Congenital Syphilis in Los Angeles County

Women and Health Equity Conference

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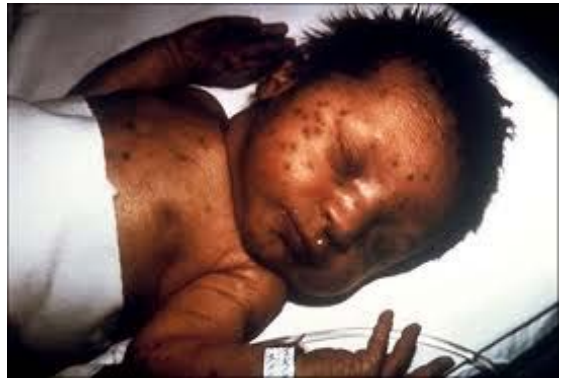
County of Los Angeles Department of Public Health
September 12, 2019

Sexually Transmitted Disease Inequities

- Inequities in the burden of disease for chlamydia, gonorrhea, syphilis and other STDs by race and Hispanic ethnicity continue to persist in the United States
- These disparities are not explained by individual or population-level behavioral differences; rather they result in large measure from systemic, societal, and cultural barriers to STD diagnoses, treatment and routinely accessible preventive services
- Progress has been made in reducing the magnitude of disparities in some STDs, especially for Blacks, but much more needs to be done to address these issues through individual, group, and structural-level health care interventions
- Continued monitoring of differences across groups in reported case incidence is also critical to the success of these efforts, including a sharpened focus on ascertainment of race and Hispanic ethnicity for persons diagnosed and reported with STDs

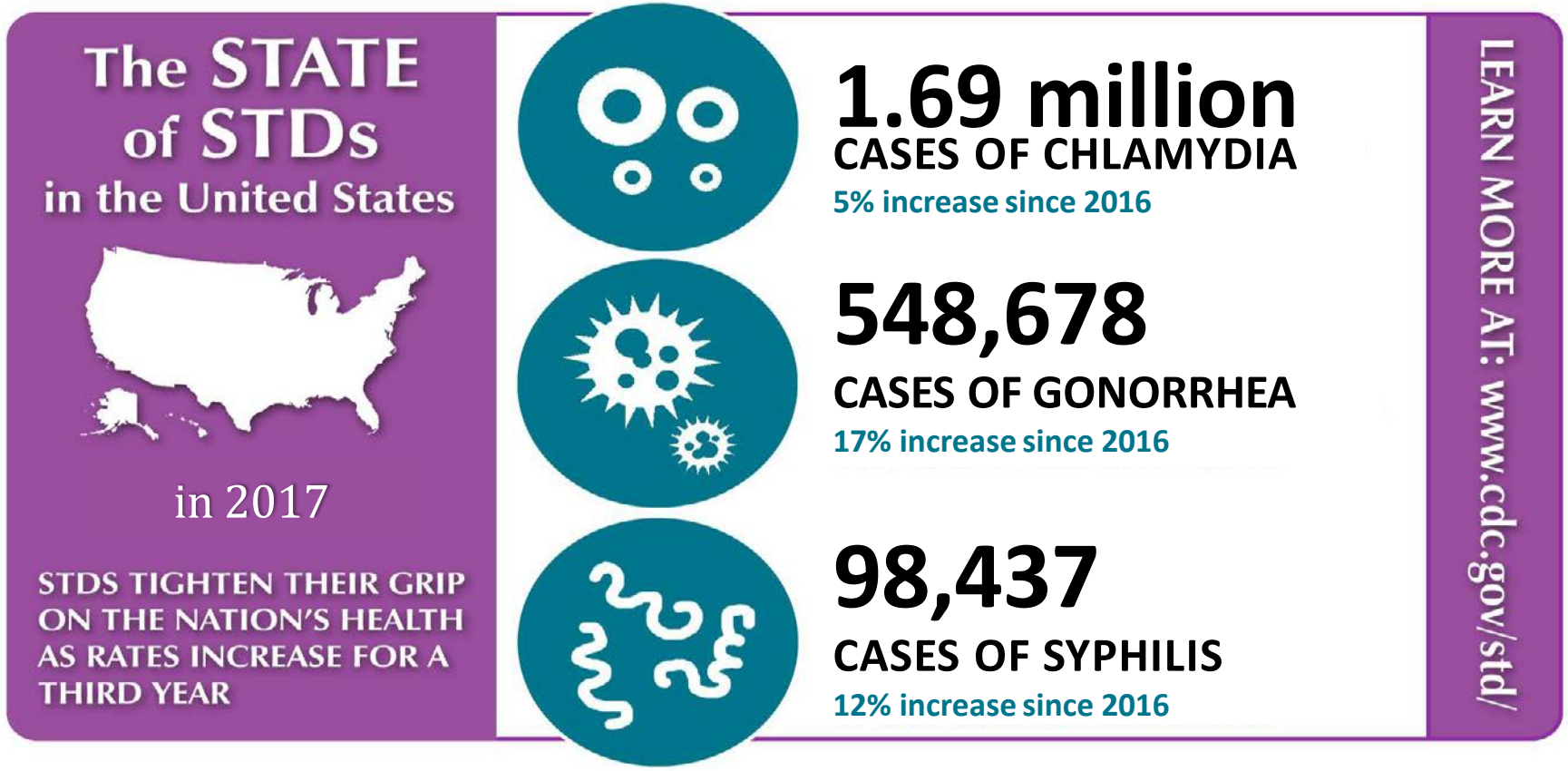
Congenital Syphilis (CS)

- Syphilis in an infant exposed during pregnancy
- Transmitted from mother to child during pregnancy, regardless of the stage of disease
- Can cause severe illness in babies, including premature birth, birth defects, blindness, hearing loss and even death
- Preventable with timely diagnosis and treatment of syphilis in pregnant women **priority for California**



Prevention of CS is an urgent priority for California

STDs are at a record high in the United States



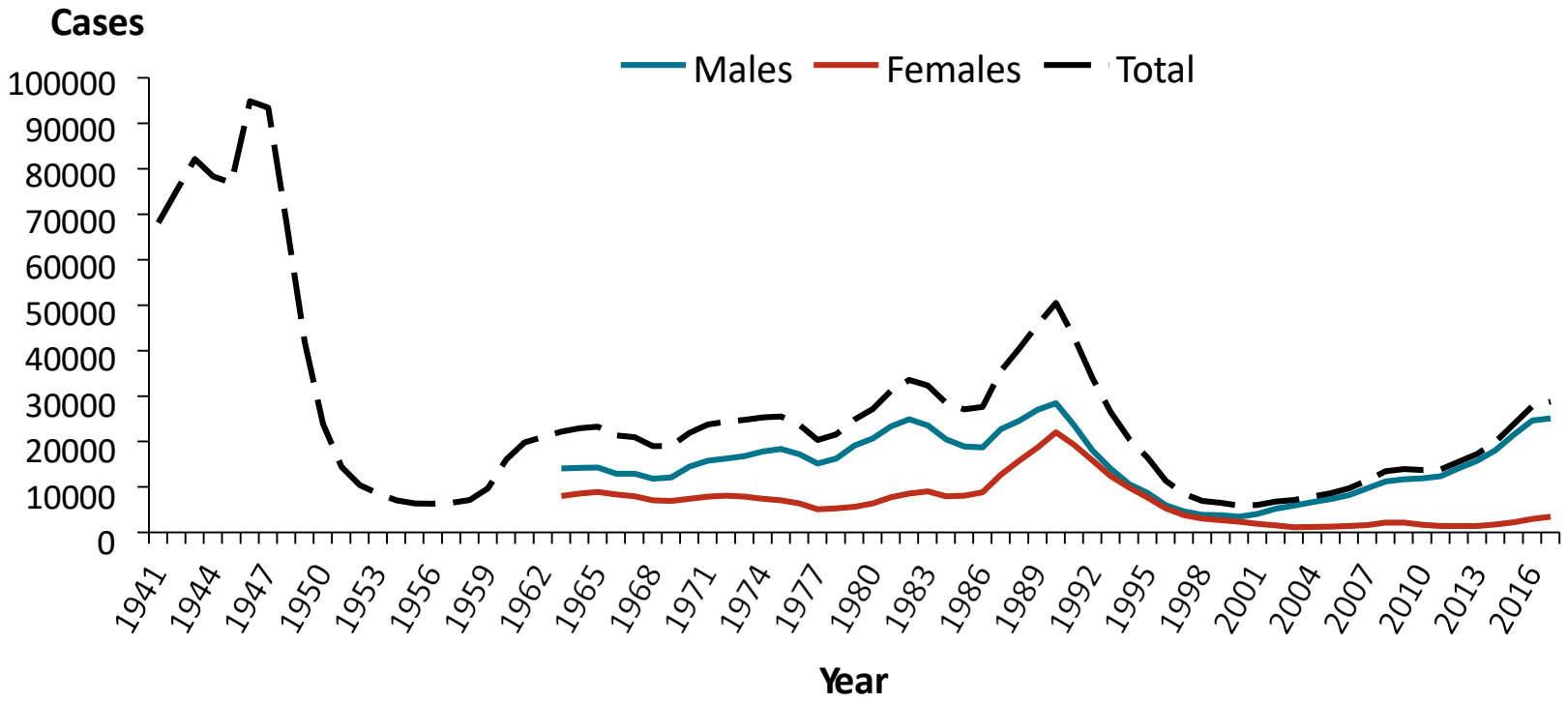
more than **900** Congenital Syphilis Cases in 2017 **44% ↑**

*Data are preliminary as of April 12, 2018; congenital syphilis data are preliminary as of July 10, 2018

Primary and Secondary Syphilis:

