Stakeholder Meeting to Address the Rise of Syphilis in the Region of the Americas

PAHO

Pan American Health Organization

World Health Organization

Americas

Stakeholder Meeting to Address the Rise of Syphilis in the Region of the Americas

Washington, D.C., 2022

PAHO
Pan American Health Organization
World Health Organization
REGIONAL OFFICE FOR THE Americas

Stakeholder Meeting to Address the Rise of Syphilis in the Region of the Americas

PAHO/CDE/HT/21-0023

Contents

Abbreviations

CDC	United States Centers for Disease Control and Prevention
CRSF	Caribbean Regional Strategic Framework
CS	congenital syphilis
EMTCT	elimination of mother-to-child transmission strategy
HIV	human immunodeficiency virus
KP	key population
MOH	ministry of health
NTT	non-treponemal syphilis test
PAHO	Pan American Health Organization
PEP	post-exposure prophylaxis
PrEP	pre-exposure prophylaxis
RDT	rapid diagnostic test
SITE	Syphilis Interventions towards Elimination
SOICC	Syphilis Outbreak Investigation Coordination Committee
STI	sexually transmitted infection
TT	treponemal syphilis test
WHO	World Health Organization

Introduction and Objectives

As the World Health Organization (WHO) is developing a new Global Health Sector Strategy on Sexually Transmitted Infections, and in the current context of increasing syphilis cases in many countries of the Americas, the Pan American Health Organization (PAHO) organized a meeting to review the syphilis situation in the Region of the Americas, share lessons learned in the syphilis response, and discuss public health measures toward syphilis elimination in the Region.

The meeting took place virtually with 637 participants from 38 countries of the Region on 16–17 November 2021.

Syphilis in the Region of the Americas: Update and country examples

Overall situation of syphilis in the Americas, 2020

Countries of the Americas committed to eliminating syphilis as a public health problem by 2030, but data indicate insufficient progress. In some countries of the Americas there seems to be a rise in sexually transmitted infections (STI) (1–8), including syphilis. And while the COVID-19 pandemic has impacted access to health services and syphilis screening and treatment, syphilis cases were already seen to be rising before the pandemic.

Overall, in the Region, there are data on access to testing and treatment among pregnant women but not among other populations with high syphilis burden. Also, there is a lack of information on the types of tests used and treatment provided. Person-centered approaches, increased political will, and enhanced surveillance are paramount to address the syphilis epidemic. Adoption of innovative approaches and tools as well as increased community awareness are important elements to include for a more effective response.

Syphilis in Canada: Related factors and response

Dr. Gravel, from the Public Health Agency of Canada, showed the increasing rates of syphilis and congenital syphilis (CS) across Canada from 2010 to 2021, and especially since 2017 (9). Eight provinces and territories have declared outbreaks in the past years. During 2020, there was no increase in the number of syphilis cases, but it is inferred that the COVID-19 pandemic had an impact, reducing demand for and availability of diagnosis and treatment of syphilis. The data show higher rates among men, more than double those of women, but greater increases (especially since 2017) among women compared with previous years, and mostly among women of reproductive age (15–39 years). This has translated into an increase of CS cases, especially since 2015–2017.

To address this situation, Public Health Agency of Canada convened a Syphilis Outbreak Investigation Coordination Committee (SOICC) in July 2019. Among its objectives are: (1) To enhance the surveillance of syphilis, through data submitted twice a year through SOICC to Public Health Agency of Canada; (2) To have a more sensitive CS case definition; (3) To review the recommendation for prenatal screening—repeat screening for those at high risk and/or in areas experiencing outbreaks (at 28–32 weeks of gestation and at delivery); and (4) Track enhanced surveillance systems for HIV and hepatitis C.

Among the lessons learned are that data show differing syphilis epidemiology by provinces and territories, by region, and by different subpopulations, and there are discrepancies among rural and urban areas. The federal level needs to work closely with provinces and territories to adapt the response to the local level. Surveillance also needs to consider other syndemics, such as HIV coinfection, substance use and abuse, and other social determinants of health. The interventions related to access to care need to be culturally appropriate and address stigma and discrimination as barriers to health care. Community actions need to be funded in order access populations most in need.

Epidemiological situation and innovative response in the municipality of São Paulo, Brazil

CS continues to be on the rise in the municipality of São Paulo. Data from 2007 through 2020 show how the number of CS cases increased 1.9 times, and the CS incidence rates increased 2.3 times over that period. As of 2020, the reported CS incidence rate in São Paulo was 7.1 per 1,000 live births. When the data were analyzed geographically for that same year, the results showed that the CS incidence in the Northern (10.6 per 1,000 live births) and Southern (7.6 per 1,000 live births) sections of São Paulo surpassed the mean 7.1 per 1,000 live births CS incidence rate compared with the other areas. In addition, at a submunicipal level, the results showed that four subprefectures in the Northern section and two subprefectures in the Southern section have also surpassed São Paulo's CS mean incidence rate compared with the other subprefectures in each section. The increase has drawn the attention of public health and government officials. Dr. Pinto emphasized that the CS incidence rate varies widely in the municipality, as it also does in the rest of the country, which is culturally and economically heterogeneous.

