

ANNUAL REPORT
FY 2017-18

ENVIRONMENTAL HEALTH SERVICES



Public Health



COUNTYWIDE VISION

We envision a complete county that capitalizes on the diversity of its people, its geography, and its economy to create a broad range of choices for its residents in how they live, work, and play.

We envision a vibrant economy with a skilled workforce that attracts employers who seize the opportunities presented by the county's unique advantages and provide the jobs that create countywide prosperity.

We envision a sustainable system of high quality education, community health, public safety, housing, retail, recreation, arts and culture, and infrastructure, in which development complements our natural resources and environment.

We envision a model community which is governed in an open and ethical manner, where great ideas are replicated and brought to scale, and all sectors work collaboratively to reach shared goals.

From our valleys, across our mountains, and into our deserts, we envision a county that is a destination for visitors and a home for anyone seeking a sense of community and the best life has to offer.

SAN BERNARDINO COUNTY BOARD OF SUPERVISORS



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First District



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Dear Friends,

We are excited to announce our Fiscal Year (FY) 2017-18 Annual Report. Our amazing staff have dedicated themselves to ensuring a safe and healthy community through developing new partnerships, finding opportunities to collaborate and embracing innovation.

Environmental Health Services (EHS) operates in the largest county in the contiguous United States, with over 20,000 square miles of land area. San Bernardino County is home to over two million people; with millions more who come to our county to enjoy a variety of leisure activities. Additionally, our major freeway network brings hundreds of thousands of travelers through our county daily, who frequent many of our businesses and recreational areas.

The accomplishments highlighted in this report are indicative of EHS' commitment to protecting public health, safety and improving quality of life for all county residents and visitors. We continue to embrace, develop and implement new and innovative methods to effectively and efficiently improve customer service, educate the public and address today's health issues, such as foodborne illnesses, safe water and vector-borne diseases.

We are grateful to our highly trained staff and committed county, city, business and community partners all dedicated to our mission. We look forward to working with you in serving a healthy and vibrant San Bernardino County.



Jennifer Osorio

Chief, Environmental Health Services

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Our mission is to improve the quality of life by protecting public health, promoting safety and preventing environmental hazards so those who reside, visit and invest can prosper and achieve well-being.

Our vision is to focus on prevention of illness and injury through a balance of education, collaboration, enforcement and innovation.

We strive to be a leading edge organization that is business-friendly, efficient, transparent and fiscally sound, while promoting healthy, sustainable and safe communities.

2017-18 AT-A-GLANCE

Total Number of Inspections: **46,981**

Total Number of Complaints: **3,495**

	Inspections*	Complaints
FOOD FACILITIES	17,273	1,948
MOSQUITO and VECTOR CONTROL	13,077	1,168
RECREATIONAL HEALTH	9,420	134
LAND USE	3,463	88
PLAN CHECK	2,371	40
HOUSING	1,377	117

Total Number of Inspections by Board of Supervisor District*

- District 1 - 4,631
- District 2 - 5,597
- District 3 - 10,075
- District 4 - 5,102
- District 5 - 7,963

*Total, District and City numbers may vary due to inspection types.

Total Number of Inspections by City*

Adelanto	167
Apple Valley	644
Barstow	504
Big Bear Lake	978
Chino	1,042
Chino Hills	700
Colton	1,636
Fontana	3,096
Grand Terrace	271
Hesperia	785
Highland	892
Loma Linda	414
Montclair	505
Needles	456
Ontario	2,400
Rancho Cucamonga	1,946
Redlands	2,090
Rialto	1,612
San Bernardino	5,670
Twentynine Palms	263
Upland	1,130
Victorville	1,508
Yucaipa	1,304
Yucca Valley	506

*Total, District and City numbers may vary due to inspection types.