Reported Cases, U.S., 1941–2017*

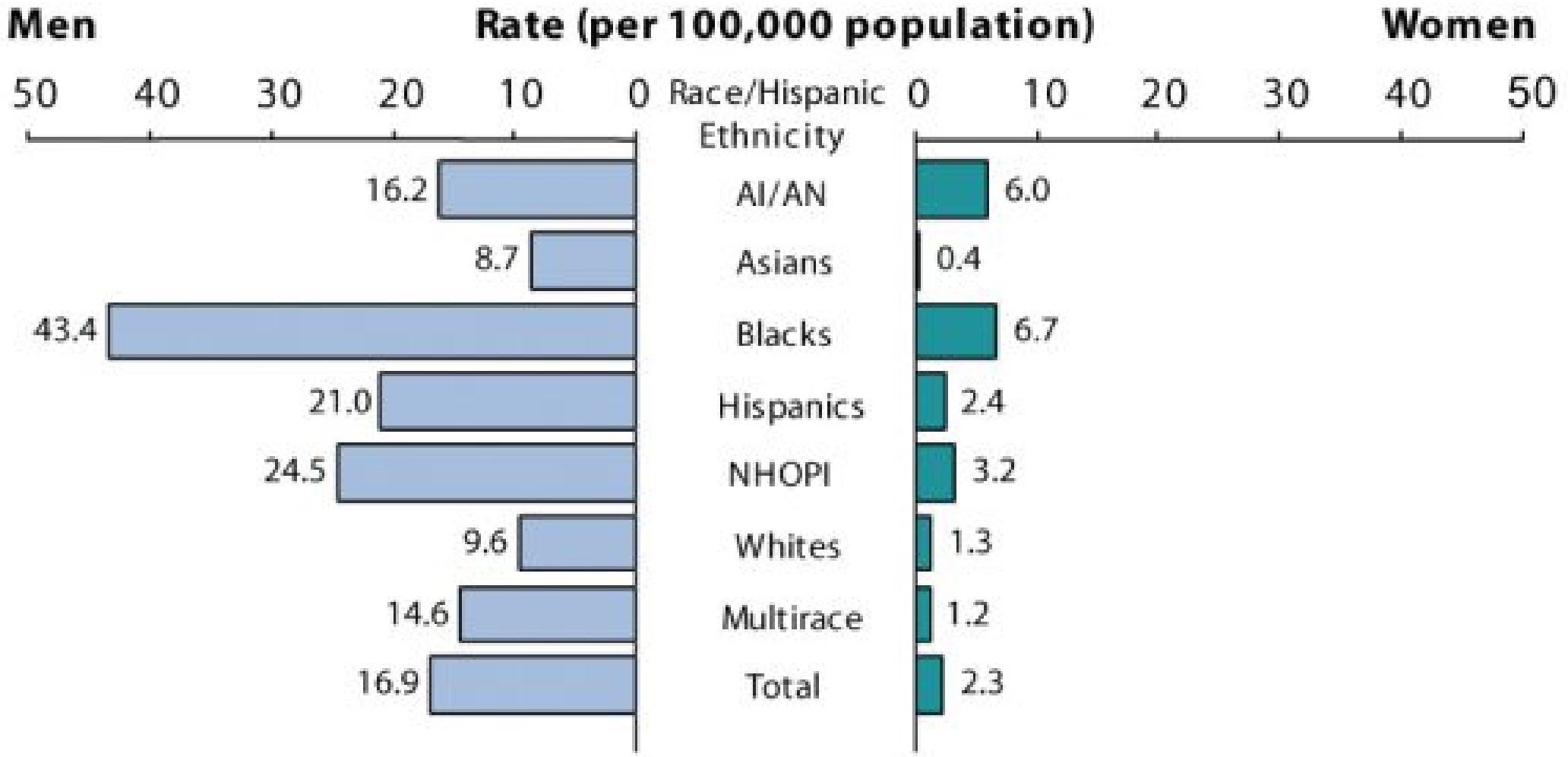
Primary and Secondary Syphilis Cases have increased 390% since 2001



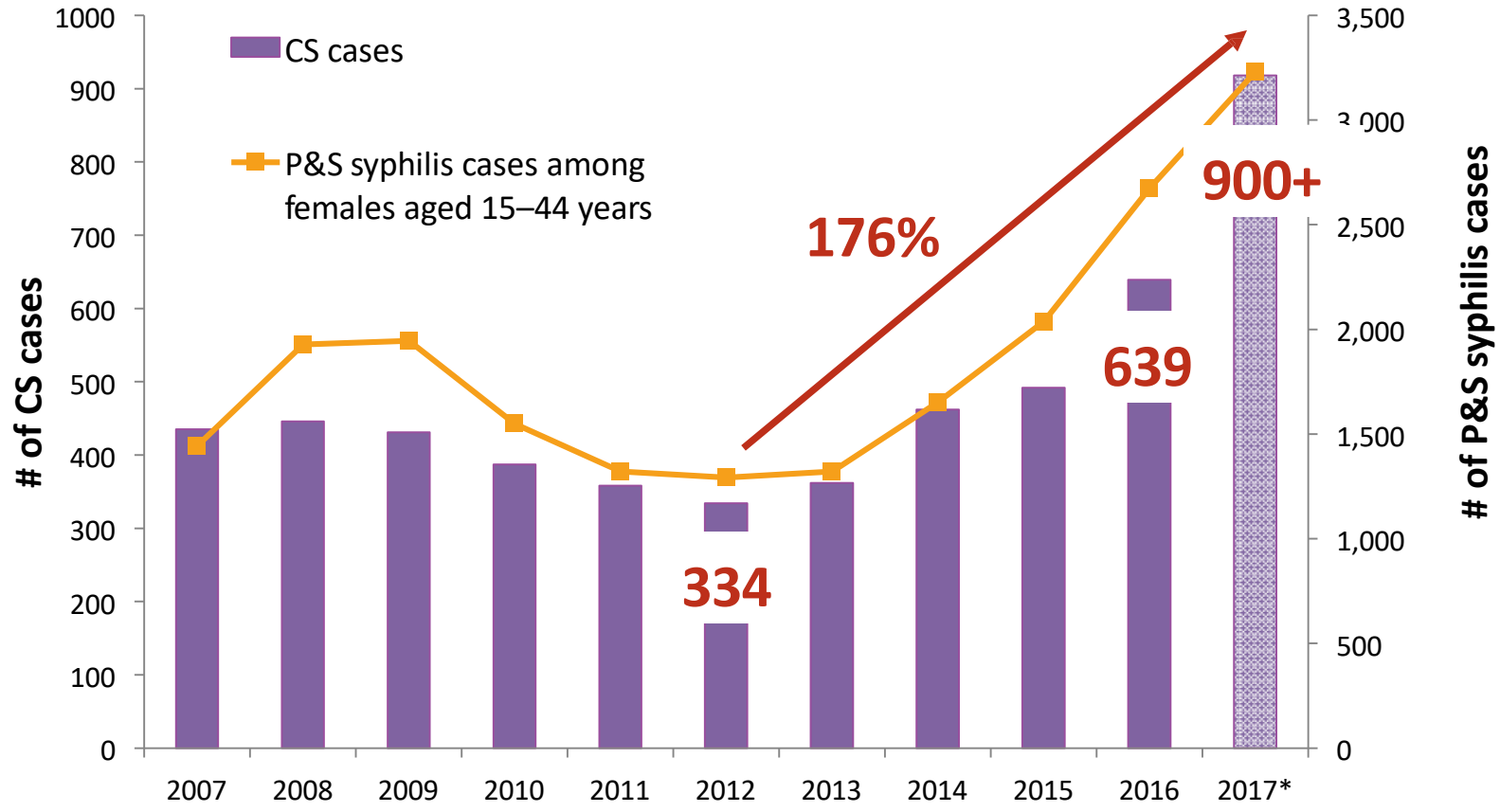
CDC estimates more than 55,000 people are infected each year

*Data for 2017 are preliminary as of April 12, 2018

Primary and Secondary Syphilis — Rates of Reported Cases by Race, Hispanic Ethnicity, and Sex, United States, 2017 (Source: CDC)

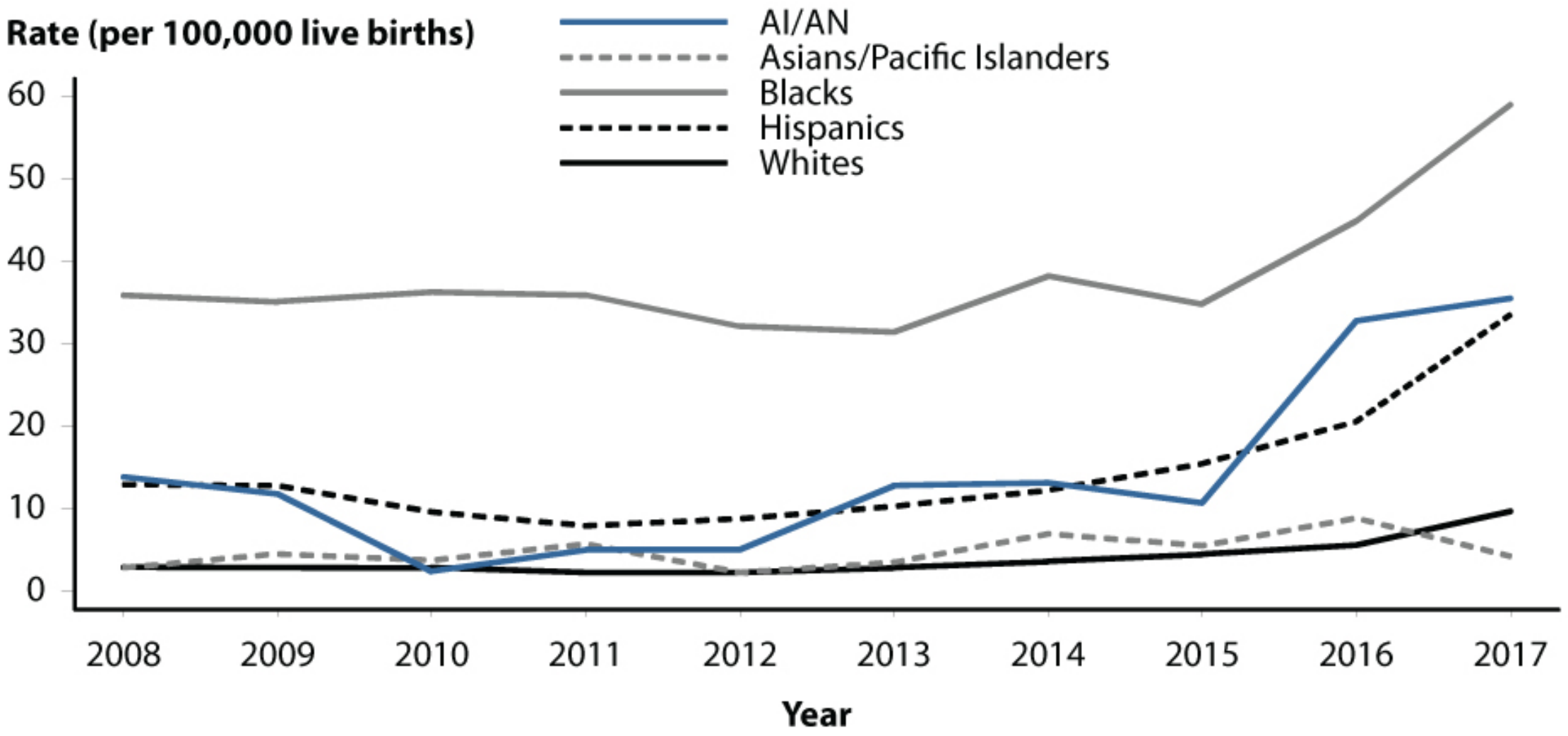


Congenital Syphilis (CS) Cases and Primary and Secondary (P&S) Syphilis Cases Among Females of Reproductive Age, U.S., 2007–2017*



*Data for 2017 are preliminary as of 06/30/2018.

