

Partaking in Missouri's Syphilis Elimination Plan

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MOPHI

a non-profit 501c(3) organization that works with communities and stakeholders to transform the Missouri public health system to optimize health for all Missourians



Statewide Syphilis Initiatives

- Funded by and in partnership with the Missouri Department of Health and Senior Services (MO DHSS)
- Launched Missouri Syphilis Advisory Group in Fall 2023 and Missouri Congenital Syphilis Review Board in Spring 2024
- Drafted the Missouri Syphilis Elimination Plan in 2024 as well as the Missouri Syphilis Outbreak and Response Plan in 2025 for review by the Advisory Group and Review Board



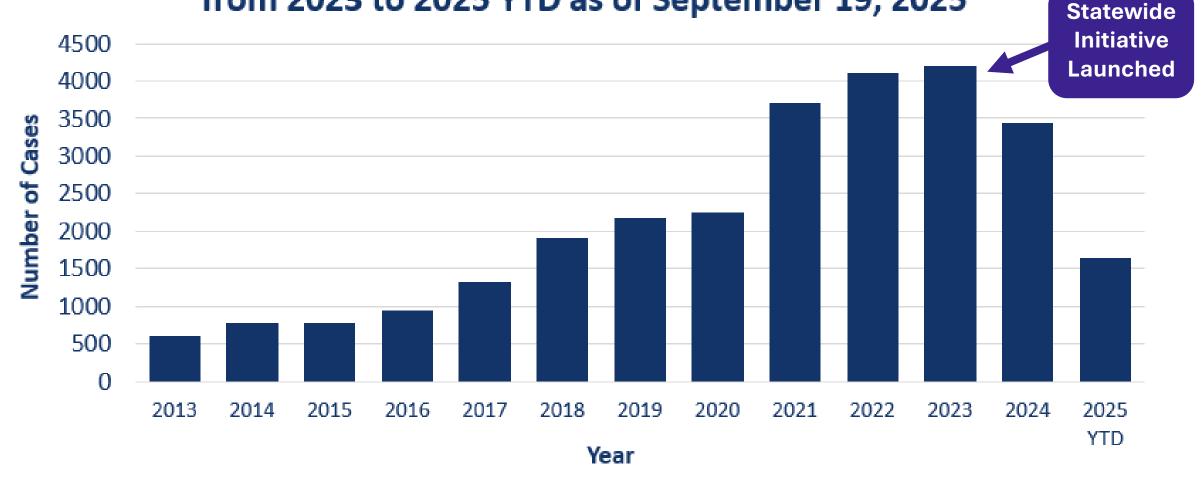
Learning Objectives

- 1. Discuss syphilis trends in Missouri.
- 2. Learn how to participate in statewide syphilis elimination initiatives.
- 3. Understand the role of Missouri Disease Intervention Specialists.
- 4. Comprehend Missouri disease reporting requirements.
- 5. Know the updated prenatal testing requirements in Missouri.
- 6. Follow CDC guidance on testing and treatment.
- 7. Find resources for provider education and consultation.



Epidemiology of Congenital Syphilis and Syphilis in Missouri

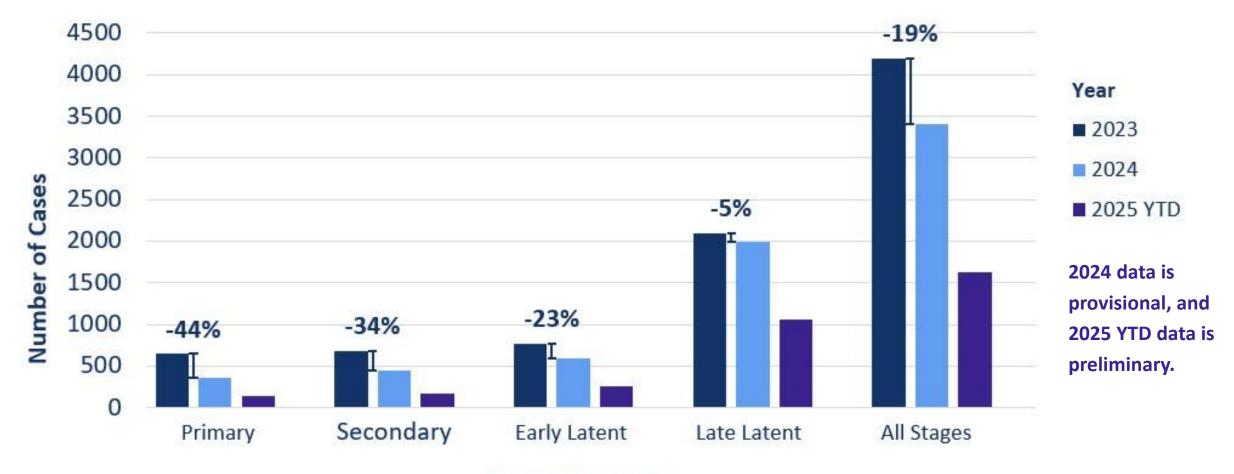
Cases of Syphilis in Missouri Increased from 2013 to 2023 and Decreased from 2023 to 2025 YTD as of September 19, 2025



