

Teresa Everson, MD, MPH

Congenital Syphilis

Innovative Models for Successful Treatment



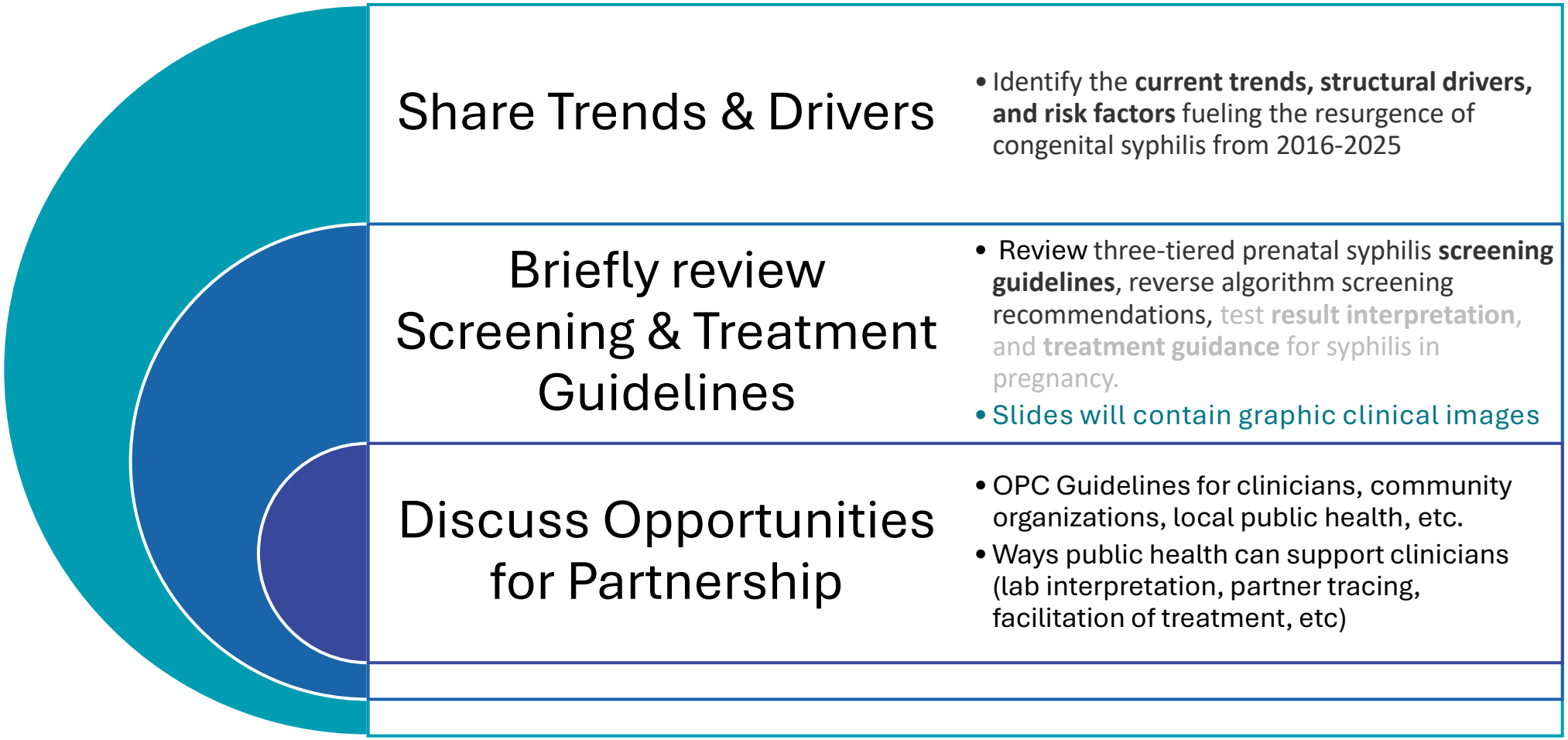
Congenital Syphilis

Innovative Models for Successful Treatment

October 18, 2026 | Presented By:

Jillian Garai, *** Oregon Health Authority
Teresa Everson, MD, MPH, Deputy Health Officer, Multnomah County Health Department

Objectives


Share Trends & Drivers
• Identify the **current trends, structural drivers, and risk factors** fueling the resurgence of congenital syphilis from 2016-2025
Briefly review Screening & Treatment Guidelines
• Review three-tiered prenatal syphilis **screening guidelines**, reverse algorithm screening recommendations, test **result interpretation**, and **treatment guidance** for syphilis in pregnancy.
• Slides will contain graphic clinical images
Discuss Opportunities for Partnership
• OPC Guidelines for clinicians, community organizations, local public health, etc.
• Ways public health can support clinicians (lab interpretation, partner tracing, facilitation of treatment, etc)



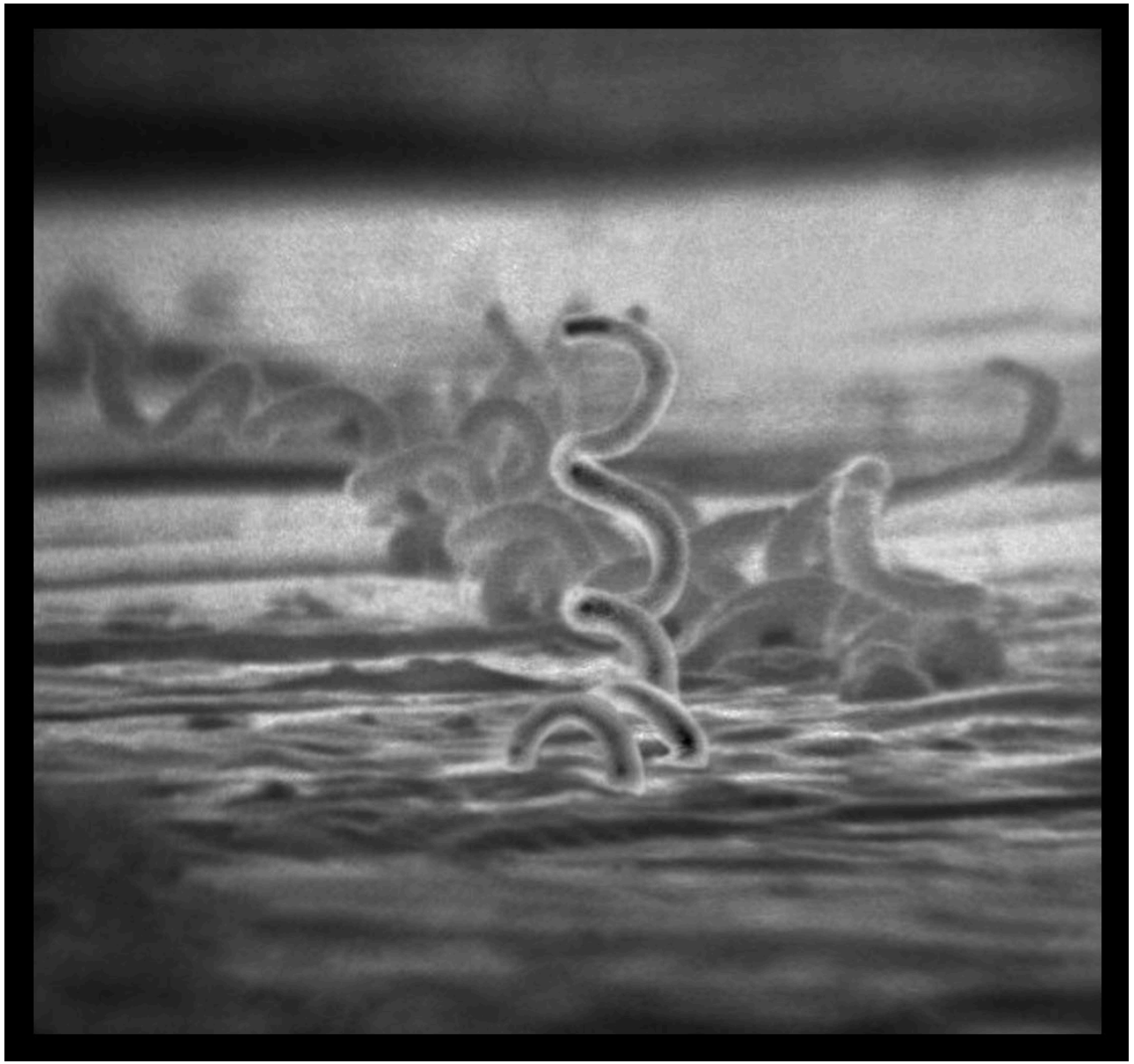
BIG THANKS to David Cuevas, Lead DIS at MCHD Public Health, and to the Coordinated Congenital Syphilis Prevention Leadership team and workgroup members

Coordinated Congenital Syphilis Prevention Leadership

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Pete Singson, MD, Oregon Health Authority
Phillip Wetmore, Comagine Health

Coordinated Congenital Syphilis Prevention Workgroup Members

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Wahji Kasten, ND, MPH, Central City Concern
YoungYoon Ham, PharmD, OHSU



https://en.wikipedia.org/wiki/Treponema_pallidum

Clinical Progression and Stages of Syphilis

(Early: Primary)

Typically a single painless chancre at the site of exposure, plus lymphadenopathy.



(Early: Secondary)

A systemic illness often with rash (disseminated and/or involving palms and soles), fever, malaise, pharyngitis, hepatitis, mucous patches, condyloma lata, and/or alopecia.





Late

Symptomatic infection can involve the cardiovascular system or gummatous (granulomatous) disease of the skin,subcutaneous tissues, bones, or viscera).

Asymptomatic late infection is also possible



Neurosyphilis +/- ocular/otosyphilis

Early Neurosyphilis: May present as asymptomatic or symptomatic meningitis, or meningovascular disease. Vision or hearing loss can occur; ocular/otologic cases are treated as neurosyphilis.

Late Neurosyphilis The most common forms involve the brain and spinal cord, manifesting as dementia (general paresis) and tabes dorsalis.

Congenital Syphilis

Congenital Syphilis

Early Manifestations: Manifests from birth to 2 years. Features include hepatosplenomegaly, snuffles (rhinitis), skeletal abnormalities, and mucocutaneous lesions (blueberry muffin rash).

