

NHICEP January Meeting 2022 Edition: Issues in Congenital Syphilis



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CDC Call to Action

Let's Work Together to Stem the Tide
of Rising Syphilis in the United States



January 21, 2022

THE
STATE OF STDs
IN THE
UNITED STATES,
2019

STDs increased for the
6th year, reaching a
new all-time high



1.8 million
CASES OF CHLAMYDIA
19% increase since 2015



616,392
CASES OF GONORRHEA
56% increase since 2015



129,813
CASES OF SYPHILIS
74% increase since 2015



1,870
CASES OF SYPHILIS
AMONG NEWBORNS
279% increase since 2015

LEARN MORE AT: www.cdc.gov/std/

Retrieved from: <https://www.cdc.gov/std/statistics/2019/graphics.htm>

Syphilis in Pregnancy

▶ Maternal risk factors:

- STI in pregnancy
- Multiple or new partners
- Substance use
- Incarceration
- Late/No prenatal care
- Unhoused

ALSO
consider not only
personal risk, but
community risk

▶ Screening 3x in pregnancy now recommended

- First prenatal visit
- Third trimester (around 28 weeks)
- Delivery (and postpartum, if ongoing risk)

STI Treatment Guidelines, 2021:p39-56

Syphilis in Pregnancy

- ▶ Monitoring based on stage of pregnancy at diagnosis
 - RPR 8 weeks after treatment unless Primary/Secondary infection
 - If treated at 24 weeks GA, repeat RPR at delivery
 - If syphilis diagnosed in second half of pregnancy, fetal sonogram recommended
- ▶ Additional dose recommended in early infection
- ▶ Missed doses >9 days between doses needs retreatment
- ▶ Jarisch-Herxheimer (JH) reaction
 - GA >20wks risk for premature labor and/or fetal distress
- ▶ Concern for reinfection or treatment failure
 - A four-fold increase in titer after treatment that is sustained for >2 weeks after treatment

The Resurgence of Congenital Syphilis

SYPHILIS

is increasing among
NEWBORN BABIES
in the United States



**EVERY CASE IS ONE TOO MANY
WHEN WE HAVE THE TOOLS TO
PREVENT IT**

In 2019:



