



A REPORT  
TO THE  
ARIZONA LEGISLATURE

Performance Audit Division

---

Performance Audit

## Department of Agriculture—

Food Safety and Quality Assurance  
Inspection Programs

---

May • 2010  
REPORT NO. 10-04



**Debra K. Davenport**  
Auditor General

The **Auditor General** is appointed by the Joint Legislative Audit Committee, a bipartisan committee composed of five senators and five representatives. Her mission is to provide independent and impartial information and specific recommendations to improve the operations of state and local government entities. To this end, she provides financial audits and accounting services to the State and political subdivisions, investigates possible misuse of public monies, and conducts performance audits of school districts, state agencies, and the programs they administer.

## The Joint Legislative Audit Committee

---

Representative **Judy Burges**, Chair

Senator **Thayer Verschoor**, Vice Chair

Representative **Tom Boone**

Senator **John Huppenthal**

Representative **Cloves Campbell, Jr.**

Senator **Richard Miranda**

Representative **Rich Crandall**

Senator **Rebecca Rios**

Representative **Kyrsten Sinema**

Senator **Bob Burns** (*ex officio*)

Representative **Kirk Adams** (*ex officio*)

## Audit Staff

---

**Melanie M. Chesney**, Director

**Shan Hays**, Manager and Contact Person

**Jeremy Weber**, Team Leader

**Steven Meyeroff**

**Cheya Wilson**

Copies of the Auditor General's reports are free.  
You may request them by contacting us at:

### **Office of the Auditor General**

**2910 N. 44th Street, Suite 410 • Phoenix, AZ 85018 • (602) 553-0333**

Additionally, many of our reports can be found in electronic format at:

**[www.azauditor.gov](http://www.azauditor.gov)**



**DEBRA K. DAVENPORT, CPA**  
AUDITOR GENERAL

**STATE OF ARIZONA**  
OFFICE OF THE  
**AUDITOR GENERAL**

**WILLIAM THOMSON**  
DEPUTY AUDITOR GENERAL

May 13, 2010

Members of the Arizona Legislature

The Honorable Janice K. Brewer, Governor

Mr. Donald Butler, Director  
Department of Agriculture

Transmitted herewith is a report of the Auditor General, a Performance Audit of the Department of Agriculture—Food Safety and Quality Assurance Inspection Programs. This report is in response to a November 3, 2009, resolution of the Joint Legislative Audit Committee. The performance audit was conducted as part of the sunset review process prescribed in Arizona Revised Statutes §41-2951 et seq. I am also transmitting within this report a copy of the Report Highlights for this audit to provide a quick summary for your convenience.

As outlined in its response, the Department of Agriculture agrees with most of the findings and plans to implement all of the recommendations directed at it.

My staff and I will be pleased to discuss or clarify items in the report.

This report will be released to the public on May 14, 2010.

Sincerely,

Debbie Davenport  
Auditor General

Attachment



## REPORT HIGHLIGHTS

### PERFORMANCE AUDIT

#### Our Conclusion

The Department of Agriculture (Department) helps ensure the safety and quality of Arizona's dairy products, meat and poultry, eggs, and fresh produce. Because the dairy industry benefits from the Department's oversight, the State should share more costs—which the State General Fund bears almost entirely—with the industry, as some other states do. Similarly, the Legislature should consider transferring responsibility for meat and poultry inspections to the U.S. Department of Agriculture (USDA), who would conduct these inspections at no cost to the State, or require the industry to pay the costs of operating a state program. The Department should also continue shifting its produce program emphasis from quality to safety and take additional actions to promote food security.



# 2010

May • Report No. 10-04

## Dairy industry should share in safety program costs

The Department regulates the safety of milk and milk products by enforcing the federal grade "A" pasteurized milk ordinance, which the State has adopted. This allows Arizona dairies to sell their products in other states. The Department inspects sanitation and other specific processes and conditions at dairy farms and processing plants, and tests samples of milk and milk products.

The State General Fund pays for almost all of the program's \$390,000 in annual

costs, partly because licensing fees have not increased for over 50 years except for temporary increases in fiscal years 2009 and 2010.

The dairy industry in other states pays more of the costs. In four of the ten states surveyed, the industry pays the majority of the inspection costs. In four of the other six states surveyed, the industry paid from 5 to 17 percent of the costs. Arizona dairy industry fees have generally contributed less than 1 percent of costs.

## Consider transferring meat and poultry inspections to USDA

The USDA has ultimate responsibility for meat and poultry inspection. The USDA must inspect any slaughter or meat processing plant that sells meat and poultry out of state. However, states may enter into agreements with the USDA to inspect establishments that do not sell in interstate commerce.

Inspections, whether federal or state, ensure that animals are disease-free, facilities are clean and sanitary, and meat and poultry products are wholesome and properly labeled. In Arizona, 27 establishments are federally inspected, and 34 are state inspected. However, the federally inspected establishments account for over 99 percent of all cattle slaughtered in Arizona.

**Many states do not have state inspection programs**—Twenty-three states, including states that produce large amounts of red meat like Colorado and Nebraska, do not conduct state inspections. Only 4 of 13 western states, including Arizona, have state inspection programs.

The USDA and the State each pay half of the program's costs, and transferring meat and poultry inspection to the USDA would save the State about \$400,000 a year. The State General Fund pays nearly all of the State's share of program costs except a small amount from fees and overtime inspection charges. If the program is transferred, some establishments may incur facility modification costs, but it does not appear that modifications should be extensive. Industry costs for overtime inspections could also increase because the federal overtime rate is higher, but overtime use appears to be limited.

As an alternative, the State could increase fees so the industry covers the inspection program's costs. However, with only 34 state-inspected facilities, each could have to pay an average of more than \$10,000 per year to cover the inspection program's costs, which could place a burden on the establishments.

## Department helps ensure egg safety and quality

State inspectors inspect eggs and egg products at laying facilities, wholesalers, and retail stores. Eggs are a common source of foodborne illness outbreaks caused by *Salmonella Enteritidis*.

The risk is reduced by properly handling, washing,

and refrigerating eggs during processing, transportation, and storage.

The cost of inspections is covered by industry fees. The frequency of wholesaler and retailer inspections depends on the volume of eggs they sell.

## Promoting produce safety

Produce is particularly susceptible to contamination because it is typically grown in a natural environment. In addition, unlike animal products, it is usually consumed raw rather than cooked.

The USDA introduced a program in 1999 to promote voluntary produce safety audits, which the industry pays for. These audits examine growing and handling practices at farms, packing facilities, and warehouses. In some states, the produce industry has worked to develop marketing agreements addressing produce safety. For example, Arizona and California have voluntary leafy

green product agreements where participants agree to specific safety standards and annual audits.

Historically, department inspections focused on quality standards such as color, shape, and size. However, the Department is focusing more on promoting produce safety. It is training inspectors to do USDA food safety audits and promoting the audits.

The Department could use more of its federal grant monies to fund projects to promote food safety audits, such as helping small farmers prepare for and receive audits.

## Better promotion of food defense

Food defense refers to protecting food products from intentional contamination. Although reported cases are sporadic, experts believe the threat is plausible and the effects could be far-reaching.

Although the USDA and U.S. Food and Drug Administration have written federal food defense guidelines, these guidelines are voluntary. Department meat and poultry inspectors look for potential security vulnerabilities—such as water systems, receiving and shipping areas, and access to sensitive areas—when inspecting, but they cannot require or enforce security measures. Dairy and produce inspectors' roles are even more limited.

Currently, food defense rests largely with the industry, and industry efforts vary primarily based on size, with larger facilities focusing more on security. The Department should take more steps to promote food defense at all of the facilities it regulates. For example, as it has done with meat and poultry facilities, the Department could provide all facilities it regulates with a voluntary self-assessment tool that would help identify security risks. The Department could also educate the public and industry about food defense through its Web site. In addition, the Department should seek additional opportunities to collaborate with federal, state, and local government agencies to promote food security by preventing intentional contamination.

### Department of Agriculture—

Food Safety and Quality Assurance  
Inspection Programs

A copy of the full report is available at:

[www.azauditor.gov](http://www.azauditor.gov)

Contact person:

Shan Hays, (602) 553-0333

REPORT  
HIGHLIGHTS  
PERFORMANCE AUDIT

May 2010 • Report No. 10 – 04

# TABLE OF CONTENTS



<b>Introduction &amp; Background</b>	<b>1</b>
<b>Finding 1: Dairy safety program costs should be shared with industry</b>	<b>7</b>
Department oversees dairy product safety	7
State pays for dairy inspection program but faces economic challenges	8
State and industry should share inspection program costs	12
<b>Recommendations</b>	<b>15</b>
<b>Finding 2: State should consider transferring meat and poultry inspections to USDA</b>	<b>17</b>
USDA and Department help ensure safe meat and poultry in Arizona	17
State could transfer all meat and poultry inspections to USDA	20
Transferring inspections would likely have minimal impacts to state-inspected establishments	22
Alternatively, State could increase fees to cover costs	25
<b>Recommendations</b>	<b>26</b>
<b>Finding 3: Department helps to ensure egg safety and quality</b>	<b>29</b>
Eggs commonly linked to foodborne illness	29
Department inspects and grades eggs	30
Federal regulations also address egg safety	32

• continued



# TABLE OF CONTENTS

<b>Finding 4: Department can further promote produce safety</b>	<b>33</b>
Produce safety is a national concern	33
Department can do more to promote produce safety	36
Recommendation	40
<b>Finding 5: Department should better promote preventative food defense measures</b>	<b>41</b>
Intentional contamination of food is a risk	41
Department should help industry protect food supply	43
Recommendations	47
<b>Appendix A: Methodology</b>	<b>a-i</b>
<b>Agency Response</b>	
<b>Tables:</b>	
1 Schedule of Revenues, Expenditures, and Changes in Fund Balances Fiscal Years 2008 and 2009 (Unaudited)	4
2 Dairy License and Permit Types, and Number of Licenses and Permits October 2009 (Unaudited)	9

continued ♦

# TABLE OF CONTENTS



## Tables (Continued):

3 Dairy Inspection Program Areas, Regulatory Activities, and Inspection Frequencies	10
4 Dairy Inspection Program Licensing Fees	11

## Figures:

1 Mississippi Joint Legislative Committee on PEER Structured Fee-Setting Process Developed for State Government	14
2 States with and without State Meat and Poultry Inspection Programs and Commercial Red Meat Production by State Calendar Year 2008 (In Millions of Pounds)	21
3 Percentage of U.S. Fresh Market Vegetable and Melon Production by State for 24 Selected Crops Calendar Year 2008 Estimates	37

## Photos:

1 Egg Candling	31
----------------	----

♦ concluded





# INTRODUCTION & BACKGROUND

---

The Office of the Auditor General has conducted a performance audit of the Department of Agriculture (Department) pursuant to a November 3, 2009, resolution of the Joint Legislative Audit Committee. This is the first in a series of two reports on the Department and was conducted as part of the sunset review process prescribed in Arizona Revised Statutes (A.R.S.) §41-2951 et seq. This audit focuses on the Department's food safety and quality assurance inspection programs and identifies options the State should consider regarding their scope and funding. The second report will focus on the 12 statutory sunset factors.

The Legislature established the Department in 1989 to provide uniform and coordinated agricultural programs and policies in Arizona. The Department's mission is "to regulate and support Arizona agriculture in a manner that encourages farming, ranching, and agribusiness while protecting consumers and natural resources." One way in which the Department protects consumers is to help ensure the safety and quality of food produced in Arizona. In 2008, the State produced approximately 408.3 million pounds of commercial red meat, 4.3 billion pounds of milk, and 3.3 billion pounds of vegetables and melons. Notably, Arizona was the nation's 12th largest producer of milk and the 3rd largest producer of vegetables and melons in that year.

## Food safety and food defense

Recent outbreaks of foodborne illnesses and an increased awareness of homeland security have renewed national focus on food safety and food defense. Although food safety and food defense are often highly interrelated, food safety refers to protecting food from *unintentional* contamination while food defense refers to protecting food from *intentional* contamination (see Finding 5, pages 41 through 47, for more information on food defense). Contaminated food can lead to serious illness or death and can have significant economic costs. The U.S. Centers for Disease Control and Prevention (CDC) estimates that there are about 76 million cases of foodborne illness in the nation each year. Although most of these cases are mild, the CDC estimates that about 325,000 people are hospitalized and about 5,000 people die from foodborne illnesses each year. Children, pregnant women, the elderly, and people with compromised immune systems have a higher risk for severe illness.

The annual economic cost of foodborne illness is in the billions of dollars. For example, the U.S. Department of Agriculture (USDA) estimated in 2000 that the annual cost of medical care, productivity losses, and premature deaths from foodborne illnesses caused by five major pathogens—accounting for just 3.4 million of the estimated 76 million cases—was approximately \$6.9 billion.<sup>1</sup> Other economic costs can include those that more directly impact the food industry, such as product recalls and loss of consumer confidence.

Food can become contaminated at any point in the food supply chain—on farms, in processing plants, during transportation, or in restaurants and consumers' homes. Most contamination involves bacteria such as *E. coli* or *Salmonella*, but viruses, parasites, fungi, and chemicals can also cause foodborne illness. According to the Center for Science in the Public Interest, the foods most commonly linked to foodborne illness outbreaks include seafood, produce, poultry, beef, and eggs.<sup>2</sup> Consuming raw foods may increase the risk of illness because potential pathogens are not killed like they would be through cooking or pasteurization. In addition, foods made from multiple animals or plants, such as ground beef or bagged salad, have a greater risk of contamination because a pathogen in one animal or plant can contaminate the whole batch.

## Food safety in Arizona

The nation's food safety system is a complex partnership of federal, state, and local agencies. At the federal level, 15 agencies have food safety roles, but primary responsibility is under the U.S. Food and Drug Administration (FDA) and the USDA. Although the federal government has primary responsibility for food safety, state and local governments perform much of the food safety work. In Arizona, the Departments of Health Services and Agriculture share responsibility for food safety.

- **Department of Health Services**—The Department of Health Services is generally responsible for overseeing the safety of food and drink provided for human consumption. It administers a state-wide public health sanitation program to enforce state food safety regulations, which are consistent with the FDA's 1999 Model Food Code. Many of the program's responsibilities have been delegated to the State's 15 county health departments. The Department of Health Services and the county health departments license or permit and routinely inspect food establishments (such as food manufacturing facilities, food warehouses, restaurants, and grocery stores) and bottled water facilities to evaluate food safety practices and sanitary conditions. The Department of Health Services also monitors and helps investigate foodborne illnesses throughout the State. In fiscal year 2009, there were 34 confirmed foodborne illness outbreaks in Arizona

<sup>1</sup> Crutchfield, S.R., & Roberts, T. (2000). Food safety efforts accelerate in the 1990's. *Food Safety*, 23(3), 44-49. Retrieved December 23, 2009, from <http://www.ers.usda.gov/publications/foodreview/septdec00/FRsept00h.pdf>

<sup>2</sup> The Center for Science in the Public Interest is a nonprofit organization that seeks to improve public health through work on nutrition and food safety issues. Center for Science in the Public Interest. (2008). *Outbreak alert 2008: Closing the gaps in our federal food-safety net*. Retrieved September 21, 2009, from [http://www.cspinet.org/new/pdf/outbreak\\_alert\\_2008\\_report\\_final.pdf](http://www.cspinet.org/new/pdf/outbreak_alert_2008_report_final.pdf)

that sickened 362 people. Although the food vehicle was not identified for many of these outbreaks, some of the outbreaks were tied to chicken, ground beef, peanut butter, and cookie dough. In one of these outbreaks, 20 people were sickened by contaminated sprouts grown in Arizona.

- **Department of Agriculture**—The Department helps ensure the safety and quality of dairy, meat and poultry, eggs, and produce through various inspection programs (see the next section). It also monitors animal health and agricultural pests to help prevent harmful diseases and pests that could affect the food supply. In addition, the Department monitors agricultural workers to ensure the proper use of pesticides. The Department's State Agricultural Lab supports these programs through various analyses, such as testing food samples for pathogens and identifying harmful agricultural pests.