Late Manifestations: Manifests after 2 years. Characterized by Hutchinson's triad (notched teeth, interstitial keratitis, eighth-nerve deafness) and saber shins.

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Congenital Syphilis is a serious infection.

Congenital syphilis results when syphilis bacteria (treponema pallidum) cross the placenta and infect the fetus.

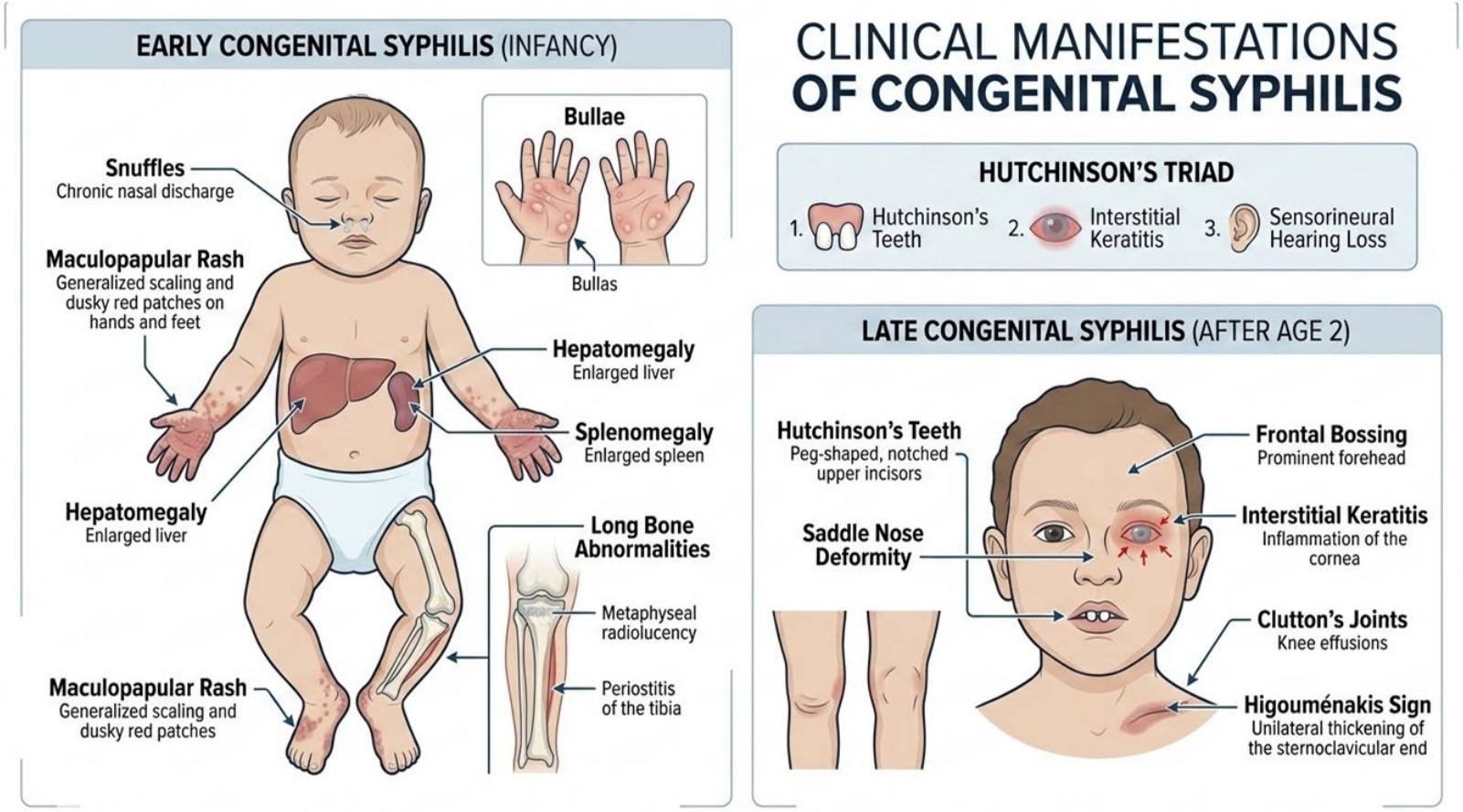


Photo source: UpToDate.com

Congenital Syphilis is a serious infection.

- **80% of infants are affected in primary (chancre) and secondary syphilis (rash),**
  - 25% stillbirth, 14% neonatal death, 41% alive but affected

- **23% of infants are affected In late syphilis (asymptomatic),**
  - 12% stillbirth, 9% neonatal death, 2% alive but affected





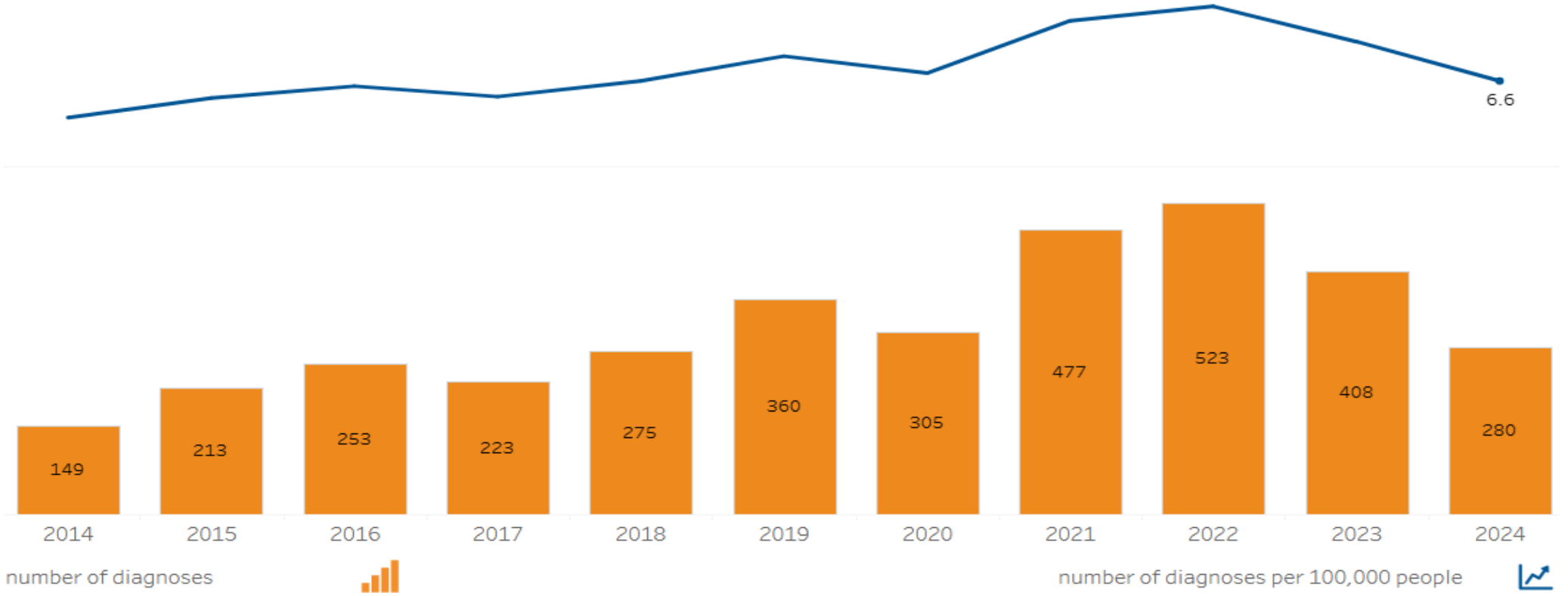
And we've seen a

696% increase

In US CS cases 2015→ 2024

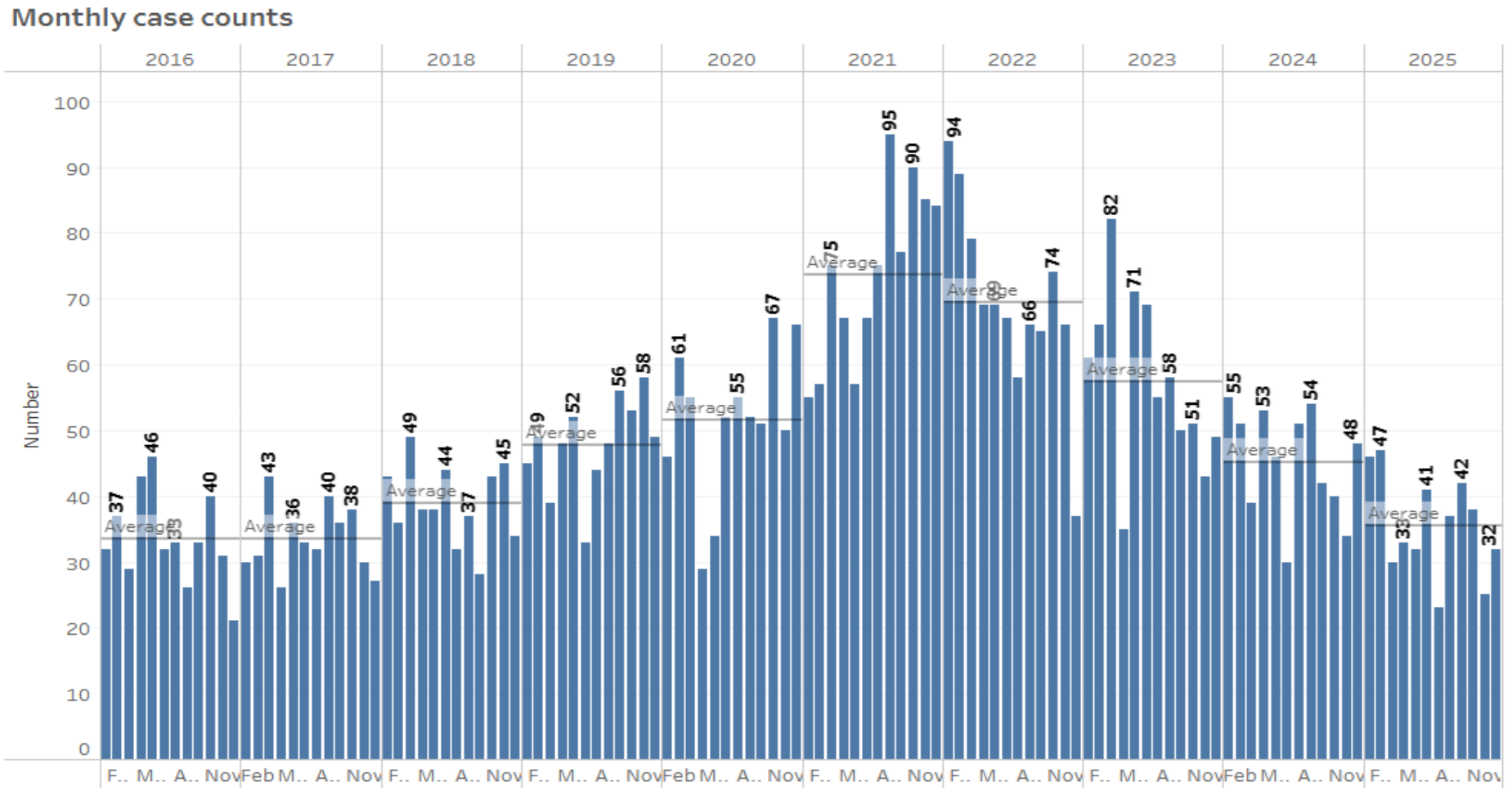
https://www.cdc.gov/media/releases/2025/2025-cdc-reports-latest-national-data-on-syphilis-in-newborns-and-sexually-transmitted-infections-stis.html

