



Public Health

ENVIRONMENTAL HEALTH SERVICES

2016-2017
ANNUAL REPORT

SAN BERNARDINO COUNTY BOARD OF SUPERVISORS



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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.

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Environmental Health Services

DEPARTMENT of PUBLIC HEALTH

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.

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Program Coordinator
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Dear Friends,

We are happy to announce our Fiscal Year (FY) 2016-2017 Annual Report. We have been hard at work bringing new and innovative ways to improve the health of the cities and communities in which we serve.

Our dedicated staff has the unique challenge of operating in the largest county in the contiguous United States, with over 20,000 square miles of land area. San Bernardino County is also the 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.

The accomplishments highlighted in this report are indicative of Environmental Health Services' (EHS) commitment to protecting public health, safety and improving quality of life for all county residents and investors. Through innovation and ingenuity, we have developed new strategies and adopted new technologies to effectively and efficiently improve customer service and address today's public 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 healthy and vibrant San Bernardino County.



Joshua Dugas

Division Chief, Environmental Health Services
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2016-17 AT-A-GLANCE

Total Number of Inspections

19,343



Food Facilities

11,173



Mosquito and
Vector Control

9,407



Recreational
Health

3,543



Land Use

1,316



Housing

Total Number of Complaints

1,605



Food Facilities

1,082



Mosquito and
Vector Control

121



Housing

107



Recreational
Health

33



Land Use

Total Number of Inspections by District*

District 1
5,846

District 2
7,198

District 5
8,150

District 3
11,826

District 4
7,216

**District and City totals may vary due to inspection types.*

Total Number of Inspections by City*

Adelanto	135
Apple Valley	858
Barstow	774
Big Bear Lake	1,092
Chino	1,346
Chino Hills	1,109
Colton	1,203
Fontana	3,377
Grand Terrace	231
Hesperia	1,129
Highland	968
Loma Linda	559
Montclair	657
Needles	525
Ontario	3,292
Rancho Cucamonga	2,964
Redlands	2,385
Rialto	1,564
San Bernardino	6,944
Twentynine Palms	303
Upland	1,961
Victorville	1,832
Yucaipa	1,313
Yucca Valley	594

*District and City totals may vary due to inspection types.

Records Requested

538

Data of Interest

Increase in Permitted Body Art Facilities



Number of *Aedes aegypti* Mosquitoes Trapped and Tested



Number of Composting Facilities Within the County

35

Number of Plan Checks Requested

4,156

VIRTUAL RECEPTIONIST

ALICE (A Live Interactive Customer Experience) is a virtual receptionist kiosk that provides remote EHS customers a high quality service experience while interacting and communicating with live staff. Many residents throughout the county live far from the customer service center located in the City of San Bernardino, but want to experience a face-to-face interaction with a representative. Customers who prefer communicating in person may now walk into the EHS office in Hesperia, and use the ALICE kiosk to speak with a live representative through video conferencing and submit payments and documents electronically. An ALICE kiosk is also available at the Rancho Cucamonga Office.

On average, 80 customers used ALICE every month in FY 2016-2017. Surveys collected from customers show that:

- 100% of customers were successfully connected to a representative,
- Over 80% of customers felt the service was helpful, and
- 80% of customers were helped in three minutes or less.





E-RECEIPTING

In an effort to improve customer service and increase efficiency and productivity, EHS has adopted a new method of receipting using electronic records. Prior to Electronic Receipting (E-Receipting), handwritten receipts were issued to customers, and recorded separately in a database and fiscal records.

The implementation of E-Receipting has reduced the number of errors and decreased customer wait times. As payment information is entered, it is automatically uploaded into a database. E-Receipts are easily searchable and reports can be generated quickly and accurately. Payment information can now be entered directly into a Web-based application and a live record made available immediately. The ability to search records, reproduce receipts, and create reports much more quickly and efficiently will help reduce customer wait times.



