We are pleased to join the San Joaquin County Public Health Services team and continue to seek ways to amplify our presence in the community consistently across all of our programs. In light of the growing opioid crisis, we hope to step up our community engagement by using a multi-faceted approach that includes working with other agencies and departments to provide more education, prevention, treatment and harm reduction services.

With the recent legalization of cannabis, there will not only be a legal shift but public health effect as well. We also want to make sure San Joaquin County residents are well informed through sustained and appropriate public health campaigns and ensure that the risks are well understood.

In an effort to continue improving data access and data sharing within our community, we are working to create a seamless flow of information between community providers and Public Health Services to more efficiently and adequately serve the county population when public health issues arise. This will also allow us to make decisions and target our services with real time data.

We look forward to interacting with all who live, work and play in San Joaquin County to fully achieve our goals.

Kismet Baldwin, M.D.
Public Health Officer
San Joaquin County Public Health Services

Gordon Arakawa, M.D., Ph.D.
Assistant Public Health Officer
San Joaquin County Public Health Services
San Joaquin County Public Health Services (PHS) provides a broad array of programs and services to protect and promote the health and wellbeing of county residents. PHS is well regarded for its core programs, including an immunization registry and a Public Health Laboratory that both serve surrounding counties. The 235-member multidisciplinary staff reflects the broad diversity of the county’s population.

**Vision and Mission**

As set forth in the new PHS Strategic Plan, 2017-2022:

*Vision:* All San Joaquin County communities are healthy, safe, equitable, and thriving.

*Mission:* To protect, promote, and improve health and wellbeing for all who live, work, and play in San Joaquin County.

**Programs that Serve the People of San Joaquin County**

PHS programs and services are grouped into the following categories:

PHS programs within these categories include:

- **Communicable Disease Control and Prevention** – acute communicable diseases, sexually transmitted diseases and tuberculosis.
- **Health Promotion, Chronic Disease, and Injury Prevention** – tobacco control, child passenger safety, pedestrian and bike safety, heart disease and diabetes prevention, nutrition and physical activity, senior fall prevention, the promotion of breastfeeding, oral health, and opioid safety.
- **Maternal, Child, Adolescent and Family Health** – Black Infant Health; Nurse Home Visiting, and Cal-Learn (to help young people receiving CalWORKs grants to graduate from high school).
- **Clinical Services or Linkage with Care** – Children’s Medical Services, Medical Therapies for Children, and Childhood Lead Poisoning Prevention.
- **Supportive Capabilities** – Epidemiology, Public Information and Communications, Emergency Preparedness, and issuing of birth and death certificates. It also includes Policy Development and Support (e.g., Accreditation) and Community Partnership Development.
In alignment with the Board of Supervisors strategic priorities regarding collaboration among County departments, PHS has a number of public health nurses stationed in other divisions and departments that serve clients in common (i.e., Human Services Agency, Children’s Services Branch – Foster Care Nursing Services and Child Protective Services; Aging and Community Services – In-Home Supportive Services and Adult Protective Services; and San Joaquin General Hospital’s’ Healthy Beginnings clinic). Public Safety is another strategic priority of the Board. It is also an integral part of public health’s mission with its focus on safe and healthy communities and protecting residents from harm (including from disease). PHS continues to collaborate with community partners to promote public safety by preventing early deaths, e.g., addressing opioid misuse and abuse; promoting safer, more walkable neighborhoods; preventing intentional injuries; and reducing the impact of both acute and chronic diseases.

Health equity means everyone has a fair opportunity to obtain optimal health. This requires removing barriers to individual and community health, such as poverty and discrimination. In this context, health is inextricably linked to geography, because structural social conditions tend to concentrate resources and opportunities for healthful living. In essence, where you live determines how long you live. This is a very real concern in our County where life span is foreshortened by nearly 20 years in our more impoverished neighborhoods. To get at the root causes of such inequities, PHS is working with colleagues across all sectors to improve the social, economic, and physical conditions that impact health. For example, our collective county-wide Community Health Improvement Plan (CHIP) focuses on actions such as reducing food insecurity, finding ways to ensure that all third graders are proficient readers, and promoting safe and affordable housing. Both traditional and non-traditional community partners are working together to implement CHIP strategies to realize change.

Every year, PHS takes the opportunity to showcase a few of its programs in the Annual Report. Brief program descriptions with highlights for 2017 are found on the following pages. These highlights help to demonstrate our commitment to service excellence and the strong support of our community partners in moving forward to improve health in all of our communities.
Communicable Disease Control and Prevention

In 2017, San Joaquin County Public Health Services (PHS) received approximately 11,100 reports of communicable diseases, a 21% increase from 2016 (9,200 reports); chlamydia and gonorrhea account for about ~50% of the reports (3,988 and 1,360 respectively).