Congenital Syphilis — Rates of Reported Cases by Year of Birth, Race, and Hispanic Ethnicity of Mother United States, 2008–2017 (Source: CDC)



Congenital Syphilis Cases (2017)

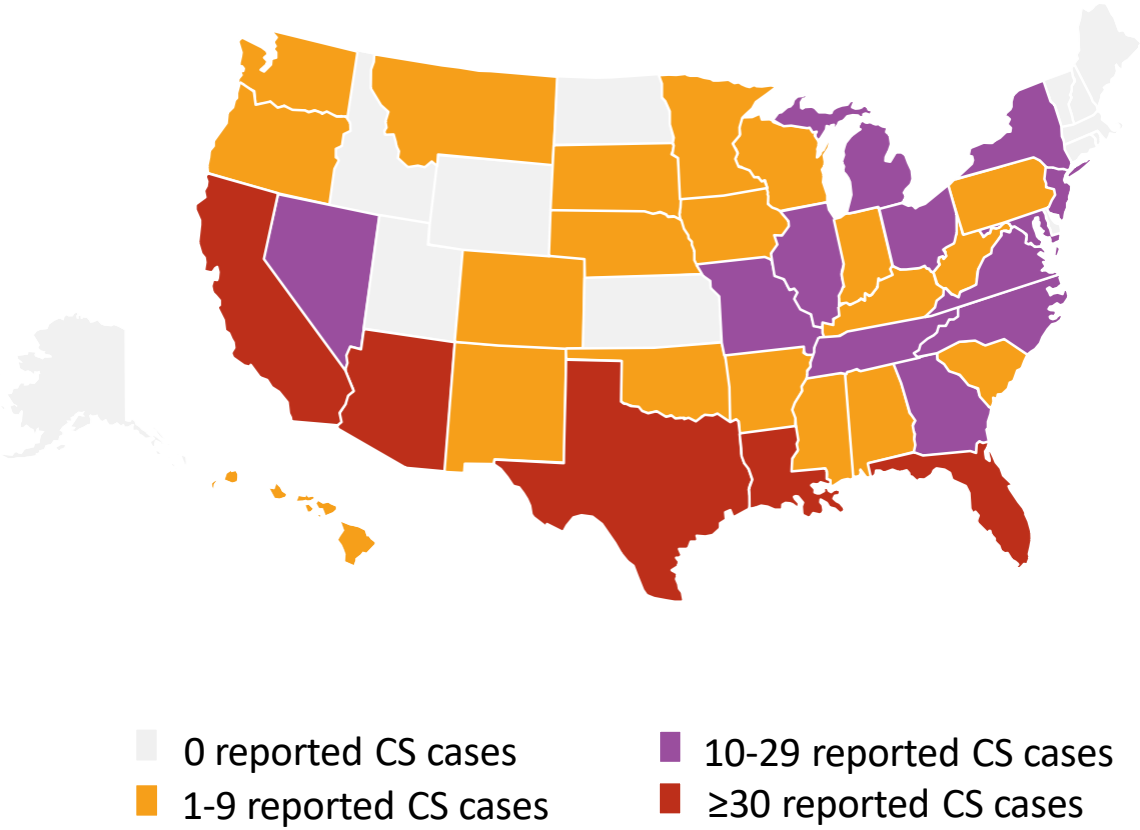
County of Los Angeles Public Health

Thirty-seven U.S. states reported at least 1 congenital syphilis case in 2017.

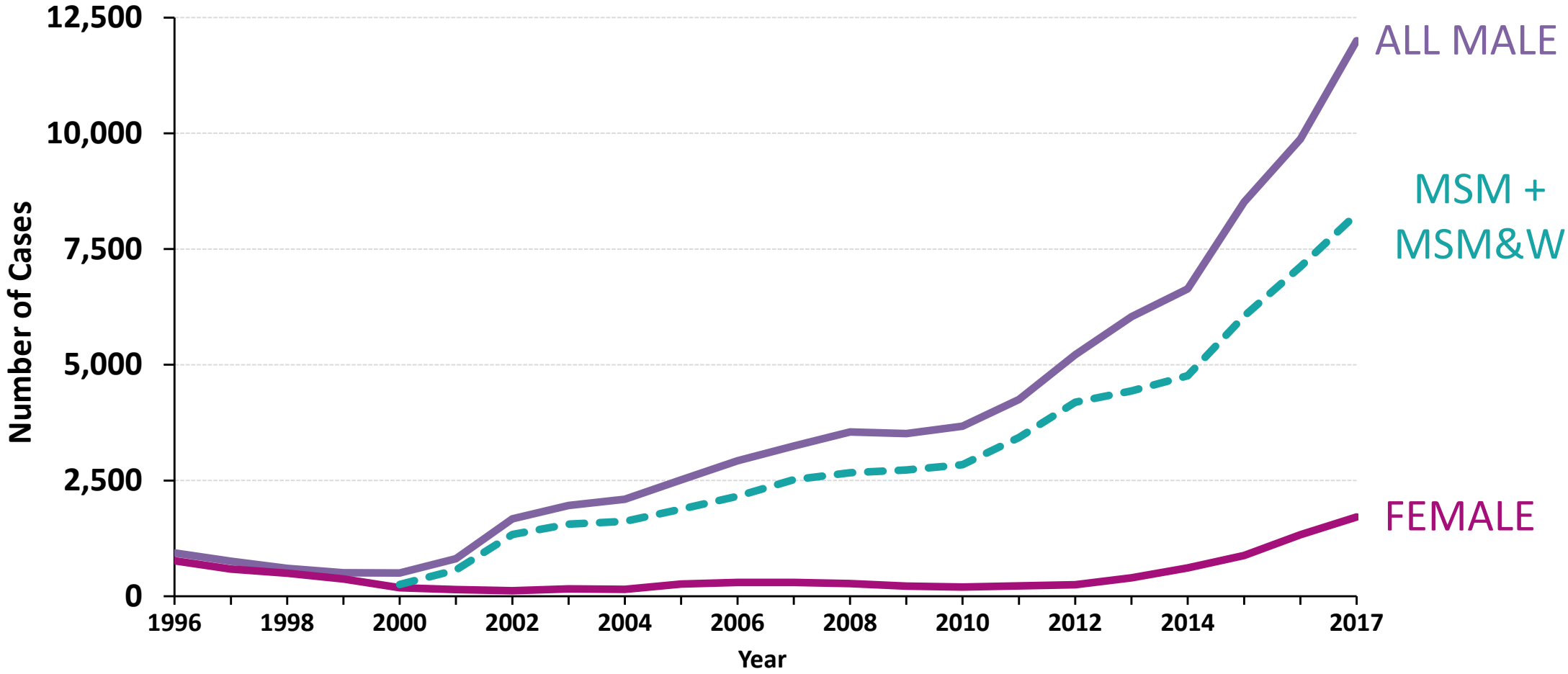
In 2017, 5 states represented 70% of all congenital syphilis cases in the U.S.

State	2012 Cases	2017* Cases
CA	35	281
TX	78	176
FL	37	93
LA	33	59
GA	16	23
MD	12	20
AZ	14	30
IL	23	21
OH	19	18
U.S. Total	**334**	**918**

*Congenital syphilis data are preliminary as of July 2018



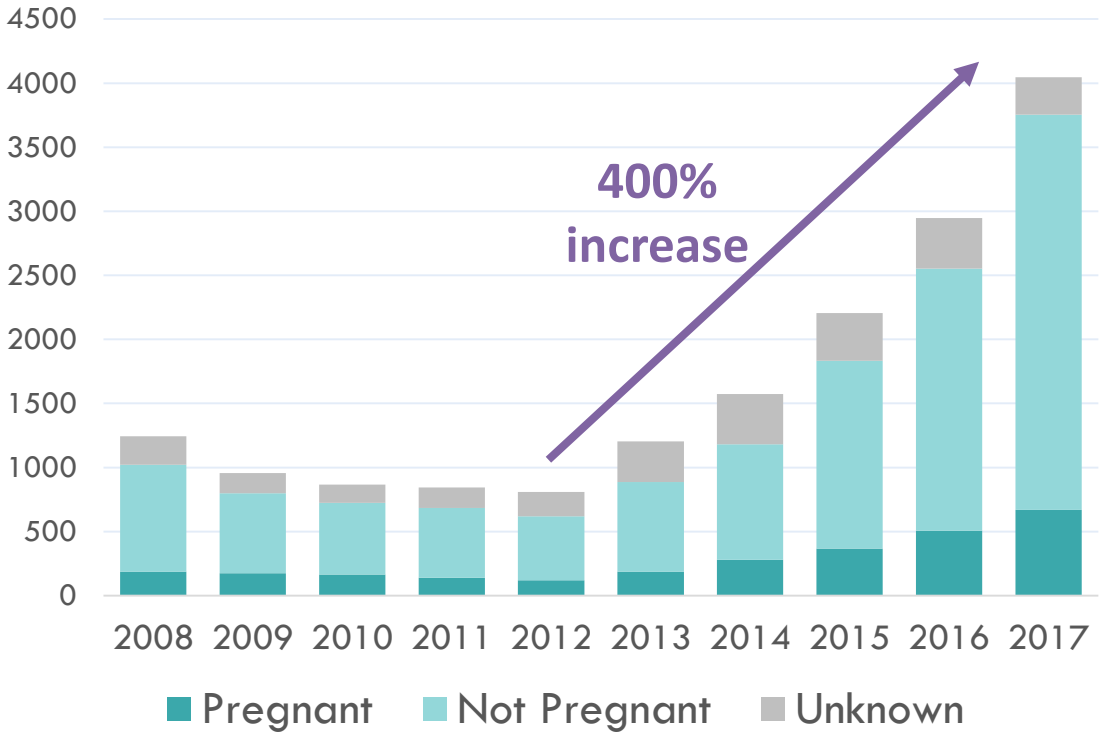
Early Syphilis*, Cases by Gender; California, 1996–2017