(the good news)
Early Syphilis Diagnoses peaked in 2022 in Oregon



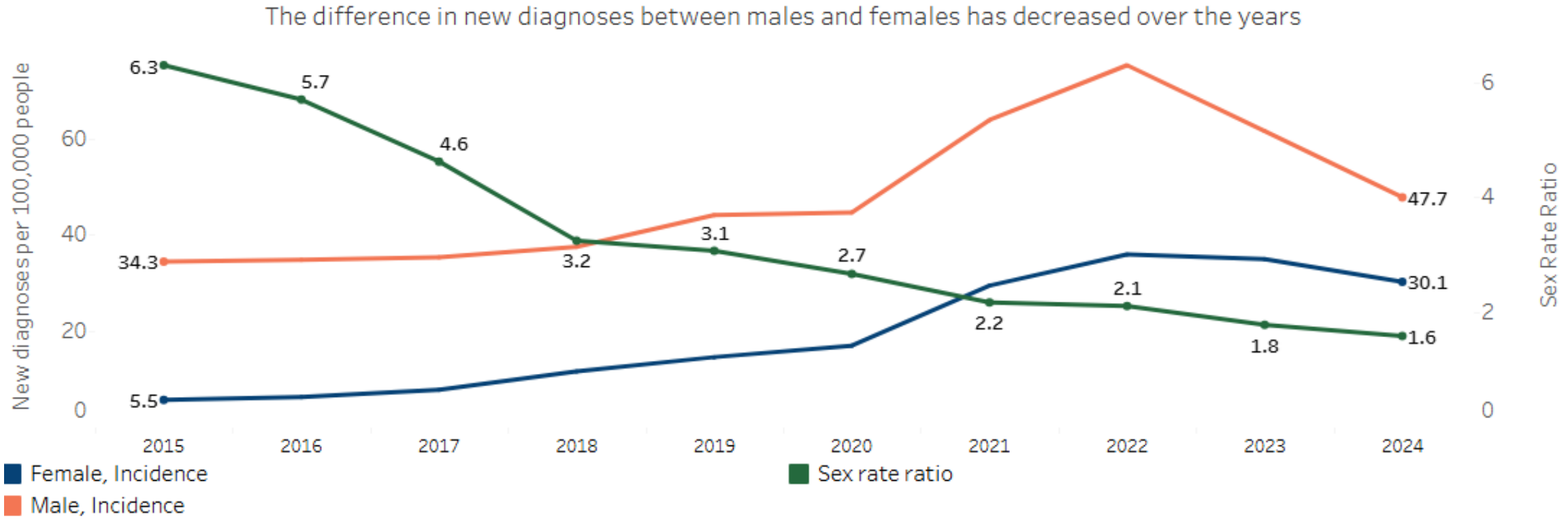
Source: Oregon Health Authority

(the good news)
All syphilis cases, Multnomah County residents, 2016 – 2025



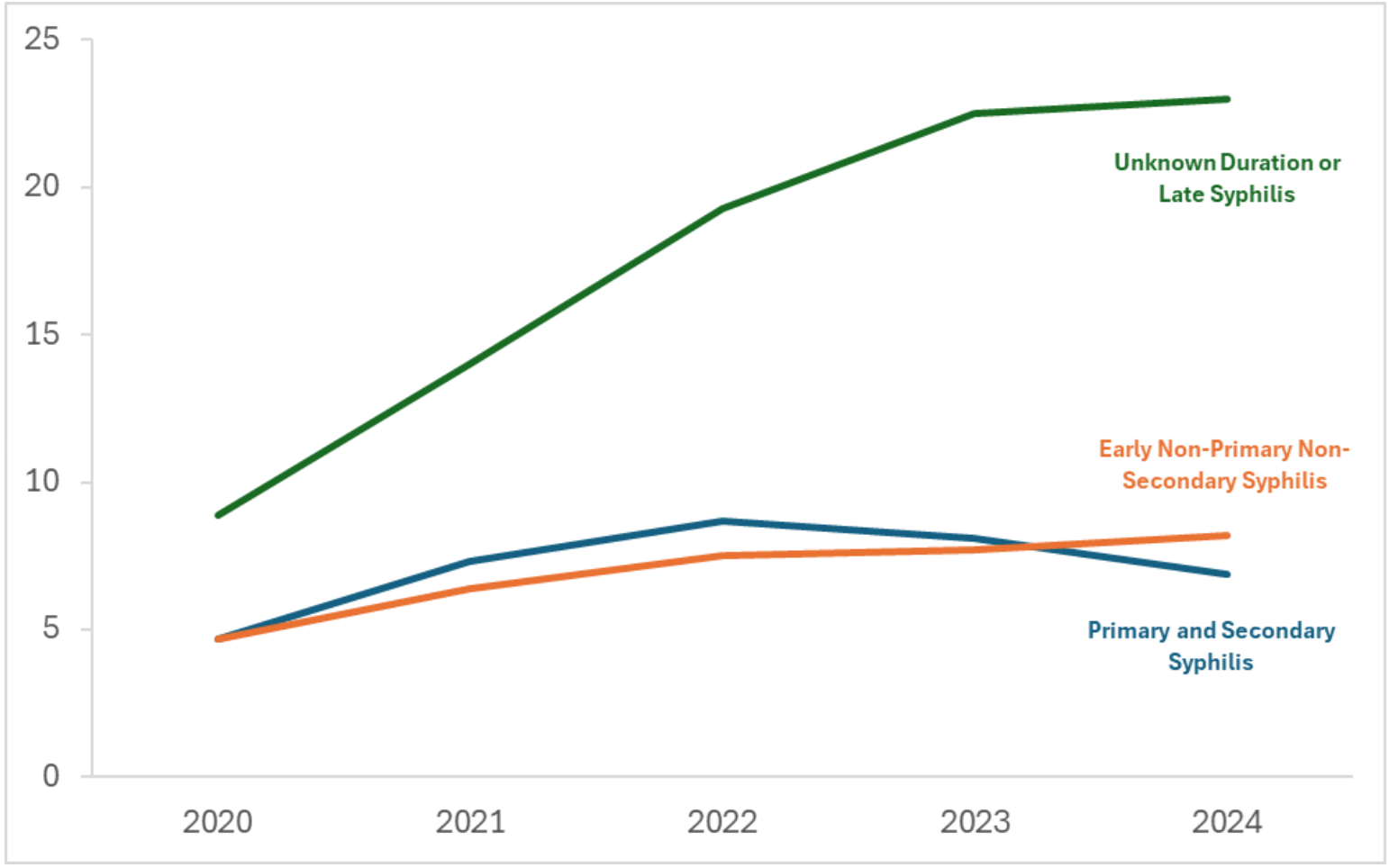
But….

The difference in new diagnosis between AMAB and AFAB individuals has decreased over the years in the US.



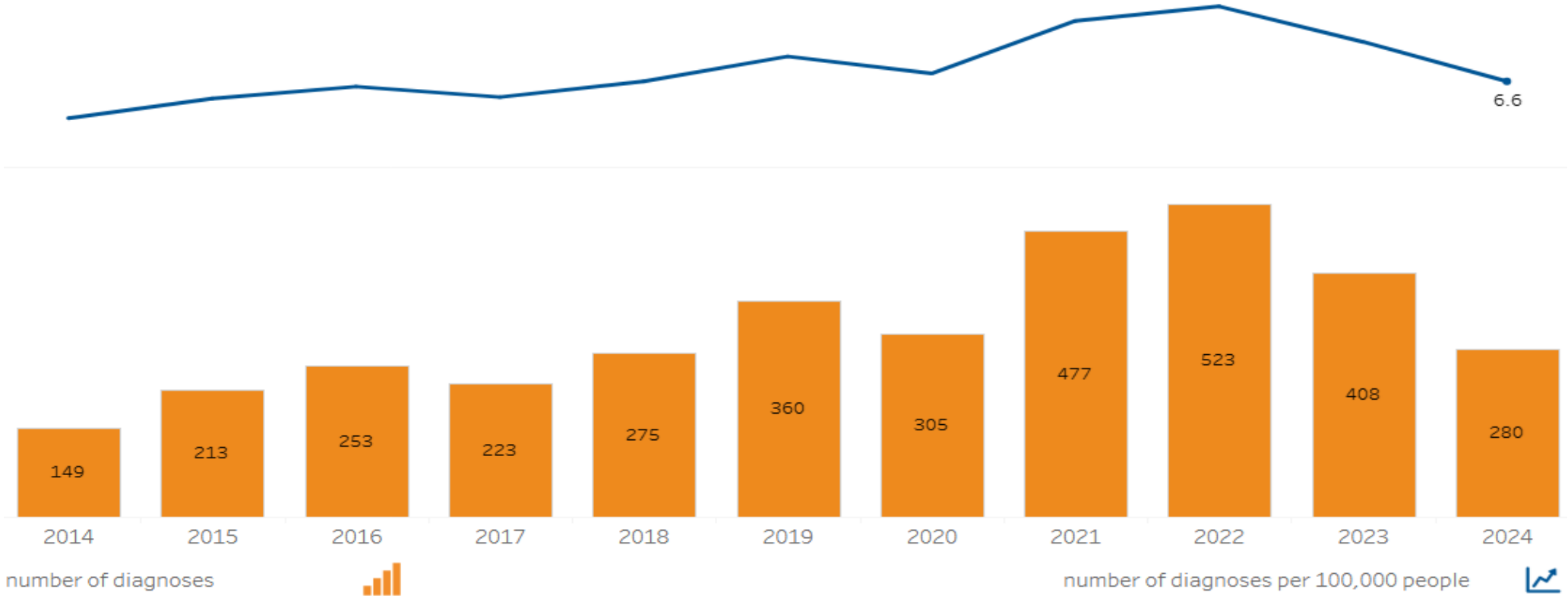
Source: CDC: https://www.cdc.gov/sti-statistics/annual/index.html