## Department's food safety programs and program budgets

The Department helps ensure the safety and quality of dairy, meat and poultry, eggs, and produce through several inspection programs. Generally, the programs license and inspect companies that produce, process, handle, transport, or store these foods to ensure compliance with federal and/or state laws and standards. As of December 2009, the Department reported that it had a total of 121.35 full-time equivalent (FTE) positions for these programs, of which 42.25 positions were vacant. The programs' funding sources vary. For example, the dairy inspection program is paid for almost entirely with State General Fund monies, while the egg inspection program is paid for entirely by industry fees. Table 1 (see page 4) shows each program's revenues and expenditures for fiscal years 2008 and 2009. The total fiscal year 2010 budget for these programs was \$5.75 million as of February 2010, including the budget reductions passed in December 2009.<sup>1</sup> Specifically, the Department's inspection programs include:

- **Dairy Inspection Program (4.76 FTEs, 0 vacancies)**—Through its dairy inspection program, the Department regulates the production and processing of Arizona dairy products by licensing (or permitting) and inspecting dairy farms, plants, transporters, and other related companies (see Finding 1, pages 7 through 16). The program enforces nationally accepted standards adopted by the State that allow the Arizona dairy industry to ship grade "A" milk products in interstate commerce. The Department issued 423 licenses during fiscal year 2009. The program is primarily paid for by the State General Fund. As of February 2010, the program's budget for fiscal year 2010 was \$359,165.

<sup>1</sup> Laws 2009, 5th S.S., Ch. 1, §1, reduced the Department's State General Fund lump sum appropriation by \$696,100 and its Citrus, Fruit and Vegetable Revolving Fund appropriation by \$72,000.

**Table 1:** Schedule of Revenues, Expenditures, and Changes in Fund Balances<sup>1</sup>  
Fiscal Years 2008 and 2009  
(Unaudited)

	Animal Products Food Safety and Quality Inspection Program			Fresh Produce Standardization and Inspection Program		Total
	Meat and Poultry Inspection	Dairy Inspection	Egg Inspection	Citrus, Fruit and Vegetable Standardization	Federal-State Inspection Service	
<b>Fiscal Year 2008</b>						
Revenues:						
State General Fund appropriations	\$1,040,715	\$390,065				\$1,430,780
Federal grants	605,570					605,570
Inspection fees and other charges				\$784,376	\$3,393,433	4,177,809
License and fees <sup>2</sup>	3,652	3,448	\$623,031	167,075	4,650	801,856
Other			3,976	16,878	55,476	76,330
Remittances to the State General Fund	<u>(496,412)</u>	<u>(3,448)</u>				<u>(499,860)</u>
Total net revenues	<u>1,153,525</u>	<u>390,065</u>	<u>627,007</u>	<u>968,329</u>	<u>3,453,559</u>	<u>6,592,485</u>
Expenditures and operating transfers: <sup>3</sup>						
Personal services and related benefits	919,691	328,338	595,300	751,606	2,482,778	5,077,713
Professional and outside services	7,343			1,680	441,626	450,649
Other expenditures and operating transfers <sup>4</sup>	<u>113,681</u>	<u>61,727</u>	<u>83,454</u>	<u>143,681</u>	<u>316,344</u>	<u>718,887</u>
Total expenditures and operating transfers	<u>1,040,715</u>	<u>390,065</u>	<u>678,754</u>	<u>896,967</u>	<u>3,240,748</u>	<u>6,247,249</u>
Net change in fund balances	<u>\$ 112,810</u>	<u>\$ -0-</u>	<u>\$ (51,747)</u>	<u>\$ 71,362</u>	<u>\$ 212,811</u>	<u>\$ 345,236</u>
<b>Fiscal Year 2009</b>						
Revenues:						
State General Fund appropriations	\$ 896,579	\$386,639				\$1,283,218
Federal grants	525,906					525,906
Inspection fees and other charges				\$776,265	\$3,195,507	3,971,772
License and fees <sup>2</sup>	16,402	20,586	\$781,107	183,675	7,348	1,009,118
Other			711	10,124	30,823	41,658
Remittances to the State General Fund	<u>(490,083)</u>	<u>(3,794)</u>				<u>(493,877)</u>
Total net revenues	<u>948,804</u>	<u>403,431</u>	<u>781,818</u>	<u>970,064</u>	<u>3,233,678</u>	<u>6,337,795</u>
Expenditures and operating transfers <sup>3</sup>						
Personal services and related benefits	787,615	328,411	629,770	659,797	2,345,688	4,751,281
Professional and outside services	4,774		157	62,784	413,722	481,437
Other expenditures and operating transfers <sup>4</sup>	<u>104,190</u>	<u>58,228</u>	<u>71,698</u>	<u>274,459</u>	<u>284,027</u>	<u>792,602</u>
Total expenditures and operating transfers	<u>896,579</u>	<u>386,639</u>	<u>701,625</u>	<u>997,040</u>	<u>3,043,437</u>	<u>6,025,320</u>
Net change in fund balances	<u>\$ 52,225</u>	<u>\$ 16,792</u>	<u>\$ 80,193</u>	<u>\$ (26,976)</u>	<u>\$ 190,241</u>	<u>\$ 312,475</u>

<sup>1</sup> The table does not include the Leafy Green Products Shipper Marketing Agreement because the Department provides only legal and administrative services for the agreement.

<sup>2</sup> Laws 2008, Ch. 291, §12, permitted the Department to raise fees to generate up to \$1.1 million during fiscal year 2009; therefore, the Department increased licensing fees for meat and poultry and dairy inspection programs.

<sup>3</sup> Administrative adjustments are included in the fiscal year paid.

<sup>4</sup> Amounts include monies transferred to the State General Fund in accordance with Laws 2008, Ch. 53, §23, and Ch. 285, §46. Specifically, for fiscal years 2008 and 2009, \$7,500 was transferred from the Egg Inspection Program (both fiscal years); \$9,400 and \$35,100 from the Citrus, Fruit and Vegetable Standardization Program; and \$25,400 and \$25,500 from the Federal-State Inspection Service Program.

Source: Auditor General staff analysis of the Arizona Financial Information System (AFIS) *Accounting Event Transaction File* for fiscal years 2008 and 2009.

- **Meat and Poultry Inspection Program (17.64 FTEs, 7 vacancies)**—The Department licenses companies that slaughter, process, distribute, transport, and store meat and poultry products and maintains a federal-state cooperative program that regulates the slaughter and processing of meat and poultry products sold within the State (see Finding 2, pages 17 through 27). The Department issued 236 licenses during fiscal year 2009. The USDA pays for approximately 50 percent of the program's direct costs, plus some additional money to cover indirect costs. The remaining costs are primarily paid for by the State General Fund. As of February 2010, the program's budget for fiscal year 2010 was \$828,050.
- **Egg Inspection Program (15 FTEs, 3 vacancies)**—The Department licenses companies that sell eggs wholesale in Arizona and inspects eggs at laying facilities, wholesalers, and retail stores to enforce state egg laws and regulations (see Finding 3, pages 29 through 32). The Department issued 82 licenses during fiscal year 2009. In addition, the USDA contracts with the Department to provide egg-grading services to the industry upon request. The Egg Inspection Program is paid for by the egg industry. As of February 2010, the program's budget for fiscal year 2010 was \$866,700.
- **Citrus, Fruit and Vegetable Standardization Program (20 FTEs, 12.75 vacancies)**—The Department licenses produce dealers, packers, and shippers through its Citrus, Fruit and Vegetable Standardization Program. The Department issued 525 licenses during fiscal year 2009. Historically, the standardization program inspected fresh produce to enforce state quality standards that include factors such as size, color, and shape. The program also provides administrative services for a marketing agreement created in 2007 with Arizona's leafy greens industry designed to promote safe growing and handling practices through food safety audits. In 2009, the Department began changing the program's focus from quality standards to food safety (see Finding 4, pages 33 through 40, for more information about the standardization and the leafy greens marketing agreement). The leafy greens industry pays for and runs the marketing agreement. The produce industry pays for the standardization program. As of February 2010, the standardization program's budget for fiscal year 2010 was \$630,625.
- **Federal-State Inspection Service Program (63.95 FTEs, 19.5 vacancies)**—Since 1996, the USDA has contracted with the Department to perform various federal inspection services and enforce U.S. import requirements at the Arizona-Mexico border. The inspection services are generally voluntary and performed at produce sellers' or buyers' request. Generally, these inspections focus on ensuring grade or quality standards, but one service entails food safety audits at growers' or packers' request as part of the USDA's Good Agricultural Practices and Good Handling Practices (GAP/GHP) Audit Verification Program (see Finding 4, pages 33 through 40, for more information about the GAP/GHP

audit program). The Federal-State Inspection Service Program is paid for by industry fees. As of February 2010, the program's budget for fiscal year 2010 was \$3,065,460.

## Audit scope and objectives

This audit focused on the Department's role in food safety and defense related to Arizona-produced agricultural products. Specifically, the audit focused on the four foods the Department regulates—dairy, meat and poultry, eggs, and produce—and their respective inspection programs. In addition to examining food safety and food defense issues related to these programs, the audit identified options the State should consider regarding the programs' scope and funding.

This audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The Auditor General and staff express appreciation to the Director of the Department and his staff for their cooperation and assistance throughout the audit.

# FINDING 1

---

## Dairy safety program costs should be shared with industry

The Department of Agriculture (Department) should propose fee changes that would increase the dairy industry's share of the costs for the Department's dairy inspection program. The Department helps ensure the safety of Arizona milk and milk products by licensing and inspecting dairy industry facilities and testing dairy products to verify compliance with milk product safety standards. Historically, the Department has funded its dairy inspection program primarily through State General Fund monies, but the Department is facing significant budget cuts. Because both the industry and the public receive benefits from the dairy program, the State should share more of the costs of the dairy inspection program with the industry, as is done in some other states auditors reviewed. In developing a proposal for modifying fees, the Department should consider several factors, including ways to equitably allocate costs, the impact on the dairy industry, and the efficiency of department operations, including any opportunities to reduce the level of regulation.

### Department oversees dairy product safety

The Department regulates the safety of milk and milk products in Arizona by enforcing national and state sanitation and safety standards. In 2008, dairy products were ranked as Arizona's most valuable agricultural commodity, generating 22 percent of all farm-related receipts and producing over 4.3 billion pounds of milk. By statute, the State has adopted national standards called the pasteurized milk ordinance for grade "A" milk and dairy products (see textbox, page 8).<sup>1</sup> In addition, statute requires the Department to regulate manufactured products, such as cheese, butter, and frozen desserts, according to the U.S. Department of Agriculture's (USDA) general specification for dairy plants. The pasteurized milk ordinance was developed jointly by the U.S. Food and Drug Administration (FDA), state regulatory agencies, and the dairy industry, and represents the minimum standards adopted in all 50 states. The FDA reviews the Department's program every 3 years to ensure that the Department is adequately enforcing the ordinance. The FDA's most recent

Dairy products were Arizona's most valuable agricultural commodity in 2008.

<sup>1</sup> Arizona Revised Statutes (A.R.S.) §3-605 adopts the federal milk ordinance, which is defined in A.R.S. §3-601(5) as the FDA's grade "A" pasteurized milk ordinance.



## Grade “A” pasteurized milk ordinance.

The pasteurized milk ordinance is a nationally recognized milk sanitation and safety standard for grade “A” milk and milk products. The FDA developed the ordinance in collaboration with state regulatory agencies and the dairy industry. It is used in all 50 states as the basis for certifying companies that ship dairy products interstate through a federal-state cooperative program. Although the FDA ultimately has legal jurisdiction over dairy products shipped in interstate commerce, states carry out most of the monitoring and enforcement that the ordinance requires under FDA oversight.

Source: Auditor General staff analysis of the grade “A” pasteurized milk ordinance, 2005 revision; Taylor, M.R., & David, S.D. (2009). *Stronger partnerships for safer food: An agenda for strengthening state and local roles in the nation's food safety system*. Retrieved April 17, 2009, from [http://www.thefsrc.org/State\\_Local/statelocal\\_report\\_release.htm](http://www.thefsrc.org/State_Local/statelocal_report_release.htm)

review, published in February 2008, found that the Department was in substantial compliance with the ordinance’s requirements.

To ensure compliance with the state and national standards, the Department licenses or permits companies and individuals, inspects farms and facilities, and tests samples of milk products. As shown in Table 2 (see page 9), as of October 2009, the Department had permits or licenses for approximately 120 dairy farms and numerous other individuals and companies that transport, sample, process, and distribute milk and milk products. The Department’s inspections evaluate overall sanitation and other specific processes and conditions (see Table 3, page 10). For example, auditors observed department staff conducting two unannounced dairy farm inspections. During the 2-hour visit to each farm, the department inspector performed inspection activities such as ensuring that milk houses were clean and had hand-washing facilities, and that equipment properly protected milk during transfer. The pasteurized milk ordinance requires dairy farms to be inspected at least once every 6 months.

## State pays for dairy inspection program but faces economic challenges

Although the dairy industry pays some licensing fees, the State General Fund pays for almost all of the dairy inspection program’s costs. However, the Department is facing significant budget cuts that may affect the program. The dairy industry has also experienced an economic downturn that may be ending.

**Table 2: Dairy License and Permit Types, and Number of Licenses and Permits  
October 2009  
(Unaudited)**

License or Permit Type and Definition	Number of Licenses or Permits <sup>1</sup>
<b>Dairy (permit)</b> A farm where milk is produced. Although statute does not require dairy farms to obtain a license to operate, the pasteurized milk ordinance, which is adopted by statute, requires dairy farms to obtain a permit.	117
<b>Milk hauler/sampler</b> A person who transports raw milk or raw milk products to or from a dairy, milk plant, or other milk station. Licensees are also authorized to collect raw milk samples for laboratory testing.	289
<b>Producer-distributor</b> A dairy farm that processes and distributes grade "A" milk using milk from its own farm.	6
<b>Producer-manufacturer</b> A dairy farm that manufactures and distributes milk products, such as cheese or butter, using milk from its own farm.	1
<b>Milk distributing plant</b> A plant that processes and distributes grade "A" milk and milk products.	8
<b>Manufacturing plant</b> A plant that manufactures milk products, such as cheese or butter. These plants commonly use grade "B" milk, which is not subject to the pasteurized milk ordinance, to manufacture the products.	14
<b>Wholesale distributor</b> A warehouse where finished liquid milk products or other milk products such as cheese and cream are stored at cold temperatures before shipping to smaller retailers.	60

<sup>1</sup> Because the table is current as of October 2009, the total number of licenses and permits listed in the table does not equal the total number of dairy licenses issued during fiscal year 2009 (reported in the Introduction and Background section of this report).

Source: Auditor General staff analysis of A.R.S. §§3-601, 3-605, 3-607, and 3-619; the grade "A" pasteurized milk ordinance, 2005 revision; and information on dairy licenses and permits provided by department staff.

Dairy industry pays almost none of the Department's regulatory costs—As of fiscal year 2009, the State General Fund paid for almost all of the dairy inspection program's costs. Licensing fees have generally offset less than 1 percent of these costs, and even with fiscal year 2009 increases, fees offset only approximately 5 percent of the costs. For example, in fiscal year 2008, the Department received \$3,448 in licensing-fee revenue, which offset \$390,065 in program costs, not including costs incurred by the State Agricultural Laboratory for

**Table 3: Dairy Inspection Program Areas, Regulatory Activities, and Inspection Frequencies**

Inspection Area	Examples of Regulatory Activities	Minimum Inspection Frequency
Dairy Farms	Inspect facility, equipment, milking procedures, and test water used to chill milk	6 months
	Sample and test the water supply	3 years
Transportation	Inspect hauler/sampler's sampling procedures	24 months
	Inspect milk tank trucks	12 months
	Inspect truck-cleaning facilities and transfer stations	6 months
Plants	Inspect facilities and test pasteurization equipment at milk-distributing plants	3 months
	Inspect facilities and test pasteurization equipment at manufacturing plants	6 months
Dairy Product Testing	Test raw milk samples from each farm and finished products from each plant at the State Agricultural Laboratory	4 in 6 months

Source: Auditor General staff analysis of the grade "A" pasteurized milk ordinance, 2005 revision; A.R.S. §3-622, USDA's general specifications for dairy plants; and department inspection forms, staff interviews, and Auditor General staff observations of dairy inspections.

testing milk and dairy product samples. Historically, statutory licensing fees for the dairy program have not increased for over 50 years, with one minor exception.<sup>1</sup> However, the Legislature authorized temporary fee increases in fiscal years 2009 and 2010 (see Table 4, page 11, for the statutory and temporary fees). In fiscal year 2009, the Department collected \$20,586 in dairy-licensing fees because of the temporary increase.<sup>2</sup> In addition, the Department has been concerned with the funding of the dairy program and discussed these concerns with some industry representatives beginning in January 2008.

