



**STD ACTION PLAN**  
**ADHS RECOMMENDATIONS ON STD CONTROL**  
**JUNE 2019**

ARIZONA DEPARTMENT OF HEALTH SERVICES  
150 N. 18TH AVENUE  
PHOENIX, ARIZONA 85007

# EXECUTIVE SUMMARY

## Introduction

Sexually Transmitted Diseases (STDs) have been rising in Arizona for over two decades and, in 2018, over 57,000 combined cases of chlamydia, gonorrhea, and syphilis were reported to the Arizona Department of Health Services (ADHS). STDs can be controlled when people and their partners have access to prevention, screening, and treatment. In April 2019, ADHS selected STD Control as a Breakthrough Project in an effort to respond to the rising rates of STDs.

Throughout June, ADHS coordinated multiple stakeholder meetings to identify strategies and recommendations for controlling the spread of STDs and improving access to healthcare. This plan outlines the recommendations and strategies to help control the spread of STDs in Arizona.

## Goals to address STD Control:

- Improve access to screening and treatment.
- Build capacity to prevent congenital syphilis and control the spread of STDs in Arizona.
- Expand infrastructure to accommodate the growing disease burden and control emerging infections.

**Recommendations** created through multiple meetings with local health jurisdictions, partner agencies, and stakeholders, to address the above goals include:

1. Promote policies that allow providers to prescribe treatment for partners.
2. Improve access to screening and treatment in rural Arizona by implementing standing orders for chlamydia, gonorrhea, and syphilis.
3. Identify ways to encourage expectant mothers to access prenatal care and receive syphilis screening and promote healthy pregnancies.
4. Utilize perinatal caseworkers to better understand the barriers to accessing care and link women to prenatal care and other social services to prevent reinfection and promote healthy pregnancies.
5. Expand partnerships with correctional facilities, home visiting programs, and groups that work with current and recovering drug users to address root causes of STD transmission.
6. On-board additional laboratories to electronic laboratory reporting via HL7 messaging or spreadsheet reporting. Initiate the enhancement of ADHS IT infrastructure to accept electronic case reports (eCR) from providers.
7. Expand multi-site resistance screening in Maricopa County.
8. Develop a plan to respond to emerging STDs like LGV and Chancroid.

## How to use this report

- **Strategic Plan:** serves as the dashboard for the action plan, with major accomplishments and primary data, and identifies the main recommendations along with the performance measures to ensure the recommendations are accomplished.
- **Recommendation Brief:** provides greater detail into each recommendation, including data to support the recommendation, proposal, action plan for implementation and the agencies responsible.

# EXECUTIVE SUMMARY

## DEFINITIONS

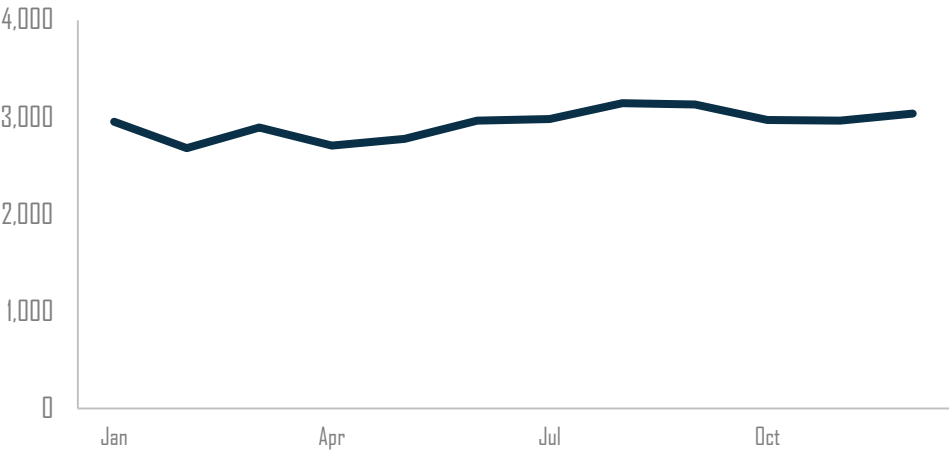
- **Chancroid** is an infection of the genital skin or mucous membranes caused by the bacteria *Haemophilus ducreyi* and is characterized by painful ulcers and enlargements of lymph nodes.
- **Congenital Syphilis** is a severe, disabling, and often life-threatening infection that occurs in infants born to a mother with untreated/inappropriately treated syphilis.
- **Electronic Laboratory Reporting (ELR)** is the automated process of sending laboratory reports using an electronic method. According to the CDC, ELR improves the reporting of notifiable conditions and improves the effectiveness and efficiency of public health responses to outbreaks. Additionally, eligible hospitals can use ELR to work towards fulfilling Meaningful Use requirements and government financial incentives.
- **Electronic Case Reporting (eCR)** is the automated transmission of health information from an electronic Health Record (EHR) to public health. According to the CDC, eCR works to simplify disease reporting for providers and “Because the EHR is the data source for case reports, eCR will improve the completeness of patient contact, clinical, and epidemiologic information to jump start case investigations.”
- **Expedited Partner Therapy (EPT)** is the practice of providing an extra dose of medication or a prescription to a patient with chlamydia or gonorrhea to deliver to their sexual partner(s).
- **Gonococcal Isolate Surveillance Project (GISP)** is a project established by the CDC in 1986 to monitor antibiotic resistance trends in gonorrhea in the United States.
- **Lymphogranuloma Venereum (LGV)** is a chronic infection of the lymphatic system caused by three types of the chlamydia bacteria.
- **Trichomoniasis** is a common STD caused by infection with a protozoan parasite called *Trichomonas vaginalis*.

# STD Action Plan

## ADHS Response

Goal	2-year	5-year
↑ the # of STDs treated within 14 days	10%	25%
(Base: 35,219)	(35,220)	(44,024)

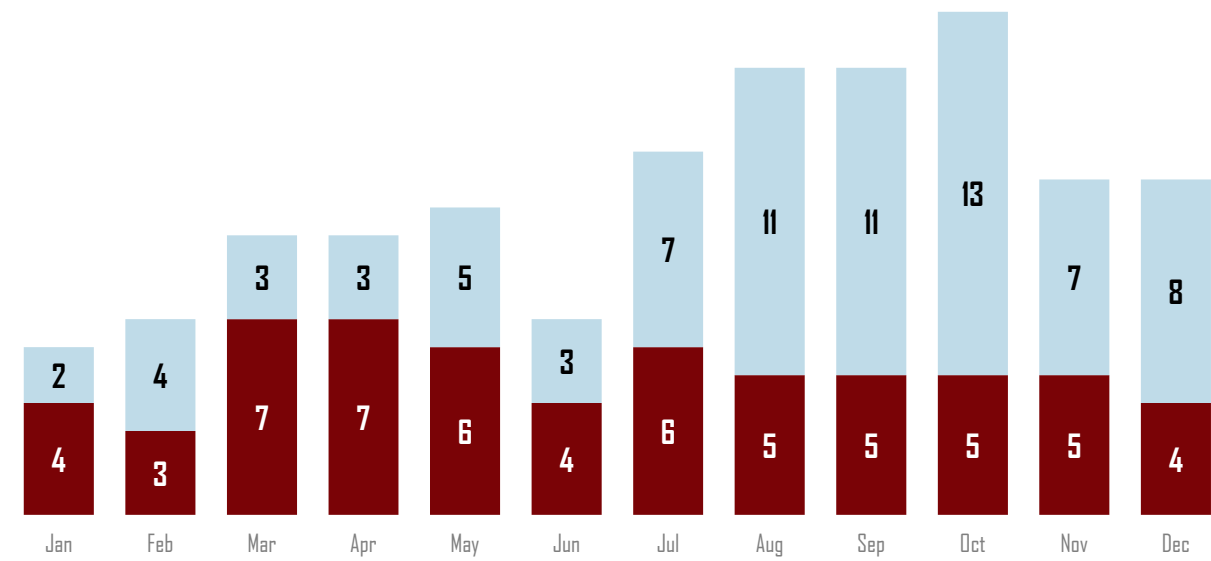
Number of **STDs treated within 14 days** in 2018.