Syphilis among AFAB individuals, United States, 2020-2024 (rate per 100,000)



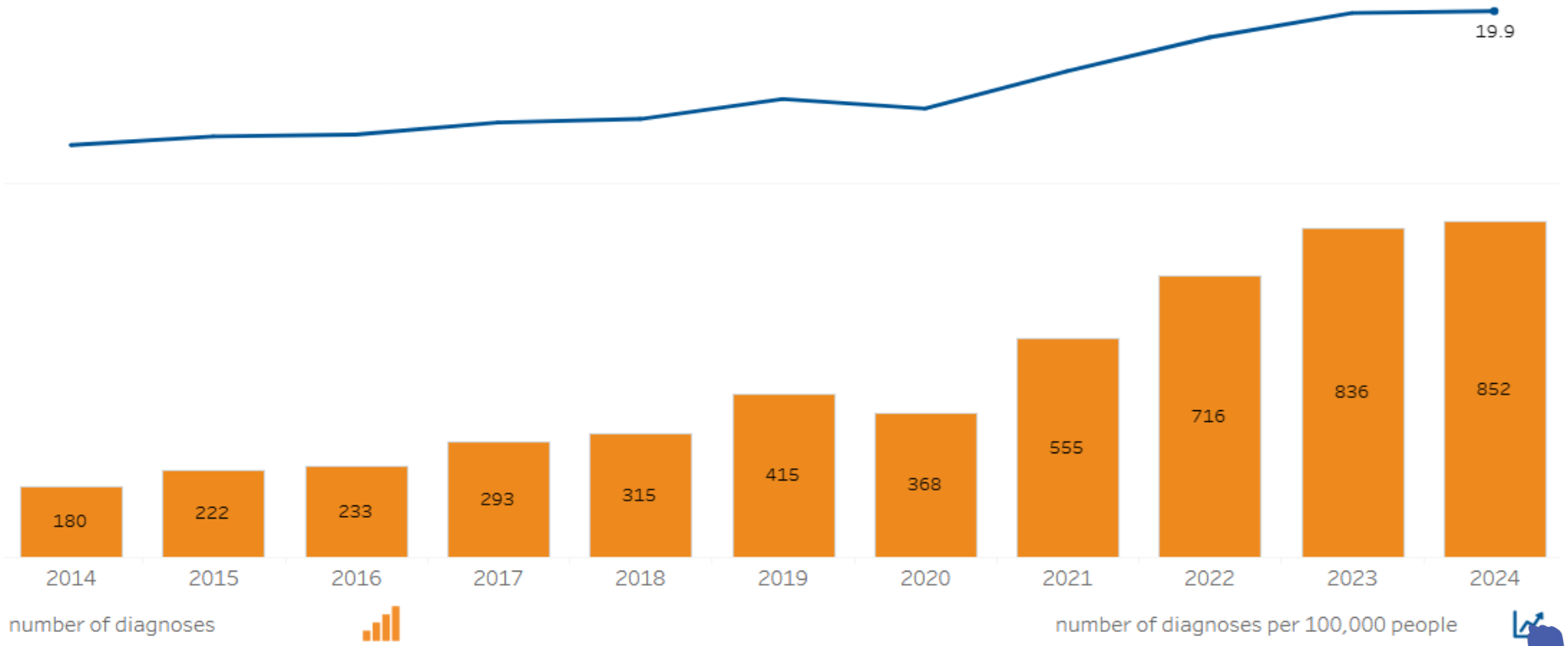
Source: CDC: https://www.cdc.gov/sti-statistics/annual/index.html

Early Syphilis Diagnoses peaked in 2022 in Oregon



Source: [Oregon Health Authority]

The rate of syphilis declined in the last two years in Oregon, *except for late and unknown duration stage*



Source: Oregon Health Authority

And when you put these together…

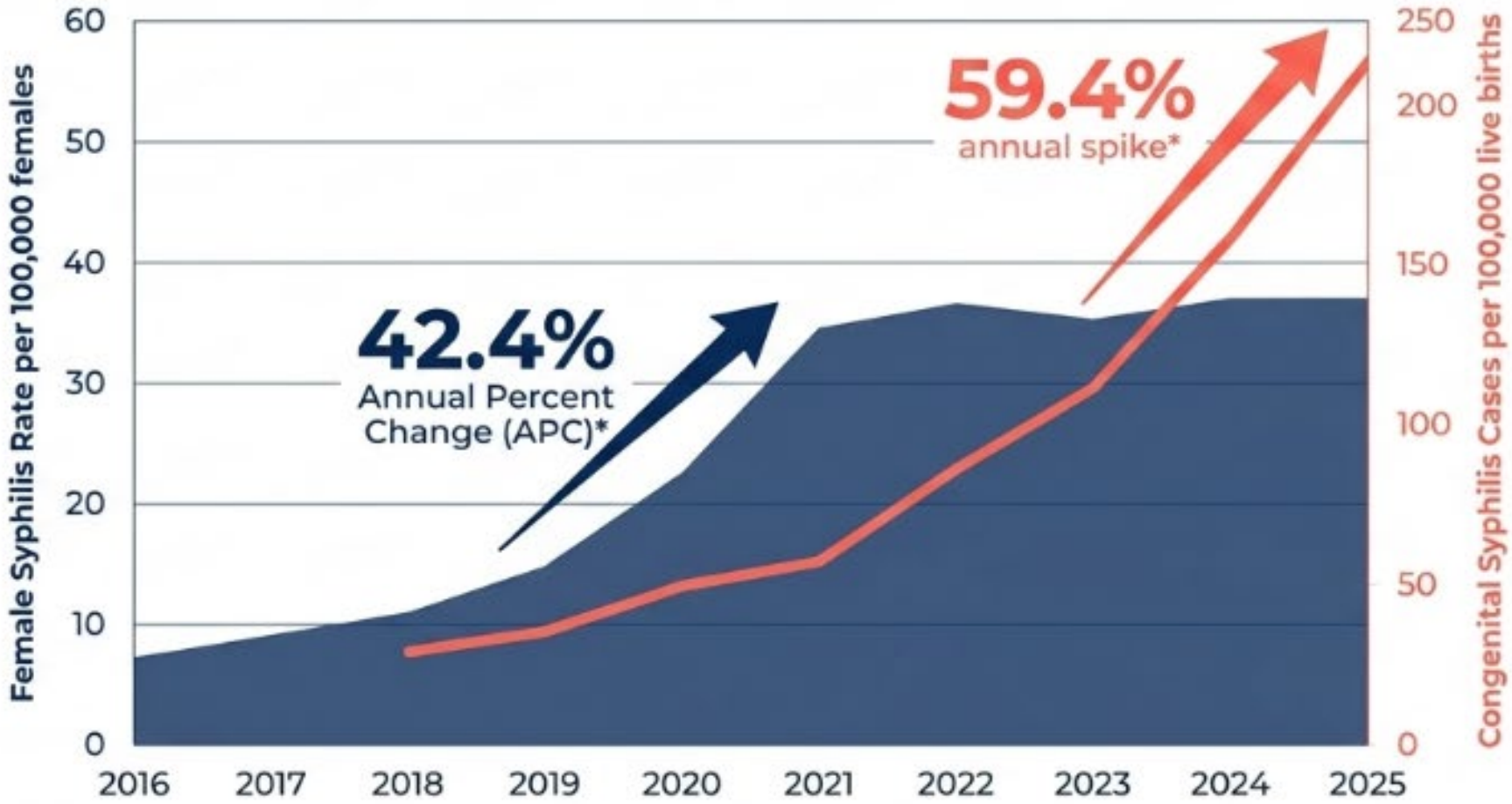
Source: Oregon Health Authority

All syphilis infections by stage, Multnomah County residents, 2018-2025

Syphilis infection by stage (darker colors=more cases)

	2018	2019	2020	2021	2022	2023	2024	2025	2026
Primary	101	121	123	165	159	91	61	34	15
Secondary	91	94	157	242	208	154	81	61	19
Early non-primary non-secon..	146	194	179	255	220	164	101	75	35
Late or unknown duration	124	157	152	214	239	270	287	242	121
Congenital	5	8	7	8	7	11	13	14	4

