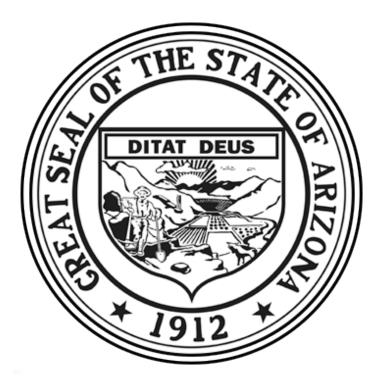
ANNUAL REPORT FOOD SAFETY AND ENVIRONMENTAL S E R V I C E S

ARIZONA DEPARTMENT OF HEALTH SERVICES

OFFICE OF ENVIRONMENTAL HEALTH BUREAU OF EPIDEMIOLOGY AND DISEASE CONTROL



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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. R9-16-403. There were 173 Registered Sanitarian Full Time Employees (FTEs) and 9 Sanitarian Aide FTEs employed with the 15 Arizona county health departments, Arizona State University (ASU), and ADHS that were engaged in public health sanitation programs in Arizona during FY2017.

THE FOLLOWING ARE HIGHLIGHTS OF FY2017 ACTIVITIES.

Representatives from the 15 Arizona county health departments, ASU, and ADHS conducted a total of 112,093 routine inspections at 52,841 regulated facilities during FY2017.

There were 34,821 food establishments in Arizona and 86,426 food-related

inspections (routine and re-inspections) that were conducted at these establishments. Pre-operational inspections at food establishments totaled 8,792, and an additional 8,870 inspections were conducted at temporary food establishments.

In addition to food establishments, a

total of 31,370 routine inspections were conducted at 18,020 regulated facilities that include bottled water manufacturers, public accommodations, children's camps, campgrounds, public schools, trailer coach parks, and public and semi-public bathing places.

There were **1,356 foodborne illness complaints** received by Arizona health departments in FY2017. The total number of foodborne illness and non-foodborne illness complaints reached 8,897.

18 foodborne disease outbreaks were investigated by ADHS in FY2017, and most (61%) were part of a multistate outbreak.

The **FDA issued 498 food recall press releases and public notices** associated with FDA-regulated products in 2016.

The USDA issued 122 recall notices in 2016. As a result, approximately 58,140,787 pounds of food were recalled nationwide.

INTRODUCTION

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 unsanitary conditions. The FS&ES Program administers a statewide public health sanitation program that includes oversight of retail food establishments, 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 writing and 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 Food and Drug Administration's Voluntary National Retail Food Regulatory Program Standards (FDA Program Standards).

Arizona Department of Health Services - Phoenix, Arizona

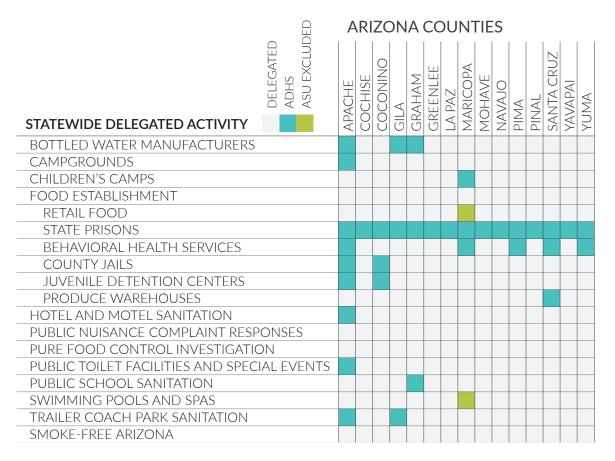
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FY2017 ACTIVITIES

To most effectively and efficiently accomplish its mission objectives, ADHS has delegated several public health sanitation program responsibilities to Arizona's 15 county health departments and Arizona State University (ASU). This allows local governments to maximize the level of services they choose to provide, taking into consideration the services most needed in their communities. Local oversight encourages community interaction in program design and operation to meet local needs. Counties are required to perform duties in accordance with the conditions outlined in their individual delegation agreements with ADHS. See Figure 1 for a summary of delegated activities. All delegation agreements require an annual report to be submitted by each county health department and ASU, summarizing their program activities over the fiscal year. These reports can be found in Appendix A.

In FY2017, all of Arizona's counties renegotiated their delegation agreements, effective for the next 15 years.

Figure 1: Summary of Delegated Activities Statewide



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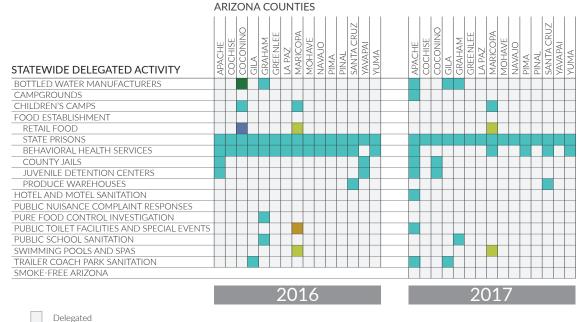


Figure 2: Comparison of Delegated Activities Statewide for FY2016 to FY2017

ADHS State employee

State employee charitable function on State property are excluded Exclude plan review for new facilities

Exclude plan review for i ASU excluded

Exclude plan review for food processors licensed by USDA, FDA, or State agencies and that distribute beyond the county boundaries

Facilities regulated and inspected by ADHS, the counties, and ASU include retail food establishments, bottled water facilities, public accommodations (i.e. hotels and motels), children's camps, campgrounds, public schools, trailer coach parks, 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. R9-16-403. One hundred seventy three (173) Registered Sanitarian FTEs and 9 Sanitarian Aide FTEs at ADHS, ASU, and the 15 Arizona county health departments conducted a total of 112,093 routine inspections at 52,841 regulated facilities during FY2017.

Figure 3: Number and Type of Facilities and Number of Routine Inspections in Arizona FY2017

	ROUTINE INSPECTIONS	FACILITIES
FOOD ESTABLISHMENTS	80,723	34,821
SWIMMING POOLS AND SPAS	26,240	12,999
TRAILER COACH PARKS	1,846	1,783
PUBLIC SCHOOL GROUNDS	1,785	1,731
PUBLIC ACCOMMODATIONS	1,336	1,362
CAMPGROUNDS	41	41
CHILDREN'S CAMPS	42	51
BOTTLED WATER	80	53
TOTALS	112,093	52,841

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—48 million individuals—will become ill with foodborne illness every year, with 128,000 hospitalizations and 3,000 deaths. The pain, suffering, medical costs, and reduced productivity due to these illnesses are estimated to cost between \$10-83 billion dollars annually.

Because of the challenges of maintaining capacity to conduct required inspections while simultaneously responding to incidents of foodborne illness, several counties have joined the nationwide trend toward conducting risk-based inspections. This approach places greater emphasis on promoting active managerial control in retail food establishments, and ensures that inspections are conducted in an efficient manner. Inspections evaluate risk factors for foodborne illness including: Improper holding temperatures, Inadequate cooking, Contaminated equipment, Food from unsafe sources, and Poor personal hygiene.

In addition to performing inspections, state and county health departments provide 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 welcomed by industry and regulators as a means of preventing foodborne illness and protecting the public's health. One thousand one hundred and eighteen (1,118) presentations were provided by state and county environmental health staff statewide in FY2017, reaching 24,792 individuals.



2.1.1 INSPECTION PROGRAM

Retail food establishments-including 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 34, 821 regulated food establishments in Arizona during FY2017, an increase of 8.9% from the previous year. State and county **Registered Sanitarians and Sanitarian** Aides conducted 86,426 food safety inspections (routine and re-inspections) at these establishments. An additional 17.662 inspections were conducted for pre-operational and temporary food establishments.