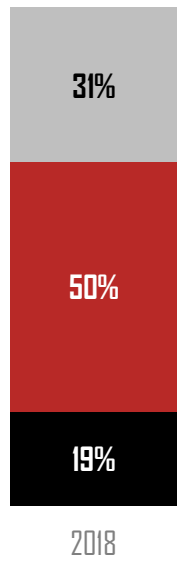
Activity Updates:

- Initial stakeholder meeting held 6/12/2019
- Recommendation briefs submitted to stakeholders for feedback 6/28/19
- Recommendation briefs submitted to ADHS leadership 7/3/2019

Number of **congenital syphilis cases** and **prevented congenital syphilis** in 2018.



**Deaths** and **severe outcomes** among congenital syphilis cases in 2018.



# Recommendations

Goals	Recommendations	Performance Measures
<b>Improve access to screening and treatment.</b>	Promote Policies that allow providers to prescribe treatment for partners.	<ul style="list-style-type: none"> <li>• By August, 2019: Complete memo summarizing the landscape of EPT provider liability nationwide</li> <li>• By September, 2019, update EPT section of ADHS website</li> <li>• By December 30, 2019, present data from cost-effectiveness study to health insurance companies</li> </ul>
	Expand multi-site resistance screening in Maricopa County.	<ul style="list-style-type: none"> <li>• By June 30, 2020, submit at least 250 specimens for GISP</li> <li>• By June 30, 2020, submit an additional 125 specimens from extragenital sites for eGISP</li> </ul>
	Improve access to screening and treatment in rural Arizona by implementing standing orders for chlamydia, gonorrhea, and syphilis.	<ul style="list-style-type: none"> <li>• By September 30, 2019, identify at least one jurisdiction to work with to develop standing orders to improve access to screening and treatment.</li> <li>• By January 31, 2020, identify the best means for creating standing orders for pharmacists to administer ceftriaxone and Bicillin.</li> <li>• By June 30, 2020, finalize standing orders</li> </ul>
<b>Build capacity to prevent congenital syphilis and control the spread of STDs in Arizona.</b>	Utilize perinatal caseworkers to better understand the barriers to accessing care and link women to prenatal care and other social services to prevent reinfection and promote healthy pregnancies.	<ul style="list-style-type: none"> <li>• By December 2019, establish scope of work for perinatal case workers</li> <li>• By March 2020, begin linking women to services using perinatal case workers</li> <li>• By June 30, 2020, evaluate impact of perinatal case workers using PRISM data</li> </ul>
	Expand partnerships with correctional facilities, home visiting programs, and groups that work with current and recovering drug users to address root causes of STD transmission.	<ul style="list-style-type: none"> <li>• By June 30, 2020, partner with an ER to implement rapid syphilis screening among pregnant women to prevent congenital syphilis.</li> <li>• By June 30, 2020, hold at least 4 stakeholder meetings</li> </ul>
	Identify ways to encourage expectant mothers to access prenatal care to receive syphilis screening and promote healthy pregnancies.	<ul style="list-style-type: none"> <li>• By January 31, 2020, understand the capacity of community-based organizations to complete screening and treatment.</li> <li>• By March 31, 2020, complete informational guides for pregnant women.</li> <li>• By June 30, 2020, complete at least 75 interviews</li> <li>• By June 30, 2020, complete report to summarize findings and outline next steps</li> </ul>
<b>Expand infrastructure to accommodate the growing disease burden and control emerging infections.</b>	On-board additional laboratories to electronic laboratory reporting via HL7 messaging or spreadsheet reporting. Initiate the enhancement of ADHS IT infrastructure to accept electronic case reports (eCR) from providers.	<ul style="list-style-type: none"> <li>• By June 30, 2020, onboard PIMC to electronic spreadsheet reporting.</li> <li>• By June 30, 2020, increase the proportion of labs entered electronically by 5%.</li> <li>• By June 30, 2019, decrease the average time of reporting STDs for PIMC by 7 days.</li> </ul>
	Develop a plan to respond to re-emerging STDs.	<ul style="list-style-type: none"> <li>• By November 15, 2019, fully understand the landscape of insurance coverage of testing and treatment for emerging STDs in Arizona</li> <li>• By February 1, 2020, complete response plan for emerging STDs internal for ADHS STDCP as well as for providers</li> <li>• By March 15, 2020, create new section on provider page of website for emerging diseases, including response plan for providers to enable them to take the correct action</li> <li>• By June 2020, complete plan for emerging STDs</li> </ul>

# RECOMMENDATION BRIEF: EPT

**Recommendation:** Promote policies that allow providers to prescribe treatment for partners.

## **Background & Gap:**

Expedited Partner Therapy (EPT) is the practice of treating sex partners of patients diagnosed with chlamydia or gonorrhea by providing prescriptions or medications for their partner without needing to have an exam.<sup>1</sup> EPT has been legal in Arizona since September 2008, when the legislature passed A.R.S. § 32-1401.27. EPT is an important tool for STD control because it allows providers to treat persons with limited or no access to healthcare, prevents reinfection in their patient, and stops the spread of STDs in their community. Despite the current legislation in Arizona which permits the use of EPT, there are many barriers to implementing the use of EPT by providers in the healthcare community.

In 2018, Arizona reported 53,744 combined cases of chlamydia and gonorrhea and 3,196 cases of syphilis. County disease investigators help link partners to testing and treatment; however syphilis case investigations take priority because untreated syphilis can lead to more severe outcomes like ocular, auditory, and neurological problems. The average investigator can work between 400-600 cases a year. ADHS STD Control funding currently supports 11 investigators statewide, providing coverage for between 4,400 - 6,600 cases, leaving tens of thousands of combined chlamydia and gonorrhea cases uninvestigated. Given the current outbreak of syphilis, EPT is a critical tool that providers can use to help control the spread of STDs for partners who are unable to access screening and treatment. As STD trends continue to rise, EPT is a powerful strategy to extend the reach of thinly stretched resources to meet the needs of our most vulnerable communities.

Although EPT is legal in Arizona, many physicians are reluctant to offer EPT because the language used in the legislation is confusing and contradicting. In a 2016 survey of providers conducted by ADHS, many respondents expressed concerns related to liability, navigating prescription requirements, distribution of EPT, and exclusion of non-reportable STDs in current EPT legislation. Although no adverse events and/or life threatening allergic reactions to medications when dispensed as EPT have been reported, the existing law does not protect providers from liability from allergic reactions or other adverse outcomes. Updating the statute to protect providers from liability would assist in uptake of EPT in Arizona.

Another barrier to utilization of EPT is the prescription requirements. Current legislation under A.R.S. § 32-1401 requires that the partner's name is known and placed on the prescription. If legislation were to permit prescriptions with no name, it is not specified whether pharmacists could dispense a prescription drug when the prescription is made out to an unnamed individual. While this requirement does not explicitly forbid EPT, it does create a barrier and restricts the ability of providers to provide a blank prescription or "extra dose" of treatment for the patient to deliver to a partner. This is an important piece of EPT, because patients may not want to divulge their partner's name or may not even know their partner's full name. The most recent information presented by the Centers for Disease Control and Prevention (CDC) reports

# RECOMMENDATION BRIEF: EPT

that 15 of the 44 states where EPT is permissible allow prescribing medication to a partner without the partner's name being known.<sup>2</sup>

In addition to allowing prescriptions to appear or be distributed to the primary patient, the cost of the partner's medication needs to be addressed. Insurance companies, including Medicaid, vary in their policies for payment for EPT.<sup>3</sup> In many states it is not legal to bill the primary patient's insurance for the partner's prescription.<sup>4</sup> Lack of coverage for EPT creates a financial barrier to care, often requiring the primary patient or their partner to pay for treatment out of pocket. EPT is utilized not only to control the spread of chlamydia and gonorrhea in the community, but also to prevent reinfection of the primary patient if their partner remains untreated. Rather than treating the primary patient repeatedly and resulting sequela from repeated infections, it may be cost effective to cover treatment for the partner at the same time.

