### SEXUALLY TRANSMITTED INFECTIONS (STI) NATIONAL STRATEGIC PLAN FOR THE UNITED STATES: 2021-2025

## VISION

The United States will be a place where sexually transmitted infections are prevented and where every person has high-quality STI prevention, care, and treatment while living free from stigma and discrimination.

This vision includes all people, regardless of age, sex, gender identity, sexual orientation, race, ethnicity, religion, disability, geographic location, or socioeconomic circumstance.

### **Goals, Objectives, and Strategies**



### GOAL 1: PREVENT NEW STIS

#### **Objective 1.1: Increase awareness of STIs and sexual health**

Strategies:

- 1.1.1 Develop and implement culturally sensitive and linguistically appropriate campaigns to provide education on sexual health, STI primary prevention, testing, and treatment that reduce STI-associated stigma and promote sexual health.
- 1.1.2 Support a non-stigmatizing, comprehensive approach to sexual health education and sexual well-being, especially in adolescents and young adults, that promotes healthy sexual development and relationships and includes both risk-avoidance and risk-reduction messaging at the community level in schools, faith-based organizations, and other community-based organizations.
- 1.1.3 Integrate STI messaging into existing public health campaigns and strategies.
- 1.1.4 Increase awareness of STI testing among adolescents, young adults, MSM, and pregnant women.
- 1.1.5 Increase awareness and education especially among MSM and their providers on the importance of extragenital testing.

#### **Objective 1.2: Expand implementation of quality, comprehensive STI primary prevention activities** *Strategies:*

- 1.2.1 Ensure that prevention programs are accessible, comprehensive, and culturally, linguistically, and age appropriate.
- 1.2.2 Implement STI prevention activities in a broad range of health care delivery, education, and community-based settings through innovative, evidence-based approaches.
- 1.2.3 Promote safe and supportive environments such as school, family, and community that encourage adolescents and young adults to avoid and decrease STI risk.
- 1.2.4 Increase private and confidential time for providers with their adolescent patients during preventive care visits to improve the effectiveness of risk assessment, screening and counseling on STIs, reproductive health, mental health, and substance use disorders.
- 1.2.5 Establish partnerships with both public and private entities to expand and strengthen STI prevention efforts.

## **Objective 1.3:** Increase completion rates of routinely recommended HPV vaccination *Strategies:*

- 1.3.1 Increase confidence in the HPV vaccine by implementing messaging and evidence-based interventions to address scientifically documented barriers to uptake and emphasizing that it prevents cancer.
- 1.3.2 Dispel myths that lead to HPV vaccine hesitancy in communities by working with trusted community leaders, community-based organizations, and providers to guide strategies and provide culturally affirming messages about HPV vaccination.
- 1.3.3 Reduce missed opportunities to promote and provide routinely recommended HPV vaccination including catch-up HPV vaccination in accordance with current Advisory Committee on Immunization Practices recommendations.
- 1.3.4 Integrate HPV vaccination into routine clinical care for adolescents and young adults.
- 1.3.5 Provide HPV vaccination at a broad range of clinical and nontraditional community-based settings, including pharmacies, retail clinics, and dental offices.
- 1.3.6 Reduce the financial and system barriers encountered by providers and consumers to providing HPV vaccination.

## Objective 1.4: Increase the capacity of public health, health care delivery systems, and the health workforce to prevent STIs

#### Strategies:

- 1.4.1 Provide resources, incentives, training, and technical assistance to expand health workforce and systems capacity.
- 1.4.2 Increase diversity of the workforce that delivers STI prevention services.
- 1.4.3 Partner with professional societies and academic institutions to increase awareness and knowledge of sexual health including STI prevention, screening, and treatment, and to strengthen and expand clinical practices that lead to high-quality STI care provided by public health personnel, health care professionals, and paraprofessionals.
- 1.4.4 Integrate STI prevention with HIV, viral hepatitis, and substance use prevention services across workforces and delivery systems.

