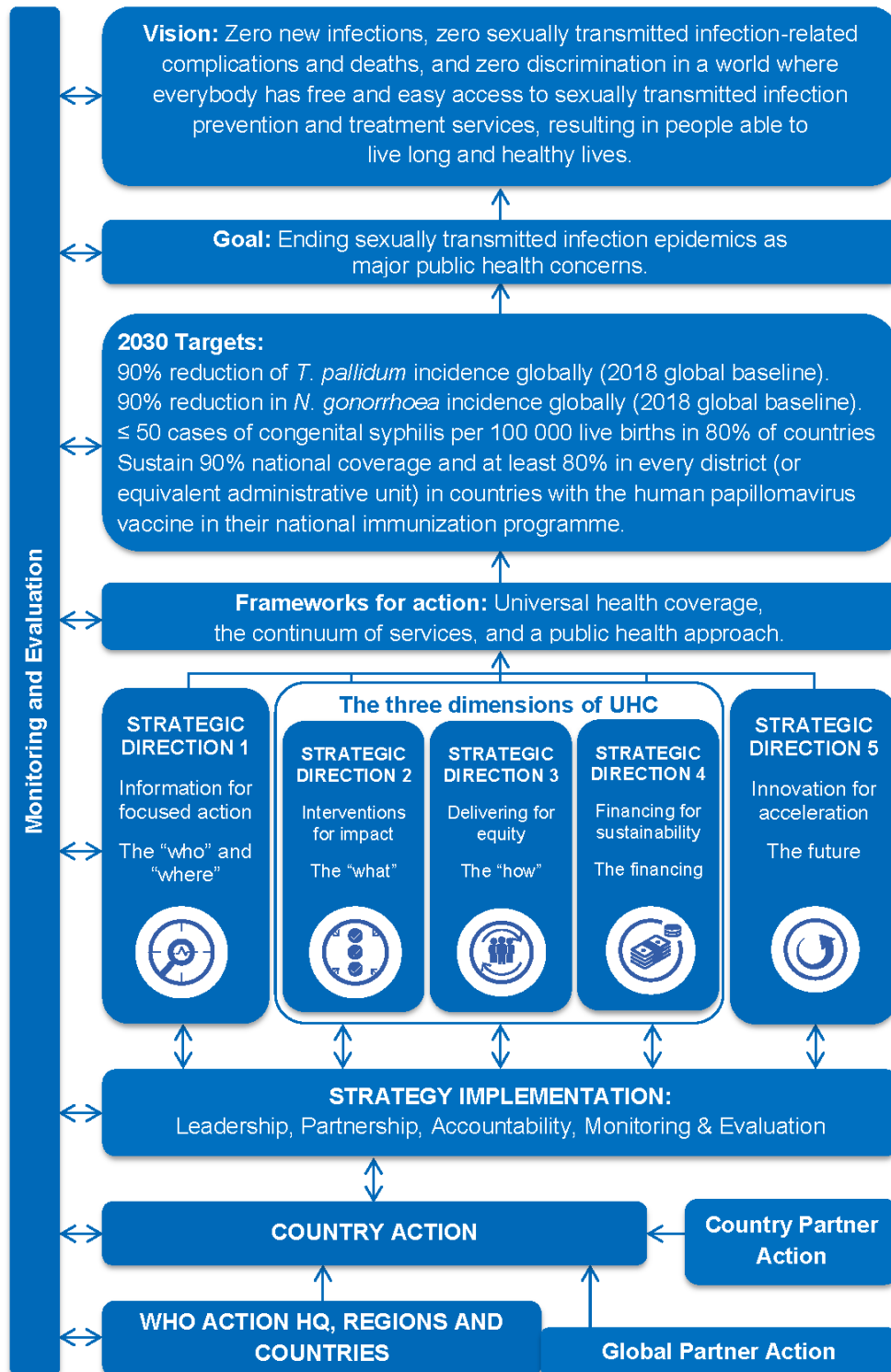
## Outline of the strategy

9. The following five major sections underpin this draft strategy (an overview of which is provided in Figure 1):

1. **Setting the scene** – reviews the current status of sexually transmitted infection epidemics and burden, identifies opportunities and challenges for the future, and argues the case for adequate investment in the health sector response to sexually transmitted infections.
2. **Framing the strategy** – describes the three organizing frameworks for the strategy (universal health coverage, continuum of sexually transmitted infection services and the public health approach) and presents the structure of the strategy.
3. **Vision, goal, targets and guiding principles** – presents a set of impact and service coverage targets for 2020 and 2030 to drive the response.
4. **Strategic directions and priority actions** – recommends actions to be taken for both countries and WHO under each of five strategic directions.
5. **Strategy implementation: leadership, partnerships, accountability, monitoring and evaluation** – outlines the key elements of implementation.



**Figure 1. Outline of the draft global health sector strategy on sexually transmitted infections 2016–2021**



## 1. SETTING THE SCENE: Why the sexually transmitted infection response should be a global priority

10. The burden of morbidity and mortality worldwide resulting from sexually transmitted pathogens compromises quality of life, as well as sexual and reproductive health and newborn and child health (see Figure 2). Sexually transmitted infections also facilitate indirectly the sexual transmission of HIV and cause cellular changes that precede some cancers. Sexually transmitted infections impose a substantial strain on the budgets of both households and national health systems in middle- and low-income countries, and have an adverse effect on the overall well-being of individuals (Box 3).

### Box 3. The hidden toll of sexually transmitted infections

It is estimated that annually there are 357 million new cases of four curable sexually transmitted infections among people aged 15–49 years (see Figure 2): *Chlamydia trachomatis* (131 million), *Neisseria gonorrhoeae* (78 million), syphilis (6 million), or *Trichomonas vaginalis* (142 million).<sup>\*</sup> The prevalence of some viral sexually transmitted infections is similarly high, with an estimated 417 million people infected with herpes simplex type 2, and approximately 291 million women harbouring the human papillomavirus. The prevalence of these sexually transmitted infections varies by region and gender. These epidemics have a profound impact on the health and lives of children, adolescents and adults worldwide:

- Fetal and neonatal deaths – syphilis in pregnancy leads to over 300 000 fetal and neonatal deaths each year, and places an additional 215 000 infants at increased risk of early death;
- Cervical cancer – the human papillomavirus infection is responsible for an estimated 530 000 cases of cervical cancer and 264 000 cervical cancer deaths each year;
- Infertility – sexually transmitted infections, such as gonorrhoea and chlamydia, are important causes of infertility worldwide;
- HIV risk – the presence of a sexually transmitted infection, such as syphilis, gonorrhoea, or herpes simplex virus infection, greatly increases the risk of acquiring or transmitting HIV infection (by two to three times, in some populations);
- The physical, psychological and social consequences of sexually transmitted infections severely compromise the quality of life of those infected.

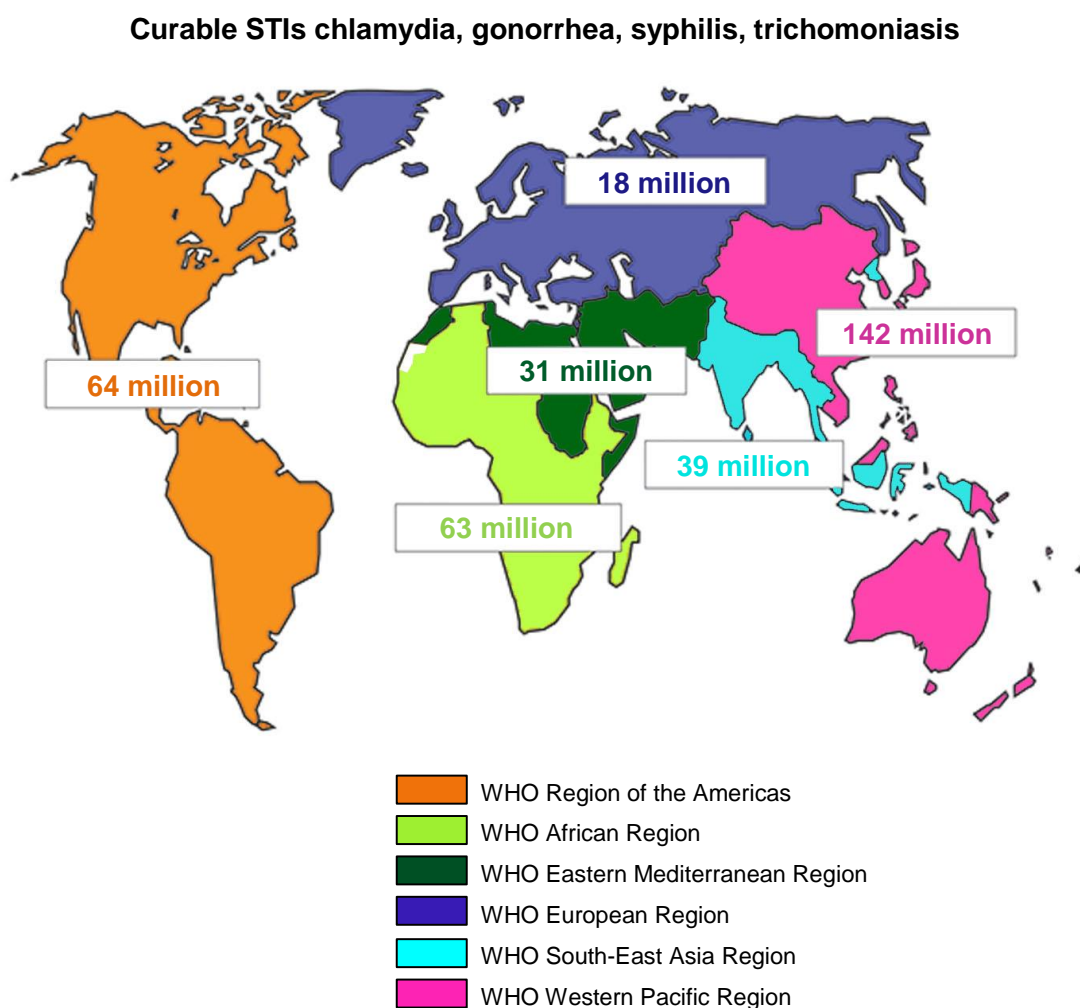
Adequate control and/or elimination of sexually transmitted infections will contribute to reducing disease and human suffering.

<sup>\*</sup> Most recent estimates are for 2012.

11. Complications due to sexually transmitted infections have a profound impact on sexual and reproductive health. The numbers of men and women infected with sexually transmitted infections are similar (with the exception of herpes simplex virus type 2), notwithstanding some regional differences (see Figures 3(a) and 3(b)); however, complications disproportionately affect women in several ways.

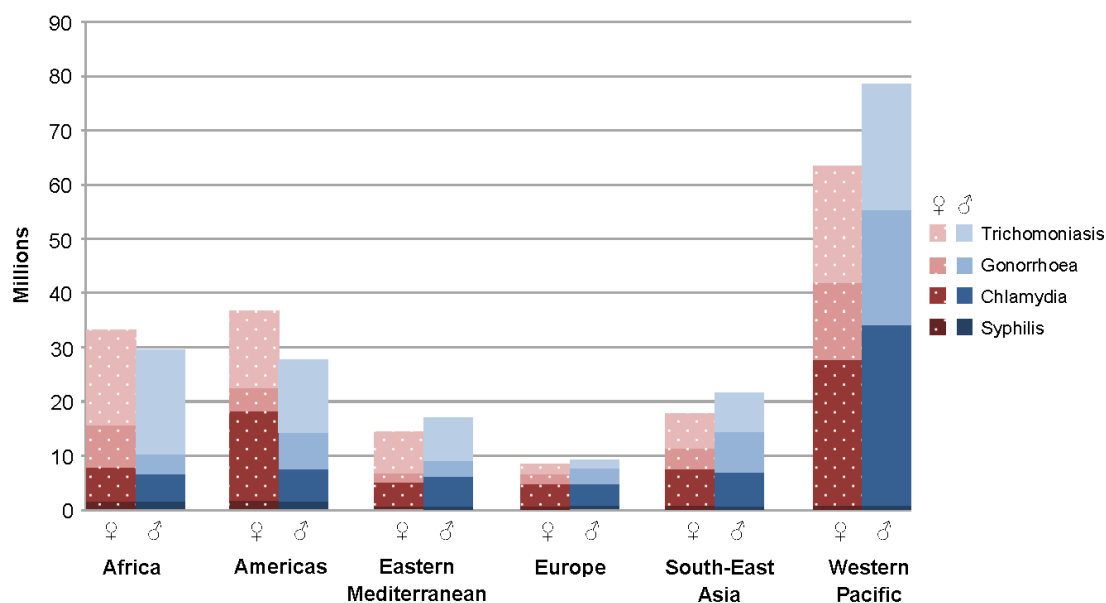
12. Limited data on sexually transmitted infections, in particular data disaggregated by sex, compromise the global response. There is inconsistent reporting between and within regions and countries. The present draft strategy proposes a priority focus on two areas: firstly, on securing better data on the sexually transmitted infection burden by sex and by age group in order to measure progress towards the control of sexually transmitted infections; and secondly, on identifying priority areas for action.