The inspection frequency of each food establishment is determined by its assigned classification: complex, moderate, or limited. This categorization is based on the complexity of the food service operation, and considers factors such as the types of food offered, the preparation processes used, and the populations served. More frequent inspections 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. Food establishments in Arizona classified as complex or moderate are generally inspected more frequently than limited facilities. By focusing inspection efforts on establishments that pose a greater risk for foodborne illnesses, the classification system allows resourcesincluding inspection staff-to be utilized more effectively. 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.

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**.

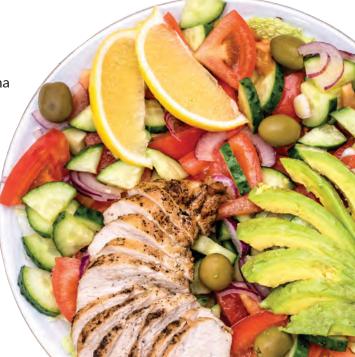
LIMITED FACILITY

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.



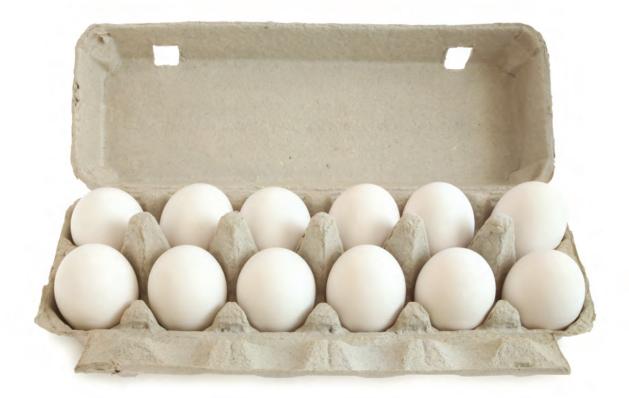
On average in FY2017, there were 3.0 inspections per complex facility, 2.2 inspections per moderate facility, and 1.8 inspections per limited facility statewide. Challenges to meeting inspection frequency expectations can include staffing shortages, inadequate numbers of Registered Sanitarians on staff, a high rate of staff attrition, 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. **Figure 4:** Number of Food Establishments and Routine Inspections by Food Service Complexity FY2017

FOOD ESTABLISHMENT				
COMPLEX	MODERATE	LIMITED		
11,607	11,629	11,585		

ROUTINE INSPECTIONS				
	COMPLEX	MODERATE	LIMITED	
	35,073	25,157	20,493	

2.1.2 ENFORCEMENT

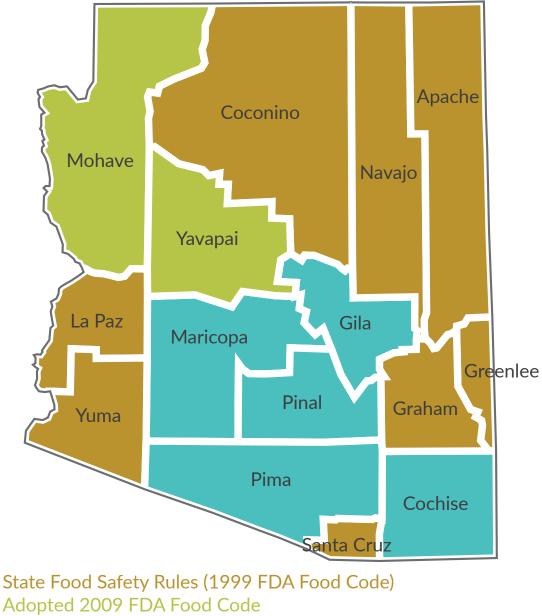
The goal of the food safety inspection program is to achieve compliance with state food safety requirements without resorting to compliance proceedings and enforcement actions. Unfortunately, these regulatory actions are sometimes necessary to achieve compliance. During FY2017, 834 compliance proceedings were taken at food establishments in Arizona that include notices of violation, cease-and-desist orders, permit suspensions, and citations. Additionally, 132,091 food items were detained or embargoed in FY2017.



2.1.3 FOOD SAFETY REGULATION

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 5).

Figure 5: Newer Versions of the FDA Food Code have been adopted by Seven Arizona Counties





2.1.4 FOODBORNE ILLNESSES

There were 1,356 foodborne illness complaints received by Arizona health departments in FY2017. This represents a 4.8% decrease from FY2016. ADHS 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 infections from some pathogens are remaining stable or showing a slight decrease, **infections from Campylobacter and Shigella have increased** over the 5-year period (see Table 1 and Figure 6).

 Table 1: Enteric Diseases in Arizona per 100,000 Population

Pathogen	2012	2013	2014	2015	2016
Campylobacteriosis	14.5	12.9	13.9	20.4	18.2
Shiga toxin producing E. coli	2.2	3.7	1.5	1.9	2.2
Giardiasis	1.7	1.7	1.8	2.1	1.8
Listeriosis	0.2	0.1	0.2	0.1	0.01
Salmonellosis (excluding S. Typhi and S. Paratyphi)	13.2	15.3	15.7	17.2	13.2
Shigellosis	6.8	6.5	5.5	8.1	18.0
Vibrio infection (excluding toxigenic V. <i>cholerae</i>)	0.4	0.3	0.5	0.5	0.3
Hepatitis A	1.4	1.1	0.5	1.1	0.7

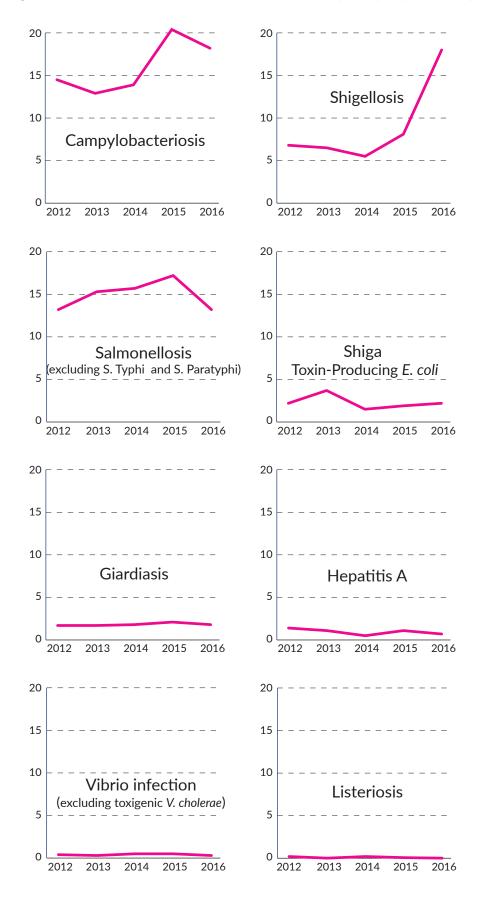


Figure 6: Rate of reported cases of enteric disease in Arizona by fiscal year per 100,000 population

Each year, CDC **FoodNet** (www.cdc. gov/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 7). In addition to reporting the 2015 and 2016 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.

Figure 7: Foodborne Illness Report Card



Rate calculated per 100,000 population

"Estimate based on 10 U.S. FoodNet sites, 2016: https://www.cdc.gov/mmwr/volumes/66/wr/mm6615a1.htm?s_cid=mm6615a1_w

Based on Healthy People 2020 target rates https://www.healthypeople.gov/2020/topics-objectives/topic/food-safety/objectives/ Estimates of foodborne illness burden in the United States https://www.cdc.gov/foodborneburden/

2.1.5 NATIONWIDE OUTBREAKS AND FOOD RECALLS

During FY2017, 18 foodborne disease outbreaks were investigated in Arizona. The majority of these (83%) were identified through molecular laboratory testing, and most (61%) were part of multistate outbreak investigations lead by CDC. Data for calendar year 2017 are preliminary and subject to change.

FOOD RECALLS

The FDA issued 498 food recalls of FDA-regulated food products in 2016. A large number of the recalls were due to undeclared allergens and Listeria contamination. 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 122 recall notices in 2016. The USDA regulates meat, poultry, and certain egg products. Approximately 58,140,787 pounds of food were recalled nationwide. A USDA recall summary for calendar year 2016 is provided in Table 2 and includes information regarding the type, reason, and product associated with the recalls.