**General Communicable Disease (CD)**

Conducted case and foodborne outbreak investigation of *Clostridium botulinum* (botulism) associated with consumption of jalapeno nacho cheese sauce sold at a gas station in Walnut Grove. Of the 10 lab-confirmed California cases, 4 lived in San Joaquin County. All infected patients required hospitalization and most needed rehabilitation services after discharge.

**Tuberculosis (TB)**

Provided case management and directly observed therapy to people with active TB, ensuring treatment completion and decreasing risk for TB spread. Followed up on contacts of TB cases and prioritized the contacts with latent TB to promote completion of treatment and interrupt the cycle of transmission.

**Sexually Transmitted Diseases (STDs)**

Received funds to implement and evaluate use of a rapid syphilis test in non-clinical settings; one of five counties in the US awarded this grant. This was part of outreach efforts at local homeless encampments to address an increase in the number of syphilis cases among those living there.
Health Promotion, Chronic Disease and Injury Prevention

**Diabetes Prevention**

Launched the nationally recognized Diabetes Prevention Program, a series of classes specifically designed to work with adults at risk for developing diabetes. Facilitated training of more than 30 staff from seven different organizations as lifestyle change coaches. The YMCA, San Joaquin County Engage, and Community Medical Centers have now begun to offer this program to County residents.

**Child Passenger Safety**

Trained 17 new Child Passenger Safety Technicians (CPSTs), and certified 1 new Instructor who can now train additional CPSTs; this more than doubles the capacity within the County to improve child passenger safety! Provided car seats at no cost for over 200 children, and educated 144 Stockton Police Officers on new Child Passenger Safety Laws and how to enforce them.

**Access to Healthy Food**

Prioritized food security by collaborating with five community organizations and 24 schools to create community gardens throughout the county. Over 2,500 students and 1,300+ families receiving training and hands-on experience on how to grow and supplement their diet with fresh produce.
Maternal, Child, Adolescent and Family Health

**Mental Health Resource Directory**

Created a comprehensive Mental Health Resource Directory as a tool for local community-based organizations and medical providers to improve access to mental health services in our county. Published in August, the directory continues to receive positive reviews. It will be reviewed and updated every 2 years.

**Cal-Learn**

Provided case management to 250 local pregnant and parenting teens, both mothers and fathers, who receive CalWORKs/Temporary Assistance for Needy Families. Cal-Learn helps teens develop a plan to finish high school or earn a GED, and provides referrals to community resources that can help these adolescents achieve life goals.

**Women, Infants and Children (WIC)**

Provided support to more than 620 breastfeeding mothers each month, many of whom chose to breastfeed exclusively after their visits. Coaching was provided by a highly skilled International Board Certified Lactation Consultant hired by WIC in July, Breastfeeding Peer Counselors, and other dedicated WIC staff.
Access to and Linkage with Clinical Care

**HIV Case Management**

Assisted clients in accessing health care, mental health care, substance abuse treatment, housing and psychosocial support. Activities included: development of a comprehensive and individualized care plan, partner services, treatment adherence and medical follow-up, counseling, helping clients access emergency financial assistance and necessities (i.e., food, clothes).

**Food Access Pilot**

Served clients living with HIV/AIDS who lack access to optimal nutrition. Eligible clients were enrolled in the program and provided either a weekly meal kit delivery or a prepared food delivery which provides 30% of their daily caloric needs. Clients received a nutritional assessment and periodic follow up assessments by a Registered Dietitian.

**Transportation Assistance**

Facilitated transportation using UBER for authorized clients who require transport to healthcare-related services. Previously, staff provided round-trip transportation to medical appointments. Through the use of UBER, savings over six months totaled more than $7,300.
Supportive Capabilities

Laboratory (Lab)

Hired first full-time Public Health Lab Director since the previous lab director retired in January 2012. In response to requests from the public, the public health lab began offering microbiological water testing to the public. County residents can now bring samples of their drinking water to the lab for testing.

Emergency Preparedness (EP)

Assisted with the coordination of the 2017 Winter Storms response providing hours of high level support at the SJC Emergency Operations Center (EOC). Hosted a two day, no-cost training, “Pediatrics in Disasters Response” during National Preparedness Month that included over 40 partners in law enforcement, Fire, EMS, Behavioral Health, childcare providers, and community volunteers.

Public Information & Communication

Developed and disseminated information to the community and healthcare providers regarding issues that impact the public’s health and safety via news releases, media events, presentations, provider health advisories and alerts, and website and social media postings. Information can be found at the public health website, Facebook, Twitter, and YouTube.
The definition of epidemiology (Epi) is complex\(^1\), with many variations, but in simple terms: Epi monitors the health of the community to identify and help solve issues.

