



ARIZONA DEPARTMENT  
OF HEALTH SERVICES

FOOD SAFETY AND ENVIRONMENTAL SERVICES

# Annual Report

BUREAU OF EPIDEMIOLOGY AND DISEASE CONTROL  
OFFICE OF ENVIRONMENTAL HEALTH

FY2016

This page has intentionally been left blank.



Douglas A. Ducey, Governor

*State of Arizona*

Cara M. Christ, *Director*

*Arizona Department of Health Services*

ARIZONA DEPARTMENT OF HEALTH SERVICES

Bureau of Epidemiology and Disease Control

Office of Environmental Health

Food Safety and Environmental Services Section

150 N. 18th Avenue, Suite 140

Phoenix, Arizona 85007-3245

(602) 364-3122

This publication can be made available in alternative format.

Please contact the number listed above.

*Permission to quote from or reproduce materials from this publication is granted  
when due acknowledgment is made.*

*“Equal Opportunity/Reasonable Accommodation Employer”*

# CONTENTS

|   |    |
|---|----|
| Executive Summary   | 1  |
| 1.0 Introduction  | 2  |
| 2.0 FY2016 Activities   | 3  |
| 2.1 Food Safety   | 5  |
| 2.1.1 Inspection Programs   | 6  |
| 2.1.2 Enforcement   | 7  |
| 2.2 FDA Voluntary National Retail Food Regulatory Program Standards | 8  |
| 2.2.1 FDA Cooperate Agreement                                       | 9  |
| 2.2.2 Implementing the Program Standards                            | 10 |
| 2.3 Conference for Food Protection                                  | 12 |
| 2.4 Food Safety Regulation Update                                   | 13 |
| 2.5 Foodborne Illness   | 14 |
| 2.6 Nationwide Outbreaks and Food Recalls                           | 17 |
| 2.7 Bottled Water   | 20 |
| 2.8 Swimming Pools and Spas   | 21 |
| 2.9 Public Accommodations   | 22 |
| 2.10 Trailer Coach Parks  | 23 |
| 2.11 School Grounds   | 24 |
| 2.12 Children's Camps   | 25 |
| 2.13 Camp Grounds   | 26 |
| 3.0 Home Baked & Confectionery Goods Program                        | 27 |
| 4.0 School & Community Gardens                                      | 28 |
| 5.0 Registration and Training of Sanitarians                        | 31 |
| 5.1 Trainings Offered for Registered Sanitarians                    | 32 |
| 6.0 Brownfield  | 33 |
| 7.0 Summary   | 36 |
| Appendix A  | 38 |
| Appendix B  | 40 |
| Appendix C  | 41 |
| Appendix D  | 42 |
| Appendix E  | 43 |

# EXECUTIVE SUMMARY

The Arizona Department of Health Services (ADHS) administers a statewide food safety and environmental health public health sanitation program that oversees retail food, bottled water facilities, public accommodations (i.e. hotels and motels), trailer coach parks, children's camps, campgrounds, public schools, public and semi-public bathing places, and public nuisances. ADHS has delegated most of these public health sanitation program responsibilities to each of the 15 Arizona county health departments, through delegation agreements, in order to most effectively accomplish its mission objectives.

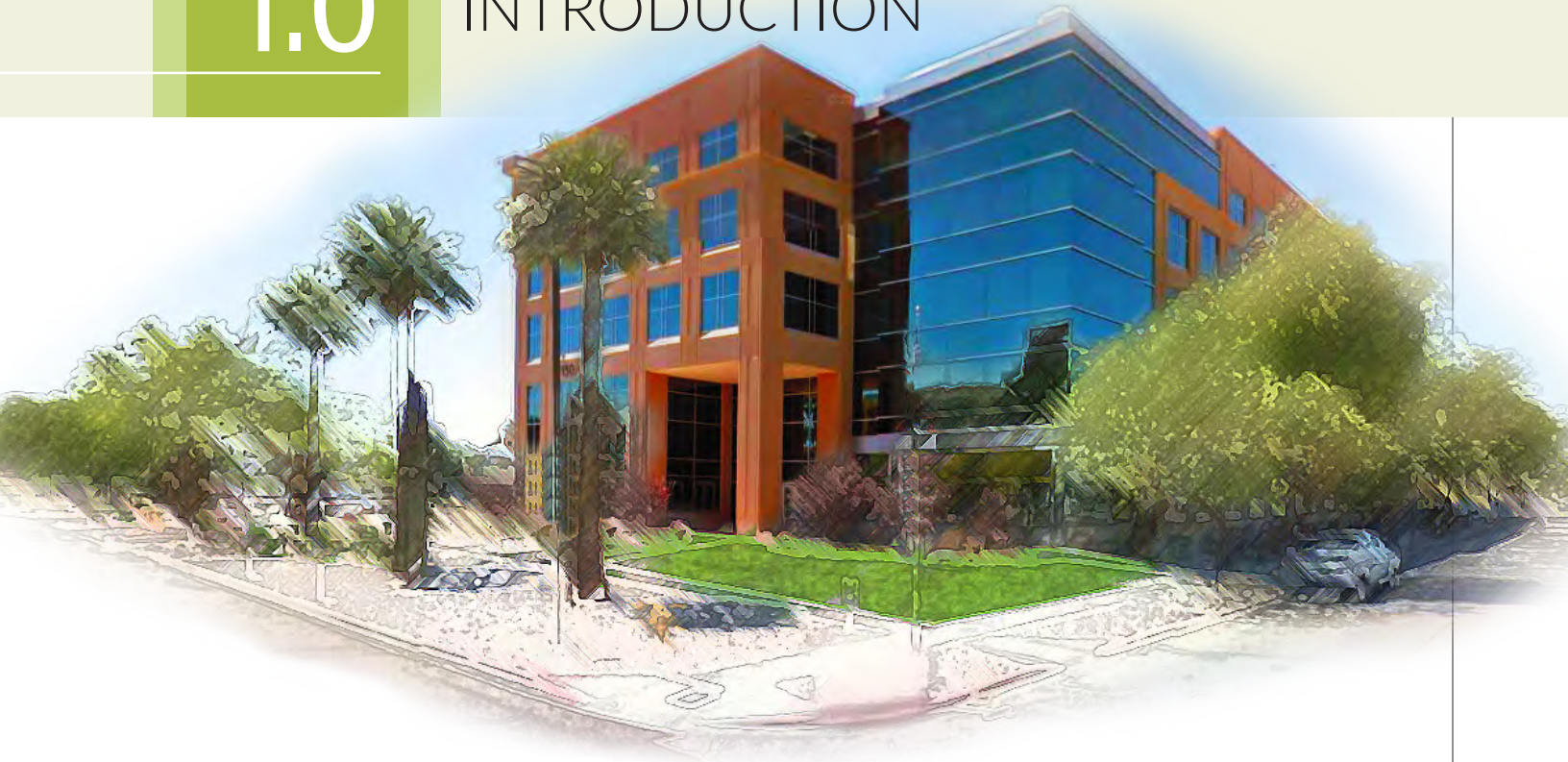
Individuals that carry out the provisions of the program must be licensed as a Registered Sanitarian in the State of Arizona or, under specific conditions, a Sanitarian Aide as specified in A.A.C. R9-16-408. A total of 174.5 Registered Sanitarians and 22 Sanitarian Aides among the 15 County health departments, Arizona State University (ASU), and ADHS were engaged in a public health sanitation program during FY2016.

The following are highlights of FY2016 activities.

- A total of 82,986 food safety related inspections (routine and re-inspections) were conducted at 31,987 food establishments.
- A total of 7,373 pre-operational inspections at food establishments and 8,731 inspections at temporary food establishments were conducted.
- A total of 30,633 routine inspections were conducted at 17,688 regulated facilities that include public accommodations, trailer coach parks, children's camps, campgrounds, public schools, and public and semi-public bathing places.
- Twelve (12) Arizona counties, one tribal health department, and ADHS are participating in the U.S. Food and Drug Administration's (FDA) Voluntary National Retail Food Regulatory Program Standards. The program is designed to foster national uniformity among retail food regulatory programs.
- A total of 1,425 foodborne illness complaints were received by county health departments. This represents an increase of 30% from FY2015.
- A total of 8,103 complaints (including foodborne illness) were investigated.
- The FDA issued 445 recalls associated with FDA-regulated products that may pose a significant risk to the public.
- The United States Department of Agriculture (USDA) issued 150 recall notices over 2015. Approximately 21,104,848 pounds of meat, poultry, and certain egg products were recalled nationwide.

# 1.0

## INTRODUCTION



Arizona Department of Health Services – Phoenix, Arizona

The Food Safety and Environmental Services (FS&ES) Program in the Office of Environmental Health at ADHS is responsible for the administration and oversight of food safety and environmental sanitation in the State of Arizona in accordance with State law. The mission of the Food Safety and Environmental Services Program is:

*To prevent and control human illness related to the transmission of infectious agents or toxic substances in food and water, and to prevent disease transmission due to insanitary conditions.*

The FS&ES Program administers a statewide public health sanitation program that includes oversight of retail food safety, bottled water facilities, public accommodations (i.e. hotels and motels), trailer coach parks, children’s camps, campgrounds, public schools, public and semi-public bathing places, and public nuisances. In addition, the FS&ES Program assists with epidemiological investigations; assists with the interpretation of public health sanitation laws and rules for Arizona county health departments; establishes and maintains liaisons with federal, state, tribal, and local agencies; provides in-person and online training opportunities; and organizes and coordinates activities that improve statewide retail food programs and further progress towards further conformance with the FDA’s Voluntary National Retail Food Regulatory Program Standards (FDA Program Standards).

# 2.0

## FY2016 ACTIVITIES

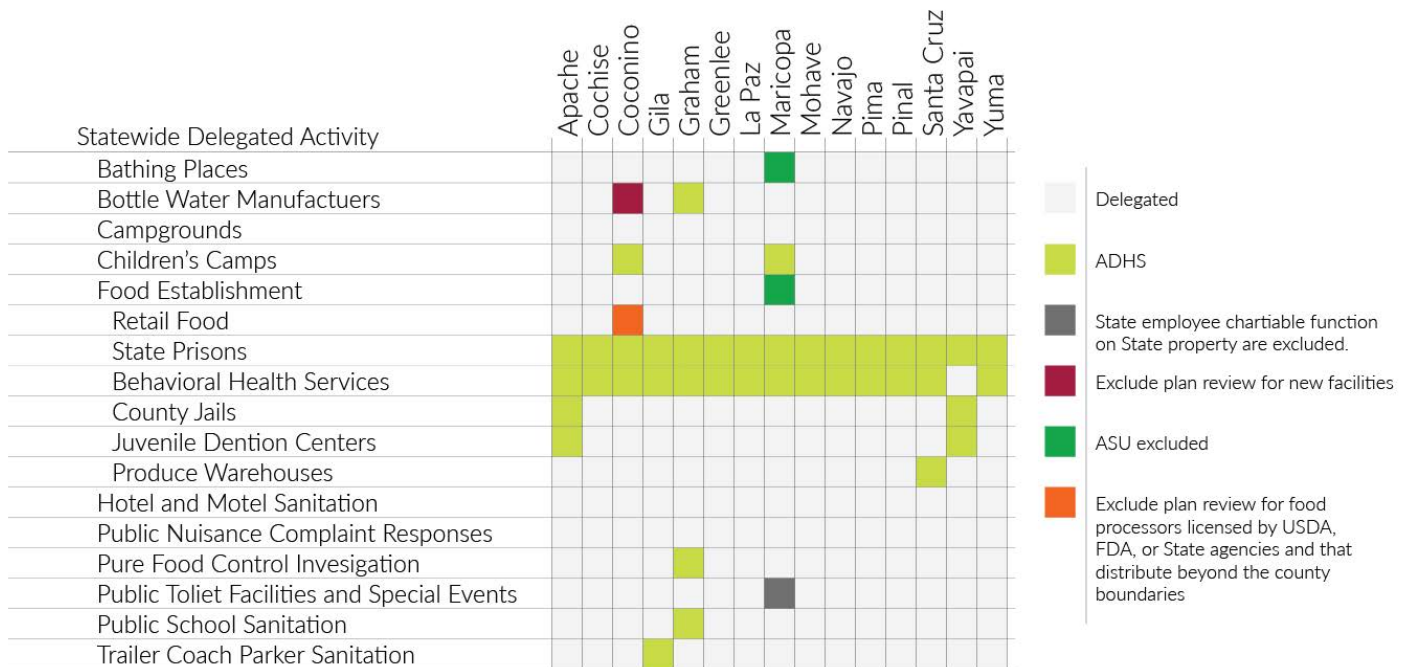


Figure 1: Summary of Delegated Activities Statewide

ADHS has delegated several public health sanitation program responsibilities to each of the 15 Arizona county health departments in order to most effectively and efficiently accomplish its mission objectives. The delegation of responsibilities provides local oversight and allows local governments to maximize the level of services they chose to provide, taking into consideration the services most needed in their communities. Local control encourages community interaction in program design and operation to meet local needs.