**Department and dairy industry face economic challenges, but industry shows signs of recovery**—The Department has faced significant budget cuts in fiscal years 2009 and 2010. According to a department official, the Department has tried to minimize the impact of budget cuts on the dairy inspection program to maintain food safety and compliance with the statutorily required pasteurized milk ordinance. The pasteurized milk ordinance is the accepted national standard for milk, and failing to perform the ordinance requirements could jeopardize the Arizona dairy industry's ability to market milk products in other states. According to an industry representative, almost all of the dairy plants in

The Department has tried to minimize the impact of budget cuts on the dairy inspection program.

<sup>1</sup> Fees have not increased since 1951, with the exception of the wholesale distributor license, which was added in 1962.  
<sup>2</sup> Laws 2008, Ch. 291, §12, and Laws 2009, 4th S.S., Ch. 3, §23, authorized the Department to increase fees for fiscal years 2009 and 2010.

Table 4: Dairy Inspection Program Licensing Fees

License or Permit Type	Annual Fee	
	Statutory Fee	Temporary Fee <sup>1</sup>
Dairy	No fee	No fee
Milk hauler/sampler	\$5 (initial) \$1.50 (renewal)	\$50 (initial) \$30 (renewal)
Producer-distributor	\$25	\$150
Producer-manufacturer	\$25	\$150
Milk distributing plant	\$50	\$300
Manufacturing plant	\$50	\$100
Wholesale distributor	\$25	\$100

<sup>1</sup> Laws 2008, Ch. 291, §12, and Laws 2009, 4th S.S., Ch. 3, §23, authorized the Department to increase fees for fiscal years 2009 and 2010.

Source: Auditor General staff analysis of A.R.S. §§3-607 and 3-619 and dairy inspection program licensing fees information provided by department staff.

Arizona have out-of-state business. Program officials reported that, in response to budget constraints, the Department has limited staff training and travel expenditures. Further, one official stated that program staffing is at the minimum necessary to support the Department's food safety mandates and meet the requirements of the pasteurized milk ordinance. On February 1, 2010, the Department reduced the program's budget in response to Laws 2009, 5th S.S., Ch. 1, §1, and the impact on program activities was unknown as of February 3, 2010.<sup>1</sup>

The dairy industry also experienced an economic downturn in fiscal year 2009. Specifically, that year's milk price declined from \$18.40 per hundredweight in August 2008 to \$11.30 per hundredweight in June 2009 before beginning to rise again.<sup>2</sup> Milk prices fluctuate with the supply of milk and other factors. For example, the calendar year average price per hundredweight was \$12.88 in 2006, \$19.13 in 2007, and \$18.32 in 2008. As of early December 2009, a department official reported that ten Arizona dairy farms had closed since July 2008, including closures to clear land for development as well as temporary closures where the farmers planned to restore their herds when prices increase. Prices had increased to \$16.30 per hundredweight in December 2009, and according to one industry analyst, the 2009 downturn was ending and prices were expected to remain higher.<sup>3</sup>

<sup>1</sup> Laws 2009, 5th S.S., Ch. 1, §1, reduced the Department's State General Fund lump sum appropriation by \$696,100 and its Citrus, Fruit and Vegetable Revolving Fund appropriation by \$72,000.

<sup>2</sup> All figures in this paragraph are from the USDA Economic Research Service. (2010, January 26). *U.S. dairy situation at a glance*. Retrieved February 12, 2010, from <http://www.ers.usda.gov/publications/ldp/LDPTables.htm>; USDA Economic Research Service. (2009, November 24). *U.S. dairy situation at a glance*. Retrieved December 4, 2009, from <http://www.ers.usda.gov/publications/ldp/LDPTables.htm>

<sup>3</sup> The Commodity Update: The Monthly Newsletter for Multi-Unit Foodservice Purchasing Executives. (2009, October 8). *Dairy update*, 19(10), 3. Retrieved December 3, 2009, from [http://www.mktvsn.com/MarketVision\\_CommodityUpdate.pdf](http://www.mktvsn.com/MarketVision_CommodityUpdate.pdf)

## State and industry should share inspection program costs

According to guidance on setting government user fees, because the industry benefits from the dairy inspection program's work, it should also help support the cost of regulation. In four of ten other states' dairy inspection programs that auditors reviewed, industry fees provide most of the programs' funding, and of the six states funded similarly to Arizona using primarily general fund monies, four states use fees to provide a higher portion of the costs than in Arizona. The Department should propose fee changes to have the industry share a greater portion of the dairy inspection program costs. The proposed fees should be determined using a fee-setting approach that considers what portion of the cost should be shared, any possible ways to cut costs in the existing program, and the impact of any fee increases on the industry.

**Dairy inspection program costs should be shared with the industry**—Fee-setting principles can guide decisions about the amounts industry and government should pay for regulation. According to guidance on setting user fees in government, the parties that benefit from a government program should help pay for the regulatory costs.<sup>1</sup> For example, the egg industry pays fees to the Department to cover the cost of regulation for egg inspection services that benefit the egg industry. The dairy inspection program benefits both the industry and the public. Specifically, the dairy industry benefits from the ability to market milk interstate while the public benefits from the assurance that dairy products are produced and processed safely as outlined in the pasteurized milk ordinance. In addition, the industry may benefit from an enhanced public perception of product quality and safety. According to department officials, industry members are generally not opposed to paying higher fees as long the monies are used for the program and not transferred to the General Fund.

**Some other states share more of the cost with industry**—In some other states surveyed, the industry generally pays more of the cost of dairy inspection than in Arizona. Auditors reviewed dairy inspection program funding in six western states and four states with milk production volume similar to Arizona's.<sup>2</sup> According to officials in those states:

- Four of the ten states fund a majority of their dairy inspection program costs through industry fees. For example, since at least 1997, Ohio statute has allowed the state to charge up to 63 percent of the dairy inspection program cost to the industry through licensing and inspection fees such as an inspection fee based on the amount of raw milk or dairy product used at

The dairy industry benefits from the inspection program.

Four states pay most of their dairy inspection program costs through industry fees.

<sup>1</sup> United States Government Accountability Office. (2008). *Federal user fees: A design guide* (GAO-08-386SP). Washington, D.C.: Author.

<sup>2</sup> States contacted include six western states—California, Colorado, Idaho, New Mexico, Utah, and Washington—and four additional states with similar milk production volume—Indiana, Iowa, Ohio, and Vermont.

processing plants and frozen dessert manufacturers. According to an Ohio official, although industry fees covered as little as 40 percent of costs in fiscal year 2001, as of fiscal year 2010, industry fees covered nearly the full 63 percent allowed by law. Similarly, industry fees covered 83 percent of California's dairy inspection program costs in 2008. California charges various fees such as licensing fees, penalties, and assessments based on the type of work inspectors perform and the size of the facility needing inspection. According to a California program official, although the percentage of program costs covered by fees can vary somewhat each year, the practice of charging fees to the industry has existed for at least the past 5 years. Further, according to an official in Idaho, industry fees have covered nearly 100 percent of its dairy inspection program costs for the past 30 years. Finally, according to an Iowa dairy program official, about 80 percent of the program budget has come from industry fees.

- Among the six states that use mainly general fund monies to pay for their dairy inspection programs, four share a higher percentage of their programs' costs with the industry than Arizona does. According to officials in these states, industry fees have covered between 5 percent and 17 percent of their programs' costs compared to less than 1 percent in Arizona in fiscal year 2008.<sup>1</sup> For example, in Washington, industry fees have covered 17 percent. Further, dairy program officials in both Vermont and Utah stated that their programs are about 7 percent funded by fee revenue. Finally, according to a Colorado dairy inspection program official, fees covered approximately 5 percent of Colorado's total program costs after fees were increased in fiscal year 2009.

**Department should propose fee changes**—The Department should take steps to reevaluate the current fee structure for the dairy inspection program and propose changes for legislative consideration that would increase the industry's share of the program costs. Because the dairy inspection program benefits both the industry and the public, it may be appropriate for the industry to share more of the regulatory costs. In determining how the costs will be shared, the Department should use a structured approach that takes several variables into account. Mississippi's Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER) developed an approach that the Department might find useful.<sup>2</sup> PEER's approach consists of a decision model for establishing or increasing government fees, called the Theory of Fee Setting in Government, and guidance on implementing new fees. Figure 1 (see page 14) summarizes key concepts from PEER's approach. Similarly, in 2008, the U.S. Government Accountability Office issued a design guide for federal user fees that offers similar suggestions for setting fees. By taking a structured approach, the Department would consider several factors from these guidelines, including:

<sup>1</sup> In fiscal year 2009, Arizona's fees were temporarily increased and covered approximately 5 percent of the program's costs. The fees were also increased for fiscal year 2010.

<sup>2</sup> Joint Legislative Committee on Performance Evaluation and Expenditure Review: (2002). *State agency fees: FY2001 collections and potential new fee revenues*. Jackson, MI: Author.

Figure 1: Mississippi Joint Legislative Committee on PEER Structured Fee-Setting Process Developed for State Government

Determine whether fees or taxes should fund the service

Who benefits from the service: individuals, the public, or both?

- Fees should finance services that benefit individuals.
- Taxes should finance services that benefit the public.
- When both individuals and the public benefit from a service, financing can come from both fees and taxes.



Identify and analyze legal issues

- Are fees limited by statute? If so, is legislation required to change them?
- Should administrative rules be revised?



Identify the fees' purpose

- Should fees cover the cost of providing the service?
- Should fees be set to influence behavior?
- Should fees be set to encourage compliance with program regulation and goals?



Assess factors influencing fees amount

- What effect will fees have on those who pay them?
- What effect will fees have on annual revenue?
- What do similar states charge for the service?
- Will the public accept the fees' necessity?
- Is the Department subsidizing other government operations?



Determine appropriate methodology for setting fees

- Determine if there is a comprehensive cost accounting system.
- Seek to reduce costs as much as possible.
- Measure direct and indirect costs of the time staff spends in service activities.
- Determine economic impact on regulated entities.



Implement fees

- Obtain amended legislation and regulation as needed.
- Prepare those who pay fees for changes by providing advanced notice and explaining the purpose and reasoning of new fees.
- Train staff to answer questions regarding the new fees.



Periodically assess revenue, costs, and program outcomes to update fee amounts

Source: Auditor General staff analysis of fee-setting model included in the *State agency fees: FY 2001 collections and potential new fee revenues* report prepared by the Mississippi Joint Legislative Committee on PEER.

- **Funding mix**—The Department should consider what portion of total dairy inspection program costs the industry should pay based on program benefits to the industry. All program-related costs should be included, and the Department should ensure that it has an adequate process for tracking direct and indirect cost data for the dairy inspection program, including dairy product testing at the State Agricultural Laboratory. The Department should then consider how it could equitably allocate the industry portion of costs among different types of industry members based on the work required to regulate each member, such as farms, plants, and milk haulers/samplers.
- **Costs and efficiency of department operations**—The Department should evaluate the dairy inspection program’s efficiency to ensure that program costs are not higher than necessary to complete its work. In addition, the Department could consider whether to propose separate fees for activities such as follow-up inspections that department staff conduct to ensure that licensees correct problems discovered during inspections. As part of its review, the Department should consider whether it can reduce costs by reducing the amount of regulation it provides. However, because the Department enforces the pasteurized milk ordinance, which is the basic nationally accepted standard, it may not be able to significantly decrease its regulatory role without affecting the industry’s ability to market its products.
- **Impact on the industry**—The Department should consider how the fees would affect industry members. For example, some licensees may be less able than others to absorb or pass on additional regulatory costs because of the size or nature of their business. The Department should obtain stakeholders’ input in developing its proposal, and, if proposed fees are significantly higher than existing fees, it might recommend gradually phasing in fee increases.

The Department should obtain industry input regarding how increased fees would impact industry members.

Because dairy program fees and regulatory requirements are established in statute, the Department should develop a proposal for legislative consideration, including a recommended timetable for gradually implementing any significant changes.

## Recommendations:

- 1.1. The Department should propose fees to the Legislature that would increase the industry’s share of the dairy inspection program’s costs. In developing the proposal, the Department should:
  - a. Consider what portion of total program costs the industry should pay based on program benefits to the industry;



- b. Ensure that it has an adequate process for tracking direct and indirect cost data for the dairy inspection program, including dairy product testing at the State Agricultural Laboratory;
  - c. Develop equitable fees that address factors that influence cost, such as the work required to regulate different members of the dairy industry;
  - d. Evaluate the dairy inspection program's efficiency to ensure that program costs are not higher than necessary to complete its work, including identifying any possible reduction in regulation that can be achieved without affecting the industry's ability to market its products;
  - e. Consider the effect fee increases may have on different establishment types and obtain their input in proposing new fees. If proposed fees are higher than current fees, the Department might recommend gradually phasing in fee increases; and
  - f. Submit its proposal to the Legislature for consideration.
- 1.2. After receiving the Department's proposal, the Legislature should consider modifying statute to raise existing dairy inspection program fees, authorize the Department to create additional fees, and/or modify the level of regulation the Department provides.

# FINDING 2

---

## State should consider transferring meat and poultry inspections to USDA

The Legislature should consider federalizing the state meat and poultry inspection program, which the federal government will take over at no cost to the State. Both the U.S. Department of Agriculture (USDA) and the Department of Agriculture (Department) help ensure the safety of meat and poultry products in Arizona. The USDA performs food safety inspections on meat and poultry sold in interstate commerce, while the Department is part of a voluntary agreement with the USDA to inspect meat and poultry sold within the State in a program that must be at least equal to the federal program. If the State transferred all meat and poultry inspections to the USDA, as is the case in 23 states, it would save the State over \$400,000 in State General Fund monies. Although such a move would pose potential impacts to state-inspected establishments that could include transition costs, higher and more overtime fees, and less individualized service, these impacts should not be widespread. Alternatively, if the Legislature decides that the State should retain its program, it should consider raising fees to cover the state program's costs.

## USDA and Department help ensure safe meat and poultry in Arizona

Federal laws require all slaughter and processing establishments to be under federal or state inspection to help ensure the safety of meat and poultry products. State law allows establishments to be under either federal or state inspection, but establishments must be under federal inspection to sell meat and poultry products out of state. Although more Arizona establishments are under state inspection, they produce significantly less meat than federally inspected establishments, and almost all cattle slaughtered in Arizona are slaughtered in federally inspected establishments.

Federal laws require meat and poultry inspections—Meat and poultry are some of the foods most commonly linked to foodborne illness outbreaks, and federal laws require that all meat and poultry sold in commerce be inspected to help ensure their safety. Specifically, the federal meat and poultry inspection acts require inspection of slaughter and processing establishments to help ensure that animals are disease-free, facilities are clean and sanitary, and meat and poultry products are wholesome and properly labeled. Under these laws, the USDA is required to inspect meat and poultry sold in interstate or foreign commerce. The laws also allow states to inspect meat and poultry sold within state borders through federal-state cooperative agreements, but they require state programs to be “at least equal to” federal inspection (see textbox).

#### “At least equal to” provision

The “at least equal to” provision of the federal meat and poultry inspection acts requires that state inspection programs operate in a manner that is at least as effective as, but not necessarily the same as, the federal inspection program. States that fail to administer programs at least equal to the federal program can be “designated,” meaning the USDA will take over all meat and poultry inspections. The USDA regularly reviews state inspections programs to determine compliance with this provision.

