

Syphilis - Update for the King County Board of Health

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W UNIVERSITY of WASHINGTON CENTER for AIDS & STD

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Background - Syphilis

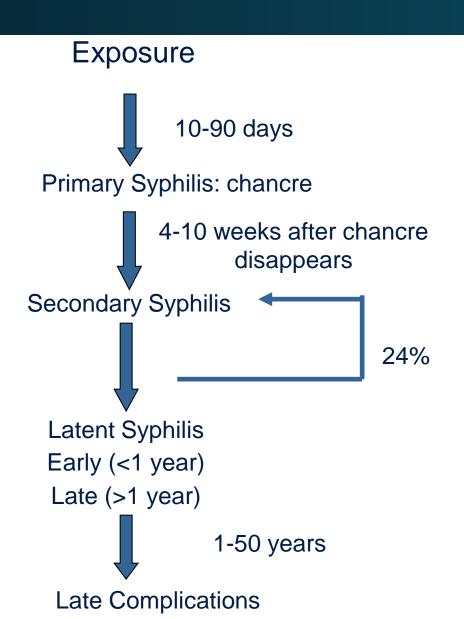
- Bacterial infection caused by Treponema pallidum
- Major cause of mortality, heart disease, mental illness, infant mortality in the pre-antibiotic era
- First effective antimicrobial was developed as a treatment for syphilis
 - Salversan (arsphenamine) 1909