Data is from DHSS's STI Dashboards: https://health.mo.gov/data/hivstdaids/dashboard-sti.php



Cases Overall and Across All Stages of Syphilis in Missouri Decreased from 2023 to 2025 YTD as of September 19, 2025

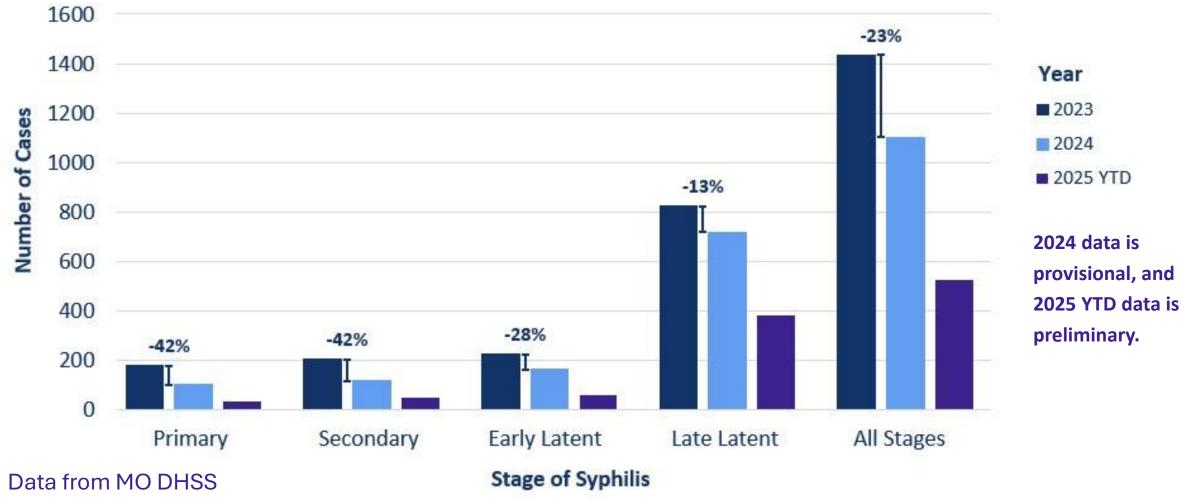


Data from MO DHSS

Stage of Syphilis

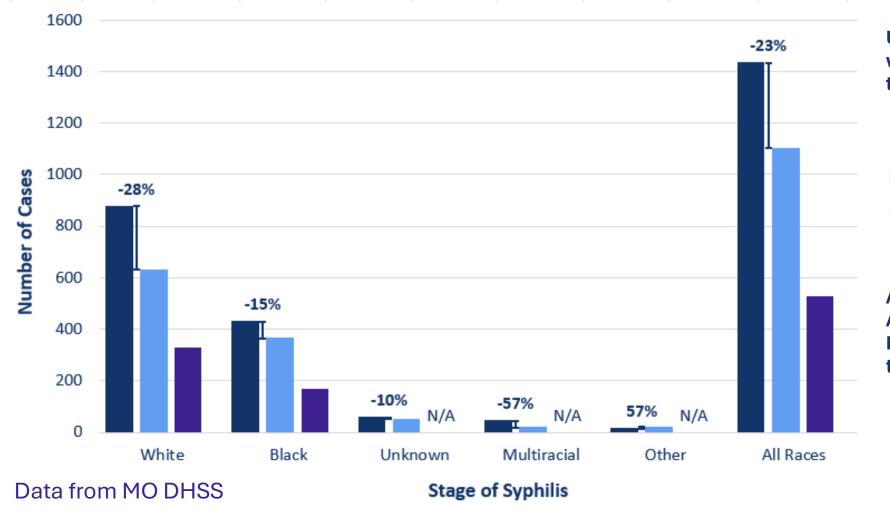


Cases Within Women of Childbearing Age (WCBA) Across All Stages of Syphilis in Missouri Decreased from 2023 to 2025 YTD as of September 19, 2025





