

# Congenital Syphilis Prevention

Using Collaboration to Combat Congenital  
Syphilis in Kern County



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# Kern County Demographics



- Population: 865,736
  - 51% Hispanic, 37% White, 5% Black, 4% Asian
  - Median Household Income: \$49,026
  - Children Living Below Poverty: 33%
  - High School Education: 73%
  - Bachelors or higher: 15%
- Geography: 8,161 sq miles
  - I-5 and 99 Fwy North/South, 58 Fwy East/West
  - Valley floor, Sierra mountains, high desert
  - 4 State prisons, 2 Federal correctional facilities
  - 2 military installations
  - Oil and agriculture

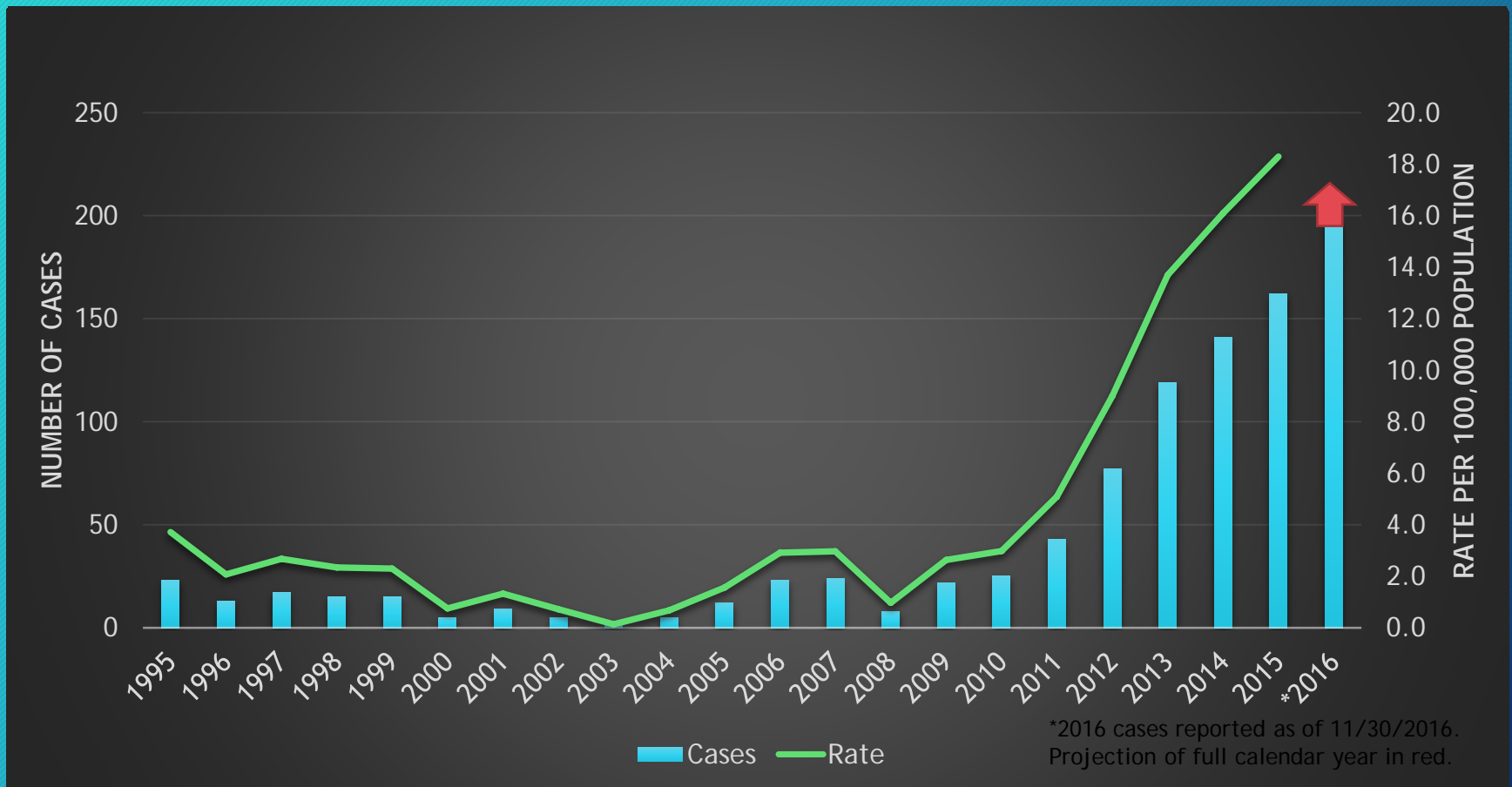
# Kern County Health Outcomes



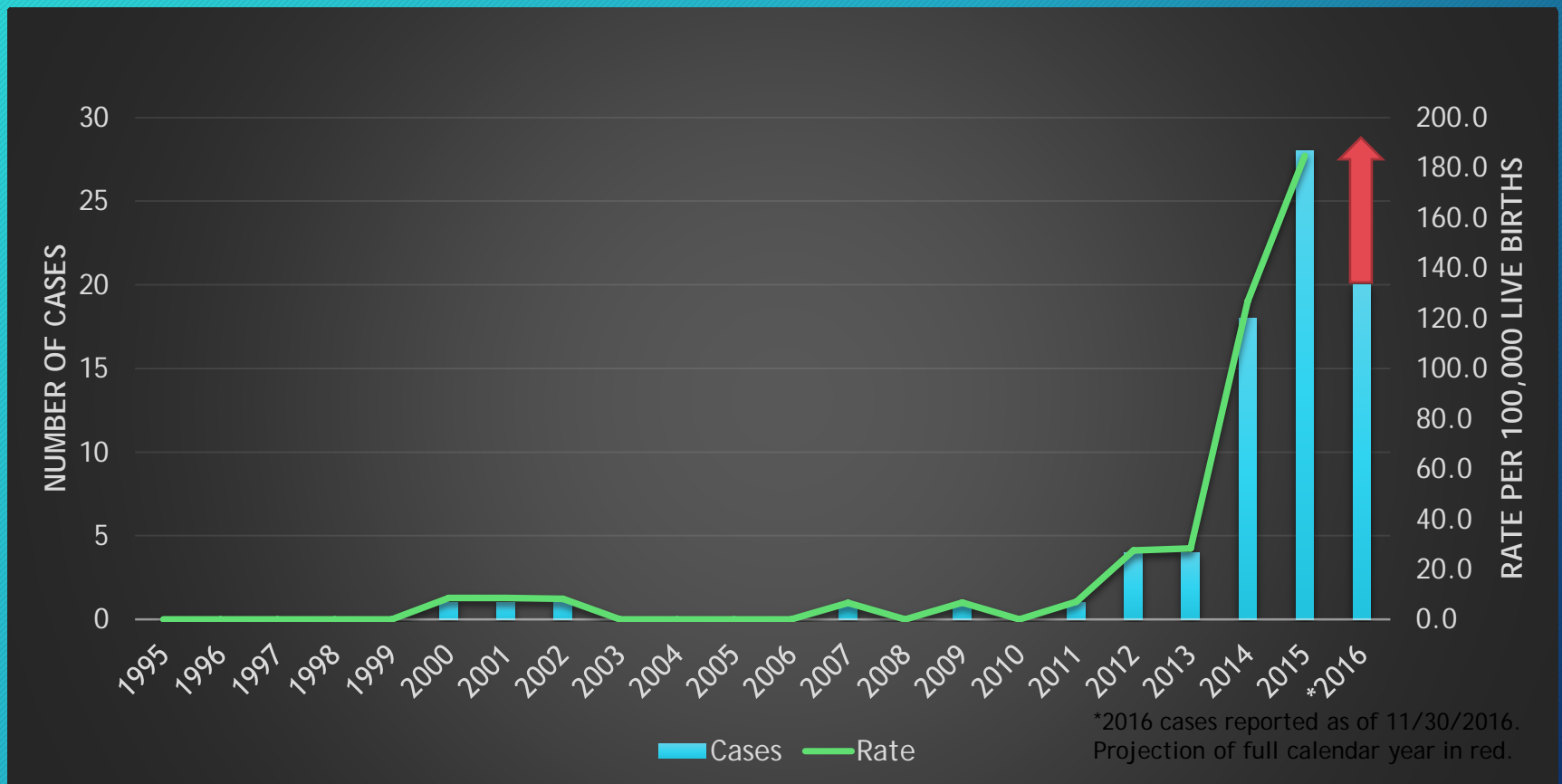
- 7<sup>th</sup> highest all-cause mortality
- Highest mortality due to diabetes
- 3<sup>rd</sup> highest mortality due to heart disease
- 7<sup>th</sup> highest incidence of infant mortality
- Highest rate of births to adolescents
- 2<sup>nd</sup> highest incidence of chlamydia
- 7<sup>th</sup> highest incidence of gonorrhea
- 3<sup>rd</sup> highest incidence of primary and secondary syphilis
- 2<sup>nd</sup> highest incidence of congenital syphilis



