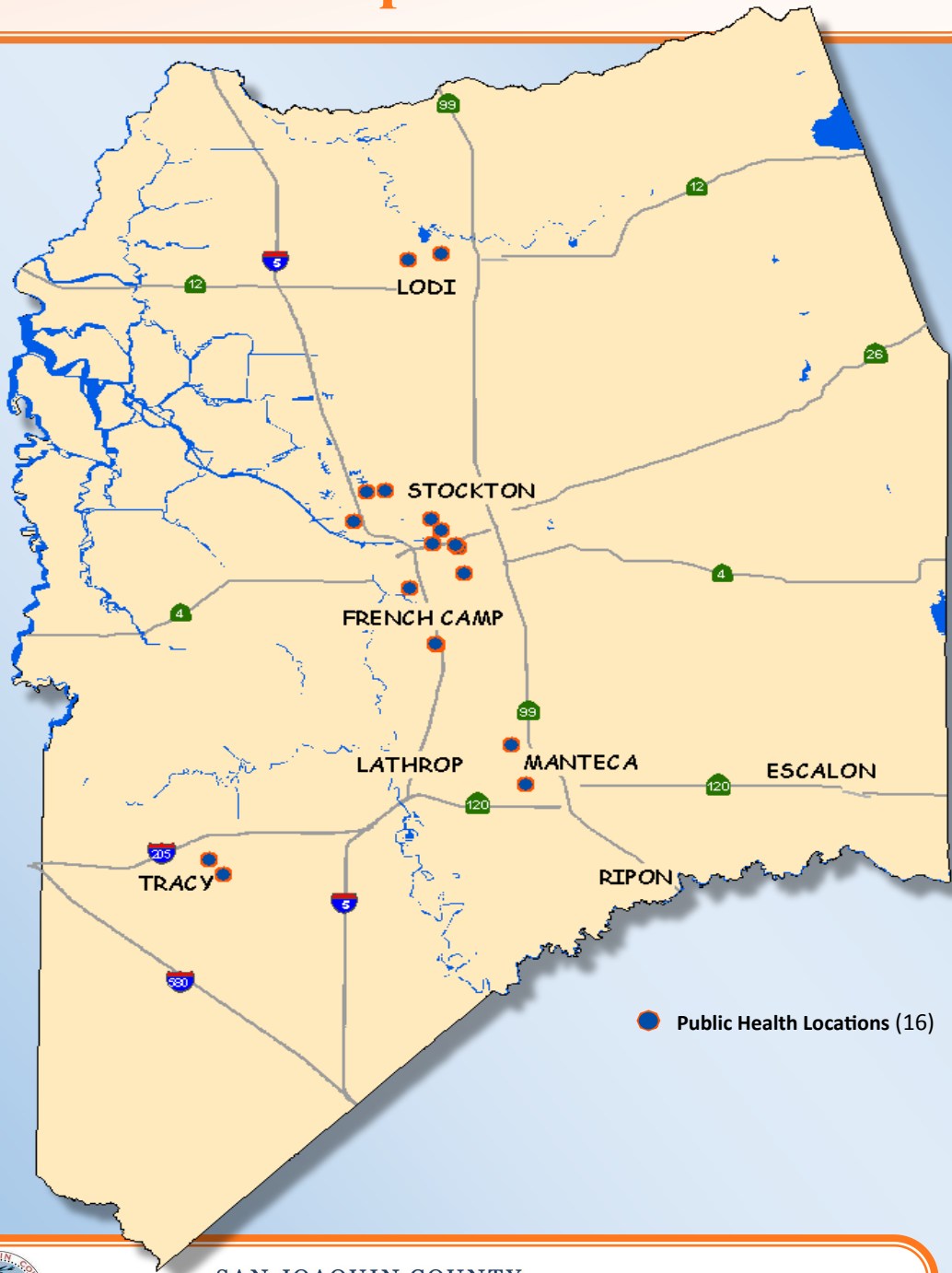


# San Joaquin County Public Health Services Annual Report—2016



A DIVISION OF  
HEALTH CARE SERVICES  
AGENCY

SAN JOAQUIN COUNTY  
**Public Health Services**

*Healthy Future*

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# INTRODUCTION

San Joaquin County Public Health Services (PHS) is a public health department with 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 a state-of-the-art Public Health Laboratory and an immunization registry that both serve seven surrounding counties. PHS' 240 member multi-disciplinary staff reflects the broad diversity of the county's population.