Dr. Pinto stated the importance of conducting epidemiological analyses focusing on locality heterogeneity to better understand the CS problem and guide public health responses. Endemic syphilis cannot be solved by an STI department alone; due to its complexity, it requires greater involvement from different sectors and levels, public health agencies, and a partnership with private partners.

Special legislation was developed in 2019 to address CS by expanding access to early diagnosis and treatment to reduce morbidity, mortality, and incidence rate of vertical transmission of syphilis. Primary health care services will oversee and coordinate screening services and treatment. Maternity hospitals will be responsible for screening and treating mothers and newborns and for follow-up of newborns that could have been exposed to syphilis. Early screening and subsequent periodic screenings during pregnancy should be followed by immediate treatment if the patient has a positive result. Penicillin should be available in all primary care units. Furthermore, the municipality developed the "Linea de Cuidados": the STI/AIDS protocol that guarantees a more comprehensive response to STIs/HIV. The guide contains general guidelines and recommendations for health care

professionals regarding prevention, diagnosis, and treatment for STIs and HIV.

São Paulo has a municipal plan with targets and objectives to eliminate CS. The municipality also developed "Monitora TV" and "TV-SP." Monitora TV is an online system that stores data from consultations and examinations of all pregnant women and children. It can also notify health units if any follow-up steps are pending. This initiative aims to monitor and evaluate cases of vertical transmission and identify potential failures and improve workflow. TV-SP is a free app that provides information to users about steps to be followed if infected with HIV, syphilis, or hepatitis B and C. Lastly, another initiative the municipal health department inaugurated is the "CTA da Cidade," a bus equipped to help diagnose and treat STIs/HIV, which offers HIV/STI preventive services, mainly focused on reducing barriers to services among vulnerable populations.

Current situation and response to syphilis in the United States of America

Dr. Mena presented the epidemiological update on syphilis in the United States of America. The rates of syphilis have been increasing steadily for years (1), and in the last decade, primary and secondary syphilis rates increased 167%. COVID-19 affected the number of primary and secondary syphilis cases detected, especially when shelter-in-place orders were in effect, reaching a 63.7% reduction during April 2020 compared with the same week in 2019. Men who have sex with men are disproportionally affected by syphilis and represented 48% of primary and secondary syphilis cases in 2019. Over the last decade, syphilis among women spread across the United States, and areas where syphilis is increasing among women are experiencing increases in CS. The national CS rate has been increasing for the last several years and is projected to be 56 per 100,000, not meeting the PAHO/WHO elimination of mother-to-child transmission (EMTCT) goal, although great variations exist among states. CS-related deaths continue to increase and consistently represent about 7% of all reported cases of CS. In 2020, of the 2,022 CS cases that were reported to the U.S. Centers for Disease Control and Prevention (CDC), 139 were stillbirths or infant deaths.

According to Dr. Mena, the national response for syphilis has always focused on individual risk factors and behaviors, but not structural barriers. The first ever STI National Strategic Plan was launched in 2020, associated with the American Rescue Plan Act of 2021. It focuses on some key areas, including human resource capacity building and continued education; laboratory activities, specifically novel technologies, and the evaluation of dual point-of-care HIV/syphilis testing; and enhanced surveillance.

There are specific CS activities, including developing a CS Strategic Plan. There are also activities to enhance data and surveillance to identify the impact of emerging health threats to pregnant women and their infants and evaluating cost-effectiveness of 28-week syphilis screening. Furthermore, prenatal syphilis screening laws vary among states.

CDC is exploring ways to build and improve relationships between state and local health departments and nontraditional partners, and is investing in state and local health departments to build a portfolio of possible CS interventions (e.g., case review boards, jail screening).

Planning Strategies for Syphilis Elimination

Key interventions toward syphilis elimination, by WHO

WHO presented the short- to mid-term planned actions, namely: (1) Update guidelines/ guidance documents to include dual HIV/syphilis testing for key populations (KP); (2) Include the recommendation of partners' services and social network testing for syphilis; and (3) Work on both treponemal (TT) and non-treponemal (NTT) rapid diagnostic tests (RDT). Regarding syphilis diagnostics, an approach is to increase the number of WHO prequalified tests; to investigate a syphilis self-test (blood-based); and to support external quality approval for dual HIV/syphilis tests. To address syphilis treatment there is resource mobilization and technical support for the prequalification of benzathine benzylpenicillin sterile powder raw material, as well as studies on alternative treatments for syphilis in pregnancy (cefixime).