Data of Interest

Number of
Plan Checks
Requested **1,767**

Number of *Aedes
aegypti*
Mosquitoes
Trapped **1,435**

Number of
Records
Requested **660**

Number of
Composting
Permits Issued
Within the County **33**

HEALTH SCORE LETTER GRADES THROUGH YELP

EHS and Yelp have been teaming up since 2016 to make it easier to check a restaurant’s health inspection letter grade. San Bernardino County has provided inspection details to Yelp for over 7,000 food facilities in San Bernardino County so patrons can view letter grades while they find a place to eat. Clicking the Health Score hyperlink on the Yelp website reveals the details of the restaurant’s health score, including the date of the last inspection, the inspection type, the letter grade and the number and type of critical and non-critical violations the restaurant received.

EHS data is collected and shared with Yelp through the Local Inspector Value-Entry Specification (LIVES) program. This information is primarily accessed by the public as they search for a restaurant on Yelp or using the Yelp mobile application. LIVES also provides a spreadsheet with the food facility name, location and inspection information that can be used to conduct research and analysis on food facilities. Yelp currently partners and shares data with 36 other municipalities throughout the United States through the LIVES program.

Collaboration with Yelp makes health inspection information more accessible, restaurants more accountable and the public more knowledgeable, resulting in a safer and healthier community.

LETTER GRADES CAN BE FOUND FOR MORE THAN
7,000 FOOD FACILITIES
IN SAN BERNARDINO COUNTY
ON YELP



PEP TALK

According to the Centers for Disease Control and Prevention (CDC), 128,000 people are hospitalized and 3,000 people die from foodborne illnesses each year in the United States. Critical violations of safe food handling practices pose a threat to food safety and contribute to food contamination and foodborne illness.

In FY 2017-18, EHS introduced a simple, yet effective, way to improve food facility compliance to meet California Retail Food Code standards. The Preliminary Education Presentation (PEP) Talk is a five-minute video that is presented to food facility operators and their staff at the time of inspection. The purpose of the video is to quickly and clearly communicate information that will help food facility operators serve safe food to their customers and lower the risk of foodborne illness. The video details how to protect against the top five contributors of foodborne illness identified by the CDC: improper hot-holding and cold-holding temperatures, improper cooking temperatures, contaminated utensils and equipment, poor employee health and hygiene and food from unsafe sources.

PEP Talks are given to food facility operators with persistent or numerous critical violations resulting in additional inspections. During FY 2017-18, EHS inspectors provided 1,049 PEP Talks.

This equates to 148 hours of additional education provided to food facility operators. Of those facilities that received a PEP Talk, 82.8 percent improved, compared to the 76.7 percent of food facilities that improved their performance without a PEP Talk. These outcomes indicate facilities that received a PEP Talk were more likely to be compliant than those that did not.

Sharing a five-minute video with food facility operators does make a difference. Businesses are able to remain open and public health is protected. EHS looks forward to continued improvement as it implements PEP Talks throughout the county.

IN FY 2017-18,
1,049
PEP TALKS WERE
PROVIDED

FOOD HANDLER ONLINE TRAINING

Food handler training is required for food facility operators and food handlers to ensure compliance with state and local food handling regulations and to reduce and prevent foodborne illnesses in food facilities. In the past, EHS Customer Service Unit staff facilitated in-person food handler training and testing in a few locations throughout the county. Because of San Bernardino County's geographical size, it was difficult for some residents to reach training and testing sites. To alleviate this issue, EHS collaborated with StateFoodSafety to create and maintain an online food handler training program available to anyone with an internet connection.

The EHS online training course launched on October 1, 2011. Over the years, it has been tailored to meet the growing needs of San Bernardino County residents. During the FY 2017-18, 62,635 people completed the food handler training online. This is a 4.6 percent increase from the previous year. As demand for training and testing increases, so does the need to update and modify the program.

StateFoodSafety regularly updates its software to ensure that food training is accessible from any platform. The online food handler training accommodates seven different languages: English, Spanish, Chinese, Korean, Vietnamese, Tagalog and American Sign Language. The training is designed to keep learners engaged during the 70-minute online course. In 2015, StateFoodSafety made its training more accessible by redesigning the course to operate on mobile devices. In 2017, the course incorporated interactivity for mobile users and in 2018 the software was updated to implement functionality for a fully mobile compatible course. In the future, the course will include "Food Safety in Real Life" sequences which are animated stories about recent foodborne illness outbreaks and health violations.