Counties accepting delegated responsibilities are required to perform duties in accordance with the conditions outlined in their individual delegation agreement with ADHS. See Figure 1 for a summary of delegated activities. Annual reports are submitted by each county health department summarizing their program activities over the fiscal year, which is a requirement of each delegation agreement.



|                                     | ROUTINE INSPECTIONS | FACILITIES |
|-------------------------------------|---------------------|------------|
| BOTTLED WATER                       | 69                  | 43         |
| PUBLIC ACCOMMODATIONS               | 1,278               | 1,262      |
| CHILDREN'S CAMPS                    | 51                  | 51         |
| CAMPGROUNDS                         | 25                  | 22         |
| PUBLIC SCHOOL GROUNDS               | 1,557               | 1,642      |
| TRAILER COACH PARKS                 | 2,059               | 1,851      |
| PUBLIC & SEMI-PUBLIC BATHING PLACES | 25,594              | 12,817     |
| FOOD ESTABLISHMENTS                 | 77,977              | 31,987     |
| TOTALS:                             | 108,610             | 49,675     |

**Figure 2:** Number and Type of Facilities and Number of Routine Inspections in Arizona FY2016

Facilities regulated and inspected by ADHS, ASU and the counties include retail food establishments, bottled water facilities, public accommodations (i.e. hotels and motels), trailer coach parks, children’s camps, campgrounds, public school grounds, and public and semi-public bathing places. Individuals that carry out the provisions of the program must be licensed as a Registered Sanitarian in the State of Arizona or, under specific conditions, be a Sanitarian Aide as prescribed by A.A.C. R9-16-408. One hundred seventy four and one-half (174.5) Registered Sanitarian FTEs and 22 Sanitarian Aide FTEs at ADHS, ASU, and the 15 Arizona county health departments conducted a total of 108,610 routine inspections at 49,675 regulated facilities in Arizona during FY2016.





## 2.1 FOOD SAFETY

ADHS, ASU and the county health departments' food safety inspection programs are focused on preventing foodborne illness. The Centers for Disease Control and Prevention (CDC) estimate that 1 out of 6 Americans will become ill with foodborne illness every year that will result in 48 million illnesses, 128,000 hospitalizations, and 3,000 deaths in the United States with an estimated cost between \$10-83 billion resulting from pain, suffering, medical costs, and reduced productivity. The county health departments have experienced challenges in recent years towards maintaining their capacity to conduct the required inspections and respond to incidents of foodborne illness. In response to these challenges, several counties have joined the nationwide trend towards conducting risk based inspections and placing greater emphasis in promoting active managerial control in retail food establishments. This approach ensures that inspections are conducted in an efficient manner, focusing on prevention of foodborne illness through the evaluation of risk factors that include the following:

- Improper holding temperatures,
- Inadequate cooking,
- Contaminated equipment,
- Food from unsafe sources, and
- Poor personal hygiene.

In addition to risk based inspections, county health departments are providing educational materials and information to operators to assist them in developing proactive food safety systems instead of resorting to a reactive approach to violations identified during an inspection. This approach to food safety is one that has been welcomed by industry and regulators as a proactive approach towards preventing foodborne illness and protecting the public's health.



## 2.1.1 INSPECTION PROGRAM

Retail food establishments that include restaurants, grocery stores, mobile food units, micro markets, food processors, correctional food service facilities, food warehouses, bakeries, instructional facilities, and school cafeterias are routinely inspected to evaluate food safety practices. There were 31,987 regulated food establishments in Arizona during FY2016, a decrease of 3.7% from the previous year. State and county Registered Sanitarians and Sanitarian Aides conducted 82,986 food safety inspections (routine and re-inspections) at these establishments.

A classification system categorizes food establishments by the complexity of the food service operation, which includes factors such as the types of food served, the preparation processes used, and potential food safety risks. The inspection frequency of establishments is then determined by the assigned category. Food service facilities engaging in complex food preparation methods and activities may require more frequent comprehensive inspections in order to evaluate the level of compliance with applicable food safety regulations. Using a classification system allocates resources, including inspection staff, primarily to high risk establishments that pose the greatest risk for foodborne illnesses. The classification categories used are:

### COMPLEX FACILITY

- Prepares and holds hot or cold food for more than 12 hours before serving; and/or
- Cooks and cools a significant number of foods during the food handling process; and/or
- Prepares food for off-site service; and/or
- Vacuum packs food; and/or
- Serves a highly susceptible population.

Complex facilities received an average of **3.1** routine inspections in FY2016



|                     | COMPLEX | MODERATE | LIMITED |
|---------------------|---------|----------|---------|
| FOOD ESTABLISHMENT  | 10,730  | 10,321   | 10,937  |
| ROUTINE INSPECTIONS | 33,637  | 24,033   | 20,294  |

**Figure 3:** Number of Food Establishments and Routine Inspections by Food Service Complexity FY2016

**MODERATE FACILITY**

- Food prepared in the facility from raw ingredients requires minimal assembly; and/or
- Hot or cold food preparation in the facility is restricted to same day service; and/or
- Foods requiring preparation in the facility are from approved processing facilities.

**LIMITED FACILITY**

- Only pre-packaged potentially hazardous foods are available or sold; and/or
- Potentially hazardous foods served are commercially pre-packaged in an approved food processing facility; and/or
- Only conducts limited preparation of potentially hazardous foods and beverages; and/or
- Only serves beverages.

Food establishments in Arizona classified as complex and moderately complex are generally inspected more frequently than limited facilities. On average, there were 3.1 inspections per complex facility, 2.3 inspections per moderate facility, and 1.9 inspections per limited facility statewide. More frequent inspection of complex food service operations are recommended due to several factors including 1) overall complexity of operations, 2) increased planning and monitoring of operational policies, and 3) increased training needs of food handling employees. Challenges to meeting inspection frequency expectations can include staffing shortages, inadequate numbers of Registered Sanitarians on staff, a high rate of staff attrition, the time and resource investment required to train field staff to conduct all categories of food inspections, and travel time between facilities in rural parts of the state.

**2.1.2 ENFORCEMENT**

The goal of the food safety inspection program is to achieve compliance with state food safety requirements without resorting to compliance proceedings and enforcement actions. Unfortunately, these regulatory actions are sometimes necessary to achieve compliance. During FY2016, 1,134 enforcement actions or compliance proceedings, were taken at food establishments in Arizona that include notices of violation, cease and desist orders, permit suspensions, and citations.



## 2.2 FDA VOLUNTARY NATIONAL RETAIL FOOD REGULATORY PROGRAM STANDARDS

The FDA Voluntary National Retail Food Regulatory Program Standards are designed to foster national uniformity among regulatory programs responsible for retail food protection. In 2012, ADHS was awarded a 5-year FDA Cooperative Agreement that provides funding to assist ADHS and the local health departments in assessing their current food safety systems and engaging in strategic planning that will ultimately improve their food safety systems, which align with FDA Program Standards' requirements. Along with ADHS, 12 Arizona counties and one tribal health department are participating in the FDA's Program Standards. ADHS self-reported meeting Standard 7 in FY2016, which was verified by Maricopa County Environmental Services. Figure 4 outlines the current status of ADHS' progress towards meeting the FDA Program Standards.

### Self-Assessment / Audit Verification Summary & Gap Analysis

**Jurisdiction:** Arizona Department of Health Services  
**Report completed by:** Food Safety & Environmental Services Program Manager  
**Date:** 6/31/2016  
**Program Standards Version:** 2015

[Click here for additional Program Standards guidance, instructions and PDF files located the FDA Retail Food website](#)

| Met | Standard  | Progress        | Standard Elements (Incomplete elements identified in red and completed elements identified in strikethrough text)        |
|-----|---|-----------------|--|
| ✗   | 1 REGULATORY FOUNDATION   | 57.1% met       | <del>1a 1b 1c 2a 2b 3a 4a</del>  |
| ✗   | 2 TRAINED REGULATORY STAFF  | 11.1% met       | <del>1a 1b 2a 2b 3a 3b 4a 4b 5a</del>  |
| ✗   | 3 INSPECTION PROGRAM BASED ON HACCP PRINCIPLES                        | 50.0% met       | <del>1a 1b 1c 2a 3a 4a 4b 4c 5a 6a</del>   |
| ✗   | 4 UNIFORM INSPECTION PROGRAM  | No elements met | <del>1a 1b 1c 2 2i 2ii 2iii 2iv 2v 2vi 2vii 2viii 2ix 2x 3a 3b</del>   |
| ✗   | 5 <u>FOODBORNE ILLNESS AND FOOD DEFENSE PREPAREDNESS AND RESPONSE</u> | 37.9% met       | <del>1a 1b 1c 1d 1e 1f 1g 1h 1i 2a 2b 3a 3b 4a 5a 5b</del><br><del>5c 6a 7a 7b1 7b2 7b3 7b4 7b5 7b6 7b7 7b8 7b9 7c</del> |
| ✗   | 6 COMPLIANCE AND ENFORCEMENT  | 25.0% met       | <del>1a 1b 2a 2b</del>   |
| ✓   | 7 <u>INDUSTRY AND COMMUNITY RELATIONS</u>                             | Fully Met       | <del>1a 1b</del>   |
| ✗   | 8 PROGRAM SUPPORT AND RESOURCES                                       | 84.6% met       | <del>1a 2a 2b 3a 3b 4a 4b 4c 4d 4e 4f 4g 4h</del>  |
| ✗   | 9 PROGRAM ASSESSMENT  | 28.6% met       | <del>1a 1b 1c 2a 2b 3a 3b</del>  |

Figure 4: FDA Program Standards Summary for ADHS' Retail Food Regulatory Program

## **2.2.1 FDA COOPERATIVE AGREEMENT**

FY2016 cooperative agreement funds were used to organize workshops, provide travel reimbursements to attend training opportunities, purchase food inspection equipment, and develop printed educational materials for ADHS and the local health departments.

### **STRATEGIC PLANNING WORKSHOP**

The first workshop took place in Pima County, on August 18-20, 2015. The purpose of the workshop was to allow participants an opportunity to explore methods for establishing a well-defined project management process for planning and tracking continuous improvement within a retail food protection program using the FDA's Program Standards. Travel stipends, using cooperative agreement funds, were provided to attendees from Arizona counties.

### **SELF-ASSESSMENT AND VERIFICATION AUDIT WORKSHOP**

The second workshop, entitled the Self-Assessment and Verification Audit Workshop, took place in Maricopa County on January 19-21, 2016. The purpose of the workshop was to provide participants with an overview of the FDA Program Standards criteria and an in-depth understanding of the self-assessment and verification audit process, worksheets, and forms. The workshop was well attended by staff from almost half of the Arizona counties and by public health professionals representing multiple out-of-state health agencies. Cooperative agreement funds were used to provide travel stipends to attendees from Arizona counties and for the printing of the workshop materials.

### **RETAIL FOOD RISK FACTOR STUDY AND RISK BASED INSPECTIONS AT RETAIL**

Pima County worked with the FDA Pacific Region Retail Food Specialist to provide a workshop entitled Considerations for Conducting a Retail Food Risk Factor Study and a Risk Based Inspections at Retail Course for their staff on May 2-4, 2016. ADHS worked with Pima County to open attendance to the course to other Arizona counties and agencies. ADHS distributed the course announcement and registration information throughout the state, resulting in the registration of twenty-five individuals from six other counties, Indian Health Service (IHS), ADHS, and Davis-Monthan Air Force Base Public Health Division. ADHS used cooperative agreement funds to provide travel reimbursements to Arizona counties that attended the course.

# Proper Food Storage in Cold Holding Units

An approved walk-in or ice bath method must be used when cooling foods. Foods must be cooled from 130°F to 70°F within 2 hours and from 70°F to 41°F within 4 hours, for a total time of 6 hours.

Foods Being Cooled, Reduced to 4 Inches or Less & Uncovered



Ready-to-Eat Potentially Hazardous Foods, Date Marked & Covered



Washed Fruits & Vegetables



Raw Pork, Beef, Seafood & Whole Eggs—Cook Temp: 145°F



Raw Ground Meats & Pooled Eggs—Cook Temp: 155°F



Raw Chicken/Poultry—Cook Temp: 165°F



Arizona Department of Health Services  
**Food Safety & Environmental Services Program**  
Phone 602-364-3118  
[www.azdhs.gov/foodsafety](http://www.azdhs.gov/foodsafety)

Figure 5: Food Storage Chart

## **2.2.2 IMPLEMENTING THE PROGRAM STANDARDS**

Cooperative agreement funds have been utilized to implement the strategies developed during the Strategic Planning workshop. After the workshop was completed, ADHS selected Standard 5, Standard 7, and Standard 8 as top priorities for the ADHS strategic plan.

### **STANDARD 5: FOODBORNE ILLNESS AND FOOD PREPAREDNESS AND RESPONSE**

For Standard 5, ADHS worked with the ADHS Public Health Laboratory to create a letter of understanding that outlined the laboratory's ability to provide analytical support to the FS&ES Program and Arizona counties. The letter of understanding includes references to the types of biological and chemical testing available for food, environmental, and clinical samples. Lastly, the letter included information regarding alternative laboratory contacts in the event a food-related emergency exceeds the capacity of the Public Health Laboratory. The letter meets all of the requirements of elements 3a and 3b of Standard 5.

### **STANDARD 7: INDUSTRY AND COMMUNITY RELATIONS**

Additional Standard 7 educational materials were requested by the Arizona counties in FY2016 and included Norovirus prevention, employee illness reporting, and proper food storage signs, as shown in Figure 5.

### **STANDARD 8: PROGRAM SUPPORT AND RESOURCES**

For Standard 8, ADHS completed the distribution of all foodborne illness kits to each county in Arizona. The foodborne illness kits were showcased in the February 16, 2016 ADHS Director's blog and were evaluated for use in the agency's accreditation initiatives. In addition, ADHS provided equipment to counties that requested items for meeting elements 2a and 2b. ADHS demonstrated the kit and went over its contents at an IHS food safety training session for Environmental Health Specialists in FY2016.

## 2.3 CONFERENCE FOR FOOD PROTECTION

One ongoing food safety initiative that began over FY2016 is the state and local agency participation in the Conference for Food Protection (CFP). The Conference for Food Protection brings together representatives from the food industry, government, academia, and consumer organizations to identify and address emerging problems of food safety to formulate recommendations. Maricopa County, Coconino County, and ADHS attended the 2016 Conference for Food Protection's Biannual Meeting, held in Boise, Idaho, as local and state representatives. The ADHS FS&ES Program Manager represented the State of Arizona as a voting delegate. Since the last biannual meeting, at least four representatives from ADHS and the local environmental health agencies have joined CFP committees, whose work will be presented at the 2018 CFP Biannual Meeting, and ADHS has organized quarterly conference calls to discuss potential issues and their impact before they are submitted.