At San Joaquin County Public Health Services (PHS), Epi provides support to all programs, which includes but is not limited to: data analysis, mapping, program evaluation, and grant writing. Epi also shares health information with the community through data reports.

**Projects**

In 2017, Epi completed 236 projects, an increase of 13% from the previous year. Most of the projects took an average of ten hours to complete; some took more than a year. Examples of projects from 2017 include:

### Tuberculosis (TB) Outbreak Contact Investigation

TB is considered one of the hardest diseases to investigate not only due to managing the cases, but their contacts as well. In 2017, there were multiple large contact investigations, with over 1,000 people needing evaluation. An Epi was dedicated full time to the TB Program to assist in these investigations.

> “These data are complex and challenging to analyze...Most importantly, the way in which you’ve collected, managed, analyzed, and presented the data is helping guide important decisions about the investigation.”  
> ~Chief, Outbreak Prevention and Control Section, Tuberculosis Control Branch, California Department of Health

### Syphilis Management Dashboard

Syphilis has been increasing rapidly in the past five years. The PHS STD Program Coordinator needed help managing the status of each case; therefore, a dashboard was created so they could get real-time information. It was so well received that it was requested by the California Department of Public Health, STD Control Branch.

> “It has exceeded my expectations. This will be a great tool for me when evaluating staff performance and workload management.”  
> ~STD Program Coordinator, PHS

### African American Birth Disparity Data

African Americans have the highest infant mortality and preterm birth rate in San Joaquin County. The PHS Black Infant Health (BIH) Program used this information for multiple purposes, including recruitment materials for program enrollment.

> “Thank you! This will assist us with our community outreach and infant mortality awareness

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Syphilis is a sexually transmitted disease (STD) caused by the organism *Treponema pallidum*.

Syphilis can also be transmitted from mother to baby during birth, resulting in congenital syphilis. Since sexual transmission of syphilis is greatly reduced by latex condom use and effective screening and treatment regimens exist, there were only 6,000 syphilis cases in the US in 2000 and the CDC believed that total elimination was within reach.

However, this optimism was short-lived. Beginning in 2005, the number of reported syphilis cases began to increase in the US. This rise was particularly surprising since it occurred during a time when the number of HIV cases decreased in the US. Figure 1 shows a comparison of the number of syphilis and HIV cases in San Joaquin County from 2013 to 2017. While the number of HIV cases decreased slightly, the number of syphilis cases markedly increased.

The news is not all bad, however. For example, as the number of syphilis cases in females of child bearing age increases, the number of congenital syphilis infections should increase proportionally. Figure 2 shows the number of early stage syphilis cases in females of child bearing age along with the number of congenital syphilis cases in San Joaquin County from 2013-2017. Even though there has been a marked increase in the number of syphilis cases in females of childbearing age, particularly in the past two years, the number of cases of congenital syphilis has decreased.

In San Joaquin County, Public Health Services (PHS) has worked diligently to identify, treat, and educate persons who have syphilis as well as their sexual contacts. Specifically, in 2017, PHS took the initiative to improve the timeliness of syphilis treatment in females of childbearing age with intensive outreach to patients and providers. The results suggest that the efforts by PHS to identify and treat syphilis in San Joaquin County are making a difference. Of course, since even one case of congenital syphilis is one too many, there is much more work to be done. PHS will continue its work to reduce the burden of syphilis disease throughout San Joaquin County.
Major Milestones Reached

This year, PHS reached several major milestones in seeking accreditation by the national Public Health Accreditation Board (PHAB). In spring 2017, the Department developed its 2017-2022 Strategic Plan. This innovative plan was the final prerequisite to initiate the application process. In December 2017, PHS submitted a package of 329 documents to demonstrate how it fulfills PHAB’s quality standards of public health practice and management. Staff throughout the department worked collaboratively to compile documents that demonstrate conformity with the 12 PHAB standards and numerous performance measures related to essential services in public health. For example:

Standard 9: Develop and implement quality improvement processes integrated into programs, processes and interventions – Our newly-hired Quality Improvement Coordinator developed a PHS Quality Improvement (QI) Plan; we also submitted work plans from several program-level QI projects to demonstrate how PHS is embedding continuous quality improvement into everyday practice.

Next Steps

PHAB will conduct a review to ensure “completeness”. That will be followed by a more thorough review of each document and then PHAB will arrange for a site visit in the summer of 2018 in which a PHAB team will come in person to evaluate our documents for conformity to the national standards.

