How AETCs, Emergency Departments, and health jurisdictions can identify and treat HIV, HCV, and Syphilis

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2022

NATIONAL RYAN WHITE CONFERENCE ON HIV CARE & TREATMENT

Disclosures

Tom Donohoe has no relevant financial interests to disclose.

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Learning Objectives

At the conclusion of this activity, participants will be able to:

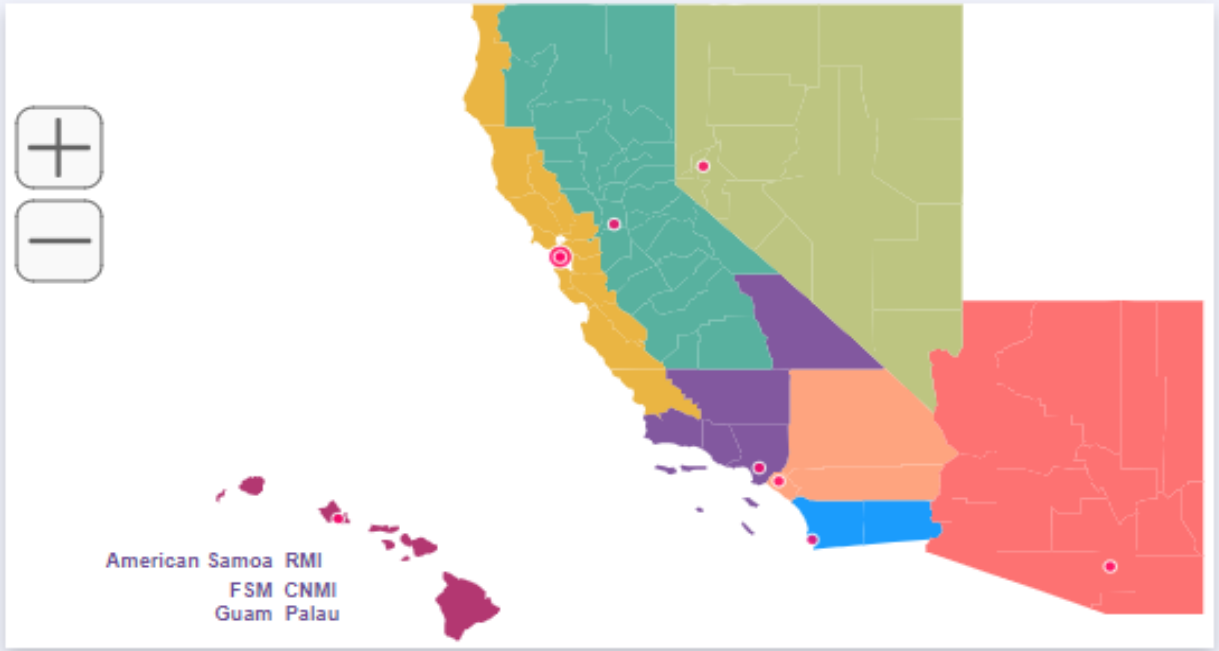
1. Explain the critical role Emergency Departments play in identifying and treating HIV, STIs and SUDs and ending the HIV Epidemic in both urban and rural settings
2. Discuss how AETCs and other Ryan White-funded partners can work with Emergency Departments and health jurisdictions to help high-risk patients link to or re-engage in high quality HIV/HCV treatment
3. Consider how your local AETCs, planning bodies, and others can best work with Emergency Departments and health jurisdictions to maximize health outcomes for the most vulnerable and hard-to-reach populations in your community

Outline

- PAETC, LA AETC, and Kern County
- How collaboration with AETC started
- Critical role of the ED in Ending the HIV Epidemic (EHE)
- Demographics and Epidemiology of Kern County
- Routine HIV, HCV, Syphilis screening and linkage data
- Challenges, Facilitators, and Lessons Learned
- Future Plans, Recommendations, and Sustainability
- Questions and Answers

PAETC, LA AETC, and Kern

PAETC: About Us



Double click on a region in the map to learn more.

About Us

The Pacific AIDS Education and Training Center (Pacific AETC) is a member of a national AIDS Education and Training Center network of eight regional and two national centers, covering all 50 states as well as US Territories and Jurisdictions. Pacific AETC works to expand the number and ability of healthcare professionals and organizations in the Pacific region to provide high-quality HIV-related services to increase access to healthcare and decrease health inequities. Our Regional Office provides overall leadership and program direction and oversight for the 8 Local Partner sites in the Pacific region. The Regional Office is based at UCSF and housed within the Department of Family & Community Medicine.

Learn More

Collaboration: That first call

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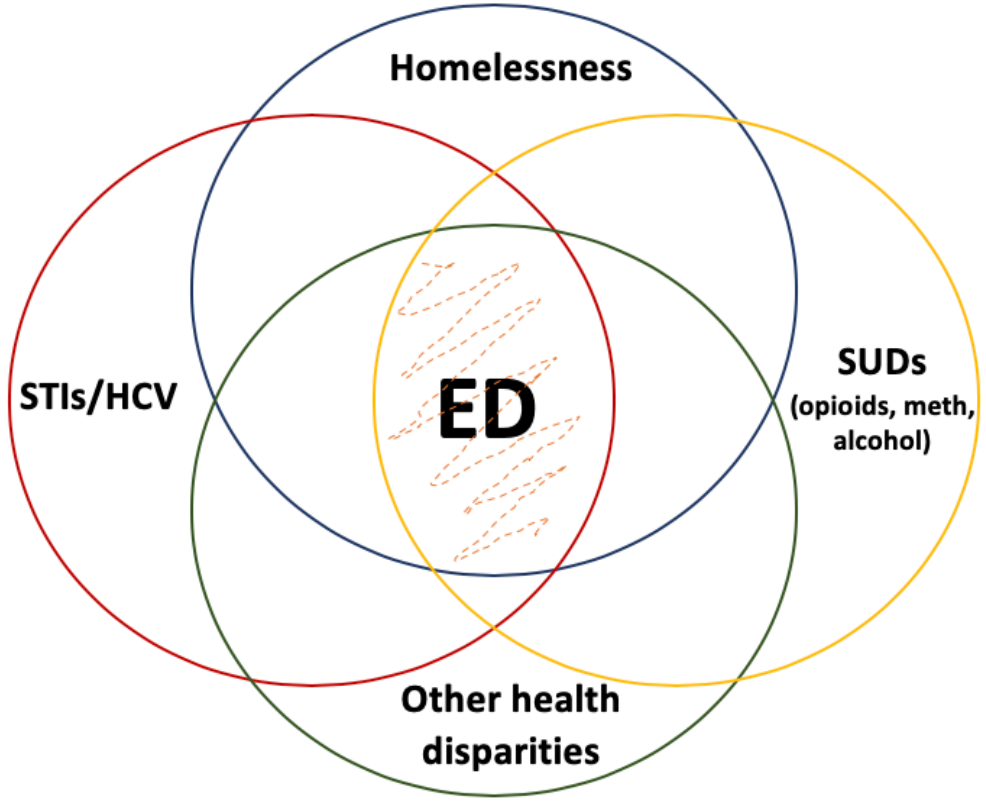
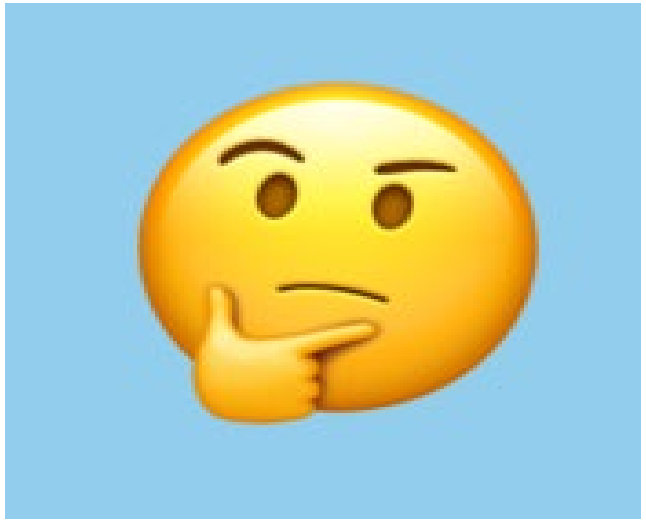
"I'm interested in implementing routine HIV screening in one or more Emergency Departments in Kern County. Can the AETC help?"