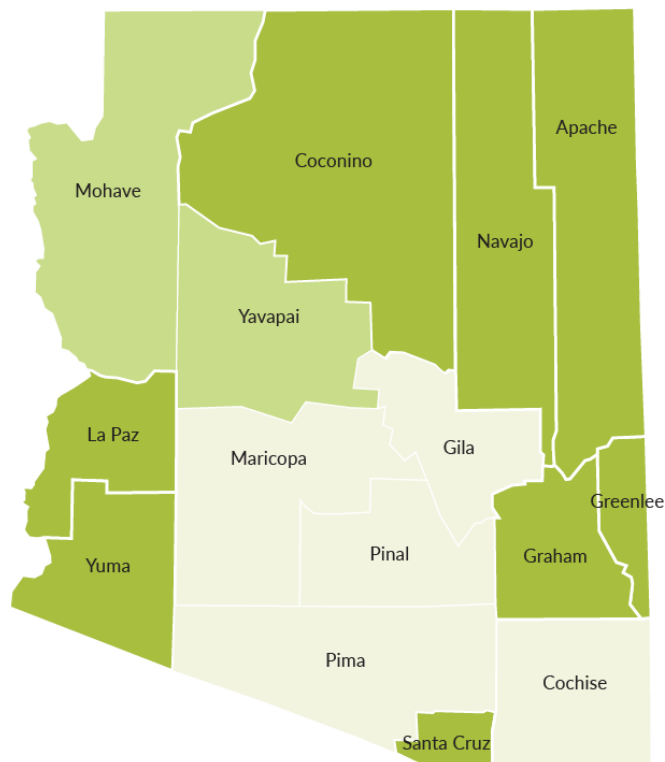
**Figure 6:** Arizona State and Local Agency Representatives at the 2016 Conference for Food Protection Biannual Meeting





## 2.4 FOOD SAFETY REGULATION UPDATE

The current Arizona Administrative Code rules for food safety are based on the 1999 FDA Model Food Code with modifications to meet Arizona's needs. Mohave County and Yavapai County have adopted the 2009 FDA Food Code. Maricopa County, Pinal County, Gila County, Cochise County, and Pima County have adopted the 2013 FDA Food Code (see Figure 7).



**Figure 7:** Newer Versions of the FDA Food Code have been adopted by Seven Arizona Counties

- State Food Safety Rules (1999 FDA Food Code)
- Adopted 2009 FDA Food Code
- Adopted 2013 FDA Food Code



## 2.5 FOODBORNE ILLNESSES

There were 1,425 foodborne illness complaints received by county health departments in FY2016. This represents an increase of 30% from FY2015. The Arizona Department of Health Services conducts surveillance for foodborne illnesses and other enteric diseases and assists county health departments in conducting investigations of disease outbreaks. Environmental investigations, including foodborne illness investigations, are conducted whenever gastrointestinal disease is suspected to be associated with the consumption of a food product. Whenever an association between foodborne illnesses and a food establishment is made, a detailed investigation is conducted to evaluate all potential sources of the disease and evaluate contributing factors.

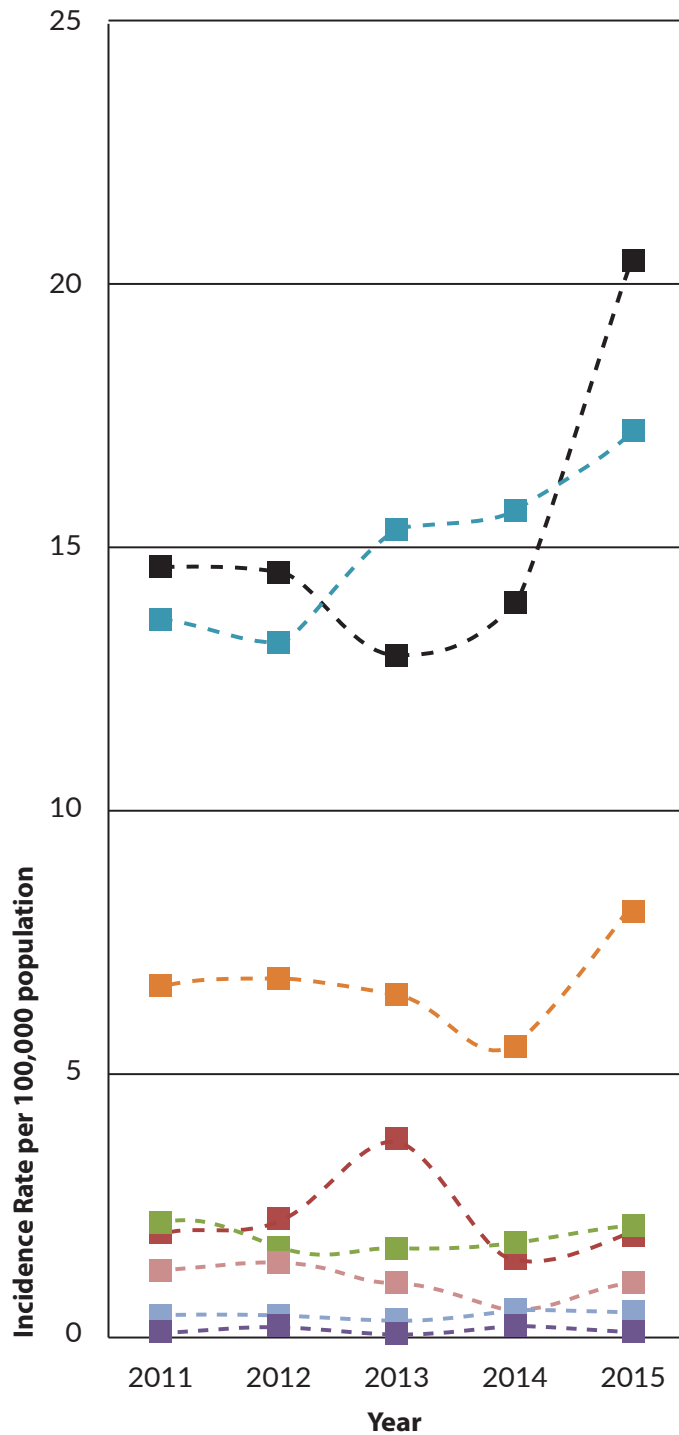
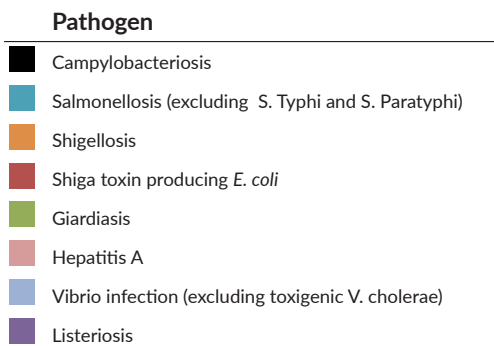
The ADHS Office of Infectious Disease Services (OIDS) is responsible for monitoring and controlling infectious diseases. The program provides data and statistics on selected reportable infectious diseases by monitoring disease trends through surveillance and epidemiologic investigations. Data collected by OIDS over the last five years for confirmed and probable cases of enteric diseases indicate that, while some pathogens are remaining stable, or showing a slight decrease, infections from *Campylobacter*, *Shigella*, and *Salmonella* have increased over the 5-year period (see Table 1 and Figure 8). Therefore, remaining vigilant and maintaining and building capacity to quickly detect and respond to outbreaks of enteric pathogens is essential.

| Pathogen   | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|------|------|------|------|------|
| Campylobacteriosis   | 14.6 | 14.5 | 12.9 | 13.9 | 20.4 |
| Shiga toxin producing <i>E. coli</i>                               | 2.0  | 2.2  | 3.7  | 1.5  | 1.9  |
| Giardiasis   | 2.1  | 1.7  | 1.7  | 1.8  | 2.1  |
| Listeriosis  | 0.1  | 0.2  | 0.1  | 0.2  | 0.1  |
| Salmonellosis (excluding <i>S. Typhi</i> and <i>S. Paratyphi</i> ) | 13.6 | 13.2 | 15.3 | 15.7 | 17.2 |
| Shigellosis  | 6.7  | 6.8  | 6.5  | 5.5  | 8.1  |
| Vibrio infection (excluding toxigenic <i>V. cholerae</i> )         | 0.4  | 0.4  | 0.3  | 0.5  | 0.5  |
| Hepatitis A  | 1.2  | 1.4  | 1.1  | 0.5  | 1.1  |

**Table 1:** Rate of Reported Cases of Enteric Diseases in Arizona

# Rate of reported cases of enteric diseases in Arizona by year 2011-2015\*

\* Rate Calculated per 100,000 Population



**Figure 8:** Rate of reported cases of enteric disease in Arizona by year, 2011-2015

Each year, CDC FoodNet reports on the number of foodborne illnesses from laboratory confirmed cases and the progress made in reaching national goals for reducing foodborne illness. FoodNet also issues an annual Food Safety Progress Report. OIDS created a similar Foodborne Illness Progress Report to compare that State's performance to national trends (Figure 9). In addition to reporting the 2014 and 2015 state rate for enteric pathogens, the report card provides the change in rate for each selected pathogen, compares the State rate to the US rate, and provides CDC target rate to strive towards. Lastly, the report card includes important information regarding the number of cases that are estimated to go unreported for each case reported.

# FOODBORNE ILLNESS REPORT CARD



|  | 2015 AZ RATE* | 2014 AZ RATE* | 2015 US RATE*† | 2020 CDC TARGET RATE‡ | PERCENTAGE OF AZ RATE CHANGE | FOR EVERY CASE REPORTED§ |
|--|---------------|---------------|----------------|-----------------------|------------------------------|--------------------------|
| CAMPYLOBACTERIOSIS                                     | 20.4          | 14.15         | 12.97          | 8.5                   | 45% INCREASE                 | 30 GO UNDIAGNOSED        |
| SHIGA TOXIN PRODUCING E. COLI                          | 1.9           | 1.5           | 0.95           | N/A                   | 27% INCREASE                 | 26 GO UNDIAGNOSED        |
| LISTERIOSIS  | 0.07          | 0.2           | 0.24           | 0.2                   | 35% DECREASE                 | 2 GO UNDIAGNOSED         |
| SALMONELLOSIS<br>(EXCLUDING S. TYPHI AND S. PARATYPHI) | 17.2          | 15.6          | 15.89          | 11.4                  | 10% INCREASE                 | 29 GO UNDIAGNOSED        |
| SHIGELLOSIS  | 8.1           | 5.6           | 5.53           | N/A                   | 45% INCREASE                 | 8 GO UNDIAGNOSED         |
| VIBRIO INFECTION<br>(EXCLUDING TOXIGENIC V. CHOLERAЕ)  | 0.5           | 0.5           | 0.39           | 0.2                   | 0% NO CHANGE                 | 142 GO UNDIAGNOSED       |

\*Rate calculated per 100,000 population

†<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6418a4.htm>

‡based on Healthy People 2020 target rates <https://www.healthypeople.gov/2020/topic/food-safety/objectives>

§Estimates of foodborne illness burden in the United States from 2011 CDC data <http://wwwnc.cdc.gov/eid/article/17/1/p1-1101-t2>

Figure 9: ADHS Foodborne Illness Report Card

## 2.6 NATIONWIDE OUTBREAKS AND FOOD RECALLS

Over FY2016, ADHS completed investigations for 22 foodborne illness outbreaks in Arizona and participated in outbreak investigations throughout the state that included two correctional facility outbreaks and two multi-state outbreaks.



**Figure 10:** Correctional Institution Outbreak Samples

### MULTISTATE OUTBREAK OF SALMONELLA POONA INFECTIONS LINKED TO IMPORTED CUCUMBERS

On August 10, 2015, ADHS was notified of a cluster of two cases of Salmonella serotype Poona infection with the same PFGE pattern (JL6X01.0018). Other cases had also recently been identified in Montana, Colorado, and Utah. ADHS investigators reached out to CDC to begin a multistate collaboration. During the same time, Maricopa County Department of Public Health (MCDPH) was investigating a cluster of Salmonella cases that were linked to a restaurant. As the investigation progressed, some of these cases had PFGE pattern results match the ongoing multistate outbreak.

By August 18, 14 Salmonella isolates had been serotyped at the Arizona State Public Health Laboratory as Poona and had PFGE patterns matching the outbreak. The majority of cases were from Maricopa County. Both MCDPH and ADHS activated their Health Emergency Operations Center (HEOC). Case counts rose daily, and by August 31, there were 59 lab-confirmed cases in Arizona,

Early in the multistate investigation, demographics indicated that those ill were primarily from the southwest (Arizona, California, Colorado, New Mexico, and Utah) and had a young median age of about 7 years (Arizona cases). The epidemic curve indicated a large peak during summer months. Because of these epidemiologic clues, and because of previous outbreaks caused by Salmonella Poona, early hypotheses included turtles, produce, and restaurant exposures.

Investigators in Arizona and other states began to administer to cases the national hypothesis-generating questionnaire, a tool commonly used during investigation of PFGE-matched clusters in which the source is unknown. Results from questionnaire were compared to background rates of the same exposures to determine if cases' exposures varied from what would be expected from the general population. Using this information, investigators were able to determine that primarily two exposures, cucumbers and watermelons, were reported more often by cases. Additional interviews with cases and data analysis determined that garden-variety cucumbers were epidemiologically linked to illness.

Investigators in Arizona and other states were able to collect product information from cases' grocery store frequent shopper cards. Investigators also responded to clusters of cases from different households who had eaten cucumbers at the same restaurant. Additionally, samples of epidemiologically implicated cucumbers were collected, including one sample collected by ADHS, and Salmonella matching the outbreak strain was recovered from multiple food samples. Traceback of cucumbers from shopper card records, restaurant clusters, and lab-tested contaminated cucumbers identified a common supplier of the cucumbers. Recalls were issued for cucumbers distributed by Andrew & Williamson Fresh Produce on September 4 and September 11.