During FY 2017-18,
62,635
people completed the food handler training online

COLTON POWER OUTAGE

On August 31, 2017 at 6:15 a.m., a lightning strike on a major transformer interrupted electrical power distribution to 53,300 residents and 241 food facilities in the City of Colton. The San Bernardino County Emergency Operations Center (EOC) was opened in support of this event and four cooling centers were established for residents to escape the summer heat. The electrical outages impacted the ability of food facilities to store food at safe temperatures, maintain hot water for washing and operate fans that remove smoke and fumes. The threat of potential food contamination was significant as full power restoration was not expected until 7 p.m.

An EHS inspector was deployed to the EOC to provide recommendations to residents and food facilities in maintaining public health standards. EHS inspectors contacted 90 food facilities by phone and visited impacted areas to ensure that reopened food facilities were operating safely. EHS also distributed educational flyers to the general public and food facility owners impacted by the power outage. The flyers outlined what food facilities can do to prepare for a power outage, what to expect during a power outage and what to do after power is restored.



ORGANIC WASTE
LANDFILL REDUCTION
GOALS:

50% BY
2020

75% BY
2025

DIVERSION OF WASTE THROUGH COMPOST PERMITTING

EHS has been working closely with the solid waste industry in response to Senate Bill (SB) 1383. SB 1383 establishes a target for California to achieve a 50 percent reduction in organic waste disposed in landfills by 2020 and a 75 percent reduction by 2025. These goals are intended to reduce air pollution related to solid waste operations. This will be accomplished through the use of new disposal methods that break down organic waste more quickly, efficiently and with energy as a byproduct. EHS has been reviewing and processing many permits in response to SB 1383. EHS permits and inspects the following composting operations, which divert organic waste from our local landfills:

Aerated Static Piles - A composting process that uses an air distribution system to either blow or draw air through the pile. There is little or no need to agitate the compost pile and the process takes only three days, compared to 15 days for the more antiquated method of Aerated Windrow Composting.

Anaerobic Digesters - A digestion tank where organic waste is collected and oxygen is removed. Anaerobic digestion has the benefit of producing both biogas and a residual digestate. Biogas can be upgraded to renewable natural gases that are used to power vehicles and heat homes. Digestate is an improvement over bagged fertilizers by reconnecting nutrient cycles important to growing crops and reducing emissions of greenhouse gasses.

Engineered Municipal Solid Waste (EMSW) - Processed solid waste that is then burned to produce energy in place of fossil fuels.

Thirty-three permits were issued in FY 2017-18. EHS looks forward to its continued partnership with the solid waste industry to achieve California's organic waste landfill diversion goals in a safe and responsible manner.



LOCAL AGENCY MANAGEMENT PROGRAM

In 2012, the State of California Regional Water Quality Control Board (RWQCB) adopted an Onsite Wastewater Treatment Systems (OWTS) policy to improve water resource protection. In accordance with Assembly Bill (AB) 885, septic system installation in a new subdivision would be limited to a two-and-a-half acre minimum lot size and the installation of any future seepage pits would be banned. This policy would also require RWQCB approval of all commercial projects for developments that produce more than 5,000 gallons of wastewater per day.

In an effort to facilitate development, while protecting water resources, EHS (in cooperation with the San Bernardino County Land Use Services Department) received approval from the RWQCB to implement a Local Agency Management Program (LAMP). This program allows septic system installation in new

subdivisions limited to a half-acre minimum lot size by putting water quality monitoring and other protective measures in place. The LAMP also allows EHS to review and approve seepage pit plans, giving additional options to home owners that need to improve or add septic systems to their property. These options allow owners of residentially zoned properties the flexibility to subdivide their property for the development of more affordable homes in areas where septic systems are necessary. Finally, the LAMP authorizes EHS to approve commercial projects for development that produce up to 10,000 gallons per day. This facilitates expedient approval of commercial wastewater systems at the local level.