According to Dr. de Mello, to eliminate CS as a public health problem by 2030, consider that any prevalence in pregnant women over 0.5% is considered high. The elimination of syphilis by 2030 is doable with current tools: condoms and lubricants; enhanced syndromic management; dual HIV/syphilis RDT; the test and treat strategy; dissemination of best practices; and data use. The EMTCT of syphilis and HIV strategy is an important political tool. There are new opportunities to address HIV–syphilis syndemics, and civil society working in HIV can support leveraging the syphilis response.

Syphilis Interventions towards Elimination model (SITE): application in Peru

Peru has relatively low prevalence of syphilis, and surveillance data presented by Dr. Reyes showed it decreased from 2012 to 2016. The main interventions implemented in the country were: (1) The use of rapid syphilis testing, both in health services and mobile services since 2010; (2) Use of dual rapid HIV/syphilis tests since 2017–2018; (3) Strengthening of laboratory capacity and networks; (4) Strengthening STI case notification; (5) Peer education, condom and lubricant distribution; and (6) Decentralization of treatment to the first level of care.

Syphilis Interventions towards Elimination (SITE) is a new tool developed by Avenir Health with support from PAHO and WHO (10). SITE simulates adult syphilis transmission in a country and can be used to look at the impact and cost-effectiveness of different STI control interventions, guiding countries toward syphilis elimination targets. The model has been piloted in Peru to identify opportunities for optimizing the country's STI and syphilis control strategy, plan, targets, and cost estimates. The results based on SITE were presented in terms of the health and transmission impact, service levels, and cost of alternative and combined packages of prevention, screening, and treatment interventions. According to the SITE modelling study, the interventions with the greatest impact on the syphilis response (more cost-effective measures) would be: (1) Treatment of symptomatic cases—primary and secondary syphilis (62% reduction in incidence); (2) Contact tracing (17% reduction); and (3) Condom use and screening of men who have sex with men.

High Risk and Vulnerable Populations for Syphilis: Lessons learned

Preventive doxycycline for high-risk populations

Doxycycline is an antibiotic studied for effectiveness as pre-exposure (PrEP) or post-exposure (PEP) prophylaxis against syphilis (and Chlamydia), but various concerns exist, including risk–benefit ratio, impact on antimicrobial resistance, and optimal use for population impact. Several key studies are underway, and Dr. Klausner presented evidence that doxycycline works in preventing syphilis infection either as PrEP or PEP.

Answering questions from the audience, Dr. Klausner concluded that to indicate the use of doxycycline as prophylaxis among a certain population, it would be necessary to determine the incidence of syphilis in that population, and to define an appropriate cutoff point to indicate the use of the syphilis PEP/PrEP. Ongoing studies are trying to define the high-risk target population, such as, for example, those that had a previous syphilis diagnosis, men who have sex with men, or a person that has sex with more than a certain number of partners. The new syphilis prophylaxis trials are looking for those answers and are expected to produce results in 2023–2025.

The use of doxycycline for syphilis prophylaxis could also be a good idea for the prevention of mother-to-child-transmission of syphilis. Dr. Klausner answered that there is no modeling of the population-level impact regarding use of doxycycline on CS, yet. He suggested we would have to understand how the syphilis incidence in core groups impacts non-core groups mathematically.

The recent CDC treatment guidelines (11) also mention PrEP and PEP in their STI Guidelines. Although not a direct recommendation, this mention hopefully allows for more awareness among providers.

Community-based interventions under the Family and Community Health Model for the timely diagnosis, management, and monitoring of syphilis in pregnant women and newborns in Nicaragua

Nicaragua has a publicly funded health model with high coverage that provides universal health access and has a broad citizen participation. This model reinforces health promotion and education, outpatient care, and community health actions. An important strategy presented by this health model is the screening of all pregnant women during prenatal care and the close monitoring of the entire pregnancy and delivery, including puerperium and child care.

Challenges include addressing lower testing coverage in rural areas with difficult access, as well as integrating dual testing (syphilis and HIV) for women of childbearing age and pregnant women, prioritizing hard-to-reach areas.

PANCAP: lessons learned from HIV–STI integration

PANCAP is the Regional Coordinating Mechanism established by heads of governments in the Caribbean to respond to the HIV epidemic and was designated by UNAIDS as an International Best Practice. PANCAP has a Caribbean Regional Strategic Framework (CRSF) that aims to integrate STIs and viral hepatitis into the regional response. The CRSF is implemented at the national level to align national responses with regional and international commitments. Countries are also required to report on progress made with respect to CRSF implementation, and the focus is on syphilis, gonorrhea and chlamydia, and viral hepatitis.