USDA Recall Summary for Calen	dar Year 2016		
Total		Number of Recalls 122	Number of Pounds Recalled 58,140,787
Recalls by Class (N=122)		122	36,140,767
Class	1	91	56,464,938
	II	26	1,063,553
	III	5	612,296
Recalls by Reason (N=122)			
Reason For Recall	STEC*	14	291,900
	Listeria monocytogenes	11	47,398,141
	Salmonella	2	19,287
	Undeclared Allergen	34	843,536
	Extraneous Material	21	6,372,416
	Processing Defect	5	1,999,078
	Undeclared Substance	7	662,595
	Other**	28	553,834

Table 2: USDA Recall Summary for Calendar Year 2016

USDA Recall Summary for Calendar Year 2016				
Recall by Species/Product (N=122)				
Species	Beef	26	591,869	
	Mixed	24	48,480,195	
	Pork	30	696,056	
	Poultry***	39	8,321,486	
	Lamb	1	15	
	Siluriformes fish (catfish)	2	51,166	

*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 FY2015. 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 affecting 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. Allergy alerts are highlighted blue in the table to distinguish them since there has been an increase in undeclared allergens in food products.

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.

Table 3: ADHS Weekly Recall Summary Table

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

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. FY2017 was the last year of the 5-year FDA Cooperative Agreement that ADHS was awarded in 2012. A new 3-year FDA Cooperative Agreement was awarded in 2017, which will provide 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. Along with ADHS, 13 Arizona counties and one tribal health department are participating in the FDA's Program Standards. Figure 8 outlines the current status of ADHS' progress towards meeting the FDA Program Standards.



Figure 8: FDA Program Standards Summary for ADHS' Retail Food Regulatory Program

Self-Assessment / Audit Verification Summary & Gap Analysis

Jurisdiction: Arizona Department of Health Services
Report completed by: Food Safety & Environmental Services Program Manager
Date: 6/16/2017

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	<u>1a 1b 1c 2a 2b 3a 4a</u>
×	2 TRAINED REGULATORY STAFF	33.3% met	<u>1a 1b 2a 2b 3a 3b 4a 4b 5a</u>
×	3 INSPECTION PROGRAM BASED ON HACCP PRINCIPLES	50.0% met	1a 1b 1c 2a 3a 4a 4b 4c 5a 6a
×	4 UNIFORM INSPECTION PROGRAM	No elements met	1a 1b 1c 2 2i 2ii 2iii 2iv 2v 2vi 2vii2viii2ix 2x 3a 3b
×	5 FOODBORNE ILLNESS AND FOOD DEFENSE PREPAREDNESS AND RESPONSE	51.7% met	1a 1b 1c 1d 1a 2a 2b 3a 3b 4a 5a 5b 5c 6a 7a 7b17b27b37b47b57b67b77b87b9 7c
×	6 COMPLIANCE AND ENFORCEMENT	25.0% met	<u>1a 1b 2a 2b</u>
\checkmark	7 INDUSTRY AND COMMUNITY RELATIONS	Fully Met	<u>1a 1b</u>
×	8 PROGRAM SUPPORT AND RESOURCES	84.6% met	1a 2a 2b 3a 3b 4a 4b 4c 4d 4a 4f 4g 4h
×	9 PROGRAM ASSESSMENT	28.6% met	<u>1a 1b 1c 2a 2b 3a 3b</u>

2.2.1 FDA COOPERATIVE AGREEMENT

FY2017 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.

SELF-ASSESSMENT AND VERIFICATION AUDIT WORKSHOP

ADHS hosted a standards verification and audit workshop that trained environmental health staff to conduct verification audits. 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. As a result, ADHS has conducted several audits for Arizona county food safety programs to verify that standards have been met or corroborate self-assessments and the counties helped audit the ADHS self-assessment completed in June. Cooperative agreement funds were also used to provide travel stipends to attendees from Arizona counties and for the printing of the workshop materials

2.2.2 IMPLEMENTING THE PROGRAM STANDARDS

Cooperative agreement funds have been utilized to implement the strategies developed during the Strategic Planning workshop in FY2016. ADHS has continued to make Standards 2 and 5 a top priority for the ADHS strategic plan, and is continuing to meet requirements for Standard 7.

STANDARD 2: TRAINED REGULATORY STAFF

In FY2017, ADHS created employee training files to reflect the hours of continuing education maintained by its staff, as well as the number of inspections conducted prior to field standardization. This meets the requirements of elements 3a and 5a of Standard 2. Each sanitarian earned a minimum of 12 hours of continuing education.

STANDARD 5: FOODBORNE ILLNESS AND FOOD DEFENSE PREPAREDNESS AND RESPONSE

In FY2017, ADHS finalized written operating procedures for conducting foodborne illness investigations, as well as the disposition, action, or follow-up, and reporting required for complaints and referrals. A complaint log was also created to better track complaints that come through ADHS. This meets the requirements of elements 1c, 1e, 1h, and 1i of Standard 5.

STANDARD 7: INDUSTRY AND COMMUNITY RELATIONS

In FY2017, ADHS continues to fully meet Standard 7. Additional educational materials have been developed, including holiday food safety infographics and Home Baked Goods newsletters. Also, Home Baked and Confectionery Goods Program staff traveled around the state to provide in-person food safety trainings to county environmental health staff, farmer's market managers, and the public.

BOTTLED WATER

Figure 9: Bottled Water Facilities in Arizona

	FY2016	FY2017
BOTTLE WATER FACILITIES	43	53
ROUTINE INSPECTIONS	69	80

23% INCREASE IN THE NUMBER OF BOTTLED WATER FACILITIES IN FY2017

Bottled Water rules are outlined in 9 A.A.C. 8, Article 2 Bottled Water. Facilities that bottle water for distribution in Arizona are routinely inspected to evaluate sanitation practices and source approval.

There were 53 bottled water facilities in Arizona and inspection staff conducted 80 routine inspections in these facilities during FY2017. One (1) enforcement action was reported at a bottled water facility in FY2017.

The Bottled Water Rules are in the revision process to improve their effectiveness by incorporating the 2016 version of the federal regulations cited in the rules.



SWIMMING POOLS AND SPAS

Figure 10: Swimming Pools and Spas in Arizona

	FY2016	FY2017
SWIMMING POOLS & SPAS	12,817	12,999
ROUTINE INSPECTIONS	25,594	26,240



AN AVERAGE OF 2 ROUTINE INSPECTIONS WERE CONDUCTED AT SWIMMING POOLS AND SPAS IN FY2017

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

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 facility operated by, and exclusively for, a residential development.

There were 12,999 public and semi-public swimming pools and spas in Arizona in FY2017. County inspection staff conducted 26,240 routine swimming pool and spa inspections, and reported initiating 2,262 enforcement actions associated with bathing facilities in FY2017.

PUBLIC ACCOMMODATIONS

Figure 11: Public Accommodations in Arizona

	FY2016	FY2017
HOTELS & MOTELS	1,262	1,362
ROUTINE INSPECTIONS	1,278	1,336

THE NUMBER OF PUBLIC ACCOMMODATIONS FACILITIES INCREASED BY 8% IN FY2017

Public accommodations such as hotels, motels, and boarding houses are routinely inspected to evaluate compliance with 9 A.A.C. 8, Article 13 Hotels, Motels, and Tourist Courts. There were 1,362 public accommodation facilities in Arizona in FY2017. County inspection staff conducted 1,336 routine inspections in these facilities, and reported initiating 24 enforcement actions associated with public accommodation facilities in FY2017.



TRAILER COACH PARKS

Figure 12: Trailer Coach Parks in Arizona

	FY2016	FY2017
TRAILER COACH PARKS	1,851	1,783
ROUTINE INSPECTIONS	2,059	1,846

THE NUMBER OF TRAILER COACH PARKS DECREASED BY 4% IN FY2017

Trailer coach park requirements are outlined in 9 A.A.C. 8, 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 1,783 trailer parks in Arizona in FY2017. County inspection staff conducted 1,846 routine inspections at trailer coach parks across the state, and reported initiating 64 enforcement actions associated with trailer coach parks in FY2017.