Cases Within Women of Childbearing Age (WCBA) Across All Stages of Syphilis by Race in Missouri from 2023 to 2025 YTD as of September 19, 2025



Unknown, Multiracial, and Other were not available for 2025 YTD at time of analysis.

Year	2024 data is
■ 2023	provisional, and
2024	2025 YTD data is
■ 2025 YTD	preliminary.

American Indian / Alaskan Native, Asian, and Native Hawaiian / Pacific Islander categories were suppressed to prevent identification.



Rate of Syphilis Cases in WCBA by Race Per 100,000 Population

Race	Year				
	2023	2024	2025 YTD*		
Black	252.7	214.5	99.3		
White	90.6	65.2	34.0		
All Races	120.6	92.8	44.2		

Data from MO DHSS

*2025 YTD = as of September 19, 2025



Statewide Syphilis Elimination Initiatives in Missouri

Statewide Syphilis Initiatives

Congenital
Syphilis
Review Board

Syphilis Advisory Group

Syphilis
Elimination
Strategic Plan

Syphilis
Outbreak and
Response Plan



Missouri Congenital Syphilis Review Board

- Meets quarterly with biquarterly case reviews to identify missed opportunities for prevention, screening and treatment
- Recommends system-level actionable solutions to inform planning
- Uses a convenience and representative sample of 9 to 12 parent-baby dyads from the past year from various regions of Missouri







This is a fabricated case for the purposes of this presentation.

Case #1 Summary: 31 yo G3P2, Non-Hispanic American Indian / Alaskan Native

- Northwest region
- Domestic violence, history of IV drug use, previous hepatitis C in 2015
- Late latent syphilis, 3 PNC visits, and BICx3
- Probable congenital syphilis, IV PCN treatment
- Reported 10-days post-dx, investigation initiated 0-days post-report
- Need reporting to DIS within 24 hours and treatment of gestational parent >30 days before delivery



Parent & Infant Timeline



3 PNC visits but came in for low blood sugar during 1st visit, **inadequate** HIV -; previous Hep C + in 2015, non-reactive in 2024 BICx3, inadequate, after delivery



5/1 26 wks 4 days 1st PNC visit **RPR 1:64, EIA +** Late latent syphilis

5/27 **PNC** visit Not offered treatment

6/24 ED visit, vomiting Not offered treatment

7/17 37 wks 4 days 🔣 **Delivery RPR 1:16** BIC

7/25 8/1 BIC **BIC**

Key: Parent **‡**Infant Q DIS ii 1st + Test 1st Treatment

2024





5/11, 5/11, 5/23, 8/1 - Parent Surveillance, Initiation (2 FVs, letter) Interview, PNC scheduled on 5/27, given rideshare voucher. Case closed. 7/17-7/18 BW: low **APGAR** normal LB normal RPR 1:32, EIA + Probable CS IV PCN, adequate



8/1, 8/17, 8/28 - Infant Surveillance, Initiation, 6 calls, 4 texts, 3 letters,

and 13 FVs for follow-up

labs. Case Closed.

9/29 **RPR 1:4** EIA +



Review Board Findings

CDC Missed Prevention Opportunity Classification	Count Acros	9 Cases	
	2022-2023	2023-2024	2023-2025
No treatment or nondocumented treatment	7	0	2
Undocumented testing or non-timely testing	6	5	2
Inadequate treatment	5	9*	3
Late identification at seroconversion	1	1	1
Clinical Congenital Syphilis despite adequate treatment	1	1	3
Insufficient data to identify	0	1	0

^{*3} cases were due to untimely testing or delayed identification of seroconversion.