Figure 2. WHO estimates: 357 million new cases of curable sexually transmitted infections in 2012

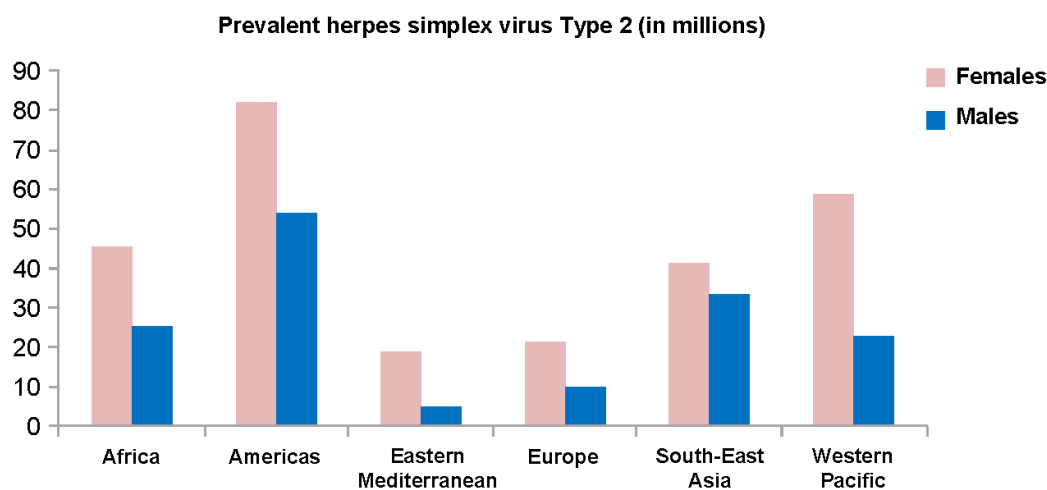


Source: Newman LM, Rowley J, Vander Hoorn S et al. Global estimates of the prevalence and incidence of four curable sexually transmitted infections in 2012, PLoSOne 2015.

**Figure 3(a). Estimated incidences of four curable sexually transmitted infections, by region and sex, 2012**



**Figure 3(b). Estimated prevalence of Herpes simplex virus type 2, by region and sex, 2012**



13. In recent years there have been notable achievements in advancing the sexually transmitted infection response. There has been an appreciable decline, for example, in the incidence of *Haemophilus ducreyi* (chancroid) in general population syphilis rates, and in some sequelae of such infections, including neonatal conjunctivitis. An increase in the number of pregnant women screened for syphilis and HIV, with increased access to adequate treatment, has helped underline the feasibility of dual elimination of mother-to-child transmission of HIV and syphilis. Furthermore, increased access to human papillomavirus vaccination has already been shown to reduce pre-cervical cancer lesions and

genital warts. Further acceleration of the global response will sustain and build on these achievements and trigger further successes in sexually transmitted infection management and reduction.

14. Most of the tools required for reaching ambitious 2030 targets are available. Potentially vital innovations, such as point-of-care tests for sexually transmitted infections, vaccines against such infections and multipurpose technologies are on the horizon. Using them to full effect, however, will require a rapid increase in investment in the sexually transmitted infection response, focusing resources on the most effective programmes and on the populations and geographical locations where need is greatest, and linking sexually transmitted infection interventions with other health services, to mutual benefit. These key directions are detailed in the present draft strategy.

### **Prioritizing three sexually transmitted infections for strategic global focus**

15. The draft global health sector strategy on sexually transmitted infections focuses primarily on three infections that require immediate action for control and that can be monitored:

1. *Neisseria gonorrhoeae* because of the rising risk of untreatable gonorrhoea and the risk of coinfection with other sexually transmitted infections including *Chlamydia trachomatis*;
2. *Treponema pallidum* with the elimination of congenital syphilis, which implies that strong systems are in place to ensure screening and treatment of all pregnant women and control of syphilis in specific populations;
3. *Human papillomavirus* with an emphasis on vaccination towards the elimination of cervical cancer and genital warts.

Cost-effective interventions exist for all three sexually transmitted infections.

16. WHO also recognizes the importance of *Chlamydia trachomatis* infection and the increasing rate of infection in adolescents. However, because the best strategies to control and measure chlamydia infections are still to be defined, further research and cost-effectiveness analyses are encouraged. Furthermore, WHO will catalyse the development of point-of-care testing as a critical step within the sexually transmitted infection cascade and continuum of services.

## **2. FRAMING THE STRATEGY**

17. The proposed strategy on sexually transmitted infections is one of three related health sector strategies for 2016–2021, designed to contribute to the attainment of the 2030 Agenda for Sustainable Development, and the Goals it enshrines. Health is a major goal in this new Agenda, which reflects its central role in alleviating poverty and facilitating development.

18. The present draft strategy positions the response to the sexually transmitted infection burden within the broader post-2015 development framework. It describes the priority actions that are required in order to achieve global targets related to sexually transmitted infections, and how the response to such infections can contribute to the achievement of universal health coverage and other key health goals.

19. This draft strategy draws on three overarching frameworks: universal health coverage; the continuum of services relating to sexually transmitted infections; and the public health approach.

## Universal health coverage

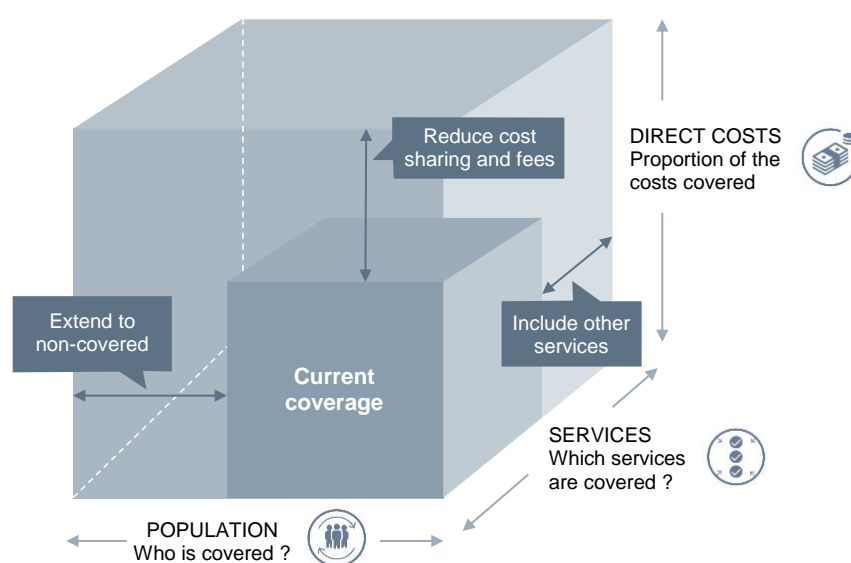
20. Universal health coverage (see Figure 4) provides an overarching framework for the strategy. It comprises three interlinked objectives:

1. improve the range, quality and availability of essential health interventions and services (covering the range of services needed);
2. improve the equitable and optimal uptake of services in relation to need (covering the populations in need of services);
3. reduce costs and provide financial protection for those who need the services (covering the costs of services).

21. As resources, efficiencies and capacities increase, the range of services provided can be expanded, the quality can be improved, and more populations can be covered with less direct costs to those who need the services – a progressive realization of universal health coverage. Each country will need to determine the most suitable path towards universal health coverage based on its own country context, prioritizing and making trade-offs in order to be able to move forward as rapidly as possible while ensuring programme sustainability, quality and equity.

22. Using the perspective of universal health coverage (Figure 4), the proposed strategy emphasizes the need for: strengthening health and community systems; identifying high-impact interventions; tackling the social determinants that drive the epidemic and hinder the response; and ensuring that people use the quality health services they need without suffering financial hardship or stigmatization. In particular, the draft strategy addresses issues related to effective and equitable service coverage, which includes overcoming barriers to care and understanding the needs of women, adolescents and specific population groups (see Box 3), including those linked to increased vulnerabilities.

**Figure 4. The three dimensions of universal health coverage: All people receive the services they need of sufficient quality to make a difference without incurring financial hardship**



## The continuum of sexually transmitted infection services as an organizing framework for sexually transmitted infection programmes

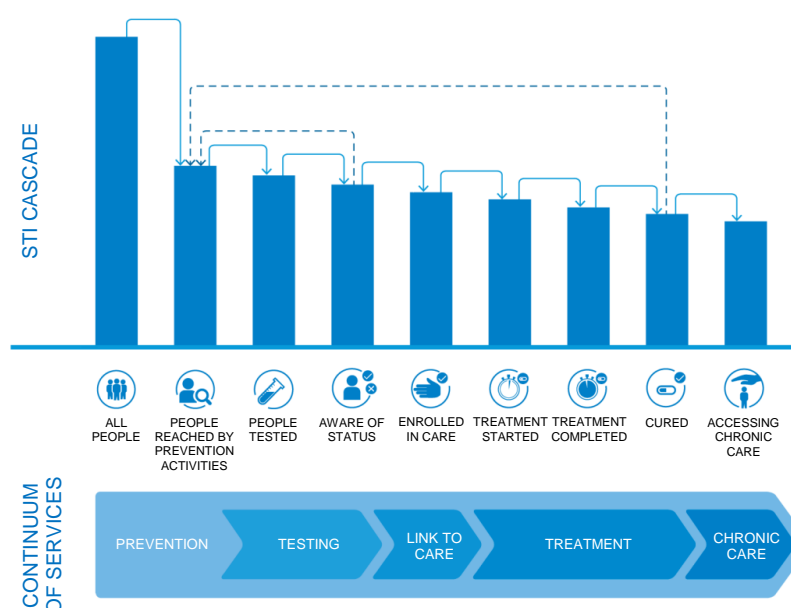
23. While the concept of universal health coverage frames the overall draft strategy, the continuum of services that are needed to overcome sexually transmitted infection epidemics provides a comprehensive service delivery framework for organizing strategic action (Figure 5). That continuum spans the full range of required interventions – preventing, diagnosing, treating and curing – that is needed to achieve strategic targets and includes all people: people reached by prevention activities; people tested; people aware of their status; people enrolled in care; people whose treatment has started; people whose treatment is complete; people who are cured; and people accessing chronic care.

24. The present draft strategy describes the priority actions for enhancing the impact and equity of sexually transmitted infection responses along that entire continuum, with special attention to reaching populations that are left behind. Depending on the context, those left behind may include: women, men, adolescents, men who have sex with men, sex workers, and transgender people. It identifies ways to ensure and improve the quality of services, and proposes strategies to achieve financial sustainability and minimize the risk of financial hardship for people requiring such services.

25. As people move along the continuum of sexually transmitted infection services, there tends to be some loss to follow-up (see Figure 5). The objective is to engage individuals as early as possible, retain them in care and minimize any leakages along the cascade of service continuum.

26. The draft strategy also makes a strong case for expanding the provision of good quality sexually transmitted infection prevention and care more widely into the areas of primary health care, sexual and reproductive health, and HIV services. It emphasizes opportunities to increase coverage by working collaboratively with other government sectors, and with community-based organizations and private providers.

**Figure 5. The continuum of sexually transmitted infection services and the cascade**



## A public health approach

27. The draft strategy is rooted in a public health approach that is concerned with preventing disease, promoting health and ensuring quality of life among the population as a whole. It aims to ensure the widest possible access to high-quality services at the population level, based on simplified and standardized interventions and services that can readily be taken to scale, including in resource-limited settings. Through adopting a public health approach, the strategy proposes:

- Standardized, simplified protocols and guidance;
- Integrated people-centred health services;
- Decentralized service delivery;
- A focus on equity;
- Community participation;
- The meaningful involvement of people most affected by sexually transmitted infections;
- Leveraging public and private sectors;
- Ensuring services are free or affordable;
- Moving from an individual clinical focus to population-based national plans.

28. It promotes the principle of Health in All Policies through, where necessary, legal, regulatory and policy reforms. It aims to strengthen integration and linkages between sexually transmitted infection services and other services, improving both impact and efficiency.

## The structure of the proposed strategy

29. The proposed strategy describes five strategic directions, under which there are priority actions that countries need to take. In addition, the support that WHO will provide in order to scale up a global response is also described. Such a response capitalizes on the opportunities provided through the frameworks emerging in response to the 2030 Agenda for Sustainable Development for ending the sexually transmitted infection epidemics as major public health concerns.

30. The five strategic directions (provided in Figure 1) in the present draft strategy for the period 2016–2021 include:

**Strategic direction 1 – Information for focused action** – Focuses on the need to understand the sexually transmitted infection epidemic and response as a basis for advocacy, political commitment, national planning, resource mobilization and allocation, implementation, and programme improvement.

**Strategic direction 2 – Interventions for impact** – Addresses the first dimension of universal health coverage by describing the essential package of high-impact interventions that need to be delivered along the continuum of sexually transmitted infection services to reach country and global targets, and which should be considered for inclusion in national health benefit packages.



**Strategic direction 3 – Delivering for equity** – Addresses the second dimension of universal health coverage by identifying the best methods and approaches for delivering the continuum of sexually transmitted infection services to different populations and in different locations, so as to achieve equity, maximize impact and ensure quality. It includes a critical focus on interventions and approaches focused on human rights, gender equality, and addressing barriers that undermine equitable access to services for different populations and in different settings and locations.

**Strategic direction 4 – Financing for sustainability** – Addresses the third dimension of universal health coverage by identifying sustainable and innovative models for financing of sexually transmitted infection responses and approaches for reducing costs so that people can access the necessary services without incurring financial hardship.

**Strategic direction 5 – Innovation for acceleration** – Identifies those areas where there are major gaps in knowledge and technologies, where innovation is required to shift the trajectory of the sexually transmitted infection response towards and beyond the 2020 milestones.

31. The proposed strategy outlines a pathway towards the goal of eliminating sexually transmitted infections as a public health threat by 2030. Impact and service coverage targets are defined for 2020 and 2030 to measure progress towards the elimination goal. To achieve these targets, action is required in five areas, which are organized under five strategic directions.

32. The five strategic directions and the priority actions are informed by the evaluation of the implementation of the 2006–2015 sexually transmitted infections global strategy<sup>1</sup> presented to the Sixty-eighth World Health Assembly in 2015.<sup>2</sup> The evaluation emphasized a need to: (1) strengthen surveillance and improve knowledge of prevalence, etiology and antimicrobial resistance; (2) scale up sexually transmitted infection interventions, in particular for specific populations through ensuring an appropriate enabling environment; (3) increase access to services by integrating the prevention and management of sexually transmitted infections into the broader agendas of HIV, sexual and reproductive health, and other key platforms; (4) strengthen financing mechanisms for relevant services and strengthening human resource capacity; and (5) accelerate access to innovations through the development of point-of-care diagnostic tests and new preventive interventions, such as vaccines, microbicides, suppressive therapy for the herpes simplex virus, and HIV prevention and health promotion methods.