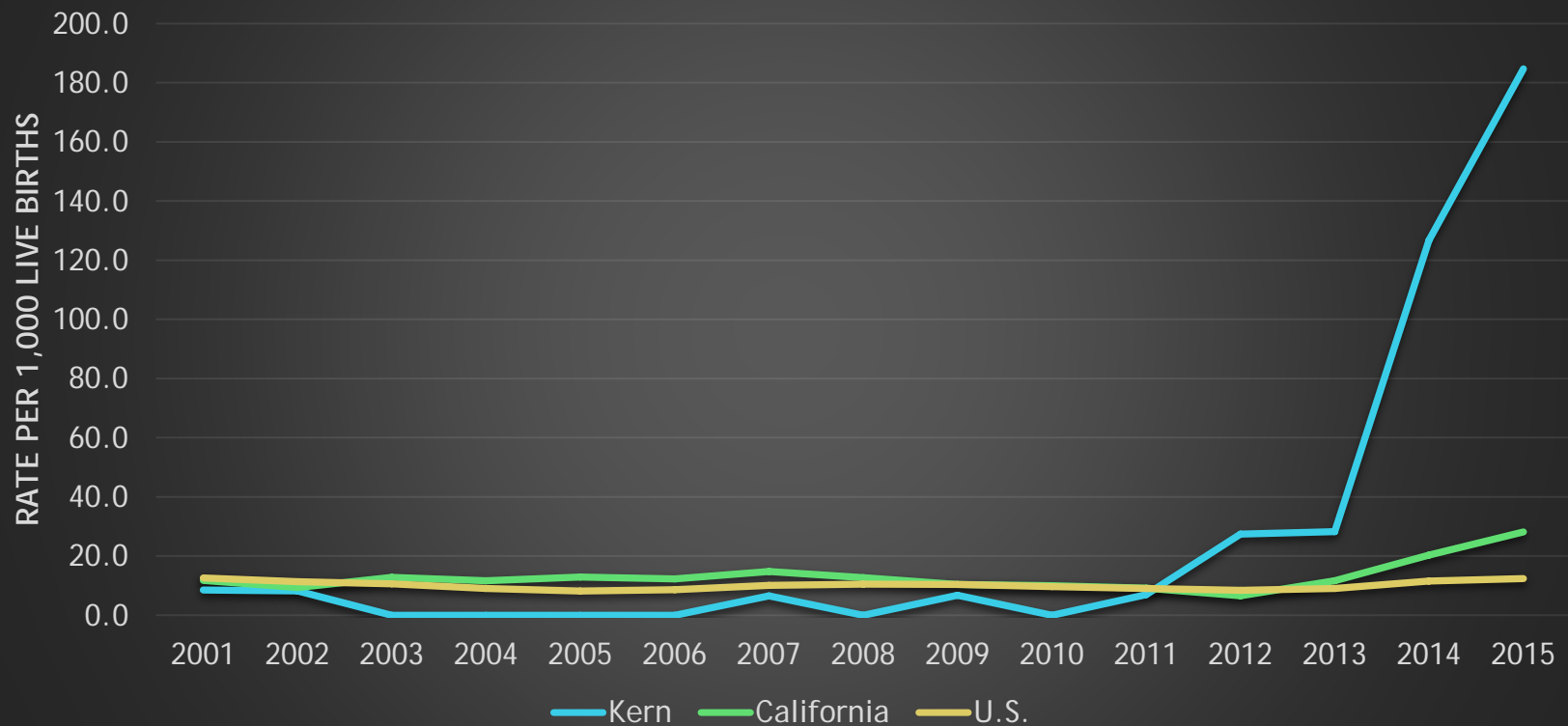
# Kern County Primary and Secondary Syphilis Cases