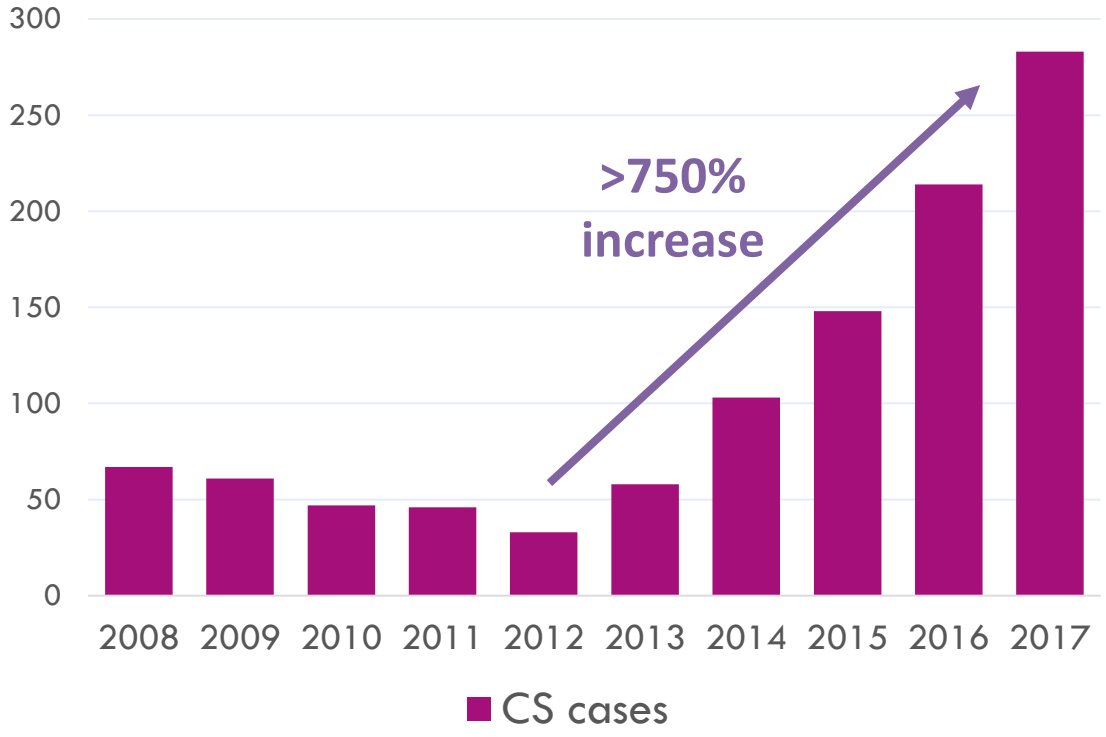
* Includes primary, secondary, and early latent syphilis.

Syphilis in females and infants has been increasing in California since 2012

Female syphilis cases (all stages)

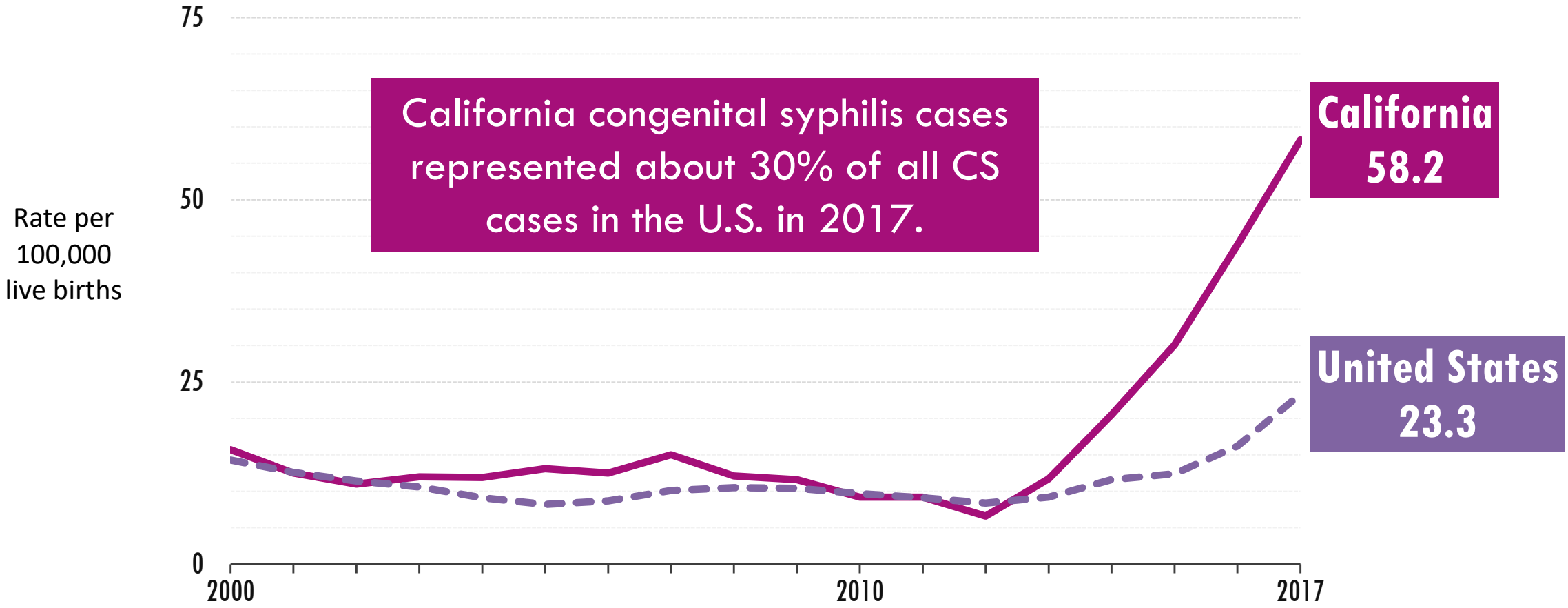


Congenital syphilis cases



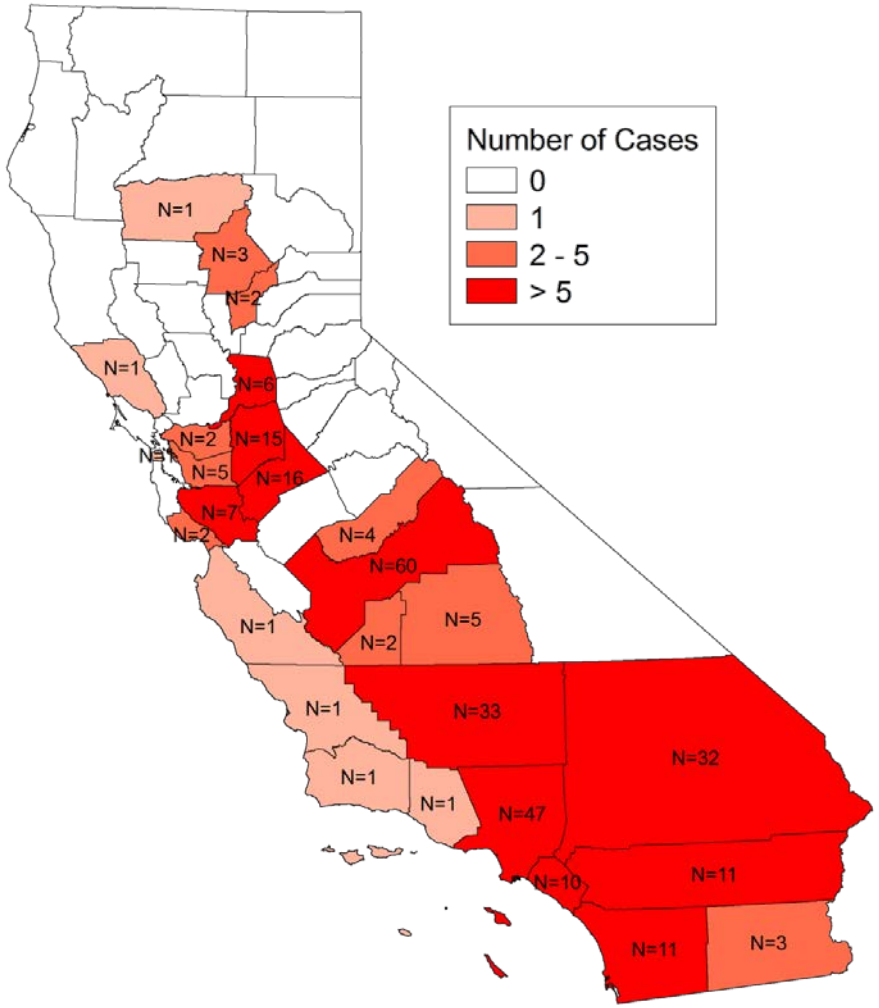
Data Source: CA Department of Public Health, STD Surveillance, 2017