1,870

CASES OF NEWBORN SYPHILIS
279% INCREASE SINCE 2015



128

DEATHS OF BABIES FROM SYPHILIS
256% INCREASE SINCE 2015



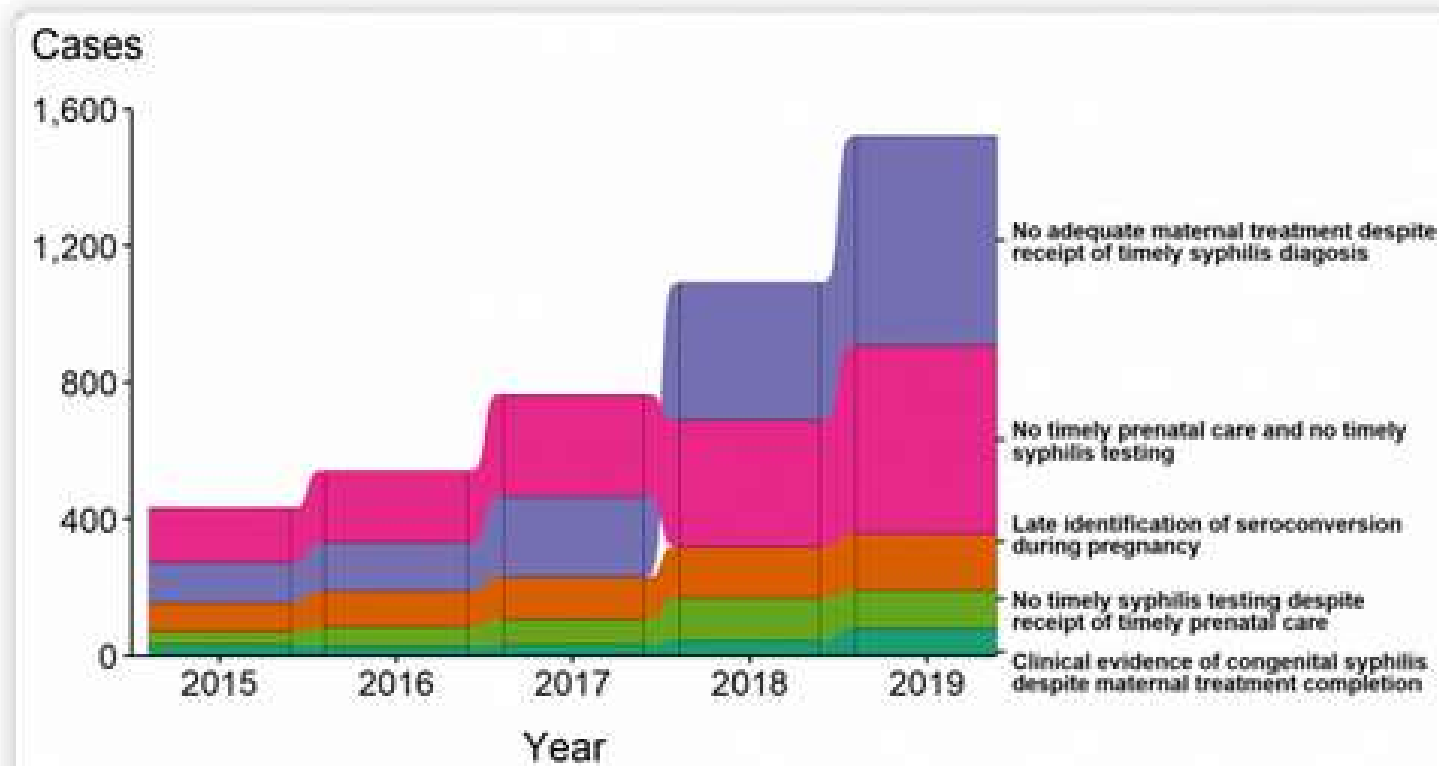
43

STATES WITH AT LEAST ONE CASE
UP FROM 31 IN 2015

<https://www.cdc.gov/std/statistics/2019/>

Retrieved from: <https://www.cdc.gov/std/statistics/2019/graphics.htm>

Congenital Syphilis: Missed Opportunities



Congenital Syphilis — Missed Prevention Opportunities
Among Mothers Delivering Infants with Congenital
Syphilis, United States, 2015–2019

Congenital Syphilis

- ▶ Testing recommended for any fetal death >20 weeks GA
 - Pathologic examination of the placenta or umbilical cord using specific staining (e.g., silver) or a T. pallidum PCR test
 - Skeletal survey demonstrating typical osseous lesions (not detected on fetal ultrasound)
- ▶ Any neonate at risk for syphilis should have full evaluation and testing for HIV
- ▶ ALL neonates born to mothers with reactive treponemal and RPR test results should be evaluated with a serum RPR

Barriers to Prevention

- ▶ Disparities
- ▶ Access to Care
- ▶ Syndemics
 - Substance use
 - Mental Health
 - Housing
 - Competing Public Health Priorities
- ▶ Clinical Education
- ▶ Data modernization



Prevention Tools

- ▶ EMR systems
- ▶ Awareness of treatment resources
- ▶ Provider education
- ▶ Patient education
- ▶ Third trimester testing
- ▶ Utilize Public Health!



Preventing Congenital Syphilis in NH

- ▶ NH is one of eight states that does not require screening for syphilis during pregnancy
- ▶ Preventable with screening labs during pregnancy
- ▶ Report ALL cases of syphilis infection
- ▶ NH congenital syphilis cases
 - 2018 (1 case) **2022 (1 case)** ←
 - 2019 (2 cases)
- ▶ Report cases of syphilis in pregnant women within 24 hours* of confirmed diagnosis (CDC recommendation, not NH requirement)
 - *Also see: <https://www.cdc.gov/std/syphilis/CTAproviders.htm>

Stafford IA, Sánchez PJ, Stoll BJ. Ending Congenital Syphilis. JAMA. 2019 Nov 11. doi: 10.1001/jama.2019.17031. Epub ahead of print. PMID: 31710335.