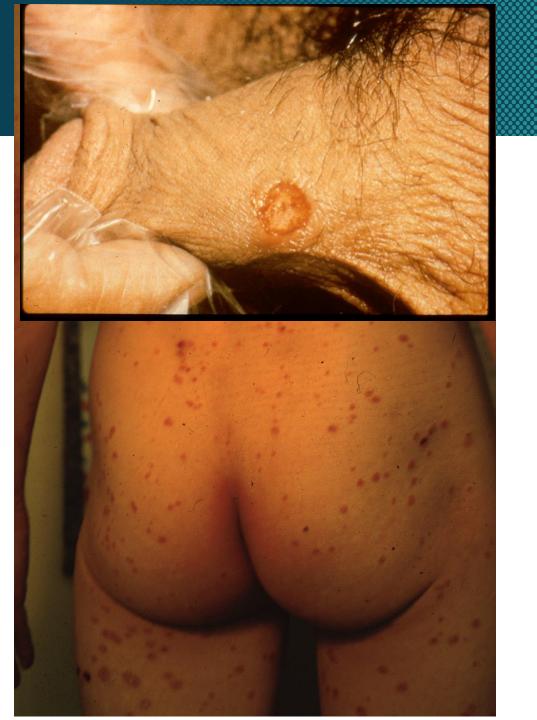


Paul Ehrlich

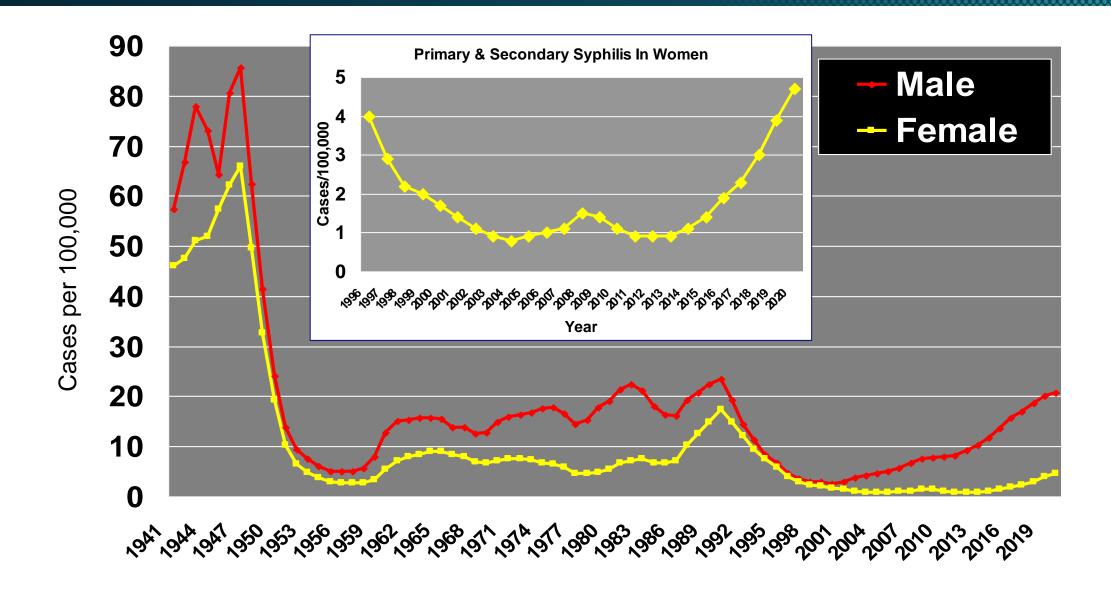


Natural History Syphilis

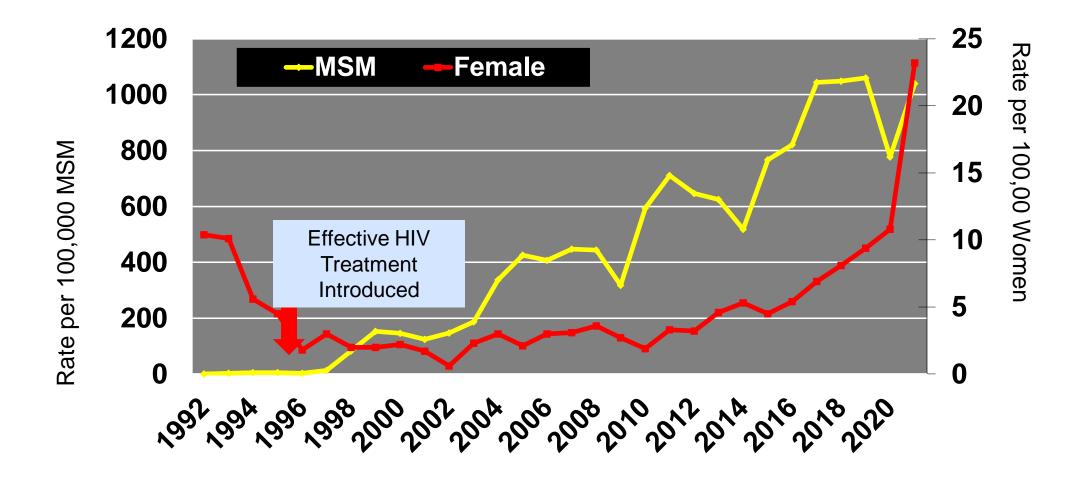




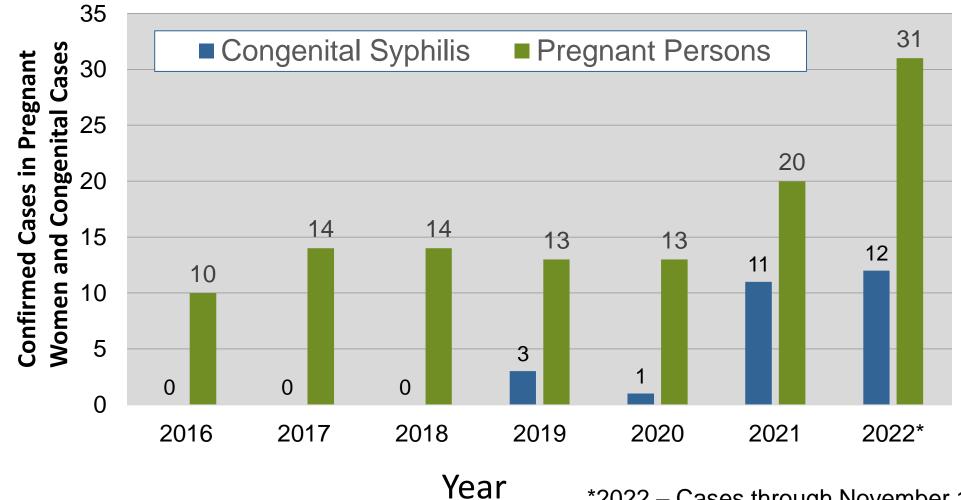
Rates of Primary & Secondary Syphilis per 100,000 in the United States, 1941-2020