Finally, although EPT can be used for trichomoniasis, it is not legal in Arizona because the definitions of conditions for which EPT can be used is restricted to reportable diseases per A.R.S. § 36-661. Since trichomoniasis is not reportable, EPT is not legal. The definition conditions for which EPT applies should be expanded to include trichomoniasis, the most prevalent nonviral STD in the US.<sup>5</sup> The recommended treatment for trichomoniasis is 2 grams orally of metronidazole, an easily prescribed and well tolerated medication for partners. While EPT of trichomoniasis is not regularly utilized throughout the US, per CDC it might have a role in partner management in states where it is permissible by law.<sup>5</sup>

## **Trends & Services in Arizona:**

Of the 53,744 reported cases of chlamydia and gonorrhea, only 4% were attempted for an interview. In a 2016 ADHS survey of providers, 22% of respondents indicated that they do not fully support EPT due to liability and malpractice concerns. ADHS STD Control funding currently supports investigation for between 4,400 - 6,600, cases each year, leaving tens of thousands of combined chlamydia and gonorrhea cases uninvestigated. EPT could be a valuable tool for linking partners of uninvestigated cases to treatment.

## **Action Plan/Timeline:**

- By August 31, 2019: Write a memo on the landscape of updating EPT legislation to include liability, excluding patient name, and permit insurance coverage
- By October 31, 2019: Update EPT information on website to include data from 2016 EPT survey to providers
- By December 31, 2019: Complete a cost-effectiveness study, assessing the cost of repeated treatment and sequela compared to initial cost of patient and partner to present to health insurance companies
- By June 30, 2020: Meet with health plan stakeholders to understand capacity for billing of partner's medication
- By June 30, 2020: Engage state Medical and Health Professional Boards to issue supportive statements or guidance on EPT to members

# RECOMMENDATION BRIEF: EPT

- By June 30, 2020: Establish next steps for expanding access to EPT in Arizona.

## Agencies Impacted:

- Arizona Department of Health Services
- Arizona Healthcare Cost Containment System
- Arizona Medical Board
- Arizona Pharmacy Association
- Arizona State Board of Pharmacy
- Network for Public Health Law and ASU
- Private health insurance companies

## Metrics:

- By August 31, 2019: Complete memo summarizing the landscape of EPT provider liability nationwide
- By September 30, 2019, update EPT section of ADHS website
- By December 30, 2019, present data from cost-effectiveness study to health insurance companies

## Resources:

1. <https://www.cdc.gov/std/ept/default.htm>
2. <https://www.cdc.gov/std/ept/legal/default.htm>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3610393/>
4. <https://www.kff.org/womens-health-policy/fact-sheet/payment-and-coverage-for-the-prevention-of-sexually-transmitted-infections-stis/>
5. <https://www.cdc.gov/std/tg2015/trichomoniasis.htm>



# RECOMMENDATION BRIEF: RESISTANCE TESTING

**Recommendation:** Expand multi-site resistance screening in Maricopa County.

## **Background & Gap:**

Gonorrhea in Arizona has been rising for six consecutive years. In 2018, Arizona reported 12,903 cases of gonorrhea and preliminary data indicate that this trend will continue in fiscal year 2020. Not only are gonorrhea rates rising, but gonorrhea is becoming more difficult to treat. The first multidrug resistant gonorrhea case was identified in the United Kingdom in March 2018.<sup>1</sup> Despite the growing threat of multidrug resistant gonorrhea, there is a lack of novel therapies to treat gonorrhea.

Although no multidrug resistant cases have been identified in Arizona, surveillance for drug resistance is important because clinical management of a multi-drug resistant case is drastically different from a non-resistant case. Should a resistant case appear in Arizona, it will be important to conduct a thorough investigation to identify and treat persons exposed to the resistant strain before it spreads through the community. Furthermore, since March 2019, there has been a shortage of several diluents used to reconstitute ceftriaxone, the recommended therapy for treating gonorrhea. Should healthcare providers experience difficulty acquiring diluents, it could restrict their ability to provide appropriate treatment.

Traditional tests for gonorrhea do not distinguish between resistant and non-resistant strains and there are no laboratories that offer low-cost resistance testing in Arizona. In order to conduct surveillance for multi-drug resistant gonorrhea, the Maricopa County Department of Public Health (MCDPH) and ADHS have been successfully participating in the Gonococcal Isolate Surveillance Project (GISP) since the project's inception in 1986.<sup>2</sup> As participants of GISP, MCDPH submits gonorrhea specimens from at least 300 men annually to be tested for antimicrobial resistance by the regional lab in Texas. Recently, the GISP project was enhanced (eGISP) to include resistance testing of extragenital samples from men and women.<sup>2</sup>

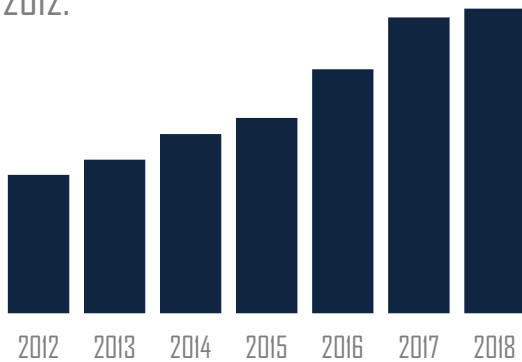
In May 2019, ADHS applied to participate in eGISP in order to expand MCDPH multisite testing to include resistance testing for a subsection of specimens. Multisite testing is important because it is estimated that over 70% of STD infections in men who have sex with men could be missed in cases that are not offered extragenital screening.<sup>3</sup> Additionally, pharyngeal gonorrhea infections can be particularly prone to resistance.<sup>4</sup>

## **Trends & Services in Arizona:**

Of the 326 male samples submitted by Arizona for resistance testing in 2018, **none** were found resistant to both ceftriaxone and azithromycin, the recommended treatment for gonorrhea. No specimens from women were submitted for resistance testing.

# RECOMMENDATION BRIEF: RESISTANCE TESTING

Gonorrhea has increased **120%** since 2012.



## Action Plan/Timeline:

- By August 31, 2019: Receive Notice of Award for eGISP, if awarded
- By October 31, 2019: Update Maricopa County contract to include eGISP activities and send to county for signature
- By December 31, 2019: Begin implementation of eGISP
- By January 31, 2020: Begin reviewing monthly specimen viability reports to ensure sample quality

## ADHS Divisions & Agencies Impacted:

- Arizona Department of Health Services
- Maricopa County Department of Public Health

## Funding & Source:

- Currently ADHS receives \$10,000 annually to participate in GISP. ADHS has applied for an additional \$50,000 annually to participate in eGISP. If awarded, ADHS will be notified August 2019.

## Alternative:

If funding for eGISP is not awarded, ADHS and MCDPH will continue to participate in GISP and continue to conduct multi-site testing for clients with extragenital exposure(s). ADHS will explore alternatives to expand both extragenital testing and resistance testing.

## Metrics:

1. By June 30, 2020, submit at least 250 specimens for GISP
2. By June 30, 2020, submit an additional 125 specimens from extragenital sites for eGISP

# RECOMMENDATION BRIEF: RESISTANCE TESTING

## References:

1. Senthilingam, M. (2018). First case of super-resistant gonorrhea reported. *CNN*. Retrieved from: <https://www.cnn.com/2018/03/28/health/uk-man-multidrug-resistant-gonorrhea-intl/index.html>
2. Centers for Disease Control and Prevention (2018). Combating the threat of antibiotic-resistant gonorrhea. Retrieved from: <https://www.cdc.gov/std/gonorrhea/arg/carb.htm>
3. National Coalition of STD Directors (2017). Extragenital testing. Retrieved from: <http://www.ncsddc.org/resource/extragenital/>
4. Dall, C. (2018). Experts brace for more super-resistant gonorrhea. Center for Infectious Disease Research and Policy News. Retrieved from: <http://www.cidrap.umn.edu/news-perspective/2018/09/experts-brace-more-super-resistant-gonorrhea>

# RECOMMENDATION BRIEF: STANDING ORDERS

**Recommendation:** Improve access to screening and treatment in rural Arizona by implementing standing orders for chlamydia, gonorrhea, and syphilis.