Congenital Syphilis Case, January 2022

- ▶ Arrived from foreign country in third trimester, no prenatal records
- ▶ Prenatal testing ordered ~33 wks GA, patient did not have labs drawn until 37 wks
- ▶ Communication with provider office re: diagnosis, plan of care, treatment plan
- ▶ Issues with OB records when patient presented to hospital ahead of scheduled c-section date
- ▶ Communication with hospital providers re: evaluation, treatment, and surveillance reporting

12/20/2021: Lab Alert: Possible False RPR Reactivity with BioPlex 2200 Syphilis Total & RPR Test Kit



- ▶ **Letter to Clinical Laboratory Staff and Health Care Providers**
- ▶ False reactivity, or "false-positive", Rapid Plasma Reagin (RPR; non-treponemal) test results can occur in some people who received a COVID-19 vaccine
- ▶ Observed in some individuals for at least five months following a COVID-19 vaccination
- ▶ Treponemal testing (TPPA, other immunoassays) do not appear to be impacted by this issue
- ▶ May need additional syphilis testing to confirm results

<https://www.fda.gov/medical-devices/letters-health-care-providers/possible-false-rpr-reactivity-bioplex-2200-syphilis-total-rpr-test-kit-following-covid-19-vaccine>

...and now a word about Neurosyphilis

- ▶ Central Nervous System involvement
- ▶ Can cause permanent damage
- ▶ “All forms of neurosyphilis”
 - Neurosyphilis (neurologic involvement)
 - Tertiary (with CNS involvement)
 - Ocular syphilis (with or without CNS involvement)
 - Ootosyphilis (with or without CNS involvement)
- ▶ May include Lumbar Puncture (LP) evaluation
- ▶ All persons with neurosyphilis should be tested for HIV



Surveillance Data

NH Cases	NH Syphilis cases (Total)	NH Ocular Symptoms	NH Ocular Symptoms Proportion	NH Clinical Manifestations	NH Clinical Manifestations Total Proportion
2021 YTD	114	10	8.8%	10	10.5%

Nationally:

- ▶ More limitations than conclusions from existing data
- ▶ Lack of equivalent national data
- ▶ Different states have various surveillance systems
- ▶ Studies evaluate selected states or cities (not nationwide)
- ▶ **GOAL: RAISE AWARENESS** among providers and public

STI Case Reporting & Further Resources



STI Case Reporting (CT, GC, Syphilis)

NEW STI Reporting Form!

<https://www.dhhs.nh.gov/dphs/cdcs/documents/std-reporting.pdf>

New Hampshire Confidential STI Reporting Form

PATIENT INFORMATION

Last Name: _____ First Name: _____ MI: _____ DOB: _____

Address: _____

City/State/Zip: _____ Employer: _____

Home Phone: _____ Call Phone: _____ Work Phone: _____

Birth Sex: Male Female Transgender Pregnant Not Pregnant

Race: White Black Asian Pacific Islander Amer Indian/Alaskan Native Other Unknown

Ethnicity: Hispanic Non-Hispanic Unknown Primary language: _____ DRUG ALLERGIES: _____

*** Please indicate all Sexually Transmitted Disease testing performed by your facility ***

CHLAMYDIA	GONORRHEA	SYPHILIS
<input type="checkbox"/> Asymptomatic	<input type="checkbox"/> Asymptomatic	<input type="checkbox"/> Primary (venous)
<input type="checkbox"/> Symptomatic onset:	<input type="checkbox"/> Symptomatic onset:	<input type="checkbox"/> Secondary (rash)
<input type="checkbox"/> Discharge	<input type="checkbox"/> Discharge	<input type="checkbox"/> Latent/Non-latent
<input type="checkbox"/> Dysuria	<input type="checkbox"/> Dysuria	<input type="checkbox"/> Non-secondary
<input type="checkbox"/> Proctitis	<input type="checkbox"/> Proctitis	<input type="checkbox"/> Asymptomatic <1 year
<input type="checkbox"/> Reiter's	<input type="checkbox"/> Reiter's	<input type="checkbox"/> Unknown Duration or Lat (1+ year)
<input type="checkbox"/> Other specify: _____	<input type="checkbox"/> Other specify: _____	<input type="checkbox"/> Unknown stage
<input type="checkbox"/> Toxic Information Disease	<input type="checkbox"/> Toxic Information Disease	<input type="checkbox"/> Toxic Information Disease