Kristopher Lyon, MD ---Thursday, May 17, 2018

Critical Role of ED in EHE



How can the LA AETC help?



Training/TA

Advice/Partners/Consultants

Arizona AETC?

Bernie Branson, MD? Doug White, MD?

Local Contacts Kern (LHJ, AETC, Part C…)

WHERE IS KATHY JACOBSON, MD?

Possible Supplemental Resources/Funders

Federal/State/Local? (Combine projects?)

FOCUS Program ….René Bennet, JD

Workplan/Timeline

Fit this project into our full plate of activities

Be realistic

Critical Role of the ED in EHE

NATIONAL RYAN WHITE CONFERENCE ON HIV CARE & TREATMENT

Kathy Jacobson, MD

Chief, California STD Control Branch & Chair, CA COVID-19 Testing Task Force

ARTICLE IN PRESS

INFECTIOUS DISEASE/REVIEW ARTICLE

HIV Prevention and Treatment: The Evolving Role of the Emergency Department

Kristi Stanley, MD*; Meredith Lora, MD; Stephen Merjavy, MD; Jennifer Chang, MD; Sanjay Arora, MD; Michael Menchine, MD, MPH; Kathleen R. Jacobson, MD

Why Emergency Departments?

NATIONAL RYAN WHITE CONFERENCE ON HIV CARE & TREATMENT

- **HIV patients are 3 times more likely to visit an emergency room, be racial minorities, and lack health insurance compared with their non-HIV counterparts**
  - *Rothman, R. E. et al. Academic Emergency Medicine, 14(7), 653-657. DOI: 10.1197/j.aem.2007.04.004
  - Pitts, S. R. et al. Natl Health Stat Report, 7(7), 1-38. PMID: 18958996
  - Lyons, M. S. et alPublic Health Reports, 120(3), 259.
    Bozzette SA et al. N Engl J Med. 1998;339(26):1897-1904
- **Emergency Departments are a safety net for people with HIV**
- **Often the sole point of entry into the healthcare system**

(Hsieh et al, Annals of EM, July 2015)

HIV Testing in the ED

- **Roll-Out**
  - **Paralleled declines -- rates undiagnosed HIV**
- **Made significant strides**
  - **Curbing the HIV epidemic in the US**

Hansoti B, Kelen GD, Quinn TC, Whalen MM, DesRosiers TT, Reynolds SJ, Redd A, Rothman RE. A systemic review of emergency department-based HIV testing and linkage to care initiatives in low resource settings. PLoS One. 2017 Nov 2;12(11):e0187443. doi: 10.1371/journal.pone.0187443. eCollection 2017.

Case 1

- 45 year old homeless black female comes in for a sore throat, abdominal pain, fever to 102.5. You tell her that you will be getting some labs today including an HIV test.
- SH- ETOH
- Raped 3 weeks ago while under the influence
- Results of Routine Screen
  - Antigen/antibody combo: POSITIVE
  - HIV-1/2 antibody differentiation: pending
  - HIV viral load: pending

Acute HIV in the ED

Annals of Emergency Medicine
An International Journal

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Acute HIV Discovered During Routine HIV Screening With HIV Antigen-Antibody Combination Tests in 9 US Emergency Departments

Presented at the International AIDS Conference, July 2016, Durban, South Africa; and the American Public Health Association annual meeting, November 2017, Atlanta, GA.

Douglas A.E. White, MD[a,*], Thomas P. Giordano, MD, MPH[b], Siavash Pasalar, PhD[c], Kathleen R. Jacobson, MD[d], Nancy R. Glick, MD[e], Beverly E. Sha, MD[f], Priya E. Mammen, MD, MPH[g], Bijou R. Hunt, MA[h], Tamara Todorovic, MPH[a], Lisa Moreno-Walton, MD[i], Vincent Adomolga, MPH[g], Daniel J. Feaster, PhD[j], Bernard M. Branson, MD[k]