PUBLIC SCHOOL GROUNDS

Figure 13: Public School Grounds in Arizona

	FY2016	FY2017
PUBLIC SCHOOL GROUNDS	1,642	1,731
ROUTINE INSPECTIONS	1,557	1,785



THE NUMBER OF PUBLIC SCHOOL GROUNDS INCREASED BY 5% IN 2017

Public school grounds requirements are outlined in 9 A.A.C. 8, Article 7 Public Schools. Public schools, including charter schools, are inspected to evaluate compliance with requirements for water supply, indoor areas, restroom, bathroom, shower room, sewage disposal, refuse management, pest control, and animal standards. 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 1,731 permitted public and charter schools in Arizona in FY2017. State and county inspection staff conducted 1,785 routine inspections at these permitted schools, and county staff reported initiating 33 enforcement actions associated with public and charter schools in FY2017.

Arizona Department of Health Services conducted 23 school grounds inspections in FY2017. This was an increase over the previous fiscal year, and was due to the process of review and re-negotiation of delegation agreements between the State and Graham County.

CHILDREN'S CAMPS

Figure 14: Public School Grounds in Arizona

	FY2016	FY2017
CHILDREN'S CAMPS	51	51
ROUTINE INSPECTIONS	51	42



NO CHANGE IN NUMBER OF CHILDREN'S CAMPS IN FY2017

Children's camps inspection requirements are outlined in A.R.S. § 36-3901 and 9 A.A.C. 8, Article 4 Children's Camps. 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 regulations only apply to camps operated continuously for a period of five days or more each year for religious, recreational, or vacation purposes. Excluded from regulations are camps for 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 FY2017. 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 42 routine inspections at children's camps, and reported no enforcement actions during FY2017.

CAMP GROUNDS

Figure 15: Public School Grounds in Arizona

	FY2016	FY2017
CAMP GROUNDS	22	41
ROUTINE INSPECTIONS	25	41

THE NUMBER OF CAMP GROUNDS INCREASED BY 68% IN FY2017

Camp grounds requirements are outlined in 9 A.A.C. 8, Article 6 Camp Grounds. Camp ground regulations apply to any city, county, village, community, institution, person, firm, or corporation operating, maintaining, or offering for public use any tract of land on which persons 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 41 camp grounds in Arizona in FY2017. County inspection staff conducted 41 inspections at these camp grounds, and reported initiating 8 enforcement actions associated with camp grounds in FY2017.



HOME BAKED & CONFECTIONERY GOODS PROGRAM

Figure 16: Home Baked & Confectionery Goods Program Registrants, by County FY2017

HOME BAKERS BY COUNTY THROUGH JUNE 30, 2017						
APACHE	42	+2				
COCHISE	233	+37				
COCONINO	140	+30				
GILA	35	+13				
GRAHAM	69	+18				
GREENLEE	26	+5				
LA PAZ	14	+2				
MARICOPA	3,782	+637				
MOHAVE	215	+60				
NAVAJO	103	+20				
PIMA	805	+175				
PINAL	388	+56				
SANTA CRUZ	36	+14				
YAVAPAI	379	+66				
YUMA	78	+19				
TOTALS	6,345	+1,154				

REGISTERED HOME BAKERS

INCREASE FROM FY2016

The Home Baked & Confectionery Goods Program continues to be a popular program—1,154 individuals registered in FY2017, an 18% increase in home bakers statewide. This brings the total number of registered home bakers since the program's inception to 6,345. The program's website includes a list of every program registrant's name, city, county, and list of products, updated at the beginning of each month.

Over FY2017, ADHS revamped the Home Baked and Confectionery Goods Program website to highlight the sections that are most relevant to home bakers and regulators, including product recalls, frosting guidelines, and a more comprehensive Frequently Asked Questions section. The guarterly eNewsletter remained a helpful source of information for program registrants and local county partners. Additionally, ADHS staff presented about the program at the 2017 Arizona Environmental Health Association (AZEHA) Spring Conference, and at farmer's market manager meetings and county health departments in Coconino, Graham/Greenlee, Maricopa, and Pima Counties.

Approved food products continue to be limited to non-potentially hazardous foods (as defined by the Arizona Food Code) made, packaged, and labeled in the registrant's home. Labels must include 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. The program allows for wholesale or retail sale of these products at food establishments, farmer's markets, and special events. There are no limits to the revenue or quantity of products sold by a registrant under the program.

SCHOOL & COMMUNITY GARDENS

Establishing and sustaining school and community gardens is an evidencebased 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 reported to the U.S. Centers for Disease Control and Prevention (CDC) with an implicated food vehicle from 1998-2008 were attributed to produce commodities¹. 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 food². 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 by creating a Food Safety Plan. In FY2017, the School and Community Garden Program certified 6 new gardens, including one garden located in Yuma County, the county's first. However, during this time, 11 school gardens closed. As a result, the total number of certified gardens decreased from 31 in FY2016 to 26 in FY2017. This represents a 15% decrease in the number of certified gardens year over year.

The School and Community Garden Program Coordinator redesigned and further streamlined the application for certification, and the new program materials launched in November 2016. The materials have been received positively, and in the next fiscal year, the School and Community Garden Program will add additional materials to facilitate good environmental health practices in school and community gardens. These may include interactive lesson plans to assist with training and education of students in hand washing and food protection, a newsletter, or other tools.

¹Painter 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].

²Carlos 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].

ANNUAL REPORT 2017

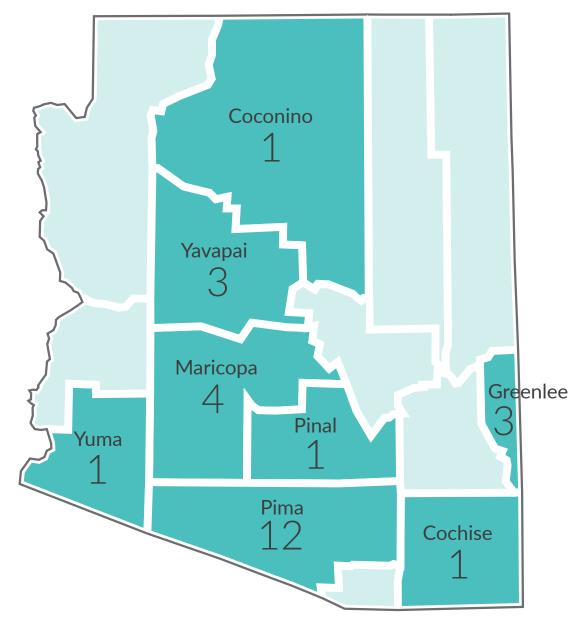


Figure 17: ADHS Certified School and Community Gardens by County

REGISTRATION & TRAINING OF SANITARIANS

ARIZONA SANITARIANS' COUNCIL

Blanca Caballero, R.S. Arizona Sanitarians' Council Chairperson ADHS Representative George Amaya, R.S. Represents: Smaller Counties Term: 1/15-1/18 David Morales, R.S. Represents: Large Counties Term: 1/15-1/18 Harlan D. Lee, Owner Represents: Lay Persons Term: 12/08-12/14 Roberto Angel, Jr., R.S. Represents: Industry Term: 3/14-6/17

Arizona law prohibits an individual from being employed as a sanitarian by the State or any political subdivision of the State unless that person is registered by ADHS as a sanitarian. The Arizona Sanitarians' Council is comprised of 5 ADHS Directorappointed members representing key stakeholders in food safety and is chaired by ADHS. The Council provides for the classification of sanitarians, standards for sanitarians, and provides for the examination of applicants for registration as sanitarians.