The rate of congenital syphilis is increasing at a greater pace in California



Data Source: CA Department of Public Health, STD Surveillance, 2017

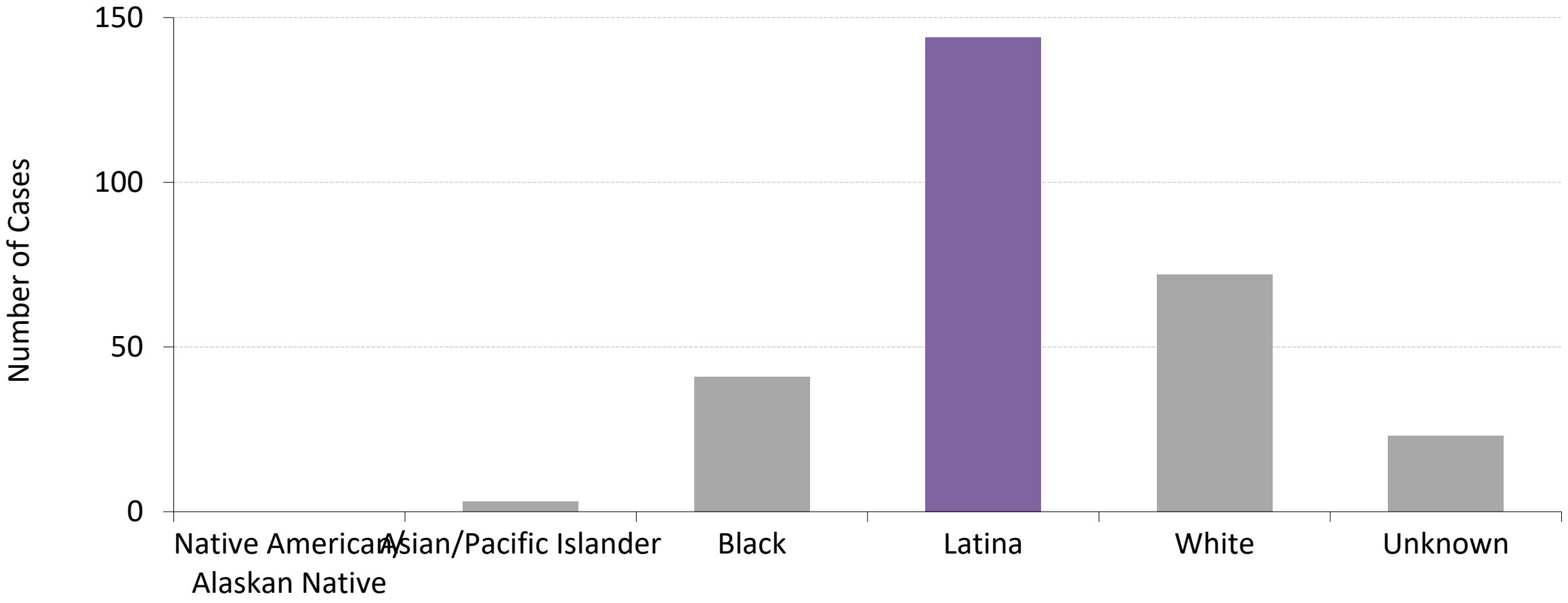
The highest congenital syphilis morbidity counties in California are in Central and Southern regions of the state.



In 2017, 9 (out of 58) counties in California reported ≥10 congenital syphilis cases.

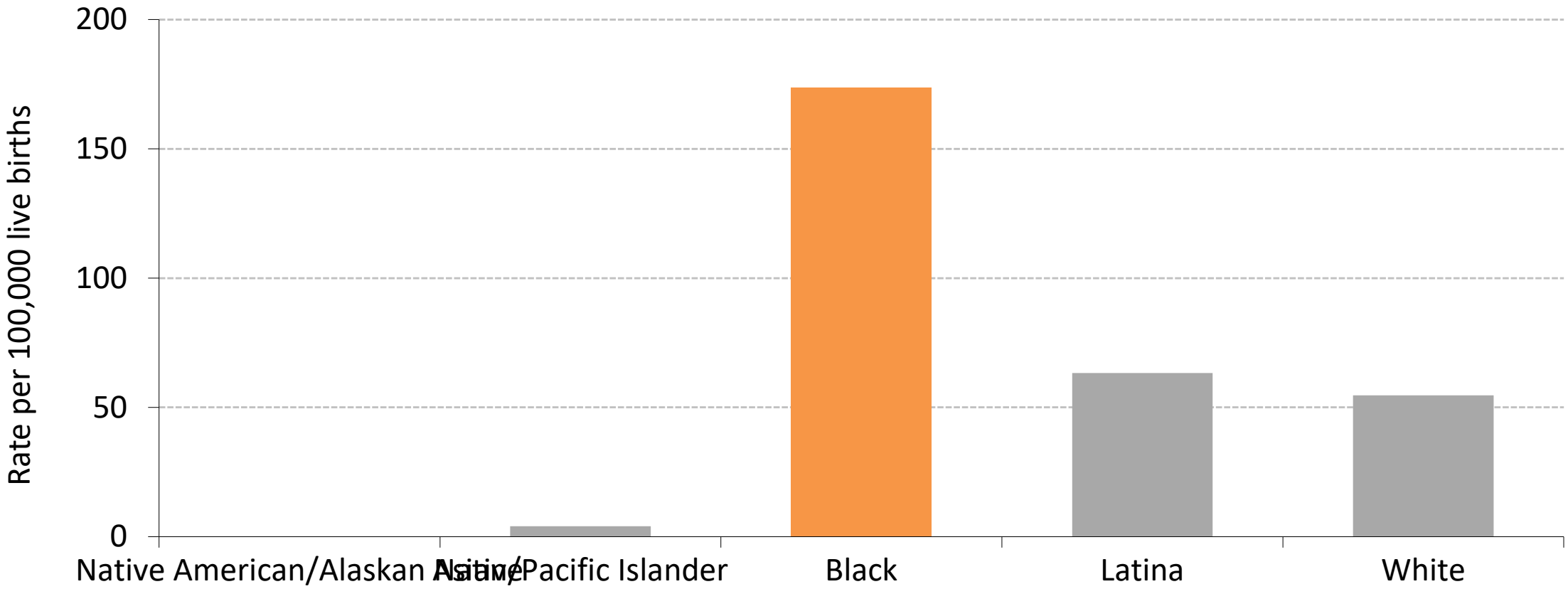
Data Source: CA Department of Public Health, STD Surveillance, 2017