Having different organizations under one umbrella is a strategy that enables a strong and integrated regional response. Countries are encouraged to strengthen sexual health services while implementing these initiatives, and the recommendation is to prioritize STIs, especially syphilis, if all cannot be included due to resource limitations. They have experience with a longstanding prevention program linking mother and child health and HIV. This has resulted in strengthening of the EMTCT strategy in the Caribbean. The most important challenges are: (1) Data and use of strategic information—there is a significant information gap; (2) Greater focus on HIV—dictated by funding, as STIs are neglected (importance of having specific designated funding); and (3) Services are still highly centralized—access to testing and treatment is also centralized. There is the need to focus on KPs and strengthen surveillance systems for health, HIV, and STIs. Prevention programs also need to be strengthened. The focus needs to be broadened from treatment to prevention.

Rapid diagnostic tests: parallel chat discussion

Meeting participants shared their practical country experiences with syphilis rapid tests (RDT).

RDTs have an important role in a public health response, and their use must be adapted according to the local specific context. Non-treponemal laboratory tests are also very important and have a role in public health, being the only available tool to monitor syphilis response to treatment. According to the specialists present in the meeting, RDTs have high sensitivity, of around 90%, and new systematic reviews shows very high performance of 98%. They have higher sensitivity than rapid plasma reagin (RPR) or Venereal Disease Research Laboratory (VDRL) tests. If there is a strong health system, and people return to be treated, a country/region/state/city could make a decision to use laboratory-based syphilis tests instead of RDT. If there is risk of missing people and missing the opportunity to treat syphilis and break the chain of transmission, then RDTs could be a good option. There is only one available dual rapid treponemal and non-treponemal test on the market, which is not yet prequalified by WHO.

WHO recommends screening for syphilis as early as possible in pregnancy and immediate initiation of treatment. This is a test and treat strategy. For KPs, the prevalence of syphilis is high, which means that the RDTs (treponemal) will be positive in a high proportion of cases. If treatment is initiated immediately there could be overtreatment, as some of these positive results might represent a past infection. The risk of overtreatment should be weighed against the risk of not being able to follow up the individual. Currently, there is no WHO position on this aspect. It could make sense to treat with only a positive RDT, even with overtreatment and considering that there is no resistant to penicillin *Treponema pallidum.*

Dual HIV/syphilis test experience: parallel chat discussion

Meeting participants shared their practical country experiences with the dual HIV/syphilis tests. Argentina is conducting a pilot study on pregnant women using dual HIV/syphilis tests. The experience is integrating the dual HIV/syphilis test in the combination prevention strategy, offering immediate treatment if the result is positive.

The increase in syphilis cases in Argentina was identified and the health services needed to guarantee the immediate supply of penicillin. COVID-19 intensified the use of dual tests, especially because these are associated with fewer face-to-face consultations in health services. The dual HIV/syphilis rapid test experience in the country is very positive, had a high impact, and was included as a strategy of the Ministry of Health. Dual HIV/syphilis testing is promoted at the primary health care level and the hospital networks, enabling dual HIV/syphilis test access to the entire population, including KPs and for prevention of mother-to-child transmission (PMTCT).

Peru validated the dual HIV/syphilis test in 2017 for national use in prenatal care, through a low-cost, centralized purchase by UNICEF. There is good experience and practical learnings, such as the need to perform color visual acuity testing for providers who will be reading the tests, and learning that weak lines mean a positive result for syphilis, while for HIV a strong line is needed for the result to be considered positive.

In Mexico there is use of dual HIV/syphilis testing, but there are persistent challenges with sensitivity and specificity, as well as cost.

Syphilis EMTCT Group Recommendations

- Review legislation and legal frameworks for provision of syphilis treatment to pregnant women and their sexual partners.
- Ensure policies are in place to provide services to migrants.
- Determine the situation of the most vulnerable women in each country.
- Strengthen partnerships with civil society organizations (CSOs) and community leadership.
- Promote more public awareness and person-centered education.
- Improve supply chain management.
- Ensure that all health facilities have access to needed resources: tests and medications, internet access and tablets for data collection.
- Update algorithms, especially for KPs.
- Include dual HIV/syphilis test in local algorithms.
- Raise awareness of the importance of antenatal care, testing prior to the onset of pregnancy, and the accompaniment of couples during the reproductive process.
- Integrate health services and laboratory.
- Provide laboratory results and monitor treatment results in a timely manner.
- Provide interinstitutional platforms for care and monitoring.
- Incorporate knowledge of syphilis in the training curriculum for professionals and promote ongoing training to reduce information gaps or fear of treatment with penicillin among health care professionals.
- In-house sessions/refresher training with staff at various health facilities on syphilis and its management.
- Further decentralization and integration of services.
- Health facilities' reports should be assessed quarterly to address gaps.
- Develop quality monitoring plans.