## Programs that Serve the People of San Joaquin County

PHS has a strong slate of managers and supervisors that direct programs grouped as follows:

- **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 wellness, and the promotion of breastfeeding;
- **Maternal, Child, Adolescent, and Family Health** - Black Infant Health, Adolescent Family Life, and Women, Infants, and Children (WIC);
- **Clinical Services or Linkage with Care** - immunization clinics, California Children's Services, Medical Therapies for Children, Child Health and Disability Prevention, Foster Care Nursing Services, and Childhood Lead Poisoning Prevention; and
- **Supportive Capabilities** - Epidemiology, Public Information/Communications, and Emergency Preparedness, as well as the issuing of birth and death certificates.

## Priorities of the San Joaquin County Board of Supervisors

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 (e.g., 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).

## Health in All Policies

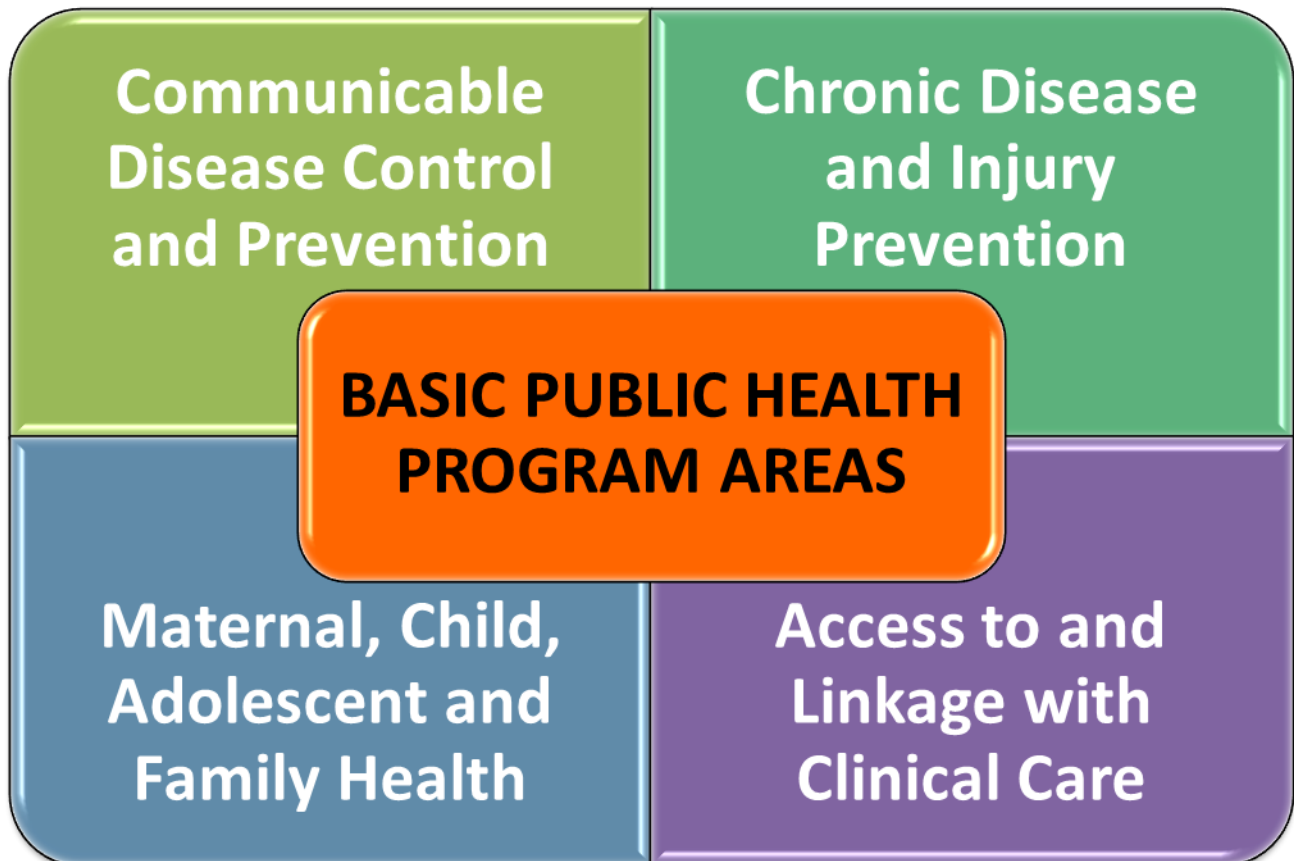
PHS recognizes that creative, community- and policy-oriented approaches are key to long-term success. PHS strives for a "health in all policies" approach that calls for public health professionals to work with many community partners, such as law enforcement, transportation officials, environmentalists, educators, community service providers, faith-based organizations, and resident grassroots leaders who can help communities to make the healthier choice the easy choice for all.