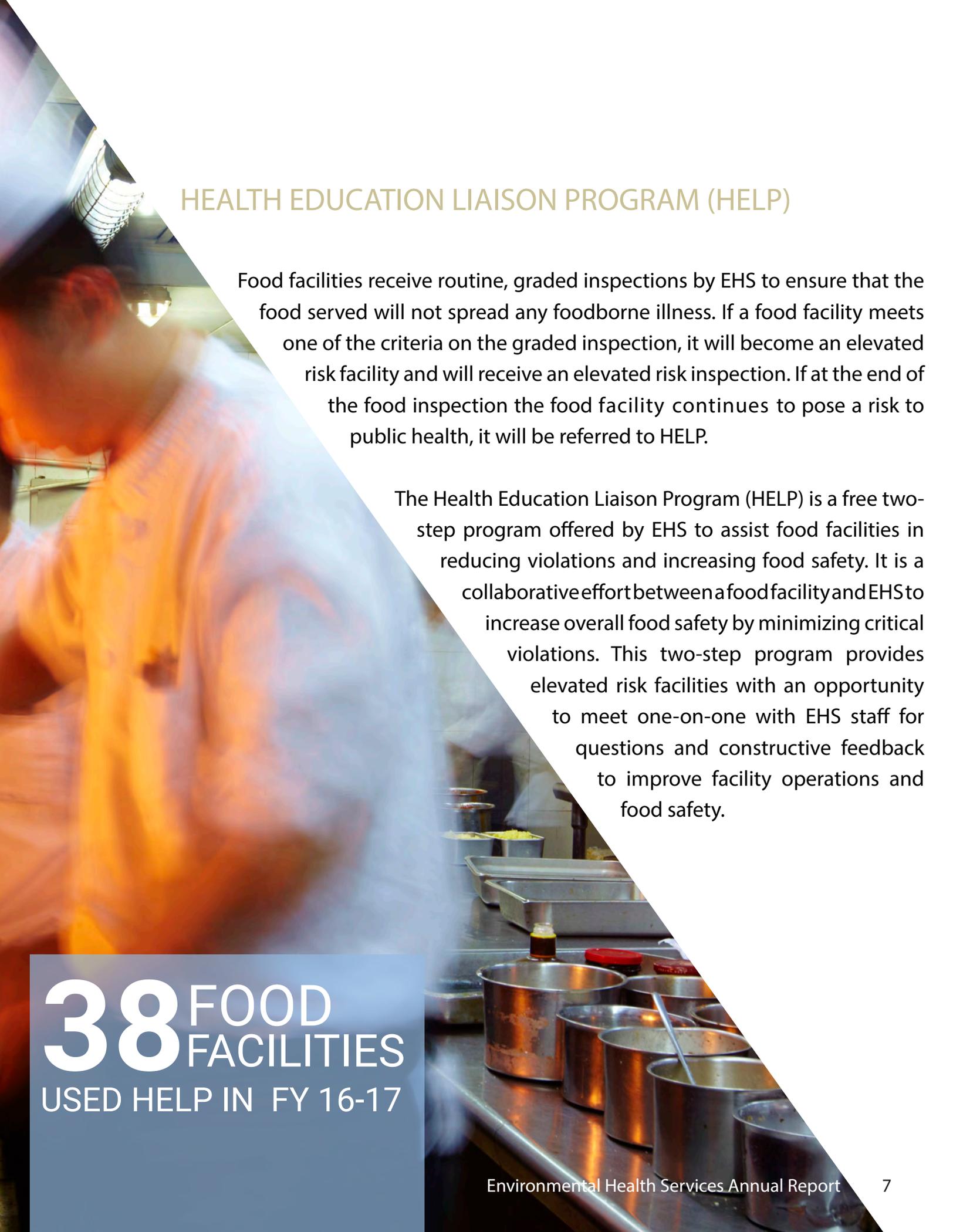
EHS COMPLETED
178 RISK-BASED
INSPECTIONS IN FY 16-17

RISK-BASED INSPECTIONS

EHS has implemented a Risk-Based Inspection Frequency Plan based on the Food and Drug Administration's (FDA) Voluntary National Retail Food Regulatory Program Standards. The plan incorporates Hazard Analysis and Critical Control Points (HACCP) Principles. These principles standardize inspections to improve identification of biological, chemical, and physical hazards which could have an effect on food safety.