After the recalls were announced, case counts dropped off dramatically, yet investigators continued to receive reports of Salmonella infections matching the outbreak strain, most of which reported exposure to recalled product. By March 18, 2016, the outbreak appeared to be over. A total of 907 lab-confirmed cases were identified from 40 states, including 140 cases in Arizona. Six deaths were reported, including one in Arizona.

## FOOD RECALLS

The FDA issued 445 food recalls of FDA-regulated food products in FY2016. The FDA works with industry and state partners to conduct traceback investigations and to issue press releases and public notices about recalls that may pose a significant risk to the public. The FDA regulates all other food products except those under USDA regulation.

The USDA issued 150 recall notices over 2015. The USDA regulates meat, poultry, and certain egg products. Approximately 21,104,848 pounds of food, associated with these recalls, were recovered nationwide. A USDA recall summary for calendar year 2015 is provided in Table 2 and includes information regarding the type, reason, and product associated with recalls.



Figure 11: ADHS Sample Go-Kit

| USDA Recall Summary for Calendar Year 2015 |                        |                   |                           |
|--|------------------------|-------------------|---------------------------|
| Total                                      |                        | Number of Recalls | Number of Pounds Recalled |
|  |                        | 150               | 21,104,848                |
| Recalls by Class (N=150)                   |                        |                   |                           |
| Class                                      | I                      | 99                | 16,623,878                |
|  | II                     | 39                | 3,176,212                 |
|  | III                    | 12                | 1,304,758                 |
| Recalls by Reason (N=150)                  |                        |                   |                           |
| Reason For Recall                          | STEC*                  | 8                 | 215,593                   |
|  | Listeria monocytogenes | 6                 | 82,547                    |
|  | Salmonella             | 3                 | 4,828,874                 |
|  | Undeclared Allergen    | 58                | 10,268,457                |
|  | Extraneous Material    | 11                | 1,104,790                 |
|  | Processing Defect      | 4                 | 5,259                     |
|  | Undeclared Substance   | 5                 | 1,176,731                 |
|  | Other**                | 55                | 3,422,597                 |
| Recall by Species/Product (N=150)          |                        |                   |                           |
| Species                                    | Beef                   | 41                | 1,345,842                 |
|  | Mixed                  | 38                | 10,238,498                |
|  | Pork                   | 37                | 1,480,768                 |
|  | Poultry***             | 33                | 8,004,465                 |
|  | Ovine                  | 1                 | 35,275                    |

**Table 2:** USDA Recall Summary for Calendar Year 2015

\*STEC includes recalls due to Shiga toxin-producing *E. coli* (STEC). STEC organisms include *E. coli* O157:H7, *E. coli* O45, *E. coli* O103, *E. coli* O111, *E. coli* O121, *E. coli* O145.

\*\*\*Other\*\* includes producing without inspection, failure to present for import inspection, and labeling issues, among others.

\*\*\*Poultry includes egg products.

ADHS FS&ES Program started a food recall notification process to the County Food Safety Programs in FY 2015. Recall notifications received from the USDA and FDA are reviewed for information pertaining to Arizona. The table below illustrates how the weekly updates are organized. Class I Recalls effecting Arizona are sent out to the counties immediately. Class II, Class III, and Allergy Alerts are sent out as a group at the end of the week. There has been an increase in undeclared allergens in food products over the last year. This approach was implemented in order to assist the counties in prioritizing recall information, as multiple recalls can be issued during a one week period.

| Weekly Recall Summary     |                       |
|---------------------------|-----------------------|
| Distribution              | Recall Info and Link  |
| Nationwide or AZ specific | CLASS I               |
|                           | CLASS II or CLASS III |
|                           | Allergy Alerts        |



## 2.7 BOTTLED WATER

**NO  
CHANGE** in  
number of bottled  
water facilities in  
FY2016

|                         | 2015 | 2016 |
|-------------------------|------|------|
| BOTTLE WATER FACILITIES | 43   | 43   |
| ROUTINE INSPECTIONS     | 67   | 69   |

**Figure 12:** Bottled Water Facilities in Arizona

Bottled Water rules are outlined in 9 A.A.C. Article 2 Bottled Water. Facilities that bottle water for distribution in Arizona are routinely inspected to evaluate sanitation practices and approval of a source. There were 43 bottled water facilities in Arizona and inspection staff conducted 69 inspections in these facilities during FY2016. There were no enforcement actions reported at bottled water facilities for FY2016.





## 2.8 SWIMMING POOLS AND SPAS

An average of **2** routine inspections were conducted at swimming pools and spas in FY2016

|                       | 2015   | 2016   |
|-----------------------|--------|--------|
| SWIMMING POOLS & SPAS | 12,911 | 12,817 |
| ROUTINE INSPECTIONS   | 23,613 | 25,594 |

Figure 13: Swimming Pools and Spas in Arizona

Public and semi-public swimming pools rules are outlined in 9 A.A.C. Article 8 Public and Semipublic Swimming Pools and Bathing Places. Public and semi-public swimming pools and spas are routinely inspected to evaluate compliance with applicable regulations, particularly those associated with the prevention of waterborne illnesses.

ADHS rules apply to the sanitary conditions of public and semi-public swimming pools and bathing places. A swimming pool or bathing place is “public” if it is open to members of the general public, regardless of whether a fee is charged for admission. A swimming pool or bathing place is “semi-public” if it is operated in conjunction with lodging such as a hotel, motel, resort, apartment, townhouse or condominium complex, trailer court, mobile home park, recreational vehicle park, or community pool facilities operated by, and exclusively for, a residential development.

There were 12,817 public and semi-public swimming pools and spas in Arizona in FY2016. State and county inspection staff conducted 25,594 swimming pool and spa inspections. State and county health departments reported initiating 1,850 enforcement actions associated with these facilities in FY2016.

## 2.9 PUBLIC ACCOMMODATIONS

The number of public accommodations facilities decreased by **4%** in FY2016

|                     | 2015  | 2016  |
|---------------------|-------|-------|
| HOTELS & MOTELS     | 1,309 | 1,262 |
| ROUTINE INSPECTIONS | 1,412 | 1,278 |

Figure 14: Public Accommodations in Arizona

Public accommodations such as hotels, motels, and boarding houses are routinely inspected to evaluate compliance with 9 A.A.C. Article 13 Hotels, Motels, and Tourist Courts. There were 1,262 public accommodation facilities in Arizona in FY2016. State and county inspection staff conducted 1,412 inspections in these facilities. County health departments reported initiating 19 enforcement actions associated with public accommodation facilities in FY2016.

## 2.10 TRAILER COACH PARKS

The number of trailer coach parks increased by **10%** in FY2016

|                     | 2015  | 2016  |
|---------------------|-------|-------|
| TRAILER COACH PARKS | 1,677 | 1,851 |
| ROUTINE INSPECTIONS | 2,002 | 2,059 |

**Figure 15:** Trailer Coach Parks in Arizona

Trailer coach park requirements are outlined in 9 A.A.C. Article 5 Trailer Coach Parks. Inspections include the evaluation of the water supply, sewage disposal system, sanitation facilities, service buildings, toilet facilities, and waste disposal. There were 1,851 trailer parks in Arizona in FY2016. State and county inspection staff conducted 2,059 inspections at trailer coach parks across the state. County health departments reported initiating 42 enforcement actions associated with trailer coach parks in FY2016.

## 2.11 PUBLIC SCHOOL GROUNDS

The number of public school grounds decreased by **5%** in FY2016

|                     | 2015  | 2016  |
|---------------------|-------|-------|
| PUBLIC SCHOOLS      | 1,722 | 1,642 |
| ROUTINE INSPECTIONS | 1,832 | 1,557 |

**Figure 16:** Public School Grounds in Arizona

Public school grounds requirements are outlined in 9 A.A.C. Article 7 Public Schools. Public schools, including charter schools, are inspected to evaluate compliance with water supply, indoor areas, restroom, bathroom, shower room, sewage disposal, refuse management, pest control, and animal standards requirements. Food operations at public and charter school grounds are permitted or licensed and evaluated as food establishments under the requirements in 9 A.A.C. Article 1 Food and Drink (see Section 2.1).

There were 1,642 permitted public and charter schools in Arizona in FY2016. State and county inspection staff conducted 1,557 inspections at these permitted schools. State and county health departments reported initiating 43 enforcement actions associated with public and charter schools in FY2016.



## 2.12 CHILDREN'S CAMPS

**NO  
CHANGE** in  
number of children's  
camps in FY2016

|                     | 2015 | 2016 |
|---------------------|------|------|
| CHILDREN'S CAMPS    | 51   | 51   |
| ROUTINE INSPECTIONS | 49   | 51   |

**Figure 17:** Public School Grounds in Arizona

Children's camps inspection requirements are outlined in A.R.S. § 36-3901 and 9 A.A.C. Article 4. Children's camp inspections evaluate the location, layout, water supply, toilets and disposal systems, and drainage of a children's camp. Food operations at children's camps are permitted or licensed and evaluated as food establishments under the requirements in 9 A.A.C. Article 1 Food and Drink (see Section 2.1).

Children's camps are sometimes associated with day camps; however, the children's camp regulations only apply to camps operated continuously for a period of five days or more each year for religious, recreational, or vacation purposes. Children's camps do not include camps used by individual or family use, penal or correctional camps, or camps operated solely for the education, care, or treatment of children. Day camps, which operate similarly to daycares, do not fall within the definition of a children's camp and are therefore not licensed as such.

There were 51 children's camps that applied for an annual permit in FY2016. The dates of operation for these camps were varying, with some operating only during the summer months and others only operating a few days per year. State and county inspectors conducted 51 inspections at children's camps during FY2016. There were no enforcement actions reported at children's camps for FY2016.

## 2.13 CAMP GROUNDS

The number of  
camp grounds  
decreased by  
**37%** in FY2016

|                     | 2015 | 2016 |
|---------------------|------|------|
| CAMP GROUNDS        | 35   | 22   |
| ROUTINE INSPECTIONS | 32   | 25   |

**Figure 18:** Public School Grounds in Arizona

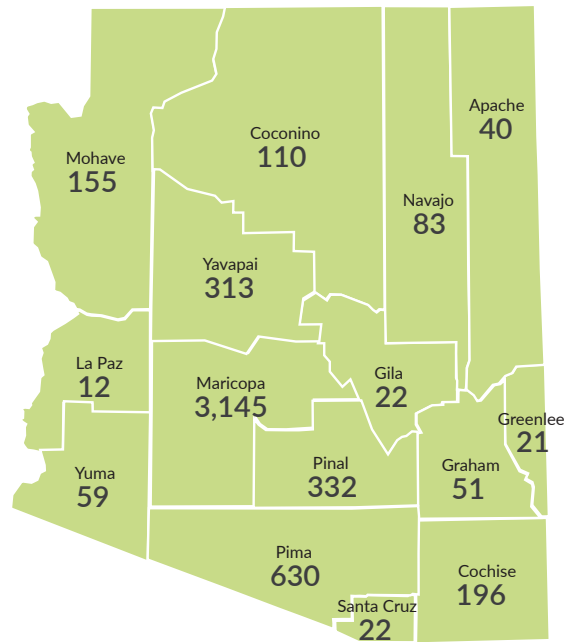
Camp grounds requirements are outlined in 9 A.A.C. Article 6 Camp Grounds. Camp ground regulations apply to any city, county, county, village, community, institution, person, firm, or corporation operating, maintaining, or offering for public use any tract of land on which person may camp or picnic either free or by payment of a fee. Camp grounds are evaluated for compliance with supervision, water supply, protection against fires, sewage and refuse, toilet, and construction and maintenance of building requirements.

There were 22 camp grounds in Arizona in FY2016. County inspection staff conducted 25 inspections at these camp grounds. There were no enforcement actions reported at camp grounds for FY2016.

# 3.0

## HOME BAKED & CONFECTIONERY GOODS PROGRAM

**Figure 19:**  
Home Baked &  
Confectionery  
Goods Program  
Registrants, by  
County FY2016



The Home Baked & Confectionery Goods Program continues to grow, with 5,191 individuals registered at the end of FY2016. Approved food products continue to be limited to non-potentially hazardous foods made in the registrant's home and must be labeled with the address and contact information of the registrant, a list of ingredients, and a statement notifying the consumer that the product was made in a private home. If applicable, the label must also include a statement that the product was prepared in a facility for individuals with developmental disabilities. All packaging must be done in the home kitchen.

The program allows for the sale of these products at locations that include permitted food establishments, farmers' markets, and special events. There are no limits to the revenue or quantity of products sold by a registrant under the program. Popular items over the past year include dry spice mixes and rubs, dry baking mixes including waffle and pancake mixes, and dry roasted coffee beans. The eNewsletter for the Home Baked & Confectionery Goods Program is sent to program registrants and local county partners on a quarterly basis and includes program information, features a registered home baker of the month, and shares information that would be of interest to home bakers. The eNewsletter has been a huge success, as evidenced by the feedback received from both registrants and the Arizona Counties.

Over FY2016, ADHS was requested to present about the cottage food program, or Home Baked & Confectionery Goods Program, at the November 2015 Integrated Foodborne Outbreak Response and Management Conference and on a National Association of County and City Health Officials sharing session in April 2016.

# 4.0

## SCHOOL & COMMUNITY GARDENS



Figure 20: School Harvested Produce

Establishing and sustaining school and community gardens is an evidence-based strategy to augment local food systems and increase access to healthy foods. Many Arizonans have limited opportunities to make healthy food choices, contributing to the burdens of overweight and obesity, type 2 diabetes, and other threats to health and wellbeing. The Arizona Health Improvement Plan outlined a goal to increase the proportion of adults and children at a healthy weight in Arizona by 5 percent by 2020. Supporting school and community gardens, and consequently the food systems they are part of, contributes to this goal by expanding the menu of options available to Arizonans in making healthy food choices.