## Social Determinants of Health

We are particularly interested in how 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. In fact, life span is foreshortened by more than 10 years in our most impoverished neighborhoods. To get at the root causes of such inequities, we are working with colleagues across all sectors to improve the social, economic, and physical conditions that impact health. With our commitment to service excellence and the strong support of our community partners, we are confident that we can continue to improve health in all of our communities.

# PHS PROGRAM HIGHLIGHTS

The following pages briefly describe selected PHS programs and illustrate some of their highlights from 2016. They are grouped in four major public health program areas plus the group of capabilities that provide support to all program areas (see below graphic).



## Supportive Capabilities

- **Assessment (Epidemiology and Laboratory Capacity)**
- **Emergency Preparedness and Response**
- **Public Information and Communication**
- **Policy Development and Support (e.g. Accreditation)**
- **Community Partnership Development**

# PROGRAM HIGHLIGHTS

## Communicable Disease Control and Prevention

In 2016, San Joaquin County Public Health Services (PHS) received approximately 9,200 reports of communicable diseases, a 7% decrease from 2015 (9,850 reports); chlamydia and gonorrhea account for about 50% of the reports (3,800 and 1,150, respectively).

### General Communicable Disease (CD)

Conducted case and outbreak investigations of select reportable diseases to identify the source of infection (e.g., food, water, person) and other exposed/ill contacts and excluded ill people from working until cleared. *Coccidioidomycosis*, also known as Valley Fever, increased statewide in 2016. In San Joaquin County, most people with *coccidioidomycosis* live in or near Tracy.

*Coccidioidomycosis* (“Valley Fever”)

**172** Cases—Highest on Record



52% Increase over 2015

### 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.



**42** Cases—Lowest on Record



28% Decrease from 2015

### Sexually Transmitted Diseases (STDs)

Worked with community partners, focusing on prevention, treatment, surveillance, and care. Conducted extensive contact investigations of individuals exposed to syphilis. Prioritized investigating and ensuring treatment of women of childbearing age and their partners to prevent congenital syphilis.

Syphilis

**261**

Infectious Cases



2 Times Higher than 2015



~3 Times Higher than 2015

# PROGRAM HIGHLIGHTS

## Chronic Disease and Injury Prevention

### Safer, More Walkable Communities

*Collaborated with schools by hosting parent workshops and AAA Safety Patrol training, spearheaded a poster art contest, and conducted bike rodeos and Walk to School Day events. PHS also broadened the lens to include senior mobility; conducted a first Walkability for Older Adults symposium in partnership with key organizations that serve seniors.*

300  
Students



Walked or Biked to School  
on 'Walk to School Day'

### Child Passenger Safety

*Secured \$100,000 in federal funding to significantly expand the child passenger safety program's education and training activities. Included promoting the new child passenger safety law; displayed the new law in English and Spanish using car magnets on county fleet vehicles.*

125  
Car  
Magnets



Were Installed on County Vehicles  
Displaying New Law

### Healthy Retail—Access to Healthy Food

*Launched Refresh San Joaquin to improve access to healthy food items in neighborhood stores. Actions ranged from stocking fresh fruits and vegetables for the first time, removing eye-catching signage that promotes unhealthy products like tobacco and alcohol, and rearranging floor space to make stores more inviting for shopping.*



Changed Practices to Improve Access to  
Healthy Food

# PROGRAM HIGHLIGHTS

## Maternal, Child, Adolescent and Family Health

### Breastfeeding Initiative

*Assisted maternity hospitals with the adoption and implementation of California Department of Public Health's Breastfeeding Model Hospital Policies and designation as WHO/UNICEF Baby-Friendly hospitals. Provided training and assistance to hospitals to improve practices and policies.*

San Joaquin General Hospital

Achieved  
Baby-Friendly  
Designation



3 of 5 Maternity Hospitals Designated

### Women, Infants and Children (WIC)

*Issued 364,177 vouchers this year to help pregnant and breastfeeding women as well as young children to obtain healthy products ranging from fresh fruits and vegetables to whole grains, low fat dairy products, and high fiber protein sources such as beans and lentils. Promoting eating fresh fruits and vegetables is a priority. Of the 55,453 vouchers specifically for fruit and vegetables, (90%) were redeemed.*