# Kern County Congenital Syphilis Cases



# Congenital Syphilis Incidence by Jurisdiction



# 18 Probable Congenital Syphilis Cases in 2014

## Identified:

- No prenatal care
- Inconsistent prenatal care
- Failure to complete treatment
  - ❖ Late Latent cases were being closed after 1<sup>st</sup> dose of Bicilin
- Substance use



# Enhanced Surveillance

- Spreadsheet of syphilis cases
- Biweekly case review
- Ensure completion of 3 doses of Bicilin
- Referral to Prenatal Case Management programs and/or Public Health Nursing
- Assistance with transport to clinic



# Case Management Benefits

- Ensured completion of treatment
- Syphilis Education and Dangers of reinfection
- Provide transportation to clinic for treatment
- Determine birthing hospital and send notification

# Case Management Benefits

- Ensure completion of treatment for partners
- Coordination with local jail to ensure treatment
- Coordination with local substance abuse treatment programs

# Advantages of Case Management

- Linkage to prenatal care
- Education resources for mom
- High risk infant follow-up
- Linkage to car seat for infant
- Coordination with CPS



# 28 Probable Congenital Syphilis Cases in 2015

- 5 fetal demises, 1 perinatal death
- 79% mothers with late stage syphilis (asymptomatic)
- 54% mothers with no prenatal care



# 25 Probable Congenital Syphilis Cases in 2016

As of 11/30/16

- 1 fetal demise (32 weeks gestation)
- 68% mothers with late stage syphilis (asymptomatic)
- 60% mothers with no prenatal care

# 30 Congenital Syphilis Cases Ruled Out in 2016

- 30 syphilis(+) females whose infants did NOT develop congenital syphilis
- Mother was adequately treated for stage at least 30 days prior to delivery and infant had no S/S of congenital syphilis

# Successes: Coordinated Health Care

- Coordination with delivery hospital regarding mother's treatment history
  - Infant
    - ❖ Treated in hospital
    - ❖ Referred for additional services
    - ❖ Followed by pediatrician
  - Mother
    - ❖ 1<sup>st</sup> dose in hospital
    - ❖ Additional doses outpatient
    - ❖ Referred for additional services



# Successes

- At least 60 infants born in 2015 and 2016 to syphilis(+) mothers NOT infected with syphilis



# Congenital syphilis public awareness campaign



[kernpublichealth.com](http://kernpublichealth.com)



# Challenges

- Substance use: difficult clients to reach and keep in care
- Lack of transportation and childcare continue to be barriers to care
- No prenatal care and late entry into prenatal care delay diagnosis and treatment

# Opportunities

- Increased collaboration with delivery hospitals
- Increased awareness in the community
- Strategies to address lack of prenatal care
- Strategies to address substance use