Syphilis Key Populations Group Recommendations

- Increase access to information/promote health-seeking behavior (at all levels).
- Implement elimination campaigns and strengthen communication and advocacy.
- Certify health care facilities as KP-friendly services.
- Adequacy of person-centered (non-stigmatizing) services.
- Ongoing in-service training of health care workers to provide STI and sexual health services that are KP-friendly and non-discriminatory.
- Management of the concept of elimination of syphilis in "big cities."
- Consultations with the community about the best way to reach KP.
- Strengthening of the Health Information System to capture data from CSOs.
- Use information to make decisions.
- Integrate screening services in community-based services into the information system.
- Creation of sentinel surveillance centers.
- Promote purchases of syphilis tests through PAHO strategic funds (validated and low cost).
- Promote networking and working relations with academic sectors to develop evidence-based policies.
- Include prevalence and incidence studies, and risk assessments, to better understand the magnitude and characteristics of the syphilis epidemic in different populations. Also, mathematical modeling, behavioral, and stigma and discrimination studies.
- Research in new diagnostic tests (prequalified NTTs are needed).
- Evaluate feasibility of using self-testing for syphilis.
- Costing studies/economic evaluation to justify the ask for increased public funding for STIs.
- Develop innovation for contact tracing.
- Local evaluation of new tools such as PrEP, new treatments.
- Ongoing capacity building to deliver STI and sexual health services to KPs, including on reducing stigma and discrimination.
- Work on the incorporation of integrated STI and hepatitis testing in PrEP cohorts and in primary care.
- Ensure funding for the sustainability of the proposed interventions.

Interventions suggested by participants in the working group discussion to advance the elimination of syphilis in different populations in the context of COVID-19

Syphilis EMTCT

Area of work	Suggested actor	Short-term actions	Long-term actions	Resources
Early screening of pregnant women irrespective of one's geographical location in a country.	MOH	Ensure policies are in place to provide services to migrants. Strengthen partnerships with CSOs and community leadership. Promotion of more public awareness.	Review legislation and legal frameworks to provide syphilis treatment to pregnant women and their sexual partners.	
Actions aimed at vulnerable populations, Indigenous population, persons from rural areas, or areas with difficult access to health services, pregnant women in a situation of human mobility, incarcerated persons, adolescents.	MOH	To determine the situation of the most vulnerable women in each country.	Develop targeted action plan.	
Increase screening, diagnosis, and treatment coverage.	MOH	Ensure that all health facilities have access to needed resources. Assessment and supervision of transportation, stocks of medications at various facilities. Include dual HIV/syphilis test in local algorithms.	Further decentralization and integration of services. Provide interinstitutional platforms for care and monitoring. Internet access and computerized services. Improve supply chain management.	Syphilis tests, TT and NTT, RDT and serology, and penicillin. Provision of training and dual test kits.
Improve reading and interpretation of NTT (training).	MOH/academia			
Increase surveillance and data collection.	MOH	Provision of more resources such as inexpensive tablets for data collection so that more real-time data can be available.		Computers, tablets, and Internet connection.
Increase tracing and screening of sexual partners. Increase treatment coverage.	Local authorities	Client education, provide simple signs at facilities so that the public is aware of services offered. Raise awareness of the importance of antenatal care testing prior to the onset of pregnancy and the accompaniment of couples during the reproductive process.	Update algorithms especially for persons at higher risk of infection.	Technical support. Dual test kits.

Area of work	Suggested actor	Short-term actions	Long-term actions	Resources
Faster turnover time of laboratory results so that treatment can be provided in a timely manner when results are positive.	Local authorities	Identify personnel to track laboratories and update clients in a timely manner.	Integration of health services and laboratory. Update algorithms especially for persons at higher risk of infection.	Technical support. Dual test kits.
Increase knowledge and training. Conduct various research to provide evidence-based information.	Academia	Incorporate knowledge of syphilis in the training curriculum for professionals. Promote continued education to reduce information gaps. Determine the situation of the most vulnerable women in each country.	More detailed studies can be done to improve access to services.	
Development of new technologies.	Academia		Development of new technologies to increase screening and treatment coverage at low cost.	
Increase performance on the use and interpretation of TT and NTT.	Healthcare providers – private and public sectors			
Strengthen the follow-up of pregnant women, couples and sexual partners, and newborns.	Healthcare providers – private and public sectors		Health facilities' reports should be assessed quarterly to address gaps. In house sessions/ refresher training with staff at various health facilities on syphilis and its management.	
Expand coverage in the private sector.	Healthcare providers – private sector		Health facilities' reports should be assessed quarterly to address gaps. In house sessions/ refresher training with staff at various health facilities on syphilis and its management.	
Improve chart records on syphilis.	Healthcare providers – private and public sectors		Develop quality monitoring plans. Health facilities' reports should be assessed quarterly to address gaps.	
Clinical audits: identify where the critical nodes are and inform the resolution, as well as share best health practices.	Healthcare providers – private and public sectors		Develop quality monitoring plans. Health facilities' reports should be assessed quarterly to address gaps.	
Technical assistance for example by funding case trackers to do contact tracing.	Donors and other stakeholders	Ongoing discussions	Provision of technical support	