Source: Auditor General staff analysis of the U.S. Department of Agriculture Food Safety Inspection Service directive number 5720.3. and the Federal Meat Inspection Act.

In addition, the laws exempt establishments that slaughter or process meat and poultry for an animal owner’s personal consumption from mandatory inspection. However, the federal laws still require these establishments—referred to as custom-exempt establishments—to follow certain regulations, such as handling livestock humanely and maintaining sanitary conditions, and inspectors periodically review them to determine compliance with applicable regulations. The USDA requires states with inspection programs to review custom-exempt establishments. Although these laws encourage states to have inspection programs by authorizing the USDA to cooperate with states and reimburse states up to 50 percent of their inspection program costs, federal law does not require state inspection programs. Rather, in states that do not have their own programs, the USDA inspects all commercial and custom-exempt establishments in the state.

USDA and Department inspect meat and poultry in Arizona—Both federal and state inspectors help ensure the safety of meat and poultry products in Arizona. State law establishes a state inspection program within the Department and requires all establishments that slaughter or process meat and poultry for commercial sale to be under either federal or state inspection. Although establishments that slaughter or process meat and poultry for interstate commerce must be under federal inspection, establishments that slaughter or process meat and poultry for sale within the State may choose either federal or state inspection. In Arizona, 27 establishments are under federal inspection, including a large slaughter and processing plant in Tolleson, while 34 establishments are under state inspection. Most of the state-inspected establishments are urban facilities that process meat and poultry products, but seven establishments, including all six

Establishments may choose either federal or state inspection to sell their products within the State.

of the state-inspected slaughterers, are in rural areas (see textbox, which profiles two state-inspected establishments). The Department also inspects 47 custom-exempt establishments located throughout the State. Although there are more state-inspected establishments, they produce significantly less meat than federally inspected establishments. For example, in 2008, federally inspected establishments slaughtered over 99 percent (535,900 out of 539,100 head) of all cattle slaughtered in Arizona.<sup>1</sup> According to department officials, the large federally inspected plant in Tolleson accounts for most of the cattle slaughter in the State.

Arizona has adopted federal meat and poultry regulations, thereby meeting the requirement that the state program be at least equal to the federal program, and federal and state inspectors essentially perform the same functions at their respective establishments. Federal and state regulations require commercial slaughter and processing establishments to develop and implement sanitary operating procedures and preventative controls designed to reduce the risk of contamination. Inspectors are required by federal regulations to visit these establishments each day they are in operation to ensure that operators are following their safety plans. For example, inspectors verify that slaughter equipment is properly sanitized or that ready-to-eat meat products are thoroughly cooked. Inspectors are also required to sample meat and poultry products to verify whether they are free of adulterants such as *E. coli* in raw beef products or *Listeria* in ready-to-eat products. Additionally, at slaughterhouses, inspectors also check for signs of disease in animals before and after slaughter and ensure animals are handled humanely. Both federal and state laws prohibit the slaughter of animals whose meat is sold for human consumption without an inspector at the facility, and inspectors are present at all times during slaughtering. Meat and poultry inspectors are required to inspect processing plants each day they are in operation, but may visit several processing plants in a given day. Unlike commercial establishments that are inspected daily, custom-exempt establishments are reviewed less frequently, typically about once or twice per year.

## Profile of two state-inspected Arizona establishments

**Rural slaughter/processing establishment**—This establishment, located in rural Arizona, has been state-inspected since 2007. Three days per month, this establishment slaughters and processes meat to sell commercially, and the rest of the month, it slaughters and processes meat for the livestock owners' personal consumption. About 80 percent of its commercial product is sold at local farmers markets in Phoenix and Tucson. With seven full- and part-time positions, this establishment had about \$250,000 in sales in 2008.

**Urban processing establishment**—This processing establishment, located in Phoenix, produces ready-to-eat products such as beef, chicken, and pork burritos and sells most of them to hotels, resorts, and restaurant chains. This establishment is under both state and federal inspection. It has been under state inspection since 1997, but obtained federal inspection in 2008 for some of its products that are sold out of state. It also has federal inspection for its Saturday operations. Operating 6 days per week and with nearly 40 employees, this establishment had about \$2 million in overall sales in 2008.

Source: Auditor General staff interviews with two state-inspected establishments.

<sup>1</sup> Conversely, 86 percent (2,500 out of 2,900 head) of hogs in 2007 and 90 percent (900 out of 1,000 head) of sheep and lamb in 2008 were slaughtered at state-inspected plants.

## State could transfer all meat and poultry inspections to USDA

The Legislature should consider transferring all meat and poultry inspection to the USDA. Almost half of U.S. states already rely solely on federal inspections. In addition, transferring all meat and poultry inspections to the USDA would save the State money and allow more establishments to sell products out of state. Further, transferring the function would not appear to compromise public health.

**Many states do not have their own meat and poultry inspection programs—**Twenty-three states do not have their own meat and poultry inspection programs but instead rely on federal inspection. As shown in Figure 2 (see page 21), these states include big meat-producing states such as Nebraska and Colorado, as well as small producers such as Nevada and New Mexico. Additionally, only 4 of the 13 western states have state meat and poultry inspection programs. According to a 2001 study performed by Nebraska's public policy center, some states have not adopted meat and poultry inspection programs because of the cost, lack of political support, or the lack of need for both a state and federal program.<sup>1</sup> Although other states have considered starting state meat and poultry inspection programs, Minnesota, North Dakota, and Missouri were the last states to do so, in 1999, 2000, and 2001, respectively. According to a North Dakota state official, North Dakota started its program partly because farmers and ranchers thought it would provide more opportunities for small meat producers, and one reason legislators continue to support the program is that they feel the state program is more responsive to the needs of the industry than the federal program. Conversely, New Mexico was the last state to eliminate its meat and poultry inspection program. It requested that the USDA assume responsibility for all meat and poultry inspections in 2007.

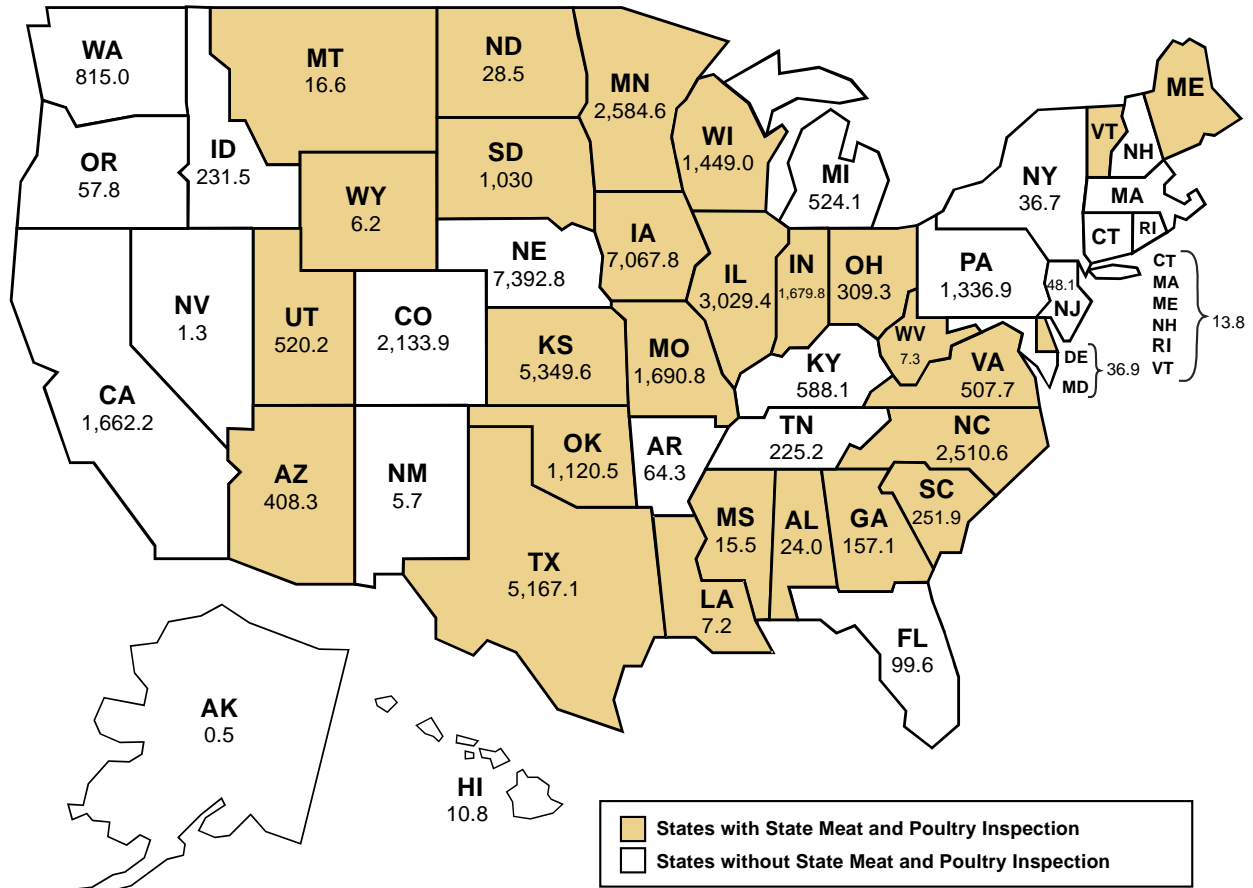
**Transferring meat and poultry inspections would have benefits—**Transferring all meat and poultry inspections to the USDA would also benefit the State and the industry. For the State, transferring inspections would save State General Fund monies because the USDA would take over all inspections, including inspections at custom-exempt establishments, at no cost to the State. Based on fiscal year 2009 program costs, transferring all meat and poultry inspections to the USDA would have saved the State approximately \$450,000 in State General Fund monies, although the State would also have lost approximately \$77,000 in indirect cost recovery associated with the federal funding for the state program. In fiscal year 2010, the savings would be approximately \$414,000 because the Department reduced the fiscal year 2010 budget for the meat and poultry program by over \$72,000.<sup>2</sup>

The USDA would take over all inspections at no cost to the State.

<sup>1</sup> University of Nebraska Public Policy Center. (2001). *Potential impacts of state meat and poultry inspection for the State of Nebraska*. Retrieved May 20, 2009, from <http://ppc.unl.edu/userfiles/file/Documents/projects/StateMeatInspection/PotentialImpacts.pdf>

<sup>2</sup> Laws 2009, 5th S.S., Ch. 1, §1, reduced the Department's State General Fund lump sum appropriation by \$696,100.

Figure 2: States with and without State Meat and Poultry Inspection Programs and Commercial Red Meat Production by State<sup>1</sup>  
 Calendar Year 2008  
 (In Millions of Pounds)



<sup>1</sup> Georgia and South Dakota have state meat inspection programs but rely on the USDA for poultry inspection.

Source: Auditor General staff analysis of states with and without state inspection programs provided by the USDA's Web site and USDA data on commercial red meat production by state. United States Department of Agriculture, National Agriculture Statistics Service. (2009). *Livestock slaughter 2008 summary*. Retrieved August 12, 2009, from <http://usda.mannlib.cornell.edu/usda/current/LiveSlauSu/LiveSlauSu-03-06-2009.pdf>

For the industry, federal inspections would allow current state-inspected establishments to ship meat products across state lines. The extent to which establishments would actually use this benefit is unclear: out of ten state-inspected establishments auditors interviewed, only one expressed a desire to sell its meat in interstate commerce. Still, federal inspection may provide more marketing options for state-inspected facilities even if establishments do not sell out of state. One USDA-inspected establishment auditors spoke with suggested that federal inspection may carry more weight than state inspection for retailers.

Transferring meat and poultry inspections should not compromise public health—Arizona has adopted federal meat and poultry regulations, and the state meat and poultry inspectors perform the same functions as federal inspectors; therefore, transferring the inspection responsibility should have little impact on public health. Auditors identified only one situation where the transfer would result in reduced inspections. Specifically, according to a USDA directive, federal inspectors typically conduct only one review per year at custom-exempt slaughter and processing establishments that comply with federal regulations, whereas Arizona statute requires at least two inspections per year at slaughter establishments.<sup>1</sup> However, because these establishments slaughter or process meat only for an animal owner’s personal consumption, and because the USDA directs federal inspectors to review noncompliant establishments more frequently, having only one inspection instead of two at compliant facilities would be unlikely to affect public health.

One concern department officials have raised about the potential change is that the USDA may pay little attention to the issue of illegal slaughter. Under state law, it is illegal to slaughter meat and poultry to be sold for human consumption without an inspector present. However, federal law also prohibits slaughtering meat or poultry to be sold for human consumption without an inspector present, and USDA compliance officers investigate reports of this type of activity.

Additionally, department officials believe transferring inspection to the USDA could compromise food safety because most meat and poultry recalls occur at federally inspected plants. However, this may be because, nationally, almost all meat is slaughtered under federal inspection. According to the USDA, between 93.7 percent and 99.1 percent of livestock slaughter in 2008 occurred in federally inspected plants, depending on the species.<sup>2</sup> Moreover, the USDA testified to Congress that over 98 percent of federally inspected plants met regulatory requirements in 2008.

Nationally, almost all meat is slaughtered under federal inspection.

## Transferring inspections would likely have minimal impacts to state-inspected establishments

Transferring meat and poultry inspections to the USDA could have some impacts to some state-inspected facilities. Although state law already incorporates federal facility requirements and, therefore, establishments should not incur major costs to comply with the federal requirements, minor costs such as changing product labels could be encountered. Further, some facilities that have overtime operations would pay a higher rate for overtime inspections. These cost impacts, however, should not be widespread. In addition, some department and industry representatives believe federal inspection will not offer the individualized attention and assistance provided

• 1 According to a department official, state inspectors perform at least one inspection per year at custom-exempt processors, similarly to the USDA. Statute does not establish an inspection frequency for custom-exempt processors.

2 Federally inspected livestock slaughter includes cattle, calves, hogs, and sheep.

by the state inspection program, but the USDA has taken several steps to improve its outreach to smaller establishments. Nonetheless, it is possible that some plants would not make the transition to federal inspection, and some may close. Specifically:

- **Some establishments may incur minor transition costs**—According to a USDA official, the transition from state to federal inspection usually requires minimal changes that could entail some costs. For example, facilities may need to change their product labels or may need to revise their food safety procedures to include more product sampling. He also stated that some establishments that have transitioned from state to federal inspection, especially older establishments, have had to upgrade their facilities to meet requirements. According to a department official, close to half of Arizona’s state-inspected noncustom-exempt establishments are at least 15 years old. However, because Arizona has adopted the federal building requirements—such as keeping establishments in good repair, using appropriate wall and floor materials to help ensure a sanitary environment, and providing office space for inspectors—in its administrative code, state inspectors should already be enforcing these requirements.

Still, some establishments could incur facility modification costs. Three establishments auditors spoke with believe the USDA will require costly modifications before granting federal inspection, and department officials believe this may be true of older rural facilities. Although it is difficult to know what modifications the USDA would require, they might not be as extensive as some believe. For example, the USDA’s last on-site review of Arizona’s meat and poultry inspection program did not result in any findings related to building requirements. The review was conducted in July 2009, and the USDA inspected 16 state-inspected meat and poultry plants, including three rural plants and seven plants that were at least 15 years old. Further, according to the USDA official, most plants do not find transition costs to be prohibitive. An owner of an Arizona establishment, an urban processor that recently changed to federal inspection, also stated that although there were costs to make the transition, he did not find the costs to be prohibitive.

- **Some establishments may pay more overtime fees, but use of overtime not widespread**—The USDA charges slaughter and processing plants for inspection costs for more than 8 hours per day or more than 40 hours in any workweek. The hourly overtime rate for the USDA was \$58.93 in fiscal year 2008.<sup>1</sup> In contrast, Arizona only charges overtime fees to slaughtering plants (processing plants are exempt) and has a much lower overtime rate—\$19.40 per hour as of December 2009. However, using overtime has not been

Arizona has adopted federal building requirements for meat and poultry establishments.