## **Background & Gap:**

In rural Arizona, county clinics and private providers face unique challenges with offering screening and timely treatment of STDs. The CDC Program Operations Guidelines for STD Prevention recommend that STD clinics have adequate physician backup and maintain current and signed standing orders for non-physician clinicians.<sup>1</sup>

Rural health departments may not have a physician consistently available to perform screening and treatment, which can delay treatment of partners and reduce efficacy of control measures. Standing orders can address this gap and serve to standardize the clinical care practiced by all clinicians. Within Arizona, there are some jurisdictions with no standing orders and others that are interested in expanding their orders.

In addition to STD clinics, many private providers in rural Arizona will readily provide STD screening, however the recommended treatments for gonorrhea and syphilis are more complex as they require an injection. Further, standing orders would greatly help these providers assure the provision of appropriate and timely treatment. Rural jurisdictions in particular face challenges with administering timely treatment for syphilis because many private providers do not store Bicillin due to the historically low incidence of syphilis and the high cost. As a result, some clients, particularly in rural jurisdictions, may have to travel over an hour to receive services. In 2018, there was a highly motivated client who traveled over nine hours in the course of three weeks to receive treatment for syphilis to help protect the health of her developing baby. This travel was a significant burden for her and would be a barrier for most. Being able to offer screening and treatment in the field or pharmacy setting through standing orders would help to improve access to timely treatment for cases and their partners in rural jurisdictions.

To relieve the patients of this burden, it would be beneficial to allow patients to go to the pharmacy and receive treatment from the pharmacist. Standing orders for STD treatment in the pharmacy would be possible in Arizona with a minor change to the Arizona Pharmacy Act to permit the administration of treatment by pharmacists for syphilis and gonorrhea<sup>2</sup>. In 2018, a standing order to allow pharmacists to distribute naloxone hydrochloride or any other opioid antagonist approved by the US FDA was signed, and A.R.S. §32-1979 was created, legalizing the act in Arizona.<sup>3,4</sup> A variety of standing orders could be utilized for the administration of ceftriaxone and Bicillin by pharmacists, including county or state standing orders. These orders would need to take into consideration strategies for billing pharmacy services.

## **Trends & Services in Arizona:**

Outside of Maricopa, Pinal, and Pima Counties, 58% of all-stage syphilis cases receive treatment within 7 days, compared to 66% inside Maricopa, Pinal, and Pima Counties.

# RECOMMENDATION BRIEF: STANDING ORDERS

## Action Plan/Timeline:

- By September 30, 2019: Identify Local Health Departments (LHDs) who are willing and able to work on drafting/updating standing orders in the next 12 months.
- By September 30, 2019: Complete a memo of the landscape of legal authority for pharmacists to administer medication; specifically, compare to what was completed during the opioid emergency declaration for pharmacists standing orders for administering naloxone
- By October 31, 2019: Begin drafting sample standing orders for identified LHDs.
- By October 31, 2019: Meet with stakeholders to discuss the feasibility of pharmacists administering Ceftriaxone and Bicillin under standing orders.
- By November 31, 2019: Meet with health plans to discuss options for billing practices for persons treated under standing orders.
- By December 31, 2019: Identify next steps for pharmacists standing orders.
- By March 31, 2020: Submit draft of standing orders for LHD to local Medical Director for review.
- By June 30, 2020: Finalize LHD standing orders.

## ADHS Divisions and Agencies Impacted:

- Arizona Department of Health Services
- County/Local Health Departments

## Potential Partners

- Arizona State Board of Pharmacy
- Pharmacy Organizations (CVS, Walgreens, etc.)
- AHCCCS & Private Insurance Companies
- Office of Individual and Family Affairs
- Federally Qualified Health Centers
- Indian Health Services
- Tribal Health Jurisdictions

## Metrics:

1. By September 30, 2019, identify at least one jurisdiction to work with to develop standing orders to improve access to screening and treatment.
2. By January 31, 2020, identify the best means for creating standing orders for pharmacists to administer ceftriaxone and Bicillin.
3. By June 30, 2020, finalize standing orders.

# RECOMMENDATION BRIEF: STANDING ORDERS

## Resources:

1. CDC (2001). Program operations guidelines for STD Prevention; overview.  
<https://www.cdc.gov/std/program/overview.pdf>
2. <https://pharmacy.az.gov/sites/default/files/lawBook.pdf>
3. <https://www.azdhs.gov/documents/prevention/womens-childrens-health/injury-prevention/opioid-prevention/naloxone-standing-order.pdf>
4. <https://www.azleg.gov/viewdocument/?docName=http://www.azleg.gov/ars/32/01979.htm>

# RECOMMENDATION BRIEF: PERINATAL CASE WORKERS

**Recommendation:** Utilize perinatal caseworkers to better understand the barriers to accessing care and link women to prenatal care and other social services to prevent reinfection and promote healthy pregnancies.

## **Background & Gap:**

Syphilis has been rising in Arizona for six consecutive years; however the rise in women and babies is much more recent. Although syphilis is more common in men, in 2016, the rate of increase of syphilis in women surpassed the rate of increase in men, which resulted in the number of congenital cases doubling in 2017. An outbreak of female and congenital syphilis was declared in 2018 and is ongoing in 2019. Prior to the outbreak, Arizona averaged 14 congenital syphilis cases per year with one congenital death every other year. In 2018, Arizona had 61 congenital cases. Ten of those cases died and 67% of the surviving infants had adverse outcomes. Prior to the outbreak, 80-90% of congenital syphilis cases occurred in Maricopa County, the most populous region of the State. Now, 10 counties are reporting at least one congenital case a year and heterosexual transmission of syphilis is rising in rural Arizona.

Late, limited, or non-traditional access of prenatal care has been identified as an issue for 76% of congenital syphilis cases. Additionally, due to the historical low case burden of female syphilis, many rural providers are unfamiliar with recommended screening and treatment of syphilis during pregnancy. Additionally, history of incarceration, reinfection, drug use, and homelessness during pregnancy are prominent themes among congenital syphilis mothers. ADHS is currently working on a project with Maricopa County to understand root causes of delayed access to prenatal care.

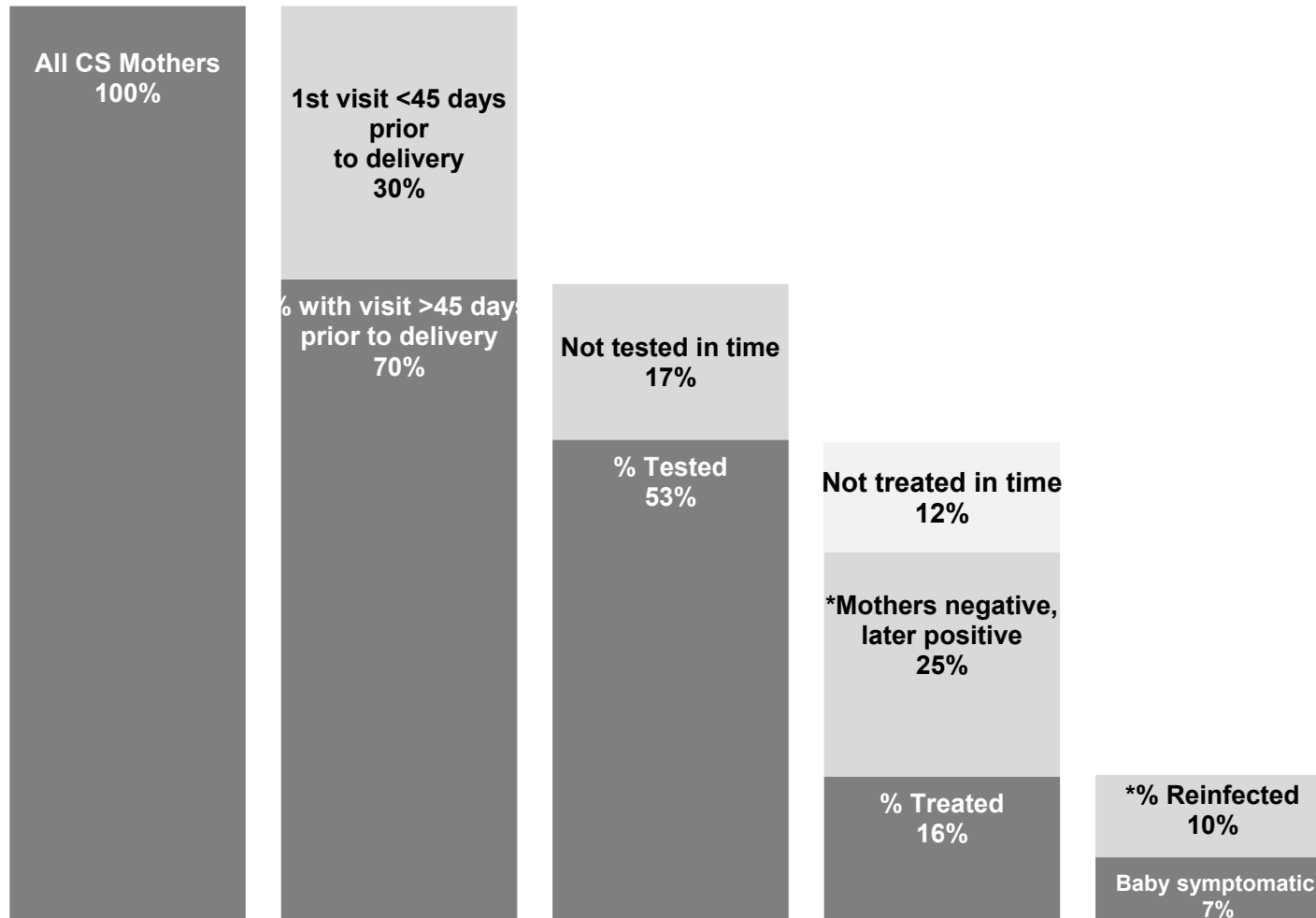
Investing in perinatal case workers to link women to prenatal care, housing, transportation, substance use recovery services, and other social services will help to connect women infected with syphilis to treatment, prevent reinfection, promote healthy pregnancies, and promote healthy families. Although prenatal care is incredibly important in this population, the fear of being reported may prevent women from seeking healthcare and subsequent screening for syphilis and other preventable diseases.