90%  




Fresh Fruit and Vegetable  
Vouchers Redeemed

### Black Infant Health

*Supported African American pregnant adult women to develop life skills, reduce stress, build social support, and improve overall health and wellness. Provided prenatal & postpartum group education sessions regarding the importance of early and continuous prenatal care, well-child check-ups, breastfeeding, and timely and complete immunizations to ensure babies are born healthy and grow into healthy children.*

54  
High-Risk  
Pregnant  
Women



Were Provided Support and Assistance

# PROGRAM HIGHLIGHTS

## Access to and Linkage with Clinical Care

### Public Health Clinic

*Evaluated patients for sexually transmitted diseases (STDs) and either treated on site or dispensed medications to ensure that all have timely access to appropriate treatment, thereby decreasing the risk of spreading STDs to others. Of all the patients seen at the STD clinic, 94 people were diagnosed and treated for chlamydia, 93 people diagnosed and treated for gonorrhea, and 192 people diagnosed and treated for all stages of syphilis.*

### STD Clinic

1,397

Patient Visits



64% Higher than Projected

### Foster Care

*Monitored and oversaw psychotropic (behavior modifying) medication use in foster children to ensure safe and appropriate use per passage of SB-319 in 2016. PHN case managers collaborated with prescribing physicians, law enforcement, caregivers, and foster children to document compliance with treatment, response to medications, and facilitate court authorizations.*

226 (25%) Foster Children



Are Taking Psychotropic  
(Behavior Modifying) Medications

### California Children's Services (CCS)

*Collaborated with pharmacies, medical providers, and durable medical equipment companies to coordinate especially for patients with complex or chronic health care needs. Compliance with medical care is monitored through case management to improve quality of life for patients, families and communities. Through advocacy, patients receive medically necessary care in a timely manner.*

1,778

New Cases  
Opened



61% Increase over 2015



# PROGRAM HIGHLIGHTS

## Access to and Linkage with Clinical Care

### Childhood Lead Poisoning Prevention

Managed children diagnosed with lead poisoning and provided home visits and environmental investigations with a Registered Environmental Health Specialist and Public Health Nurse. In 2016, a larger number of children received case management services due to new state guidelines, which lowered the blood lead levels necessary to diagnose and respond to lead poisoning.

1 Child in 2015



15 Children in 2016



Were Diagnosed with Lead Poisoning

### HIV Case Management

Assisted clients in accessing health care, mental health care, substance abuse treatment, housing and psychosocial support. Provided client support to reduce barriers to care through advocacy, assistance, and education. 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).

181

Clients Managed



21% Increase from 2015

### Medical Therapy

Provided physical and occupational therapy and medical consultation services for children with disabling conditions. Coordinated care using home visits. During the home visits, therapy staff can ensure appropriate use of medical equipment in the child's natural environment, assess for safety, and identify opportunities to promote increased independence.

450



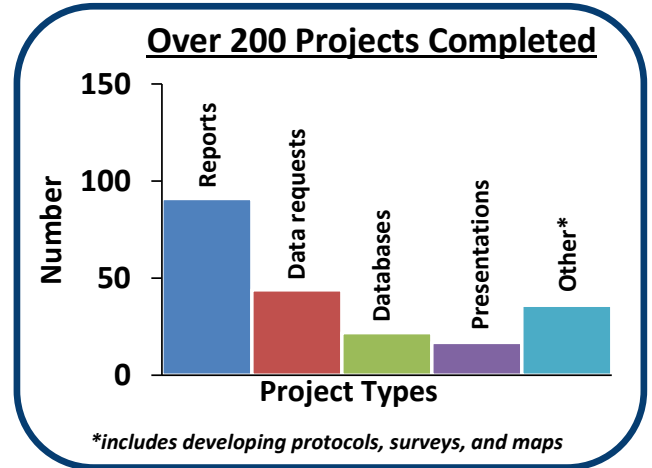
Children with Disabilities Served

# PROGRAM HIGHLIGHTS

## Supportive Capabilities

### Epidemiology (Epi)

Monitored the health status of the community to identify and solve health issues. In 2016, Communicable Disease Control and Prevention, and Chronic Disease and Injury Prevention programs at PHS were able to receive competitive grant funding in large part due to epidemiological information. In addition to PHS projects and routine tasks, Epi completed twenty projects for non-PHS requestors.