Date of Test(s): _____ Date of Test(s): _____ Date of Test(s): _____

Reporting Lab: _____ Reporting Lab: _____ Reporting Lab: _____

Result: Positive Negative Positive Negative Positive Negative

Specimen Source (all sites tested): _____ Specimen Source (all sites tested): _____ Specimen Source (all sites tested): _____

Urine _____ Rectum _____ TPRA: Pos Neg

Conjunctiva/Urethra _____ Pharynx _____ Other: Pos Neg

VDRL: Pos Neg Pos Neg

Ther: _____ Spec: _____

*** For full CDC Treatment Guidelines, see <https://www.cdc.gov/std> ***

Treatment	Treatment	Treatment
Date: _____	Date: _____	Date: _____
<input type="checkbox"/> Doxycycline 100 mg BID x 7 days	<input type="checkbox"/> Ceftriaxone 500 mg IM x 1 dose	<input type="checkbox"/> 2.4 mu Benzathine penicillin G (BIC) X 1 dose
<input type="checkbox"/> Azithromycin 1 gm orally x 1 dose	<input type="checkbox"/> Other: _____	<input type="checkbox"/> 2.4 mu Benzathine penicillin G (BIC) X 3 doses
<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____

EPT (Expedited Partner Therapy): Was medication prescribed to the patient for their partner(s)? No Yes

For more information: <https://www.dhhs.nh.gov/dphs/cdcs/dngp.htm>

Date of last negative HIV test: _____ Pos Neg Unknown Not tested

is patient on HIV pre-exposure prophylaxis? Yes No Unknown

Risk Information (Check all that apply, if known):

Partner sex: Male Female Both Transgender Unknown

injection drug use: Current (within 6 months) Ever Unknown

Healthcare Provider: _____ Provider Facility: _____ City/State: _____

Person Reporting: _____ Date: _____

Mail completed forms to: NH DHHS, OPDH, Bureau of Infectious Disease Control, 29 Hazen Dr., Concord, NH 03301 - OR -
 Fax completed forms to: 603-271-4545 Additional Forms available at <https://www.dhhs.nh.gov/dphs/cdcs/dngp.htm> Version 20207

New Hampshire Confidential STI Reporting Form

PATIENT INFORMATION

Last Name: _____ First Name: _____ MI: _____ DOB: _____

Address: _____

City/State/Zip: _____ Employer: _____

Home Phone: _____ Call Phone: _____ Work Phone: _____

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Race: White Black Asian Pacific Islander Amer Indian/Alaskan Native Other Unknown

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<input type="checkbox"/> Other specify: _____	<input type="checkbox"/> Other specify: _____	<input type="checkbox"/> Unknown stage
<input type="checkbox"/> Toxic Information Disease	<input type="checkbox"/> Toxic Information Disease	<input type="checkbox"/> Toxic Information Disease

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Reporting Lab: _____ Reporting Lab: _____ Reporting Lab: _____

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Urine _____ Rectum _____ TPRA: Pos Neg

Conjunctiva/Urethra _____ Pharynx _____ Other: Pos Neg

VDRL: Pos Neg Pos Neg

Ther: _____ Spec: _____

*** For full CDC Treatment Guidelines, see <https://www.cdc.gov/std> ***

Treatment	Treatment	Treatment
Date: _____	Date: _____	Date: _____
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<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____	<input type="checkbox"/> Other: _____

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Person Reporting: _____ Date: _____

Mail completed forms to: NH DHHS, OPDH, Bureau of Infectious Disease Control, 29 Hazen Dr., Concord, NH 03301 - OR -
 Fax completed forms to: 603-271-4545 Additional Forms available at <https://www.dhhs.nh.gov/dphs/cdcs/dngp.htm> Version 20207



Call: (603) 271-4496

***Within 24 hours for Congenital, DGI, neurosyphilis cases (CDC recommendation, not NH requirement)**

***For all other reportable infections, please report within 72 hours**

Fax: (603) 271-0545

Mail: NH DHHS, DPHS, Bureau of Infectious Disease Control, 29 Hazen Drive, Concord, NH 03301