Most cases of congenital syphilis were born to Latina mothers



CPA surveillance data, 2017

However, the highest rate of congenital syphilis is among black mothers

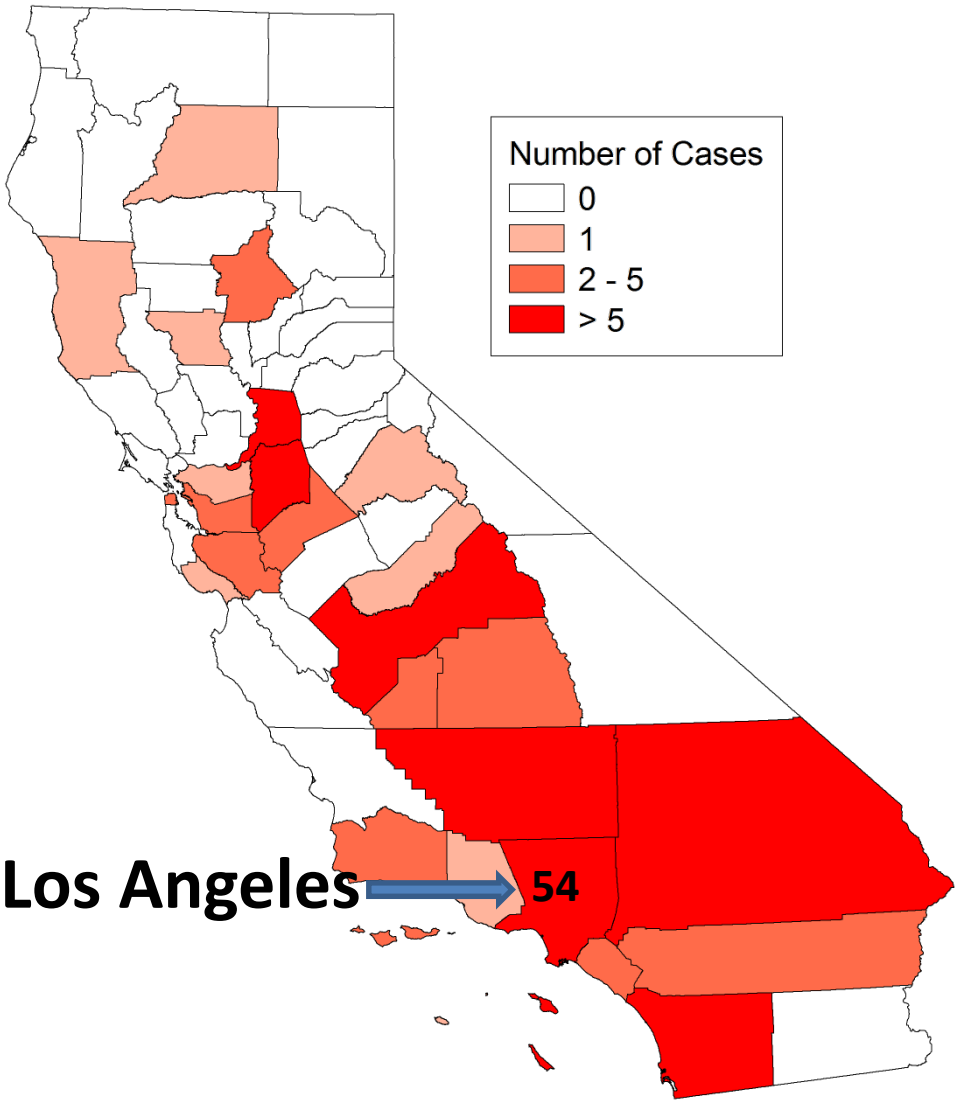


CPA surveillance data, 2017

Rev. 7/2018

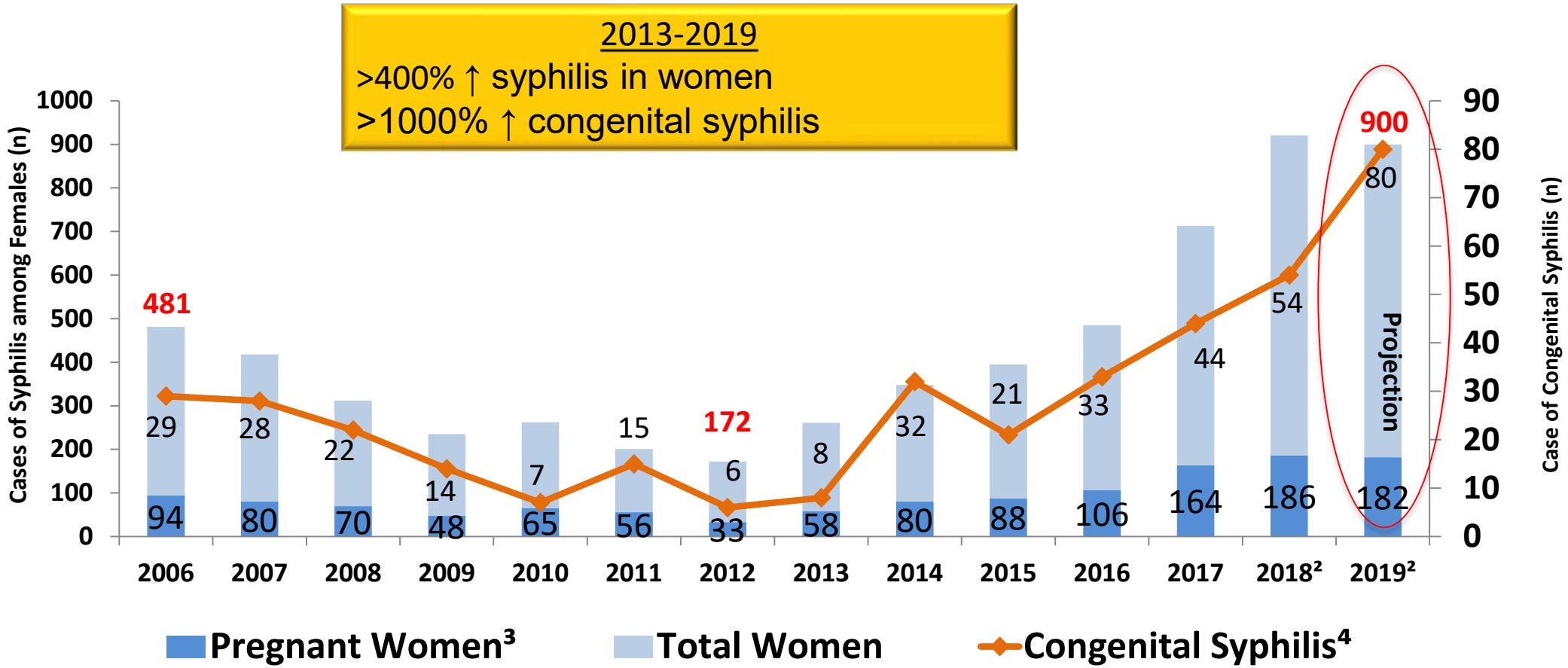
Congenital Syphilis

Number of Cases - LAC 2018-PRELIMINARY



Rev. 6/2018

Number of Female Syphilis Cases and Congenital Syphilis Cases, Los Angeles County, 2006-2019[1]



[1] Data are from STD Casewatch as of 06/16/2019 and excludes cases from Long Beach and Pasadena

[2] 2018-2019 data are provisional due to reporting delay. 2019 projections are based on provisional data. As of 06/30/19, 40 congenital syphilis cases have been reported.

[3] Syphilis among females of reproductive age (ages 15-44) including all cases staged as primary, secondary, early latent and late latent

[4] Congenital Syphilis includes syphilitic stillbirths

Source: Division of HIV and STD Programs

Syphilis in Women of Reproductive Age in LAC by Race/Ethnicity

Figure 1. Rate of Syphilis among Women Ages 15-44 by Race/Ethnicity, LAC, 2012 (n=160) and 2017 (N=640)[1]

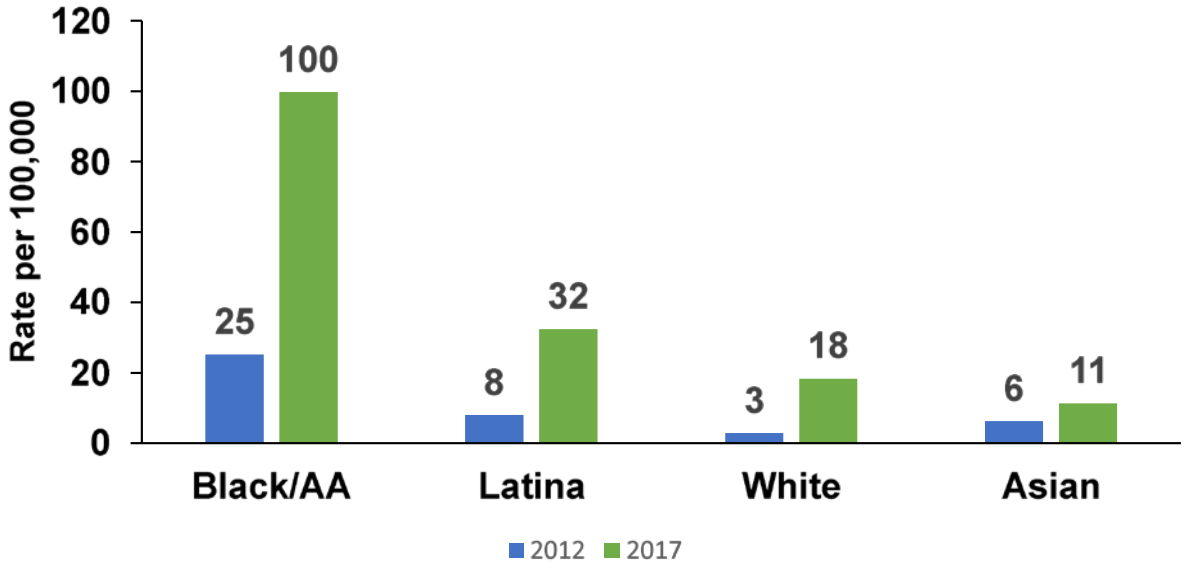


Figure 4 Syphilis Cases among Reproductive Age Women, 15-44 years, by Race/Ethnicity, LAC, 2018[1]

Race/Ethnicity	Number of Cases (%), 2012	Number of Cases (%), 2018
Latina	86 (50)	485 (52)
Black/African American	42 (24)	201 (22)
White	14 (8)	111 (12)
Asian	18 (10)	44 (5)
Other/Missing/Unknown	13 (8)	83 (9)
Total[2]	173	924

[1]Total syphilis includes all cases staged as primary, secondary, early latent, late latent and late; data for Native Hawaiians, Pacific Islanders, Native Americans, Alaska Natives, Multiple Race and Other Race are suppressed due to small numbers; 2017 data are provisional due to reporting delay and exclude cases in Long Beach and Pasadena.

Characteristics of Women Giving Birth to Babies with Congenital Syphilis, LAC 2018 (n=54) Median Age: 29.2 years (range 16-38)

	Percent
Race/Ethnicity	
Latina	62%
African American	32%
(n=47)	
Methamphetamine	81%
Cocaine	6 %
Heroin/opiates	7 %+
Ecstasy	3 %
Incarceration	26 %
Major mental illness	20%

Most Women who Give Birth to Babies with Congenital Syphilis Don't Receive Prenatal Care or are Poorly Engaged with Care

* Excludes persons for whom data were missing. Marijuana not included as substance use. + All heroin users also used meth

LAC Congenital Syphilis Root Case Analysis: 2016-2018 Cases

131 CS Cases in LAC*(2016-2018)
(127 women, 2 twin sets, 1 triplet)

2 Foreign Nationals (2 LL)
No-PNC, Returned to Mexico after delivery (1)
Late 3rd Trim-PNC, Tx <4 wks. prior delivery (1)

125 LAC Resident Women

74 (59%) Women with Late/No Prenatal Care
(8- 2°SY, 15 EL, 51 LL)
6 stillbirths, 3 born alive then died

51 (41%) Women with Early Prenatal Care
1 born alive then died

30 Women w PNC 1st Trimester (2- 1°SY; 17 EL; 11 LL)

- Inadequate Tx/Interval Tx gap (10)
- Woman became infected between 1st-2nd trimester and delivery, no 3rd trimester screen (11)
- Woman became infected between 3rd trimester and delivery (5)
- Lost to Follow-up (4)

21 Women w PNC in 2nd Trimester (1- 1°SY; 6 EL; 14 LL)

- Inadequate Tx/Interval Tx gap (4)
- Woman became infected between 2nd trimester and delivery; no 3rd trimester screen (10)
- Woman became infected between 3rd trimester and delivery (4)
- Lost to Follow-up (2)
- Unable to verify prior syphilis treatment out of USA (1)

1°SY = primary syphilis; 2°SY=secondary syphilis; EL= early latent; LL= late latent
In 2018- 52 of 54 cases were “probable CS”, with 2 “confirmed CS” (stillbirths); 2 Born Alive and later Died
In 2017- 42 of 44 cases were “probable CS”, with 2 “confirmed CS” (stillbirths); 2 Born Alive and later Died
In 2016- 32 of 34 cases were “probable CS”, with 2 “confirmed CS” (stillbirths)
Probable CS is a CDC Surveillance Definition, EL=Early Syphilis, LL=Late Latent Syphilis; Note Born Alive and later died counted as probable

Key Findings of CS Case Reviews

- Almost 50% of the cases were identified by syphilis screening at delivery
- ~ 60% of women receive late (20%) or no prenatal care (40%)
- ~75% of the women had no treatment of syphilis prior to delivery and 20% were inadequately treated
- Most cases occur primarily among Latina (3 out of 5) and African American (1 out of 4) women