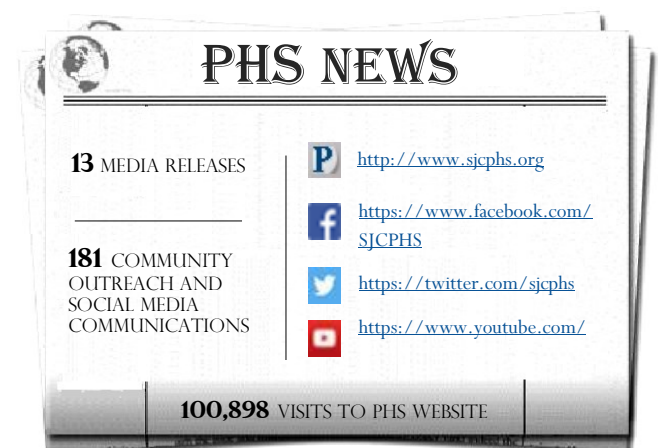
### Healthcare Community Information

Provided timely and crucial health information to the healthcare community through health alerts and advisories. Educational materials were distributed via presentations to professional groups and published articles in physician magazines.



### General Community Information

Developed and disseminated information to the general community regarding issues that impact the public's health and safety via news releases, media events, presentations, and website and social media postings. Information can be found at the public health website, facebook, twitter, and youtube.

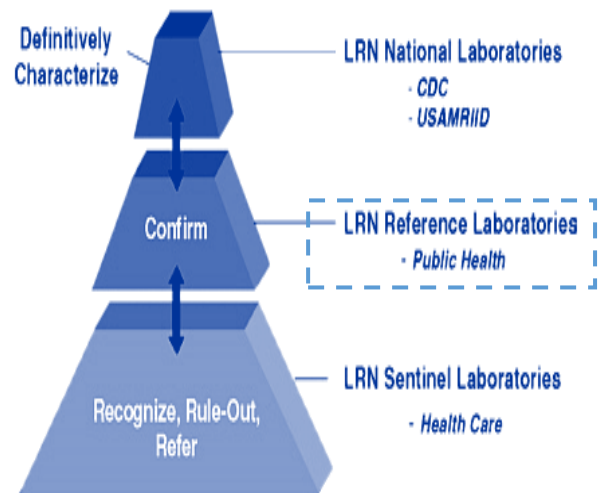


# LABORATORY CAPACITY

The San Joaquin County Public Health Laboratory serves as a regional Laboratory Response Network (LRN) Reference laboratory. Our LRN reference lab serves not only San Joaquin, but seven other counties (Stanislaus, Tuolumne, Calaveras, Amador, Alpine, Mariposa and Mono).

In addition to our daily testing for communicable diseases, we provide testing for rabies and bioterrorism agents such as *Yersinia pestis* (plague), *Francisella tularensis* (tularemia) and *Bacillus anthracis* (anthrax). The San Joaquin County Public Health Laboratory is the only lab in the region that can perform these tests. In 2016, our lab obtained samples from the brains of 116 animals for rabies testing, five with positive results.

In the past two years, we have tested 10 specimens for anthrax, two for plague, and two for tularemia. Fortunately, these tests have all been negative.



These bacteria are occasionally found in animals in our region; anthrax can infect livestock such as cattle and sheep; plague and tularemia may infect wildlife such as rabbits and squirrels. In 2015, two specimens we tested for plague were associated with a larger outbreak centered at Yosemite National Park. With an expansion of habitat of these infected animals due to climate change or even additional vegetative growth from the recent rain, we may see an increase in these diseases bringing with it the need for increased testing in the near future.

As the LRN reference laboratory, we work collaboratively with the Federal Bureau of Investigation (FBI) as well as the CDC. As part of that collaboration, we test suspicious letters or packages for agents of bioterrorism. Most recently, in late 2015, we received a suspicious letter from local law enforcement requesting testing for multiple agents. Again, after working with local law enforcement and the FBI, the letter was deemed not containing a bio threat nor a chemical or explosive agent.

Another function of the LRN is to test for emerging infectious diseases that pose a threat to our community. The most recent disease to emerge as a public health threat is Zika virus. In the second half of 2016, our laboratory became one of only a handful in the State to test for Zika virus. Since then, we have tested 38 individuals in our region with 5 being positive for acute Zika virus infection. This testing is critical to identify people infected with Zika infection, allowing PHS to take action to prevent Zika virus spread in our community.

# SELECTED MOSQUITO-BORNE DISEASES



## West Nile Virus (WNV)

Surveillance for West Nile Virus (WNV) includes symptomatic cases and asymptomatic blood donors. 2016 was one of the biggest years for San Joaquin County: one blood donor and 13 cases, two of which died. When any mosquito-borne disease is reported, PHS notifies the San Joaquin County Mosquito and Vector Control District (MVCD) and they perform mosquito spraying in the area identified where transmission most likely occurred and distribute educational information regarding the risk of WNV infection.