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214,524 screened for HIV

839 (0.4%) new diagnosis

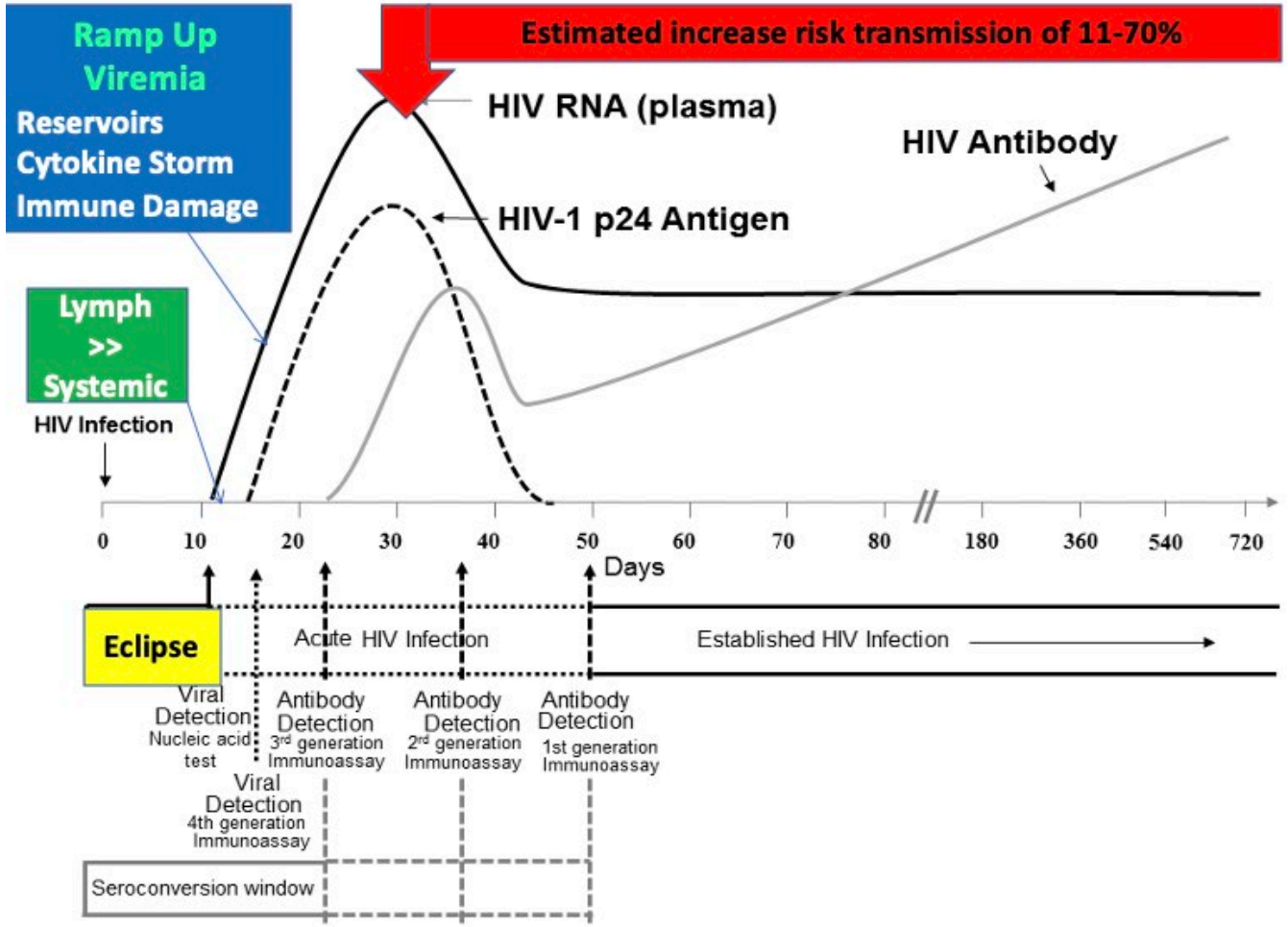
122 (14.5%) acute HIV

717 (85.5%) established infection

Compare
% Historic Positivity PHDs (2 - 4%)
High-risk, high-prevalence MSM (8 - 17%)

Opportunity to intervene

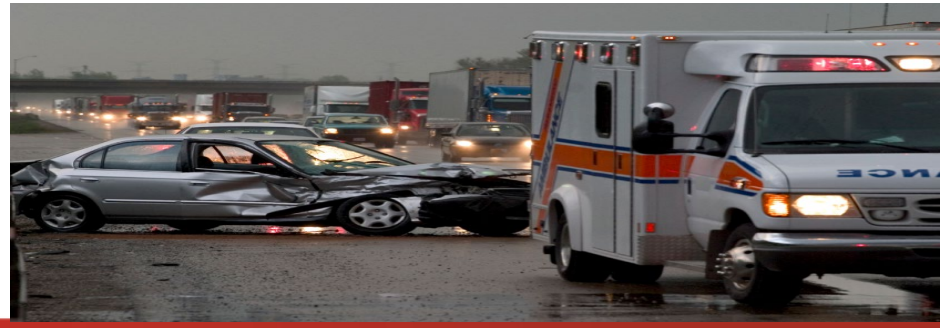
HIV Diagnosis



- **Acute**
  - (Cohen, et al. JID, 2010)
  - (Stacey, et al, J. of Virology , 2008)
  - (Fiebig, et al , AIDS 2001)
  - (Cohen et al. NEJM Aug 2011)
- **Transmission**
  - Brenner et al. JID, 2007, Hollingsworth, et al. JID, 2008,
  - Pilcher, et al. JID, 2004,
  - Gray, et al. JID, 2012

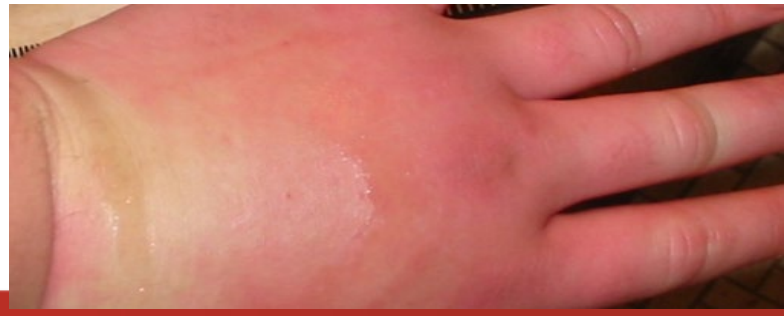
Case 2

- **24 year-old H/M MSM comes to your ED following a motor vehicle accident. He is advised at your ED everyone getting labs gets a routine HIV test. He does not refuse the test.**
- **Routine Screening Results**
  - **Antigen/antibody combo: POSITIVE**
  - **HIV-1/2 antibody differentiation: Pending**
  - **HIV viral load: Pending**



Case 3

- **35 year-old w/m presents to the ED complaining of abscess of the left hand.**
- **Results of Routine Screen- POSITIVE**
- **Disclosure- HIV+ diagnosed 5 yr ago, previously LTC but didn't like the clinic so fell out of care.**
- **Did you waste your money repeating his HIV test?**



HIV Transmissions in 2016

% of People with HIV	Status of Care	Accounted for X% of New Transmissions*
15%	Didn't know they had HIV	38%
23%	Knew they had HIV but weren't in care	43%
11%	In care but not virally suppressed	20%
51%	Taking HIV medicine and virally suppressed	0%

*values do not equal 100% because of rounding

SOURCE: Vital Signs, 2019

Dear Colleague Letter: California Department of Public Health

Dear Colleague Letter: March 28, 2022

- *EDs are uniquely positioned to identify people with syphilis, HIV and Hepatitis C who might otherwise remain undiagnosed.*
- *EDs should consider routine opt-out testing for syphilis, HIV, and hepatitis C.*
- *Implementation of opt-out testing is supported by California state law and health department recommendations.*

State of California—Health and Human Services Agency
California Department of Public Health

TOMÁS J. ARAGÓN, M.D., Dr.P.H.
Director and State Public Health Officer

GAVIN NEWSOM
Governor

March 28, 2022

Dear Colleague,

Emergency departments (EDs) are uniquely positioned to identify people with syphilis, HIV, and hepatitis C who otherwise might remain undiagnosed. Among those who experience barriers accessing routine primary care, EDs often serve as the sole point of contact with the healthcare system. EDs act as a safety net for these individuals and offer an important opportunity to identify and treat these patients, as well as bridge the gap with public health, while providing immediate and essential medical care for people who are at highest risk for sexually transmitted diseases (STD), HIV, and hepatitis C.[1, 2]