<u>Common co-morbidities:</u>

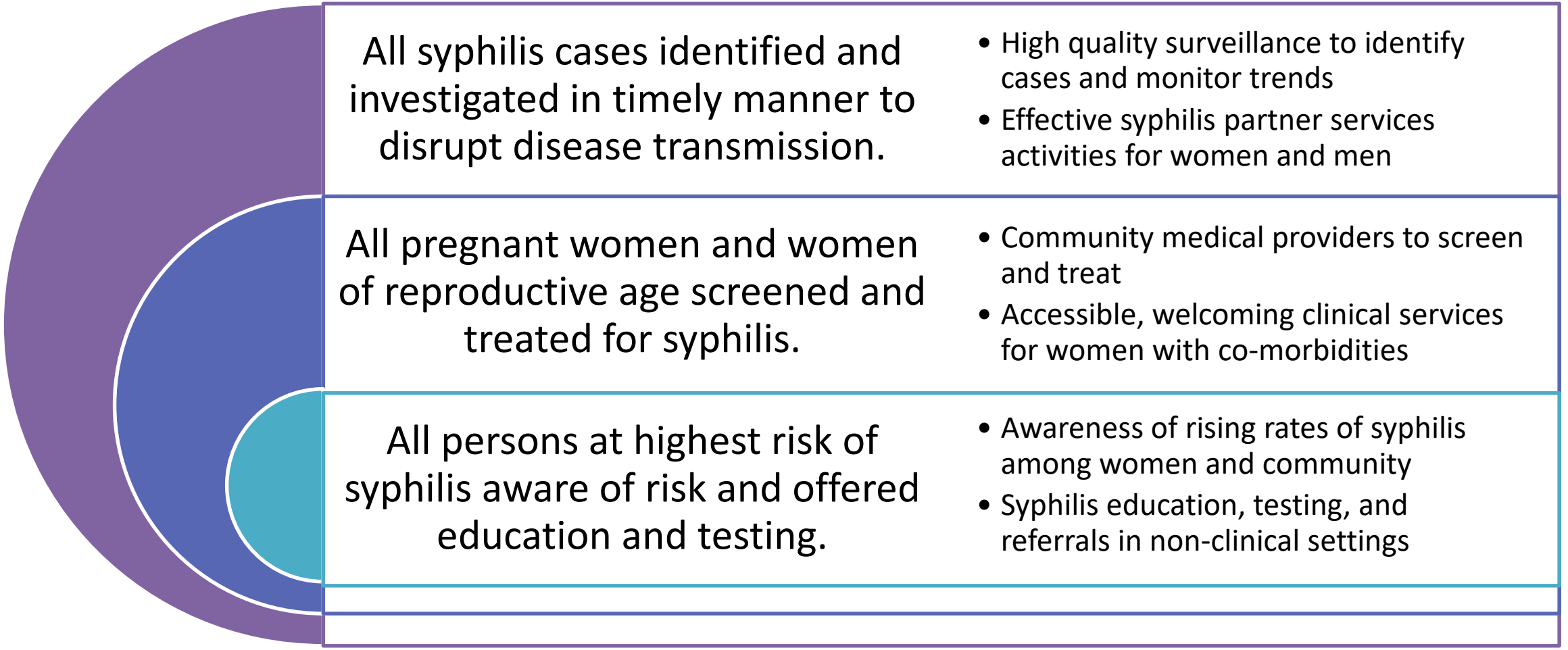
- History of arrest or incarceration
- Experiencing unstable housing or homelessness (10-20%)
- >2/3rds report active SUD during pregnancy, with methamphetamine use most common
- >30% of infants placed into the custody of DCFS due to maternal substance use (70% in 2019)

Key Findings of CS Case Reviews

Clinical Issues:

- High mortality rate (up to 9%)
- Of the 50% cases detected at delivery, often women are discharged prior to their syphilis test results returning
  - Ex: 2 separate CS exposed infants to same woman who remains inadequately treated for late syphilis
  - Some of the women are in/out of LAPD/LASD custody but only there for hours
- Many cases when woman infected or re-infected between first screening and delivery, woman not involved in regular prenatal care
  - Limited impact of third trimester screening
- Delays in Infection Control Personnel calling/notifying the DPH
- Two women in 2018 diagnosed with both HIV+ and syphilis during pregnancy (with one infant perinatally infected with HIV)

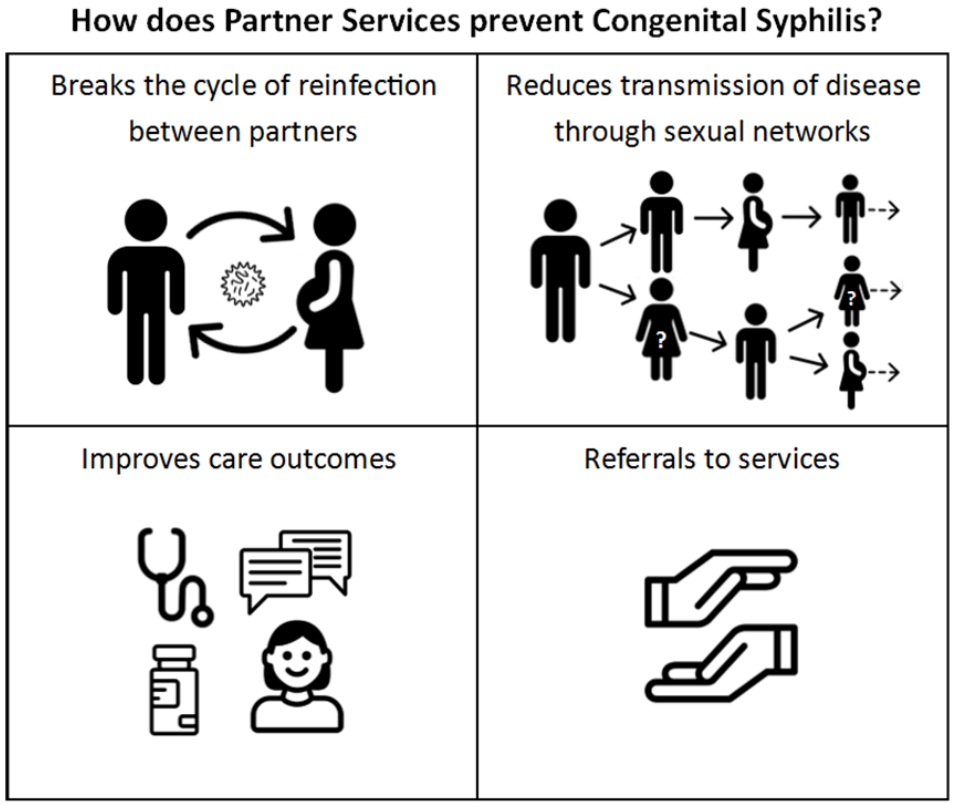
LAC Congenital Syphilis Elimination Goals and Strategies



Eliminating Congenital Syphilis in Los Angeles County: A Call to Action, Draft July 2019.

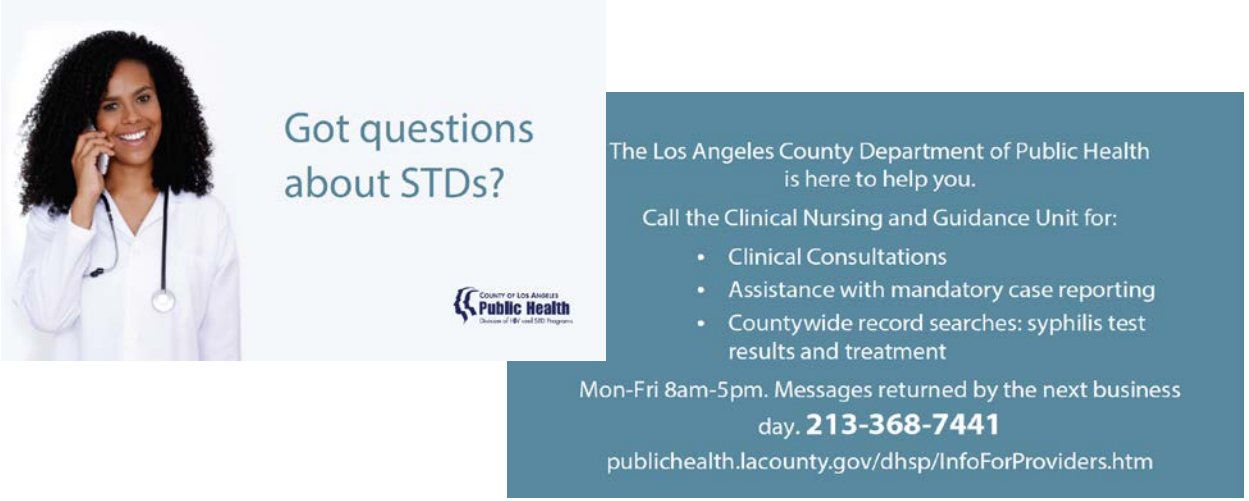
Goal 1: All syphilis cases identified and investigated in timely manner to disrupt disease transmission.

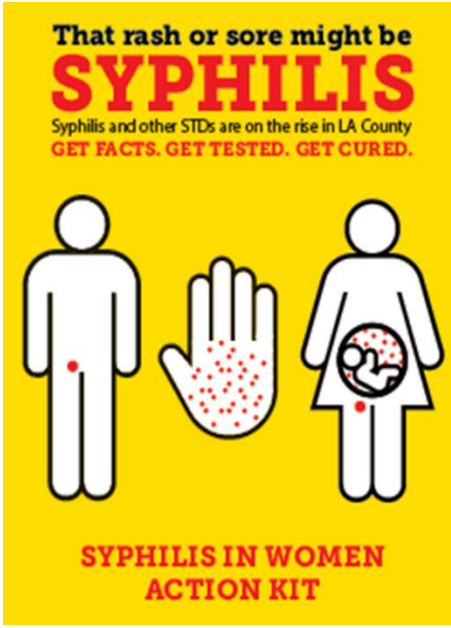
- High quality surveillance activities to identify cases and monitor trends
- Effective syphilis partner services activities for women and men



Goal 2: All pregnant women and women of reproductive age will be appropriately screened and treated for syphilis in LAC.