In January 2013, the Council began administering the National Environmental Health Association's (NEHA) Registered Environmental Health Specialist/Registered Sanitarian (REHS/RS) Environmental Health Proficiency Exam in place of the previous, State administered exam.

The exam is offered quarterly. This exam is a two-booklet examination containing 250 multiple-choice questions developed by NEHA. The main content areas are included below:

Conducting facility inspections (35%)

Conducting system inspections (20%)

Conducting investigations (14%)

Ensuring compliance (13%)

Promoting environmental public health awareness (10%)

Responding to emergencies (8%)

64% of candidates passed the Arizona Registered Sanitarians' Exam in FY2017.

74 applicants sat for the registration exam and 47 applicants passed.

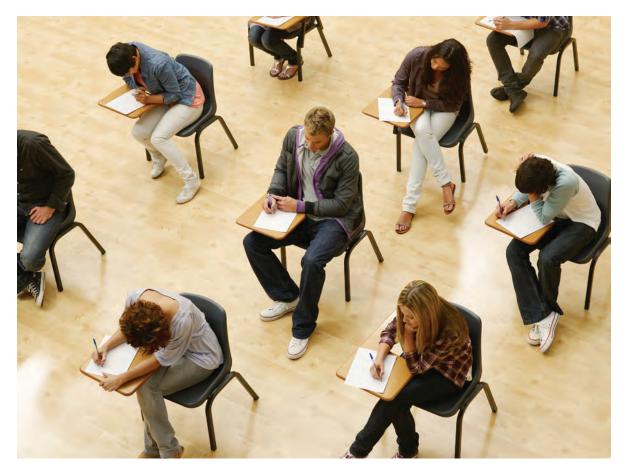
Individuals responsible for carrying out the provisions in the ADHS Delegation Agreement must be registered as a Sanitarian in the State of Arizona or, under specific conditions, a Sanitarian Aide under the direct supervision of an Arizona Registered Sanitarian.

520 individuals maintained Arizona Sanitarian Registrations in FY2017.

173 Registered Sanitarians, FTEs, employed at 15 Arizona County Health Departments, ASU, and ADHS Continuing education is a requirement for annual sanitarian registration renewal. This requirement reflects the importance of having Registered Sanitarians up-todate on advances in environmental health science, technology, regulations, policies, procedures, and a vast array of industry advances. A wide range of opportunities are available on-line and in person throughout the year, and are advertised on the ADHS website.

The Registered Sanitarian Rules will be revised and effective by the end of calendar year 2017. The rules will expand the eligibility criteria to take the exam, increase the number of applicants approved for registration, simplify the application process, remove obsolete requirements, and improve the effectiveness of the rules.

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 more time intensive than previous standardization requirements, reflecting the increased professional nature of the work. One ADHS staff member was standardized by the FDA in April 2017, bringing the total number of certified food program inspection/training officers at ADHS to 2. These certified officers are available to standardize sanitarians in Arizona.



4

PERMITTED ESTABLISHMENTS AND RELATED ACTIVITIES TOTALS

Jurisdiction activity by type Food Establishments	Apache	Cochise	Coconino	Gila	Graham	Greenlee	La Paz	Maricopa
Current number of food establishments	165	882	1,229	374	160	75	244	21,178
Limited	23	260	319	126	58	19	107	8,276
Moderate	41	414	281	108	43	26	63	5,865
Complex	101	208	629	140	59	30	74	7,037
Number of routine inspections	262	1,222	2,304	386	323	140	539	57,691
Number of re-inspections	15	54	705	18	8	8	8	3,324
Number of pre-operational inspections	12	34	246	32	8	3	9	6,895
Number of foodborne illness complaints	4	-	37	10	2	5	21	803
Number of non-foodborne illness complaints	7	4	61	17	8	7	6	6,013
Number of compliance proceedings	-	1	1	-	-	-	-	783
Number of food items detained/embargoed	-	63	17	-	667	75	-	129,162
Number of temporary food establishment inspections	33	118	254	89	46	61	237	3,941
Outreach								,
Number of presentations	22	-	74	-	4	21	110	149
Number of participants/audience	421	-	5,327	-	1,818	202	2,500	2,069
Number of consultations/counseling provided	12	-	686	-	141	8	850	5,075
Number of media contacts	-	-	4	-	-	-	10	105
Non-food Related Activities								
Public & semi-public bathing places	2	110	240	26	18	3	19	8,992
Routine inspections	-	212	521	24	35	33	19	17,650
Complaint inspections	-	-	5	-	-	-	-	480
Enforcement actions	-	-	-	-	-	-	-	1,660
Trailer coach parks	-	107	86	-	-	11	156	480
Routine inspections	-	94	102	-	-	11	7	495
Complaint inspections	-	1	2	-	-	-	6	59
Enforcement actions	-	-	-	-	-	-	-	2
Public school grounds	15	51	52	13	-	7	10	1,010
Routine inspections	29	40	48	13	-	7	9	1,010
Complaint inspections	-	-	5	-	-	-	1	ć
Enforcement actions	-	-	-	-	-	-	-	ć
Camp grounds	-	-	14	-	-	10	-	5
Routine inspections	-	-	14	-	-	10	-	é
Complaint inspections	-	-	-	-	-		-	
Enforcement actions	-	-	-	-	-	-	-	
Children's camps	4	-	-	9	-	-	-	
Routine inspections	1	-	-	8	-	-	-	
Complaint inspections	-	-	-	1	-	-	-	
Enforcement actions	-	-	-	-	-	-	-	
Public accommodations	25	96	182	41	12	6	24	475
Routine inspections	31	70	192	25	12	12	24	410
Complaint inspections	1	1	29	1		-	2	61
Enforcement actions	-	-	-	-	-	-	-	13
Bottled water	-	2	1	-	-	-	1	33
Routine inspections	_	2	2	-	_	_	2	53
Complaint inspections	-	-	-	-	-	-	-	5.
Enforcement actions	-	-	-	-	-	-	-	
Body Art Parlors	_		15			_	-	
Routine Inspections	_	-	22	_	-		-	
Complaint inspections	-	-	1	-	-	-	-	

4

PERMITTED ESTABLISHMENTS AND RELATED ACTIVITIES TOTALS

Jurisdiction activity by type Food Establishments	Mohave	Navajo	Pima	Pinal	Santa Cruz	Yavapai	Yuma	ADHS/ASU
Current number of food establishments	1,341	478	4,481	987	273	1,333	1,192	429
Limited	717	120	763	172	79	80	356	11
Moderate	370	191	2,102	471	60	778	674	14
Complex	254	167	1,616	344	134	475	162	17
Number of routine inspections	2,493	541	7,429	2,231	400	2,878	861	1,02
Number of re-inspections	324	91	428	116	16	445	84	5
Number of pre-operational inspections	112	34	788	146	18	355	52	4
Number of foodborne illness complaints	40	14	236	26	1	-	4	15
Number of non-foodborne illness complaints	231	10	925	114	18	91	3	2
Number of compliance proceedings	22	-	24	1	-	2	-	
Number of food items detained/embargoed	-	-	101	1,582	-	-	-	42
Number of temporary food establishment inspections	391	125	2,452	546	88	261	93	13
Outreach			,					
Number of presentations	295	-	55	4	23	337	7	1
Number of participants/audience	3,975	-	2,004	142	174	5,222	245	69
Number of consultations/counseling provided	83	43	22	426	-	455	275	52
Number of media contacts	-	-	98	1	-	-	-	
Non-food Related Activities								
Public & semi-public bathing places	277	42	2,489	285	43	205	231	1
Routine inspections	842	40	4,908	429	61	1,080	247	13
Complaint inspections	25	-	162	11	-	7	3	
Enforcement actions	4	-	590	2	-	-	-	
Trailer coach parks	105	41	377	194	21	-	205	
Routine inspections	127	41	520	232	19	-	198	
Complaint inspections	14	-	25	29	1	-	12	
Enforcement actions	5	-	54	1	-	-	-	
Public school grounds	56		260	94	31	73	33	2
Routine inspections	68	-	292	96	33	68	40	2
Complaint inspections	1	-	5	5	-	4	6	
Enforcement actions		-	27	-	-	-	-	
Camp grounds	3	5	-	4	-	-	-	
Routine inspections	4	1	2	4	-	-	-	
Complaint inspections	-	-	-	-	-	-	-	
Enforcement actions	8	-	-	-	-	-	-	
Children's camps	-	3	7	2	-	24	-	
Routine inspections	-	2	7	2	-	18	-	
Complaint inspections	-	-	-	-	-	5	-	
Enforcement actions	-	-	-	-	-	-	-	
Public accommodations	85	36	166	34	24	114	42	
Routine inspections	115	36	205	36	21	107	40	
Complaint inspections	36	-	47	6	-	13	19	
Enforcement actions	2	-	9	-	-	-	-	
Bottled water	3	-	6	1	-	-	6	
Routine inspections	5	-	14	1	-	-	1	
Complaint inspections	-	-	-	-	-	-	1	
Enforcement actions	-	-	1	-	-	-	-	
Body Art Parlors			-					
Routine Inspections	-	-	-	-	-	-	_	
Complaint inspections	_	-	-	_	_	-	_	