#### **GOAL 2: IMPROVE THE HEALTH OF PEOPLE BY REDUCING ADVERSE OUTCOMES OF STIS**

# Objective 2.1: Expand high-quality affordable STI secondary prevention, including screening, care, and treatment, in communities and populations most impacted by STIs *Strategies:*

- 2.1.1 Integrate STI screening, diagnosis, care, and treatment as a routine part of a wide variety of programs and settings including those that screen, diagnose, and treat people for other whole health and public health issues such as primary care, urgent care, emergency departments, pediatrics, family planning, HIV, viral hepatitis, substance use disorders, correctional facilities, and school-based health centers.
  - 2.1.2 Support expanded staffing and role of disease intervention specialists in programs and settings that serve communities and populations disproportionately impacted by STIs.
  - 2.1.3 Reduce systems and financial barriers to receiving STI testing, care, and treatment, including those related to laboratory services and coverage for point-of-care testing, self-collected testing, extragenital testing, expedited partner therapy, and partner services.
  - 2.1.4 Increase STI screening and testing for adolescent and young women, pregnant women, and MSM, including extragenital STI testing among MSM, in accordance with CDC guidelines.
  - 2.1.5 Increase linkage to care between public health, correctional facilities, syringe services programs, substance use disorder treatment facilities, emergency departments, pharmacies, retail clinics, school-based health centers, and other health care providers and community-based organizations to provide coordinated, comprehensive care and treatment for people with STIs.

- 2.1.6 Increase STI quality measurement and incentives to promote high-quality STI screening, care, and treatment and to reduce missed opportunities in clinical settings.
- 2.1.7 Increase patient sexual health portals and STI clinical decision support systems in electronic health records to support high-quality sexual health assessments, STI screening, and integrated care models.

# Objective 2.2: Work to effectively identify, diagnose, and provide holistic care and treatment for people with STIs by increasing the capacity of public health, health care delivery systems, and the health workforce *Strategies:*

- 2.2.1 Expand workforce knowledge and experience in STI prevention, screening, diagnosis, and treatment through education and training, maintenance of certification, and continuing education programs for health professionals and paraprofessionals.
- 2.2.2 Expand the capacity of the health workforce to provide STI screening, testing, and care through innovative, evidence-based models such as Project ECHO, mentoring programs, telehealth, express visits, and other models described in Strategy 2.1.5.
- 2.2.3 Optimize, expand use of, and improve the effectiveness of expedited partner therapy, STI partner services, and linkage to care in programs and settings that provide STI testing and treatment.
- 2.2.4 Expand integrated, coordinated, patient-centered, trauma-informed care models that address the syndemic of STIs, HIV, viral hepatitis, and substance use disorders, including related comorbidities and social determinants of health.

### GOAL 3: ACCELERATE PROGRESS IN STI RESEARCH, TECHNOLOGY, AND INNOVATION

## **Objective 3.1:** Support research and investments to develop STI vaccines and bring them to market *Strategies:*

- 3.1.1 Increase research to improve understanding of STI pathogenesis, immunity, and correlates of protection.
- 3.1.2 Develop and leverage academic, public, and private partnerships for vaccine development, approval, and manufacture.
- 3.1.3 Ensure that critical pathways exist to facilitate STI vaccine approval and to bring newly licensed STI vaccines to market.
- 3.1.4 Ensure vaccine development and distribution is rooted in racial, ethnic, and sexual and gender identity equity and is community-informed to best serve those disproportionally affected by STIs.

## Objective 3.2: Support the development and uptake of STI multipurpose prevention technologies, antimicrobial prophylaxis regimens, and other preventive products and strategies

- Strategies:
  - 3.2.1 Develop and leverage academic, public, and private partnerships for the development, approval, and manufacture of multipurpose prevention technologies and other preventive technologies and products.
  - 3.2.2 Advance research on pre-exposure and post-exposure prophylaxis.

