

RECOMMENDATIONS

MARCH 2021 – SEXUALLY TRANSMITTED INFECTIONS: ADOPTING A SEXUAL HEALTH PARADIGM

ADOPT A SEXUAL HEALTH PARADIGM

Recommendation 12-1: The Department of Health and Human Services (HHS) should develop a vision and blueprint for sexual health and well-being that can guide the incorporation of a sexual health paradigm across all HHS programs, including the major public insurance programs (Medicaid, Medicare, and the Children’s Health Insurance Program), as well as the public health programs operated throughout the department, including the Centers for Disease Control and Prevention, the Health Resources and Services Administration, the Indian Health Service, and the Substance Abuse and Mental Health Services Administration. The plan should align sexual health and well-being with other dimensions of health—physical, mental, and emotional.

- A holistic approach to sexual health programs should include new approaches and strategies for specifically engaging men (including men who have sex with men) with readily available male-centered sexual health specialty services and the implementation of sexual and reproductive health services in primary care.
- The plan should include strategies for improving sexual health services that address the needs of priority populations, such as women, adolescents, and young adults, and expand attention and resources to underserved populations, including Black, Latino/a, and Indigenous populations; people who use drugs; people who engage in sex work; transgender; and gender-expansive populations.

BROADEN OWNERSHIP AND ACCOUNTABILITY FOR RESPONDING TO STIs

Recommendation 12-2: Federal agencies and relevant professional organizations should equip parents with evidence-based guidance to engage in developmentally appropriate, comprehensive sexual health education and dialogue and to identify actionable steps for their children. Specifically, the committee recommends the following:

- The Department of Health and Human Services (HHS), through the Centers for Disease Control and Prevention (CDC) Division of STD Prevention, the CDC Division of Adolescent Health and School Health, the Indian Health Service, and other key public health service agencies, should develop a national, parent-focused communication campaign to promote and guide parental communication with adolescents regarding sexual health and sexually transmitted infection (STI) prevention.
- HHS, including CDC, the Health Resources and Services Administration, and the National Institutes of Health, should develop a compendium of existing evidence-based resources and programs for parental education and skills training on adolescent and young adult sexual health and STI prevention. In addition, there should be continued research investments to improve existing and to develop new, evidence-based resources and programs.
- Guidelines should be developed for pediatric and adolescent health care to support skills training and educate parents in promoting adolescent and young adult sexual health, including the prevention of STIs. This would include the following:
 - Delivering evidence-based programs for parental education and skills training that are co-located as an extension of regular care
 - Providing training resources for providers that facilitate direct communication with parents regarding sexual health and STI prevention in their children

Recommendation 12-3: The Centers for Disease Control and Prevention Division of STD Prevention should take steps to expand community knowledge of sexual health and promote actions that lead to a greater understanding of healthy sexuality by encouraging and supporting public dialogue and the adoption of evidence-based interventions in various community settings (families, schools, faith communities, community-based organizations, and workplaces).

BOLSTER EXISTING SYSTEMS AND PROGRAMS FOR RESPONDING TO STIs

Recommendation 7-1: To improve the efficacy and reach of tools for sexually transmitted infection (STI) management and prevention, the National Institutes of Health should prioritize development of point-of-care (POC) diagnostic tests; development of diagnostic tests for active syphilis; promotion of public–private partnerships (PPPs) to develop new antimicrobials; and expedited development of vaccines. Specifically:

- **POC diagnostics:** Prioritize development of POC diagnostic tests to reduce the interval between testing and treatment. Use of these POC tests should be promoted to reduce opportunities for transmission. Optimally, POC tests should be inexpensive, rapid, and receive a Clinical Laboratory Improvement Amendments waiver to permit increased testing at sites providing health care or at home.
- **New diagnostics for syphilis:** Promote development of new, innovative diagnostic tests for active syphilis that distinguish untreated, active syphilis from previously treated infection, which is required to effectively control syphilis.
- **Antimicrobials and vaccines for STI treatment and prevention:** Subsidize and encourage PPPs with the goals of developing new, readily accessible antimicrobials for STI treatment and expediting development of vaccines for prevention of high-priority STIs such as chlamydia, gonorrhea, syphilis, and herpes.

Recommendation 8-1: The Department of Health and Human Services (HHS) should take steps to expand the reach of psychosocial and behavioral interventions to prevent and control sexually transmitted infections at the individual, interpersonal, and community level. This can be accomplished by developing sustainable funding mechanisms to deliver those interventions; establishing standard guidelines for school-based comprehensive sexual health education; and developing, evaluating, and disseminating community-based approaches:

1. HHS should develop new mechanisms that provide sustainable funding for dissemination, adoption, and scale up of evidence-based psychosocial and behavioral interventions by a wide range of stakeholders, including community-based organizations, parent–teacher associations, workplaces, faith-based organizations, and pediatric and primary care practices.
2. The Centers for Disease Control and Prevention (CDC) Division of Adolescent and School Health should work in partnership with parents and guardians, parent–teacher associations, states, districts, and local school boards to establish standard evidence-based guidelines for school-based comprehensive sexual health education that is grounded in psychosocial and behavioral theories and research. To ensure that each student receives medically accurate, age-appropriate, and culturally inclusive comprehensive sexual health education in elementary, middle, and high school, dedicated staff, including school-based nurses and health educators should be trained, provided adequate time, and be given necessary resources.
3. CDC, in collaboration with state and local departments of health, should develop and evaluate the efficacy of promising community-based approaches that are grounded in psychosocial and behavioral research, extend reach into affected communities, foster ongoing collaboration with community stakeholders for capacity building and sustainability, and provide allocation of sustained dedicated resources for formative work, intervention implementation, evaluation, replication, and scale up of evidence-based interventions.