Syphilis and hepatitis C are curable, and HIV treatment can achieve viral suppression and undetectable viral loads, which eliminates sexual transmission of HIV.[3] Identification and treatment of these infections decreases statewide morbidity and mortality. Therefore, **California Department of Public Health (CDPH) recommends that EDs consider implementing routine opt-out testing for syphilis, HIV, and hepatitis C.**

Opt-out testing – in which a patient is notified that testing will be performed unless the patient declines (e.g., if blood testing is being done as part of the planned workup) – is recommended by the U.S. Centers for Disease Control and Prevention (CDC) as best clinical care, regardless of reported risk behaviors. **Implementation of opt-out STD, HIV, and hepatitis C testing is supported by California state law and health department recommendations.**[2, 4]

Identification and immediate treatment through the ED may have the added benefit of furthering health equity for those disproportionately affected by these infections.[5] Routinized opt-out ED syphilis, HIV, and hepatitis C screening is an effective strategy to identify infections, begin immediate treatment, link to care, prevent transmission, and enable health equity.

If you have questions, please contact stdcb@cdph.ca.gov. Thank you for your work to improve the health and wellness of California's residents.

Sincerely,

Kathleen Jacobson, MD
Chief, STD Control Branch
California Department of Public Health

Marisa Ramos, PhD
Division Chief,Office of AIDS
California Department of Public Health

Conclusions

"Nothing is more expensive than a missed opportunity…"

-H. Jackson Jr

Vision for ED in Kern

NATIONAL RYAN WHITE CONFERENCE ON HIV CARE & TREATMENT

Kristopher Lyon, MD

Public Health Officer, Kern County

Emergency Medicine Physician

Demographics of Kern County

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Home to 893,119 people

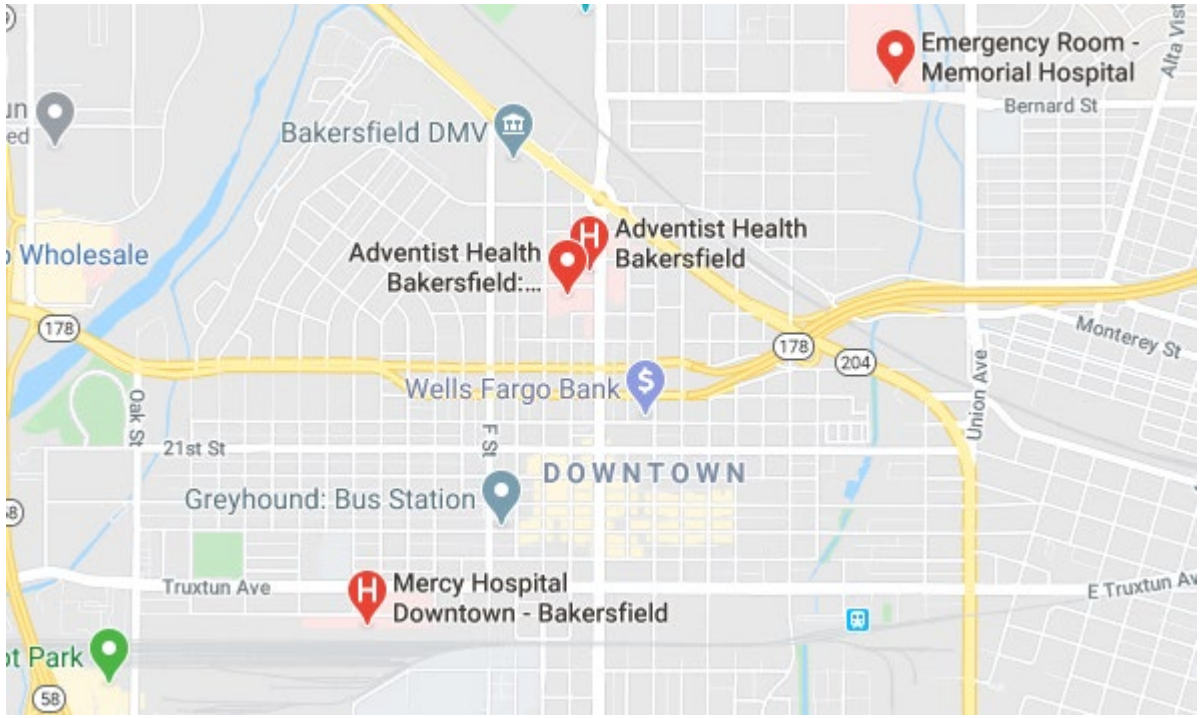
23% live below the Federal Poverty Level

53% Latino/Hispanic

33% White

5% Black/African American

Bakersfield is the largest city with 383,579



Vision for Kern EDs

- Improve individual and public health
- Increase local expertise and resources
- Coordinate with community providers
- Obtain help, training, technical assistance, where possible
- Test run approaches (PDSA cycles)
- Be compliant…standards/laws/rules
- Don’t let perfection be the enemy of the good

Planning, Meeting, Applying

- Conducted PDSA cycle
- Applied for and received FOCUS HIV/HCV screening and linkage grant (Emergency Department and Health Department)
- Applied for and received Rapid ART grant from State Office of AIDS (health department)
- Met with legal, financial, regulatory, lab and other involved departments
- Conducted full day training with PAETC, health department, and clinicians/staff
- Hired new positions made possible by grants
- Successfully launched program in October 2019
- Dealing with COVID-19 since March 2020
- Considering how to sustain our success in 2022 and beyond