Review Board Findings

- Determined 99 follow-up actions for incorporation into plans
- Calls upon MO DHSS, partner organizations, policy advocates, and social services as well

E.g., "Consult with DIS every time a pregnant person tests positive."

Healthcare Providers and Systems

- Assist and educate providers
- Educate patients
- Expand awareness and provision of services
- Partner with and report to DIS
- Standardize and verify documentation and reporting



Missouri Syphilis Advisory Group

- Meets bimonthly to review drafts of plans, provide updates on Missouri programs, and share resources
- Focuses on identifying case trends, promoting awareness of prevention strategies, and tracking legislation
- Reviews drafts of the Missouri Syphilis Elimination Strategic Plan





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Missouri Syphilis Elimination Strategic Plan

Increase State and Local Public Health Capacity

Expand Avenues for Testing

Increase Provider Capacity

Expand Access to Treatment

Focus Areas

Engage in Non-Traditional Settings

Build Awareness

Prevent New Congenital Syphilis Cases

Respond to Outbreaks



Responsible Parties

Our Syphilis Elimination Plan relies on involvement from college and schools of public health, community clinics, community organizations, emergency departments, local public health agencies, public libraries, Sexually Transmitted Disease program staff and more. See the plan for the 49 organizations currently involved. If you or your organization would like to get involved, contact Allie Bodin at abodin@mophi.org.



Missouri Syphilis Outbreak and Response Plan

- 'Respond to Outbreaks' section
- Covers outbreak response, partner follow-up, incident management, post outbreak activities, and more

Respond to Outbreaks		
	Outbreak Case Definition	.52
	Outbreak Investigation	.53
	Outbreak Declaration	.53
	Case Findings	.54
	Case Characterization and Interviews	.54
	Partner Follow-Up	.54
	Test and Treat Partners Presumptively	.54
	Doxycycline Post-Exposure Prophylaxis (Doxy-PEP)	.56
	Responsibilities	.57
	Initiating an Incident Management Team (IMT)	.57
	IMT Roles	.57
	Communications	.59
	Post Outbreak Activities	.59



Partaking in Our Efforts



Expand In-Field Testing and Care Continuity

With DHSS and LPHAs, clinics can:

- Complete surveys about in-field testing.
- 2. Reallocate or raise funds to purchase rapid tests.
- 3. Post about availability of rapid and confirmatory RPR testing via the Missouri State Public Health Laboratory.
- 4. Create a plan for those conducting rapid testing to access timely confirmatory RPR testing.
- 5. Purchase and distribute rapid tests for syphilis.



Expand At-Home Testing

With DHSS and LPHAs, clinics can:

- 1. Plan pilot testing for at-home testing.
- 2. Identify clinics to conduct pilot testing.
- 3. Conduct the pilot program.





> Implement Opt-Out Testing

With DHSS, LPHAs, and statewide associations, clinics and emergency departments can:

- 1. Implement syphilis testing in clinics and hospitals that conduct opt-out emergency department testing for syphilis.
- 2. Enroll rural Critical Access Hospitals in opt-out testing.

The American College of Obstetricians and Gynecologists (ACOG) recommends all pregnant persons be tested for syphilis at healthcare encounters outside of routine prenatal care including emergency room visits as of April 2024.



Improve Disease Reporting Compliance

With DHSS and LPHAs, clinics, hospitals and residency programs can:

1. Present a webinar on disease reporting requirements to clinics and hospitals, including during didactics for residents in family medicine, internal medicine, OB/GYN and pediatrics.



Conduct Education and Outreach to Providers

With DHSS and LPHAs, clinics and hospitals can:

- 1. Lead train-the-trainer trainings for providers on public health resources available to test and treat syphilis.
- 2. Share patient education on the DHSS website with clinics and hospitals.





Teach About Accessing Treatment via 340B

With the Accreditation Council for Continuing Medical Education, Missouri Pharmacy Association, and the St. Louis STI/HIV Prevention Training Center, clinics can:



- Collaborate with an internal medicine or medical knowledge podcast about accessing syphilis treatment via 340B.
- 2. Organize a lunch-and-learn in physician-owned clinics, particularly rural clinics.



Immediately Treat Pregnant Individuals

With DHSS, LPHAs, the St. Louis STI/HIV Prevention Training Center, and statewide associations, clinics can:

- 1. Propose allocation of Title V to increase rapid testing and treatment in pregnant individuals.
- 2. Fund and allocate rapid testing and treatment resources towards pregnant individuals with syphilis.