<sup>1</sup> In its *Fiscal Year 2011 Budget Summary and Annual Performance Plan*, the USDA proposed adding two new meat and poultry inspection user fees. One proposed user fee would be collected from plants that have sample failures or require additional inspection activities because of a pattern of regulatory noncompliance. The other proposed user fee would be for a facility’s application and annual renewal activities in order to cover the increased costs above and beyond basic inspection services provided to meat and poultry establishments. The USDA estimated collections from the new fees would total \$4 million and \$8.6 million nation-wide, respectively. The USDA planned to submit legislative proposals that would permit the new fees.



widespread at state-inspected slaughtering plants. In fiscal years 2008 and 2009, the Department charged only three establishments for overtime. The total fees for the 2 years were just over \$600, representing approximately 36 hours of overtime at the Department's rate of \$17.05 per hour for those years. Auditors were unable to estimate the extent to which state-inspected processing plants work overtime because the Department does not track this information, although several plants appear to have overtime hours based on a review of plants' operating schedules. Thus, it is unknown how many Arizona processors would work overtime under federal inspection and, therefore, have to pay the federal overtime rate.

- **Some establishments are concerned they may not receive the same degree of individualized service, but the USDA has taken steps to improve its outreach—** Some owners of state-inspected meat and poultry plants who auditors spoke with said that state meat inspectors might provide owners with more opportunity to receive individualized attention, education, and assistance to navigate regulation than federal inspectors do.<sup>1</sup> Auditors heard from some state-inspected establishment owners that state inspectors were responsive to their needs and who thought that federal inspectors might be less helpful. Two owners who had experience with both state and federal inspection said that state inspectors were more helpful with some aspects of regulation, such as approving new labels. Additionally, one owner of a state-inspected plant speculated that USDA inspectors might spend more time reviewing paperwork and be less concerned than state inspectors with ensuring that a wholesome product is made. However, another owner of a rural plant that has been under both state and federal inspection told auditors that USDA inspectors are respectful, knowledgeable about meat and poultry regulations, and provided a better quality of inspection.

The USDA has heard similar complaints from small and very small establishments and has taken several steps to improve its outreach to these establishments. Specifically, in 2008, the USDA started a program whose primary purpose is to provide small and very small establishments under both state and federal inspection with assistance in complying with regulations. This program publishes newsletters, conducts webinars, and provides guidance documents. Additionally, the USDA has an online question-and-answer knowledge base called "Ask Karen" that contains information pertinent to the safe preparation of meat, poultry, and egg products. One USDA-inspected meat processor in Arizona told auditors that it takes "Ask Karen" about a day to respond to his questions. Finally, in December 2009, the USDA launched a small plant help-desk to provide regulatory assistance for operators of small and very small meat and poultry plants.

In 2008, the USDA started a program to help small establishments comply with regulations.

1 Throughout the course of the audit, auditors interviewed representatives from ten state-inspected and four federally inspected slaughter and/or processing establishments. The ten state-inspected establishments included seven urban and three rural facilities, and included four facilities a department official identified as being over 25 years old. During the interviews, auditors discussed the state inspection program and the possibility of transferring the program to the USDA or raising user fees.

The Department believes that some state-inspected meat and poultry establishments, especially those located in rural areas, would have difficulty transitioning to federal inspection. It is possible that some of Arizona's state-inspected plants would not apply for federal inspection and do only custom-exempt work or close down. When New Mexico transitioned to federal inspection in 2007, 26 of the 31 state-inspected plants applied for and were granted federal inspection, according to a USDA official.<sup>1</sup> Of the plants that received federal inspection, most of them were in rural areas. New Mexico officials told auditors that the establishments that did not make the transition did not do so because of financial considerations and because the owners did not want to work under federal inspection.

The Department's meat and poultry program budget is limiting the amount of inspection it can provide and is causing some plants to seek federal inspection. Specifically, department officials told auditors that, because of budget constraints, as of October 2009, the Department has had to deny requests from 27 establishments that had requested state inspection or additional inspection days in the previous 5 years. One establishment owner who had been denied state inspection in the past told auditors that he was applying for federal inspection at a new rural facility because he did not think the State could offer him inspection and because he planned to sell his product in interstate commerce. Additionally, in October 2009, the Department stopped providing inspection on Saturdays because of budget constraints. As of September 2009, eight state-inspected processing plants had been scheduled to receive Saturday inspection. One of these plants has since obtained federal inspection for Saturdays.

The Department has had to deny inspection requests because of budget constraints.

## Alternatively, State could increase fees to cover costs

If the Legislature decides to retain the state meat and poultry inspection program, the meat and poultry industry should pay for the regulatory costs because, without a state meat and poultry inspection program, the federal government would conduct the safety inspections at no cost to the State. Having both state and federal meat and poultry inspection programs in Arizona primarily benefits the industry, and not the State, by allowing industry members to choose between two regulators. As discussed in Finding 1 (see pages 7 through 16), the parties that benefit from a government program should pay the costs. If the state inspection program is retained, the Department should follow an orderly process, such as the one suggested in Finding 1, to develop a proposal for fees that would cover the state inspection program's costs. This process should include assessing the program's efficiency to minimize costs where possible; ensuring it has a way to accurately track program costs, including testing performed at the State Agricultural Laboratory; developing an equitable method to determine fees for different types of industry members based on the work required to regulate each type such as meat and poultry slaughterers or processors; considering the effect fee increases may have on

<sup>1</sup> Of the 26 plants that were granted federal inspection, the USDA official noted that five of them later decided to operate as custom-exempt.

different establishment types; obtaining stakeholders' input in proposing new fees; and, lastly, proposing fee changes for the Legislature to consider. After receiving the Department's proposal, the Legislature should consider modifying statute to raise existing fees or authorize the Department to create additional fees. According to department officials, industry members are generally not opposed to paying higher fees as long the monies are used for the program and not transferred to the State General Fund.

However, because there are only 34 state-inspected establishments (excluding custom-exempt establishments), licensing fees would need to increase significantly to cover the meat and poultry inspection program costs. Statute requires meat and poultry establishments to pay between \$5 and \$80 in licensing fees, although in fiscal years 2009 and 2010 fees were between \$35 and \$150 as authorized by legislation.<sup>1</sup> Similarly, the three other western states—Montana, Utah, and Wyoming—that have state meat and poultry inspection programs also charge relatively low fees. Licensing fees in these states range from \$25 to \$150. Based on the program's fiscal year 2009 State General Fund appropriation, the 34 state-inspected establishments would potentially need to pay more than \$10,000 on average to cover the program's costs, which could place a burden on the establishments.<sup>2</sup> Because fees would need to increase significantly to cover costs, the Department might recommend phasing in the changes. Still, increasing user fees to fully fund the meat and poultry inspection program may result in some state-inspected establishments changing to federal inspection to avoid paying higher fees.

The Department's options for reducing program costs to minimize the impact on the industry are limited. Specifically, state cooperative meat and poultry program inspectors must perform inspection activities that are at least equal to those adopted by the USDA, including providing adequate inspection coverage on days establishments produce products. Therefore, the State could not reduce the frequency of its meat and poultry inspections for cost savings without jeopardizing its "at least equal to" status. States that fail to administer programs at least equal to the federal program can be designated, meaning the USDA will take over all meat and poultry inspections.

## Recommendations:

- 2.1. The Legislature should consider eliminating the state meat and poultry inspection program and transferring inspection responsibilities to the USDA.
- 2.2. If the Legislature decides to retain the state meat and poultry inspection program, the Department should propose new fees to the Legislature to fund

<sup>1</sup> Laws 2008, Ch. 291, §12, and Laws 2009, 4th S.S., Ch. 3, §23, authorized the Department to increase fees for fiscal years 2009 and 2010. On September 1, 2008, the Department raised its licensing fees for meat and poultry establishments from between \$5 and \$80 to between \$35 and \$150.

<sup>2</sup> The exact amount required would depend on how costs were allocated between commercial slaughter, commercial processing, and custom-exempt establishments, each of which requires a different level of regulation.

Fees to cover program costs could place a burden on establishments.

the cost of the program. In developing the fees, the Department should do the following:

- a. Develop equitable fees that address different types of industry members based on the work required to regulate each member such as meat and poultry slaughterers and processors;
- b. Ensure that it has an adequate process for tracking cost data for the meat and poultry inspection program, including meat and poultry product testing at the State Agricultural Lab;
- c. Evaluate the state meat and poultry inspection program's efficiency to ensure that program costs are not higher than is necessary to complete the work; and
- d. Consider the effect fee increases may have on different establishment types and obtain their input in proposing new fees. Because proposed fees would be significantly higher than current fees, the Department might recommend gradually increasing fees.

2.3. After receiving the Department's proposal, the Legislature should consider modifying statute to raise existing fees or authorize the Department to create additional fees.



# FINDING 3

---

## Department helps to ensure egg safety and quality

The Department of Agriculture's (Department) egg inspection program appears to adequately help ensure egg safety and quality in Arizona. Eggs are one of the foods most commonly linked to foodborne illness in the U.S. The Department's egg inspection program, which the industry funds, helps maintain safe and high-quality eggs by enforcing safety and quality regulations that are in line with model egg regulations. The U.S. Department of Agriculture (USDA) and the U.S. Food and Drug Administration (FDA) also regulate egg safety and quality to help reduce foodborne illness from eggs.

### Eggs commonly linked to foodborne illness

Eggs are one of the foods most commonly linked to foodborne illness outbreaks. In 2008, the Center for Science in the Public Interest (Center) reported that, nation-wide, eggs were linked to 72 outbreaks and 1,747 illnesses between 1990 and 2006, and egg dishes such as egg salad and French toast were linked to an additional 279 outbreaks and 9,396 illnesses.<sup>1</sup> The Center also reported that the number of egg-related outbreaks has declined in recent years. The primary contaminant in egg-related illnesses is *Salmonella Enteritidis* (see textbox). According to experts, the industry and consumers are responsible for reducing the number of foodborne outbreaks associated with eggs. Specifically, industry can reduce the contamination risk by adopting measures to prevent *Salmonella Enteritidis* from infecting laying hens during production and by properly washing, handling, and refrigerating eggs during processing, transportation,

***Salmonella Enteritidis*** is a bacterium that can cause illness in humans. Shell eggs are a primary source of human infections. Shell eggs can be contaminated through unsanitary environmental conditions after being laid or through ovarian tissue in infected hens before the shell is formed.

Source: Auditor General staff analysis of information from the USDA, the FDA, the National Egg Quality School, and the United Nation's Food and Agriculture Organization.

<sup>1</sup> The Center for Science in the Public Interest is a nonprofit organization that works to improve the public's health through its work on nutrition and food safety issues. Center for Science in the Public Interest. (2008). *Outbreak alert 2008: Closing the gaps in our federal food-safety net*. Retrieved September 21, 2009, from [http://www.cspinet.org/new/pdf/outbreak\\_alert\\_2008\\_report\\_final.pdf](http://www.cspinet.org/new/pdf/outbreak_alert_2008_report_final.pdf)

and storage. Consumers also can reduce the risk by storing eggs at the proper temperature and cooking them thoroughly.

## Department inspects and grades eggs

The Department maintains an egg inspection program to help ensure the safety and quality of eggs produced and sold in Arizona. Program staff inspect eggs and egg products to enforce compliance with state laws and regulations, and perform grading services on the USDA's behalf at the State's only commercial egg producer. The egg inspection program is funded entirely by industry fees. As of December 2009, the program had eight inspectors and, as of February 2010, a fiscal year 2010 budget of \$866,700. Although the USDA licenses most of the inspectors to provide the grading services, three inspectors perform state inspections while five inspectors provide USDA grading services.<sup>1</sup> Specifically:

- **State inspection**—Program staff inspect eggs and egg products at laying facilities, wholesalers, and retail stores to ensure compliance with state laws and regulations that address safety and quality. These laws and regulations are in line with model egg regulations and include refrigeration, expiration dating, grading, and sanitation requirements (see textbox).<sup>2</sup>

Industry fees pay for the egg inspection program.

### Egg laws and regulations enforced by program inspectors

- **Refrigeration**—According to food safety experts, proper storage temperatures can inhibit bacterial growth in eggs. State law requires eggs to be stored at a temperature no higher than 45°F and egg products at a temperature no higher than 0°F.
- **Expiration dating**—It is illegal to sell eggs marked grade AA or A past their expiration date in Arizona. According to food safety experts, consuming eggs soon after they are laid can help reduce opportunities for bacteria to grow in contaminated eggs. Arizona requires all eggs sold in the State to have an expiration date of 24 days after being candled, which is one of the shortest expiration periods in the nation.
- **Egg quality**—The State has adopted federal standards, grades, and weight classes that set quality requirements for grade AA, A, and B eggs. These quality standards also entail safety aspects, such as ensuring that eggs are clean from bacteria and do not have excessive cracks that could allow bacteria to enter.
- **Sanitation**—In 2009, Arizona amended its administrative rules to require all egg producers in the State to meet the USDA's facility and sanitary operation requirements. These requirements help ensure eggs are properly washed and sanitized during egg grading and packing.

Source: Auditor General staff analysis of Arizona Revised Statutes §§3-701, 3-715, and 3-727; Arizona Administrative Code R3-2-901 through 903 and 906 through 908; World Health Organization Food and Agriculture Organization of the United Nations. (2002). *Risk assessments of Salmonella in eggs and broiler chicken: Interpretative summary* (Microbiological Risk Assessment Series 1). Rome, Italy: Author.

<sup>1</sup> One state egg inspector is a trainee and is not yet licensed by the USDA.

<sup>2</sup> The model egg regulations are written by the National Egg Regulatory Officials, whose membership consists of state agriculture department officials and whose purpose is to promote uniform standards for quality, safety, labeling, and handling of shell eggs and egg products that ensure a safe, fresh, and truthfully marketed egg supply.

The Department licenses companies that sell eggs wholesale in the State and charges them a \$25 annual licensing fee and a quarterly assessment fee based on the number of eggs or weight of egg products sold to retailers. The Department issued 82 licenses during fiscal year 2009.

During the inspections, inspectors verify storage temperatures and check expiration dates for both eggs and egg products, and visually examine, or candle, a sample of eggs to verify the egg grade (see Photo 1). Statute requires inspectors to retain, or prohibit from being sold, all eggs and egg products that do not comply with state requirements. Although inspection frequencies are not specified in statute or rule, the Department has set goals to inspect large wholesalers (including the State's only commercial egg producer) once per month, small wholesalers once per quarter, and retail stores from every year to once every 3 years depending on how many eggs they sell. According to department data, state inspectors performed 396 inspections at wholesalers (about 90 percent of the Department's goal for wholesale egg inspections) and 359 inspections at retail stores in fiscal year 2009.

Photo 1: Egg Candling



Source: Used with permission of Hickman Family Farms.

- **USDA grading services**—The USDA maintains a cooperative agreement with the Department to provide grading services at industry members' request, who pay an hourly rate to cover the costs of these services and a volume charge based on the number of graded cases of eggs. The Department collects the volume charges from industry members and passes them on to the USDA. In addition to grading eggs, state inspectors monitor plant sanitation, processing and storage temperatures, and handling procedures. The Department provides daily grading services at three egg laying facilities. Only eggs graded under a USDA grader's supervision have the USDA grade shield.

Although this audit did not focus on program effectiveness, information obtained during the audit suggests that state laws department staff enforce adequately protect the public from unsafe eggs. Specifically, state laws are in line with model egg regulations and, in the case of expiration dates, exceed other states' practices. In addition, according to department data, the Department achieved about 90 percent of its goal for wholesale egg inspections in fiscal year 2009 and retained eggs that did not meet standards to prevent them from sale to the public.



## Federal regulations also address egg safety

The federal government also plays an egg quality and safety role through regulations and participation in a federal-state-industry cooperative program. Under the 1970 Egg Products Inspection Act (Act), the USDA provides continuous inspection of egg products, such as liquid or frozen eggs. Similarly to regulating meat slaughtering establishments, the Act requires mandatory continuous inspection by USDA inspectors throughout the production of egg products. The Act also helps ensure safety by requiring these products to be pasteurized. Arizona has one USDA-inspected egg products plant. In addition, the USDA administers the National Poultry Improvement Plan, a cooperative federal-state-industry program that establishes standards to evaluate poultry breeding stock and hatchery products to limit egg-transmitted and hatchery-disseminated diseases such as *Salmonella Enteritidis*. The Department and the State's only commercial egg producer both participate in this program.