### 3. VISION, GOAL, TARGETS AND GUIDING PRINCIPLES

33. The draft strategy outlines a vision, goal, targets, milestones, the broader impact, and guiding principles for the global health sector.

34. The targets and milestones were proposed during a WHO expert consultation on sexually transmitted infections in August 2014, which included country representatives and experts in this area of public health. The choice of targets was influenced by the availability of cost-effective interventions

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<sup>1</sup> See the progress report of the implementation of the global strategy for prevention and control of sexually transmitted infections: 2006–2015, at <http://www.who.int/reproductivehealth/publications/rtis/STI-progress.pdf?ua=1> (accessed 22 April 2016).

<sup>2</sup> See document A68/36 progress report G.

that should be urgently scaled up and the, use of existing indicators and reporting frameworks to reduce the reporting burden of countries. These targets can be monitored through the existing Global AIDS Response Progress Reporting system (*N. gonorrhoeae* and *T. pallidum*), and the Global vaccine action plan (HPV vaccination). The proposed 70% targets were based on expert consensus and are not informed by a modelling exercise. The human papillomavirus vaccine target is consistent with the targets identified in the Global vaccine action plan.<sup>1</sup>

35. The global targets should be achieved by 2030, which aligns with the timeline established for the Sustainable Development Goals.<sup>2</sup> The report to be produced in 2021 will measure the milestones, and an evaluation will be undertaken at that time on whether targets are on track. Any adjustments that are required to achieve the 2030 global targets may also be made at that time.

### The vision

36. Zero new infections, zero sexually transmitted infection-related complications and deaths, and zero discrimination in a world where everybody has free and easy access to prevention and treatment services for sexually transmitted infections, resulting in people able to live long and healthy lives.

### The goal

37. Ending sexually transmitted infection epidemics as major public health concerns.<sup>3</sup>

### Global targets for 2030

38. A concerted effort to rapidly scale up effective interventions and services can achieve the goal of ending sexually transmitted infection epidemics as public health concerns by 2030, by reaching this ambitious set of targets (see Figure 6):

- 90% reduction of *T. pallidum* incidence globally (2018 global baseline);
- 90% reduction in *N. gonorrhoeae* incidence globally (2018 global baseline);
- 50 or fewer cases of congenital syphilis per 100 000 live births in 80% of countries;<sup>4</sup>
- 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.

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<sup>1</sup> See document WHA65/2012/REC/1, Annex 4.

<sup>2</sup> As mentioned, the Sustainable Development Goals and targets are identified in the United Nations General Assembly resolution 70/1 – Transforming our world: The 2030 Agenda for Sustainable Development identifies see [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E) (accessed 22 April 2016).

<sup>3</sup> Ending the sexually transmitted infection epidemics as major public health concerns is defined by the reduction in cases of *N. gonorrhoeae* and *T. pallidum*; as well as by the elimination of congenital syphilis and of pre-cervical cancer lesions through the high coverage of human papillomavirus vaccines.

<sup>4</sup> Aligned with the Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis, see [http://apps.who.int/iris/bitstream/10665/112858/1/9789241505888\\_eng.pdf?ua=1&ua=1](http://apps.who.int/iris/bitstream/10665/112858/1/9789241505888_eng.pdf?ua=1&ua=1) (accessed 25 April 2016).

## Milestones for 2020

39. Milestones for 2020 (see Figure 7) include:

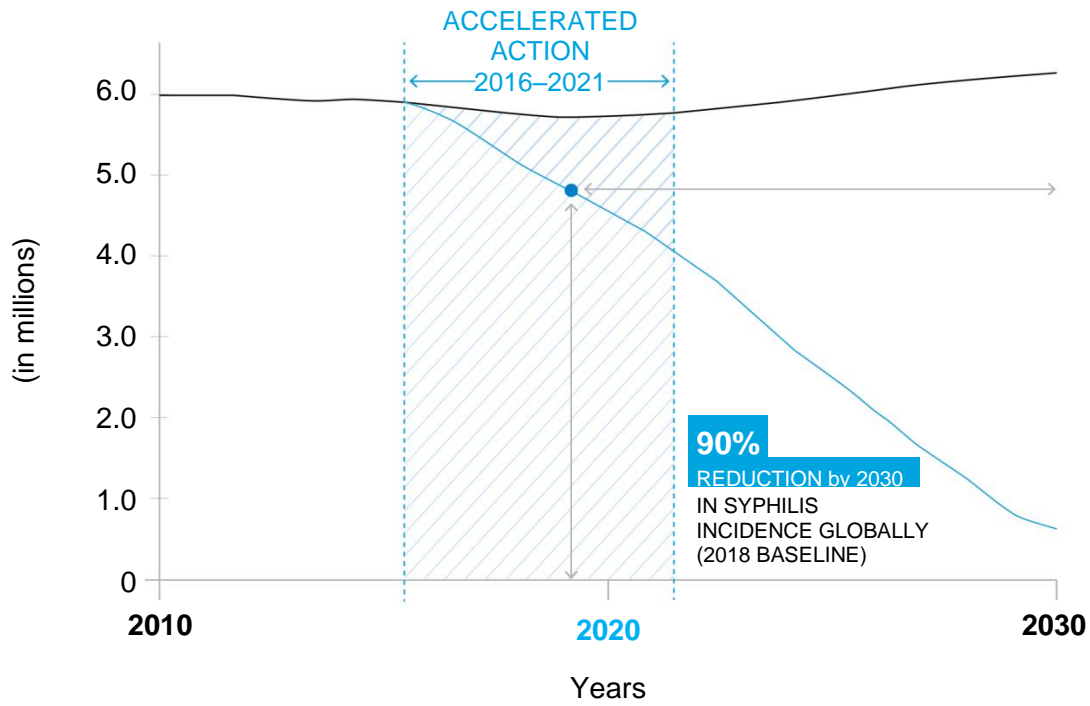
- **70% of countries have sexually transmitted infection surveillance systems in place** that are able to monitor progress towards the relevant targets
- **70% of countries have at least 95% of pregnant women screened for HIV and/or syphilis**; 95% of pregnant women screened for HIV and/or syphilis with free, prior and informed consent; 90% of HIV-positive pregnant women receiving effective treatment; and 95% of syphilis-seropositive pregnant women treated with at least one dose of intramuscular benzathine penicillin or other effective regimen
- **70% of key populations for HIV have access to a full range of services relevant to sexually transmitted infection and HIV**, including condoms
- **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
- **70% of countries deliver HPV vaccines** through the national immunization programme
- **70% of countries report on antimicrobial resistance in *N. gonorrhoeae***
- **90% national coverage** sustained and at least 80% in every district (or equivalent administrative unit) in countries with the human papillomavirus vaccine in their national immunization programme

## Country targets for 2020

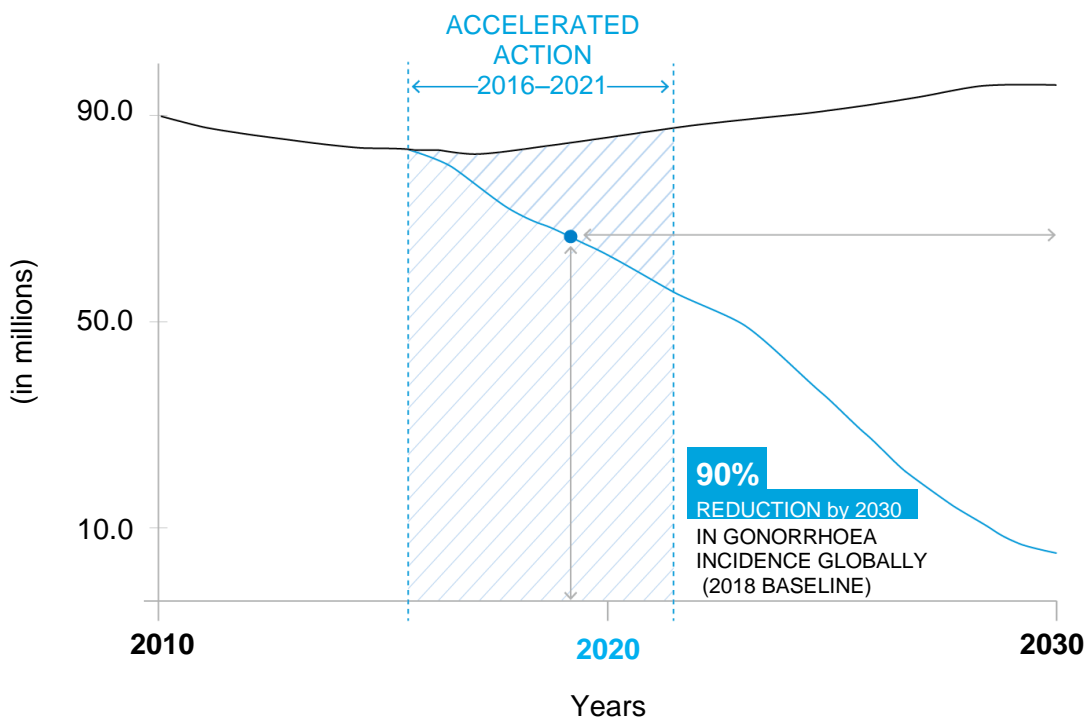
40. Informed by global goals and targets, countries should develop as soon as practicable ambitious national goals and targets for 2020 and beyond, taking into account the country context, including the nature and dynamics of country epidemics, populations affected, structure and capacity of the health care and community systems, and resources that can be mobilized. Targets should be feasible and developed based on the best possible data available on the sexually transmitted infections situation, trends and responses, and monitored through a set of standard and measurable indicators. The targets should apply to everyone.

Figure 6. Incidence targets: syphilis and gonorrhoea

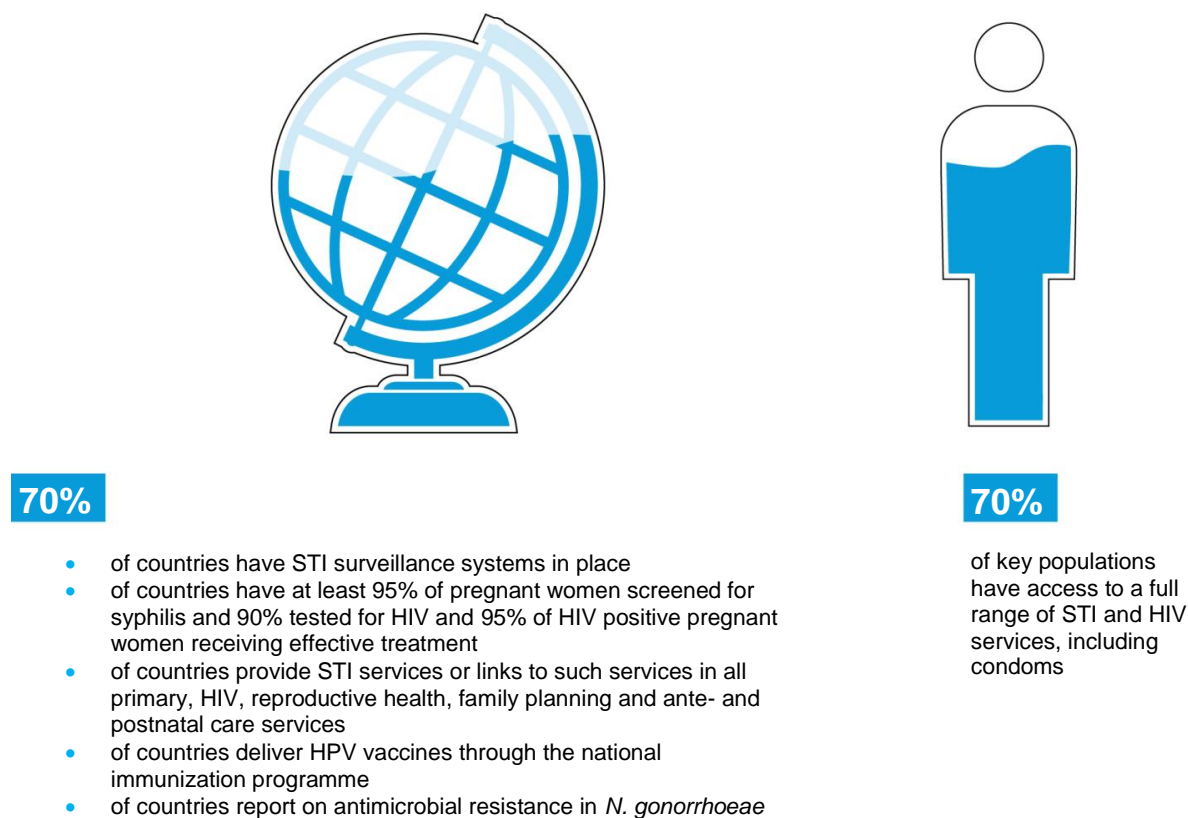
**Syphilis incidence**



**Gonorrhoea incidence**



**Figure 7. The draft strategy on sexually transmitted infections – 2020 milestones**



### The broader impact

41. By saving millions of lives directly and indirectly, and by improving the health and well-being of an even greater number of people, an expanded and more effective response to sexually transmitted infections will contribute significantly to reaching universal health coverage, realizing people's overall right to health, and achieving the 2030 Agenda for Sustainable Development. The impact will be multiplied if actions are underpinned by strong health and community systems, accompanied by strengthened responses in other health areas, and address the social and regulatory factors that increase the risk of sexually transmitted infections and impede access to appropriate services.

42. In the 2030 Agenda for Sustainable Development, the targets under Sustainable Development Goal 3 cover broad areas, and do not include a specific mention of, or targets for, sexually transmitted infections.<sup>1</sup> Accelerated action to address 2020 targets related to sexually transmitted infections will enhance progress relating to a number of 2030 Sustainable Development Goals.