Rates of Early Syphilis per 100,000 in Men Who Have Sex with Men & Rates of Syphilis (All Stages) per 100,000 in Women, King County, WA,



Congenital Syphilis Cases 2016 - 2022 King County, Washington



*2022 – Cases through November 15, 2021

Characteristics of 2021-22 Syphilis Cases in Pregnant Persons, King County

	Percent (N=40)
Race/Ethnicity NH White NH Black Hispanic Native Am.Alaska Native Mult/Unknown	22% 15% 32% 2% 20%
Risk Factors Living homeless Substance use Exchange sex No risk	40% 62% 5% 32%
South King County	55%

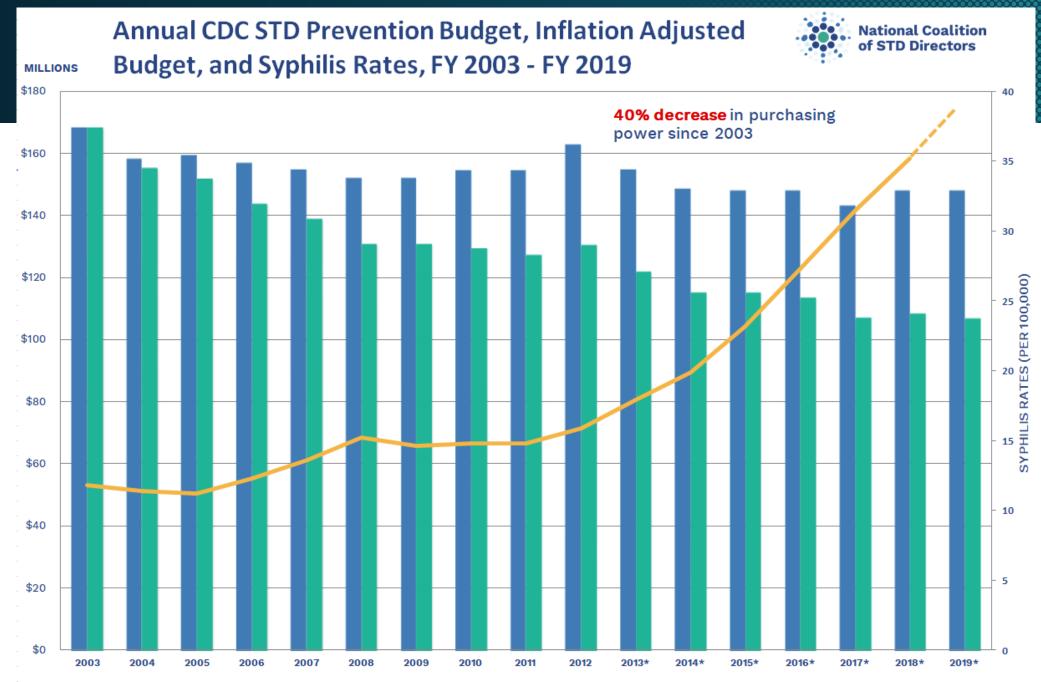
Congenital Syphilis Cases in King County in 2021-22

Identified Gaps in Congenital Syphilis Prevention		Adverse Birth Outcomes	
Limited/No prenatal care	6 (54%)	Fetal Demise/Stillbirth	2 (18%)
No syphilis test at first		Premature Birth	5 (45%)
prenatal visit	1 (9%)	Symptomatic	6 (54%)
Untreated	4 (36%)	None	1 (9%)

- 2022 8/12 congenital cases were born premature and 9 were symptomatic
- No defined cases of stillbirth or fetal demise
 - At least 2 cases of fetal demise/still birth in pregnant women with syphilis

What is Public Health Doing?