The FDA is also responsible for egg safety and is working to solve the problem of *Salmonella Enteritidis* in eggs. In 2009, the FDA issued a rule that requires egg producers to implement measures to prevent contamination and potential illness from *Salmonella Enteritidis*. Specifically, beginning July 9, 2010, egg producers will be required to have and implement a prevention plan that addresses farm and henhouse security, rodent control, and *Salmonella Enteritidis* testing. This rule allows for state and/or local officials to help implement it by carrying out inspections and using prescribed administrative remedies, and the FDA plans to provide further guidance to states and localities on enforcing this rule. According to a company official from Arizona's only commercial egg producer, he does not anticipate that his company will have to change many of its practices to come into compliance with the new rule.

This finding contains no recommendations.

# FINDING 4

---

## Department can further promote produce safety

Although government and the agriculture industry have increased efforts to encourage produce safety, the Department of Agriculture (Department) can further promote produce safety in Arizona. Produce safety concerns have heightened in the U.S. as significant human illness outbreaks have affected thousands of people. The industry and government have taken steps to address the issue of produce safety by encouraging food safety audits, and providing guidelines for safe growing and handling practices, but participation is voluntary, and neither the State nor the federal government have regulatory requirements for food safety that producers, processors, and shippers must follow. The Department's emphasis has traditionally been on quality standards (such as size, color, and shape) rather than produce safety. Although the Department has shifted some of its focus toward produce safety, auditors identified an additional step the Department could take. Specifically, it could target some of its existing agricultural federal grant dollars to help companies prepare for and receive food safety audits.

### Produce safety is a national concern

An increase in the number of foodborne illness outbreaks associated with fresh fruits and vegetables has raised national concern for produce safety in recent years. For example, since 2006 there have been large national outbreaks tied to spinach, peppers, and peanuts (see textbox, page 34). The 2008 outbreak of *Salmonella* in peppers was one of the largest foodborne illness outbreaks reported in the last 10 years, affecting over 1,400 people in 43 states, the District of Columbia, and Canada.

Produce is particularly susceptible to contamination because it is grown in a natural environment. Further, risk of illness from produce consumption may be higher because produce is often consumed raw, unlike animal products, which are generally cooked or pasteurized to kill bacteria. According to the Center for Science in the Public Interest, produce was linked to 35,060 foodborne illnesses between 1990 and 2006, which is 21 percent of illnesses linked to a specific food source during that time.<sup>1</sup>

Produce is susceptible to contamination because it is grown in a natural environment.

<sup>1</sup> Center for Science in the Public Interest. (2008). *Outbreak alert 2008: Closing the gaps in our federal food-safety net*. Retrieved September 21, 2009, from [http://www.cspinet.org/new/pdf/outbreak\\_alert\\_2008\\_report\\_final.pdf](http://www.cspinet.org/new/pdf/outbreak_alert_2008_report_final.pdf)

## Major foodborne illness outbreaks from produce

**Spinach**—In 2006, 205 illnesses and 3 deaths were associated with fresh bagged spinach from California that was contaminated with *E. coli* O157:H7.

**Jalapeno and serrano peppers**—In 2008, over 1,400 illnesses from *Salmonella*-contaminated peppers produced in Mexico were reported in what was first thought to be a tomato-related outbreak.

**Peanuts**—In 2008 and 2009, *Salmonella*-contaminated peanuts from Georgia caused over 500 illnesses and may have contributed to as many as 9 deaths.

Source: Auditor General staff summary of information from the CDC, the FDA, and Trust for America's Health.

Further, the U.S. Centers for Disease Control and Prevention (CDC) reported that the most common foods linked to foodborne illness outbreaks reported during 2006, after poultry, were leafy vegetables and fruits/nuts.<sup>1</sup>

Although the federal government does not require produce growers to implement preventative food safety measures, federal agencies have taken steps to address produce safety concerns. For example:

- **U.S. Food and Drug Administration (FDA)**—The FDA has issued guidance for safely growing and handling produce to reduce microbial contamination. In 1998, it published its *Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables*, and in 2009, it issued commodity-specific draft food safety guidance for tomatoes, melons, and leafy green products, the three types of produce more often associated with foodborne illness. The guidance suggests minimizing potential microbial contamination in various ways such as ensuring that the quality of water used for produce's final rinse is consistent with EPA requirements for drinking water and minimizing opportunities for field contamination by providing accessible toilets and hand-washing facilities for workers. However, the FDA typically does not inspect farms and does not enforce compliance with recommended practices in these guidance documents.
- **U.S. Department of Agriculture (USDA)**—In 1999, the USDA's Agricultural Marketing Service introduced a program for voluntary produce safety audits known as the Good Agricultural Practices and Good Handling Practices (GAP/GHP) Audit Verification Program. These audits verify adherence to the recommendations made in the FDA's *Guide to Minimize Microbial Food Safety*

The FDA has issued commodity-specific guidance for tomatoes, melons, and leafy greens.

<sup>1</sup> Surveillance for foodborne disease outbreaks—United States, 2006. (2009, June 12). *Morbidity and Mortality Weekly Report*, 58(22), 609-636. Retrieved September 30, 2009, from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5822a1.htm>

*Hazards for Fresh Fruits and Vegetables.* The GAP section of the audit examines farm practices such as examining the farm sewage system for leaks to prevent produce contamination. The GHP section examines handling practices at packing facilities, storage facilities, and wholesale distribution centers. For example, an operation should prohibit workers with infectious diseases from handling fresh produce. The USDA licenses state inspectors to conduct the audits, which are valid for 1 year. The companies that request the audits pay a federally established rate of \$92 per hour, including inspectors' travel time, for both the initial audit and any follow-up visits. According to a department inspector who conducts these audits, the audits usually last between 2 and 7 hours, with between 1 and 9 hours of travel time.

In the absence of federal regulations, the food and agriculture industry has also taken steps to ensure produce safety. For example:

- **Third-party audits**—Many retailers require produce suppliers to follow specific quality and safety standards and to undergo third-party audits to ensure compliance. These standards are often different, and suppliers who sell to multiple retailers may need to undergo multiple audits under different standards. For example, some standards require fields to be set a certain distance from concentrated animal feeding operations, a potential source of contamination, while others do not. In addition, although these audits help ensure safe practices, they are required only by the industry and are not monitored or required by government.

In addition, industry members and state agencies have worked together to help ensure produce safety. For example:

- **Statutes and marketing agreements**—Members of the agriculture industry in some states, including Arizona, have worked with their respective states to pass statutes or develop marketing agreements for specific commodities. For example, in Florida, the tomato industry worked with the State to develop a mandatory tomato safety program. Florida statute requires the Florida Department of Agriculture and Consumer Services to conduct tomato safety inspections at farms, greenhouses, and packing houses to ensure compliance with safety practices in Florida's tomato best practices manual. Industry fees pay for the inspection costs as well as research grants to provide scientific information on tomatoes. In California and Arizona, the leafy greens industry has worked with state agencies to implement marketing agreements for leafy green products. Although participation in these agreements is voluntary, those who agree to participate must follow specific safety standards and undergo annual audits to ensure compliance (see textbox, page 36). As of November 2009, 35 Arizona companies have signed the agreement, representing 96 percent of leafy greens grown in Arizona according to the marketing agreement Web site. The USDA is considering an industry proposal to create a national leafy greens

## Arizona Leafy Green Products Shipper Marketing Agreement

In September 2007, the Department and the State's leafy green products industry created the Arizona Leafy Green Products Shipper Marketing Agreement. Arizona's agreement was patterned after a similar agreement in California following the 2006 *E. coli* outbreak in bagged spinach from California. Participation in the agreement is voluntary. However, shippers who agree to participate and their suppliers must follow mandatory safety standards for growing and handling leafy green products and are subject to annual audits that check compliance with the standards. The standards cover worker hygiene, water quality, field use, and animal control. For example:

- Untreated manure must be kept at a specific distance from water wells;
- Land adjacent to fields must be free from septic leaks or other risks; and
- There must be no evidence of animal fecal material in the fields.

The agreement is funded by an assessment on products shipped by members and is run by a committee of industry members. This committee contracts with California's Department of Food and Agriculture, the agency that conducts the audits for California's agreement, to perform the Arizona audits. The committee also contracts with the Arizona Department of Agriculture to provide administrative and legal services such as collecting the assessment on products shipped by members and coordinating public outreach sessions. As of November 2009, 35 companies had signed the Arizona agreement. Collectively, these companies ship and sell more than 85 percent of leafy green products nationally and in Canada from November through March.

marketing agreement and held hearings for public comment in September and October 2009. The USDA accepted comment until January 27, 2010.

Despite these efforts, some industry members have called for federal produce safety regulations to create uniform national standards. Some industry representatives have published documents and presented testimonials to the USDA and FDA concerning the need for national produce standards. The Food Safety Enhancement Act of 2009 (Act) was introduced in Congress and, if it passes, will require the FDA to establish science-based food safety standards for growing, harvesting, packing, sorting, transporting, and holding fruits and vegetables that the FDA determines are necessary to reduce health risks. The Act would require the FDA to update its guidance for minimizing microbial food safety hazards for fresh fruits and vegetables. As of January 6, 2010, the bill was with the U.S. Senate. In addition, in 2009, the FDA reported that within the next 2 years it expects to finalize its commodity-specific food safety guidance for tomatoes, melons, and leafy greens and require compliance with them.

## Department can do more to promote produce safety

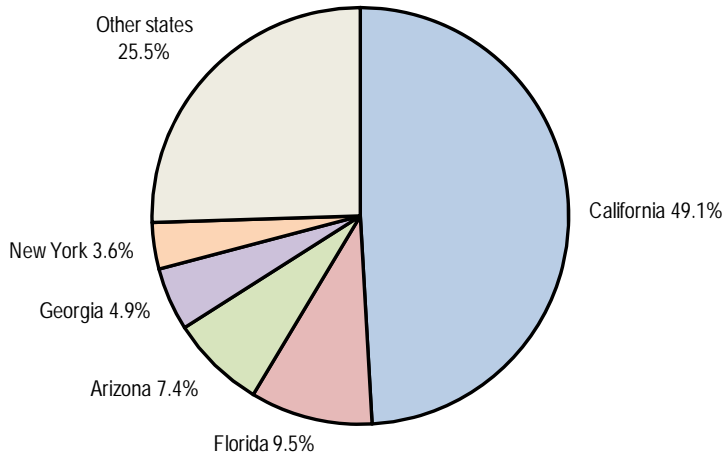
The Department has shifted some of its focus from produce quality to produce safety but can take an additional step to promote produce safety audits. In 2009, the

Department began retraining its produce quality inspectors to perform produce safety audits and has begun providing industry with information about the GAP/GHP audit program. In addition to these efforts, the Department should initiate projects or encourage applicants for federal grant monies the Department awards to submit proposals for projects that help small companies overcome obstacles to receiving food safety audits.

### Arizona produces significant amounts of fruits and vegetables—

Arizona grows a significant amount of produce, especially leafy greens. In 2008, Arizona ranked third in the nation for the production of fresh market vegetables and melons, producing 7.4 percent of the nation's total production, compared to 9.5 percent by Florida and 49.1 percent by California (see Figure 3). In addition, Arizona is the second largest producer of lettuce in the nation, producing about 22 percent of the national total, compared to California, which produces the other 78 percent.

**Figure 3:** Percentage of U.S. Fresh Market Vegetable and Melon Production by State for 24 Selected Crops<sup>1</sup>  
Calendar Year 2008 Estimates



<sup>1</sup> The 24 selected crops are artichokes, asparagus, snap beans, broccoli, cabbage, cantaloupes, carrots, cauliflower, celery, sweet corn, cucumbers, garlic, honeydews, lettuce (head, leaf, and romaine), onions, bell peppers, chili peppers, pumpkins, spinach, squash, tomatoes, and watermelons. The three largest crops, in terms of production, are onions, head lettuce, and watermelons, which combined account for 37 percent of the total production.

Source: Auditor General staff analysis of USDA data on fresh market vegetable and melon production. United States Department of Agriculture, National Agricultural Statistics Service. (2009). *Vegetables 2008 summary*. Retrieved October 21, 2009, from <http://usda.mannlib.cornell.edu/usda/current/VegeSumm/VegeSumm-01-28-2009.pdf>

Department has shifted some focus to produce safety—Given the importance of produce to the State’s agriculture industry, the Department has taken some steps to shift its focus from produce quality to produce safety. Since 1929, the Department has enforced state product quality standards for each commodity grown or marketed in Arizona through its Citrus, Fruit and Vegetable Standardization Program. The program also manages the federal-state inspection program that provides federal inspection services, such as the GAP/GHP audits, and enforces U.S. import requirements at the international border between Arizona and Mexico. Historically, the standardization program has licensed produce packers, dealers, and shippers and has inspected produce to verify quality standards such as color, shape, decay, size, maturity, and labeling. Although quality standards are important, industry members and department officials have said that the program has become somewhat obsolete as the industry’s quality standards for some commodities now exceed state standards. Consequently, Arizona’s produce industry has worked with the Department to shift its focus from quality to promoting food safety standards. Specifically:

- **Discontinuing quality inspections**—The Citrus, Fruit and Vegetable Advisory Council voted to discontinue standardization program inspections to enforce state quality standards beginning in August 2009. The program will continue to license packers, dealers, and shippers and enforce labeling requirements.
- **Training food safety auditors**—Using monies from produce industry assessments, the Department has begun training more of its federal-state inspectors and all of the former standardization inspectors to perform the food safety focused audits such as GAP/GHP audits as well as audits for the Arizona leafy greens marketing agreement. According to the Department, in 2009, only two of the Department’s federal-state inspectors were certified by the USDA to perform GAP/GHP audits. However, with the shift from standardization to safety, an additional nine inspectors are in the process of becoming certified by the USDA to perform GAP/GHP audits, and four inspectors are being trained to perform the leafy greens audits. The industry pays for both GAP/GHP and leafy greens audits.
- **Promoting GAP/GHP audits**—In conjunction with training additional inspectors to perform GAP/GHP audits, the Department has begun promoting these audits among packers, dealers, and shippers licensed by the Department. According to the Department, the GAP/GHP inspectors have been distributing flyers to inform licensees about the availability and benefits of safety-related activities such as GAP/GHP certification. Even so, as of November 2009, only 11 Arizona companies received and passed GAP/GHP audits. By comparison, the USDA’s National Agricultural Statistics Service estimates that there are 241 commercial vegetable and melon farms in Arizona, and there were 525 licensed produce dealers, packers, and shippers in the State in fiscal year 2009.

Additional department inspectors are becoming certified to perform GAP/GHP audits.

Department could further promote produce safety audits—In addition to the steps the Department has already taken related to produce safety, the Department could use some of its federal grant monies such as the Specialty Crop Block Grant to assist companies that may need assistance preparing for GAP/GHP audits. Since 2008, the USDA's Agricultural Marketing Service has offered all 50 states grant monies for enhancing the competitiveness of specialty crops, including fruits, vegetables, tree nuts, and other nongrain crops. Grant monies can be used for projects such as specialty crop research, increasing nutrition knowledge about specialty crops, assisting entities in developing Good Agricultural Practices, and in cost-sharing arrangements for safety audits. In fiscal year 2009, the Department received over \$1.1 million of this Specialty Crop Block Grant money, which it awarded to 18 agricultural research projects designed to enhance the competitiveness of Arizona specialty crops.