## **Trends & Services in Arizona:**

In Arizona the number of women with syphilis increased 263% from 2015-2018. Additionally, from 2017-2018, 30% of mothers of congenital syphilis cases did not receive any prenatal care and 9% of mothers were re-infected during pregnancy. Additionally, 13% of mothers of congenital syphilis cases were known to have been incarcerated in the past 12 months. Of the congenital syphilis case mothers who were in prenatal care more than 45 days prior to delivery, 35% were not tested for syphilis, which is a missed opportunity for prevention. Women who initiate treatment more than 30 days before delivery are significantly less likely to have a baby with congenital syphilis.

# RECOMMENDATION BRIEF: PERINATAL CASE WORKERS

## Where are the gaps in preventing congenital syphilis (2017 - 2018)?

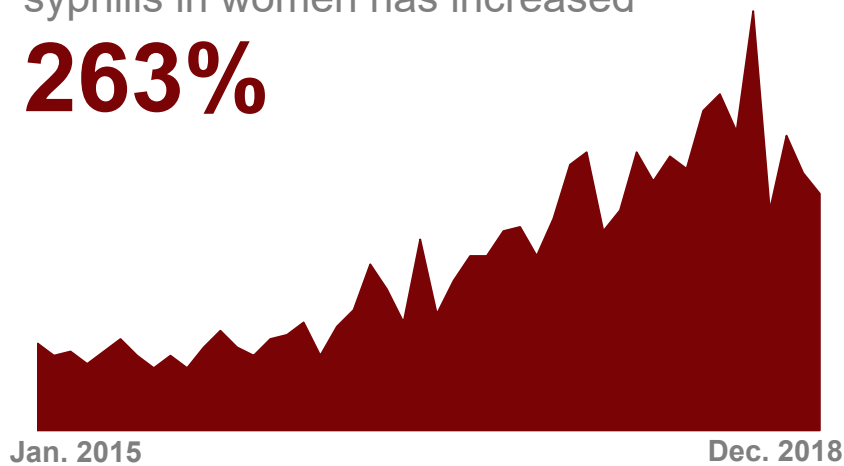




# RECOMMENDATION BRIEF: PERINATAL CASE WORKERS

Since 2015 the yearly average of syphilis in women has increased

## 263%



### Action Plan/Timeline:

- By September 2019: Update Maricopa contract to include perinatal case worker
- By November 2019: Meet with maternal and child health stakeholders to identify scope of work for perinatal case workers and strategies for linking women to social services
- By December 2019: Fill Maricopa County perinatal case worker and award contract for statewide perinatal case worker
- By December 2019: Develop a process flow for case handoff between disease investigators and for perinatal case workers
- By January 2020: Coordinate trainings for perinatal case workers
- By March 2020: Begin tracking metrics for perinatal case workers using PRISM
- By June 2020: Evaluate impact of perinatal case workers

### ADHS Divisions & Agencies Impacted:

- Arizona Department of Health Services
- Maricopa County Department of Public Health

### Funding & Source:

- ADHS has been awarded for \$200,000 to support two perinatal case workers.

### Metrics:

1. By December 31, 2019, establish scope of work for perinatal case workers
2. By March 31, 2020, begin linking women to services using perinatal case workers
3. By June 30, 2020, evaluate impact of perinatal case workers using PRISM data

# RECOMMENDATION BRIEF: EXPAND PARTNERSHIPS

**Recommendation:** Expand partnerships with correctional facilities, home visiting programs, and groups that work with current and recovering drug users to address root causes of STD transmission.

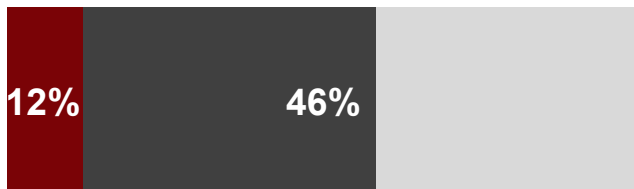
## Background & Gap:

STDs are often a symptom of larger, interrelated, root causes of illness (e.g. drug use, poverty, access to care, history of incarceration, low SES, education, geographic isolation, social isolation, adverse childhood experiences (ACEs), access to quality social services, exposure to trauma, fear of deportation, etc.). ADHS is funded to conduct STD surveillance, case investigation, promote screening/treatment/policy, and use data to inform work. The majority of funds (75%) support the personnel who perform surveillance and case investigation, 10% is used for screening, and 7% is used to maintain and enhance the surveillance database to accommodate the ever-increasing burden of disease. Very little funding is available to address the root causes of disease, however failing to address these root causes leave clients vulnerable to reinfection and perpetuates disease transmission. Additionally, persons with STDs and/or persons who use drugs often face stigma, which may dissuade them from seeking services.

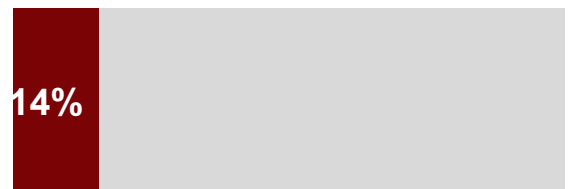
By expanding collaboration with experts in the root causes that perpetuate disease transmission, the ADHS STD Control Program can extend its reach and improve delivery of services. The STD Control Program has had preliminary discussions with the Home Visiting Program, the Teen Pregnancy Prevention Program, correctional health, programs that work with persons who use drugs, the Arizona Coalition to End Sexual and Domestic Violence, and several other programs to better understand how to address root causes of disease and identify strategies to streamline efforts to more efficiently link persons to prevention and screening resources.

## Trends & Services in Arizona:

The majority of mothers of congenital syphilis cases reported using **meth, heroin, cocaine, or opiates**. 12% of those who report drug use reported **IV drug use**.