Underlying these systems and their contributors, including school and community gardens, is food safety. Consumers must feel assured of the safety of locally grown food in order to confidently purchase and prepare it for friends and family. In the United States, 46% of foodborne illness outbreaks with an implicated food vehicle from 1998-2008 were attributed to produce [commodities](#)<sup>1</sup>. In addition to the significant human costs of these outbreaks, research has shown that customers adjust their shopping choices, at least in the short term, in response to outbreaks attributed to a particular [food](#)<sup>2</sup>. The prevention of outbreaks through safe food production and handling, then, protects both human health and consumer confidence in local food systems.

Arizona Department of Health Services' School and Community Garden Program certifies school and community gardens that demonstrate they are following food safety practices known to prevent foodborne illness and incorporate elements of good handling and good agricultural practices. In FY2016, the School and Community Garden Program certified 13 gardens, giving a total of 31 certified gardens in 6 counties statewide, up from 19 gardens in 7 counties in FY2015. This represents a 63 percent increase in certified gardens statewide year over year.





**Figure 21:** School Meals Prepared with ADHS Certified School Garden Grown Produce

The School and Community Garden Program Coordinator participated in numerous events throughout the year to present information about the certification offered through the Program and provide education and guidance on gardening and food safety. Finally, in the last two months of FY2016, the School and Community Garden Program Coordinator began the process of redesigning and further streamlining the application for certification, which is scheduled to be completed in FY2017.



**Figure 22:** ADHS Certified School Garden Grown Produce



**Figure 23:** ADHS Certified School Garden Program Materials



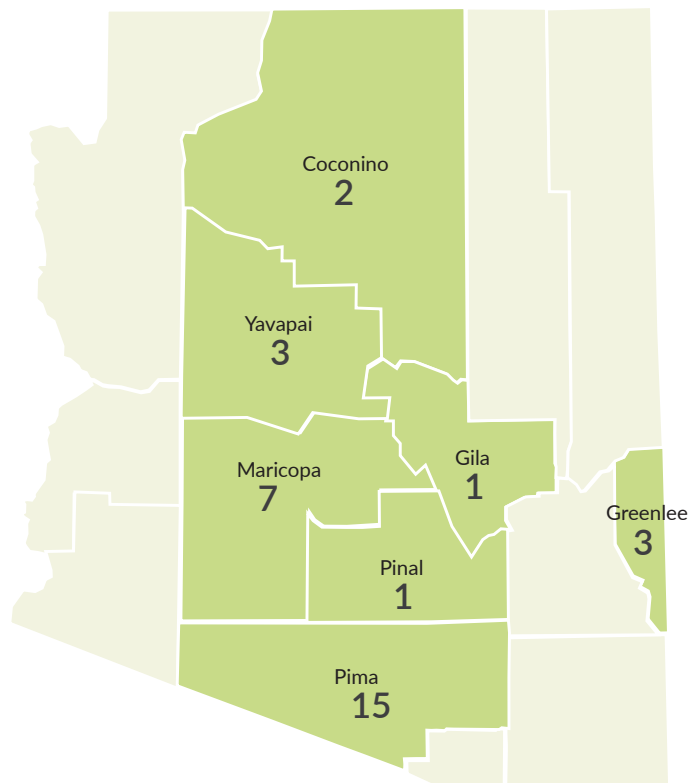


**Figure 24:** ADHS Certified Garden

<sup>1</sup>Painter JA, Hoekstra RM, Ayers T, Tauxe RV, Braden CR, Angulo FJ, et al. Attribution of foodborne illnesses, hospitalizations, and deaths to food commodities by using outbreak data, United States, 1998–2008. *Emerg Infect Dis* [Internet]. 2013 Mar [August 03, 2016].

<sup>2</sup>Carlos Arnade, Linda Calvin, Fred Kuchler. Consumers’ Response to the 2006 Foodborne Illness Outbreak Linked to Spinach. *Amber Waves magazine, USDA* [Internet]. 2010 Mar [August 03, 2016].

**Figure 25:** ADHS Certified School and Community Gardens by County



# 5.0

## REGISTRATION & TRAINING OF SANITARIANS

### ARIZONA SANITARIANS' COUNCIL

|                          |  |
|--------------------------|--|
| Blanca Caballero, R.S.   | Arizona Sanitarians' Council Chairperson |
| George Amaya, R.S.       | Represents: Smaller Counties             |
| David Morales, R.S.      | Represents: Large Counties               |
| Harlan D. Lee, Owner     | Represents: Lay Persons                  |
| Roberto Angel, Jr., R.S. | Represents: Industry                     |

In January 2013, the Arizona Sanitarians' Council began administering the National Environmental Health Association's (NEHA) Registered Environmental Health Specialist/Registered Sanitarian (REHS/RS) Environmental Health Proficiency Exam. This exam is a two-booklet examination containing 250 objective, multiple choice questions developed by NEHA. In July 2014, NEHA began providing an updated REHS/RS Exam that includes new content areas. These main content areas, with percentages allotted to each area, are included below:

- Conducting facility inspections (35%),
- Conducting system inspections (20%),
- Conducting investigations (14%),
- Ensuring compliance (13%),
- Promoting environmental public health awareness (10%), and
- Responding to emergencies (8%).

During FY2016, fifty-four (54) applicants sat for the registration exam. Thirty-one (31) applicants (57%) passed the examination and became registered as sanitarians. In FY2016, five hundred twenty two (522) individuals maintained Arizona sanitarian registrations in good standing.

Individuals responsible for carrying out the provisions in the ADHS delegation agreement must be registered as a sanitarian in the State of Arizona or, under specific conditions, a Sanitarian Aide under the direct supervision of an Arizona Registered Sanitarian. There were 174.5 Registered Sanitarian FTEs employed at the 15 Arizona county health departments, ASU, and ADHS. Several county environmental health departments have Registered Sanitarians that have been standardized in the new FDA program to promote nationwide uniformity of Food Safety Programs. Standardization is a process by which experienced sanitarians can be trained to focus on critical food safety factors and to maintain consistency among sanitarians. The updated standardization procedure is more complex and is more time intensive than previous standardization requirements, reflecting the increased professional nature of the work involved.

***57% of candidates passed the Arizona Registered Sanitarians' Exam in FY2016***

## 5.1 TRAININGS OFFERED FOR REGISTERED SANITARIANS

Continuing education is a requirement for annual sanitarian registration renewal. This requirement reflects the importance of providing training opportunities to Registered Sanitarians that are relevant to the environmental health profession. Registered Sanitarians must stay abreast of advances in environmental health science, technology, regulations, policies, procedures, and a vast array of industry advances. Meeting this requirement is can be challenging due to limited training opportunities and resources to fund time and travel to attend training events.

During FY2016, training opportunities were provided by agencies that include the ADHS Office of Environmental Health, the ADHS Office of Infectious Disease Services, the Arizona Environmental Health Association (AZEHA), and the Arizona County Directors of Environmental Health Services Association. Trainings provided over the fiscal year included the AZEHA Annual Conference, the Annual Arizona Infectious Disease Training and Exercise, a Risk Based Inspections at Retail Course, two FDA workshops, the 2015 Integrated Outbreak Response Management Conference held in Phoenix, the 2016 NACCHO Conference held in Phoenix, and the 2016 FDA PacRim Shellfish Sanitation Conference held in Phoenix. In addition, the Federal Emergency Management Administration, FDA, CDC and several university programs offered on-line training options for Registered Sanitarians that were unable to travel to the aforementioned training opportunities.



# 6.0

## BROWNFIELDS



Figure 26: ADHS Certified Garden

Brownfields and land reuse sites are properties that are abandoned, underused, or not considered for redevelopment because of the real or perceived risk of their contamination. These sites, while not quantified in Arizona, are a familiar sight to many throughout the state. As part of a grant from the Agency for Toxic Substances and Disease Registry, the ADHS Office of Environmental Health has launched an effort to increase statewide knowledge and capacity to redevelop brownfields into healthy, useful places that contribute positively to the quality of life in their communities, with an emphasis on community gardening.

The Arizona Health Improvement Plan aims to increase the proportion of adults and children in Arizona who are at a healthy weight by five percent by the year 2020. A primary strategy identified in the Plan to support this goal is to increase availability of affordable, healthy food in communities. The Plan also identified tactics to effect this change – namely, by establishing more grocery stores where they are most needed and by supporting farm-to-table efforts, including farmers’ markets and community gardens. The redevelopment of brownfield/land reuse sites represents an incredible opportunity to increase Arizonans’ access to healthy foods – whether those sites are redeveloped into community gardens, used for grocery stores, or used as farmers’ markets – while at the same time reducing potential exposure of community members to environmental contaminants that may be present on the sites.



Figure 27: ADHS Garden Start Kits

**FREE WORKSHOP**

## *Land Recycling & New Tools For Creating Healthy Communities and Economic Growth*

August 19, 2016 • 8 am – 2 pm • Business Accelerator  
Northern Arizona Center for Entrepreneurship and Technology • 2201 North Gemini Drive • Flagstaff, Arizona

8:00 – 8:30 Registration

8:30 – 8:45 Welcome and Introduction of Program, Dave Laney (ATC Group Services)

8:45 – 10:00 **BROWNFIELDS, HEALTHFIELDS, AND COMMUNITY HEALTH CONCERNS**

- Transforming Brownfields to Healthfields, Rosanne Albright (City of Phoenix)
- The Effects of Health Disparities, Julie Ann Baldwin (Northern Arizona University)
- Getting Started/What To Do First: Community Action Model, Dave Laney (ATC)

10:00 – 10:10 Break

10:10 – 11:10 **IDENTIFYING AND ADDRESSING NEEDS FOR REDEVELOPMENT/REUSE**

- Assessment & Cleanup of Properties, Dave Laney (ATC)
- Liability Considerations, Jerry Worsham (The Cavanagh Law Firm)
- Financing Considerations, Jennie Cure (ADEQ), Dave Laney (ATC)

11:10 – 11:40 Lunch (Provided)

11:40 – 1:40 **PRACTICAL APPLICATIONS FOR CITIES, SCHOOLS, AND NEIGHBORHOODS**

- Karl Eberhard AIA, City of Flagstaff Community Design and Redevelopment Manager
- Amanda Guay, North Country HealthCare Director of Community Health Programs & Services
- Steve Ayers, Town of Camp Verde, Economic Development Director
- Katherine Londen, Arizona Department of Health Services, Public Health Sanitarian, Food Safety & Environmental Services
- CJ Hagar, Vitalyst Health Foundation, Director Healthy Community Policies
- Dean Brennan, Arizona Alliance for Livable Communities

1:40 – 2:00 **RESOURCES FOR FUTURE SUCCESS**





Figure 28: Brownfield / Land Reuse Workshop and Agenda

In FY2016, in Phoenix, OEH held the first of three regional workshops to bring together representatives from non-profit organizations; local, county, and state planning and development staff; city planners; local, county and state health agencies; and others to discuss how to successfully redevelop brownfields/land reuse sites in partnership with their communities. More than 50 individuals registered for the event, and 45 attended. An attendee evaluation showed that most attendees felt that they developed a better understanding of how to identify, manage and mitigate any environmental health risks associated with redeveloping a brownfield/land reuse site; how to engage with communities to ensure the outcome of a brownfield/land reuse project was successful and sustainable; and how to evaluate the impact of these projects on our communities' health.

In preparation for this and other events in the future, ADHS developed a wealth of new program materials in FY2016 to help educate Arizonans about brownfields/land reuse sites and introduce to them the potential these sites offer for redevelopment. These materials included a program brochure; a vertical banner display; an educational model showing how sites may become contaminated and demonstrating how they can be remediated if they do have contamination; garden starter kits; a customized USB with program information pre-loaded; reusable bags; and an expanded website.

### Taking Action

If you are interested in leading or supporting the redevelopment of a brownfield or land reuse site in your community, consider the following questions before you start planning.

- 1. What's having a negative impact on the health, safety, or happiness of people in your community?
- 2. How can redevelopment address these issues?
- 3. What corresponding benefits would you expect as a result of the redevelopment?
- 4. What data can you gather to measure the impact of the redevelopment on the health, safety, or happiness of people in your community?



Together, these questions form the basis of the Action Model, a tool developed by the Agency for Toxic Substances and Disease Registry that anybody can use to improve their community. For more information, visit our website or see [www.atsdr.cdc.gov/sites/brownfields/model.html](http://www.atsdr.cdc.gov/sites/brownfields/model.html).

### How Can ADHS Help?

The Arizona Department of Health Services (ADHS) works with federal, state, and local agencies to identify health concerns, mitigate potential exposures, and address communities' questions related to brownfields and land reuse sites in their neighborhoods.

ADHS accomplishes this through a variety of activities, including conducting health education and outreach, performing site visits, and creating risk assessment reports (also called health consultations). For more information, visit our website at [www.azdhs.gov/brownfields](http://www.azdhs.gov/brownfields).



Please contact ADHS' Office of Environmental Health if you are interested in learning more about brownfields and land reuse sites or would like to request assistance from ADHS.



ARIZONA DEPARTMENT  
OF HEALTH SERVICES

Office of Environmental Health  
150 North 18th Avenue  
Phoenix, Arizona 85007  
Phone: (602) 364-3118  
Fax: (602) 364-3146  
[www.azdhs.gov/brownfields](http://www.azdhs.gov/brownfields)

## Brownfields and Land Reuse

Office of Environmental Health  
[www.azdhs.gov/brownfields](http://www.azdhs.gov/brownfields)



ARIZONA DEPARTMENT  
OF HEALTH SERVICES

Figure 29: ADHS Brownfields Brochure

# 7.0

## SUMMARY

### **ALL INSPECTIONS**

Representatives from the 15 Arizona county health departments and ADHS and ASU conducted a total of 108,610 inspections for all categories at 49,675 regulated facilities during FY2016. A total of 174.5 Registered Sanitarians FTEs and 22 Sanitarian Aide FTEs were involved in food safety and sanitation programs at State and local agencies

### **FOOD INSPECTIONS**

There were 40,718 (including temporary) food establishments in Arizona and 99,090 food safety related inspections (i.e. pre-operational, routine, re-inspection, or follow-up inspections) were conducted at these establishments.