Although the Department awards Specialty Crop Block Grant monies to projects based on priorities that include food safety, few funded projects are focused directly on produce safety. The Department receives applications for these monies from universities, industry associations, and other entities. It makes awards based on eight priorities suggested by stakeholders, including food safety, research, education, and public outreach. The Department awarded monies to 18 projects in fiscal year 2009. However, according to a department official, few applications have been received that focus directly on produce safety. For example, in fiscal year 2009, only 3 of the 38 applications the Department received focused directly on food safety, and none of these 3 focused on food safety audits. Of the 3 food safety-focused applications, the Department funded one project that involved educating youth in Yuma County—where a high volume of leafy greens are produced—about the importance of food safety and their role in keeping food safe by staying out of fields and off of canal banks. The other two were disqualified, one because it did not meet application requirements and the other because of duplicate funding. The Department also funded seven additional projects that focused on pesticide or fertilizer use, which could also affect food safety by helping to reduce chemical residue on foods.

The Department could take a more proactive approach by initiating produce safety projects or encouraging applicants to submit proposals focused on projects that help companies overcome obstacles to food safety audits. Department officials agreed that targeting monies toward produce safety audits could benefit specialty crops in Arizona. These types of projects are considered eligible projects by the grant specifications and have also been performed in some other states. For example:

- **Consultation**—Grant monies could be used for projects that provide consultation or training that prepares growers and handlers for produce safety audits. Small companies that cannot afford to hire an in-house produce safety

The Department could use federal grant monies to encourage food safety audits.



manager may have difficulty meeting audit requirements such as having standard operating procedures that describes how the company will help keep food safe. Some states have used federal grant monies to provide audit preparation assistance to these companies. For example, in fiscal year 2009, the Texas Department of Agriculture used Specialty Crop Block Grant monies to fund a vegetable specialist at Texas A&M University to provide free GAP/GHP consultation to help Texas farms and greenhouses develop standard operating procedures. In addition, the New Jersey Department of Agriculture provides monies from other grants to a similar program at Rutgers University, which offers safety audit assistance including training, standard operating procedure development, and mock audits.

- **Cost share**—Grant monies could be used in a cost-share program to promote produce safety audits as well. Because the cost of third-party safety audits can be prohibitive, especially to small farmers, some states' departments of agriculture have started cost-share programs to help growers and handlers in their state receive GAP/GHP audits. For example, the Pennsylvania Department of Agriculture's cost-share program awards Pennsylvania growers and handlers who pass a GAP/GHP audit with \$400 of Specialty Crop Block Grant monies to help offset the audit's costs. In addition, Connecticut used grant monies to implement a program to reimburse 50 percent of audit costs up to \$500 to become USDA GAP certified. Also, the Maryland Department of Agriculture used grant monies in a GAP/GHP audit cost-share program and, according to a Maryland department official, has reimbursed ten applicants \$400 each. Further, according to the Texas Department of Agriculture, it approved one Specialty Crop Block Grant project in 2009 that offers a one-time, \$750 cost-share award to companies that pass a third-party food safety audit, which could include GAP/GHP audits.

The Department should consider initiating projects or encouraging grant applicants to submit applications for projects that are focused on food safety audits. However, in providing these monies for projects of any type, including food safety, the Department should do so on the basis of the relative costs and benefits involved.

## Recommendation:

- 4.1. The Department should consider initiating projects using available grant monies or encouraging applicants for grant monies to submit proposals focused on produce safety such as audit preparation or cost-share projects. The Department should do this on the basis of relative costs and benefits involved.

# FINDING 5

---

## Department should better promote preventative food defense measures

The Department of Agriculture (Department) should do more to promote preventative security measures at facilities it regulates. Since the September 11, 2001, terrorist attacks (9/11), a heightened concern exists that a terrorist could intentionally contaminate the United States food supply as a way to threaten public health or hurt the agricultural economy. Two of Arizona's most valuable agricultural commodities, milk and leafy greens, are among the foods most vulnerable to intentional contamination. Government oversight of security, however, is limited largely to issuing guidelines and noting areas needing improvement in some inspections where food defense issues may overlap with food safety issues. The extent to which establishments have adopted these guidelines varies, and larger establishments have apparently taken more aggressive actions than smaller establishments. Steps the Department could take to promote security measures include providing facilities that it regulates with a voluntary self-assessment tool, increasing food defense awareness during inspections, promoting more food defense reviews as part of voluntary audits, and fostering greater collaboration between the many agencies involved in food safety and food defense.

### Intentional contamination of food is a risk

Following 9/11, government officials and the public have expressed concern that the U.S. food supply could be vulnerable to acts of intentional contamination. Although the threat of intentional contamination is difficult to measure, food experts believe vulnerabilities should be assessed because the potential consequences could be far reaching. Arizona is a significant producer of some foods considered to be more vulnerable, such as milk and leafy green vegetables.

Food defense is a national concern—Food defense refers to protecting food products from intentional contamination. In October 2001, following 9/11, the

The threat of intentional contamination is hard to measure, but consequences could be far reaching.

President added the agriculture and food industries to the list of critical infrastructure systems needing protection from potential terrorist attacks. According to the U.S. Department of Homeland Security, experts reason that, given the vulnerability of food to major unintentional foodborne illness outbreaks, individuals with malevolent aims could intentionally reproduce these outbreaks with more severe consequences than unintentional ones.<sup>1</sup> A 2005 study funded by the National Center for Food Protection and Defense estimated that many U.S. residents expected at least one terrorist attack involving deliberate chemical or biological contamination of a common food product to occur in their lifetime.<sup>2</sup>

The threat of intentional contamination is difficult to measure, but experts believe an incident is plausible and could be far reaching. Thus far, reported cases of intentional contamination have been sporadic. In addition, most reported cases have not occurred in agricultural settings, but rather in retail outlets, homes, and workplaces, and were typically performed using commonly available household, agricultural, or industrial chemicals (see textbox). However, experts believe the threat is plausible and that vulnerabilities at any point in the food supply chain should be considered, given the potential impact. For example, terrorists or other individuals could introduce animal or plant diseases to cause economic harm or generate fear. Persons wishing to harm public health could use biological, radiological, or chemical agents to contaminate food products. The potential costs of intentional contamination could include loss of life, destruction of crops and livestock, healthcare expenses, lost wages, and less consumer confidence in the safety of the food supply.

### Examples of intentional contamination

- In 1984, members of a religious cult poisoned ten Oregon salad bars with *Salmonella*, resulting in 751 individual cases of illness.
- In 1996, a disgruntled employee of a Texas hospital willfully tainted snacks in a staff break room, which caused illness in 12 people.
- In 2003, a Michigan supermarket employee infected 200 pounds of ground beef with an insecticide, causing illness in 92 people.

Source: United States Department of Homeland Security, Office of Inspector General. (2007). *The Department of Homeland Security's role in food defense and critical infrastructure protection* (OIG-07-33). Washington, D.C.: Author.

**Arizona produces vulnerable products**—Some food products, including some types that Arizona produces, are more vulnerable than others to intentional contamination. The FDA states that foods prepared in large batches, foods with a short shelf life, foods that are easily accessed, and foods that are uniformly mixed are more at risk for intentional contamination because they can affect a higher number of people and are difficult to trace back.<sup>3</sup> Specifically, the FDA considers raw milk and fresh leaf and stem vegetables to be especially vulnerable to intentional contamination. According to a food defense expert, Arizona may be vulnerable to an intentional act of contamination because it produces a lot of dairy products and fresh produce. Dairy products and lettuce are among the State's most valuable agricultural commodities. In 2008, Arizona ranked 12th in U.S.

<sup>1</sup> United States Department of Homeland Security, Office of Inspector General. (2007). *The Department of Homeland Security's role in food defense and critical infrastructure protection* (OIG-07-33). Washington, D.C.: Author.

<sup>2</sup> The National Center of Food Protection and Defense was launched as a United States Homeland Security Center of Excellence in July 2004. It is a multidisciplinary and action-oriented research consortium that addresses the vulnerability of the nation's food system to attack through intentional contamination with biological and chemical agents.

<sup>3</sup> Acheson, D.A. (2005, November). Equipping and educating the next generation of leaders in food protection and defense. In *Proceedings of the Institute of Food Technologists' First Annual Food Protection & Defense Research Conference*, Atlanta, GA. Retrieved July 1, 2009, from <https://www.ift.org/fooddefense/15-Acheson.pdf>

production of milk, producing over 4.3 billion pounds of milk, and second in U.S. production of head lettuce and spinach.

## Department should help industry protect food supply

The Department should take steps to assist with food defense. Although food defense regulations are limited, governments have provided general guidance and individualized assistance in some inspections where food defense issues overlap with existing safety inspections. The industry has taken steps to protect food from intentional contamination, but these steps vary by establishment. However, the Department should strengthen food defense for agriculture in Arizona and can do so through awareness, education, and other steps, especially at the facilities it already regulates.

**Department plays a limited role in food defense**—The Department's inspectors play a dual food safety and defense role in the Department's meat and poultry inspection program, but have no regulatory authority over defense of other types of agricultural products. Even in the meat and poultry inspection program, their food defense role is limited. Specifically:

- **Meat and poultry**—In accordance with federal directives, both the USDA's and the Department's meat and poultry inspectors look for potential security vulnerabilities as part of their food safety inspections. These include vulnerabilities in an establishment's water systems and processing, manufacturing, storage, shipping, and receiving areas. For example, they must observe whether the establishment restricts personnel access to sensitive production areas or how hazardous materials are used and stored. However, even for meat and poultry, federal statute limits the extent to which federal agencies can impose security requirements at food-processing facilities. For example, since 2000, federal law has required meat and poultry establishments to develop and implement food safety plans, but it has not required these establishments to adopt food defense plans, nor can inspectors enforce the security measures that should be contained in such plans.
- **Dairy**—The Department's food defense role is even more limited in dairy regulation than in meat and poultry. Although state laws and regulations address food safety, they do not require dairy facilities to establish security measures, and dairy inspectors are not required to assess vulnerabilities during inspections. For example, under existing regulations, a state dairy inspector could require a door on a milking facility to stop flies from getting in, but could not require the door to be locked to prevent unauthorized access.

Meat and poultry inspectors look for security vulnerabilities as part of food safety inspections.

- **Produce**—Neither the FDA, the federal agency with oversight over produce, nor the Department appear to require produce farms to implement security measures to protect against intentional contamination, based on a review of federal documents and Arizona’s rules and statutes. However, the USDA’s Good Agricultural Practices and Good Handling Practices (GAP/GHP) Audit Verification Program does contain a section on food defense (see Finding 4, pages 33 through 40). This section requires companies to verify that they have food defense plans and have implemented security measures consistent with federal security guidelines. However, this section is optional and, according to the Department, only 1 of the 11 Arizona produce companies that were GAP/GHP-certified as of November 2009, and another company that obtained certification in December 2009, had requested and passed the food defense section as part of their GAP/GHP audit.

**Industry’s food defense efforts vary**—Except for the meat and poultry inspectors’ role, Arizona and the federal government rely on the food industry to protect commodities from intentional contamination, but the extent to which the food industry is protecting itself is unclear. The USDA and FDA have written voluntary guidelines that identify preventative measures to minimize the risk that food will be subject to tampering or other malicious, criminal, or terrorist actions (see textbox). Some industry members believe that the industry has improved

#### Examples of security measures contained in FDA and USDA guidelines

- **Security procedures for visitors**—Visitors, guests, and other nonplant employees should provide proof of identity and be restricted to nonproduct areas unless accompanied by a responsible employee.
- **Laboratory security**—In-house laboratory facilities should have comprehensive and validated security and disposal procedures in place, such as restricting access to the lab and controlling pathogens.
- **Shipping and receiving security**—Inspection of all incoming shipments for signs of tampering and any irregularities in products or labels should be investigated immediately.
- **Personnel security**—A system of positive identification should be established, new hires should be subject to screenings and background checks, entry to plant should be controlled, and personal items should be restricted.
- **Hazardous chemical security**—Hazardous chemical storage areas or rooms should be secured and isolated from other parts of the plant, access to these areas should be controlled, and all irregularities in stock should be investigated immediately.
- **Outside security**—Outside lighting should be sufficient to detect unusual activities; all access to the establishment should be monitored and controlled; parking areas for visitors should be a safe distance from the facility; and all door, windows, roof openings, vent openings, and storage areas should be secured.

Source: Auditor General staff analysis of U.S. General Accounting Office (2003). *Food processing security: Voluntary efforts are underway but federal agencies cannot fully assess their implementation* (GAO-03-342). Washington, D.C.: Author.

facility security to varying degrees. According to a U.S. Government Accountability Office survey of FDA and USDA inspectors, more than half observed that large processing plants have implemented a larger range of measures than smaller plants. This is consistent with auditors' interviews and observations of some Arizona food industry establishments. For example, one large dairy company in Arizona reported that it annually requests and receives a third-party audit focused on both safety and security practices, which has resulted in improvements to its facility's security system. In addition, auditors observed security cameras used in at least one large dairy facility in Arizona. However, auditors' interviews of small meat and poultry operations suggest that some owners have decided not to adopt security measures because they do not consider their establishments to be at risk.

Large processing plants have implemented a larger range of security measures than smaller plants.

Department should strengthen food defense through further integrating security awareness and education into its existing food safety role—The Department should help protect food and agriculture businesses in Arizona by further integrating food defense into its food safety activities. The Department should take measures to strengthen food defense promotion at facilities it regulates, particularly at food establishments that are not already taking steps to protect their facilities. Specifically, the Department should work with the facilities to help them mitigate their risk of intentional food contamination through awareness and education. Examples of specific steps the Department could take include:

- **Provide a self-assessment tool to facilities that have not taken steps on their own**—The Department could provide facilities it regulates with a voluntary self-assessment tool that would help businesses identify security risks. According to a department official, starting in 2004, meat and poultry inspectors distributed self-assessment checklists, provided by the USDA, to meat and poultry plants. In addition, some facilities have taken steps such as obtaining third-party audits of their food defense practices. However, some other facilities, particularly smaller operations, might benefit from a self-assessment checklist. The FDA has written a food defense self-assessment tool to help food producers, processors, and transporters identify preventative measures they may take to minimize the risk of food's being subject to tampering or other malicious, criminal, or terrorist actions (see textbox, page 46). Similarly, the Arizona Department of Health Services developed a self-assessment tool for the facilities that it regulates. The Department could provide either of these tools or develop a new one tailored to all of the facility types it regulates.
- **Increase awareness through inspection personnel**—The Department could incorporate nonregulatory food defense into its inspections by providing information or suggestions on preventative measures to its licensees. According to a 2003 U.S. Government Accountability Office report, FDA and USDA field personnel are encouraged to discuss food security concerns with plant managers and provide them with copies of the guidelines, with the goal

## Excerpts from FDA food defense self assessment tool

- Know who is and who should be on premises, and where they should be located, for each shift.
- Collect the uniforms, name tag, or identification badge when a staff member is no longer associated with the establishment.
- Reassess levels of access for all staff periodically.
- Verify the identity of unknown visitors.
- Minimize, to the extent practical, places that can be used to temporarily hide intentional contaminants.
- Use only known, appropriately licensed or permitted (where applicable) contract manufacturing and packaging operators and sources for all incoming materials, including ingredients, compressed gas, packaging, labels, and materials for research and development.
- Assign responsibility for security to knowledgeable individual(s).

Source: Auditor General staff analysis of Office of Food Defense, Communication and Emergency Response, Food Defense Oversight Team. (2007). *Guidance for industry: Food producers, processors, and transporters: Food security preventive measures guidance*. Washington, D.C.: Federal Food and Drug Administration, Center for Food Safety and Applied Nutrition. Retrieved July 8, 2009, from <http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodDefenseandEmergencyResponse/ucm083075.htm>

of heightening the industry's awareness of food security practices and encouraging them to voluntarily implement preventative measures. In addition, the State of Minnesota has trained its meat and poultry inspectors to increase plant operator awareness of vulnerabilities and prevention of intentional contamination. The Department's meat and poultry and egg inspectors have also received food defense training, and the GAP/GHP audit training for produce inspectors includes training on the food defense portion of the GAP/GHP audits. The Department could ensure all of its inspectors receive food defense training to help them use their expertise to monitor and suggest improvements during inspection visits. The FDA offers food defense training materials on its Web site that the Department could use to train its inspectors.