San Joaquin County also had an increase in WNV infection in horses, accounting for seven (33%) of the 21 equine infections reported statewide. PHS coordinated with Veterinary Medical Societies in our county to get the word out to veterinarians about the increase in WNV in horses and to promote equine vaccination.



## Zika Virus

Zika virus was identified as an emerging public health threat in 2015 and while outbreaks of the disease have been previously reported in Africa, Asia, and islands in the Pacific, there was a heightened concern due to new data suggesting an association between birth defects and unexpected loss of pregnancy with Zika infection in women.

PHS developed information packets about Zika infection during pregnancy and delivered these packets to offices of physicians caring for pregnant women. Presentations were given to various groups including hospitals and community groups. While the *Aedes* mosquito that transmits Zika has not been detected in SJC, PHS met with MVCD quarterly to plan for a coordinated response for its expected arrival.

Testing for Zika was initially limited to CDC then later became available at SJC Public Health Laboratory in June 2016. Criteria for testing changed rapidly as additional information was received from international studies, therefore approval for testing required a thorough assessment for possible exposures and symptoms by PHS staff.

In 2016, PHS received 105 requests for Zika testing, 81 were approved based on eligibility, 73 were tested, and ultimately seven were diagnosed with Zika (Figure 1). All cases traveled to places with ongoing Zika transmission: El Salvador, Guatemala, Jamaica (2), Mexico (2), and Puerto Rico; and none were pregnant.

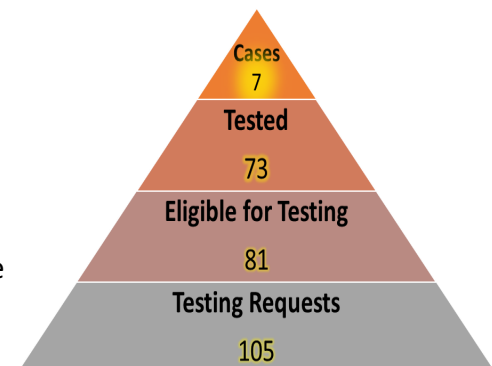
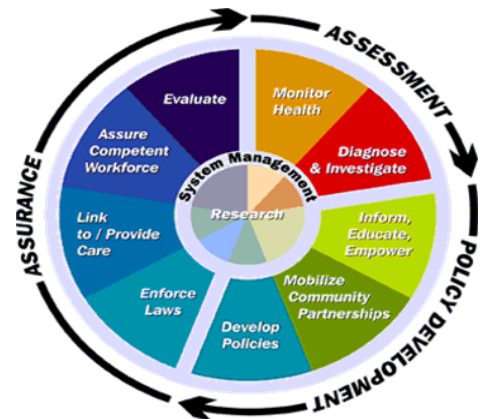


Figure 1. Zika Virus Testing

# PUBLIC HEALTH ACCREDITATION

PHS continued in its preparation to apply for accreditation from the national Public Health Accreditation Board (PHAB). The process consists of adopting a set of quality standards of public health practice and management, measuring performance against those standards, and recognizing health departments that meet those standards. PHAB's standards and measures are based on the 10 Essential Public Health Services (see figure) which describe the activities that all public health systems should provide. Accreditation will be a significant milestone for PHS and will allow the department to continue to focus on quality improvement to:

- Promote accountability to the community we serve
- Meet the mission of improving the health of the community
- Build upon our strengths and improve our weaknesses
- Place the department in a competitive position to garner additional funding.



There are seven steps to Public Health Accreditation:

1) *Pre-application*; 2) *Application*; 3) *Document Selection and Submission*; 4) *Site Visit*; 5) *Accreditation Decision*; 6) *Reports*; and 7) *Reaccreditation - every 5 years*. PHS is at step 1 and making excellent progress in fulfilling the four prerequisites required to initiate the process:

- The Department has developed and implemented its foundational electronic **Performance Management and Quality Improvement (PMQI) system**;
- PHS, in concert with a broad array of community partners, has just completed the **Community Health Needs Assessment (CHNA)**, a comprehensive assessment of health status outcomes, as well as the social factors that impact health.
- PHS co-led the process to develop a subsequent county wide **Community Health Improvement Plan (CHIP)**, a community-driven plan to improve health by focusing on priorities derived from CHNA data. This joint CHIP was a first for local area hospitals who had previously developed independent implementation plans
- And, work to develop **PHS's Departmental Strategic Plan** has commenced. It will address departmental priorities, including its role and accountability in implementing the CHIP.