# Objective 3.3: Support the development and uptake of innovative STI diagnostic technologies, therapeutic agents, and other interventions for the identification and treatment of STIs, including new and emerging disease threats

#### Strategies:

- 3.3.1 Develop new STI treatment options to address antimicrobial resistance, supply chain limitations, and other barriers.
- 3.3.2 Support the development of molecular diagnostic tests to rapidly identify and characterize antimicrobial resistance.
- 3.3.3 Advance the development and uptake of point-of-care and self-collected STI diagnostics.

3.3.4 Develop and leverage academic, public, and private partnerships for the development, approval, and manufacture of new, as well as short-supplied and/or high-cost existing, STI diagnostic technologies, therapeutic agents, and other interventions.

# Objective 3.4: Identify, evaluate, and scale up best practices in STI prevention and treatment, including through translational, implementation, and communication science research *Strategies:*

- 3.4.1 Expand implementation of innovative, evidence-based models that increase the quality and convenience of STI testing, care, and treatment, such as telehealth, STI express clinics, pharmacy-based services, self-collected testing, mobile field-based units, and expedited partner therapy.
- 3.4.2 Develop, assess, and support the scale-up of innovative STI service delivery models in settings such as clinics, pharmacies, schools, mental health programs, substance use disorder programs, retail clinics, and field and community settings.
- 3.4.3 Develop policies that facilitate the implementation of innovative and effective STI prevention and treatment models and technologies, including the appropriate use of antibiotics.
- 3.4.4 Advance communications and implementation science to raise the visibility of STIs and sexual health, promote uptake of STI vaccines, and scale up novel STI prevention technologies and products.

## **GOAL 4: REDUCE STI-RELATED HEALTH DISPARITIES AND HEALTH INEQUITIES**

#### **Objective 4.1: Reduce stigma and discrimination associated with STIs**

#### Strategies:

- 4.1.1 Support and encourage training of health care and health systems personnel in cultural sensitivity, bias, discrimination, and disparities associated with STIs.
- 4.1.2 Work with communities to address misconceptions and reduce stigmas that negatively affect STI prevention, screening, testing, care, and treatment.
- 4.1.3 Expand and encourage self-collected testing, opt-out testing for STIs, and other approaches that promote sexual health and STI testing in health care delivery.
- 4.1.4 Promote privacy and confidentiality of individual personal health and public health records especially for adolescents and young adults.
- 4.1.5 Re-examine laws that criminalize behavior that potentially exposes another person to an STI.

## Objective 4.2: Expand culturally competent and linguistically appropriate STI prevention, care, and treatment services in communities disproportionately impacted by STIs

#### Strategies:

4.2.1 Train providers, including primary care, specialty, and nontraditional providers, to deliver high-quality, culturally and linguistically appropriate, nondiscriminatory, nonjudgmental, compassionate, and comprehensive sexual health services to populations disproportionately impacted by STIs.

#### **Objective 4.3: Address STI-related social determinants of health and co-occurring conditions** *Strategies:*

- 4.3.1 Expand policies and approaches that promote STI prevention and care in programs involving housing, education, transportation, the justice system, and other systems that impact social determinants of health.
- 4.3.2 Promote innovative programs and policies that provide patients with resources that address social determinants of health, including housing, education, transportation, food, and employment.
- 4.3.3 Improve data collection and surveillance of STIs in populations that are underrepresented in current data.



**GOAL 5: ACHIEVE INTEGRATED, COORDINATED EFFORTS THAT ADDRESS THE STI EPIDEMIC** 

## Objective 5.1: Integrate programs to address the syndemic of STIs, HIV, viral hepatitis, and substance use disorders

Strategies:

- 5.1.1 Establish and scale up integration of STI-related efforts, policies, and programs involving all components of the syndemic.
- 5.1.2 Integrate STI prevention, screening, testing, care, and treatment in funding opportunities that address other components of the syndemic.