A DECADE OF ESCALATION DRIVEN BY LATE AND UNKNOWN STAGE DIAGNOSES

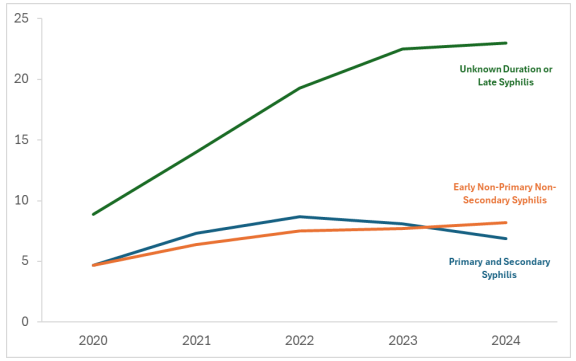


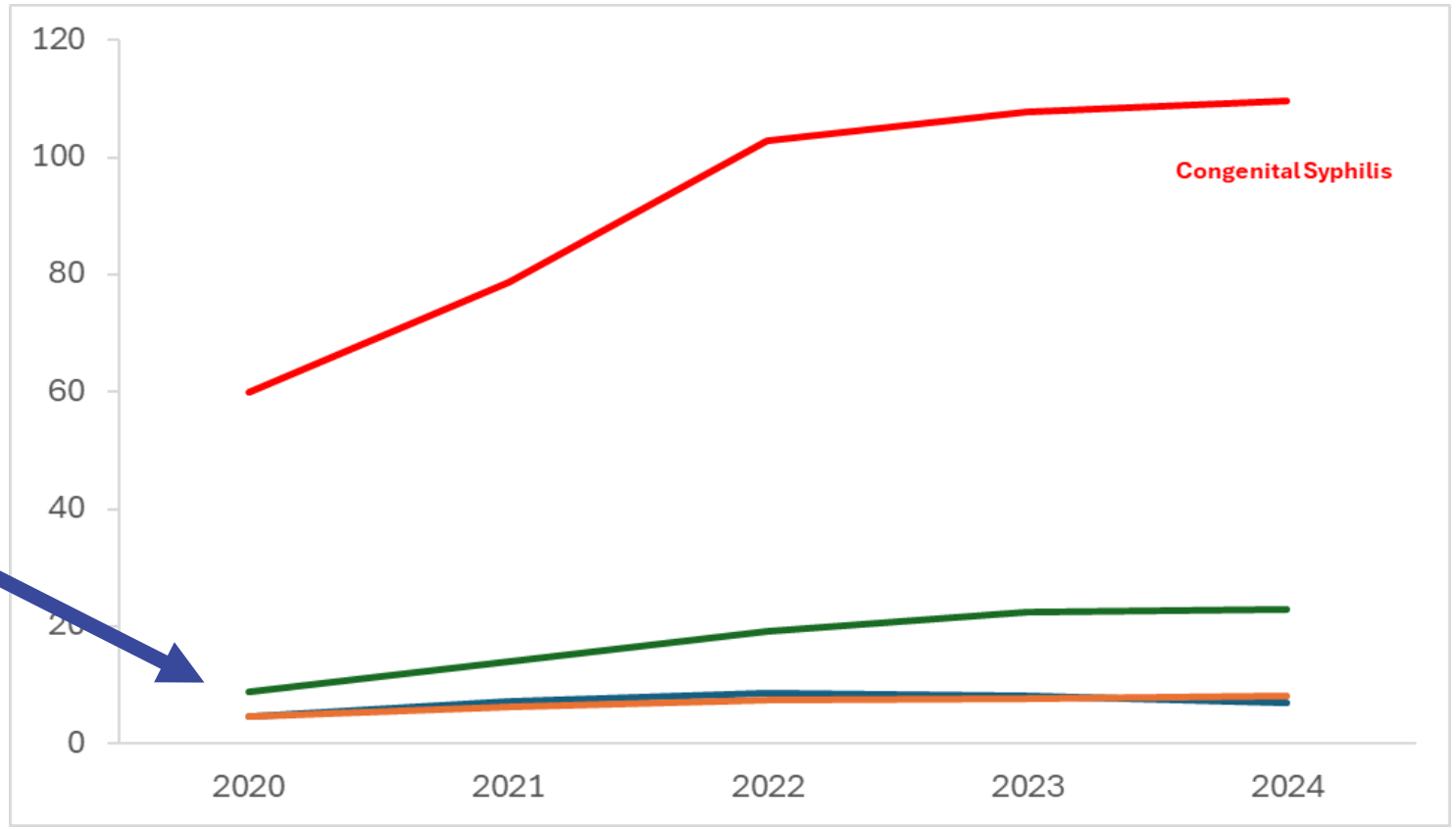
THE HIDDEN RESERVOIR:
50% of female diagnoses are **Late or Unknown** stage, masking the true infectious burden and complicating prenatal screening.

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Congenital Syphilis, United States, 2015-2024 (rate per 100,000)

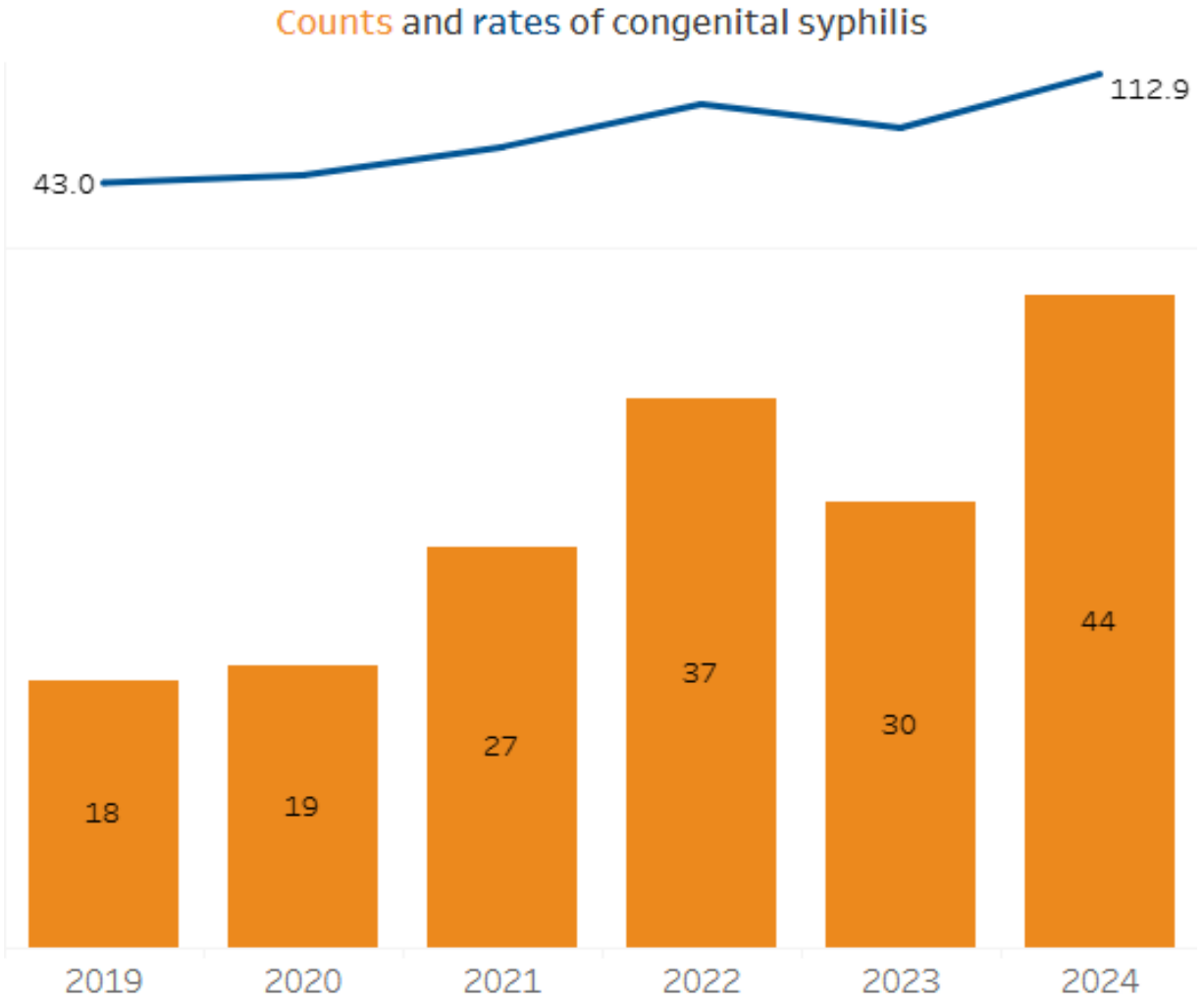
Syphilis among AFAB individuals, United States, 2020-2024 (rate per 100,000)





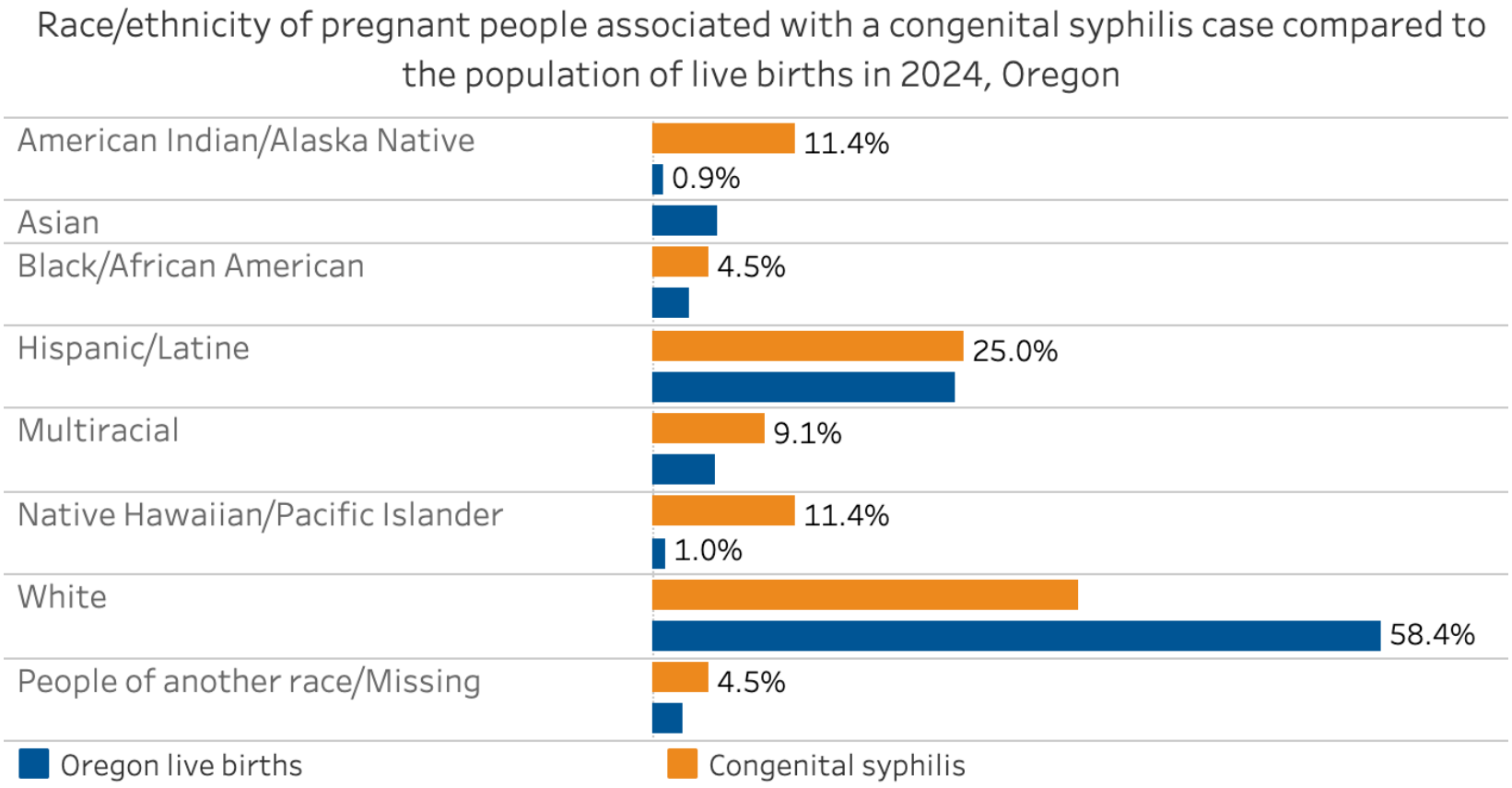
Source: CDC: https://www.cdc.gov/sti-statistics/annual/index.html