The Department plans to submit its letter of intent (registration) to PHAB in June 2017. This will then trigger a year-long process to compile documentation that demonstrates that PHS's programs and services conform to the national standards.

## COMMUNITY PARTNERSHIPS

Community partners from all sectors play an important role in building a strong public health system. These partnerships include both traditional and non-traditional entities that encourage divergent perspectives, provide additional expertise, leverage assets and resources, and engender shared ownership of strategies for community improvement. This year, PHS continued to serve as catalyst and/or valued partner on many coalition-led initiatives, advisory groups, and task forces in the county:



PHS established a 30-member *Safe Kids Coalition* focusing on reducing childhood injuries. In its first year, this coalition garnered funding for a Safe Medications project that trained Head Start Staff to conduct education for parents and grandparents to encourage them to lock medications away from curious youngsters or risk-taking teens – a small but important step in community efforts coalescing around the prevention of opioid overdoses.



PHS continued to serve as an active member of the *Reinvent South Stockton Coalition's (RSSC) Steering* Committee. RSSC is a broadly representative group that includes concerned residents and neighborhood activists as well as influential stakeholders working to build community capacity and civic engagement to help revitalize South Stockton. Activities focus on coordinated efforts to improve safety, education, housing, jobs creation and health. Of special interest this year, PHS assisted in the development of a long-term vision for the work (i.e. Promise Zone approach), crafting health-related metrics and strategies.



In a unique partnership that few other local health departments across the state have been able to engender, PHS co-led the development of a county wide Community Health Improvement Plan (CHIP) based on data gathered in the recently completed triennial Community Health Needs Assessment (CHNA). This joint CHIP was a first for local area hospitals who had previously developed independent implementation plans. PHS worked closely with area *non-profit hospitals, Federally Qualified Health Centers, two Medi-Cal Managed Care Plans* as well as key influential *stakeholders* from both the *public and private sectors* throughout the process. The CHIP created a joint call to action in three priority areas: Healthy Eating/Active Living; High-quality Education; and Community Safety and Social Supports. Completed in December 2016, all of the partners are now looking forward to collaborating on CHIP initiatives to create a healthier San Joaquin County.

## LOOKING FORWARD: HEALTH GROWS HERE

While we provide many services that are not reflected in the highlights section of this report, it is clear that we are making commendable strides in many areas. Additional communicable disease control staff hired in 2015-2016 resulted in the first decline in diagnosed Tuberculosis cases in three years and the lowest number on record. However, there are **emerging and re-emerging local public health issues** that require our immediate attention as well: Zika virus activity, increased deaths due related to opioid abuse, and cannabis use in teens and pregnant or breastfeeding women, and the Syphilis epidemic.

In response to the increase in syphilis, we have begun **targeted outreach** to groups identified to be at high-risk for syphilis including those who are homeless and those who are incarcerated. We are partnering with Correctional Health Care to screen inmates for syphilis risk factors, and testing if risk is identified. We were one of five counties nationwide selected to receive funding from the National Association of County and City Health Officials (NACCHO) to study the use of a fingerstick rapid syphilis test. In 2017 we will be testing the homeless in Stockton, both in the shelter and on the streets.

For chronic diseases, **reducing obesity** will improve our public health significantly. Two efforts to highlight are those that increase walking and other physical activities for all ages, and that increase access to healthy food for more people. Additionally, efforts to increase the use of child car-seats will help reduce vehicle-related injuries. Regarding family health, efforts to increase breastfeeding for all babies and to improve the health of African-Americans will result in healthier children, mothers, and families.

Additionally, in 2017, San Joaquin County Clinics will open a **Federally Qualified Health Center Look-Alike** at our Hazelton Avenue site in Stockton. This area of Stockton was identified as a medically-underserved area of San Joaquin County. For the first time, there will be a primary care clinic for people of all ages in this neighborhood.