Recommendation 10-1: The Department of Health and Human Services and state governments should identify and support innovative programs to assure that sexually transmitted infection (STI) prevention and treatment services are available through multiple venues and assure that federal and state governments maximize access opportunities for individuals who face health care access barriers. Priority populations for these efforts should include persons ineligible for coverage, persons who face affordability barriers (including high out-of-pocket costs), and persons who will not access STI services without confidentiality guarantees (such as adolescents and young adults with insurance coverage through parents or guardians).

Recommendation 11-1: Sexual health promotion should be operationalized and prioritized in practice guidelines and training curricula for U.S. health professionals. Sexually transmitted infection (STI) prevention and management should be incentivized and facilitated as a focus area of practice for both the clinical workforce and important segments of nonclinical public health and social services professionals. The committee recommends five programmatic priorities for implementing this recommendation:

1. Clinical practice guidelines and benchmarks developed by health professional organizations should more heavily emphasize the importance of consistent delivery of recommended sexual health services (e.g., sexual histories, vaccinations, and routine STI screening). Relevant professional organizations include but are not limited to the American Medical Association, the National Medical Association, the American Nurses Association, the National League for Nursing, the Association of Nurse Practitioners, the American Academy of Physician Assistants, the American Academy of Pediatrics, the Society for Adolescent Health and Medicine, the American College of Physicians, the American Academy of Family Physicians, the American College of Obstetrics and Gynecology, the Infectious Diseases Society of America, and the HIV Medicine Association.
2. Licensing bodies for primary care generalists (i.e., primary care physicians, nurse practitioners, physician assistants, and nurses) and behavioral health specialists should formulate a minimum sexual health skill set (e.g., taking a sexual history and understanding the basics of STI prevention, being aware of guidelines for STI screening and treatment, and understanding HIV prevention and care) to be reflected in formal training programs and yearly continuing medical education, continuing medical units, and continuing education requirements.
3. The Centers for Disease Control and Prevention (CDC) and state and local health departments, in collaboration with STI/HIV expert providers and the regional STI prevention training centers, should serve as a resource of clinical expertise for primary care providers and nonclinical health and social services professionals and paraprofessionals. This should be accomplished through consultation, technical assistance, and continuing education (see also Recommendation 12-5).
4. CDC should identify federal and state policy actions that would most effectively expand the available workforce to address STI prevention, screening, and treatment. Policies that identify new reimbursement models and promote the ability of advance practice clinicians, pharmacists, community health workers, and other health care workers to provide STI services should be identified and communicated to state policy makers and to encourage state legislatures to reduce or eliminate the scope of practice barriers.
5. The Centers for Medicare & Medicaid Services, the Health Resources and Services Administration, CDC, and other agencies should explore public–private partnerships to address logistical and regulatory barriers to workforce expansion. The use of emerging technologies (e.g., point-of-care STI testing and treatment referrals) and delivery models (e.g., telehealth services, pharmacy-based health care) for sexual health services are two innovative examples that can extend the reach of the STI workforce.

Recommendation 12-4: The Centers for Disease Control and Prevention (CDC) should modernize its core sexually transmitted infection (STI) activities to strengthen the timely monitoring of STIs with less reliance on estimated rates based on case reports, to inform proper treatment of persons with STIs, and to increase consistency and accountability across jurisdictions. The committee recommends a three-pronged approach:

1. Modernize surveillance activities to enable more rapid release of data:

- Automate case reporting of reportable STIs.
- Release a preliminary STD Surveillance Report within 6 months of the reporting period, with a revised report later in the year.
- Explore the use of new data sources to capture STI incidence (critically, both cases and numbers tested), such as electronic medical records, commercial databases, such as health information exchanges, clinical and pharmacy data, social media/online searches, and artificial intelligence, and invest in better data integration efforts within the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP).
- Develop a publicly available STI dashboard to raise public awareness and accountability.

2. Improve timeliness of the STI treatment guidelines:

- The CDC STI treatment guidelines should be updated and disseminated annually, and more frequently if necessary, to better address real-time changes to the STI epidemic and emerging treatments and technologies. The entirety of the guidelines should undergo comprehensive reviews no less frequently than every 5 years.