43. The proposed strategy will contribute to five of the 13 health-related targets by 2030:

- Ending preventable deaths of mothers, newborns and children under 5 years of age;

<sup>1</sup> United Nations General Assembly resolution 70/1 – Transforming our world: The 2030 Agenda for Sustainable Development, see [http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E) (accessed 22 April 2016).

- Ending epidemics of AIDS, and combatting hepatitis and other communicable diseases;
- Reducing by one third premature mortality from noncommunicable diseases through prevention and treatment, and promoting mental health and well-being;
- Ensuring universal access to services for sexual and reproductive health care, family planning, information and education, and the integration of reproductive health into national strategies and programmes;
- Achieving universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

44. Effective action addressing sexually transmitted infections will help: combat antimicrobial resistance; eliminate adverse neonatal outcomes; reduce HIV transmission; prevent cancer; decrease the burden of infertility; and support the health and well-being of young people.

45. The lack of specific sexually transmitted infection targets in the 2030 Agenda for Sustainable Development can have implications for priority-setting by countries and, in particular, for the priority given to the measurement of sexually transmitted infection indicators. It is crucial, however, to understand that the fast and extensive implementation of the actions outlined in this draft strategy will contribute substantially to achieving the 2030 Agenda for Sustainable Development.

### **The guiding principles**

46. The present draft strategy is rooted in a public health approach<sup>1</sup> that is concerned with preventing disease, promoting health, and prolonging life in the population as a whole, and is designed to promote a long-term, sustainable response.

47. The following principles guide the strategy:

- Universal health coverage;
- Government stewardship and accountability;
- Evidence-based interventions, services and policies;
- Protection and promotion of human rights, gender equality and health equity;
- Partnership, integration and linkage with relevant sectors, programmes and strategies;
- Meaningful engagement and empowerment of people most affected by sexually transmitted infections.

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<sup>1</sup> The core public health functions involve assessing and monitoring the health of specific most-affected populations to identify health threats and priorities; formulating public policies to solve identified health problems and priorities; and ensuring that all populations have access to appropriate and cost-effective care, and evaluating the effectiveness of that care.

## **4. STRATEGIC DIRECTIONS AND PRIORITY ACTIONS**

### **4.1. STRATEGIC DIRECTION 1: Information for focused action**

#### ***Knowing your sexually transmitted infection epidemic in order to implement a tailored response***

48. A robust strategic information system is a cornerstone for advocating, funding, strategically planning and implementing effective sexually transmitted infection interventions, for monitoring and improving them, and for providing evidence of their impact. It is essential for countries to know their sexually transmitted infection epidemics and to know the related responses in order that up to date, accurate information guides national responses.

#### **Strategic information for advocacy and investment**

49. With limited resources, countries need to build a strong, comprehensive case to justify the use of domestic resources for sexually transmitted infection prevention and care, and to mobilize external resources. A well-functioning strategic information system is essential for rallying political commitment and for building a strong case for investment. It enables countries to define and develop a budget for an effective package of interventions and services based on the country context, decide on the most appropriate allocation of resources across the different levels of the health system, and identify potential and reliable sources of funding.

#### **Understanding the epidemics**

50. Knowing the epidemics includes understanding where, how and among whom new infections are occurring, and identifying the factors that facilitate sexually transmitted infection transmission or limit access to and use of appropriate services. Prevention, treatment and care programmes can then be prioritized and focused accordingly.

51. Geographical and population mapping can help countries design and implement the most efficient and effective responses. Strategic information systems should provide subnational and disaggregated data to monitor epidemic trends and to map the locations and core groups among which most transmission of sexually transmitted infections is occurring. This will enable resources and services to be allocated, according to where the greatest impact can be achieved.

#### **National sexually transmitted infection surveillance**

52. There are four core components of sexually transmitted infection surveillance: case reporting, prevalence assessments, assessment of the etiology of sexually transmitted infection syndromes, and monitoring of antimicrobial resistance. Currently, most relevant national surveillance systems are based on universal syndromic case reporting.

53. Over time, countries should be assisted to move from syndromic to etiologic surveillance. This will require not only strengthening of in-country laboratory capacity, but also the development and introduction of affordable point-of-care sexually transmitted infection diagnostics. National case reporting should focus on syphilis, gonorrhoea, urethral discharge and genital ulcer disease. In addition, countries should conduct routine syphilis prevalence monitoring of pregnant women and of specific populations, including men who have sex with men, and sex workers; countries should also

conduct gonorrhoea and chlamydia prevalence monitoring among the same populations and among adolescents.

54. Every few years, countries using syndromic management should conduct an etiologic assessment to inform treatment recommendations. All countries should have an ongoing system in place to conduct routine gonococcal antimicrobial resistance monitoring.

55. A strong strategic information system that focuses on sexually transmitted infection is required to: generate data disaggregated by sex and age; and triangulate and synthesize data regularly from other data collection systems covering other health-related topics, such as HIV, and maternal, reproductive and child health.

56. Robust data on sexually transmitted infections make it possible to focus related programmes more precisely and effectively, and to deploy or adapt services to reach greater numbers of people in need. Civil society is an important partner for strengthening strategic information systems, and for ensuring that data are collected and used in an ethical manner that benefits communities.

57. Surveillance data on sexually transmitted infections can also be used as the basis for estimating national prevalence and incidence of syphilis and gonorrhoea, and congenital syphilis rates. Such estimates can be used to assess progress towards the goals of the present draft strategy.

58. The potential impact of the introduction of pre-exposure prophylaxis of HIV infection in different communities should be monitored, including through the surveillance of sexually transmitted infections, sexual behaviour and drug resistance. While there is currently no evidence for risk compensation in sexual practices, such as decreased condom use or more sexual partners, from studies or early programmes, this important innovation should be monitored to ensure its effectiveness and also to ensure that any unanticipated consequences are addressed.

#### *Priority actions for countries*

- **Strengthen and integrate sexually transmitted infection surveillance into the national health information system** as a part of health system strengthening, using standardized indicators and methodologies as guided by WHO; ensure that data collection methods yield high-quality information, meet ethical standards, and do not pose risks for communities or the health care workers involved.
- **Increase the “granularity” of data** including through: enhanced sexually transmitted infection-related disaggregated data collection based on different stratifiers that include age, sex, population and location; involve affected communities and specific populations to achieve high-quality data and analysis.
- **Identify specific populations** who are most at risk for sexually transmitted infections and places where most of the transmission is occurring; establish mechanisms to promote the participation of affected communities; conduct routine case reporting and periodic prevalence assessment of core sexually transmitted infections to assess the magnitude of the sexually transmitted infection problem in target populations, including by disaggregating the data; describe the sexually transmitted infection epidemics and measure the impact in terms of sequelae and cost.
- **Include data on the risk factors and determinants of sexually transmitted infections** in order to understand and address these determinants. Include a focus on pre-exposure prophylaxis as appropriate. Use both standard and innovative participatory survey methodologies to develop accurate estimates of key population sizes and detailed understandings of subnational epidemics; integrate biological surveillance with other programmes, such as a behavioural surveillance survey in the HIV files – include contact tracing and treatment of partners.



- **Strengthen national laboratory capacity** through quality assurance and the introduction of point-of-care diagnostics to ensure routine monitoring of sexually transmitted infections and antimicrobial resistance to *N. gonorrhoeae*.

#### *Priority actions for WHO*

- **Provide global leadership and assistance to countries** in strengthening sexually transmitted infection surveillance and in using standard methodologies for such surveillance and estimation of the burden and impact; support the development of strategic information systems and sexually transmitted infection epidemics and response mapping, including the analysis of disaggregated data for monitoring inequities; support countries in strengthening case reporting, prevalence assessment, etiologic assessment and antimicrobial resistance monitoring; strengthen global systems for collecting and sharing national surveillance data on sexually transmitted infections, including disaggregated data and analysis for monitoring equity.
- **Provide guidance on the collection and analysis of disaggregated data** based on different stratifiers and the involvement of affected communities and specific populations, including key populations for HIV, in efforts to obtain high-quality data and achieve high-quality analysis; use internationally endorsed methods for estimating the sizes of key populations for HIV and on setting programme targets for services for key populations for HIV.
- **Ensure linkages** of some components of sexually transmitted infection surveillance to existing mechanisms including HIV and antimicrobial resistance surveillance.

### **Tracking, monitoring and sharing evidence on the response**

59. The strategic information system needs to be capable of collecting and analysing disaggregated data along the entire continuum of care: prevention, treatment and care services to identify gaps in the coverage and performance of services, and to determine areas requiring improvements. By identifying indicators for measuring progress and for monitoring and evaluating interventions, countries can assess, report and improve services relating to sexually transmitted infections, and achieve greater equity in their responses. They can determine whether services are available and being used, whether and where disparities and gaps exist, which delivery models are most effective (for instance, through health facilities, community-based services or other approaches), and which elements require improvement. Linking the sexually transmitted infection response with other health and development initiatives requires greater integration of health information systems and the alignment of reporting across health programmes.

### **National strategic planning, programme implementation and accountability**

60. The strategic information system has to inform a national strategy and implementation plan that is based on the country context, defines national targets and is aligned with global targets. This national strategy and implementation plan guides the national health response to sexually transmitted infections.

61. The strategy should describe actions that need to be taken to achieve the national targets, including identifying specific populations and priority locations based on local epidemiology, prioritizing evidence-based and high-impact interventions and service delivery models that best suit the context, and implementing a monitoring and evaluation framework that can track progress towards the targets.

62. There should be clear linkages between the present draft health strategy and other relevant sectoral strategies, other relevant disease-specific strategies, such as those for tuberculosis, and sexual and reproductive health, and broader national health and development strategies. Each country should have a national programme focusing on sexually transmitted infections, with the necessary resources and capacity to implement a relevant national strategy and plan, and to monitor and report on progress.

63. Countries need to track, assess and report on progress towards the agreed targets, using indicators on availability, coverage outcomes and impact of services. Benchmarking – or comparisons between and within countries – should be used to assess performances. Existing instruments should be used for measuring progress in implementing policy, legal and structural measures for enhancing the sexually transmitted infection response, including the National Composite Policy Index<sup>1</sup> and the People Living with HIV Stigma Index.<sup>2</sup>

#### *Priority actions for countries*

- **Strengthen the governance and accountability of programmes relating to sexually transmitted infections** and conduct regular programme reviews to help ensure that national strategies, plans and resource allocation reflect actual country needs as they evolve.
- **Set national targets and milestones** and identify indicators for monitoring and evaluating the national sexually transmitted infection programme, as well as for monitoring equity so that countries can assess and regularly report on the status of their response, and use those assessments for further programme improvements.
- **Ensure that relevant monitoring and evaluation frameworks track the entire continuum of services** in both the public and private sectors, and are harmonized with other health information systems, and are set up to track equity through appropriate disaggregation and analysis; use subnational data collection and mapping techniques to detect deficiencies in service provision and infrastructure, and to help inform decisions made on where to place additional services; monitor access to, and uptake and quality of sexually transmitted infection services for specific populations.

#### *Priority actions for WHO*

- **Develop, update and disseminate guidance** on national strategic planning and prioritization relating to sexually transmitted infections; WHO regional and country offices to support regular reviews to assess progress towards the 2020 and 2030 global targets.
- **Provide technical support to countries** with sexually transmitted infection programmes and impact reviews to focus investments.
- **Make information available** on the status of country and regional progress towards targets and support the use of benchmarking – or comparisons between and within countries across different subgroups – to assess progress towards reaching targets.

<sup>1</sup> The National Composite Policy Index is Appendix 4 in the 2010 Reporting document of the United National General Assembly Special Session on HIV/AIDS, Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators, see [http://data.unaids.org/pub/Manual/2009/JC1676\\_Core\\_Indicators\\_2009\\_en.pdf](http://data.unaids.org/pub/Manual/2009/JC1676_Core_Indicators_2009_en.pdf) (accessed 22 April 2016).

<sup>2</sup> For more information, see the People Living with HIV Stigma Index, at <http://www.stigmaindex.org/> (accessed 22 April 2016).

## 4.2. STRATEGIC DIRECTION 2: Interventions for impact

*People should receive the full range of sexually transmitted infection services they need*

### **Defining a set of core interventions: the sexually transmitted infection benefit package**

64. Each country needs to define a set of essential sexually transmitted infection interventions and services. Sexually transmitted infection strategies are most effective when people have access to and benefit from a continuum of high-quality services for preventing, diagnosing and managing sexually transmitted infections. In addition to integrating relevant services into routine service delivery processes, targeted outreach to specific populations may be required.

65. Informed on their sexually transmitted infection prevalence and incidence, each country must prioritize interventions across the continuum of prevention to treatment and package these interventions in effective and acceptable ways. As resources and capacity increase, the scope of interventions and services can be expanded progressively, with the aim of further improving sexually transmitted infection and broader health outcomes. The evidence shows clearly that combination packages achieve greater impact than discrete, individual interventions.

66. When countries define their package of interventions, coinfection should be considered. Sexually transmitted infections share common risk-associated behaviours; multiple infections can be acquired at the same time and existing infection can facilitate transmission and acquisition of other sexually transmitted infections, including HIV. Diagnosis of one infection is an indicator of risk for others. Although coinfection is common, precise global estimates of coinfection are unavailable. Specific populations, including key populations for HIV, are at highest risk for coinfection of sexually transmitted infections. As such, special attention should be paid at all levels of the health system to symptomatic and asymptomatic coinfection in these populations, as well as in the general population.

67. Although the core interventions and services will vary by country, based on epidemic dynamics and country context, each of the following intervention areas should be covered:

- Prevent sexually transmitted infection transmission and acquisition;
- Achieve early diagnosis of sexually transmitted infections and linkage to treatment;
- Manage symptomatic patients;
- Reach sex partners and offer them treatment;
- Package interventions for maximum impact: (1) eliminate mother-to-child transmission of syphilis and HIV; (2) fully utilize human papillomavirus and hepatitis B vaccines; (3) control the spread and impact of gonococcal antimicrobial resistance;
- Ensure quality of care for sexually transmitted infection services and interventions: (1) strengthen the continuum of prevention, diagnosis, treatment and care; (2) link and integrate services and programmes; (3) implement quality assurance and improvement programmes.