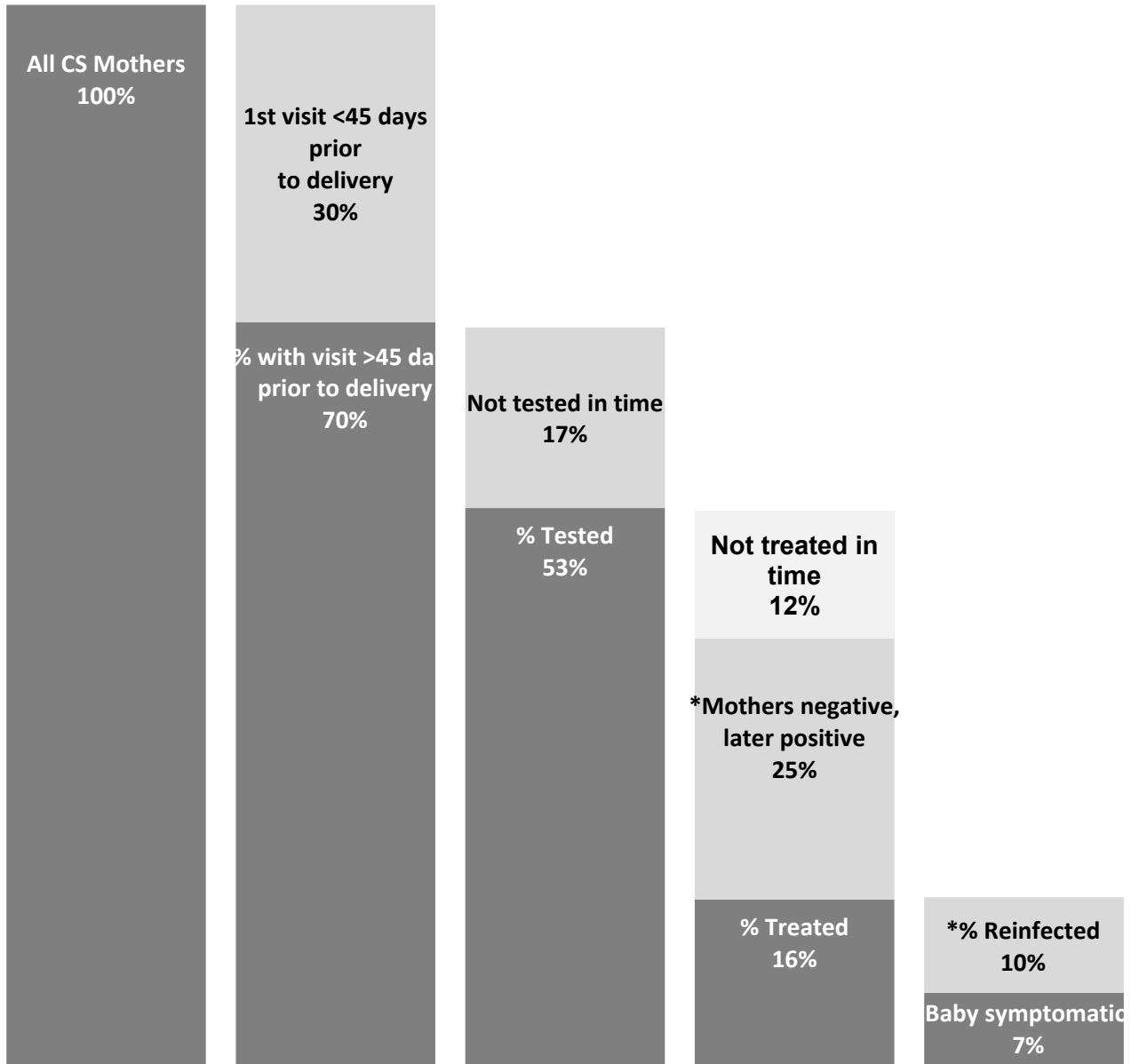


In Arizona, 14% of congenital syphilis mothers are **known to have been incarcerated** within the past 12 months.



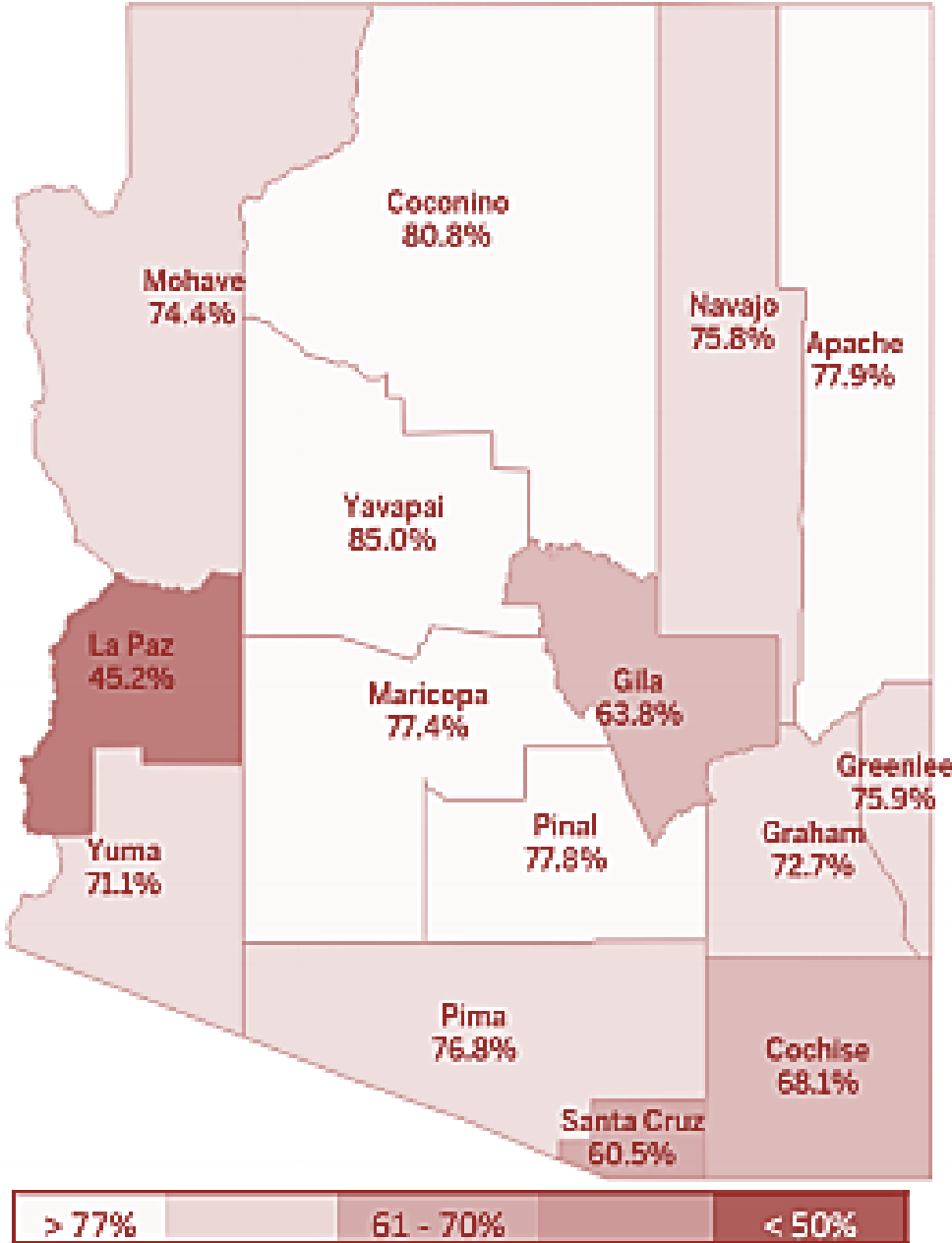
# RECOMMENDATION BRIEF: EXPAND PARTNERSHIPS

Where are the gaps in preventing congenital syphilis (2017 - 2018)?



# RECOMMENDATION BRIEF: EXPAND PARTNERSHIPS

In Arizona, women receiving intermediate or adequate prenatal care ranges from **45.2 – 85.0%** of pregnant women by County.