## Objective 5.2: Improve quality, accessibility, timeliness, and use of data related to STIs and social determinants of health

#### Strategies:

- 5.2.1 Strengthen and expand existing surveillance infrastructure and methods including the capacity for more realtime data sharing between public health authorities and health care providers.
- 5.2.2. Incorporate novel scientific approaches for monitoring, identifying, and responding to trends in STIs and STI sequelae and social determinants of health related to STIs.
- 5.2.3 Strengthen and expand surveillance to identify rapidly cases of antimicrobial resistant STIs.
- 5.2.4 Strengthen and expand existing health care data and quality measures to assess provider adherence to recommended guidelines for STI screening, care, and treatment.
- 5.2.5 Leverage technology and invest in data solutions to modernize and improve the efficacy of partner services.
- 5.2.6 Ensure timely dissemination of data and analyses related to STI surveillance, public health, and health care data to inform decision-making.
- 5.2.7 Work to align indicators across programs that address STI, HIV, viral hepatitis, preventive care, maternal care, pediatrics, family planning, and substance use disorder treatment and services.

## Objective 5.3: Improve mechanisms to measure, monitor, evaluate, report, and disseminate progress toward achieving national STI goals

Strategies:

- 5.3.1 Encourage entities to integrate STIs and sexual health into existing and future implementation plans that address or relate to other communicable infections or substance use disorders.
- 5.3.2 Monitor, review, evaluate, and regularly communicate progress on STI program implementation according to an established schedule and address areas of deficiency.
- 5.3.3 Develop and implement recommendations promoting policies, programs, and activities that accomplish goals and address areas for improvement.

### **Priority Populations and Subgroups**

#### Adolescents and Young Adults

- People aged 15–24 account for approximately 50% of the 20 million new STIs in the United States each year, yet approximately 25% of the sexually active population.
- People aged 15–24 account for 62% of chlamydia cases.
- Among females, those aged 20–24 had the highest rate of reported gonorrhea cases; those aged 15–19 had the second highest rate.
- The rate of P&S syphilis among females aged 15-24 increased 100% from 2014 to 2018.
- Young people aged 15–24 account for 49% of HPV infections. Yet only 51% of adolescents and young adults are fully vaccinated against HPV.

#### Men Who Have Sex with Men

- MSM accounted for 54% of reported P&S syphilis cases.
- The rate of P&S syphilis among MSM in 2018 was 37 times the national rate of 10.8 P&S syphilis cases per 100,000.
- Gonococcal isolates from MSM are more likely to exhibit AMR than isolates from men who have sex with women only.
- Ten percent of new HIV infections among MSM are estimated to be attributable to gonorrhea and chlamydia, equating to 2,600 HIV infections each year.
- Less than 20% of MSM living with HIV receive extragenital gonorrhea or chlamydia screening, based on CDC screening recommendations for MSM.

#### **Pregnant Women**

- The rate of P&S syphilis among females aged 15–44 increased 165% from 2014 to 2018 (2.6–6.9 cases per 100,000).
- The rate of congenital syphilis cases has increased 185% since 2014, with 1,306 cases and a rate of 33.1 cases per 100,000 live births in 2018.
- In 2018, congenital syphilis cases included 78 syphilitic stillbirths and 16 infant deaths, a mortality rate of 7.2%.

#### Subgroups

- · Racial and Ethnic Minorities: Blacks, Hispanics, and American Indians/Alaska Natives
- Geographic Regions: South and West