68. The core package needs to be regularly reviewed to ensure that, as new evidence emerges and new technologies and approaches are developed, innovations are rapidly integrated and opportunities

harnessed. Updated guidelines for the management of sexually transmitted infections will be made available by WHO to assist countries in developing and implementing their core interventions and services.

### **Prevent sexually transmitted infection transmission and acquisition**

69. Combination prevention is the most effective approach for the prevention of sexually transmitted infections. Evidence-based comprehensive prevention frameworks work best when there is a strategic combination of behavioural, biomedical and structural approaches. Such a combination includes an understanding of sexually transmitted infections and primary prevention methods, including condoms, and a focus on working with people most affected by, and vulnerable to, sexually transmitted infections, in particular adolescents. HIV combination prevention efforts should also incorporate components focused on other sexually transmitted infections.

70. Effective prevention requires ensuring access to vital information, commodities (such as condoms) and services (such as vaccination, voluntary medical male circumcision, testing, treatment and care) within a human rights framework. Alongside that, behaviour interventions are critically important for sexually transmitted infection prevention including HIV, and include: the promotion of consistent use of male and female condoms; education including a focus on increasing awareness of sexually transmitted infections; reduction in the number of sexual partners; increased uptake of testing for sexually transmitted infections, including HIV; delayed sexual debut; as well as the promotion of sexual well-being.

71. Many such interventions have the dual advantage of preventing sexually transmitted infections, including HIV and unintended pregnancies, in particular through the use of condoms by adolescents. Focusing the interventions appropriately for specific populations (including key populations for HIV), adolescents and pregnant women is a priority. In addition, when community knowledge about sexually transmitted infections is strengthened, and stigmatization and discrimination are reduced, the use of services related to sexually transmitted infection tends to improve.

#### *Priority actions for countries*

- **Prioritize high-impact and comprehensive prevention interventions** tailored to the epidemic closely linked with HIV prevention, sexual and reproductive health, and mother and child health and immunization programmes that include:
  - Comprehensive health information, education and health promotion programmes for adolescents;
  - Male and female condom programming for dual protection against sexually transmitted infections and unintended pregnancy, in particular for adolescents, and distributed through communities and through outreach services for specific populations;
  - The use of maternal and child health and family planning clinics as additional outlets for the provision of care and distribution of condoms to women who could be at risk of sexually transmitted infections;
  - Greater use of social marketing programmes to increase demand and supply of quality-assured, affordable sexually transmitted infection services, and condoms in traditional and non-traditional outlets;
  - Promoting voluntary medical male circumcision where appropriate;
  - Ensuring access to human papillomavirus and hepatitis B vaccination.

- **Tailor and focus risk reduction interventions** addressing sexual health from a well-being perspective to the needs of populations that are most affected; address the key factors that place people at greater risk for sexually transmitted infections and that impede access to effective and relevant services, including interventions to redress human rights violations that emerge from the criminalization of same-sex behaviours or sex work, to prevent and manage gender-based violence, as well as violence related to sexual orientation and gender identity.

#### *Priority actions for WHO*

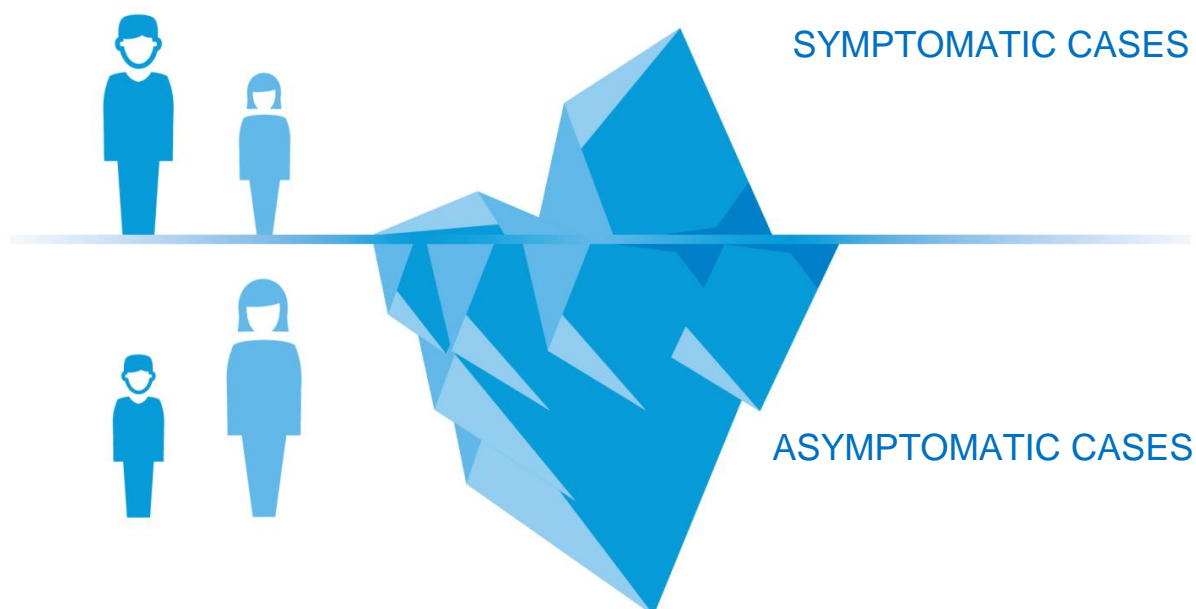
- **Update and disseminate updated guidance on sexually transmitted infection prevention** including: rapidly integrating new evidence-based health sector interventions into sexually transmitted infection prevention packages for different epidemic contexts, giving particular attention to specific and key populations, adolescents, and women; promoting effective male and female condom programmes, including setting global standards and facilitating procurement.
- **Update and disseminate guidance for targeted populations on sexually transmitted infection vulnerability and risk reduction interventions;** work with partners to promote new initiatives on reducing risk, and empowering and increasing resiliency, confidence and agency among adolescent girls and young women and among specific and key populations; provide evidence and guidance on the role of positive gender norms and attitudes that help reduce sexually transmitted infection vulnerability and risk; advocate for increased commitment, resources and actions to eliminate sexually transmitted infections in newborns.

### **Achieve early diagnosis of sexually transmitted infections and linkage to treatment**

72. Early diagnosis of sexually transmitted infections can be achieved: by screening, that is, detecting illness due to testing based upon risk factors in an asymptomatic individual; and by diagnosis, that is, discovering the underlying cause of symptoms. Early diagnosis of sexually transmitted infections, including those without symptoms, is the best opportunity for effective medical treatment and support, and for preventing further transmission. This can be challenging, given that most sexually transmitted infections are asymptomatic (see Figure 8). In the absence of affordable point-of-care tests for sexually transmitted infections, screening remains rare in resource-constrained settings.

**Figure 8. Sexually transmitted infections**

*Women are more affected by asymptomatic sexually transmitted infections than men and men are more likely to have symptomatic sexually transmitted infections than women*



73. Each country will need to select the most appropriate combination of screening and diagnostic approaches based on the nature and dynamics of its sexually transmitted infection epidemics, the affected populations and its health system, as well as on the evidence available. Special efforts are required for the detection and management of asymptomatic sexually transmitted infections in specific populations, which include key populations for HIV, adolescents and young adults, and pregnant women, such as case-finding or screening, with enhanced interventions for reaching sexual partners. Specific attention is required in ensuring that sexually transmitted infection diagnosis is accessible, and also in ensuring the quality of diagnostic tools and services, to minimize risk of misdiagnosis. Prompt diagnosis and effective management of sexually transmitted infections breaks the chain of transmission and prevents the development of complications and long-term sequelae of such infections.

**Manage symptomatic patients**

74. Each primary point-of-care for persons with sexually transmitted infections should follow an up-to-date management protocol for people with symptomatic infections of that kind, and for their sexual partners, based on global guidelines. Primary point-of-care outlets are varied and include primary health care clinics, sexual and reproductive health services, including antenatal care services and services that provide care and management of persons living with HIV. Moreover, sexually transmitted infection case management for high-risk populations should be linked closely with HIV prevention services, including outreach services.

### **Reach sex partners and offer them treatment**

75. Partner notification is integral to effective sexually transmitted infection prevention and care. Approaches for informing sex partners and offering them counselling and treatment vary according to circumstances and include patient referral (whereby patients are encouraged to contact their sex partners themselves), provider referral (the health care provider notifies the partner and arranges treatment), contractual patient–provider referral (a two-step approach that links patient and provider referral methods), and expedited partner therapy (the diagnosed patient takes the prescriptions or medication to his/her partner without prior examination of the partner). A “couples approach” for increasing counselling and partner treatment rates should be encouraged, in particular in the context of antenatal care. The selected strategy has to be rights-based and sensitive to gender inequalities, while ensuring and expediting partners’ access to treatment.

### **Package interventions for maximum impact**

76. The overall public health impact of these core interventions can be boosted by combining them with other initiatives, specifically: the global campaign to eliminate mother-to-child transmission of HIV and syphilis; wider introduction of the vaccine against the human papillomavirus; voluntary medical male circumcision to impact on HIV and other sexually transmitted infections; and strategies to confront the emergence of gonococcal antimicrobial resistance.

### **Eliminate mother-to-child transmission of syphilis and HIV**

77. A number of countries have committed to eliminate mother-to-child transmission of HIV and syphilis (also known as “congenital syphilis”). In many countries, the elimination of mother-to-child transmission of syphilis is linked to a dual elimination campaign (elimination of mother-to-child transmission of HIV and syphilis).<sup>1</sup> A few countries have begun implementing a triple elimination campaign (elimination of mother-to-child transmission of HIV, syphilis and hepatitis B). The steps required towards preparing for validation will help countries strengthen their sexually transmitted infection programmes, and should help reduce inequities among different populations within a country.

### **Fully utilize human papillomavirus and hepatitis B vaccines**

78. Vaccinating against human papillomavirus can dramatically reduce cervical cancers caused by the virus; the hepatitis B vaccine is safe and effective in preventing hepatitis B infection.<sup>2</sup> Countries should urgently consider the further introduction or expansion of these vaccination programmes with human papillomavirus vaccines, in the context of a comprehensive framework for cervical cancer prevention and control. The human papillomavirus vaccine by the population it targets should be a critical pillar of adolescent health programmes with increased health education and strategies to reach adolescents.

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<sup>1</sup> Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis, see [http://apps.who.int/iris/bitstream/10665/112858/1/9789241505888\\_eng.pdf?ua=1&ua=1](http://apps.who.int/iris/bitstream/10665/112858/1/9789241505888_eng.pdf?ua=1&ua=1) (accessed 21 April 2016).

<sup>2</sup> See the draft global health sector strategy on viral hepatitis, 2016–2021, available at: <http://www.who.int/hepatitis/strategy2016-2021/en> (accessed 5 May 2016).

### *Priority actions for countries*

- **Adapt and implement guidelines on sexually transmitted infection and HIV screening and diagnosis:** procure, introduce and expand use of WHO prequalified diagnostics; implement quality assurance and quality improvement measures to lower the risk of misdiagnosis, and reduce delays between collecting specimens, laboratory testing, sharing the results, and access to treatment.
- **Implement and scale-up evidence-based national sexually transmitted infection management guidelines** based on country data and services available:
  - implement strategies for detecting and managing asymptomatic infections in specific and key populations, pregnant women and adolescents, such as regular case testing or screening, with enhanced interventions for reaching sexual partners;
  - update implementation plans for guiding effective and sustainable scale-up of symptomatic sexually transmitted infection management, based on the latest evidence;
  - encourage use of single dose treatment, delivered at a health facility where feasible, to enhance adherence;
  - integrate sexually transmitted infection management in specific populations, HIV prevention services and care to address major coinfections and comorbidities, notably HIV.
- **Ensure availability of effective sexually transmitted infection management commodities and medicines** when people seek care for sexually transmitted infections: ensure procurement of quality-assured drugs; work to decrease barriers on accessibility and affordability of quality sexually transmitted infection diagnostics.
- **Develop and implement strategies to strengthen sexual partner management:** adopt strategies for partner notification and evaluate the level of implementation; safeguard patient confidentiality; ensure linkage to counselling and treatment of partners.
- **Screen all pregnant women for syphilis**, and ensure that those who are seropositive receive appropriate injectable penicillin therapy: link efforts to eliminate mother-to-child transmission of syphilis with those to eliminate mother-to-child transmission of HIV; in order to attain validation standards, strive to increase coverage and reduce disparities in the delivery of mother-to-child transmission of syphilis interventions.
- **Urgently consider introducing a vaccination programme against human papillomavirus** as part of a comprehensive approach to cervical cancer prevention: define a package of information, including health promotion, which targets adolescents and can be delivered in coordination with the implementation of human papillomavirus vaccination programmes.
- **Introduce hepatitis B vaccination into national infant immunization** programmes of any countries that have not yet done so – to do so urgently, and ensure timely delivery of the birth dose of hepatitis B vaccine to prevent perinatal transmission of hepatitis B infection.

### *Priority actions for WHO*

- **Regularly update and disseminate consolidated sexually transmitted infection management guidelines** that include: clinical, operational and programmatic guidance that will guide rapid and sustainable treatment scale-up; consolidated guidance on sexually transmitted infections and HIV testing approaches, strategies and diagnostics, incorporating the latest innovations, with a particular focus on early diagnosis; regular testing and screening; support to countries in the adaptation, implementation and monitoring of guidelines; provide and update evidence-based guidelines for partner notification, communication and counselling, diagnosis and treatment.
- **Accelerate support for the elimination of mother-to-child transmission of syphilis:** provide technical guidance on how to achieve standards for the validation for the elimination of mother-to-child transmission of syphilis; identify ways to reduce barriers to diagnostics and treatment for elimination of mother-to-child transmission of syphilis; accelerate development of new technologies for improved diagnosis and treatment of syphilis in pregnant women and newborns.