Syphilis key populations

Area of work	Suggested actor	Short-term actions	Long-term actions	Resources
Create and maintain partnership between policymakers, CSOs, communities, KPs on sexual health.	MOH	Increase access to information/ promote health-seeking behavior (at all levels). What is the best way to reach the KP? Ask the community.	Strengthening of Health Information System to capture data from CSOs	Technical cooperation for normative and regulations, and for sharing successful experiences.
Integrate HIV/STIs/sexual and reproductive health. Intersectoral health policies.	MOH			
Develop a strategy to syphilis elimination.	MOH and local authorities	Elimination campaigns.	Communication and advocacy. Management of the concept of elimination of syphilis in "big cities."	
Update regulations and recommendations.	MOH			
Strengthen logistics for procurement of commodities.	MOH	Promote purchase of tests through PAHO strategic funds (validated and low cost).	Advocacy in the ministries to reduce validation processes and use existing experiences. (Tool kits)	Support countries to work with the strategic fund for test procurement.
Screen KPs with dual HIV/ syphilis tests and integrate testing into central services for these populations.	MOH			
Strengthening of surveillance systems using information technologies (incorporating registry variables that characterize the KP).	MOH and local authorities	Use information to make decisions. Design information systems that allow for information extraction. Integrate screening services in community-based services into the information system.	Creation of sentinel surveillance centers.	
Develop KP-friendly model of care for sexual health such as community-based services that provide comprehensive services.	Local authorities	Certify health care facilities and KP-friendly services.	Ongoing capacity building to deliver STI and sexual health services to KPs, including on reducing stigma and discrimination. Adequacy of person-centered (non-stigmatizing) services.	

Area of work	Suggested actor	Short-term actions	Long-term actions	Resources
Strengthen PrEP services.	Local authorities	Provide STIs/sexual health services as part of PrEP.		
Develop contact notification (tracing).	Local authorities			
Working with peers (delegation of tasks).	Vulnerable populations and communities			
Leverage CSO competencies and systems to strengthen the STI and sexual health response.	Vulnerable populations and communities	Client education.	Building on the success of the HIV advocacy, expand to include advocacy for STI and sexual health services for KPs. Advocacy work against stigma and discrimination.	
Service quality monitoring and research.	Vulnerable populations and communities		Establish alliances with the government and the community.	
Support research: implementation research, models of service delivery.	Academia/MOH	Research in new diagnostic tests and biobanks (NTTs are needed). Evaluate feasibility of using self-testing for syphilis. Local evaluation of new tools such as PrEP, new treatments. Develop innovation for contact tracing.	Costing studies/economic evaluation to further justify funding for STIs. Promote collaboration with academia to support evidence-based policies. Conduct prevalence and incidence studies, and risk assessments, to understand the magnitude and characteristics of the syphilis epidemic in different populations. Also, mathematical modeling and behavioral, stigma and discrimination studies.	Funds. Allocate national or donor resources.
Ongoing capacity building to deliver STI and sexual health services to KPs including on reducing stigma and discrimination.	Healthcare providers – public and private sectors	Ongoing in-service training of health care workers to provide STI and SH services that are KP-friendly and non-discriminatory.		
Training to understand testing algorithms, do rapid test and interpret it. Training to reduce stigma.	Healthcare providers – public and private sectors	Include them in reporting and notification.		Technical support, updated protocols, virtual training, support platforms. Ensure resources and supplies.
Support governments to advocate for increase funding for STIs. Do not duplicate efforts. Harmonize indicators.	Donors and other stakeholders	Funding. Technical support.	Ongoing technical assistance.	

Next Steps – PAHO

- Recommend a comprehensive, person-centered approach to sexual health within the model of care for vulnerable populations:

  - all HIV testing accompanied by syphilis testing;

  - point-of-care testing for syphilis;

  - HIV/syphilis dual testing of pregnant women to advance the elimination of CS.
- Provider training: virtual course on management of syphilis in pregnant women.
- Meeting report and dissemination of regional data.
- Raise priority of syphilis and other STIs in national agendas.
- Support national planning exercises to update intermediate goals toward elimination.
- Dissemination of information and materials on STI management and treatment according to WHO recommendations.