# RECOMMENDATION BRIEF: EXPAND PARTNERSHIPS

## Action Plan/Timeline:

- By July 31, 2019: include metrics in the Health Start home visiting questionnaire related to syphilis screening and provide moms with “Syphilis During Pregnancy” brochure
- By August 31, 2019, receive notification of award to fund enhanced screening efforts
- By September 30, 2019, begin drafting RFP for screening in the ER setting
- By November 30, 2019, meet with partners from correctional health to discuss strategies for improving testing, treatment, and reporting
- By December 31, 2019, begin analyzing preliminary data from Health Start project

## ADHS Divisions & Agencies Impacted:

- Arizona Coalition to End Sexual and Domestic Violence
- Arizona Department of Health Services

## Potential Partners

The following groups and organizations were identified as potential partners during the initial STD Action Plan stakeholder meeting on June 12.

- Arizona Department of Corrections
- Arizona Public Health Association
- CHEERS Recovery Center Doula Program Partnership on Education
- Circle the City
- Community Medical Services
- Ebony House
- Faith Based Organizations
- Family Drug Courts
- Federally Qualified Health Centers (FQHCs)
- First Things First
- Halfway Houses
- Health Plans
- Jails/Prisons
- Maricopa County Cradle to Crayons Child Welfare Center
- Medication-Assisted Treatment (MAT) clinics
- Native Health
- Other substance use and mental health treatment facilities
- Parole courts
- Perinatal care providers
- Schools/Colleges
- Sonoran Prevention Works
- Sports coaches
- Terros

## Funding & Source:

- ADHS has received \$69,494 to pilot rapid syphilis screening of pregnant women in the ER setting.

# RECOMMENDATION BRIEF: EXPAND PARTNERSHIPS

## Metrics:

1. By June 30, 2020, partner with an ER to implement rapid syphilis screening among pregnant women to prevent congenital syphilis
2. By June 30, 2020, hold at least 4 stakeholder meetings

# RECOMMENDATION BRIEF: ACCESS TO PRENATAL CARE

**Recommendation:** Identify ways to encourage expectant mothers to access prenatal care to receive syphilis screening and promote healthy pregnancies.

## **Background & Gap:**

In September 2018, Arizona declared a statewide outbreak of syphilis in women and babies due to the high rate of increase of these infections. ADHS has utilized risk factor data collected on all maternal syphilis cases to identify key risk factors for these women. When expectant mothers receive timely screening and initiate appropriate treatment for syphilis more than thirty days prior to delivery, the chances of their baby having syphilis are greatly reduced. One of the main risk factors identified among Arizona mothers of congenital syphilis babies is delayed or no access to prenatal care. This leads to delayed detection and treatment of syphilis, resulting in congenital syphilis.

In addition to delayed access to prenatal care, many of the mothers of congenital syphilis babies report current or historical drug use. Previous studies indicate that threatening policies can discourage substance-using women from seeking medical treatment during their pregnancies.<sup>1</sup> Although prenatal care is incredibly important in this population, the fear of being reported to the Department of Child Services (DCS), may prevent women from seeking healthcare and subsequent screening for syphilis and other preventable diseases.

Arizona DCS states that few of the children who are reported for any reason are actually removed from their homes. In most reported situations, the families and DCS work together cooperatively to resolve the problems that lead to the report.<sup>3</sup> Despite these efforts, pregnant women and persons who use drugs may still avoid seeking healthcare, particularly if they have faced stigma by the governmental organizations, the medical community, public health, or other social service agencies. Often the persons most in need of health services are also the ones who have been disconnected and isolated from services due to negative experiences with the healthcare system.

ADHS is currently working on a project with Maricopa County to better understand reasons why some women have delayed access to prenatal care.

## **Trends & Services in Arizona:**

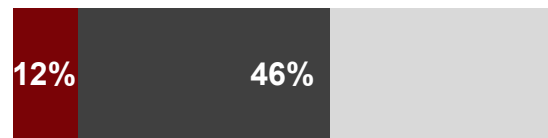
54% of women who gave birth to a congenital syphilis baby from 2017-2018 and reported hard drug use did not access prenatal care.

# RECOMMENDATION BRIEF: ACCESS TO PRENATAL CARE

**76%** of congenital syphilis mothers from 2017-2018 **started prenatal care after the 1st trimester.**



The majority of mothers of congenital syphilis cases reported using **meth, heroin, cocaine, or opiates**. **12%** of those who report drug use reported **IV drug use.**



## Action Plan/Timeline:

- By August 31, 2019: Begin conducting enhanced interviews with pregnant women with syphilis.
- By January 31, 2020: Engage with community based organizations who serve persons who use drugs, particularly pregnant women, to encourage access to screening among at-risk communities.
- By February 29, 2019, evaluate preliminary data from enhanced maternal syphilis interviews to identify factors contributing to delayed access to prenatal care.
- By March 31, 2020: Meet with perinatal case workers to discuss findings of enhanced maternal syphilis interviews.
- By April 30, 2020: Promote messaging to pregnant women for where they can access services to promote healthy pregnancies.
  - Collaborate with stakeholders to distribute the message to the correct audience
  - Include messaging around the “path for keeping baby”
  - Include messaging for where to access low cost prenatal care, screening, and other needed services
- By June 30, 2020: Finalize report to summarize findings of enhanced maternal syphilis interviews and outline action items

## ADHS Divisions & Agencies Impacted:

- Arizona Department of Health Services
- Arizona Medical Board
- Families F.I.R.S.T.
- Maricopa County Department of Public Health
- Sonoran Prevention Works

## Funding:

- Gift cards for the maternal syphilis interview project will be purchased using March of Dimes funds

## Metrics:

1. By January 31, 2020, understand the capacity of community-based organizations to complete screening and treatment
2. By March 31, 2020, complete informational guides for pregnant women
3. By June 30, 2020, complete at least 75 enhanced interviews with pregnant women with syphilis



# RECOMMENDATION BRIEF: ACCESS TO PRENATAL CARE

4. By June 30, 2020, complete report to summarize findings of the enhanced interview project and outline next steps

## Resources:

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5151516/>
2. <https://www.gutmacher.org/state-policy/explore/substance-use-during-pregnancy>
3. <https://dcs.az.gov/resources/faq>

## SELECTED SOURCES

# RECOMMENDATION BRIEF: ELECTRONIC LAB REPORTING

**Recommendation:** Onboard additional laboratories to electronic laboratory reporting via HL7 messaging or spreadsheet reporting. Initiate the enhancement of ADHS IT infrastructure to accept electronic case reports (eCR) from providers.

## **Background & Gap:**

The state of Arizona is a dual reporting state, meaning healthcare providers and laboratory providers are each required to report STD cases. In 2018, 146,000 chlamydia, gonorrhea and syphilis reports were received from laboratories and providers, a number which is increasing by thousands every year. The high case volume and rapid increase of STDs requires rapid improvement in the timeliness of STD reporting. ADHS only has two data entry staff allocated to enter STD reports, and one of the data entry specialists is a temporary employee.

The agency has invested in Electronic Laboratory Reporting (ELR) to reduce the burden of manual data entry for lab reports, but over 40,000 STD reports are still sent to the state and to local health agencies by mail or electronic fax and require manual entry into Arizona's state STD surveillance system, PRISM.

Additionally, about 13,000 STD reports each year are manually entered by providers into the Medical Electronic Disease Surveillance Intelligence System (MEDSIS) to fulfill their reporting requirement. However, every provider does not use MEDSIS and even when reports are provided, the local health department frequently has to reach out to providers to request additional information needed for case investigation. Manual reporting and entry of data is often associated with decreased timeliness and accuracy of STD reports and can lead to inconsistencies between data systems. Expanding electronic reporting would improve data quality and reduce the burden of manual data entry for the other ADHS programs that work with reportable conditions.

Since Arizona is a dual reporting state, further investment must be made to: (1) Onboard additional laboratory facilities to electronic laboratory reporting and (2) Enhance the ADHS IT infrastructure and capacity to accept electronic case reports (eCR) from providers. Support for these two initiatives would greatly improve the timeliness, accuracy, and completeness of reported STD cases.