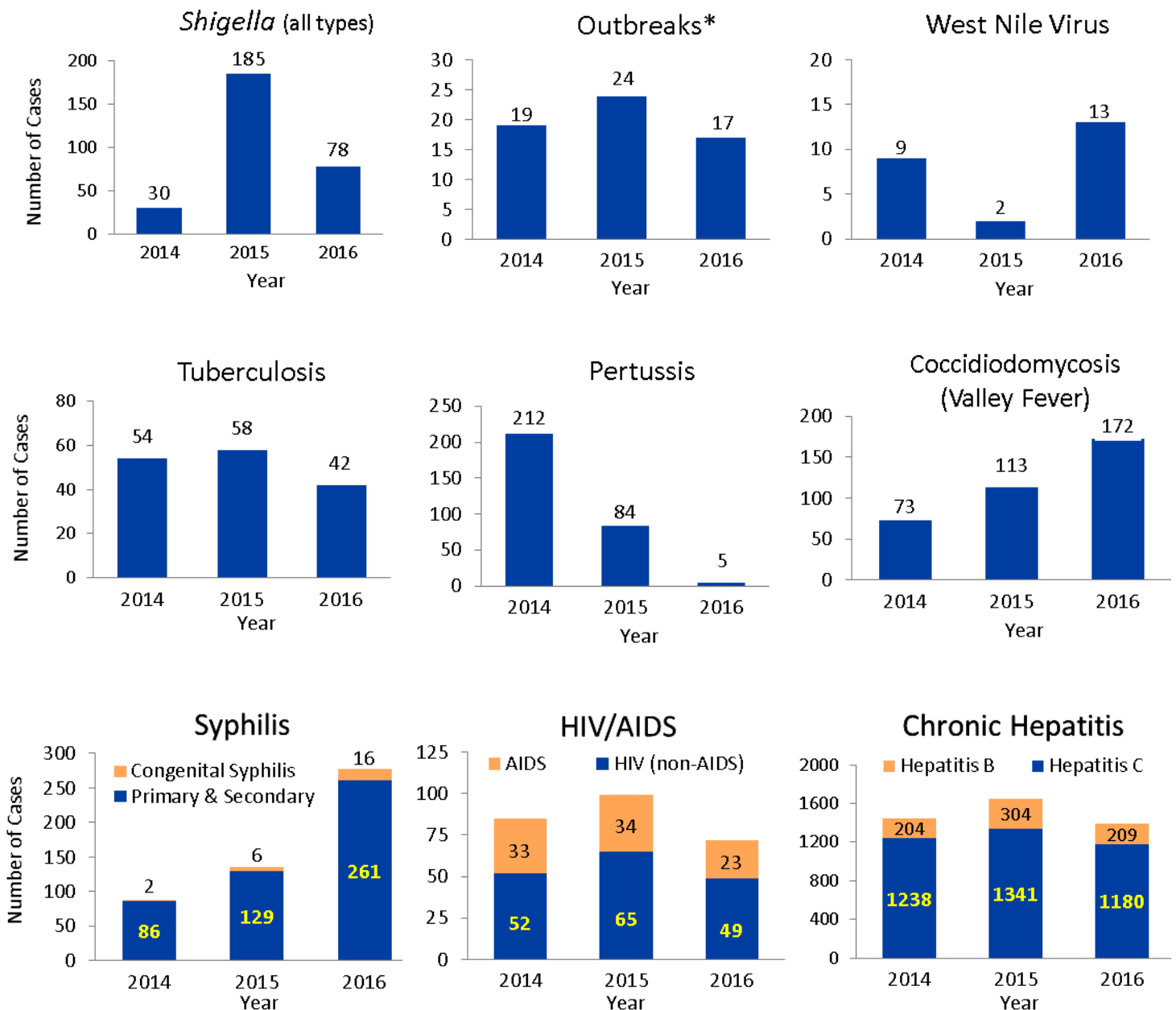
Finally, with our strategic planning this year, we continue progress with seeking accreditation. Once accredited, the county will have illustrated that the essential public health services available to all residents **meet the expected national standard of quality**. We will continue to seek ways to improve the quality of our services by instilling a culture of quality improvement. We trust that the public will continue to value and want more done to enhance the health of their families and their communities. Only with a strong and consistent focus on improving health—and working with residents and community partners to address the conditions that impact health—can we collectively ensure that health and greatness can continue to grow in San Joaquin County.

# APPENDIX

The total number of cases for the below notifiable diseases was 2,345 in 2015 and 2,065 in 2016, a 12% decrease. The number of cases continue to increase for coccidioidomycosis and syphilis, especially in the last three years.

See below for the three-year trends of selected notifiable diseases.

## Case Count by Year Reported, 2014-2016



Notes: Data are provisional and may change as additional information is received

\*Outbreaks are defined as the excess of what would normally be expected and varies depending on disease, location, and season.



# ACKNOWLEDGEMENTS

**San Joaquin County Public Health Services**

**Annual Report—2016**

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**Special Thanks to PHS Staff for Providing Information!**



**Cover Image “Map of PHS Locations” -**

**Produced by Yohani Ramos and Julia Lauper, Epidemiologists.**

**Available at <http://www.sjcphs.org>**



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