### **FOODBORNE OUTBREAKS**

Four large outbreaks were investigated in FY2016 that included two multi-state outbreaks and two large prison outbreaks. The demand on resources resulting from these investigations underscores the importance of preparedness to respond quickly and effectively.

### **FDA VOLUNTARY NATIONAL RETAIL FOOD REGULATORY PROGRAM STANDARDS**

ADHS and the Arizona counties have made significant progress towards conformance with the Program Standards. ADHS fully meets the requirements of Standard 7.

### **FOOD REGULATIONS**

Inconsistencies in food regulations continue to be a challenge for ADHS and the Arizona counties, as demonstrated by the variability in model year food codes adopted across the state at the local level.



# APPENDIX

# APPENDIX A

## PERMITTED ESTABLISHMENTS AND RELATED ACTIVITY TOTALS

| Jurisdiction activity by type                      | Apache | Cochise | Coconino | Gila | Graham | Greenlee | La Paz | Maricopa |
|--|--------|---------|----------|------|--------|----------|--------|----------|
| <b>Food Establishments</b>                         |        |         |          |      |        |          |        |          |
| Current number of food establishments              | 160    | 795     | 1,025    | 388  | 170    | 52       | 276    | 19,046   |
| Limited  | 18     | 260     | 274      | 132  | 63     | 7        | 122    | 7,632    |
| Moderate   | 46     | 361     | 223      | 114  | 35     | 2        | 67     | 5,219    |
| Complex  | 96     | 174     | 529      | 142  | 72     | 43       | 87     | 6,195    |
| Number of routine inspections                      | 194    | 1,169   | 2,497    | 417  | 350    | 307      | 591    | 55,355   |
| Number of re-inspections                           | 6      | 38      | 568      | 62   | 20     | 30       | 10     | 2,846    |
| Number of pre-operational inspections              | 7      | 19      | 244      | 29   | 4      | 3        | 6      | 5,868    |
| Number of foodborne illness complaints             | -      | 6       | 29       | 11   | -      | 6        | 9      | 936      |
| Number of non-foodborne illness complaints         | 9      | 27      | 77       | 24   | 3      | 44       | 30     | 5,099    |
| Number of compliance proceedings                   | -      | -       | 1        | -    | -      | -        | -      | 1,094    |
| Number of food items detained/embargoed            | -      | -       | 12       | -    | 270    | 1        | -      | 175,707  |
| Number of temporary food establishment inspections | 46     | 78      | 244      | 92   | 35     | 125      | 172    | 3,579    |
| <b>Outreach</b>                                    |        |         |          |      |        |          |        |          |
| Number of presentations                            | 37     | -       | 59       | -    | 7      | 24       | 80     | 120      |
| Number of participants/audience                    | 510    | -       | 4,739    | -    | 1,561  | 135      | 2,528  | 2,800    |
| Number of consultations/counseling provided        | 1      | -       | -        | -    | 92     | -        | 2,500  | 4,100    |
| Number of media contacts                           | -      | -       | 4        | -    | -      | -        | 10     | 130      |
| <b>Non-food Related Activities</b>                 |        |         |          |      |        |          |        |          |
| Public & semi-public bathing places                | 2      | 127     | 181      | 12   | 20     | 3        | 20     | 8,879    |
| Routine inspections                                | 2      | 209     | 695      | 25   | 38     | 18       | 20     | 17,995   |
| Complaint inspections                              | -      | 2       | 4        | 3    | -      | -        | -      | 387      |
| Enforcement actions                                | -      | -       | -        | -    | -      | -        | -      | 1,425    |
| Trailer coach parks                                | -      | 117     | 75       | -    | 11     | 1        | 158    | 471      |
| Routine inspections                                | -      | 93      | 113      | -    | 11     | 2        | 41     | 449      |
| Complaint inspections                              | -      | 1       | 1        | -    | -      | -        | 4      | 76       |
| Enforcement actions                                | -      | -       | -        | -    | -      | -        | -      | 4        |
| Public school grounds                              | 11     | 53      | 43       | -    | -      | 7        | 11     | 953      |
| Routine inspections                                | -      | 34      | 43       | -    | -      | 20       | 11     | 846      |
| Complaint inspections                              | -      | -       | 9        | -    | -      | 6        | -      | 6        |
| Enforcement actions                                | -      | -       | -        | -    | -      | -        | -      | 7        |
| Camp grounds                                       | -      | -       | 8        | -    | -      | 2        | -      | 5        |
| Routine inspections                                | -      | -       | 8        | -    | -      | 4        | -      | 5        |
| Complaint inspections                              | -      | -       | -        | -    | -      | -        | -      | -        |
| Enforcement actions                                | -      | -       | -        | -    | -      | -        | -      | -        |
| Children's camps                                   | 4      | -       | -        | 9    | -      | -        | -      | -        |
| Routine inspections                                | 4      | -       | -        | 10   | -      | -        | -      | -        |
| Complaint inspections                              | -      | -       | -        | -    | -      | -        | -      | -        |
| Enforcement actions                                | -      | -       | -        | -    | -      | -        | -      | -        |
| Public accommodations                              | 21     | 96      | 128      | 40   | 12     | 6        | 25     | 418      |
| Routine inspections                                | 26     | 77      | 188      | 33   | 13     | 12       | 25     | 401      |
| Complaint inspections                              | 2      | -       | 40       | 2    | -      | -        | 2      | 156      |
| Enforcement actions                                | -      | -       | -        | -    | -      | -        | -      | 12       |
| Bottled water                                      | -      | -       | 1        | -    | -      | -        | 1      | 27       |
| Routine inspections                                | -      | -       | 1        | -    | -      | -        | 2      | 42       |
| Complaint inspections                              | -      | -       | -        | -    | -      | -        | -      | 3        |
| Enforcement actions                                | -      | -       | -        | -    | -      | -        | -      | -        |
| Body Art Parlors                                   | -      | -       | 10       | -    | -      | -        | -      | -        |
| Routine Inspections                                | -      | -       | 37       | -    | -      | -        | -      | -        |
| Complaint inspections                              | -      | -       | 10       | -    | -      | -        | -      | -        |

# APPENDIX A

## PERMITTED ESTABLISHMENTS AND RELATED ACTIVITY TOTALS

| Jurisdiction activity by type                      | Mohave | Navajo | Pima  | Pinal | Santa Cruz | Yavapai | Yuma  | ADHS/ASU |
|--|--------|--------|-------|-------|------------|---------|-------|----------|
| <b>Food Establishments</b>                         |        |        |       |       |            |         |       |          |
| Current number of food establishments              | 1,320  | 442    | 4,400 | 993   | 304        | 1,343   | 790   | 483      |
| Limited  | 678    | 142    | 748   | 173   | 82         | 78      | 348   | 180      |
| Moderate   | 368    | 125    | 2,017 | 469   | 64         | 784     | 307   | 120      |
| Complex  | 274    | 175    | 1,635 | 351   | 158        | 481     | 135   | 183      |
| Number of routine inspections                      | 1,895  | 645    | 7,662 | 1,658 | 205        | 2,759   | 1,152 | 1,121    |
| Number of re-inspections                           | 327    | 51     | 366   | 114   | 4          | 481     | 46    | 40       |
| Number of pre-operational inspections              | 126    | 66     | 362   | 159   | 17         | 391     | 29    | 43       |
| Number of foodborne illness complaints             | 13     | 8      | 243   | 41    | 3          | -       | 112   | 8        |
| Number of non-foodborne illness complaints         | 184    | 2      | 898   | 118   | 15         | 140     | 1     | 7        |
| Number of compliance proceedings                   | 26     | -      | 12    | 1     | -          | -       | -     | -        |
| Number of food items detained/embargoed            | -      | -      | 101   | 2,348 | -          | -       | -     | 14,074   |
| Number of temporary food establishment inspections | 357    | 68     | 2,776 | 582   | 20         | 297     | 99    | 161      |
| <b>Outreach</b>                                    |        |        |       |       |            |         |       |          |
| Number of presentations                            | 233    | 1      | 48    | 4     | 19         | 367     | 8     | 9        |
| Number of participants/audience                    | 5,410  | 93     | 1,720 | 550   | 295        | 7,146   | 251   | 730      |
| Number of consultations/counseling provided        | 70     | 35     | 12    | 273   | -          | 419     | 540   | 351      |
| Number of media contacts                           | 5      | -      | 89    | 7     | -          | -       | 1     | -        |
| <b>Non-food Related Activities</b>                 |        |        |       |       |            |         |       |          |
| Public & semi-public bathing places                | 270    | 42     | 2,489 | 287   | 43         | 203     | 221   | 18       |
| Routine inspections                                | 365    | 41     | 4,431 | 415   | 8          | 959     | 270   | 103      |
| Complaint inspections                              | 10     | -      | 95    | 16    | 2          | 5       | -     | -        |
| Enforcement actions                                | 4      | -      | 414   | -     | -          | -       | -     | 7        |
| Trailer coach parks                                | 104    | 41     | 398   | 185   | 21         | -       | 269   | -        |
| Routine inspections                                | 103    | 41     | 418   | 337   | 10         | -       | 441   | -        |
| Complaint inspections                              | 1      | -      | 18    | 72    | 1          | -       | -     | -        |
| Enforcement actions                                | 2      | -      | 36    | -     | -          | -       | -     | -        |
| Public school grounds                              | 56     | -      | 259   | 92    | 31         | 74      | 48    | 4        |
| Routine inspections                                | 66     | -      | 285   | 99    | 8          | 72      | 69    | 4        |
| Complaint inspections                              | 3      | 1      | 5     | 3     | -          | -       | -     | -        |
| Enforcement actions                                | -      | -      | 36    | -     | -          | -       | -     | -        |
| Camp grounds                                       | 3      | 3      | -     | 1     | -          | -       | -     | -        |
| Routine inspections                                | 3      | 3      | -     | 2     | -          | -       | -     | -        |
| Complaint inspections                              | -      | -      | -     | -     | -          | -       | -     | -        |
| Enforcement actions                                | -      | -      | -     | -     | -          | -       | -     | -        |
| Children's camps                                   | -      | 3      | 4     | 2     | 1          | 24      | -     | 4        |
| Routine inspections                                | -      | 3      | 4     | 2     | -          | 25      | -     | 3        |
| Complaint inspections                              | -      | -      | -     | -     | -          | 1       | -     | -        |
| Enforcement actions                                | -      | -      | -     | -     | -          | -       | -     | -        |
| Public accommodations                              | 85     | 36     | 170   | 34    | 24         | 114     | 53    | -        |
| Routine inspections                                | 81     | 36     | 167   | 34    | 10         | 109     | 66    | -        |
| Complaint inspections                              | 36     | -      | 33    | 3     | 1          | 13      | -     | -        |
| Enforcement actions                                | -      | -      | 7     | -     | -          | -       | -     | -        |
| Bottled water                                      | 4      | -      | 4     | 1     | -          | 1       | 4     | -        |
| Routine inspections                                | 3      | -      | 12    | 2     | -          | 2       | 5     | -        |
| Complaint inspections                              | -      | -      | -     | -     | -          | -       | -     | -        |
| Enforcement actions                                | -      | -      | -     | -     | -          | -       | -     | -        |
| Body Art Parlors                                   |        |        |       |       |            |         |       |          |
| Routine Inspections                                | -      | -      | -     | -     | -          | -       | -     | -        |
| Complaint inspections                              | -      | -      | -     | -     | -          | -       | -     | -        |

# APPENDIX B

## AVERAGE NUMBER OF INSPECTIONS PER FACILITY TYPE

NUMBER OF FOOD ESTABLISHMENTS

FOOD ESTABLISHMENT INSPECTIONS

RATIO OF FOOD ESTABLISHMENT INSPECTIONS TO ESTABLISHMENT BY COMPLEXITY

### JURISDICTION ACTIVITY BY TYPE

|            | COMPLEX |        |      | MODERATE |        |      | LIMITED |        |      |
|------------|---------|--------|------|----------|--------|------|---------|--------|------|
| APACHE     | 96      | 114    | 1.19 | 46       | 55     | 1.20 | 18      | 25     | 1.39 |
| COCHISE    | 174     | 434    | 2.49 | 361      | 524    | 1.45 | 260     | 211    | 0.81 |
| COCONINO   | 529     | 1,455  | 2.75 | 223      | 461    | 2.07 | 274     | 581    | 2.12 |
| GILA       | 142     | 151    | 1.06 | 114      | 114    | 1.00 | 132     | 139    | 1.05 |
| GRAHAM     | 72      | 149    | 2.07 | 35       | 75     | 2.14 | 63      | 126    | 2.00 |
| GREENLEE   | 43      | 240    | 5.58 | 2        | 4      | 2.00 | 7       | 63     | 9.00 |
| LA PAZ     | 87      | 199    | 2.29 | 67       | 145    | 2.16 | 122     | 247    | 2.02 |
| MARICOPA   | 6,195   | 23,894 | 3.86 | 5,219    | 15,505 | 2.97 | 7,632   | 15,956 | 2.09 |
| MOHAVE     | 274     | 444    | 1.62 | 368      | 591    | 1.61 | 678     | 860    | 1.27 |
| NAVAJO     | 175     | 272    | 1.55 | 125      | 208    | 1.66 | 142     | 165    | 1.16 |
| PIMA       | 1,635   | 3,637  | 2.22 | 2,017    | 3,302  | 1.64 | 748     | 723    | 0.97 |
| PINAL      | 351     | 632    | 1.80 | 469      | 812    | 1.73 | 173     | 214    | 1.24 |
| SANTA CRUZ | 158     | 106    | 0.67 | 64       | 44     | 0.69 | 82      | 55     | 0.67 |
| YAVAPAI    | 481     | 1,215  | 2.53 | 784      | 1,392  | 1.78 | 78      | 152    | 1.95 |
| YUMA       | 135     | 240    | 2.49 | 307      | 454    | 2.89 | 348     | 458    | 1.77 |
| ADHS / ASU | 183     | 455    | 2.49 | 120      | 347    | 2.89 | 180     | 319    | 1.77 |