HIV Reporting Forms should always be mailed



Off Hours STI Reporting - PHN On Call

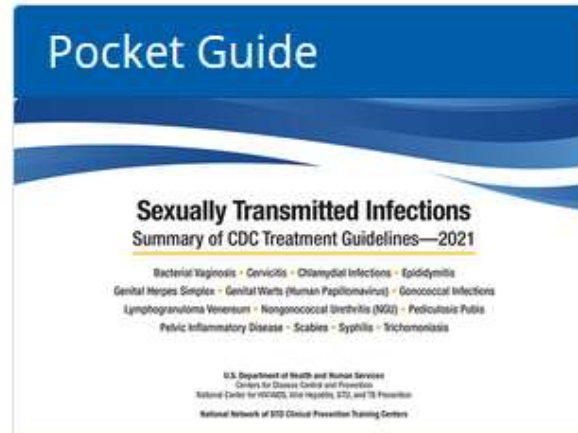
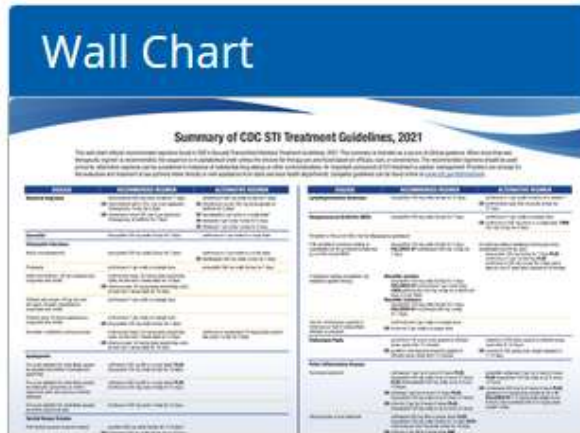
- ▶ PHN on call 24/7 (Main # 271-4496)

- ▶ For urgent STI reporting such as:
 - Congenital Syphilis (within 24 hours of admission)
 - Disseminated Gonorrhoea infection
 - Fetal death >20weeks GA

- ▶ PHN can assist with:
 - Clinical guidance & resources
 - Reporting questions



CDC Provider Resources



Mobile App

This page will be updated as information about the new app becomes available.

The new 2021 STI Treatment Guidelines are here but the 2021 STI Treatment (Tx) Guide mobile app is under construction. In the interim, we have developed a mobile-friendly solution to help you continue to quickly access treatment recommendations for STIs. The 2015 STD (Tx) Guide app is now outdated and will retire at the end of July 2021.

<https://www.cdc.gov/std/treatment-guidelines/provider-resources.htm>

Sexual Health Resources

- ▶ National Coalition for Sexual Health
<https://nationalcoalitionforsexualhealth.org/>
 - Provider/Patient Information on Taking a Sexual History

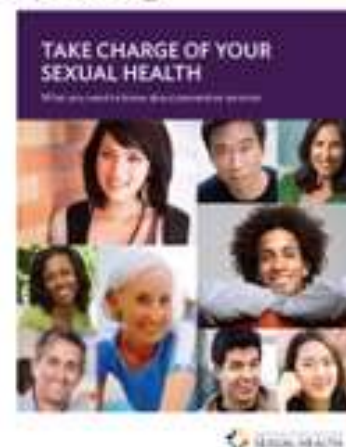


Five Action Steps to Good Sexual Health

fiveactionsteps.org

Compendium of Sexual & Reproductive Health Resources

For Healthcare Providers!