The Risk-Based Inspection Frequency Plan prioritizes time and resources by categorizing food facilities into three main tiers: facilities with prepackaged foods, facilities with open food and food handling, and facilities from either one of the first two groups that have an elevated risk. Food facilities with an elevated risk to food safety receive additional assistance in order to address food safety hazards to the public.

The Risk-Based Inspection Frequency Plan has gained national attention due to its effectiveness and efficiency in implementing food safety. EHS was invited to present the plan at the 81st National Environmental Health Association (NEHA) Annual Educational Conference in 2017.



HEALTH EDUCATION LIAISON PROGRAM (HELP)

Food facilities receive routine, graded inspections by EHS to ensure that the food served will not spread any foodborne illness. If a food facility meets one of the criteria on the graded inspection, it will become an elevated risk facility and will receive an elevated risk inspection. If at the end of the food inspection the food facility continues to pose a risk to public health, it will be referred to HELP.

The Health Education Liaison Program (HELP) is a free two-step program offered by EHS to assist food facilities in reducing violations and increasing food safety. It is a collaborative effort between a food facility and EHS to increase overall food safety by minimizing critical violations. This two-step program provides elevated risk facilities with an opportunity to meet one-on-one with EHS staff for questions and constructive feedback to improve facility operations and food safety.

38 FOOD
FACILITIES
USED HELP IN FY 16-17



5,788

POOL INSPECTIONS
WERE COMPLETED
IN FY 16-17

GEOGRAPHIC INFORMATION SYSTEMS (GIS) TOOLS FOR POOL SAFETY SURVEYS

In 2017, EHS adopted new software tools utilizing cloud technology and real time data to improve efficiency. This technology consists of three ArcGIS applications working together: Work Force, Navigator, and Survey123. Supervisors can assign pool safety survey sites by geographic location to maximize an inspector's time in the field. Pool inspectors are able to enter accurate coordinate site information and upload photographs to the EHS network to assist in future data analysis. Inspectors also use ArcGIS Navigator to get directions to the next site location using the shortest route possible within their assigned area. These efficiencies have led to an increase in daily pool safety surveys, which results in greater pool safety for the community.