# APPENDIX C REGISTERED SANITARIANS AND SANITARIAN AIDE TOTALS BY JURISDICTION IN FY2016

REGISTERED SANITARIANS  
SANITARIANS AIDES

| JURISDICTION |       |     |
|--------------|-------|-----|
| APACHE       | 1.5   | 0   |
| COCHISE      | 3     | 2   |
| COCONINO     | 8     | 1   |
| GILA         | 1     | 1   |
| GRAHAM       | 2     | 0   |
| GREENLEE     | 1     | 1   |
| LA PAZ       | 1.5   | 0.5 |
| MARICOPA     | 104   | 0   |
| MOHAVE       | 2     | 4   |
| NAVAJO       | 2     | 0   |
| PIMA         | 23    | 3   |
| PINAL        | 7     | 0   |
| SANTA CRUZ   | 2     | 1   |
| YAVAPAI      | 6     | 2   |
| YUMA         | 4     | 0   |
| ADHS / ASU   | 6.5   | 6.5 |
| TOTALS       | 174.5 | 22  |

# APPENDIX D ARIZONA FOODBORNE ILLNESS REPORT CARD

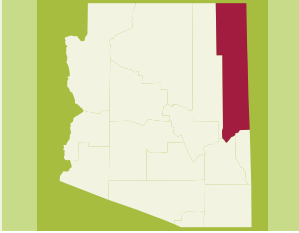


|   | 2015 AZ RATE* | 2014 AZ RATE* | 2015 US RATE*† | 2020 CDC TARGET RATE‡ | PERCENTAGE OF AZ RATE CHANGE | FOR EVERY CASE REPORTED\$ |
|---|---------------|---------------|----------------|-----------------------|------------------------------|---------------------------|
| <b>CAMPYLOBACTERIOSIS</b>                                     | 20.4          | 14.15         | 12.97          | 8.5                   | 45% INCREASE                 | 30 GO UNDIAGNOSED         |
| <b>SHIGA TOXIN PRODUCING E. COLI</b>                          | 1.9           | 1.5           | 0.95           | N/A                   | 27% INCREASE                 | 26 GO UNDIAGNOSED         |
| <b>LISTERIOSIS</b>  | 0.07          | 0.2           | 0.24           | 0.2                   | 35% DECREASE                 | 2 GO UNDIAGNOSED          |
| <b>SALMONELLOSIS</b><br>(EXCLUDING S. TYPHI AND S. PARATYPHI) | 17.2          | 15.6          | 15.89          | 11.4                  | 10% INCREASE                 | 29 GO UNDIAGNOSED         |
| <b>SHIGELLOSIS</b>  | 8.1           | 5.6           | 5.53           | N/A                   | 45% INCREASE                 | 8 GO UNDIAGNOSED          |
| <b>VIBRIO INFECTION</b><br>(EXCLUDING TOXIGENIC V. CHOLERAE)  | 0.5           | 0.5           | 0.39           | 0.2                   | 0% NO CHANGE                 | 142 GO UNDIAGNOSED        |

**FOODBORNE ILLNESS REPORT CARD**

Rate calculated per 100,000 population  
 †<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6418a4.htm>  
 ‡based on Healthy People 2020 target rates <https://www.healthypeople.gov/2020/topic/food-safety/objectives>  
 \$Estimates of foodborne illness burden in the United States from 2011 CDC data <http://wwwnc.cdc.gov/eid/article/17/1/p1-1101-t2>

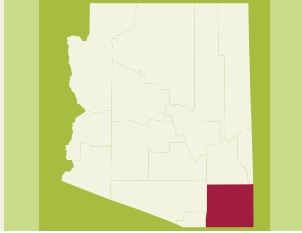
# APPENDIX E



## APACHE COUNTY

|                       |                  |
|-----------------------|------------------|
| County Seat           | St. Johns        |
| Population            | 73,195           |
| Size                  | 11,197 sq. miles |
| Number of Sanitarians | 1.5              |
| Sanitarian Aides      | 0                |
| Food Establishments   | 160              |
| Bathing Places        | 2                |
| Trailer Coach Parks   | 0                |
| School Grounds        | 11               |
| Public Accommodations | 21               |
| Total Complaints      | 9                |

# APPENDIX E

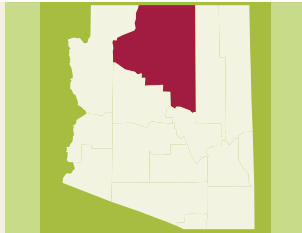


## COCHISE COUNTY

|                       |                        |
|-----------------------|------------------------|
| County Seat           | <b>Bisbee</b>          |
| Population            | <b>132,088</b>         |
| Size                  | <b>6,165 sq. miles</b> |
| Number of Sanitarians | <b>3</b>               |
| Sanitarian Aides      | <b>2</b>               |
| Food Establishments   | <b>795</b>             |
| Bathing Places        | <b>127</b>             |
| Trailer Coach Parks   | <b>117</b>             |
| School Grounds        | <b>53</b>              |
| Public Accommodations | <b>96</b>              |
| Total Complaints      | <b>33</b>              |



# APPENDIX E



## COCONINO COUNTY

|                       |                  |
|-----------------------|------------------|
| County Seat           | Flagstaff        |
| Population            | 136,011          |
| Size                  | 18,618 sq. miles |
| Number of Sanitarians | 8                |
| Sanitarian Aides      | 1                |
| Food Establishments   | 1,025            |
| Bathing Places        | 181              |
| Trailer Coach Parks   | 75               |
| School Grounds        | 43               |
| Public Accommodations | 128              |
| Total Complaints      | 106              |

### COUNTY REPORTED HIGHLIGHTS:

**Medical Marijuana Intergovernmental agreement:** The Environmental Health Program completed the deliverables for the medical marijuana grant with the Arizona Department of Health Services.

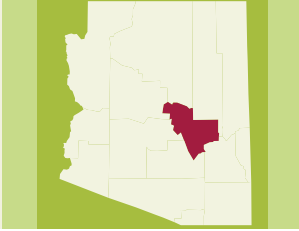
**Tickborne Relapsing Fever Outbreak:** The Environmental Health Program had an article featured in the April 2015 issue of the Journal of Environmental Health.

**Food Inspection Website:** The Environmental Health Program is currently working on a website for the public to view food inspections.

**Best Practices Guide for Farmer's Market Coordinators:** The Environmental Health Program developed a Best Practices Guide for Farmer's Market (FM) Coordinators and is waiting to receive comments from FM Coordinators.

**Coconino County worked with the CDC providing data for the Morbidity and Mortality Weekly Report title: Immediate Closures and Violation Identified During Routine Inspections of Public Aquatic Facilities - Network for Aquatic Facility Inspection Surveillance, Five State, 2013.**

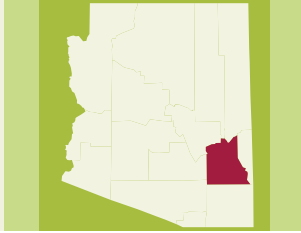
# APPENDIX E



## GILA COUNTY

| County Seat           | Globe           |
|-----------------------|-----------------|
| Population            | 53,144          |
| Size                  | 4,757 sq. miles |
| Number of Sanitarians | 1               |
| Sanitarian Aides      | (1)             |
| Food Establishments   | 388             |
| Bathing Places        | 12              |
| Trailer Coach Parks   | 0               |
| School Grounds        | 0               |
| Public Accommodations | 40              |
| Total Complaints      | 35              |

# APPENDIX E



## GRAHAM COUNTY

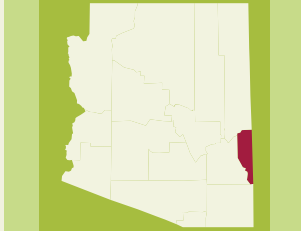
|                       |                 |
|-----------------------|-----------------|
| County Seat           | Safford         |
| Population            | 37,416          |
| Size                  | 4,622 sq. miles |
| Number of Sanitarians | 2               |
| Sanitarian Aides      | (0)             |
| Food Establishments   | 170             |
| Bathing Places        | 20              |
| Trailer Coach Parks   | 11              |
| School Grounds        | 0               |
| Public Accommodations | 12              |
| Total Complaints      | 3               |

### COUNTY REPORTED HIGHLIGHTS:

Graham County Health Department has launched a Facebook page, with the main content from Environmental Health and food safety. The page is administered by a sanitarian on staff that also monitors unpermitted food offered for sale on social media and updates food recall information.

The Graham County Health Department webpage has been updated. All forms and applications are now available online along with other supporting links and documentation.

# APPENDIX E



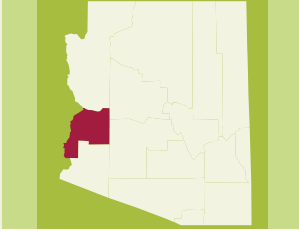
## GREENLEE COUNTY

|                       |                 |
|-----------------------|-----------------|
| County Seat           | Clifton         |
| Population            | 8,802           |
| Size                  | 1,843 sq. miles |
| Number of Sanitarians | 1               |
| Sanitarian Aides      | (1)             |
| Food Establishments   | 52              |
| Bathing Places        | 3               |
| Trailer Coach Parks   | 1               |
| School Grounds        | 7               |
| Public Accommodations | 6               |
| Total Complaints      | 50              |

### COUNTY REPORTED HIGHLIGHTS:

Service to the community is the reason for our existence. If we are responsible for insuring a safe food supply in the community, we operate on the idea that everyone who touches food for public consumption should be trained in food safety. Another angle to insure food safety is frequent inspections. This allows the inspector to correct any flaws in the operator's food prep system.

# APPENDIX E



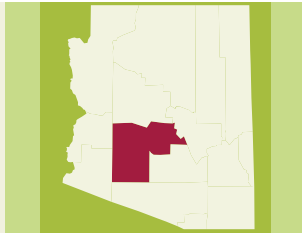
## LA PAZ COUNTY

|                       |                 |
|-----------------------|-----------------|
| County Seat           | Parker          |
| Population            | 20,281          |
| Size                  | 4,499 sq. miles |
| Number of Sanitarians | 1.5             |
| Sanitarian Aides      | (1.5)           |
| Food Establishments   | 276             |
| Bathing Places        | 20              |
| Trailer Coach Parks   | 158             |
| School Grounds        | 11              |
| Public Accommodations | 25              |
| Total Complaints      | 39              |

### COUNTY REPORTED HIGHLIGHTS:

La Paz has hired a sanitarian half-time who is responsible for half of the permanent food establishment inspections. As a result, the County was able to complete the required number of inspections for the food establishments in the county.

# APPENDIX E



## MARICOPA COUNTY

|                       |                 |
|-----------------------|-----------------|
| County Seat           | Phoenix         |
| Population            | 3,942,169       |
| Size                  | 9,200 sq. miles |
| Number of Sanitarians | 104             |
| Sanitarian Aides      | 0               |
| Food Establishments   | 19,046          |
| Bathing Places        | 8,879           |
| Trailer Coach Parks   | 471             |
| School Grounds        | 953             |
| Public Accommodations | 418             |
| Total Complaints      | 6,035           |

### COUNTY REPORTED HIGHLIGHTS:

#### ACTIVE MANAGERIAL CONTROL (AMC) TRAINING

Maricopa County Environmental Services Department (MCESD) continues to offer AMC classes to help food facility managers gain better food protection control at their establishments. In FY16, MCESD held 42 classes and trained 611 attendees. This is a 31% increase from FY15's 32 classes and a 62% increase from FY15's 377 attendees. A measured and sustained reduction in priority violations was seen by establishments after attending the AMC class:

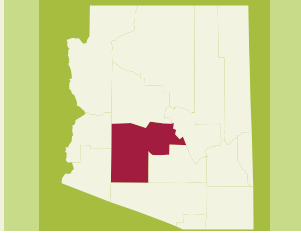
Center for Disease Control and Prevention – MMWR May 20, 2016

MCESD worked with the CDC providing data for the Morbidity and Mortality Weekly Report titled: Immediate Closures and Violations Identified During Routine Inspections of Public Aquatic Facilities – Network for Aquatic Facility Inspection Surveillance, Five States, 2013

2016 NACo Awarded for “Mobile Restaurant Ratings Tool”

MCESD maintains inspection results from food establishments such as restaurants, retail stores, school cafeterias, and mobile food trucks. In August 2015, these inspection results were made available to the public through a new Mobile Restaurant Ratings tool. In addition to being mobile-friendly, this tool provides users with the ability to search geospatial enriched data, file a citizen complaint, and learn more about the ESD's Cutting

# APPENDIX E



## MARICOPA COUNTY

Edge Food Safety Partnership program. Since launching the Mobile Restaurant Ratings tool, there has been a 17% increase in the number of hits related to inspection results and the enrollment rate for the Cutting Edge program has doubled. Facilitating access to inspection results has increased the public's ability to make informed choices, and encouraged businesses to work towards reducing the risk of foodborne illness.

### **THE CUTTING EDGE PROGRAM – FOOD SAFETY PARTNERSHIP**

This innovative program rewards and promotes food establishments with food safety systems and active managerial control. During FY16, participation in the program grew from 1734 to 2076 participants (a 16% increase). More importantly, participants demonstrated greater long-term control over foodborne illness risk factor violations by achieving almost three times fewer foodborne illness risk factor violations per inspection.