MORE THAN **1,000**
RESIDENTIAL PROPERTIES
WERE INSPECTED
FOR *Aedes* MOSQUITOES

AEDES SURVEILLANCE PROGRAM

The EHS Mosquito and Vector Control Program (MVCP) received a grant of \$150,000 from the Public Health Foundation Enterprises (PHFE) for the Invasive *Aedes* Surveillance Program. The grant term was from April 2017 through July 2018. The purpose of this grant was to provide surveillance and abatement of the *Aedes* mosquito, and educate the public about the associated threats of Zika and Dengue fever. During the grant term, an additional \$40,000 was awarded by PHFE, bringing the total amount to \$190,000.

The *Aedes* Surveillance Program grant allowed MVCP to purchase traps and pesticides; hire two public service employees and one full-time contract vector technician; increase outreach and education activities; and conduct residential block surveys, focusing on *Aedes* mosquitoes. Outreach achievements include: five community events, three health fairs, four school presentations and a multi-day California Mosquito Awareness Week event.

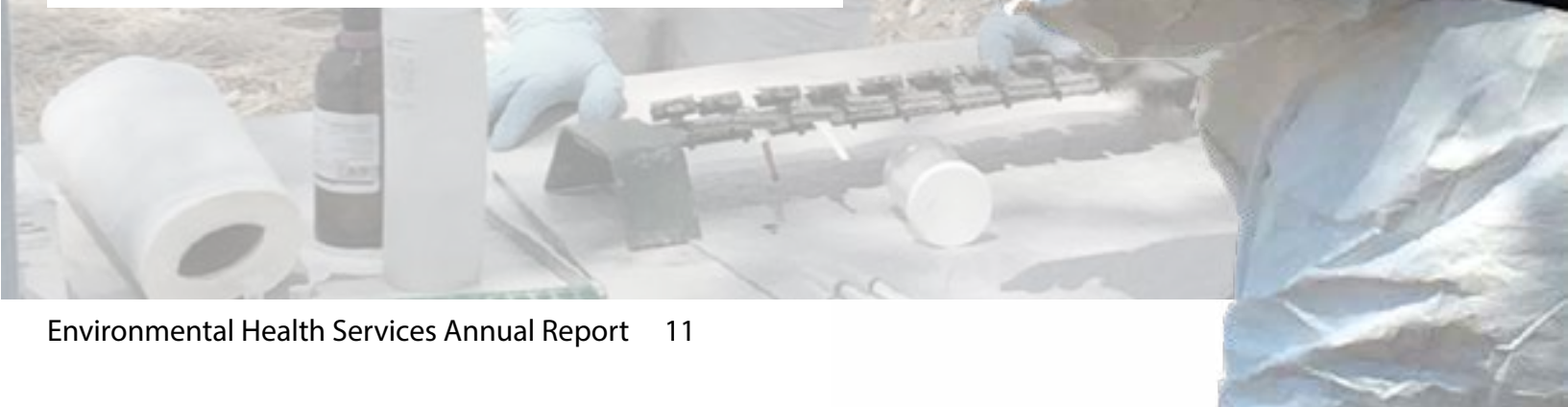
By leveraging resources, the PHFE grant increased MVCP's ability to achieve its goal of protecting public health and reducing threats from the *Aedes* mosquito. MVCP staff used a variety of surveillance methods to determine which neighborhoods had higher *Aedes* mosquito populations and strategically targeted resources in these high risk areas. In FY 2017-18, 1,191 residential properties were inspected and 1,538 traps were placed. EHS captured 3,410 *Aedes* mosquitoes, including *Aedes aegypti* mosquitoes, in the following ten cities/locations: Bloomington, Colton, Fontana, Grand Terrace, Loma Linda, Mentone, Redlands, Rialto, San Bernardino and Yucaipa.

VISION2BACTIVE

The MVCP supports the San Bernardino County Vision2BActive campaign by monitoring parks and trails within the county for rodents, ticks and mosquitoes. Conducting routine surveys in these areas decreases the potential exposure of residents to vector-borne diseases. MVCP's efforts to conduct surveillance and abatement helps promote healthy communities.