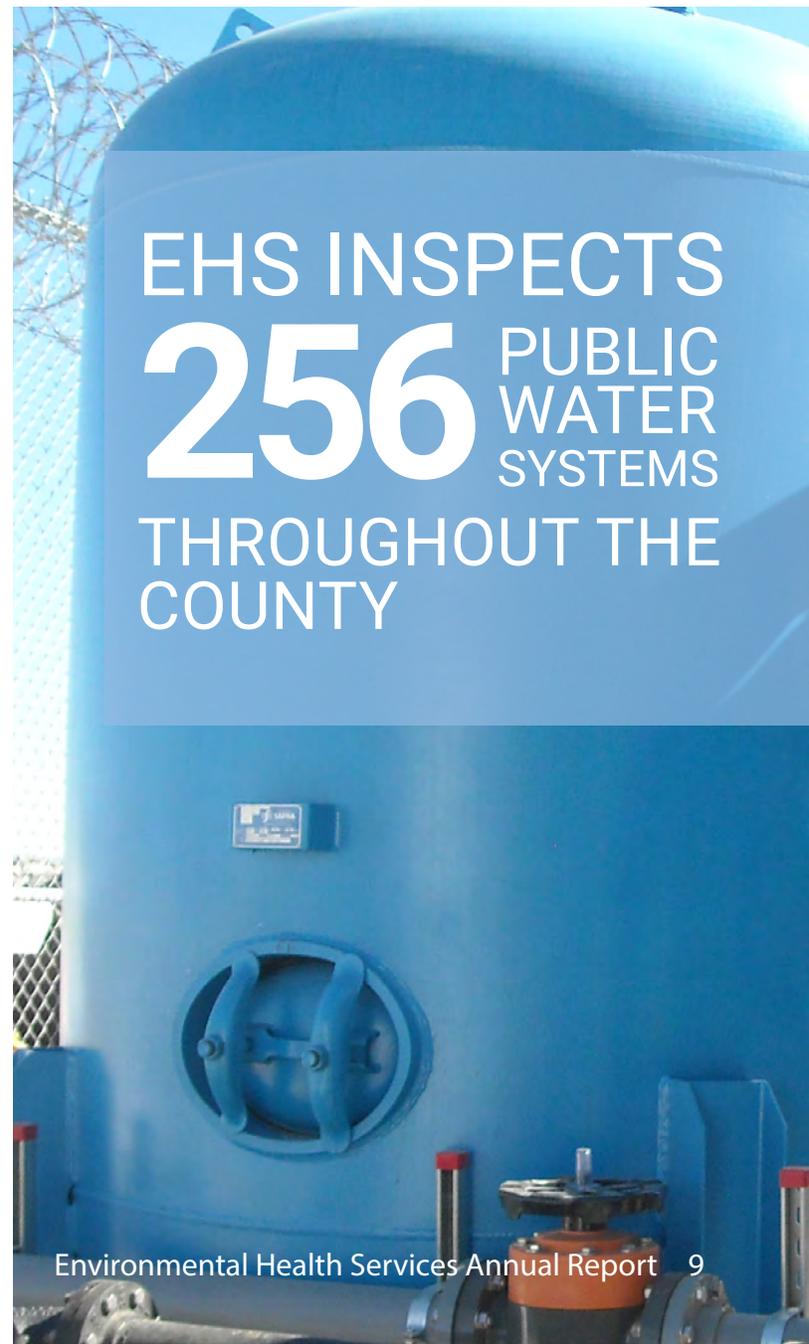
WATER COMPLIANCE

Under the authority of the California Safe Drinking Water Act, EHS is responsible for regulating small public water systems serving 200 service connections or less. EHS currently monitors 256 public water systems annually to ensure they consistently provide pure and wholesome water to San Bernardino County residents.

To support small public water system operators, EHS hosted a half day industry roundtable on May 31, 2017. This event was attended by 47 operators managing 35 different water systems. In collaboration with the State of California Water Resources Control Board (SWRCB) and the California Rural Water Association, EHS provided training on bacteriological sample siting plans, water well and storage tank standards, permit amendment, Technical, Managerial, and Financial (TMF) documents, and how to complete a consumer confidence report. EHS staff also assisted operators in completing electronic annual reports during the event.

In fiscal year 2016-2017, EHS found 18 small public water systems to be in violation of water safety standards. To ensure the health and safety of residents who depend on these water systems, EHS has taken actions to address public water

systems with consistently poor water quality and with significant structural deficiencies. Through EHS' enforcement action, 18 systems have returned to compliance or begun the process of correcting violations.



EHS INSPECTS
256 PUBLIC
WATER
SYSTEMS
THROUGHOUT THE
COUNTY



42 FOOD FACILITY OPERATORS and INDUSTRY LEADERS ATTENDED THE ROUNDTABLE

CAMP OWNERS ROUNDTABLE

On June 2, 2016, EHS staff responded to an outbreak of *Salmonella* poisoning at a local retreat center where twelve children became ill. On March 25, 2017, EHS received a call regarding the spread of Norovirus at a local conference center in which 41 campers were infected. In both instances EHS took prompt action to close down the facilities and investigate the infection to prevent the spread of further illness.

In response to these outbreaks, EHS hosted an informational roundtable for camp owners and operators on June 8, 2017. EHS leadership, as well as experts from the Department of Public Health (DPH) Communicable Disease Section (CDS), helped to educate 42 attendees on the importance of sanitization practices, the most common types of diseases spread at camps (with an emphasis on Norovirus), costs associated with an outbreak, and how to reduce and prevent future outbreaks.

Due to the success of this roundtable, EHS is planning several more events in 2018 focused on camps, food safety, and vector control.