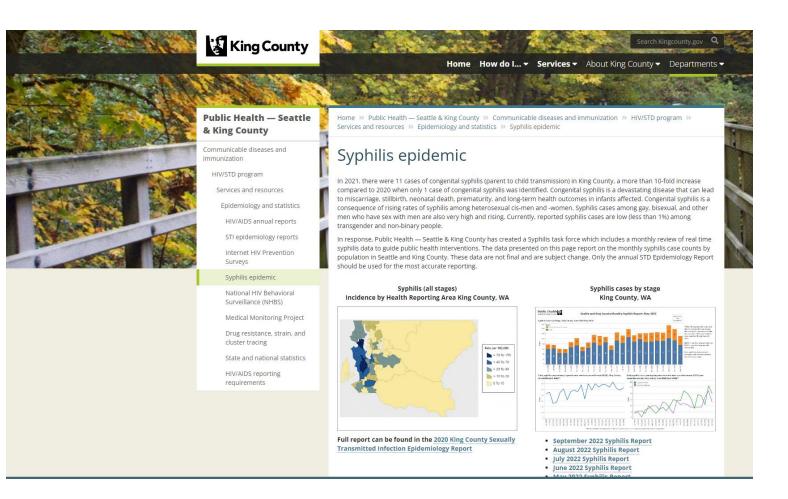
- Surveillance and epidemiology
- Case investigation and contact tracing focus on ensuring treatment
- Public education
- Policy New screening recommendations
- Expanded outreach testing
 - Jails
 - Emergency rooms
 - Healthcare Organizations (HCOs)
- Expanded clinical services
 - PHSKC Sexual Health Clinic
 - New low barrier care clinics SHE Clinic, two new clinics in south county
 - Expanded work through Family Planning Program



Actual Funding Inflation Adjusted -Syphillis Rates (per 100,000) *For comparability, Working Capital Fund excluded

Epidemiology

- New monthly syphilis epidemiology report
- Improves accountability
- Informs the community, including elected officials



Case Investigation and Contract Tracing

- Resources insufficient to investigate and provide partner services to all cases
- Disease investigators prioritize cases in heterosexuals (particularly cis-women) with goal of averting congenital syphilis
 - All HIV+ cases in people who are not virally suppressed prioritized
- Focus on ensuring that pregnant persons are treated
 - Very resource intensive

Number of Syphilis Cases Reported, Assigned for Investigation, and Interviewed, King County, WA, Jan-Sept 2023

	Total Reported Cases	Assigned N (%)	Interviewed N (%)
Cis-Women	260	254 (98)	123 (47)
MSW	245	242 (99)	132 (54)
MSM*	491	197 (40)	78 (16)
Total	996	693 (70)	333 (33)

*Only early syphilis cases included

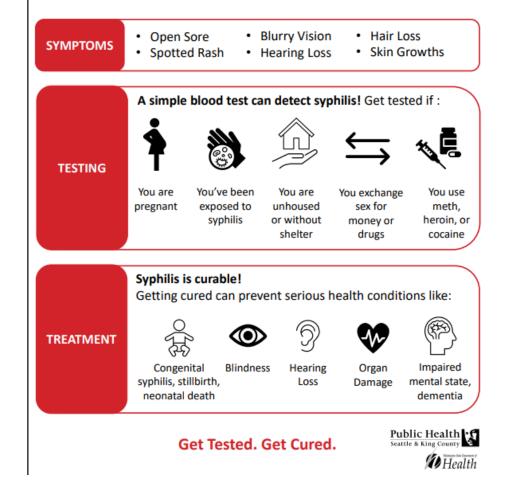
Syphilis Rising

- Expanded media campaign focusing on both MSM and women
- Seeks to promote testing and symptom recognition



Syphilis infections are quickly rising among women and pregnant people.

Syphilis is curable, and congenital syphilis (parent-child transmission) is preventable.