> Explore Field Delivery Therapy of Bicillin

With DHSS and LPHAs, clinics can:



- Complete a survey on interest in offering field delivery therapy, including potential facilitators and barriers.
- 2. Receive training on administering bicillin.



> Teach About Doxy PEP

With DHSS, LPHAs, local businesses, and the St. Louis STI/HIV Prevention Training Center, clinics can:

- Create, distribute, and post flyers about doxycycline post-exposure prophylaxis (Doxy PEP) in communities at higher risk.
- Organize a booth on syphilis screening, treatment and doxy PEP at events frequented by communities at higher risk.







> Target Interventions to Pregnant People

With DHSS, LPHAs, and statewide associations, clinics can:

Your baby's health depends on your health.





- Develop a toolkit to encourage testing and treatment of syphilis for pregnant persons.
- 2. Expand access to and awareness of the importance of prenatal care.



Things Those Working in Infectious Disease Need to Know

Topics

- 1. The role of Disease Intervention Specialists (DIS)
- 2. Missouri disease reporting requirements
- 3. Updated prenatal testing requirements in Missouri
- 4. CDC guidance on testing and treatment



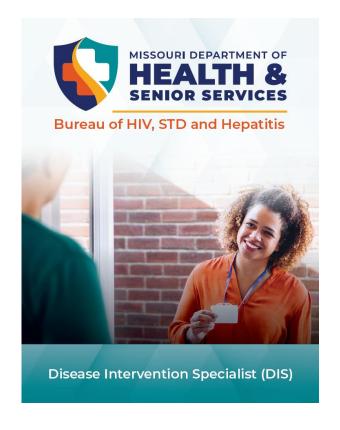
Role of a Disease Intervention Specialist (DIS)

- DIS = public health professionals working to stop infection spread that threatens communities who are
 - Knowledgeable about STIs and skilled in taking sexual histories
 - Experts in identifying and locating people potentially exposed to or positive for an STI
 - Resourceful in referring people for testing and treatment
 - o Educators to the public and healthcare providers about STIs

Encourage patients to complete interviews with DIS.



Role of a Disease Intervention Specialist (DIS)



Handout about the role of DIS as a highly skilled resource that supports and collaborates with medical providers

https://mophi.org/wpcontent/uploads/2025/10/Resourceon-Disease-Intervention-Specialist-DIS.pdf



Disease Reporting Requirement in Missouri

• 19 CSR 20-20.020 "A [healthcare professional] providing diagnostic testing, screening or care to any person with [or suspected of having] any disease, condition, or finding listed in sections (1)–(4) of this rule . . . shall make a case report to the local health authority or the Department of Health and Senior Services, or cause a case report to be made by their designee, within the specified time."

Syphilis, including congenital syphilis (A50-A53, A65, O98.11, O98.12, O98.13), shall be reported within one calendar day of first knowledge or suspicion by telephone, facsimile or other rapid communication.



Disease Case Report Form

 Report diseases and conditions to your local health agency or to the Missouri Department of Health and Senior Services during business hours 573-751-6113, after hours and on weekends 800-392-0272 or by fax 573-526-0235.

Available online at:
https://health.mo.gov/living/healthcondiseases/communicabledisease/cdmanual/pdf/CD-1.pdf



MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES Section for Disease Prevention 930 Wildwood Drive, P.O. Box 570, Jefferson City, MO 65102-0570 Telephone: (573) 751-6113 FAX: (573) 526-0235

DISEASE CASE REPORT

IF THE CONDITION REQUIRES IMMEDIATE PUBLIC HEALTH INTERVENTION, OR IS SUSPECTED OF BEING A DELIBERATE ACT, OR PART OF AN OUTBREAK CALL THE DEPT OF HEALTH AND SENIOR SERVICES 24 HOURS A DAY 7 DAYS A WEEK AT 1-800-392-027

	NAME (LAST, FIRST, M.I.)		PATIENT IDENTIFIER	DATE OF BIRTH		AGE	
nation	PATIENT'S COUNTRY OF ORIGIN	DATE ARRIVED IN USA	OCCUF	PATION		RACE/ETHNICIT	
	HOME TELEPHONE	WORK TELEPHONE	PAREN	T OR GUARDIAN		☐ BLACK HISPANIC:	☐ YES