Surveys were conducted in 66 of the county's regional parks and trails in an effort to mitigate diseases carried by ticks, rodents and mosquitoes. MVCP conducted the following types of surveys during FY 2017-18: 100 tick, 30 plague and 10 Hantavirus. Of the 192 ticks collected during the surveys, zero tested positive for Lyme disease and relapsing fever. Of the seven rodents tested during the surveys, zero tested positive for plague and Hantavirus.

Water sources such as puddles, streams and flood control areas are surveyed year-round for mosquito breeding. Mosquito surveillance is conducted using various traps and the mosquitoes caught are tested for West Nile virus, Western Equine Encephalitis and St. Louis Encephalitis. Of the mosquitoes trapped at county parks and trails, zero tested positive for these diseases. County residents can feel confident that their parks and trails are safe as they enjoy the outdoors.



EHS roundtable events in years past have been successful in disseminating information and forming new community partnerships. In 2018, EHS conducted a Camp, Food and Vector Roundtable for each of its programs. Each roundtable was uniquely tailored to the needs of its customers and provided education and networking opportunities.

On January 23, 2018, 27 community members and city officials attended the Vector Roundtable at San Bernardino Valley College. The Vector Roundtable provided attendees an opportunity to learn about emerging diseases such as Zika and West Nile virus and vector control services provided throughout the county. The Vector Roundtable received a very positive response from community leaders. MVCP staff were invited to conduct additional presentations and community events throughout the county and received new requests for services from cities that had not participated previously.

On April 30, 2018, EHS hosted 53 food facility operators and vendors at the Department of Behavioral Health Auditorium in Rialto for the Food Roundtable. The Food Roundtable opened with a presentation on how food facility operators can help reduce waste by donating wholesome food. EHS also informed attendees about the use of a short educational video called PEP Talk to better assist food facility operators in meeting health standards. More about PEP Talks can be found on page five of this report.

On May 1, 2018, EHS hosted 34 camp operators and managers at the Loch Leven Christian Camp and Conference Center near Forest Falls for the Camp Roundtable. EHS opened the Camp Roundtable by introducing camp owners and managers to a new method for submitting documentation via an online portal called Jotform. This application allows users to quickly and easily complete EHS forms without wasting paper or paying for postage. Approximately 30 camps used Jotform for the 2017-18 camp season to submit annually required documents to EHS. Attendees also received education on the updated Retail Food Inspection Guide that includes the most current legislation, clarification on possible violations and a self-inspection checklist. In an effort to encourage participation, this roundtable offered a live web feed using Microsoft Skype for those who could not attend the meeting in person. Four camp operators used this method for viewing the conference.

EHS will continue to use roundtables for building new partnerships and strengthening current ones, resulting in a more informed and safer community.



In FY 2017-18, the EHS Health Education team conducted 68 community outreach events, reaching over 7,100 people. Events focused on various topics, including mosquito and vector control, food safety and recreational health.