Kern Epidemiology

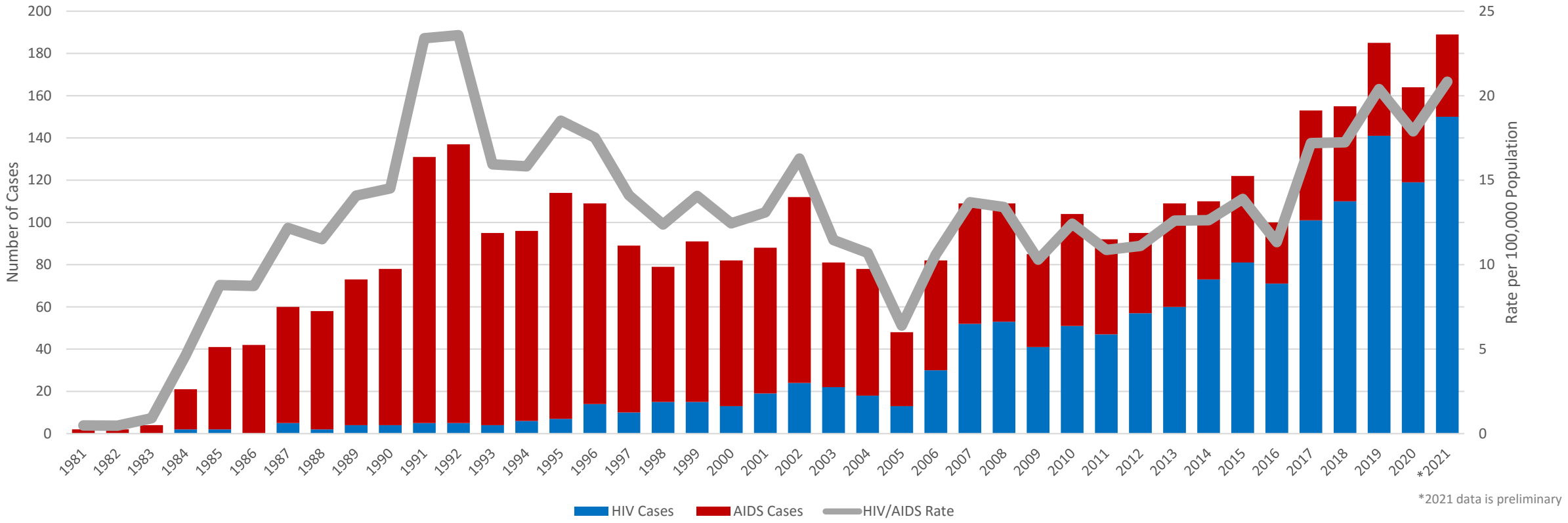
Tom Donohoe for

Kim Hernandez, MPH

Epidemiologist

Kern County Public Health

Kern County HIV/AIDS Cases



Cumulative Cases

- 3,774 Cumulative Cases
- 62% HIV Stage 3 (AIDS) at time of dx

2021 Preliminary Cases

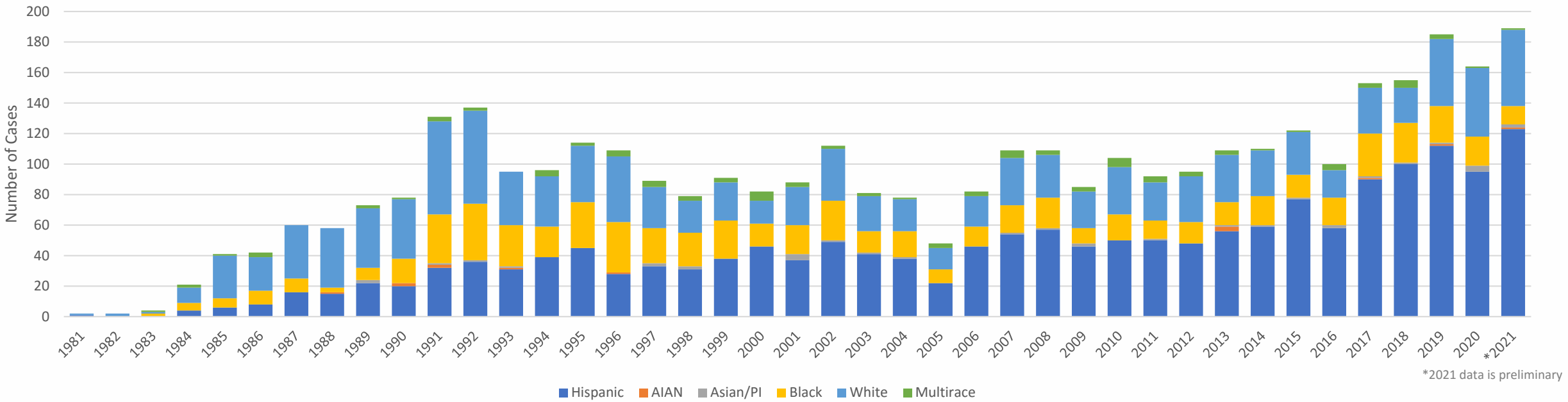
- 189 cases
- 21% HIV Stage 3 (AIDS) at time of dx

Trends

- 32% more cases in 20-21 compared to 91-92
- Rate is 18% lower in 20-21 compared to 91-92

Source: California Department of Public Health DUA, 2022

Kern HIV Cases by Race/Ethnicity



*2021 data is preliminary

Cumulative Cases

- 47% Hispanic
- 31% White
- 18% Black
- 1% Asian/Pacific Islander
- <1% American Indian/Alaskan Native
- 3% Multi-race

2021 Preliminary Cases

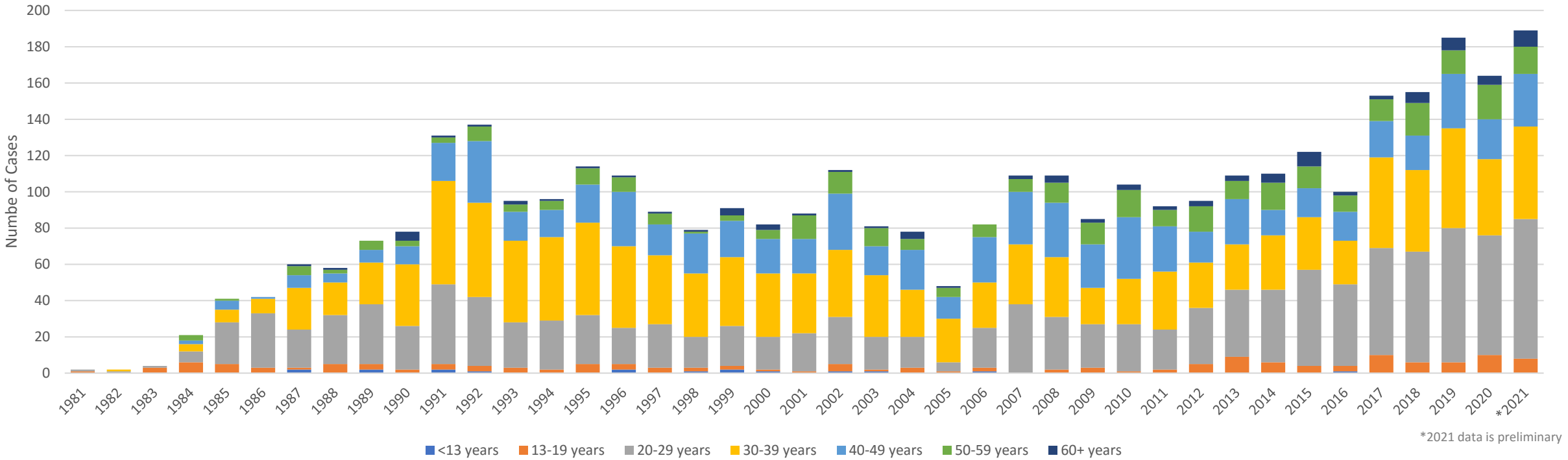
- 65% Hispanic
- 26% White
- 6% Black
- 1% Asian/Pacific Islander
- 1% American Indian/Alaskan Native
- 1% Multi-race