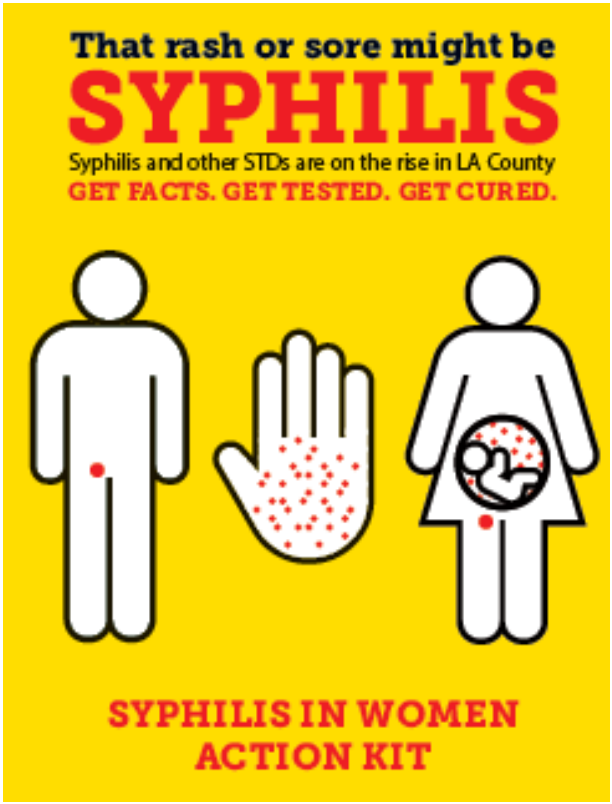
- Mobilize community medical providers servicing this population to screen and treat
  - Disseminate syphilis screening recommendations through public health detailing and technical assistance
  - Increase collaboration with key medical provider groups (OB, birthing hospitals, Title X, PCPs, ED providers)





Public Health Detailing Campaign and Action Kit

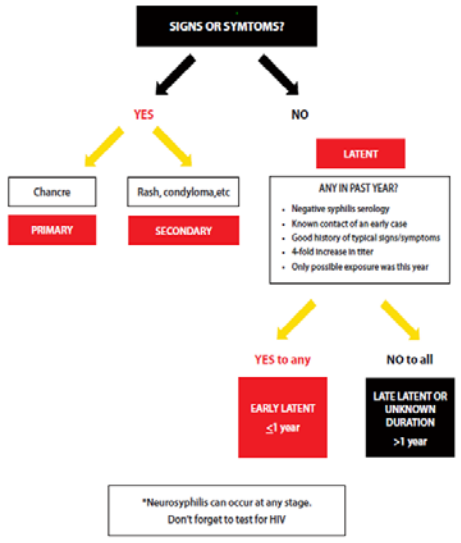
- 4 public health detailers conducted a brief syphilis tutorial and assessment at initial visit
- Follow-up sessions conducted with medical providers during an 8-week period
- Medicaid OB and providers in LAC who had diagnosed ≥ 1 a case of syphilis in a woman in 2017 (n=432)
- Key messages
  1. Screen all women of reproductive age
  2. Screen all pregnant women for syphilis during the first trimester or at their initial prenatal visit.
  3. Re-screen pregnant women for syphilis early in the third trimester (28-32 weeks) and at delivery.



Taking a sexual history, syphilis screening, staging and treatment

Traditional Syphilis SCREENING

Syphilis STAGING



Courtesy of CDPH, STD Control Branch, October 2017

Take a sexual history of all patients:
GETTING THE CONVERSATION STARTED

Post in your workspace

Some patients may not be comfortable talking about their sexual practices. It is critical to put them at ease by informing them that this is a routine conversation you have with all patients as part of their medical exam and anything they say will remain confidential.

WHO?
- Number of partners in the past year
- Gender
- Steady and/or casual partners
- Partner's risk factors (multiple sex partners, incarcerated, HIV +)

HOW?
- Types of sex (vaginal, oral, anal)
- Sex while under the influence of drugs and alcohol

WHAT?
- Methods to protect yourself from STDs/HIV
- Methods to prevent pregnancy
- Previous history of STDs

TIPS FOR HAVING CONVERSATIONS ABOUT SEXUAL HISTORY:
- Emphasize this is routine for all patients
- Ensure confidentiality
- Be non-judgmental (verbal and non-verbal)
- Make it conversational (ask open-ended questions)

Reverse Sequence Syphilis SCREENING

Syphilis Treatment RECOMMENDATIONS

	STAGE OF SYPHILIS	RECOMMENDED REGIMENS	DOSE/ROUTE
Early Syphilis	Primary, Secondary, and Early Latent Less than 12 months	Benzathinepenicillin G	2.4 million units IM in a single dose
Late Syphilis	Late latent or unknown duration Greater than 12 months	Benzathinepenicillin G	7.2 million units IM administrated as 3 doses of 2.4 million units IM each, at 1-week intervals

*For Neurosyphilis and Ocular Syphilis see CA STD Treatment Guidelines

Additional Treatment Information
- On the day of treatment, order an RPR test for a "day of treatment titer." This will serve as a benchmark to determine whether patient has adequate treatment response.
- Longer treatment duration is required for persons with syphilis of unknown duration or late latent syphilis (infected greater than 12 months) to ensure adequate treatment.
- **Intramuscular Benzathine penicillin G is the only therapy with documented efficacy for syphilis during pregnancy.** Pregnant women with syphilis in any stage who report penicillin allergy should be desensitized and treated with penicillin.
- Pregnant women diagnosed with late syphilis (3 doses) must be treated exactly **7 days** apart. Pregnant women who miss any doses must repeat full course of therapy.
- If patient is not pregnant and allergic to penicillin, consider alternative regimens; see CA STD Treatment Guidelines.

Treating Partners
- Persons who are a known sexual contact of a partner diagnosed with early syphilis should be treated presumptively for early syphilis, even if serologic test results are negative.
- If you are unable to locate or treat partner(s), please call the Los Angeles County Department of Public Health Partner Services Line 213-639-6231 for assistance.

Assistance

For help interpreting test results and guidance on appropriate staging and treatment, call the **Clinical Guidance and Nursing Unit (213) 368-7441** at the Los Angeles County Department of Public Health.

All cases of syphilis must be reported to the Department of Public Health within **one** working day. (California Health and Safety Code 120675-120715) **http://publichealth.lacounty.gov/dhsp/ReportCase.htm**

Goal 2: All pregnant women and women of reproductive age will be appropriately screened and treated for syphilis in LAC.

- Ensure accessible and welcoming clinical services for women with co-morbidities
  - Explore new models of care for clinical services
    - Possibly new perinatal case management services
    - Consider roving OB team model
    - Express STD clinics to increase # patients seen and treated for syphilis

Homelessness and pregnancy intentions, San Francisco

	N=32
Age (mean)	31 years
Homeless >1 year	78%
Unsheltered	69%
Desire pregnancy in the next year*	(n=30)
Yes	30%
Don't know	17%
How would you feel if you found out you were pregnant today?	
Somewhat or very happy	63%
Unsure	14%
Somewhat or very unhappy	27%
* Two women were pregnant at the time of interview	

Seidman, Newmann, unpublished data 2018.

Bixby Center for Global Reproductive Health | UCSF University of California San Francisco

Homelessness and contraception, San Francisco

	N=30
Pregnancy prevention at last intercourse	
Nothing	47%
Withdrawal	25%
Condoms	14%
Anal or oral sex instead of vaginal	3%
Using a clinician-prescribed contraceptive method	14%

1. Dominika Seidman, MD, MAS, UCSF. *Offering services to pregnant women who are unstably housed or homeless*

Goal 3: All persons at highest risk of syphilis will be aware of the risk and be offered education and testing in non-clinical settings.

- Increase awareness of rising rates of syphilis to women and their community
  - Increase dissemination of STD information and resources
    - Social marketing, reports, website, outreach
    - Community coalitions, established DPH partnerships (ex: CFS)

CDPH

CAPTC

MCAH

Nurse-Family Partnership
Helping First-Time Parents Succeed

LAHSA

Health Services
LOS ANGELES COUNTY

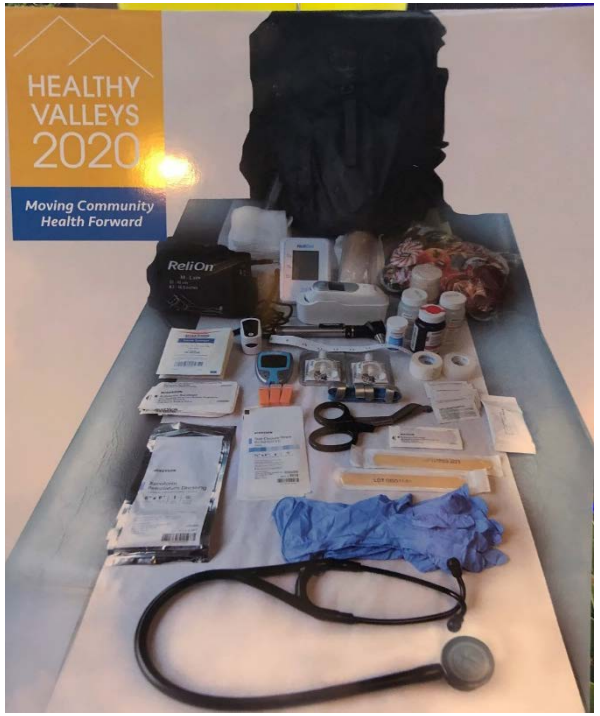
MAMA's NEIGHBORHOOD
a Strong Start for Families

Goal 3: All persons at highest risk of syphilis will be aware of the risk and be offered education and testing in non-clinical settings.

- Increase syphilis testing in non-clinical settings and field (new organizational partners and targeted DPH field response)
  - Mobilize new organizational partners to support education, testing, and referrals
    - Correctional partners – Rapid syphilis testing in CRDF screening
    - SUD providers and syringe exchange programs

Goal 3: All persons at highest risk of syphilis will be aware of the risk and be offered education and testing in non-clinical settings.

- Develop DPH's STD and infectious disease field outreach capacity targeted to persons experiencing homelessness
  - Partner with existing homeless medical services
    - Importance of provider with prescribing authority
  - DPH outreach
    - Full complement of DPH interventions and services
      - Syringe, wound care, vaccines, testing



Rapid Syphilis Screening Pilot with LAHSA in SPA 2 (June 2019)

Considerations for Elevating CS Response in CA

- Declaration of CS outbreak
  - Brings media attention, increased leverage for local HO to issue required screenings
- State HO Order
  - Brings media attention, could require jails to conduct screening of all women of reproductive age
- Medi-Cal Policy Letter
  - Provide appropriate reimbursement for 3rd trimester and delivery screening
- Licensing and Certification Policy Letter
  - Clarification of existing regulations
    - Ex: syphilis screening be provided in all SUD programs; hospitals/ED re: SB 1152
- Emergency Regulation
  - Allows DIS to conduct CLIA-waived tests for reportable diseases (rapid syphilis)
  - Expansion of provision of "incidental medical services" to licensed residential facilities to include screening for diseases

Thank you!

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