3. Increase accountability and establish new funding requirements:

- CDC should engage in a data standardization partnership across NCHHSTP and with grantees to develop and publish a core set of STI indicators with standardized definitions of terms. To promote the use of these standardized data, CDC should set a condition of awards for its funding programs to require that every grantee report surveillance and other data to CDC consistent with these new data standards.
- CDC should also make a condition of awards the requirement that states engage in a broad and meaningful stakeholder engagement process. This should include representatives of local health departments, heavily affected communities, health insurance programs and exchanges, federally qualified and other health centers, Ryan White HIV/AIDS Program recipients, Substance Abuse and Mental Health Services Administration recipients, and others to develop a multi-year state or major municipalities STI prevention and control plan that:
 - leverages disparate assets within the state or major municipalities for establishing STI prevention and care priorities, aligning STI and HIV priorities;
 - establishes benchmarks; and
 - creates a process for monitoring and reporting on progress toward achieving established benchmarks.

Recommendation 12-5: The Centers for Disease Control and Prevention (CDC) should encourage local health departments to develop and implement comprehensive plans for sexually transmitted infection (STI) prevention and control. This should be done by funding key partners, such as the National Association of County and City Health Officials (NACCHO) and the National Coalition of STD Directors (NCSD), to develop resources and provide technical assistance to state and local health departments on how to conduct a meaningful stakeholder consultation process, how to develop a plan that offers strategic support for improving STI outcomes leveraging all available community assets, and how to monitor implementation and keep the public informed of progress toward achieving the plan’s objectives. The plans should do the following:

- Include community-wide needs assessments, oversampling high-priority populations, that determine the adequacy of available sexual health services in their jurisdictions and explore the creation of new, improved, and easier access points for sexual health promotion in a stigma-free environment, including STI screening and treatment services that take advantage of current rapid and self-testing technologies.
- Identify mechanisms to meet the needs of underserved and highly impacted populations.
- Establish formalized, funded relationships with trusted community-based organizations to deliver critical STI prevention and care services.

CDC, in collaboration with the National Network of STD Prevention Training Centers, NACCHO, and NCSD, should develop STI Resource Centers (SRCs) for clinical consultation, workforce development, and technical assistance to support the planning process and provide consultation to individual clinical STI providers. At a minimum, these SRCs should be operational at the level of state and large municipal jurisdictions.

EMBRACE INNOVATION AND POLICY CHANGE TO IMPROVE SEXUAL HEALTH

Recommendation 6-1: The Centers for Disease Control and Prevention (CDC) should expand its capacity to use technology for sexually transmitted infection (STI) prevention and control. To accomplish this, CDC should recruit seasoned individuals from the private and public sectors with experience in digital behavior change and team science to work collaboratively with agency public health and marketing staff. It should develop timely and open data systems and deploy artificial intelligence–based mass marketing strategies to advance STI prevention.

Achieving this recommendation would entail that CDC undertake the following activities:

1. CDC should establish a process for regular dialogue on ethical, technological, and health equity issues associated with novel technologies with leading industry and nonprofit experts in digital technology and social communication along with STI providers and representatives of affected communities.

2. CDC should assess its STI data management capacity and that of its grantees and make recommendations for strengthening interoperability and security of such systems, safeguarding the privacy and confidentiality of individually identifiable information, and increasing the timeliness, openness, and accuracy of aggregated data. The assessment should also include recommendations for future investments in new epidemiologic data sources and approaches, such as models incorporating STI-related social media and Internet search data, data analytics, and data visualization to effectively convey emerging STI trends to public health stakeholders and the general public. These actions will require state and local public health departments to assess and update their efforts accordingly as well.
3. CDC should partner with state and local health departments to develop and implement highly targeted AI-based digital mass communication outreach strategies to identify and intervene to address inequities among populations heavily impacted by STIs. Such strategies could disseminate interventions and campaigns to audiences at heightened risk of STI acquisition, leveraging technology to improve the effectiveness of such efforts.

Recommendation 9-1: The Secretary of Health and Human Services (HHS) should acknowledge structural racism and other forms of structural inequities as root causes of sexually transmitted infection (STI) outcomes and inequities and as threats to sexual health.

HHS should lead a whole-of-government response that engages all relevant federal departments and agencies to develop a coordinated approach to reduce negative STI outcomes and address inequities in the U.S. population by promoting sexual health and eliminating structural inequities that are barriers to STI prevention, testing, and treatment among marginalized groups.

In mounting this response, the Secretary should:

- consult broadly with affected communities and critical stakeholders to conduct a national landscape analysis that assesses social and structural barriers that prevent access to STI services. The focus should be on identifying communities with high morbidity and limited access to affordable and desirable STI prevention and care services and resources in order to develop a national holistic plan for ongoing monitoring of the national STI infrastructure and STI burden, including interrelated social and structural determinants of health inequities;
- establish a priority research agenda, including a data-collection strategy that organizes data on STI outcomes and their structural and social determinants among marginalized populations;
- strengthen partnerships with, funding for, and technical assistance to state and local health departments and community-based organizations;
- foster greater collaboration across health and human services agencies; and
- report regularly to the public on progress for addressing STI outcomes and inequities.

To read the full report, please visit
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