Updated Prenatal Testing Requirements in MO

5

10

11

12

13

15

Senate Bill No. 79
mandates Hep B, Hep
C, HIV, and syphilis
testing three times
during pregnancy at:

1st prenatal exam,28 weeks gestation,and delivery

210.030. 1. Every licensed physician, midwife, registered nurse and all persons who may undertake, in a professional way, the obstetrical and gynecological care of a pregnant woman in the state of Missouri shall, if the woman consents, take or cause to be taken a sample of venous blood of such woman at the time of the first prenatal examination, or not later than twenty days after the first prenatal examination, another sample at twenty-eight weeks of pregnancy, and another sample immediately after birth and subject such [sample] samples to an approved and standard serological test for syphilis[, an] and approved serological [test] tests for hepatitis B, hepatitis C, human immunodeficiency virus (HIV), and such other treatable diseases and metabolic disorders as are prescribed by the department of health and senior services.





Links to CDC guidelines are in slide notes for the next three slides.

- 1. Confirm pregnancy test results at any healthcare encounter.
- 2. Run more tests upon initial positive result, depending on what testing algorithm (traditional or reverse) was used.
- 3. If the pregnant person tests positive at delivery, conduct confirmatory testing on infants even with negative RPR.
- 4. Conduct and document x-rays and lumbar punctures for congenital syphilis when indicated.
- 5. Infant follow-up exams and tests "should be performed every 3 months until the test becomes nonreactive or the titer has decreased fourfold."



CDC Syphilis Treatment Guidelines

- 1. Administer adequate treatment to people who are pregnant.
- 2. Start treatment at least 30 days before delivery.
- 3. Treat immediately after positive test.
- 4. Administer doses 5-9 (ideally 7) days apart if giving multiple.

Adequate treatment varies by stage of syphilis. Ask patients if they have had syphilis before and, if so, when and if they were treated. Verify with records. Request syphilis history (when low titer) from DIS or other facilities to ensure correct staging and adequate treatment. Document treatment thoroughly.



> CDC Congenital Syphilis Treatment Guidelines

- 1. Administer IV PCN treatment to infant immediately when indicated.
- 2. Treat infants with negative RPR immediately when indicated.

Recommended Regimens, Possible Congenital Syphilis

Aqueous crystalline penicillin G 100,000–150,000 units/kg body weight/day, administered as 50,000 units/kg body weight/dose by IV every 12 hours during the first 7 days of life and every 8 hours thereafter for a total of 10 days





Provider Consultation Resources

STD Clinical Consultation
Network (CCN) of the National
Network of STD Clinical
Prevention Training Centers

https://www.STDCCN.org

Free clinical consultation available to licensed healthcare professionals and STD program staff provided by expert faculty. Refer to consultation for reinfections.

St. Louis STI/HIV Prevention
Training Center of the
Washington University School
of Medicine in St. Louis

https://preventiontraining.wustl.edu/

Free clinical consultation available to licensed healthcare professionals and STD program staff provided by expert faculty at regional STD Prevention Training Centers.

Perinatal Syphilis Warmline of the Illinois Department of Public Health and Chicago Department of Public Health

1-800-439-4079 – unsure if still operating Monday-Friday 8am-4pm Messages returned w/i one business day

Clinical consultation on testing and treatment, record searches to obtain prior testing, and help with mandatory reporting.





Provider Education Resources

STI Treatment Guide Mobile App, Wall Chart, Pocket Guide, and Full Guidelines from Centers for Disease Control and Prevention

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

https://www.cdc.gov/std/treatment-guidelines/wall-chart.pdf

https://www.cdc.gov/std/treatment-guidelines/pocket-guide.pdf

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

Free application for Apple and Android mobile devices, poster, handy pocket guide, and full treatment guidelines. Quick and easy access to STI prevention, diagnostic, and treatment recommendations.

'7 Things to Know About Syphilis' Video from United States Department of Health and Human Services

https://www.youtube.com/watch?v=t
pb5zf0RaTM

Educational video of fast facts about what people should know about syphilis.



Acknowledgments

Missouri Public Health Institute Team

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