Final Comments

- Based on available information, progress in the elimination of mother-to-child transmission of syphilis in the Region is slow, and there is a rise in syphilis in different vulnerable populations. To achieve a change in the regional landscape of syphilis, it is necessary to consider the lessons learned from countries that have carried out successful actions.
- The experience of the COVID-19 pandemic has shown us that an effective health response should be under the leadership of the ministries of health and include community participation. The strengthening of the first level of health care, active surveillance, notification, follow-up, and treatment of cases and contacts are essential to have an impact and positive results.

References

1. U.S. Centers for Disease Control and Prevention [Internet]. Atlanta: CDC; 2021 Oct 7 [Accessed 2021 Oct 9]. Sexually Transmitted Diseases (STDs): Data and Statistics. Available from: https://www.cdc.gov/std/statistics/default.htm
2. Departamento de Doenças de Condições Crônicas e Infecções Sexualmente Transmissíveis. Boletim Epidemiológico Sífilis 2021. Número especial (Ano V-no 01):57. Brasília: Ministério da Saúde do Brasil, Secretaria de Vigilância em Saúde; 2021. Available from: http://www.aids.gov.br/pt-br/pub/2021/boletim-epidemiologico-de-sifilis-2021 [Accessed 2021 Oct 16].
3. García-Cisneros S, Herrera-Ortiz A, Olamendi-Portugal M, Sánchez-Alemán MA. Re-emergence of syphilis in women of reproductive age and its association with the increase in congenital syphilis in Mexico during 2010-2019: an ecological study. BMC Infect Dis. 2021;21(1):992. https://doi.org/10.1186/s12879-021-06680-w
4. U.S. Centers for Disease Control and Prevention [Internet]. Atlanta: CDC; 2021 Jul 29 [Accessed 2021 Oct 9]. Sexually transmitted diseases surveillance 2019. National overview of STDs, 2019. Available from: https://www.cdc.gov/std/statistics/2019/default.htm
5. Jenness SM, Le Guillou A, Chandra C, Mann LM, Sanchez T, Westreich D, et al. Projected HIV and Bacterial Sexually Transmitted Infection Incidence Following COVID-19–Related Sexual Distancing and Clinical Service Interruption. J Infect Dis. 2021;223(6):1019–28. https://doi.org/10.1093/infdis/jiab051
6. World Health Organization. Global Health Sector Strategy on Sexually Transmitted Infections 2016-2021 Towards Ending STIs. Geneva: WHO; 2021. Available from: https://www.who.int/publications/i/item/WHO-RHR-16.09
7. Tsuboi M, Evans J, Davies EP, Rowley J, Korenromp EL, Clayton T, et al. Prevalence of syphilis among men who have sex with men: a global systematic review and meta-analysis from 2000–20. Lancet Glob Health. 2021;9(8):E1110–18. https://doi.org/10.1016/S2214-109X(21)00221-7
8. Institute of Environmental Science and Research [Internet]. [New Zealand]: ESR; 2021 [Accessed 2021 Oct 9]. Sexually Transmitted Infection (STI) surveillance (Dashboard). Interpretation Document. Available from: https://www.esr.cri.nz/our-services/consultancy/public-health/sti/
9. Public Health Agency of Canada. Report on sexually transmitted infections in Canada, 2017. Ottawa: PHAC; 2020 Jan 27 [Accessed 2021 Oct 9]. Available from: https://www.canada.ca/en/public-health/services/publications/diseases-conditions/report-sexually-transmitted-infections-canada-2017.html
10. Pan American Health Organization. Strategies for the Elimination of Syphilis in Peru. Program Impact and Cost-Effectiveness Projections Using the Syphilis Interventions Towards Elimination (SITE) Model. Washington, DC: PAHO; 2021. Available from: https://iris.paho.org/handle/10665.2/53919 [Accessed 2022 Jan 4].
11. Workowski KA, Bachmann LH, Chan PA, Johnston CM, Muzny CA, Park I, et al. Sexually Transmitted Infections Treatment Guidelines, 2021. MMWR Recomm Rep. 2021;70(4):1–187. https://doi.org/10.15585/mmwr.rr7004a1