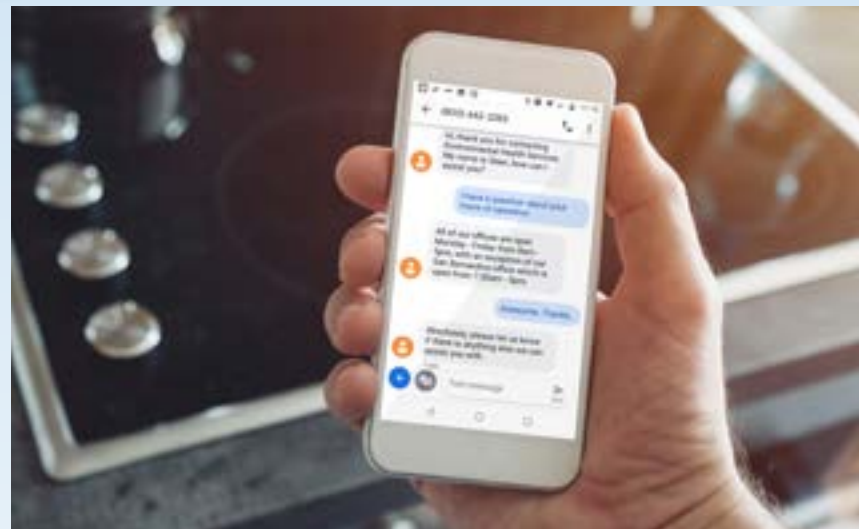
Two of the biggest events during the fiscal year were in support of the California Mosquito Awareness Week (April 15–21) and National Mosquito Awareness Week (June 24–30). The team partnered with various local organizations such as Home Depot, Lowe’s, Walmart and the Fontana Library to host events at their locations. Outreach included information and education about the various diseases mosquitoes carry, methods to prevent mosquitoes from breeding around the home and what services the MVCP provides to the public. The team provided handouts, created visual displays and interactive activities for county residents to enjoy during these two events. MVCP staff were available to answer questions regarding mosquitoes and other vector-related concerns.

The team also provided a presentation at the annual meeting for San Bernardino City Unified School District Nutrition Services. This meeting was attended by school cafeteria employees and provided general food safety education, a discussion on food inspector’s food safety concerns and an opportunity to answer any questions from attendees about related issues. This presentation has become so popular that the team was invited to a similar event sponsored by the Nutrition Services Association of the High Desert. These outreach efforts help to increase food safety at schools and protect the health of children in San Bernardino County.

WHAT'S NEXT for 2018-2019

EHS strives to make life easier for customers by combining innovative ideas with great customer service. In the next fiscal year, EHS will be implementing new services catered to the use of mobile devices. Customers will soon be able to contact EHS customer service representatives via text messaging and watch a series of instructional safety videos from their personal mobile devices. EHS is also looking into innovative ways to use technology, such as thermal cameras.

Continue reading to find out more about how EHS plans to improve public health in the next fiscal year.



TEXT MESSAGING

According to a customer support preference study by HeyWire Business, 52 percent of consumers prefer texting customer support more than other methods of communication. To better meet the needs of its customers, EHS will be expanding its communication platform to incorporate text messaging. Customers will be able to text EHS at the current customer service phone number and connect with a live customer service agent. Customers will receive the same level of great customer service as when speaking to a live agent. Texting will decrease customer wait times, while also providing the convenience of not waiting on a phone call or being put on hold. Customer service agents will also be able to respond to multiple customers simultaneously, allowing more work to be completed in a shorter period of time.

THERMAL CAMERAS

EHS is exploring thermal imaging cameras for use by inspectors when inspecting food facilities and conducting vector control abatement investigations. A thermal imaging camera is attached to a smartphone and creates a digital representation of thermal radiation created by an object. Thermal imaging cameras are able to measure temperature ranges from -4°F to 248°F and locate hot and cold spots in equipment such as refrigerators, freezers, ovens and other surfaces where food is present. Inspectors will be able to use the information to quickly identify and further investigate temperature problems in the food facility. Thermal cameras will also assist in the abatement of vectors. For example, rodent nests hiding behind walls give off heat that the thermal camera will be able to detect. An inspector will be able to quickly find these hidden nests for abatement. The use of a thermal imaging camera will help reduce the time it takes to conduct an on-site inspection or investigation.

FY 2017-18
MANAGEMENT
TEAM

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INNOVATING PUBLIC HEALTH

In FY 2017-18, EHS made it a priority to foster collaboration and partnerships by focusing on methods to engage and educate the community. Whether it was joining with Yelp to make health inspection grades easily accessible to the public, implementing PEP Talks to improve food facility inspection outcomes or facilitating public outreach events, EHS formed lasting and positive community relationships throughout the county.

Looking forward to FY 2018-19, EHS will continue to help protect residents through its services, expand its use of technology and software to increase efficiency, strengthen partnerships to increase services and introduce additional education and training opportunities.

The EHS team looks forward to another year of maintaining a strong and healthy community.

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