### **FDA COOPERATIVE AGREEMENT**

MCESD was awarded a 5 year cooperative agreement from the Department of Health and Human Services Public Health Services to support a project entitled, "Active Managerial Control Educational Strategies for Reducing the Occurrence of Foodborne Illness."

Maricopa County Environmental Health Code Adoptions by the Maricopa County Board of Supervisors:

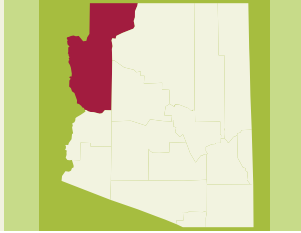
### **30 DAY TRANSITION - MCEHC CHAPTERS I AND VIII**

Allows new owners of existing food establishments to remain in business for up to 30 days while permit application review is in progress. Approved at the 7/22/2015 BOS meeting for immediate effect.

### **MICRO MARKET FEES - MCEHC CHAPTER I**

Adds a Micro Market Operating Permit and three fees associated with the permit to the MCEHC. This revision reduces Micro Market Environmental Health fees pursuant to Arizona Revised Statute § 11-251.08. New fees include: Micro Market Operating Permit (\$155), Micro Market Reference Plan (\$270) and Micro Market Permit Processing Fee (\$20). Approved at the 7/22/2015 BOS meeting for immediate effect.

# APPENDIX E



## MOHAVE COUNTY

|                       |                  |
|-----------------------|------------------|
| County Seat           | Kingman          |
| Population            | 203,334          |
| Size                  | 13,311 sq. miles |
| Number of Sanitarians | 2                |
| Sanitarian Aides      | 4                |
| Food Establishments   | 1,320            |
| Bathing Places        | 270              |
| Trailer Coach Parks   | 104              |
| School Grounds        | 56               |
| Public Accommodations | 85               |
| Total Complaints      | 197              |

### COUNTY REPORTED HIGHLIGHTS:

The Mohave County Environmental Health Division developed a quality improvement plan to improve the inspection reports completed by food safety inspectors. In order to clearly communicate risk factors with operators, reports must include:

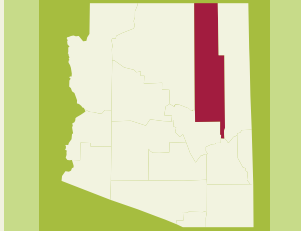
1. Specific Violations marked and noted in the correct item number
2. Corrective Actions
3. Compliance Dates for Corrective Actions
4. Clear and Concise Writing

MCEHD developed new inspection report forms to include columns for items 1-3 so inspectors would be less likely to forget to include the required information. Additionally, inspectors were trained on how to properly complete the forms. The baseline data showed 94% of reports were out of compliance. After implementing the new forms and training, we reviewed the reports and found 30% of the reports not completed to our standards. After further training, a second review of reports showed only 21% of reports were out of compliance. After seeing such great improvement, MCEHD revised all annual permit inspection forms to reflect the food safety program forms.

Mohave County worked with the CDC providing data for the Morbidity and Mortality Weekly Report title: Immediate Closures and Violation Identified During Routine Inspections of Public Aquatic Facilities - Network for Aquatic Facility Inspection Surveillance, Five State, 2013.



# APPENDIX E



## NAVAJO COUNTY

|                       |                 |
|-----------------------|-----------------|
| County Seat           | Holbrook        |
| Population            | 107,094         |
| Size                  | 9,950 sq. miles |
| Number of Sanitarians | 2               |
| Sanitarian Aides      | 0               |
| Food Establishments   | 442             |
| Bathing Places        | 42              |
| Trailer Coach Parks   | 41              |
| School Grounds        | 0               |
| Public Accommodations | 36              |
| Total Complaints      | 10              |

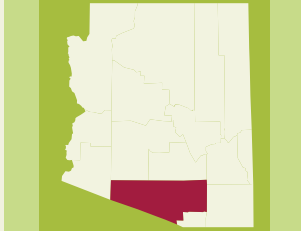
### COUNTY REPORTED HIGHLIGHTS:

In October 2015, Navajo County Environmental Health hired a second Sanitarian.

In the Spring of 2016, the Navajo County Environmental Health website was significantly updated:

- On-line fillable Complaint Form
- Temporary Food Establishment guidelines and application
- AZ Administration Codes
- F A Q's
- Food Safety
- Environmental Quality
- Training Resources

# APPENDIX E



## PIMA COUNTY

|                       |                 |
|-----------------------|-----------------|
| County Seat           | Tucson          |
| Population            | 992,394         |
| Size                  | 9,187 sq. miles |
| Number of Sanitarians | 23              |
| Sanitarian Aides      | 3               |
| Food Establishments   | 4,400           |
| Bathing Places        | 2,489           |
| Trailer Coach Parks   | 398             |
| School Grounds        | 259             |
| Public Accommodations | 170             |
| Total Complaints      | 1,141           |

### COUNTY REPORTED HIGHLIGHTS:

The Board of Supervisors adopted a New Food and General Provisions Ordinance which included incorporating the FDA 2013 Model Food Code and Inspection form, enforcement actions, specifications for mobile and temporary food service and micro-markets. A five year phase in for a total cost recovery system was also adopted. Seven Public Hearings, three Board of Public Health and various meeting were conducted to introduce the proposed code to the regulated community and the public.

Risk Based Food Inspection training was hosted by Pima County and the entire food protection staff participated.

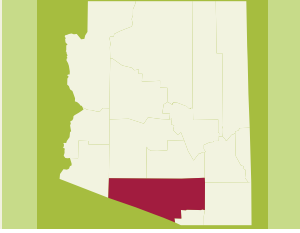
Staff training on the 2013 Food Code was provided to all staff and the Food Service Operator/Worker training program was modified to reflect the new changes.

Three new EHS positions were created and filled to assist in our risk based inspection frequency goal (when totally funded – 2020, an additional 20 staff have been budgeted for being implemented as the fee increase is realized).

The FDA Food Grant was awarded which is a \$70,000/year grant for a period of 5 years.

The FDA Voluntary Retail Food Standards program accomplishments were assessed and two Standards were met and submitted for Audit (Standard #1 – Regulatory Foundation and Standard #7 – Industry and Community Relations).

# APPENDIX E

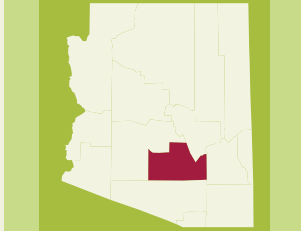


## PIMA COUNTY

The program is in the process of evaluating hand held field inspection platform for conducting all environmental health inspections.

Pima County worked with the CDC providing data for the Morbidity and Mortality Weekly Report title: Immediate Closures and Violation Identified During Routine Inspections of Public Aquatic Facilities - Network for Aquatic Facility Inspection Surveillance, Five State, 2013.

# APPENDIX E



## PINAL COUNTY

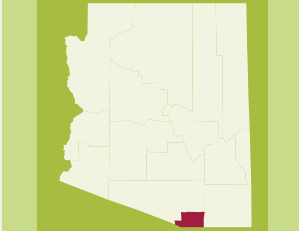
|                       |                 |
|-----------------------|-----------------|
| County Seat           | Florence        |
| Population            | 387,365         |
| Size                  | 5,365 sq. miles |
| Number of Sanitarians | 7               |
| Sanitarian Aides      | 0               |
| Food Establishments   | 993             |
| Bathing Places        | 287             |
| Trailer Coach Parks   | 185             |
| School Grounds        | 92              |
| Public Accommodations | 34              |
| Total Complaints      | 159             |

### COUNTY REPORTED HIGHLIGHTS:

In June of 2016, Pinal County Environmental Health Services completed a current self-assessment of our program with respect to the FDA Voluntary National Retail Food Program Standards.

Since 2014 Pinal County Environmental Health had investigated six citizen's complaints regarding a salsa vendor selling food along the side of the road in San Tan Valley. Eventually, our Sanitarians were able to catch up with this vendor and inform her that making and selling salsa required a food establishment permit. In late 2015, this operator obtained a permit for a retail location where she makes, packages, and sells salsa and guacamole. Interestingly, after becoming permitted, the vendor informed her inspector that the business had grown significantly. Numerous individuals, who had been apprehensive and unwilling to purchase her product when she was a roadside vendor, were now confident in the safety of her foods since she obtained her permit for her food establishment from our department. Her business has grown so much that she now has plans to expand to a full service restaurant. This is just one example of how appropriate food safety regulation can help ensure the health of the community and also provide positive outcomes for business owners.

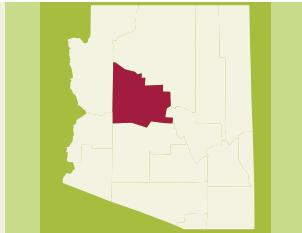
# APPENDIX E



## SANTA CRUZ COUNTY

|                       |                        |
|-----------------------|------------------------|
| County Seat           | <b>Nogales</b>         |
| Population            | <b>47,303</b>          |
| Size                  | <b>1,236 sq. miles</b> |
| Number of Sanitarians | <b>2</b>               |
| Sanitarian Aides      | <b>1</b>               |
| Food Establishments   | <b>304</b>             |
| Bathing Places        | <b>43</b>              |
| Trailer Coach Parks   | <b>21</b>              |
| School Grounds        | <b>31</b>              |
| Public Accommodations | <b>24</b>              |
| Total Complaints      | <b>18</b>              |

# APPENDIX E



## YAVAPAI COUNTY

|                       |                 |
|-----------------------|-----------------|
| County Seat           | Prescott        |
| Population            | 212,637         |
| Size                  | 8.123 sq. miles |
| Number of Sanitarians | 6               |
| Sanitarian Aides      | 2               |
| Food Establishments   | 1,343           |
| Pools                 | 203             |
| Trailer Coach Parks   | 0               |
| School Grounds        | 74              |
| Public Accommodations | 114             |
| Total Complaints      | 140             |

### COUNTY REPORTED HIGHLIGHTS:

Presented “Locally Grown Produce as an Approved Source” at July NEHA Conference. Two staff members attended conference. Implemented guidelines for restaurants to use regarding “locally grown produce as an approved source”.

Attended 2016 Public Health Preparedness Summit.

Two staff members attended the FDA Voluntary National Retail Food Regulatory Program Standards “Self-Assessment and Verification Audit Workshop”.

Two staff members attended Reduced Oxygen Packaging training in Phoenix.

Six staff members attended the 49th Annual Vector Control Workshop.

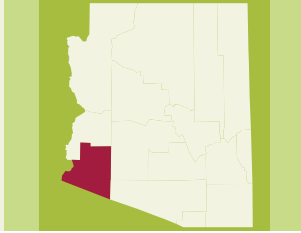
Reviewed and revised 15 Environmental Health policies.

Became the 1st Accredited Health Department in Arizona.

Developed a “No Pets Allowed/Service Animals Only” poster for use by food facilities in conjunction with the Yavapai County Food Safety Industry Council and U of A Cooperative Extension.

Utilized State provided food safety sticker templates to develop a variety of customized educational handout stickers for restaurants and food service facilities.

# APPENDIX E



## YUMA COUNTY

|                       |                 |
|-----------------------|-----------------|
| County Seat           | Yuma            |
| Population            | 200,022         |
| Size                  | 5,514 sq. miles |
| Number of Sanitarians | 4               |
| Sanitarian Aides      | 0               |
| Food Establishments   | 790             |
| Bathing Places        | 221             |
| Trailer Coach Parks   | 269             |
| School Grounds        | 48              |
| Public Accommodations | 53              |
| Total Complaints      | 113             |

### COUNTY REPORTED HIGHLIGHTS:

Participation in the Public Health Full Scale Sheltering Exercise was conducted in March of 2016. Earlier in the calendar year we were awarded a complete FBI-Kit through ADHS. Winter months brought the annual Taco, Tamale and German Festivals to the area. Over 200 temporary food services received preparatory and sanitation guidance from Sanitarians. Outreach to the Dateland area, over 60 miles from Yuma, assisted about 30 food service personnel test for food handler cards. Northern Arizona University-Yuma and Arizona Western College collaborated in a discussion with all Environmental Health personnel and Epidemiology. Twenty-eight students all within their second year of programs in the health sciences learned the rolls, responsibilities and professional expectations for employment with County government. We continue to move toward finalizing our self-assessment within the Voluntary National Retail Food Regulatory Program Standards.

Yuma County worked with the CDC providing data for the Morbidity and Mortality Weekly Report title: Immediate Closures and Violation Identified During Routine Inspections of Public Aquatic Facilities - Network for Aquatic Facility Inspection Surveillance, Five State, 2013.

# APPENDIX E



## ARIZONA STATE UNIVERSITY

|                       |                      |
|-----------------------|----------------------|
| Population            | 83,301               |
|                       | <b>Four Campuses</b> |
| Number of Sanitarians | 1.5                  |
| Sanitarian Aides      | 0                    |
| Food Establishments   | 169                  |
| Bathing Places        | 18                   |
| Trailer Coach Parks   | NA                   |
| School Grounds        | 4                    |
| Public Accommodations | NA                   |
| Total Complaints      | 4                    |

### **ASU REPORTED HIGHLIGHTS:**

The past year at Arizona State University has been a year of plan review and construction inspections. The football stadium is being remodeled over a three year period. The second phase is to be completed prior to this football season.

Our main dining destination has been totally remodeled with an emphasis on “Cooking to Order.” The food operator has almost eliminated the cooling of foods that require reheating at a later time. This process helps in minimizing the cooling/reheating danger zones that frequently cause food safety issues.



# APPENDIX E



## ARIZONA DEPARTMENT OF HEALTH SERVICES

|                       |             |
|-----------------------|-------------|
| Population            | 6.7 Million |
| Number of Sanitarians | 5           |
| Sanitarian Aides      | 6.5         |
| Food Establishments   | 324         |
| Pools                 | NA          |
| Trailer Coach Parks   | NA          |
| School Grounds        | 0           |
| Public Accommodations | NA          |
| Total Complaints      | 11          |