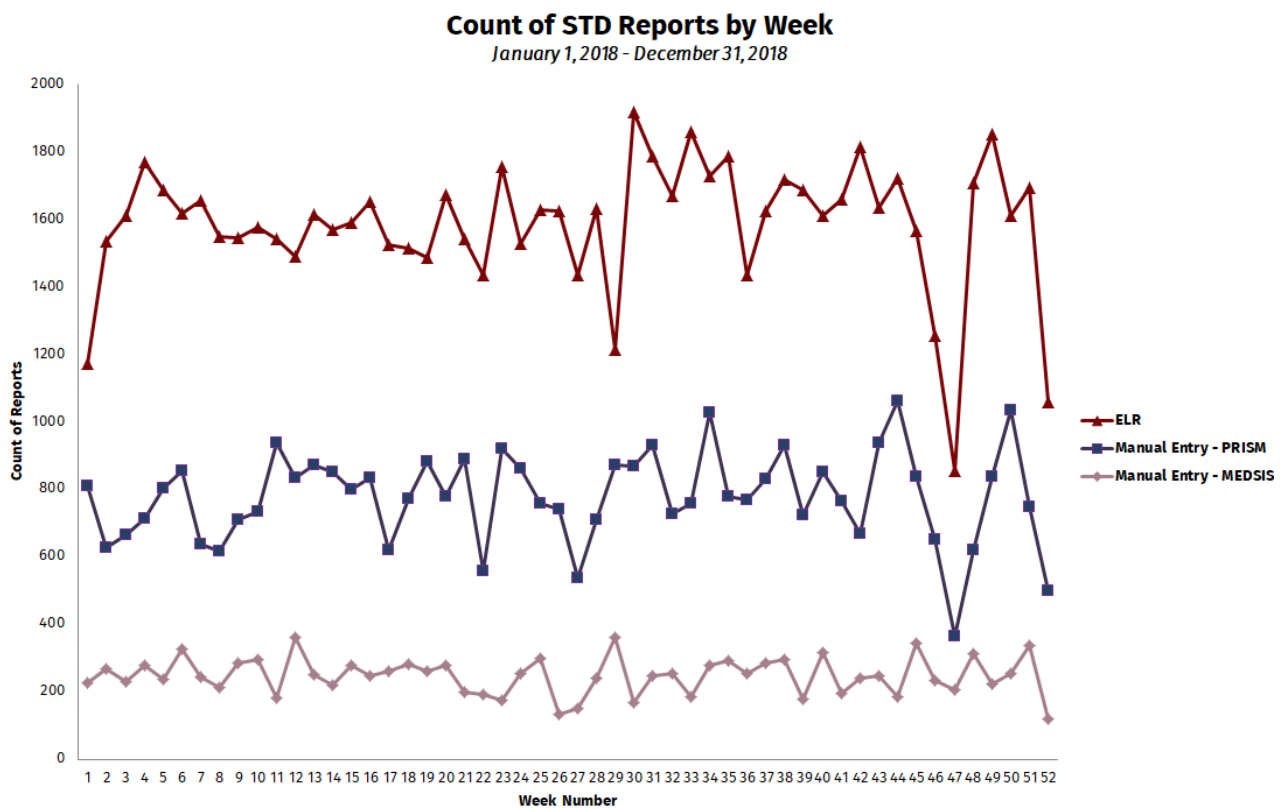
## **Trends & Services in Arizona:**

# RECOMMENDATION BRIEF: ELECTRONIC LAB REPORTING

The majority of STD reports are received through **electronic laboratory reports**, however, almost **40 % require manual entry** into **PRISM** or **MEDSIS**.



■ ELR ■ Manual Entry - PRISM ■ Manual Entry - MEDSIS



## Action Plan/Timeline:

- By July 31, 2019: Meet with the Phoenix Indian Medical Center (PIMC) to discuss the feasibility of spreadsheet reporting labs and treatment for patients diagnosed with STDs
- By October 31, 2019: Develop a template for PIMC spreadsheet reporting
- By December 31, 2019: Begin piloting spreadsheet reporting with PIMC
- By June 30, 2020: Reduce the amount of manual data entry from PIMC
- By December 31, 2020: onboard at least two major reporting facilities

## ADHS Divisions & Agencies Impacted:

- Arizona Department of Health Services
- Phoenix Indian Medical Center

# RECOMMENDATION BRIEF: ELECTRONIC LAB REPORTING

- Other high volume laboratories and providers reporting by paper

## **Metrics:**

1. By June 30, 2020, onboard PIMC to electronic spreadsheet reporting.
2. By June 30, 2020, increase the proportion of labs entered electronically by 5%.
3. By June 30, 2020, decrease the average time of reporting STDs for PIMC by 7 days.

# RECOMMENDATION BRIEF: EMERGING STDs

**Recommendation:** Develop plan to respond to re-emerging STDs.

## **Background & Gap:**

In April 2019, ADHS received two reports of suspect *Lymphogranuloma venereum* (LGV). The cases had no known link and were geographically isolated from one another. The last time ADHS received a report of suspect LGV was in 2017. LGV is caused by serovars of *Chlamydia trachomatis*. Although chlamydia is a nationally notifiable condition, LGV is not and all suspect reports of LGV are submitted to CDC as chlamydia. As a result there are multiple barriers for accurate LGV surveillance, including that many laboratories do not have the capacity to serotype strains.<sup>1</sup> While it is unusual for ADHS to receive two suspect LGV in the same month, it is difficult to determine if this is truly abnormal since chlamydia specimens are not routinely serotyped for LGV and are therefore not routinely reported to ADHS.

Although LGV is a serovar of *C. trachomatis*, the treatment for non-LGV *C. trachomatis* is different and would not be sufficient to clear an LGV infection. Treatment for non-LGV *C. trachomatis* is 1g azithromycin orally, whereas the treatment for LGV is doxycycline 100mg orally twice a day for 21 days. The difference in treatment impacts clinical management for the primary patient as well as public health management of partners.

ARUP Laboratories and Quest Diagnostics both offer chlamydia antibody differentiation testing, however, it is unknown to what extent insurance plans would cover differentiation testing for suspect cases of LGV.<sup>2,3</sup> There is a need to work with health plans to better understand LGV differentiation coverage so that public health can navigate LGV testing and partner services when suspect reports are received.

Also in April 2019, ADHS received a report of suspect chancroid. The last time Arizona reported a suspect chancroid case was in 2015. CDC does offer testing for suspect chancroid cases, however, by the time the specimen was collected, the patient had received multiple antibiotics and the specimen was compromised. The case would not divulge partner name(s) or contact information. There may be a need to include chancroid education in provider trainings to assure timely detection and reporting to ADHS, particularly if there are partners who have not been linked to screening and treatment.

## **Trends & Services in Arizona:**

Arizona had a 1 suspect case of chancroid in 2015 and 1 suspect case in 2019.

Arizona received 2 reports of suspect LGV in 2019. Prior to 2019, the last suspect case was in 2017.

## **Action Plan/Timeline:**

- By October 31, 2019: Meet with health plan stakeholders to clarify coverage of LGV
- By November 30, 2019: Discuss strategies for responding to suspect LGV and chancroid cases
- By January 15, 2020: Begin gathering educational materials for providers on emerging STDs
- By June 30, 2020: Draft plan for emerging STDs

# RECOMMENDATION BRIEF: EMERGING STDs

## ADHS Divisions & Agencies Impacted:

- Arizona Department of Health Services

## Metrics:

1. By November 15, 2019, fully understand the landscape of insurance coverage of testing and treatment for emerging STDs in Arizona
2. By February 1, 2020, complete response plan for emerging STDs internal for ADHS and providers
3. By March 15, 2020, create new section on the ADHS provider webpage for emerging diseases, including response plan for providers to enable them to take the correct action
4. By June 2020, complete plan for emerging STDs

## References:

1. CDC (2019). Guidance for reporting LGV cases as chlamydia to CDC. Retrieved from [https://www.cdc.gov/std/program/forms/Guidance-for-Reporting-LGV-Cases\\_clearance.pdf](https://www.cdc.gov/std/program/forms/Guidance-for-Reporting-LGV-Cases_clearance.pdf)
2. Chlamydia Antibody Differentiation (Lymphogranuloma Venereum) by Microimmunofluorescence): <http://ltd.aruplab.com/Tests/Pub/0098880>
3. Quest Diagnostics Lymphogranuloma Venereum (LGV) Differentiation Antibody Panel, MIF: <https://testdirectory.questdiagnostics.com/test/test-detail/19553/?cc=MASTER>