- **Strengthen efforts to ensure high-quality diagnostics for sexually transmitted infections are accessible and available:** strengthen the WHO prequalification programme to ensure rapid access to quality sexually transmitted infection diagnostics; work to decrease barriers on accessibility and affordability of quality sexually transmitted infection diagnostics.
- **Set the research agenda and conduct research to address gaps in sexually transmitted infection management** in resource-poor settings; support research to identify effective, efficient, safe and acceptable diagnostic tests, technologies and approaches relevant to sexually transmitted infections.
- **Strengthen sexually transmitted infection immunization guidance:** assess schedules and doses for immunization policies, and advise on the most effective methods for protecting high-risk groups, as well as males; support operational research in countries for the introduction of human papillomavirus vaccine and for linking it to adolescent health programmes; support efforts to ensure that the human papillomavirus vaccine is available in countries at an affordable price; develop guidance on other health interventions that could be introduced, together with the vaccination programme.

### Control the spread and impact of gonococcal antimicrobial resistance

79. Gonorrhoea is one of the most common sexually transmitted infections worldwide and it has a significant effect on morbidity and mortality. Over the past decades, *N. gonorrhoeae* has developed resistance to almost all medicines used to treat the infection, which raises the prospect of untreatable gonococcal infections. WHO has strengthened the Gonococcal Antimicrobial Surveillance Programme by establishing a network of laboratories to coordinate gonococcal antimicrobial resistance monitoring and provide data to inform treatment guidelines. Other sexually transmitted infection pathogens with potential antimicrobial resistance include *T. pallidum*, herpes simplex virus and *Haemophilus ducreyi*. These are linked to the overall global antimicrobial resistance action plan.<sup>1</sup>

### Strengthen synergies and linkages for sexually transmitted infection services and interventions

- **Strengthen the continuum of prevention, diagnosis, treatment and care**

80. Services should be organized to minimize “leakages”, to maximize retention along the continuum, and adherence to prevention and care interventions. Major challenges include: acceptability and uptake of effective prevention interventions; stigmatization and discrimination in some health care settings; targeting diagnosis to maximum effect and minimizing incorrect diagnoses; linking people to appropriate prevention and treatment services as early as possible; and ensuring treatment adherence.

81. Services should be people-centred, patient-friendly, that respect people’s rights and that address their varying needs without judgement or prejudice; in addition to being more effective, people-centred services may be more efficient. The involvement of community groups and networks has also been shown to be effective, especially for reaching specific populations, including those that can be harder to reach such as those recognized as adolescents and key populations for HIV.

82. A strong continuum of services also requires strong coordination across various levels of health service delivery with an effective cross-sector referral mechanism.

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<sup>1</sup> See resolution WHA68.20(2015).

- **Link and integrate services and programmes**

83. Greater integration and linking of sexually transmitted infection services and programmes with those for other relevant health areas (including for HIV, family planning, maternal and neonatal care; health promotion, including sexual health; immunization, noncommunicable diseases and mental health), that is, comprehensive primary healthcare and other sectors (such as school health education programmes targeting adolescents, and occupational health) have the potential to reduce costs, improve efficiency and lead to better outcomes. Appropriate models of integration and linkage will depend on the country context and health system, and should be informed by operational research.

*Priority actions for countries*

- **Strengthen the implementation of strategies and interventions to monitor antimicrobial resistance**, including strengthening national laboratory network capacities; integrate surveillance of antimicrobial resistance of *N. gonorrhoeae* to the national antimicrobial resistance surveillance plan; adapt national treatment guidelines to resistance patterns and implement interventions to limit the spread of antimicrobial resistance; reduce the prescription and procurement of antimicrobials.
- **Strengthen links, collaboration and integration**, including between sexually transmitted infection programmes and those with responsibilities for HIV, reproductive health, mother-to-child transmitted diseases, cancer and noncommunicable disease, and adolescent health;
  - support further integration through primary health care services;
  - integrate key indicators for prevention and control into national sexually transmitted infection monitoring and evaluation systems;
  - ensure adequate communication and coordination between the different levels of the health system, and the public and private sectors;
  - analyse the continuum of prevention and control services to determine the quality of services, identify major weaknesses and take remedial action.

*Priority actions for WHO*

- **Provide global leadership on tackling antimicrobial resistance:** coordinate the response on antimicrobial resistance of *N. gonorrhoeae* with the Global action plan on antimicrobial resistance:<sup>1</sup>
  - increase support for the Gonococcal Antimicrobial Surveillance Programme<sup>2</sup> and other efforts to monitor antimicrobial resistance and contain the spread of untreatable gonorrhoea;
  - update treatment guidelines for gonorrhoea;
  - monitor the possible emergence of antimicrobial resistance to treatments for *T. pallidum*, herpes simplex virus and *H. ducreyi*;
  - invest further in research for the development of points-of-care for sexually transmitted infection that allow better identification of antimicrobial resistance.

<sup>1</sup> For the Global action plan on antimicrobial resistance, see [http://www.who.int/drugresistance/global\\_action\\_plan/en/](http://www.who.int/drugresistance/global_action_plan/en/) (accessed 22 April 2016).

<sup>2</sup> For information on the Gonococcal Antimicrobial Surveillance Programme, see [http://www.who.int/reproductivehealth/topics/rtis/gonococcal\\_resistance/en/](http://www.who.int/reproductivehealth/topics/rtis/gonococcal_resistance/en/) (accessed 22 April 2016).

- **Support countries to progress linkages and integration of services:**
  - propose indicators and methods for measuring effective linkage;
  - document and disseminate best practices on integration and mHealth;
  - promote the WHO monitoring and evaluation framework to national sexually transmitted infection monitoring and evaluation systems;
  - facilitate the collection of national data on the continuum of services and report on major findings;
  - identify common weaknesses in the continuum of services and propose interventions to address them;
  - include learning on effective interventions and approaches in WHO operational and programmatic guidance.

### 4.3 STRATEGIC DIRECTION 3: Delivering for equity

*All people should receive the sexually transmitted infection services they need, which are of adequate quality*

84. Reaching the targets on sexually transmitted infection requires an appropriate enabling environment for action grounded in principles of human rights and gender equality and will only be possible by focusing suitable, high-impact interventions and services for specific populations, including those who are most at risk for and vulnerable to sexually transmitted infections and in places where most transmission of sexually transmitted infections is occurring. Ensuring access to effective services should therefore be equitable and free of discrimination. This can be a challenge, as sexually transmitted infections occur with high frequency among specific populations and among adolescents, all of whom may experience challenges in accessing or remaining linked to health services and, in particular, to sexually transmitted infection services. As a result, large proportions of people at high risk for sexually transmitted infections do not use prevention methods and services effectively, remain undiagnosed, or do not use or adhere to treatment therapies.

85. Coverage of treatment services can be increased through collaboration with other health programmes, government sectors (for example, education, occupational health, prison services, migration), as well as with community-based organizations and private health care providers.

#### **Promote an enabling environment which includes policies and laws that promote human rights and gender equality**

86. When properly enforced, laws and policies that protect and promote public health and human rights, including sexual and reproductive health and rights, can reduce vulnerability to and risk of sexually transmitted infection; expand access to sexually transmitted infection care and other health services; and enhance their reach, quality and effectiveness. In many countries legal, institutional and other barriers continue to deter people from using services relating to sexually transmitted infections. The health sector is obliged to ensure that policies, laws and regulations support relevant national programmes and national health responses more generally, by promoting gender equality and through protecting and promoting the human and health rights of populations that are at increased risk for sexually transmitted infections (including specific populations, as defined earlier) and for adolescents.

## **Reduce vulnerability and risk**

87. Effective interventions for reducing sexually transmitted infection vulnerability and risk hinge on awareness building and targeted health promotion and risk reduction communication, and on increased access to and use of sexual and reproductive health services. Progress in these areas requires: effective actions to reduce stigmatization and discrimination in health care settings and the community; initiatives to prevent and provide services that address gender-based violence and violence related to sexual orientation or gender identity; and interventions that empower women and stigmatized populations. In some populations the harmful use of alcohol can exacerbate certain vulnerabilities and risk behaviours and so should be taken into account when designing services.

## **Reaching all populations with appropriate services**

88. In addition to effectively meeting the needs of the general population, reaching specific populations with the most appropriate interventions will be critical for ending sexually transmitted infection epidemics in countries. Actions are needed to overcome or remove barriers that prevent these populations from accessing the sexually transmitted infection and broader health services they need. Depending on the population, these barriers may include age of consent laws, criminalization of behaviours such as sex work and sex between men, and institutionalized stigmatization and discrimination, as well as gender-based and other forms of violence including intimate partner violence. The sexually transmitted infection response also needs to reflect the fact that different populations may require different sets of interventions and different types of services.

## **Specifically address men and boys**

89. Men and boys have often been overlooked as a population requiring a specific focus for sexually transmitted infection control. Increasingly, sexually transmitted infection and HIV responses are recognizing the importance of ensuring that comprehensive approaches include components focused on ensuring access to services for men and boys as well as for women and girls. Additional interventions may include targeted social and behaviour change programmes among men; promotion of voluntary medical male circumcision; programmes focused on alcohol and substance use; and a focus on specific populations including mobile populations and migrants, men who have sex with men, male sex workers and the male clients of sex workers.

## **Engaging and linking with communities and partners**

90. Engagement with communities and other partners at all levels is vital for defining the package of interventions, improving policy coherence, programme coordination and accountability, and for addressing the various factors that affect the design, delivery, performance and outcomes of sexually transmitted infection programmes. Partnerships should be guided by public health principles, including the need for robust government stewardship, public accountability, and the promotion of human rights, gender equality and health equity. Strong engagement with civil society, including the faith-based sector, and especially at community level, will help ensure that essential services are accessible to all populations. Structured linkages with private sector and civil society service providers would also help extend coverage while improving quality assurance.

## **Strengthening health systems**

91. The keystone of an effective sexually transmitted infection response is a strong health system that is capable of providing reliable, effective and equitable people-centred care in both the public and

private sectors. The hallmarks of such a system are: efficient service delivery models that meet patients' variable needs; an appropriately trained and distributed workforce in sufficiently adequate numbers and responsive skill mix; a robust health information system; reliable and affordable access to essential medical products and technologies; adequate health financing; and strong leadership and governance. Currently, very few health systems demonstrate all of these features.

### Targeting special settings

92. There are specific settings where vulnerability and risk are high and where access to basic sexually transmitted infection services might be severely compromised, such as in prisons and detention centres, refugee camps and settings of humanitarian concern. Countries should ensure that services provided to individuals in these settings are equivalent to those available to the broader community.

#### *Priority actions for countries*

- **Target sexually transmitted infection interventions and services to populations and locations where need, risk and vulnerability are highest:**
  - integrate evidence-based gender-equality interventions into national sexually transmitted infection action plans including interventions that promote positive norms, empower women and girls, and address violence;
  - include comprehensive sexual health education in school curricula for adolescents;
  - identify and prioritize implementation of tailored service packages to meet the needs of populations vulnerable to and most affected by sexually transmitted infections, including linking to a broader package of appropriate health services, such as mother and child health, HIV services or vaccination;
  - include multisectoral actions to reduce stigmatization and discrimination in national sexually transmitted infection strategies, policies and programmes;
  - involve community-based organizations and peer networks in the planning and delivery of services;
  - monitor access to, and uptake and quality of, HIV and sexually transmitted infection health services for specific populations;
  - provide services appropriate for adolescents and review policies on consent to improve access;
  - implement the comprehensive package of sexually transmitted infection interventions for prisoners and prison settings as developed by the United Nations Office on Drugs and Crime and WHO;
  - include contingency plans for essential sexually transmitted infection services into national sexually transmitted infection plans to ensure continuity of relevant services in settings of humanitarian concern.
- **Create safe institutional and community environments through:**
  - applying public health evidence to shape health-related laws and policies that promote human rights and gender equality in line with internationally agreed norms and standards;
  - remove legal, regulatory and policy barriers and practices (especially in health care settings) that condone or encourage stigmatization and, discrimination and violence;
  - ensure training of health care providers on human rights and gender equality in relation to sexually transmitted infection and HIV;
  - establish independent mechanisms for monitoring and accountability to ensure grievance redress for the violation of human rights.

- **Integrate sexually transmitted infection services into national programmes** through health systems and a community-based approach, and through mechanisms related to sexual and reproductive health, maternal and child health, adolescent health and HIV;
  - equip health workers with the skills and commodities to rapidly expand primary prevention, testing and treatment of sexually transmitted infections;
  - use service delivery methods and approaches (including marshalling private sector providers and pharmacies into the sexually transmitted infection response) that provide equitable and effective services for all, particularly for specific populations;
  - ensure that legal and regulatory frameworks facilitate stronger collaboration and partnerships with community groups and between the public and private sectors;
  - provide or facilitate greater support for capacity development (for example, to strengthen participation in programme planning, service delivery, and monitoring and evaluation), and increased investment in community-based peer support and outreach programmes;
  - involve community groups in monitoring sexually transmitted infection services.