Training Resources



<https://nnptc.org>

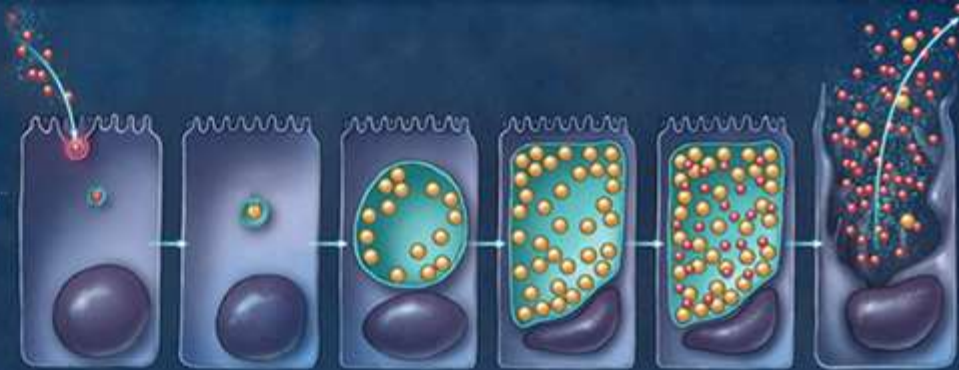
<https://www.std.uw.edu/>

National STD Curriculum

A free educational website from the University of Washington STD Prevention Training Center.

 Contributors

Funded by
Centers for Disease Control and Prevention (CDC)



National STD Curriculum Second Edition

- New 2nd Edition lessons, which started launching October 5, 2021, offer new CME, CME+MOC, CNE, and CE
- New 2nd Edition question bank topics start rolling out in October
- 2nd Edition Content includes new recommendations in the [CDC 2021 STI Treatment Guidelines](#)
- [Watch recordings of September 2021 STI Treatment Guidelines webinars](#) about important treatment considerations and major changes. The National Network of STD Clinical Prevention Trainings Centers (NNPTC) clinical faculty held four national webinars.

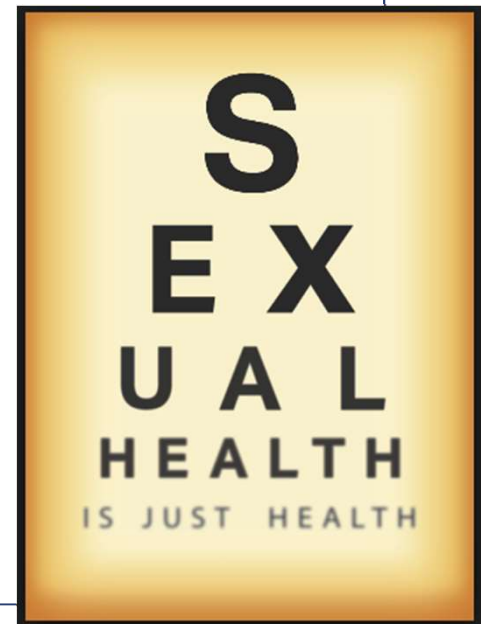
Additional Questions?

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Bureau of Infectious Disease Control
Infectious Disease Prevention, Investigation & Care Services
(603) 271-4496 Main Phone #
(603) 271-0545 Fax # Disease Reporting

*If you are interested in having a clinician-focused presentation at your facility, please contact Ann or Rachel at the numbers above.



Thank You for your participation!

References

- ▶ Centers for Disease Control and Prevention. Sexually Transmitted Infections Treatment Guidelines, 2021: <https://www.cdc.gov/std/treatment-guidelines/default.htm>
- ▶ Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2019*. Atlanta: U.S. Department of Health and Human Services; 2021.
- ▶ Centers for Disease Control and Prevention. Syphilis and Your Patients: A Guide for Healthcare Providers, 2021, <https://www.cdc.gov/std/syphilis/CTAproviders.htm>
- ▶ Oliver SE, Aubin M, Atwell L, et al. Ocular Syphilis — Eight Jurisdictions, United States, 2014–2015. *MMWR Morb Mortal Wkly Rep* 2016;65:1185–1188. DOI: <http://dx.doi.org/10.15585/mmwr.mm6543a2external icon>.
- ▶ Stafford IA, Sánchez PJ, Stoll BJ. Ending Congenital Syphilis. *JAMA*. 2019 Nov 11. doi: 10.1001/jama.2019.17031. Epub ahead of print. PMID: 31710335.
- ▶ U.S. Department of Health and Human Services. 2020. *Sexually Transmitted Infections National Strategic Plan for the United States: 2021–2025*. Washington, DC. DOI: www.hhs.gov/STI