NO

Aedes Mosquitoes
have tested positive
for any viruses in
San Bernardino County

ZIKA ADMINISTRATIVE TASK FORCE

In 2015, the invasive *Aedes* mosquito was discovered in San Bernardino County. The *Aedes* mosquito has the potential to carry and transmit the Zika, Dengue, Chikungunya, and Yellow Fever viruses. As of June 2017, no *Aedes* mosquitoes in San Bernardino County have tested positive for these viruses.

The Zika Administrative Task Force was created in response to the arrival of the *Aedes* mosquito. The task force is a collaboration between the San Bernardino County Mosquito and Vector Control Program (SBCMVC), CDS, Preparedness and Response Program (PRP), and the West Valley Mosquito and Vector Control District (WVMVCD). It is expected that this task force will serve as a precedent for developing necessary task forces in the future.

The task force developed a Standard Operating Guide, which outlines procedures for responding to locally transmitted Zika cases. The task force has also established a partnership with the Ontario International Airport to display educational material informing the public about how they can protect themselves from the West Nile and Zika viruses while traveling within the United States.

Zika Administrative Task Force Members

DPH Director
Health Officer

DPH Assistant Director

EHS Division Chief

CDS Division Chief

CDS Program Manager

SBCMVC Program Manager

SBCMVC Program Coordinator

PRP Program Coordinator

WVMVCD Scientific Director

WVMVCD District Manager

EMERGENCY RESPONSE EFFORTS

The Blue Cut Fire began in the Cajon Pass on August 16, 2016. The fire spread rapidly and consumed 37,000 acres, 105 homes and 213 other structures and caused the closure of Interstate 15 between the valley region and the High Desert. As a result of the fire, 82,649 individuals were under mandatory evacuations. Emergency shelters were opened for displaced residents in Hesperia and Fontana. Individuals sheltering at Sultana High School in Hesperia were moved to the Victorville Fairgrounds on August 19. To ensure the health and safety of evacuees, EHS deployed inspectors twice a day to emergency shelters to conduct assessments of sanitation, housing and food services, and provide recommendations to volunteers to ensure public health standards were met.

Electrical outages resulting from the fire impacted both residents and food facilities in their ability to store food at safe temperatures and keep water well equipment operational. The threat of potential food and water contamination due to these factors was significant. EHS inspectors visited affected areas to determine which food facilities had reopened and to ensure those facilities were operating up to standards.

EHS also released public informational bulletins on several topics, including: the use and maintenance of swimming pools impacted by smoke and ash, procedures for food facilities in the event of a major disaster or emergency, information on food salvaging operations for retail food facilities impacted by the fire, and the safe use of private wells and septic systems after a wildfire.