There were 0 Cases of CS in Oregon in 2013 And 44 Cases of CS in OR in 2024.



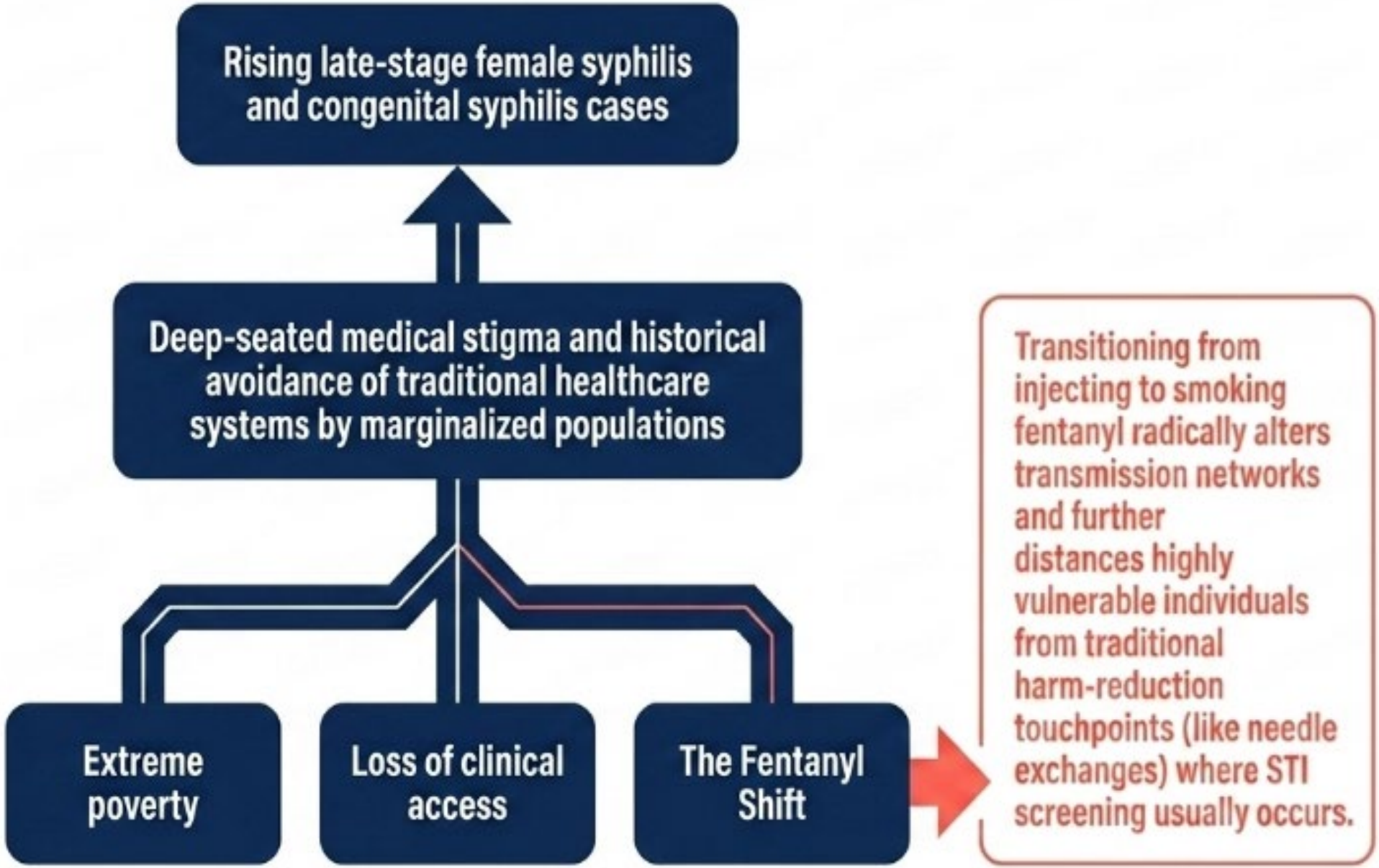
Source: Oregon Health Authority

People of color are disproportionately impacted by congenital syphilis



Source: Oregon Health Authority

So why aren’t we catching more cases and treating more folks??

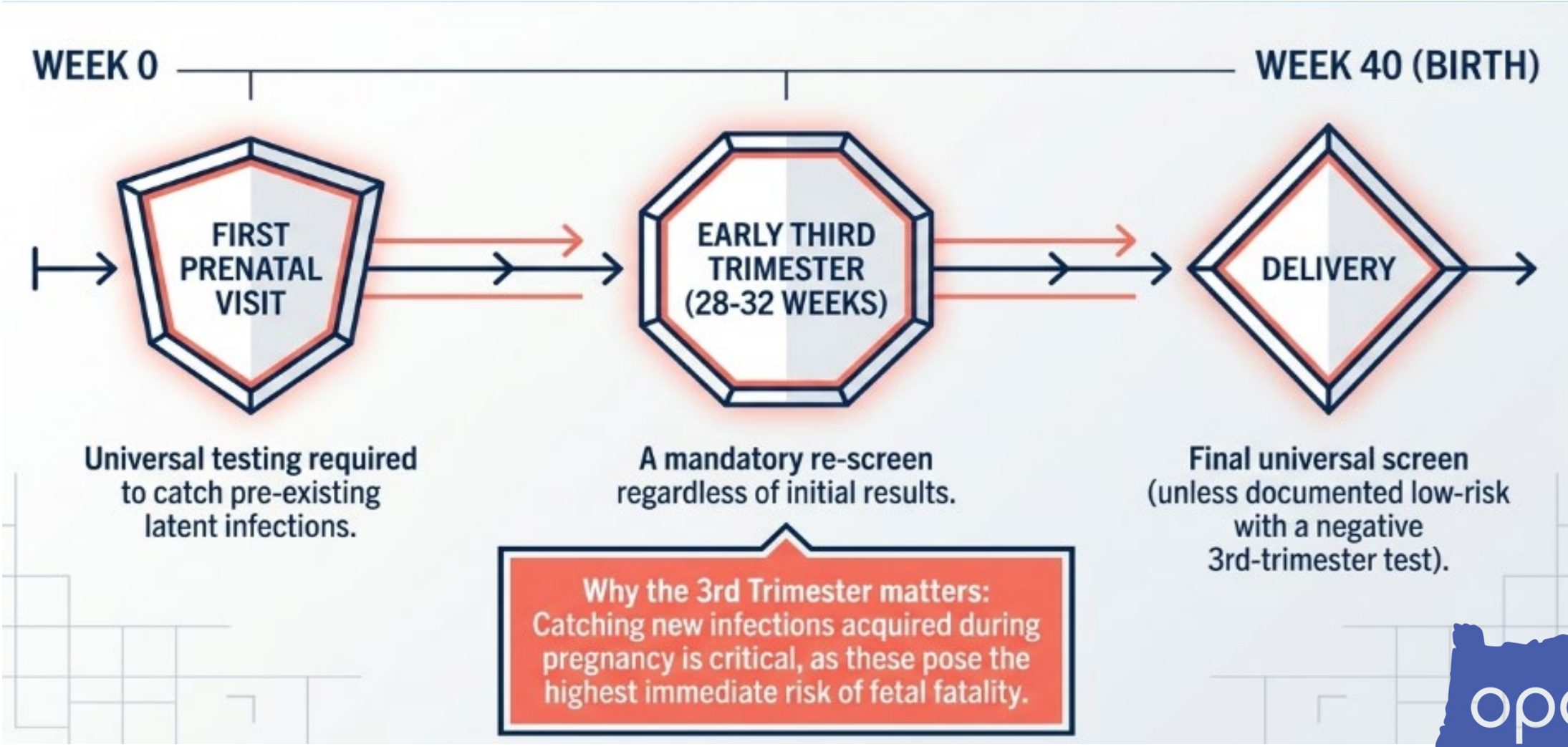

Rising late-stage female syphilis and congenital syphilis cases
Deep-seated medical stigma and historical avoidance of traditional healthcare systems by marginalized populations
Extreme poverty
Loss of clinical access
The Fentanyl Shift
Transitioning from injecting to smoking fentanyl radically alters transmission networks and further distances highly vulnerable individuals from traditional harm-reduction touchpoints (like needle exchanges) where STI screening usually occurs.