County Demographics

- 52% Hispanic
- 36% White
- 5% Black
- 4% Asian/Pacific Islander
- 1% American Indian/Alaskan Native
- 2% Multi-race

Source: California Department of Public Health DUA, 2019

Kern HIV Cases by Age Group



*2021 data is preliminary

Cumulative Cases

- 33% are 30-39 years old
- 32% are 20-29 years old
- 2% are <18 years old

2021 Preliminary Cases

- 27% are 30-39 years old
- 41% are 20-29 years old
- <1% are <18 years old

County Demographics

- 13% are 30-39 years old
- 16% are 30-39 years old
- 27% are <18 years old

Source: California Department of Public Health DUA, 2021

“Almost” an EHE-designated county

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2018 Newly Diagnosed HIV Cases: California by County

1. Los Angeles- 1,711 (16.6/100K) ↓ from 2,155 in 2014 –EHE
2. San Diego- 379 (11.5/100K) ↓ from 503 in 2014 –EHE
3. Orange- 286 (8.9/100K) ↓ from 352 in 2016 –EHE
4. San Bernardino- 278 (12.8/100K) ↑ from 222 in 2014 –EHE
5. Riverside- 259 (10.7/100K) ↓ from 264 in 2014 –EHE
6. San Francisco- 240 (27/100K) ↓ from 327 in 2014 –EHE
7. Alameda- 200 (12/100K) ↓ from 270 in 2016 –EHE
8. Sacramento- 158 (10.3/100K) ↓ from 185 in 2014 –EHE
9. **Kern - 156 (17.2 * /100K) ↑ from 110 in 2016 –NOT EHE** ***second only to SF**

Source: California Department of Public Health Office of AIDS, California HIV Surveillance Report, 2018, Table 1c, Page 8. https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/California_HIV_Surveillance_Report2018.pdf

Kern STD Summary, 2021*

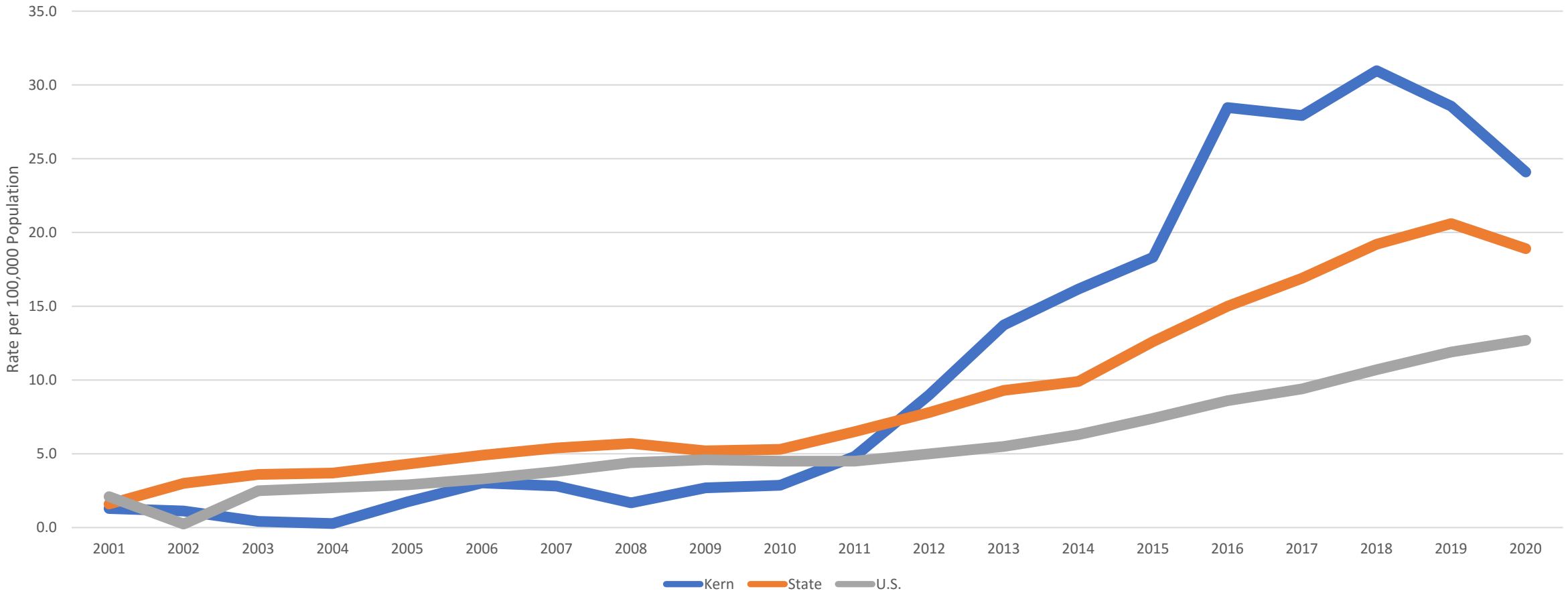
Disease	Number of Cases	Frequency
Chlamydia	5,973	16 per day
Gonorrhea	2,239	6 per day
Syphilis	1,293	4 per day
HIV	189	1 every other day
Kern County	**9,694**	**1 every hour**

Disease	Number of Cases	Frequency
Congenital Syphilis	36	1 every 10 days

*2021 data is preliminary

Source: California Reportable Disease Information Exchange (CalREDIE)

Primary & Secondary Syphilis



Source: California Department of Public Health, All STDs Tables, Primary and Secondary Syphilis, Page 42
https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/STD-Data-All-STDs-Tables.pdf

Screening inside the ER

Kris Lyon, MD for

Kian Azimian, MD

Emergency Medicine Physician

Bakersfield Memorial Hospital

HIV ED Screening Data-2021/22

Month/Year	Tests Conducted	Reactive	Percentage Reactive
June 2021	507	4	0.79%
July 2021	577	7	1.21%
Aug 2021	509	6	1.18%
Sep 2021	447	0	0.00%
Oct 2021	1,340	7	0.52%
Nov 2021	1,077	7	0.65%
Dec 2021	964	9	0.93%
Jan 2022	921	6	0.65%
Feb 2022	1,152	9	0.78%

HIV ED Screening Data-2021/22 (con't)

Month/Year	Tests Conducted	Reactive	Percentage Reactive
Mar 2022	1,050	4	0.38%
April 2022	999	15	1.50%
May 2022	1,091	9	0.82%
TOTAL: June 2021-May 2022	10,634	87	0.82%

HepC ED Screening Data-2021/22

Month/Year	Tests Conducted	Reactive	Percentage Reactive
June 2021	509	43	8.45%
July 2021	571	35	6.13%
Aug 2021	508	41	8.07%
Sep 2021	447	31	6.94%
Oct 2021	2,231	139	6.23%
Nov 2021	2,067	129	6.24%
Dec 2021	1,901	122	6.42%
Jan 2022	1,991	123	6.18%
Feb 2022	1,796	100	5.57%