EHS CONDUCTED
ASSESSMENTS AT
TWO SHELTERS
TWICE A DAY FOR
7 DAYS

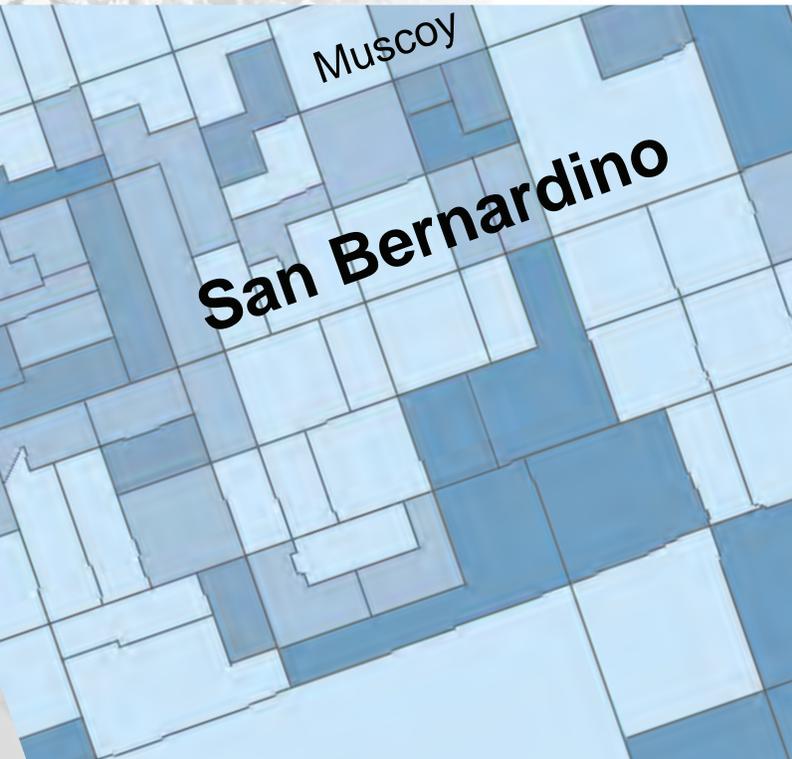


WHAT'S NEXT for 2017-2018

EHS is excited about implementing new and innovative ideas that make protecting public health more efficient and more impactful. EHS will build on the growth and success of this year by investing in technology, collaboration opportunities and program development.

- The use of Geographic Information Systems (GIS) and wireless inspection software will increase productivity and efficiency for staff out in the field.
- Additional training to food facility managers will help increase food safety.
- Access to potential mosquito breeding sites will further reduce the infectious mosquito population.
- Facilitating networks between food facilities and food banks will help alleviate hunger within our communities.

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



DIGITAL MAPPING

EHS will be implementing ArcGIS Collector software to assist SBCMVC by the end of 2017. SBCMVC inspectors will soon be able to:

- Digitally locate and track mosquito breeding sites for improved geolocation data.
- Quickly identify asset location which will improve efficiency in the field by enabling a small number of SBCMVC staff to monitor:
 - 885 water sources,
 - 1,200 trap site locations, and
 - 184 water retention basins.

LIVE MOBILE INSPECTIONS

EnvisionConnect software is used by EHS office staff and inspectors to schedule, track, and record inspection information electronically. In order to upload inspection data to EnvisionConnect, staff must synchronize their laptops at their assigned office each day. In 2018, EHS will be instituting technology updates to allow staff to access EnvisionConnect wirelessly in the field. This change will eliminate the need for staff to come into the office to upload data. This enhancement is expected to increase the productivity of inspectors and improve the ability of EHS to provide services to the public.



LEARN CLASS

The Liaison Education and Risk Network (LEARN) is an innovative class and networking opportunity designed to help reduce violations and increase food safety through a more informal approach to intervention. Facility managers, employees, and industry leaders will be invited to attend a monthly training designed to educate participants on food safety laws and best practices, as well as facilitate networking amongst the food community. Those who attend will have access to EHS personnel who will be available to answer any questions and provide additional resources.



GROUNDWATER RECHARGING SURVEILLANCE

Throughout the County, flood control basins are used by local water districts to replenish water supplies. Standing water at these locations becomes a potential breeding ground for mosquitoes. SBCMVCPC will be collaborating with the San Bernardino County Department of Public Works - Flood Control District, the San Bernardino Valley Municipal Water District, and the West Valley Water District to ensure these locations are monitored as breeding sources. These efforts will help reduce the mosquito population and prevent the spread of diseases while ensuring the replenishment of ground water with minimal impact to the community.





FOOD DONATION EDUCATION

In the United States, approximately 62.5 million tons of food is wasted every year. Meanwhile, 15.6 households experienced food insecurity in 2017. EHS staff will support food reclamation and donation efforts by educating food facility owners about Assembly Bill 1219, the California Good Samaritan Food Donation Act. This new bill will release food donors from liability for donations made to food banks, and help alleviate some hesitation that comes from donating food.

EHS also plans to facilitate strong networks and sustainable partnerships by connecting food facility operators with food banks throughout the county. This effort will get more food into the hands of those who need it.



INNOVATING PUBLIC HEALTH

In FY 2016-17, EHS made it a priority to protect public health through leveraging new technology, improving and expanding education and outreach, and getting services to where it matters most. Looking forward to 2018, EHS will continue to 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 San Bernardino County.



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