Syphilis in Oregon law- OAR 333

- Health care providers, health care facilities, and licensed laboratories shall cooperate with public health authorities in the investigation and control of syphilis infections (OAR 333-019-0002)3

(Guidance) Oregon Health Authority recommends that all pregnant people be tested for syphilis three times: 1) at the first prenatal visit or presentation to care, 2) at 28 weeks' gestation, and 3) at delivery

Recommendations for Syphilis Screening in Pregnancy



DEMYSTIFYING SEROLOGY: THE TWO PILLARS OF DIAGNOSIS

TREPONEMAL TESTS (TP-PA, EIA, CIA)



Detects antibodies.

Once flipped ‘on’ by infection, it **stays on for life**, regardless of treatment.

NON-TREPONEMAL TESTS (RPR, VDRL)



Quantitative (titers).

Measures current disease activity. The “volume” goes up with active infection and goes down with successful treatment.

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Find a syphilis case? (or not sure…)
Call local public health!

RPR (DX) W/REFL, TITER AND T. PALLIDUM AB, IA

RPR (dx) w/reflex, titer and confirmatory testing — Reactive
Reference range: non-reactive

RPR TITER — 1:16

TREPONEMA PALLIDUM AB

Treponema pallidum Ab — Positive
Reference range: negative

Treatment of CS

Benzathine penicillin G 2.4 million units IM

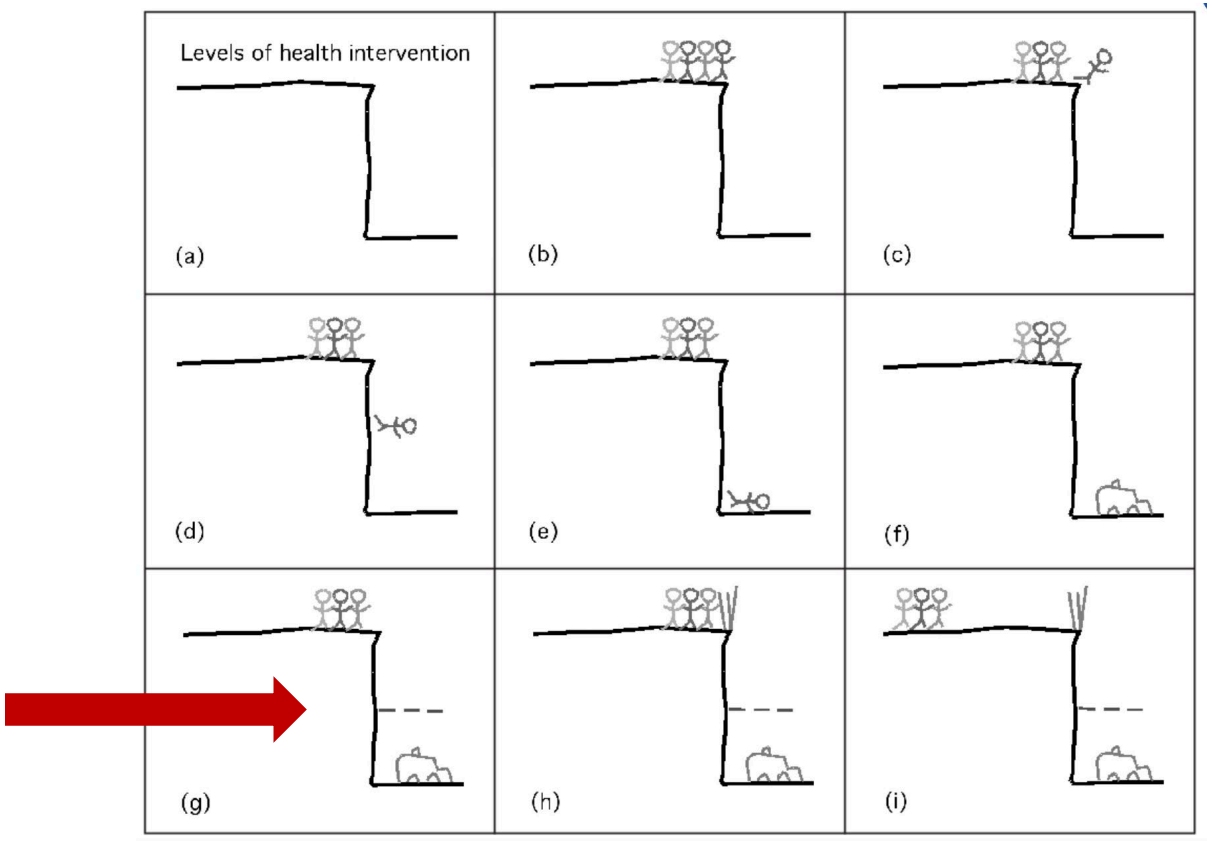
- **single dose for primary/secondary/early latent (<12mo)**
- **three weekly doses for late/unknown duration (>12mo)**
- Desensitization needed for PCN-allergic
- Treat at time of diagnosis if possible
- Don’t forget about partners
- Consult with MFM re: any additional monitoring needed



National shortage anticipated well into 2027, but doses are available for pregnant patients.

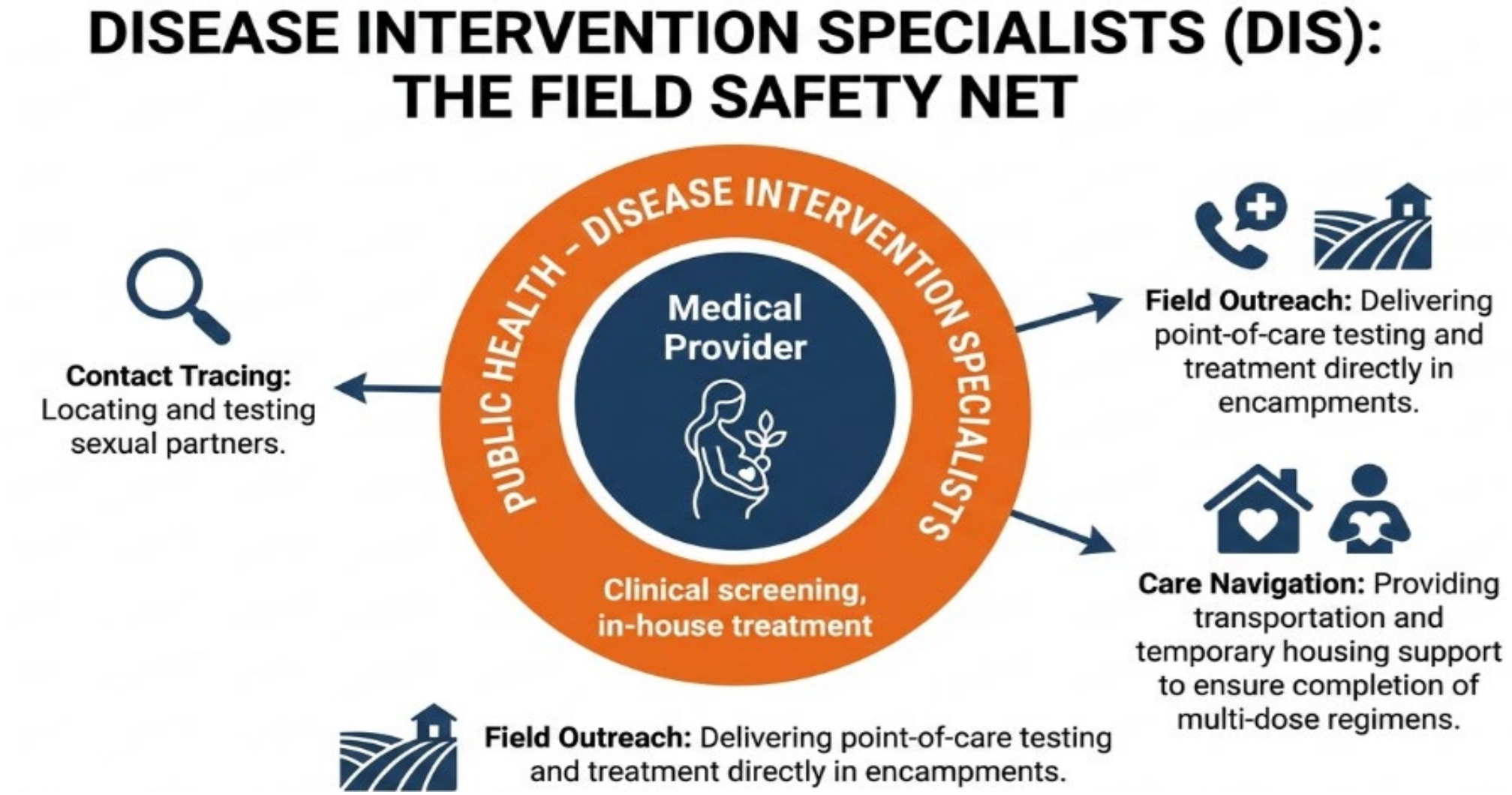
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If your patient is lost to follow-up…



Credit Dr. Camara Jones, CDC Research Director on Social Determinants of Health and Equity 2000-2014 https://pubmed.ncbi.nlm.nih.gov/20168027/

Innovative treatment options



Innovative treatment options

Washington County Public Health test and treat

- Public Health RN can:
  - perform field-based point-of-care testing
  - administer a 1st dose of penicillin
  - Secure, ensure needed follow-up

Innovative Approaches

Obtaining Reliable Contact Information

For patients without a stable address or phone number, ask:

- **Social media:** Facebook Messenger name, Instagram handle, or other platform
- **Guarantee contacts:** “Who will always know how to reach you?”
  - Collect name + phone for up to 2–3 people (parent, sibling, close friend)
- **Social services:** social worker, case manager, counselor, or parole officer
  - Collect agency name and contact info with patient permission
- **Where they spend time:** shelters, encampments, service locations, or community spaces that could support in-person outreach
- **The money question:** “If someone owed you money one year from now and your number and address changed, how would they find you?”