HepC ED Screening Data-2021/22 (con't)

Month/Year	Tests Conducted	Reactive	Percentage Reactive
Mar 2022	1,859	131	7.05%
April 2022	1,801	113	6.27%
May 2022	1,903	122	6.41%
TOTAL: June 2021-May 2022	17,584	1,129	6.42%

Syphilis ED Screening Data-2021/22

Month/Year	Tests Conducted	Reactive	Percentage Reactive
June 2021	511	42	8.22%
July 2021	568	41	7.22%
Aug 2021	505	44	8.73%
Sep 2021	444	26	5.56%
Oct 2021	2,353	117	4.97%
Nov 2021	2,199	121	5.50%
Dec 2021	2,081	112	5.38%
Jan 2022	2,155	120	5.57%
Feb 2022	557	33	5.92%

Syphilis ED Screening Data-2021/22 (con't)

Month/Year	Tests Conducted	Reactive	Percentage Reactive
Mar 2022	1,488	81	5.44%
April 2022	2,108	114	5.41%
May 2022	2,291	113	4.93%
TOTAL: June 2021 – May 2022	17,260	963	5.58%

Opioids & ED: The Bridge Program 2020

- Bridge Grant provides education and resources to make emergency rooms into primary access points for opioid addiction treatment.
- In 2020 at Bakersfield Memorial Hospital, we successfully started 214 individuals on Medication for Addiction Treatment (MAT) with Buprenorphine / Suboxone, from 321 patients with substance abuse identified. Approximately 66% success rate.
- Benefits of MAT treatment are a 15x decreased risk of death (all causes). Decrease risk of HIV & HepC, criminal activity, becoming victim of crime, and obstetric complications in pregnant women.

Opioids & ED: The Bridge Program 2021-2022

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Month of Data Collected	SUN Encounters (all)	ED/Hospital Encounters with BUP administered or Rx	ED/Hospital Encounters OUD Dx (F codes)	ED/Hospital Encounters OD Dx (T codes)
Dec-21	23	32	89	63
Jan-22	12	17	60	95
Feb-22	13	11	75	45
Mar-22	32	27	101	72
Apr-22	19	16	61	73
May-22	13	18	69	66

Challenges

- **Electronic Health Record** (HIV/HepC/RPR screening now linked to EHR, some "skipping" popup reminders)
- **Legal/Administrative Concerns** (understanding current laws, adjusting policies)
- **Laboratory Preparedness** (volume of tests, reagents needed, etc)
- **Revenue Integrity/Billing** (need to code/document)
- **Hiring/training/sustaining new positions** from grants
- **Getting buy-in** from 100% of leadership and staff