#### *Priority actions for WHO*

- **Build on existing guidance to better define essential packages and service delivery models for specific populations, locations, situations and settings**, including for women and girls, adolescents and key populations;
  - provide and disseminate guidance on clinical management of rape among adolescents and children, and promote the uptake of guidance on health sector response to partner violence and sexual violence among women in sexually transmitted infection programmes and service delivery settings;
  - synthesize and disseminate evidence on prevention and response to violence among specific populations at increased risk of sexually transmitted infection, including people who have same-sex sexual partners and sex workers;
  - collaborate with UNESCO, UNICEF and UNFPA to design a package for preventing and managing sexually transmitted infections that meets the needs and realities of young people;
  - with UNHCR update guidance on the delivery of sexually transmitted infection services in settings of humanitarian concern;
  - work with the UNODC to regularly update guidance on sexually transmitted infection services for prisoners and prison settings.
- **Promote an enabling technical, political and advocacy environment** within countries in support of an enabling environment that promotes human rights and gender equality;
  - support Member States to review and revise their health-related laws and policies to align them with international norms and standards;
  - provide advice on addressing sexual violence, with a focus on adolescents, and children, and promote the uptake of existing guidance on health sector response to violence against women in sexually transmitted infection service or programme settings.
- **Develop and disseminate guidance and tools to strengthen sexually transmitted infection service integration within health systems:**
  - develop tools on laboratory capacity strengthening for sexually transmitted infection and HIV testing;
  - develop tools to strengthen programme management and supervision through a health systems approach;
  - involve partners, civil society and community representatives in the development of guidelines and tools for the provision of sexually transmitted infection services.

## Ensure access to quality vaccines, diagnostics, medicines and other commodities

93. Effective sexually transmitted infection programmes are dependent on the uninterrupted supply of quality-assured vaccines for human papillomavirus and medicines, diagnostics and other commodities for other sexually transmitted infections. Robust procurement and supply management systems are required to ensure that the right products are selected, purchased at a reasonable price and efficiently delivered to the point of service delivery. Quality of care can be enhanced by ensuring that quality-assured commodities are procured, and that services adhere to national and international norms and standards, are continuously monitored and improved, and are made more accessible and acceptable to patients' needs and preferences.

### *Priority actions for countries*

- **Establish and implement national quality assurance norms and standards**, based on international guidelines and standards, monitor their implementation and apply quality improvement measures where deficiencies are identified; ensure the procurement of quality-assured medicines, vaccines, diagnostics and condoms, including through the use of the WHO prequalification systems; establish mechanisms to continuously monitor service utilization and acceptability, and the preferences and needs of patients, communities and health care workers; strengthen national reference laboratories to monitor the quality of diagnostic tests.
- **Establish supply and demand forecast and monitoring mechanisms** to ensure a continuous supply of essential commodities and avoid stockouts;
  - include human papillomavirus vaccine, and medicines and diagnostics for the treatment of sexually transmitted infections in the national procurement and supply management plan;
  - strengthen health system commodity procurement processes for quality-assured vaccines, medicines, diagnostics, condoms, and other commodities related to sexually transmitted infections.

### *Priority actions for WHO*

- **Provide leadership and support on quality assurance:**
  - emphasize quality assurance and quality improvement principles, approaches and indicators in WHO guidance;
  - support capacity building of national regulatory authorities, quality control laboratories, and manufacturers or other private companies, to ensure the quality of medicines including generics;
  - strengthen the WHO prequalification programme to encourage manufacturers to apply for prequalification of medicines, diagnostics and devices, and to facilitate the rapid assessment of new applications;
  - regularly report on quality improvement along the continuum of sexually transmitted infection prevention, care and treatment services.
- **Assess the quality and performance of commercially available sexually transmitted infection commodities** and issue appropriate recommendations; support capacity building of national regulatory authorities, quality control laboratories, and manufacturers to ensure the quality of medicines, including generics and diagnostics.

#### **4.4. STRATEGIC DIRECTION 4: Financing for sustainability**

##### ***People should receive the sexually transmitted infection services they need without experiencing financial hardship***

94. Central to the 2030 Agenda for Sustainable Development is the eradication of poverty and the reduction of inequality. At the global level, 150 million people experience financial catastrophe and 100 million people suffer impoverishment every year as a result of out-of-pocket health expenses. Ensuring financial security and health equity, therefore, are central to the achievement of the Sustainable Development Goals, and universal health coverage provides a framework for addressing them.

95. Countries face the challenge of investing in an expanded programme to achieve the sexually transmitted infection targets for 2020 and beyond, while ensuring long-term sustainability of funding – all in a context where development priorities are shifting and external financial support is uncertain. The trend of increasing domestic funding for sexually transmitted infection programmes needs to continue although some low-income countries, especially those with a heavy burden, will need substantial external support to ensure rapid scale-up.

96. Financing for a sustainable sexually transmitted infection response requires an approach that is embedded in a wider overall national health strategy and action in three areas: raising sufficient funds to pay for sexually transmitted infection programmes, including through public and private domestic funding and external sources; establishing equitable mechanisms to pool funds for financial risk protection; and optimizing the use of resources by reducing costs and improving efficiencies. Health system financing has a major impact on programme coverage, equity and health outcomes.

97. Ensuring sustainable financing for sexually transmitted infections through a health system approach that is system-wide will help secure greater system-wide efficiencies and synergies.

98. Financing for a sustainable response requires action in three areas:

- Increasing revenue through innovative financing and new funding approaches;
- Financial risk protection and pooling;
- Reducing price and costs and improving efficiency.

##### **Increasing revenue through innovative financing and new funding approaches**

99. On their path to financing universal coverage, countries should be encouraged to examine a variety of specific financing issues, which include: review of funding flows and allocation mechanisms; consolidation of pooling arrangements; harmonization of purchasing mechanisms; and reviewing the potential to integrate HIV, sexually transmitted infection and hepatitis interventions into national benefit packages.

100. The existing international and domestic funding commitments are not enough to achieve the 2030 targets outlined in this draft strategy. Additional sources of funding will be required to fund the sustainable scale-up of programmes and fill funding gaps that result from shifting donor priorities. Countries will need to develop and implement financial transition plans as they increase domestically funded programmes. Fiscal capacity for many low- and middle-income countries is limited for a



variety of structural reasons (including size of the informal sector, weak capacity of fiscal administration, and poor public financial management), which restricts their ability to effectively raise substantial domestic resources in the short- or medium-term, despite good macroeconomic performance. Countries that continue to require external support will need to adjust and enhance their strategies for mobilizing external support, and strengthen advocacy efforts.

101. Increased government resources both from domestic and external sources do not necessarily translate into more resources for the health sector. Overall government resources for health are subject to volatility and, despite political will, budget envelopes may be misaligned with government priorities in many contexts. Countries should be encouraged to think in terms of sustaining coverage of priority services and interventions, rather than programmes per se.

102. Countries should be encouraged to align with the broader Financing for Development agenda<sup>1</sup> to improve domestic tax systems and to crack down on international tax avoidance and illicit flows, while re-emphasizing the political advocacy needed for prioritization.

### **Financial risk protection and pooling**

103. Countries should implement health financing systems that minimize out-of-pocket payments for all essential health services, with the aim of increasing access to these services and to prevent impoverishment. To minimize catastrophic health payments, out-of-pocket spending should be limited to less than 15–20% of the total health spending. Preventing and controlling sexually transmitted infections are, in principle, relatively easy and affordable in most settings. Many sexually transmitted infection services are provided free of charge, and countries increasingly also use supportive arrangements (such as decentralizing services) to minimize the indirect costs for people using services. However, in many places, user fees continue to be imposed. As with other out-of-pocket expenses (formal and informal), such fees undermine service use, result in inequities in service access, weaken linkages to treatment and increase risks of treatment failure. Moreover, they constitute unnecessary financial burdens on households. Where possible, countries should consider reconciling benefit packages for different disease interventions. This is essential to improving financial protection, as well as for efficiency to avoid resource waste through duplication and fragmentation.

104. The WHO Health Accounts Country Platform<sup>2</sup> provides countries with a harmonized, integrated platform for annual and timely collection of health expenditure data, with the aim of protecting the population from catastrophic health expenditure and reducing inequities in health.

### **Reducing prices and costs and improving efficiencies**

105. Fiscal constraints require that countries select the most effective sexually transmitted infection interventions and approaches, target those activities to the populations and settings where they will have greatest impact, reduce the prices of medicines and other health commodities, and increase the efficiency of services. Programmes that can demonstrate value for money and efficiency gains are

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<sup>1</sup> Financing for development, see the United Nations Department of Economic and Social Affairs website: <http://www.un.org/esa/ffd/> (accessed 22 April 2016).

<sup>2</sup> For more information on the WHO Health Accounts Country Platform, see [http://www.who.int/health-accounts/platform\\_approach/en/](http://www.who.int/health-accounts/platform_approach/en/) (accessed 22 April 2016).

better positioned to argue for fair allocation of resources and external financial support. The potential for efficiency gains across programmes needs to be explored.

#### *Priority actions for countries*

- **Develop a costed investment case for sexually transmitted infections to ensure adequate allocation of domestic and external resources:**
  - develop financial transition plans with a special focus on the transition needs of programmes and services most reliant on external donors (that is, external to country donors – international aids or private donations);
  - develop new funding channels, such as a health promotion fund, with a negotiated portion of the revenue earmarked for sexually transmitted infection programmes and related services;
  - achieve greater health equity by consolidating existing pooled funds into larger pools, thereby avoiding fragmented health insurance systems;
  - use innovative financing, such as the use of special national and local taxes to support health services.
- **Implement health financing systems, financial protection schemes and other mechanisms** (such as voucher systems) that enable people to access essential, quality-assured services without suffering financial hardship;
  - phase out out-of-pocket payments (including informal user charges) and reduce other financial barriers to accessing sexually transmitted infection and other health services; ensure that health insurance schemes cover comprehensive sexually transmitted infection services;
  - ensure that people's contributions to health insurance systems reflect their abilities to pay, with subsidies (financed from government tax revenue) available for poor and vulnerable people;
  - ensure that financial risk protection schemes are universal, covering all populations, including those who are criminalized and marginalized.
- **Pursue comprehensive strategies to reduce prices of sexually transmitted infection commodities**, including through, where appropriate, voluntary licences, applying as appropriate, the use of the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and in accordance with the Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property, including compulsory licences and filing patent oppositions, differential pricing and direct price negotiations with manufacturers, as well as local manufacturing.
- **Increase efficiencies through improved planning and more efficient procurement** and distribution systems; adapt models of sexually transmitted infection service delivery based on the country context and epidemic, including, where appropriate, the introduction of task-shifting.

#### *Priority actions for WHO*

- **Estimate resource needs for sexually transmitted infections and advocate for a fully funded response through domestic and external support and a focus on:**
  - reduced or subsidized cost of sexually transmitted infection diagnostics and drugs; resource mobilization through existing global financial mechanisms;
  - strengthening WHO's prequalification programme to safeguard and expand availability of generic products; support countries to develop investment cases and funding proposals, and support the development of national health financing plans that incorporate sexually transmitted infection programmes;
  - promote the WHO Health Accounts Country Platform and support adoption by countries; explore innovative, sustainable health-financing mechanisms; provide guidance and technical support to establish robust and fair health financing systems, including the design and implementation of national compulsory health insurance.

- **Provide strategic information on prices and manufacturers of sexually transmitted infection commodities**, including through the WHO Global Price Reporting Mechanism and the Drug Regulatory Status Database; provide support to countries to strengthen their capacity to negotiate price reductions with manufacturers and to apply, where appropriate, the use of the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health.

#### **4.5. STRATEGIC DIRECTION 5: Innovation for acceleration**

##### *Changing the trajectory of the response to achieve ambitious targets*

106. Research and innovation provide the tools and knowledge that can change the trajectory of the sexually transmitted infection response, improve efficiency and quality, achieve equity and maximize impact. It is unlikely that the targets set for 2020 and 2030 will be achieved if countries rely only on existing knowledge, technologies and service delivery approaches.

107. Innovation is required not only to develop new technologies and approaches, but also to use existing tools more efficiently and to adapt them for different populations, settings or purposes. For example, WHO supports HIV research in: building capacity of health research systems; convening partners around priority-setting for research; setting norms and standards for good research practice; and facilitating the translation of evidence into affordable health technologies and evidence-informed policy. While having a very limited direct role in research and product development, WHO works closely with research and development partners and manufacturers to ensure that essential new HIV technologies are available and affordable to countries as soon as possible.

108. Given the critical role of partners in innovation, this strategic direction describes key areas for innovation that will require joint effort by countries, WHO and other partners. Given the 15-year time horizon for achieving the 2030 targets, short-, medium- and long-term research priorities should be considered. This draft strategy focuses on the short- and medium-term priorities.

##### **Optimize sexually transmitted infection prevention**

109. The main technologies for preventing sexually transmitted infections have changed little in recent times. Although male and female condoms have been proven to be effective against unintended pregnancies and sexually transmitted infections, low acceptance and incorrect or inconsistent use mean that their potential benefits are not being realized. There are major opportunities for innovations that would boost sexually transmitted infection prevention.

##### **Optimize sexually transmitted infection diagnostics**

110. New and improved diagnostics technologies, strategies and approaches would lead to earlier and more accurate diagnosis, and strengthened patient monitoring. A major barrier to advancing sexually transmitted infection control and prevention is the lack of reliable, low-cost, point-of-care tests. There are several opportunities for innovation.

##### **Optimize medicines and treatment regimens**

111. Despite major advances in the safety, potency and acceptability of medicines and regimens, there remain areas where improvements are required and possible.

## Optimize service delivery

112. Overall impact is boosted when service delivery approaches fit the realities and needs of potential beneficiaries (especially hard-to-reach priority populations), minimize inefficiencies, use simplified and standard protocols, and fully engage communities. There are opportunities for further innovation in all those respects.