Innovative Approaches

Coordinated Congenital Syphilis Prevention

Responding to the congenital syphilis crisis in Oregon

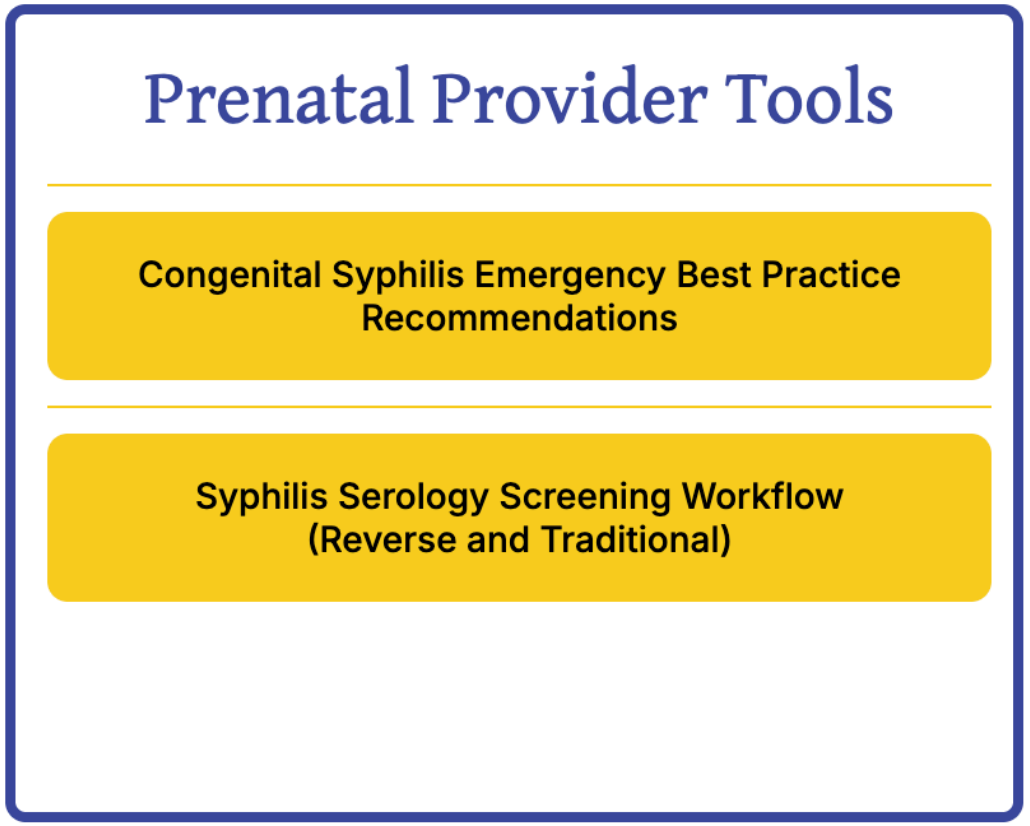


https://oregonperinatalcollaborative.org/our-initiatives/congenital-syphilis/

Coordinated Congenital Syphilis Prevention

Routine best practices:

- Screen x3 in pregnancy (presentation, 28w, delivery)
- Screen pregnant folks with limited/no prenatal care at any presentation to care
- Verify pregnancy status of all pregnancy capable folks with syphilis; treat right away if +
- Follow 2021 CDC Treatment/Care guidelines

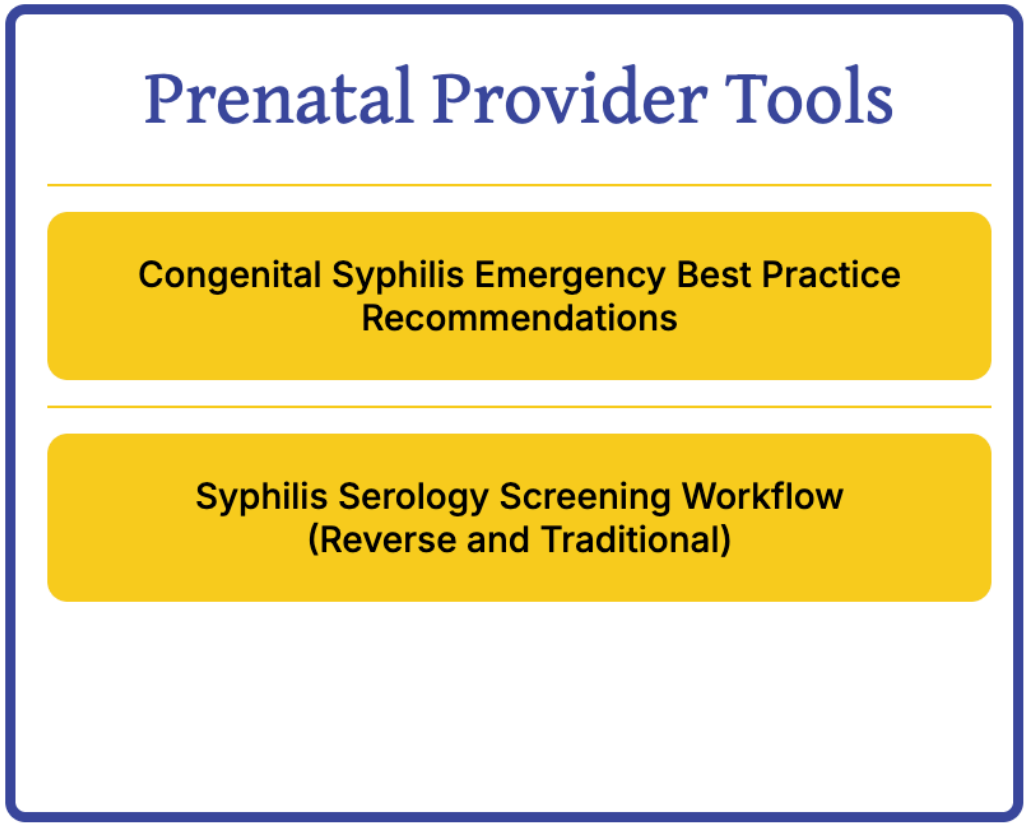


https://oregonperinatalcollaborative.org/our-initiatives/congenital-syphilis/

Coordinated Congenital Syphilis Prevention

ALSO:

- Ways to increase access/reduce barriers to care
- Ways to optimize/facilitate screening and treatment
- Ways to stay current on syphilis best practices
- **Ways to optimize relationships with local public health, community organizations, etc.**



https://oregonperinatalcollaborative.org/our-initiatives/congenital-syphilis/

Coordinated Congenital Syphilis Prevention

Community organizations are uniquely positioned to reach pregnant people who have little or no contact with traditional healthcare and are at highest risk for congenital syphilis.

These might include:

- **syringe services programs**
- **substance use treatment facilities**
- **rehabilitation programs**
- **Shelters**



https://oregonperinatalcollaborative.org/our-initiatives/congenital-syphilis/

Coordinated Congenital Syphilis Prevention

Recommendations for community organizations:

1. Provide education to all staff on congenital syphilis
2. Consider adding (rapid) syphilis screening to your services
3. Build relationships and clear communication channels with your local public health agency
4. Ask about pregnancy status and offer pregnancy testing alongside STI screening for all pregnancy-capable clients
5. Focus outreach on individuals at highest risk for syphilis in pregnancy. Use a non-stigmatizing, patient-centered approach



https://oregonperinatalcollaborative.org/our-initiatives/congenital-syphilis/

THE UNFORGIVING REALITY OF UNTREATED SYPHILIS IN PREGNANCY

- Over one-third of pregnancies in women with untreated syphilis result in a congenital case.

100%
Preventable.

- Fetal consequences are devastating: stillbirth, neonatal death, severe bone deformities, and lifelong neurological deficits.

CONTACT MULTNOMAH COUNTY HEALTH DEPARTMENT STI CLINIC FOR CONSULTS AND SURVEILLANCE REPORTING. ZERO CONGENITAL CASES IS OUR ONLY ACCEPTABLE METRIC.

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Takeaways

- Congenital syphilis is preventable
- Routinely screen pregnant folks 3X
- Screen at-risk pregnancy-capable folks
- Add pregnancy testing when doing syphilis tests
- We don’t all need to be experts in syphilis result interpretation
- Use existing resources- OPC/OHA Coordinated Congenital Syphilis Prevention
- **And if you remember nothing else…**

YOU ARE NOT ALONE: MULTNOMAH COUNTY PUBLIC HEALTH



- Congenital syphilis is a systems-level failure that requires a systems-level response.
- Multnomah County Public Health provides wrap-around support for providers managing complex, highly vulnerable, or transient cases.



Thank You!



Teresa.everson4@multco.us

Multnomah County STI Provider Line: **503-988-3702**

(ask to consult with a clinician)

Resources

- OPC Congenital Syphilis Tools (providers, ER, local PH, community orgs): https://oregonperinatalcollaborative.org/our-initiatives/congenital-syphilis/
- OHA Syphilis Testing Tips for Providers: https://www.oregon.gov/oha/PH/DISEASESCONDITIONS/HIVSTDVIRALHEPATITIS/SEXUALLYTRANSMITTEDDISEASE/Documents/OHA_Syphilis_Testing_Tips.pdf
- CDC 2021 Syphilis Treatment Guidelines: https://www.cdc.gov/std/treatment-guidelines/syphilis.htm
- Free CDC syphilis resource (9/15/26): https://www.cdc.gov/nchhstp/whats-new/new-syphilis-tools-app.html
- Oregon Local Public Health Authority Directory: Find contact information for your local health department: https://www.oregon.gov/oha/PH/DiseasesConditions/CommunicableDisease/ReportingCommunicableDisease/Documents/reportdisease.pdf



Resources

- STD Clinical Consultation Network: free clinical consultation service provided by expert faculty at regional STD Prevention Training Centers: https://www.std.uw.edu/page/site/clinical-consultation
- Oregon AETC Peer-to-Peer Provider Consultation: one-on-one education and support to physicians, advanced practitioners, and pharmacists in OR (includes access to free educational resources for clinicians and patients: https://www.oraetc.org/prescriber-support
- Indian Country ECHO Syphilis Resources: https://indiancountryecho.npaihb.org/resource-hubs/syphilis-resources/
- Project Nurture: Prenatal care, inpatient maternity care, and postpartum care for women who struggle with addictions as well as pediatric care for their infants: https://partners.healthshareoregon.org/project-nurture