Links Shared during Presentations

Brazil

http://www.imprensaoficial.com.br/DO/BuscaDO2001Documento_11_4.aspx?link=%2f2019%2fdiario%2520oficial%2520cidade%2520de%2520sao%2520paulo%2fagosto%2f17%2fpag_0035_f16c30c9d11401c824cce7bbcb3ac1f6.pdf&pagina=35&data=17/08/2019&caderno=Di%C3%A1rio%20Oficial%20Cidade%20de%20S%C3%A3o%20Paulo&paginaordenacao=100035

http://legislacao.prefeitura.sp.gov.br/leis/portaria-secretaria-municipal-da-saude-sms-676-de-30-de-setembro-de-2019

https://www.prefeitura.sp.gov.br/cidade/secretarias/upload/Linha%20de%20Cuidados%20-%20ISTsAids_%20Finalizada(1).pdf

http://legislacao.prefeitura.sp.gov.br/leis/portaria-secretaria-municipal-da-saude-sms-378-de-27-de-agosto-de-2021

https://www.prefeitura.sp.gov.br/cidade/secretarias/upload/Protocolo%20TV%20s%C3%ADfilis%20e%20SC_SMS_revis%C3%A3o_23jul-site.pdf

http://www.imprensaoficial.com.br/DO/BuscaDO2001Documento_11_4.aspx?link=%2f2021%2fdiario+oficial+cidade+de+sao+paulo%2foutubro%2f16%2fpag_0052_abc6479e4d7b8d817dc6b8aea4bf043e.pdf&pagina=52&data=16/10/2021&caderno=Di%C3%A1rio%20Oficial%20Cidade%20de%20S%C3%A3o%20Paulo&paginaordenacao=100052

https://www.prefeitura.sp.gov.br/cidade/secretarias/upload/plano_sifilis_ist_v3.pdf

http://www.prefeitura.sp.gov.br/dstaids/echo

Canada

https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/health-care-system/canada.html

https://health-infobase.canada.ca/datalab/covid-19-impact-stbbi-services.html

https://health-infobase.canada.ca/datalab/covid-19-stbbi-services.html

https://www.ccsa.ca/sites/default/files/2020-03/CCSA-Canadian-Drug-Summary-Methamphetamine-2020-en.pdf

https://www.canada.ca/en/public-health/services/reports-publications/accelerating-our-response-five-year-action-plan-sexually-transmitted-blood-borne-infections.html

https://www.canada.ca/en/public-health/services/infectious-diseases/sexual-health-sexually-transmitted-infections/reports-publications/sexually-transmitted-blood-borne-infections-action-framework.html

https://www.canada.ca/en/services/health/publications/diseases-conditions/syphilis-epidemiological-report.html

https://www.canada.ca/en/public-health/services/publications/diseases-conditions/responding-syphilis-canada-fact-sheet.html

https://www.canada.ca/en/public-health/services/infectious-diseases/sexual-health-sexually-transmitted-infections/syphilis-resource-population-specific-prevention.html

Dual tests

https://globalhealthtrainingcentre.tghn.org/articles/rapid-syphilis-test-toolkit/

Peru

https://avenirhealth.org/software-site.php

https://iris.paho.org/handle/10665.2/53919

https://doi.org/10.1016/j.idm.2021.03.004

United States of America

https://www.cdc.gov/std/treatment-guidelines/STI-Guidelines-2021.pdf

https://www.who.int/reproductivehealth/congenital-syphilis/clinical-laboratory-tools/en/

WHO

https://www.who.int/reproductivehealth/publications/rtis/ghss-stis/en/

https://atlas.ecdc.europa.eu/public/index.aspx

https://www.paho.org/en/node/80562

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8039768/

http://www.unaids.org/en/resources/presscentre/featurestories/2015/july/20150702_condoms_prevention

https://www.who.int/publications/i/item/9789240024168

https://www.who.int/publications/i/item/978-92-4-155058-1

https://www.who.int/reproductivehealth/publications/emtct-hiv-syphilis/en/

https://www.who.int/publications/i/item/dual-hiv-syphilis-rapid-diagnostic-test

https://www.who.int/publications/i/item/WHO-CDS-HIV-19.38

https://extranet.who.int/pqweb/in-vitro-diagnostics

https://www.who.int/news/item/15-11-2021-new-reduced-costs-of-dual-hiv-syphilis-rapid-tests-to-accelerate-progress-toward-emtct-of-hiv-and-syphilis

https://www.who.int/publications/i/item/WHO-CDS-HIV-19.31

https://www.who.int/publications/i/item/978-92-4-155058-1

https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/stis/strategic-information/congenital-syphilis-estimation-tool

https://www.paho.org/en/topics/syphilis

https://www.who.int/publications/i/item/WHO-CDS-HIV-19.32

https://pubmed.ncbi.nlm.nih.gov/29281619/

https://www.who.int/teams/global-hiv-hepatitis-and-stis-programmes/stis/testing-diagnostics/who-cdc-syphilis-serology-proficiency-programme

PAHO

Pan American Health Organization

World Health Organization
REGIONAL OFFICE FOR THE Americas

525 Twenty-third Street, NW
Washington, D.C., 20037
Estados Unidos de América
Tel.: +1 (202) 974-3000
www.paho.org