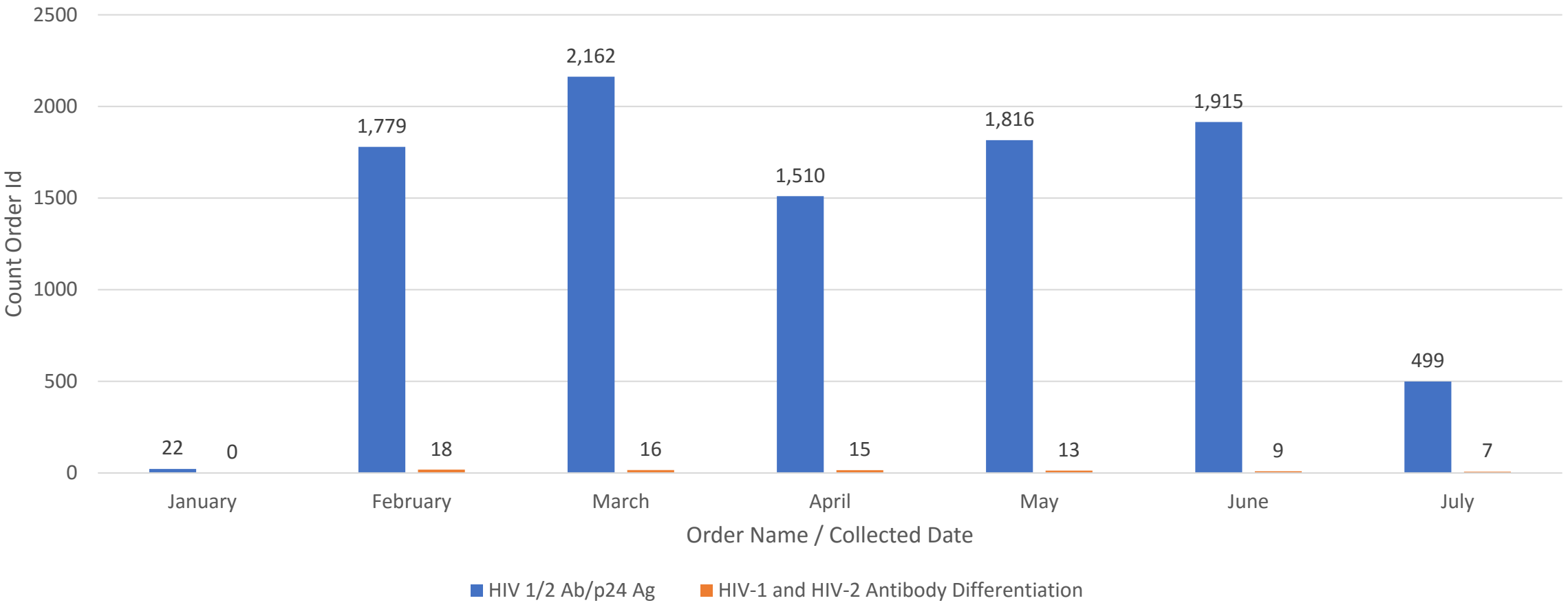
Vision for Emergency Dept. in Kern

Kristopher Lyon, MD

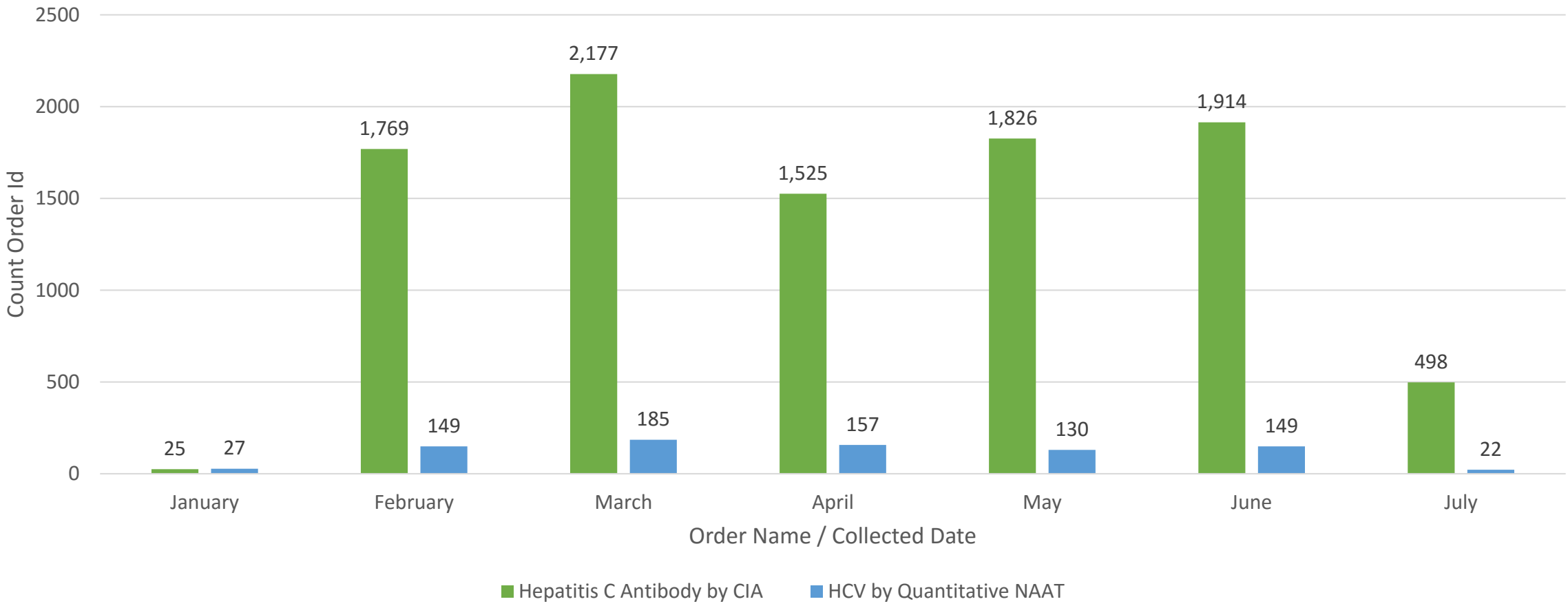
Public Health Officer, Kern County

Emergency Medicine Physician

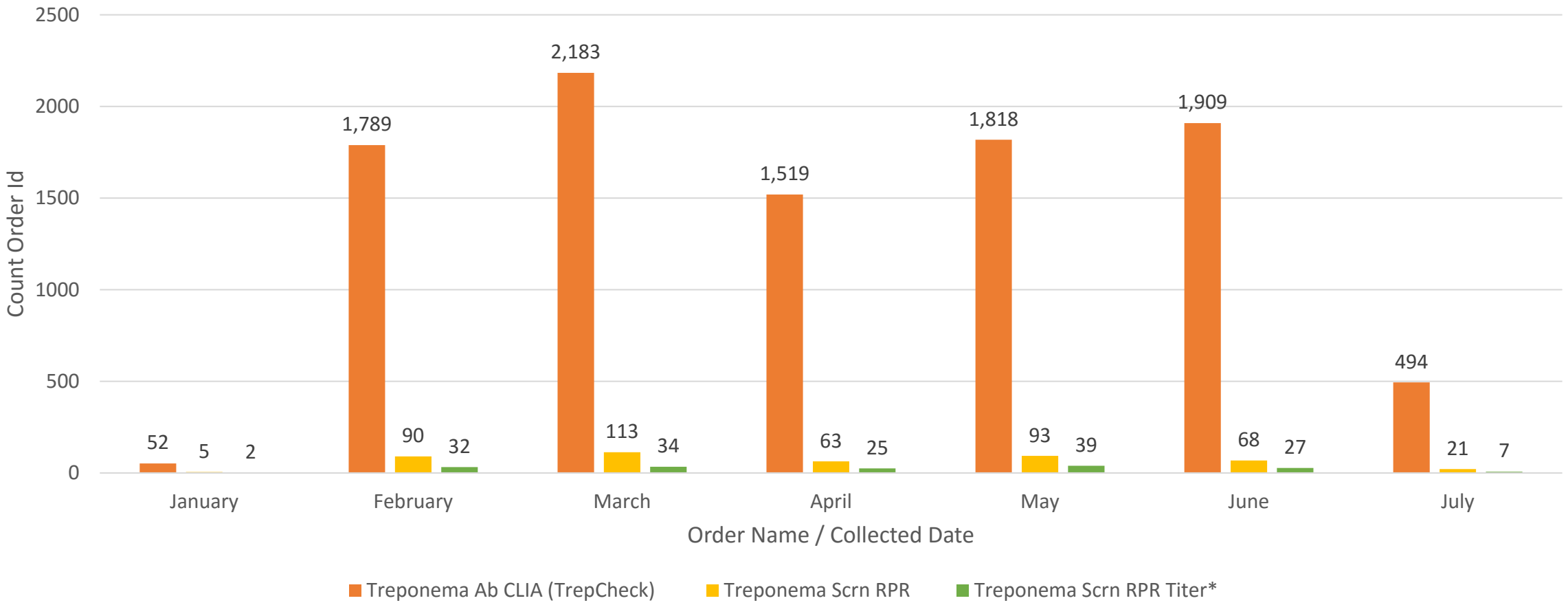
2020 HIV Screening - Adventist ED



2020 HCV Screening - Adventist ED



2020 Syphilis Screening - Adventist ED



Plans for Future

- Screenings will increasingly be tied to EHR rather than providers
- Provide immediate ART in EDs where possible
- Secure 3rd ED to implement screening and linkage (post COVID-19)
- Develop sustainability plans for post-grants environment
- Increase numbers screened/treated/linked for HIV
- Increase numbers screened/diagnosed/linked for HCV
- Increase numbers screened/treated/linked for syphilis (including PrEP)
- **Develop sustainability plans for post-grants environment**

Sustainability

- FOCUS funding sunsetting, and state rapid ART grant ended
- California AB 835--so far still in State Legislature with no new funding
- California Bridge Program for MAT secured specific MediCal (Medicaid) billing codes for MAT navigation services in EDs but no such codes exist for HIV
- Develop MediCal codes for HIV/HCV/Syphilis?—Long term, not encouraging
- Apply for new grants?—no notice of funding opportunities currently exist

How to sustain successful programs without outside funding?

Acknowledgements

- **Terri Church, Michelle Wheeler, William Watts, Tracy Langenfield, Sherri Weaver, and Renae Wade** – Dignity Health, Bakersfield
- **Patrick Salazar, Shantell Waldo, Nick Morse**– Kern County Department of Public Health
- **Kevin Watson, Jennifer Bones, and Lisa Boudreault** – Adventist Health, Bakersfield
- **Rene Bennett** – FOCUS Program
- **And Many Others** who make this entire project possible

Questions and Answers

for follow up: tdonohoe@mednet.ucla.edu

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