In summary, PHS made excellent progress in 2017, and is now moving toward the finish line. We look forward to PHS achieving national accreditation status in 2018.
PHS will be establishing a county-wide opioid safety coalition, positioning our county to provide leadership and coordination to address this serious and growing public health imperative. The coalition will build on the work begun by the hospital-led Opioid Misuse and Abuse Program. The coalition will provide outreach to health care providers regarding safe prescribing practices and to the general public on safe use, storage, and disposal of prescription medications to reduce opioid-related overdoses and deaths. Having a coalition in place strengthens the county’s ability to compete successfully for future state and federal funding opportunities.

With the goal of reducing the number of fatal overdoses from opioid drugs, including prescription opioids and heroin, we are also implementing a complementary Naloxone Distribution Grant Program. The two-year program distributes several hundred doses of the life-saving drug naloxone to local programs, agencies and community-based organizations that are in the best position to save lives from opioid overdose. The easy-to-administer naloxone nasal spray can be provided to close friends or family members of those who are at high risk of opioid overdose.

By addressing disease in high-risk populations such as homeless, we prevent exposure and spread within this population, which in turn, protects the community-at-large. We are implementing a project focused on homeless encampments to provide hepatitis A vaccination and prevention education, and screen for both tuberculosis and syphilis. Those who test positive for tuberculosis and/or syphilis will be referred for treatment at a medical home.

Finally, PHS will be establishing a new Oral Health Program focused on prevention and designed to address the gaps in current dental health services for both children and adults. The program will develop and implement an action plan for dental education, promotion, surveillance, and dental care coordination. This program will complement First 5 San Joaquin’s Dental Transformation Initiative (DTI) Local Dental Pilot Project, which focuses on providing direct dental services to underserved communities.
There are over 80 diseases and conditions that are reportable to PHS. The total number of cases for the diseases shown below increased 4% from 2,084 in 2016 to 2,175 in 2017. While *Shigella* and chronic hepatitis have decreased, other diseases, such as syphilis and Valley fever continue to increase especially in the last three years.

**Case Count By Year Reported, 2015-2017**

**Shigella (all types)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>185</td>
</tr>
<tr>
<td>2016</td>
<td>77</td>
</tr>
<tr>
<td>2017</td>
<td>36</td>
</tr>
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</table>

**Cryptosporidiosis**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1</td>
</tr>
<tr>
<td>2016</td>
<td>33</td>
</tr>
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**West Nile Virus**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>2016</td>
<td>13</td>
</tr>
<tr>
<td>2017</td>
<td>14</td>
</tr>
</tbody>
</table>

**Tuberculosis**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>58</td>
</tr>
<tr>
<td>2016</td>
<td>42</td>
</tr>
<tr>
<td>2017</td>
<td>53</td>
</tr>
</tbody>
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**Pertussis**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>84</td>
</tr>
<tr>
<td>2016</td>
<td>5</td>
</tr>
<tr>
<td>2017</td>
<td>8</td>
</tr>
</tbody>
</table>

**Coccidiodomycosis (Valley Fever)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>114</td>
</tr>
<tr>
<td>2016</td>
<td>194</td>
</tr>
<tr>
<td>2017</td>
<td>281</td>
</tr>
</tbody>
</table>

**Syphilis**

<table>
<thead>
<tr>
<th>Year</th>
<th>Congenital Syphilis</th>
<th>Primary &amp; Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>6</td>
<td>129</td>
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<tr>
<td>2016</td>
<td>16</td>
<td>262</td>
</tr>
<tr>
<td>2017</td>
<td>14</td>
<td>364</td>
</tr>
</tbody>
</table>

**HIV/AIDS**

<table>
<thead>
<tr>
<th>Year</th>
<th>AIDS</th>
<th>HIV (non-AIDS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>36</td>
<td>65</td>
</tr>
<tr>
<td>2016</td>
<td>32</td>
<td>46</td>
</tr>
<tr>
<td>2017</td>
<td>23</td>
<td>55</td>
</tr>
</tbody>
</table>

**Chronic Hepatitis**

<table>
<thead>
<tr>
<th>Year</th>
<th>Hepatitis B</th>
<th>Hepatitis C</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>303</td>
<td>1266</td>
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<tr>
<td>2016</td>
<td>208</td>
<td>1182</td>
</tr>
<tr>
<td>2017</td>
<td>176</td>
<td>1117</td>
</tr>
</tbody>
</table>

*Note: Data are provisional and may change as additional information is received*
SAN JOAQUIN COUNTY PUBLIC HEALTH SERVICES

ANNUAL REPORT — 2017

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SPECIAL THANKS TO THE PHS STAFF FOR ALL THEIR WORK AND ACHIEVEMENTS IN 2017

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