New Screening Recommendations

- PHSKC and WA State DOH have longstanding guidelines recommending frequent testing in MSM
- New expanded guidelines focused on heterosexuals

Persons at elevated risk – Test at least annually & whenever patients

present for care up to every 3 months:

Injection drugs Methamphetamine or nonprescription opioids

Homelessness or who are unstably housed

Transactional sex

- Incarceration in the prior 2 years (including current)
- History of syphilis in the prior 2 years
- Persons with a sex partner with any of the above risks at least annually

Pregnant persons:

First prenatal care

3rd trimester (24-28 weeks

- Time of delivery if any of the above risks or patient diagnosed with a STI during pregnancy⁺⁺.
- Pregnant persons not engaged in prenatal care
 - Test any time that present to a clinical setting (i.e., ERs, jail, substance use treatment facilities, labor and delivery, etc.)
- Pregnant persons with fetal demise at >20 weeks gestation

Other Adults

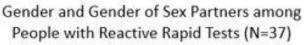
Sexually active aged <45 - if not tested since January 2021

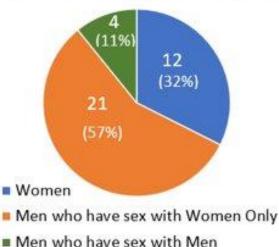
Annual - Women whose male partners have sex with both men and women Annual – HIV+ - Sexually active outside of mutually monogamous relationships Persons diagnosed with gonorrhea or HIV

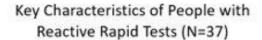
Rapid Syphilis Testing in Jail

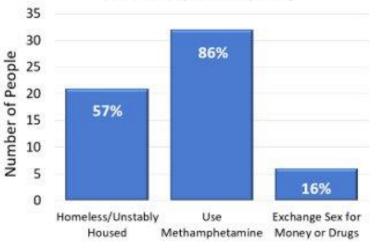
37/585 (6%) of tested persons were positive

- Pilot project evaluated rapid syphilis testing in one of King County's jails
- 11/15/21-7/31/22
- Testing ongoing with new staff assigned to SCORE







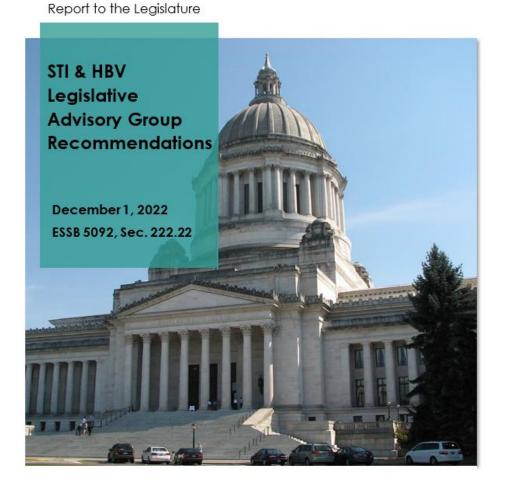


Unmet Needs/Barriers to Success

- Insufficient DIS staff to investigate all cases
- Need for expanded sexual health infrastructure walk-in sexual health care
 - King County has one sexual health clinic located at Harborview
 - Working with family planning and community partners to expand services, particularly in south King County, but infrastructure in insufficient
 - No walk-in obstetrics available in King County
- Additional resources for testing in jails & other outreach settings
 - Greater use of rapid tests
- High cost benzathine penicillin (~\$400 per dose) discourages providers from treating
- Social determinants of health underly our community's vulnerability
 - Homelessness and unstable housing
 - Substance use
 - Poverty

Unmet Needs

- Report to the WA State Legislature presents comprehensive list of recommendations to improve sexual health in WA State
 - Currently being finalized



Prepared by: Office of Infectious Disease on behalf of the STI & HBV Legislative Advisory Group



Conclusions

- Growing syphilis epidemic
 - Continued high rates in MSM
 - New epidemic affecting marginalized heterosexuals growing number of congenital syphilis cases
 - Reflects local and national epidemics of homelessness and methamphetamine use
- Need for expanded sexual health infrastructure
 - Disease investigation
 - Walk-in sexual health care including obstetrics
 - Outreach testing and treatment