### Indicators

#### **CORE INDICATORS**

Core Indicator	Baseline <sup>a</sup>	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Data Source <sup>b</sup>
1. Increase the percentage of adolescents aged 13–17 years who receive the routinely recommended doses of HPV vaccine												
Percent	51	57	63	69	75	<u>80</u>	81	82	83	84	<u>85</u>	NIS-Teen
2. Reduce rates of P&S syphilis <sup>c</sup>												
Rate per 100,000	13.6	13.5	13.4	13.3	13.3	<u>13.2</u>	13.0	12.8	12.6	12.4	<u>12.2</u>	NNDSS
3. Reduce rates of congenital syphilis°												
Rate per 100,000	67.7	66.0	64.3	62.3	60.3	<u>57.6</u>	54.2	50.1	45.4	40.0	<u>33.9</u>	NNDSS
4. Reduce gonorrhea rates <sup>c</sup>												
Rate per 100,000	221.9	220.8	219.7	218.4	217.1	<u>215.3</u>	213.1	210.4	207.3	203.7	<u>199.7</u>	NNDSS
5. Increase chlamydia screening in sexually active females aged 16-24 years												
Percent	58.8	59.7	60.6	62.2	64.1	<u>66.4</u>	68.0	71.1	73.3	75.0	<u>76.5</u>	HEDIS
6. Reduce PID in females aged 15–24 years <sup>c</sup>												
Rate per 100,000	171.6	169.9	168.2	166.1	164.0	<u>161.3</u>	157.9	153.8	149.0	143.5	<u>137.3</u>	HCUP NEDS
7. Increase condom use at last sex among sexually active high school students <sup>c</sup>												
Percent	51.3	51.6	51.8	52.3	52.9	<u>53.5</u>	54.2	54.9	55.5	56.0	<u>56.5</u>	YRBSS

<sup>a</sup> Baseline is 2020, except for Indicator 1, which uses a 2018 baseline. 2020 data points are projected based on trajectory in recent years.
<sup>b</sup> HCUP NEDS = <u>Healthcare Cost and Utilization Project Nationwide Emergency Department Sample</u>; HEDIS = <u>Healthcare Effectiveness Data and Information Set</u>; NIS-Teen = <u>National Immunization Survey-Teen</u>; NNDSS = <u>National Notifiable Diseases Surveillance System</u>; YRBSS = <u>Youth Risk Behavior Surveillance System</u>. See Data Sources section below for a description of each data source.
<sup>c</sup> This core indicator has a corresponding disparities indicator(s).

#### **DISPARITIES INDICATORS**

Disparities Indicator	Baseline <sup>a</sup>	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
8. Reduce P&S syphilis rate among MSM												
Cases/100,000	461.2	457.7	454.3	450.1	446.0	<u>440.4</u>	433.5	425.2	415.5	404.5	<u>392.0</u>	
9. Reduce congenital syphilis rate among African Americans/Blacks												
Rate/100,000	167.5	162.9	158.3	152.8	147.3	<u>139.9</u>	130.7	199.6	106.7	92.0	<u>75.4</u>	
10. Reduce congenital syphilis rate among AI/ANs												
Rate/100,000	207.6	201.9	196.2	189.3	182.5	<u>173.3</u>	161.9	148.2	132.2	113.9	<u>93.4</u>	
11. Reduce congenital syphilis rate in the West												
Rate/100,000	89.7	87.2	84.7	81.8	78.8	<u>74.9</u>	69.9	64.0	57.1	49.2	<u>40.3</u>	
12. Reduce gono	12. Reduce gonorrhea rate among African Americans/Blacks											
Rate/100,000	632.9	628.2	623.5	617.8	612.1	<u>604.5</u>	595.0	583.6	570.3	555.1	<u>538.0</u>	
13. Reduce gonorrhea rate in the South												
Rate/100,000	211.3	209.6	207.9	205.8	203.7	<u>201.0</u>	197.5	193.4	188.5	183.0	<u>179.6</u>	
14. Increase condom use at last sexual intercourse among sexually active MSM high school students												
Percentage	53.8	53.8	54.2	54.9	55.8	<u>56.9</u>	58.0	59.1	60.0	60.8	<u>61.9</u>	

<sup>a</sup> Baseline is 2020 for all of the disparities indicators. 2020 data points are projected based on trajectory in recent years.

#### **DEVELOPMENTAL INDICATORS**

- 1. Increase the percentage of patients with gonorrhea who are treated with a recommended regimen
- 2. Increase the percentage of patients with syphilis who are treated with a recommended regimen
- 3. Increase extragenital chlamydia and gonorrhea screening among MSM.

The full STI National Strategic Plan and additional resources are posted at <u>hhs.gov/STI</u>