3

AVERAGE NUMBER OF INSPECTIONS PER FACILITY TYPE (GOAL IS TWO PER YEAR)

JURISDICTION ACTIVITY BY TYPE									
	CC	OMPLE	ΞX	MC	DERA	λΤΕ	LI	MITE	D
APACHE	101	161	1.59	41	68	1.66	23	33	1.43
COCHISE	208	451	2.17	414	563	1.36	260	208	0.80
COCONINO	629	1,262	2.01	281	470	1.67	319	572	1.79
GILA	140	173	1.24	108	91	0.84	126	122	0.97
GRAHAM	59	120	2.03	43	86	2.00	58	117	2.02
GREENLEE	30	62	2.07	26	47	1.81	19	31	1.63
LA PAZ	74	159	2.15	63	150	2.38	107	230	2.15
MARICOPA	7,037	25,335	3.60	5,865	16,050	2.74	8,276	16,306	1.97
MOHAVE	254	561	2.21	370	741	2.00	717	1,191	1.66
NAVAJO	167	232	1.39	191	216	1.13	120	93	0.78
PIMA	1,616	3428	2.12	2,102	3,295	1.57	763	706	0.93
PINAL	344	1037	3.01	471	1,000	2.12	172	194	1.13
SANTA CRUZ	134	238	1.78	60	93	1.55	79	69	0.87
YAVAPAI	475	1,285	2.71	778	1,436	1.85	80	157	1.96
YUMA	162	99	0.61	674	485	0.72	356	277	0.78
ADHS / ASU	177	470	2.66	142	366	2.58	110	187	1.70

NUMBER OF FOOD ESTABLISHMENTS

FOOD ESTABLISHMENT INSPECTIONS

RATIO OF FOOD ESTABLISHMENT INSPECTIONS TO ESTABLISHMENT BY COMPLEXITY

2

REGISTERED SANITARIANS AND SANITARIAN AIDE TOTALS BY JURISDICTION IN FY 2017

JURISDICTION

APACHE	1	-
COCHISE	3	3
COCONINO	8	-
GILA	2	-
GRAHAM	2	-
GREENLEE	2	-
LA PAZ	1.5	-
MARICOPA	93	-
MOHAVE	7	2
NAVAJO	2	-
PIMA	26	-
PINAL	7	2
SANTA CRUZ	4	-
YAVAPAI	6	1
YUMA	2	-
ADHS / ASU	6.5	1
TOTALS	173	9

REGISTERED SANITARIANS

SANITARIANS AIDES

D

ARIZONA FOODBORNE ILLNESS REPORT CARD

		民族都市	MANE!	Markin		ARIZONA DE PARTMENT OF HEALTH SERVICES
CARD	2016 АZ RATE*	2015 AZ RATE*	2016 US RATE*†	2020 CDC TARGET RATE‡	PERCENTAGE OF AZ RATE CHANGE	FOR EVERY CASE REPORTED§
CAMPYLOBACTERIOSIS	18.2	20.4	17.43	8.5	11% DECREASE	30 go undiagnosed
SHIGA TOXIN-PRODUCING E. COLINFECTION	2.2	1.9	3.76	N/A	16% INCREASE	26 go undiagnosed
LISTERIOSIS	0.01	0.07	0.26	0.2	86% DECREASE	2 go undiagnosed
SALMONELLOSIS (EXCLUDING S. TYPHI AND S. PARATYPHI)	13.2	17.2	16.66	11.4	23% decrease	29 go undiagnosed
SHIGELLOSIS	18.0	8.1	5.94	N/A	222% INCREASE	8 go undiagnosed
VIBRIO INFECTION (EXCLUDING TOXIGENIC V. CHOLERAE)	0.3	0.5	0.51	0.2	40% decrease	142 go undiagnosed
Rate calculated per 100,000 population †Estimate based on 10 U.S. FoodNet sites, 2016: https://www.cdc.gov/mmwr/volumes/66/wr/mm6615a1.htm?s_cid=mm6615a1 †Based on Healthy People 2020 target rates https://www.healthypeople.gov/2020/topics-objectives/topic/food-safety/objectives Estimates of foodborne illness burden in the United States https://www.cdc.gov/foodborneburden/	w.cdc.gov/mn althypeople.g https://www.c	nttps://www.cdc.gov/mmwr/volumes/66/wr/mm6/ ://www.healthypeople.gov/2020/topics-objectives ed States https://www.cdc.gov/foodborneburden/	6/wr/mm6615 s-objectives/to rneburden/	https://www.cdc.gov/mmwr/volumes/66/wr/mm6615a1.htm?s_cid=mm6615a1_w s://www.healthypeople.gov/2020/topics-objectives/topic/food-safety/objectives ted States https://www.cdc.gov/foodborneburden/	m6615a1_w objectives	

APACHE COUNTY

County Seat	St. Johns
Population	73,195
Size (sq. miles)	11,197
Number of Sanitarians	1
Sanitarian Aides	0
Food Establishments	165
Pools	2
Trailer Coach Parks	0
School Grounds	15
Public Accommodations	25
Complaints	11

COUNTY REPORTED HIGHLIGHTS:

Apache County hired and retained a Sanitarian for 9 months.

Apache County signed a new delegation agreement with ADHS.

Apache County is currently implementing new software.



COCHISE COUNTY

County Seat	Bisbee
Population	132,088
Size (sq. miles)	6,165
Number of Sanitarians	3
Sanitarian Aides	3
Food Establishments	882
Pools	110
Trailer Coach Parks	107
School Grounds	51
Public Accommodations	96
Complaints	4

COCONINO COUNTY

County Seat	Flagstaff
Population	136,011
Size (sq. miles)	18,618
Number of Sanitarians	8
Sanitarian Aides	0
Food Establishments	1,229
Pools	240
Trailer Coach Parks	86
School Grounds	52
Public Accommodations	182
Complaints	98

COUNTY REPORTED HIGHLIGHTS:

Coconino Public Health Services District (CPHSD) received a Public Service Award for investigating a norovirus outbreak at a wedding and identifying the source of infection.

CPHSD received a Public Service Award for plague surveillance and taking actions to prevent plague from spreading to the public and pets.

CPHSD participated in a voluntary recall of medical marijuana edibles.

CPHSD reviewed and inspected the county's first body art expo that hosted 38 body art artists.

CPHSD created a county food inspection website so the public may view inspections.

CPHSD received approval to acquire a new database so paperless inspections may be conducted by health inspectors in the field.