### Priority innovations

- **Multipurpose technologies and approaches for preventing sexually transmitted infections and unintended pregnancies, especially female-controlled technologies:** male and female condoms that employ new designs and materials to increase acceptability and reduce costs, and new marketing methods to boost their demand and use; more effective behavioural and communication approaches for adolescents, in particular adolescents boys, on dual protection (prevention of pregnancy and of sexually transmitted infections and/or HIV); an increased range of vaccines for preventing the acquisition of sexually transmitted infections, especially herpes simplex virus, *C. trachomatis* and *N. gonorrhoeae* infections.
- **Innovations in service scale-up and delivery:**
  - a major scale-up of human papillomavirus and hepatitis B vaccination programmes is required alongside strengthened operational research for the introduction of vaccines;
  - decentralization and task-shifting, including for earlier, accurate diagnosis and effective linkage to treatment and care;
  - community-based service delivery and more acceptable models for reaching specific populations with comprehensive services;
  - enhanced research on health-seeking behaviour; user-friendly services and use of mHealth for adolescents that are better suited and more acceptable;
  - service linkages and integration, including clearly identifying which services would draw mutual benefit from strategic linking or integration, plus innovative mechanisms and procedures for linkage or integration.
- **Testing innovations for sexually transmitted infections:**
  - including point-of-care tests to improve the screening strategy of target populations, case management and monitoring;
  - point-of-care diagnostic tests and/or self-testing technologies that are affordable, and more rapid, reliable and simpler to use;
  - development of multiplex platforms, which would enable simultaneous diagnosis of several sexually transmitted infections at the same time, in particular *C. trachomatis*, *N. gonorrhoeae*, syphilis, HIV and antimicrobial resistance, as well as antimicrobial resistance and viral load;
  - improved diagnosis tools for pelvic inflammatory disease;
  - operational research to guide the most effective methods for introducing rapid tests in countries, and to identify major challenges and opportunities related to them.
- **Innovations to address treatment challenges and drug resistance:** More robust regimens to reduce the risk of drug resistance; new, more effective medicines for treating syphilis, *N. gonorrhoeae* and herpes simplex virus; reducing the number of treatment doses to reduce toxicities and costs.

### Priority actions for WHO

- **Develop and support public–private partnerships** to catalyse the development of new technologies, in particular point-of-care testing, multiplex platforms and the development of effective microbicides to prevent HIV and other sexually transmitted infections acquisition; and new treatment options.

- **Validation and standardization of innovative technologies and approaches**, including: new and existing diagnostic technologies and operational research in implementing point-of-care tests for sexually transmitted infection screening; dissemination of best practices describing service delivery models; guidance to countries on creating an environment that is supportive of innovation; ensuring access to affordable point-of-care tests for sexually transmitted infections, particularly in low- and middle-income countries.

## **5. STRATEGY IMPLEMENTATION: LEADERSHIP, PARTNERSHIPS, ACCOUNTABILITY, MONITORING AND EVALUATION**

### **5.1 Collaboration with partners**

113. WHO has an important convening role in bringing together different constituencies, sectors and organizations in support of a coordinated and coherent health sector response to sexually transmitted infections. In addition to its Member States, the Secretariat works closely with other key partners, including bilateral donor and development agencies and initiatives, funds and foundations, civil society, technical institutions and networks, the commercial private sector and partnership networks.

### **5.2 Global and country accountability**

114. Given the range of partners and stakeholders that join forces in an effective response, well-functioning and transparent accountability mechanisms are vital. Those mechanisms need to feature strong civil society participation. A mutual accountability process benefits from strong leadership and governance that features genuine engagement with relevant stakeholders; clear national targets that reflect the 2030 Agenda for Sustainable Development and other pertinent global commitments; appropriate indicators on the availability, coverage, quality and impact of interventions to track progress; and transparent and inclusive assessment and reporting procedures.

115. To ensure the implementation and the monitoring of the strategy in countries, once adopted, five key steps are proposed:

- Convening a regional workshop to introduce the global health sector strategy on sexually transmitted infections, and to ensure that regional strategies tailored to regional specificity are developed and presented to the regional committees;
- Developing a global workplan and regional workplans;
- Regional meetings should invite countries to review the global health sector strategy and the workplans to adapt them to the country context and to elaborate a timeline towards the implementation of the strategy on sexually transmitted infection;
- Holding joint country workshops on sexual and reproductive health, HIV and hepatitis to plan on where and how sexually transmitted infection services should be integrated;
- Strengthening the country monitoring system to permit report on progress and impact of the sexually transmitted infection strategy implementation.

### **5.3 Monitoring, evaluating and reporting**

#### **Monitoring and reporting of progress towards global goals and targets**

116. At the global level, regular reviews are planned to assess progress on the various commitments and targets. These reviews will build on the data that countries report through various monitoring and evaluation mechanisms.

117. Progress at global and regional levels towards the targets set out in this strategy will be regularly assessed. Benchmarking – or comparisons between and within countries – will also be used to assess performance in reaching targets. The strategy is designed to be sufficiently flexible to incorporate additional priorities or fill newly identified gaps in the health sector response to sexually transmitted infection. To that end, WHO will continue to work with its partners to provide support to countries for the harmonized and standardized collection of core indicators, and in the preparation of global and regional reports. Regular reporting of the data is proposed.

118. WHO will develop a suitable monitoring and accountability framework for the strategy in consultation with key stakeholders. It will also monitor and share data on the uptake of its sexually transmitted infection guidelines, as well as on progress in implementation of the strategy, in order to highlight barriers and promote best practices.

#### **Monitoring and evaluating the response at country level**

119. Progress in implementing the health sector response to sexually transmitted infections is to be assessed with indicators on availability, coverage outcome and impact, while taking into consideration other relevant recommendations for monitoring implementation. In the context of the 2030 Agenda for Sustainable Development, progress on the health-related Sustainable Development Goals will be tracked and reported.

120. Indicators for monitoring the strengthening of health systems derive from a common platform for monitoring and evaluating national health strategies, known as the Country Health Systems Surveillance platform, coordinated by WHO. Instruments are also available for measuring progress in implementing policy, legal and structural measures for enhancing the HIV and sexually transmitted infection responses.

#### **WHO's framework for results-based management**

121. Workplan implementation is monitored through a mid-term review at the end of the first year of each biennium. Progress on the achievement of the Organization-wide expected results is reported at the end of each biennium.

### **5.4 Implementing the strategy at the national level**

122. The global strategy is intended to guide the development and implementation of national sexually transmitted infection strategies. Broad buy-in through the preparation process will assist in effective implementation, with technical assistance provided through WHO and development partners in support of national strategy development and building the case for investment. In order to enable country ownership, national sexually transmitted infection strategies or plans should be aligned with existing plans, such as national development plans, national health sector strategies and other disease

strategies. They should also, to the extent possible, align with national planning and financial cycles (see Figure 9).

**Figure 9. Planning and financial cycles**



### 5.5 Costing estimates for implementing the strategy

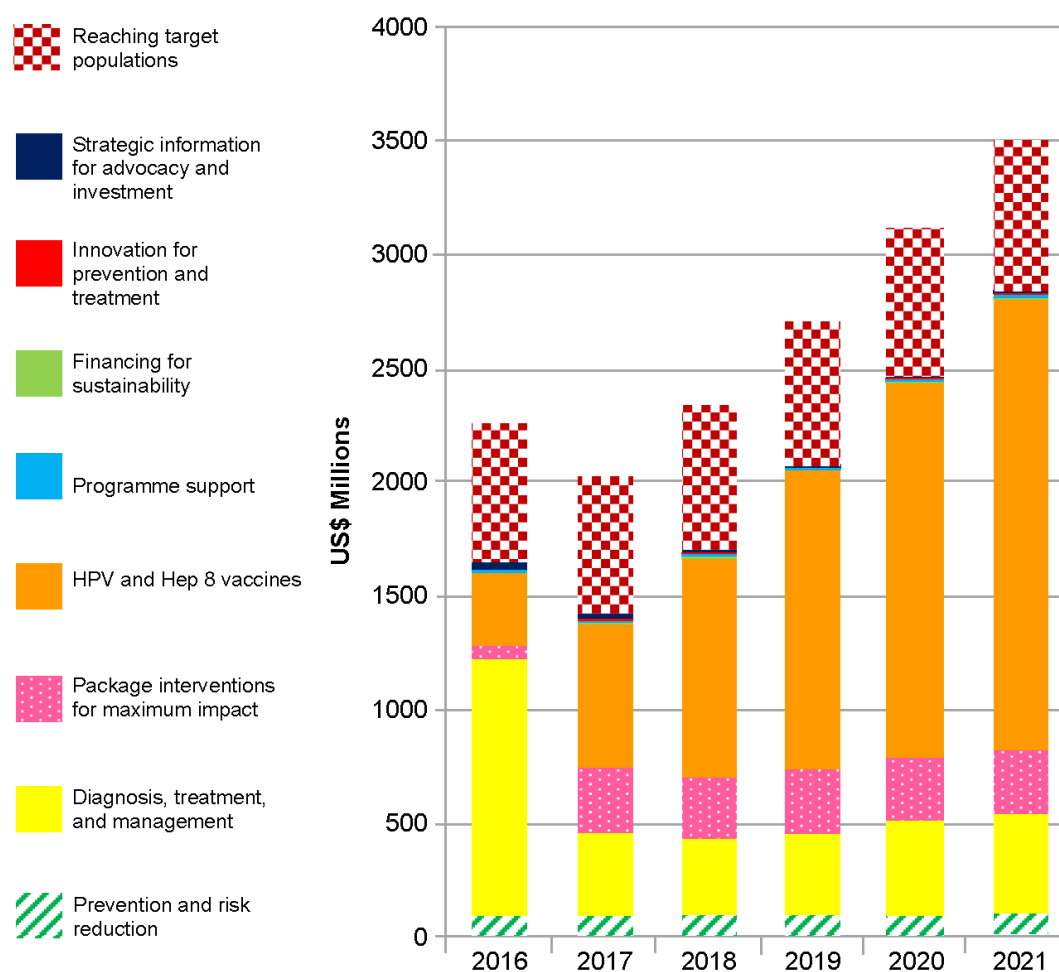
123. Full achievement of the global health sector strategy on sexually transmitted infections, 2016–2021 will cost an estimated US\$ 18 200 million for the five years, of which 99.7% is for implementing priority interventions in 117 low- and middle-income countries, and almost US\$ 53 million (0.3%) is for global-level technical support, research and advocacy by WHO and partners (see Figure 10).

124. Cost drivers are sexually transmitted infection vaccination (US\$ 3260 million), sexually transmitted infection screening (US\$ 3690 million), adolescent chlamydia screening (US\$ 2540 million), and syphilis screening in antenatal care services (US\$ 1400 million). Clinical sexually transmitted infection management is costed for an overall US\$ 3000 million, of which service delivery makes up US\$ 818 million, and diagnostic testing for gonorrhoea and chlamydia US\$ 1400 million.

125. Within global-level activities prioritized, the biggest costs are for the development of point-of-care tests to improve affordable sexually transmitted infection screening, operational research, and guidance on sexually transmitted infection surveillance. Global costs increase from US\$ 2600 million

in 2016 to US\$ 4000 million in 2021, driven by incremental scale-up of sexually transmitted infection vaccination and treatment (Figure 10).

**Figure 10. Costing of the global health sector strategy, 2016–2021**



126. Sub-Saharan Africa, bearing 40% of the global burden of sexually transmitted infection, covers 44% of the need for services and 30% of global control cost related to sexually transmitted infection. The Western Pacific Region, with 15% of global sexually transmitted infection burden, makes up 15% of sexually transmitted infection service needs and 26% of global control cost. South-East Asia Region covers 20% of global sexually transmitted infection burden and 18% of global cost. Across the 117 countries, 26% of service volumes/need and 15% of costs are in low-income countries; 47% of service need and 39% of cost in lower middle-income countries, and 27% of service need and 46% of cost in upper middle-income countries.



127. These estimates build on WHO estimates of regional burdens of *C. trachomatis*, *N. gonorrhoeae*, *T. pallidum* and *T. vaginalis* as of 2012, and declines in sexually transmitted infection rates assumed to start in 2018 in line with the draft strategy's target for 2030. Clinical management is costed for these curable sexually transmitted infections, as well as for herpes simplex virus type 2, bacterial vaginosis and *Mycoplasma genitalium*, using the draft strategy's recommendation to continue syndromic case management and expand etiologic testing where feasible and cost-effective.

128. Human papillomavirus vaccination of girls and screening of women of reproductive age will generate considerable health care and productivity savings in future years by preventing cervical cancers. Benefits from improving sexually transmitted infection control and reducing sexually transmitted infection rates by 90% according to the draft strategy's target for 2030 will further include health care savings from future sexually transmitted infection episodes averted that incur economic productivity losses, morbidity and mortality due to sexually transmitted infection-attributable infertility, pregnancy and congenital complications and psychosocial impacts.

129. The costing foresees considerable reductions in prices for human papillomavirus vaccines (across all income tiers), and chlamydia diagnostic tests, assumed to be effective from 2016. Global costs critically depend on these assumed price declines, and could be lower if further price reductions were to be achieved within the strategy horizon.

130. Investment in point-of-care test development will generate future savings by lowering sexually transmitted infection diagnostic and screening costs, and improving case management (shifting from syndromic to etiologic approach) and detection of asymptomatic sexually transmitted infection, thus contributing to lower sexually transmitted infection burdens. In addition, investment in vaccines other than against human papillomavirus could in future greatly enhance reductions in sexually transmitted infection transmission.

131. Sexually transmitted infection control implementation is expected to be funded from country domestic resources through health systems; and for human papillomavirus vaccination through national immunization programmes (with donor support for vaccine procurement, which covers around 70% of vaccination cost in countries eligible for funding through GAVI Alliance.<sup>1</sup> Costing did not include activities shared with HIV programmes, such as prevention education and sexually transmitted infection screening delivered in the context of HIV prevention. In addition to leveraging HIV prevention budgets, sexually transmitted infection initiatives will need to leverage funds from maternal, child and adolescent health interventions and immunization programmes. There is a need for a more integrated response to enhance synergies across programmes. Low-income countries will need (continuation of, and increasing) international donor support, whereas upper middle-income countries could be expected to mobilize required funding internally, if national sexually transmitted infection strategies are articulated and budgeted. Political commitment, backed by the financial commitments of both resource-poor as well as donor countries, is critical to global efforts to eliminate sexually transmitted infections.

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<sup>1</sup> For information on GAVI Alliance, see <http://www.gavi.org/> (accessed 22 April 2016).