GILA COUNTY

County Seat	Globe
Population	53,144
Size (sq. miles)	4,757
Number of Sanitarians	2
Sanitarian Aides	0
Food Establishments	374
Pools	26
Trailer Coach Parks	N/A
School Grounds	13
Public Accommodations	41
Complaints	27



GRAHAM COUNTY

County Seat	Safford
Population	37,416
Size (sq. miles)	4,622
Number of Sanitarians	2
Sanitarian Aides	0
Food Establishments	160
Pools	18
Trailer Coach Parks	0
School Grounds	N/A
Public Accommodations	12
Complaints	10

COUNTY REPORTED HIGHLIGHTS:

The Graham County Environmental Health Program (GCEHP) has received a generous amount of feedback from last year's launch of the new website material and Facebook page. GCEHP are continually working to improve both sites so that the customers in our county can receive the best information available.

The GCEHP staff was onsite at 2 community events in our effort to spread information about all aspects of the program. GCEHP will be looking to see what community events they can be part of in the upcoming year to add on to the past years improved community involvement. GCEHP staff attended the Mosquito Identification Course this year that was hosted by Pima County and put on by ADHS. Staff is attempting to identify as many mosquitoes as possible prior to submission to the ADHS Lab. GCEHP staff has been extremely busy but are attempting to find ways to do more mosquito surveillance than in the past. In the past year, GCEHP submitted more mosquitoes than in many previous years and are working on ways to optimize time and information. GCEHP staff are currently working with the county IT department on a new GIS based program that is smart phone based that will not only be easy for staff but also at some point will allow public users to leave mosquito complaints with the locations.



GREENLEE COUNTY

County Seat	Clifton
Population	8,802
Size (sq. miles)	1,843
Number of Sanitarians	2
Sanitarian Aides	0
Food Establishments	75
Pools	3
Trailer Coach Parks	11
School Grounds	7
Public Accommodations	6
Complaints	12

COUNTY REPORTED HIGHLIGHTS:

Over fiscal year 2017, Greenlee County has worked to educate the general public about the importance of food safety through several different avenues. In August 2016, the Gila Health Resources invited Greenlee County to perform a hand washing demonstration at their Health Fair. At the 2017 Health Science Festival, held in Morenci Arizona, Greenlee County had a hand washing demonstration booth. At both fairs the public was educated on the proper procedure for hand washing and the importance of washing hands properly, especially when working with food. Temporary food booth safety has also been a focus. Education is being provided when members of the public apply for a temporary permit. Information packets are being given with applications to ensure the public understands the standards for food safety, even in the temporary setting. This information is also being incorporated into the in-person Food Handler Course that is offered by Greenlee County. Greenlee County continues to strive for improving education of the public in how to safely handle food to reduce the chance of food borne illness.

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LA PAZ COUNTY

County Seat	Parker
Population	20,281
Size (sq. miles)	4,499
Number of Sanitarians	1.5
Sanitarian Aides	0
Food Establishments	244
Pools	19
Trailer Coach Parks	156
School Grounds	10
Public Accommodations	24
Complaints	27

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County Seat	Phoenix
Population	3,942,169
Size (sq. miles)	9,200
Number of Sanitarians	93
Sanitarian Aides	0
Food Establishments	21,178
Pools	8,992
Trailer Coach Parks	480
School Grounds	1,010
Public Accommodations	475
Complaints	6,816

COUNTY REPORTED HIGHLIGHTS:

2017 NACO AWARDED FOR "ENFORCEMENT PROGRAM RESTRUCTURE."

In March 2015, Maricopa County Environmental Services Department envisioned an Enforcement Program restructure that more effectively addressed residents' public health nuisance complaint concerns. This program was implemented in April 2015. By restructuring the Department's former Enforcement Program, complaint resolution times have substantially decreased, and public health nuisance concerns are now expeditiously resolved. Since the year prior to program inception to the year after implementation, the average resolution time for complaints was significantly reduced (see figure). Complaint resolution decreased from 43 to 23 days (20 days, 47%). Additionally, the restructure resulted in the broadening of inspector knowledge within all complaint activities. The Enforcement Program restructure provided an innovative alternative, which decreased complaint resolution time, increased staff knowledge, and provided better customer service to Maricopa County residents through effective utilization of a smaller staff.

GRANT ACTIVITIES

FDA COOPERATIVE AGREEMENT

MCESD staff successfully completed projects for the second year of a 5 year FDA Cooperative Agreement. These projects were related to the development of an Active Managerial Control Tool box. When completed this toolbox will provide tools for food establishments to develop food safety systems and achieve active managerial control over Maricopa County's most frequently occurring foodborne illness risk factors.

COMPLAINT % CHANGE 47% = (23-43)/43*100

AVERAGE DAYS OPEN

1 YEAR PRIOR (2014 TO 2015)	43
RESTRUCTURE (2015 TO 2016)	36
1 YEAR AFTER (2016 TO 2017)	23

SOUTHERN NEVADA HEALTH DISTRICT'S NACCHO GRANT

Maricopa County collaborated with Southern Nevada Health District and San Bernardino County on a grant from the National Association of County & City Health Officials (NACCHO). This collaboration allowed for travel to each jurisdiction to observe and learn about methods to achieve compliance with the FDA Program Standards.

AFDO GRANT

MCESD was awarded funding from the Association of Food and Drug Officials for staff to attend the FDA's Pacific Region Retail Food Conference in Reno, Nevada.

MARICOPA COUNTY ENVIRONMENTAL HEALTH CODE ADOPTIONS BY THE MARICOPA COUNTY BOARD OF SUPERVISORS:

CHAPTERS I AND VIII

Eliminated Department issued Certified Food Manager original and duplicate cards, with their respective fees (\$5 and \$3) while retaining approved Food Protection Manager training requirements for food safety. Added certificate text instead of card, and clarification on when food establishments are exempt from the Certified Food Protection Manager requirement. Approved at the 4/12/2017 BOS meeting for immediate effect.

FARMERS MARKET - MCEHC CHAPTER I

Added a farmer's market coordinator and increased business owner market opportunities. The coordinator will submit documentation to the Department, be present during farmer's market operating hours, and ensure certain sanitary measures are applied. Coordinator direction increases opportunities (e.g., the use of a temporary hand wash station in lieu of an installed unit) for business owners while ensuring public health and safety are maintained. Approved at the 4/12/2017 BOS meeting for immediate effect.

PRIMITIVE CAMPGROUNDS

Aligned MCEHC Chapter XII with the updated Arizona Revised Statute (A.R.S.) §36-136, which includes an exemption for Primitive Campgrounds offered by the State of Arizona (State) or a State political subdivision. To mesh with A.R.S §36-136, MCEHC Chapter XII language exempts Primitive Campgrounds offered by the State or State political subdivision from water, electricity and sewer public infrastructure requirements. Approved at the 4/12/2017 BOS meeting for immediate effect.

MOBILE FOOD

Without increasing current permit fees, added business owner opportunities while continuing to maintain public health and safety. Organized code for readability, updated permit definitions, revised permit titles, and deleted Food Service Worker Card/Exam fees. Added the Mobile Food Type I - 6 month fee (formally Food Peddler - 6 month fee) to the Fee Schedule to agree with MCEHC Chapter VIII, Section III. Approved at the 2/1/2017 BOS meeting for immediate effect.

ACTIVE MANAGERIAL CONTROL (AMC) TRAINING FOR FOOD SAFETY

In September 2016, MCESD revised intervention strategies in order to provide earlier opportunities to help operators who have a consecutive Priority violation, with the goal of achieving long-term corrections of foodborne illness risk factors (FIRFs). At the second consecutive Priority FIRF, the operator has the opportunity to accept assistance from MCESD staff for AMC training to address the specific FIRF. At the third consecutive Priority FIRF, the operator has the opportunity to attend a full AMC training class in place of legal action and revocation of the permit.

In FY17, 68 AMC classes trained 809 food service managers and employees. The number of classes shows a 61.90% increase from FY16's 42 classes, and the number of attendees is a 32.41% increase from FY16's 611 attendees (see table).

Fiscal Year	Managers/ Employees Trained	Classes
FY 2017	809	68
FY 2016	611	42

From September 2016 to March 2017, 172 establishments/permits attended an AMC class instead of facing legal action, while 19 permits (11%) opted out of attending AMC class and faced legal action for their third consecutive Priority FIRF. Before this policy revision, the period September 2015 to March 2016 saw legal action taken on 89 permits (for a fourth consecutive Priority FIRF) (see figure). Subsequently, MCESD will follow the 172 permits to evaluate whether the new intervention strategy reduces long-term re/occurrence of the FIRFs.

MCESD also held 15 AMC classes for internal staff (130 attendees) to improve their understanding of the classes, in order to promote the training to food facility managers for them to gain better

REVOCATION OF PERMITS FOR PATTERN OF NONCOMPLIANCE

SEPT 2015 - JAN 2016 89

Before the revised intervention strategy was adopted in Sep 2016, permit revocation was initiated at the 4th consecutive Priority FIRF.

<u>SEPT 2016- MAR 2017</u>

After the revised intervention strategy was adopted, permit revocation was initiated if AMC class attendance was declined at the 3rd consecutive Priority FIRF.

food protection control at their establishments.

INVESTIGATION OF CRYPTOSPORIDIOSIS OUTBREAK ASSOCIATED WITH RECREATIONAL WATER

MCESD collaborated with Maricopa County Department of Public Health and Centers for Disease Control to investigate the magnitude of a sustained, community-wide cryptosporidiosis outbreak. The investigation included

interviewing patients to control the mid-July outbreak by identifying the affected recreational water facilities (RWFs) and ensuring remediation of aquatic venues with hyperchlorination. By the end of October 2016, over 300 patients were interviewed. According to the CDC, a total of 352 laboratory-confirmed cryptosporidiosis cases were detected statewide from July 1 to October 31. Maricopa County had 294 confirmed and 126 probable cases. Of 247 confirmed cases who were interviewed, 80% had exposure to public or private RWFs and 18% reported swimming while symptomatic. The investigation illustrated the challenges of controlling an outbreak of cryptosporidiosis when swimmers engage in water activities while symptomatic. In conclusion, the outbreak slowed as a result of targeted remediation of RWFs, and as children returned to school after summer recess.



MOHAVE COUNTY

County Seat	Kingman
Population	203,334
Size (sq. miles)	13,311
Number of Sanitarians	7
Sanitarian Aides	2
Food Establishments	1,341
Pools	277
Trailer Coach Parks	105
School Grounds	56
Public Accommodations	85
Complaints	271



NAVAJO COUNTY

County Seat	Holbrook
Population	107,094
Size (sq. miles)	9,950
Number of Sanitarians	2
Sanitarian Aides	0
Food Establishments	478
Pools	42
Trailer Coach Parks	41
School Grounds	0
Public Accommodations	36
Complaints	24

COUNTY REPORTED HIGHLIGHTS:

Navajo County Environmental Health continues to update their website, adding information that customers want to see including the following:

Temporary Food Guidelines

Food Safety

AZ Administration Codes

Environmental Quality

Training Resources



PIMA COUNTY

County Seat	Tucson
Population	992,394
Size (sq. miles)	9,187
Number of Sanitarians	26
Sanitarian Aides	0
Food Establishments	4,481
Pools	2,489
Trailer Coach Parks	377
School Grounds	260
Public Accommodations	166
Complaints	1,161

COUNTY REPORTED HIGHLIGHTS:

The FDA Food Grant year 3 award was continued with a yearly compensation of \$70,000.

Three new EHS positions were created and filled to assist in our risk based inspection frequency goal and an additional 5 EHS staff positions have been allocated for FY17-18.

The program is in the process of finalizing a software contract with Hedgerow for all of the EH programs.



PINAL COUNTY

County Seat	Florence
Population	387,365
Size (sq. miles)	5,365
Number of Sanitarians	7
Sanitarian Aides	2
Food Establishments	987
Pools	285
Trailer Coach Parks	194
School Grounds	94
Public Accommodations	34
Complaints	140

COUNTY REPORTED HIGHLIGHTS:

During a food establishment plan review, a restaurant that applied for a food service establishment permit in a rural portion of the county was determined to not have an approved public water system. When this was caught by the Registered Sanitarian reviewing the application, the food establishment permit was not approved. The applicant worked with our department and the Arizona Department of Environmental Quality to meet state drinking water quality standards for the water system. Pinal County was finally able to issue a permit to the restaurant in question in the last week in June 2017. This is a great example of the need for a thorough and timely food establishment plan review by a Registered Sanitarian in order to protect the public's health.

Local bar owners were looking to increase sales by offering food from a mobile food unit. However, there were ongoing issues, such as the contracted unit failing to arrive as scheduled, customers wanting a specific menu, etc. In an attempt to solve this problem, the bar owners bought and permitted their own mobile food unit. However, due to the nature of the operation, the unit remained in this one location continually, and organically grew larger in scope and operation at this one location.

Pinal County Environmental Health inspections observed a lack of commissary use and the mobile food unit becoming less than mobile. A complaint inspection regarding the expanded equipment and menu resulted in a coordinated inspection between the local city jurisdiction and our department. The local city jurisdiction approved permanent hookups for the mobile food unit to the grease interceptor and other utilities and the owners began working towards health department permit approval for the expanded equipment and menu changes. With the establishment not being mobile they were also not able to report to a commissary on a regular basis. Ultimately, the wheels were removed from the unit and modifications were completed transforming the unit into a permanent, permitted standalone food establishment.

SANTA CRUZ COUNTY

County Seat	Nogales
Population	47,303
Size (sq. miles)	1,236
Number of Sanitarians	4
Sanitarian Aides	0
Food Establishments	273
Pools	43
Trailer Coach Parks	21
School Grounds	31
Public Accommodations	24
Complaints	19

COUNTY REPORTED HIGHLIGHTS:

Santa Cruz County enrolled in the FDA's Voluntary National Retail Food Regulatory Program Standards and is currently conducting a self-assessment.

YAVAPAI COUNTY

County Seat	Prescott
Population	212,637
Size (sq. miles)	8,123
Number of Sanitarians	6
Sanitarian Aides	1
Food Establishments	1,333
Pools	205
Trailer Coach Parks	0
School Grounds	73
Public Accommodations	114
Complaints	91

COUNTY REPORTED HIGHLIGHTS:

Yavapai County Community Health Services (YCCHS) approved an online food worker training certification.

YCCHS approved a new fee scheduled that included the creation and implementation of a Special Event Annual Variance Fee.

Six YCCHS staff attended various training that included the 2017 Southwest Environmental Health Conference, the annual vector control workshop, and the ADHS Zika Conference.

Completed 3rd FDA self-assessment: Met Standard 1, 3, 6 and 7. Had verification audit to confirm.

YCCHS applied for and received a \$20,000 grant for a risk factor study that is scheduled to be completed by the end of December 2017.

YCCHS applied for an FDA three-year cooperative agreement that would provide \$70,000 in funding each year.



YUMA COUNTY

County Seat	Yuma
Population	200,022
Size (sq. miles)	5,514
Number of Sanitarians	2
Sanitarian Aides	0
Food Establishments	1,192
Pools	231
Trailer Coach Parks	205
School Grounds	33
Public Accommodations	42
Complaints	7

50

ARIZONA STATE UNIVERSITY



Population	83,301
Campuses	4
Number of Sanitarians	1.5
Sanitarian Aides	0
Food Establishments	183
Pools	17
Trailer Coach Parks	N/A
School Grounds	3
Public Accommodations	N/A
Complaints	3

ASU REPORTED HIGHLIGHTS:

Gene Bond retired in February of 2017 after 12 years as a sanitarian inspecting ASU facilities.

ARIZONA DEPARTMENT OF HEALTH SERVICES



Population	6,700,000
Number of Sanitarians	5
Sanitarian Aides	1
Food Establishments	246
Pools	0
Trailer Coach Parks	0
School Grounds	23
Public Accommodations	0
Complaints	176