- **Offer information on department Web site**—The Department could educate the public and industry about food defense through information it makes available on its Web site. All six of the state agriculture departments whose Web sites auditors reviewed have information about agroterrorism, emergency preparedness, food defense, and/or biosecurity. For example, Washington's department of agriculture has links on its Web site to federal food defense requirements and guidance documents, and to local law enforcement to report suspicious behavior. California, Minnesota, Nevada, Virginia, and Ohio agriculture department Web sites also provide similar information or links.

- **Promote food defense through GAP/GHP audits**—The Department is taking steps to promote GAP/GHP audits in the State (see Finding 4, pages 33 through 40). However, few produce growers and handlers have requested the optional food defense section of the audit. The Department could encourage growers and handlers to request the food defense section as part of these audits.

In addition to integrating these steps into its food safety activities, the Department should foster collaboration with other federal, state, or local government agencies to share ideas and leverage limited resources, particularly related to preventing intentional contamination. The Department has collaborated with other agencies regarding planning for incident response. For example, the Department participates in the Arizona Foodborne Illness/Food Defense Surveillance and Response Work Group. This work group is made up of federal, state, and local government agencies that meet quarterly to address common issues that have been identified as a result of integrating existing foodborne illness and food defense response systems established under separate jurisdictions. In addition, in the past, the Department received FDA grant monies to support another collaborative effort, the Arizona Food Safety Task Force, and according to a department official, the task force may be continued in future years. The Department could seek additional opportunities to partner with these agencies or other organizations to promote food defense. The Department could also apply for federal grant funding for food defense as it becomes available. In 2009, the United States Department of Health and Human Services awarded grants to several local and state governments to promote the development of an Innovative Food Defense Program, including an emphasis on developing innovative food defense awareness education materials for state and local food safety and food defense regulatory officials. Neither the Department nor the Arizona Department of Health Services received this grant.

The Department works with other agencies on incident response and should seek further collaborations on prevention.

## Recommendations:

- 5.1. The Department should help protect food and agriculture businesses in Arizona by further integrating food defense into its food safety activities through awareness and education in addition to the steps it has already taken in its meat and poultry inspection and egg inspection programs.
- 5.2. The Department should seek additional opportunities to collaborate with other government agencies or organizations to promote food security by preventing intentional contamination. For example, the Department could apply for federal Innovative Food Defense Program grant funding from the U.S. Department of Health and Human Services.



♦

# APPENDIX A

---

## Methodology

Auditors used various methods to study the issues addressed in this report. These methods included interviewing Department of Agriculture (Department) officials and staff, a member of Arizona's Agriculture Advisory Council, University of Arizona and Arizona State University professors, representatives from Arizona's agricultural industry and federal food safety agencies; attending advisory council meetings; and reviewing statutes, rules, and the Department's Web site, fiscal year 2009 annual report, policies and procedures, and other agency documents. To assess the adequacy and efficiency of internal controls supporting the Department's food safety programs, auditors accompanied department food safety inspectors on 17 different inspections in April and August 2009, and reviewed inspection reports in the meat and poultry, dairy, and egg inspection programs. Auditors concluded that internal controls were not significant to any of the fieldwork objectives.

In addition, the following specific methods were used:

- To determine how the Department helps ensure the safety of dairy products in Arizona, auditors reviewed the U.S. Food and Drug Administration's (FDA) grade "A" pasteurized milk ordinance, the FDA's 2008 review of the Arizona dairy inspection program, and licensing and inspection documentation provided by department staff; interviewed representatives from the FDA and the U.S. Department of Agriculture (USDA); and observed state inspections at two farms and a dairy plant. To determine whether changes to the program's funding structure should be considered, auditors reviewed guidance on setting fees for government services; documented dairy program funding structures in Arizona and ten other states by interviewing dairy program management and reviewing the other states' Web sites, statutes, administrative code, and/or other documents; reviewed articles and statistical information on the dairy industry's economic condition; and interviewed two representatives of the Arizona dairy industry.

- To determine how the Department helps ensure the safety of meat and poultry products in Arizona, auditors reviewed state and federal meat and poultry laws and regulations, federal directives, and the USDA's 2009 review of Arizona's meat and poultry inspection program. Auditors also observed inspections at one slaughter and two processing facilities in April 2009. To determine whether or not the State should retain the state meat and poultry inspection program or transfer inspection to the USDA, auditors interviewed ten state-inspected and four federally inspected establishments in Arizona; state officials from North Dakota, Minnesota, and New Mexico; and USDA officials. Auditors also reviewed literature on state and federal inspection, including studies by Nebraska's Public Policy Center, Oregon State University, and the U.S. Government Accountability Office (GAO), and analyzed data on red meat production from the USDA's 2009 National Agricultural Statistics Survey. Additionally, auditors reviewed information from the USDA's Web site, including outreach materials for small and very small meat and poultry establishments and the federal directory for meat and poultry plants. Finally, auditors interviewed officials in three western states with state meat and poultry inspection programs regarding their states' licensing fees.
- To determine how the Department and others help ensure the safety of eggs and egg products in Arizona, auditors reviewed federal laws and regulations, including the FDA's 2009 rule for reducing *Salmonella Enteritidis* and regulations governing the voluntary grading of shell eggs, and information and literature from the USDA, the United Nations' Food and Agriculture Organization, the National Egg Regulatory Officials (NERO) Web site, and national egg experts. Auditors also observed egg inspections at two egg processing plants, four wholesale warehouses, and five retail stores in April and August of 2009, and interviewed the president of NERO and an official from Arizona's only commercial egg producer. To determine if Arizona's egg laws were in line with national standards, auditors compared Arizona's egg laws and rules with model egg regulations related to egg safety and quality that NERO developed.
- To determine how the Department and others help ensure the safety of produce in Arizona, auditors attended two meetings of the Citrus, Fruit and Vegetable Advisory Council in May and June 2009, and one meeting of the Arizona Leafy Green Products Shipper Marketing Agreement (Marketing Agreement) Marketing Committee in April 2009; reviewed information about the Marketing Agreement and the California Leafy Green Products Handler Marketing Agreement from their respective Web sites; reviewed the FDA's and the USDA's Web sites for information on federal roles in produce safety, including the FDA's 1998 *Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables* and the USDA's Good Agricultural Practices and Good Handling Practices Audit Verification Program; reviewed a GAO report on produce safety; reviewed industry Web sites for information on the industry's produce safety efforts; and interviewed two representatives from the Marketing Agreement and

five representatives from the Arizona produce industry. To evaluate the potential impact of produce contamination to Arizona, auditors reviewed applicable guidance and statistical data from federal government, including the U.S. Centers for Disease Control and Prevention (CDC) and the USDA's National Agricultural Statistics Survey. To determine what options the State should consider regarding the Department's role in protecting the public from contaminated produce, auditors reviewed information obtained from department of agriculture Web sites and/or interviews with department of agriculture staff in California, Florida, Hawaii, North Carolina, Pennsylvania, Minnesota, and Texas; interviewed university researchers at the University of Arizona, Rutgers University, the University of Hawaii, and Texas A&M; reviewed materials and Web sites from Rutgers University, and Texas A&M; reviewed the USDA's Web site and department documents for information about the Specialty Crop Block Grant; and reviewed information about proposed changes in the FDA's produce regulation and the Yuma hearings for the USDA's proposed National Leafy Green Marketing Agreement.

- To determine the Department's role in food defense and the options the State should consider to promote food defense, auditors reviewed documents such as the United States General Accounting Office's reports on bioterrorism and food-processing security literature, and association documentation about food terrorism, food defense, and the roles of state and government in food defense; and reviewed information obtained from federal government Web sites for the Department of Homeland Security, the FDA, and the USDA. In addition, auditors also reviewed Web sites for departments of agriculture in six states, including California, Minnesota, Nevada, Washington, Ohio, and Virginia; interviewed researchers from universities in Arizona, North Carolina, New Jersey, and Texas and a food safety program representative from a university in Hawaii; and interviewed dairy, meat and poultry, egg, and produce industry representatives in Arizona.
- To develop information for the Introduction and Background section, auditors compiled information from the Arizona Financial Information System (unaudited); the USDA Web site; the CDC Web site; the FDA Web site; the National Institute of Health Web site; food safety reports from the GAO, George Washington University, and various nonprofit food safety advocacy groups; the President's Food Safety Working Group Web site; the Department's 2009 annual report; the National Conference of State Legislatures; the Governor's Office of Strategic Planning and Budgeting Web site; the Arizona Department of Health Services' Web site; Arizona foodborne illness data from Department of Health Services staff; literature on the economic costs of food contamination and government roles in food safety and defense; department organizational charts; and program budget, staffing, and licensing information provided by the Department.



# AGENCY RESPONSE



JANICE K. BREWER  
Governor



DONALD BUTLER  
Director

# Arizona Department of Agriculture

1688 W. Adams Street, Phoenix, Arizona 85007  
(602) 542-4373 FAX (602) 542-5420

March 31, 2010

Debra K. Davenport  
Auditor General  
2910 North 44<sup>th</sup> Street, Suite 410  
Phoenix, AZ 85018

Dear Ms. Davenport:

I have reviewed the revised preliminary report draft of the performance audit of the Arizona Department of Agriculture - Food Safety and Quality Assurance Inspection Programs. Enclosed are the Arizona Department of Agriculture's written comments on the report.

Respectfully,

Donald Butler  
Director

DB/lh



**ARIZONA DEPARTMENT OF AGRICULTURE**  
**Agency Response**  
**Food Safety and Quality Assurance Inspection Programs Audit**

**Introduction and background –**

The Arizona Auditor General has made specific recommendations to the legislature and the agency, with respect to the Food Safety and Quality Assurance Inspection Programs audit it has conducted. This is the Arizona Department of Agriculture (ADA) response.

**Finding 1: Dairy safety program costs should be shared with industry**

**Recommendation 1.1:** The Department should propose fees to the Legislature that would increase the industry's share of the dairy inspection program's costs. In developing the proposal, the Department should:

- a. Consider what portion of total program costs the industry should pay based on program benefits to the industry;
- b. Ensure that it has an adequate process for tracking direct and indirect cost data for the dairy inspection program, including dairy product testing at the State Agricultural Laboratory;
- c. Develop equitable fees that address factors that influence cost, such as the work required to regulate different members of the dairy industry;
- d. Evaluate the dairy inspection program's efficiency to ensure that program costs are not higher than necessary to complete its work, including identifying any possible reduction in regulation that can be achieved without affecting the industry's ability to market its products;
- e. Consider the effect fee increases may have on different establishment types and obtain their input in proposing new fees. If proposed fees are higher than current fees, the Department might recommend gradually phasing in fee increases; and
- f. Submit its proposal to the Legislature for consideration.

## **Agency Response:**

The finding of the Auditor General is agreed to and the audit recommendation(s) will be implemented.

The Arizona Department of Agriculture (ADA) has been working with stakeholders on the issue of program funding for more than two years, starting with a meeting with industry members in January of 2008. In 2008, the agriculture advisory council began discussing numerous program funding issues. These discussions expanded to include the dairy program.

ADA believes that both the dairy industry and the public who consumes dairy products benefit from a strong inspection program. The agency regulates the industry by adherence to the federal Pasteurized Milk Ordinance (PMO), which is the de facto standard for inspection in the United States. The PMO is adopted by reference under Title 3, and is state law in Arizona.

FDA's most recent review of the milk program in Arizona shows it to be "in substantial compliance with the PMO." This allows the Arizona dairy industry to ship its products nationwide, and also in international commerce.

ADA recognizes the urgency of formulating and implementing new methods of funding the dairy inspection program, with less reliance on general funds. The agency is cognizant of the fact that its current general fund budget is less than when the agency was formed in 1991.

Agriculture staff has been examining program costs for more than one year. The agency is looking at those costs at the inspection program level, and also the costs of dairy product testing at the state agricultural laboratory. One option which is currently being examined to reduce expenses is to have industry laboratories certified to perform some of the testing, at the expense of industry.

The audit states that the agency should develop equitable fees. The Department believes that recent authorized fee increases (2008) on ADA licensed dairy samplers have had the desirable effect suggested by the Auditor General. In that, the agency believes that the actual regulatory costs to administer written tests and conduct biennial reviews of nearly 300 licensees are being covered by the fees collected.

The agency has secured support from dairy industry stakeholders for a new fee structure which offsets reductions in available general funds. This will help to ensure Arizona's PMO status is maintained. However, industry and the agriculture advisory council have clearly communicated that any fees paid

to the agency to fund the inspection programs must be utilized only for direct and indirect program expenses.

**Recommendation 1.2:** After receiving the Department's proposal, the Legislature should consider modifying statute to raise existing dairy inspection program fees, authorize the Department to create additional fees, and/or modify the level of regulation the Department provides.

**Agency Response:**

Since this finding and recommendation is to the Legislature, the Department has no response.

The agency does not believe that any reduction in the level of regulation the Department provides is possible, without jeopardizing the ability of the dairy industry to ship in interstate commerce.

**Finding 2: State should consider transferring meat and poultry inspections to USDA**

**Recommendation 2.1:** The Legislature should consider eliminating the state meat and poultry inspection program and transferring inspection responsibilities to the USDA.

**Agency Response:**

Since this finding and recommendation is to the Legislature, the Department has no response.

**Argument for the state inspection program**

The major premise presented by the Auditor General in the audit report is that the State of Arizona should consider transferring meat and poultry inspections to the USDA, which will take over inspection at no cost to the state of Arizona.

The Arizona Department of Agriculture maintains that any savings to the state general fund will be offset by plant closures, loss of local jobs, loss of business opportunity and decreased tax revenues. At public meetings, industry members in attendance agreed with this position. Further, one industry member stated that that these closures and federal designation of Arizona would also result in unregulated processing. This was the experience of the state of California.

Meat and poultry processors in Arizona support the state program, as evidenced by the fact that there are more facilities under inspection by the Arizona Department of Agriculture than there are facilities under USDA inspection. The Auditor General's statement, taken from the top of page 19, trivializes the true importance of state inspected facilities to Arizona's economy, particularly with respect to slaughter operations.

*"Although there are more state-inspected establishments, they produce significantly less meat than federally inspected establishments. For example, in 2008, federally inspected establishments slaughtered over 99 percent (535,900 out of 539,100 head) of all cattle slaughtered in Arizona.<sup>1</sup>"*

First, it is important to note that there are 3 federal slaughter plants in Arizona. One is at the University of Arizona, which exists primarily as a teaching facility for animal science students. The other is a small facility in Southern Arizona, which was previously under state inspection as recently as fall of 2009. ADA could not grant an additional day of inspected slaughter due to budget cuts, and the plant applied for federal inspection. Both facilities process nominal numbers of animals.

The third federal slaughter plant in Tolleson is one of the largest in the world. It is under the foreign ownership of the Brazilian conglomerate JBS SA, the largest beef processor in the world. Only 19% of the cattle processed at this facility are from the state of Arizona, according to a 12/30/2009 report from USDA's Animal and Plant Health Inspection Service.

It can be seen that the focus of this very large federally inspected facility is not on local Arizona markets. With respect to federal slaughter plants in Arizona taken in context: There are 32 state inspected and licensed official and custom-exempt slaughter firms, and 3 federally inspected firms. More than 90% of all slaughter operators in Arizona are regulated by the state program.

The clear majority of all other species of animals amenable to slaughter regulations are processed at state inspected facilities. And, substantial numbers of cattle as well. The firms currently under state oversight have chosen to be under state inspection, and not federal, for specific reasons. Some of these are documented in the Auditor General's report in the second paragraph on page 24.

The audit report cites information on the impact of food borne illness from the Center for Science in the Public Interest, an organization regarded by some scientists as promulgating junk science. Regardless, food borne illness is a national concern, and the ADA agrees with this finding.

The Auditor General states with respect to a federal program takeover: *“transferring the function would not appear to compromise public health.”* Also, that it would allow more establishments to sell products out of state. Public health should be considered the most important factor in deciding whether to retain the state program. With regards to allowing more establishments to sell out of state: All existing official state plants have continually had the opportunity to choose federal inspection. It is manifest and self-evident that their business plans are focused on the local Arizona market, since they must choose federal inspection to sell outside this state.

It is important to repeat that the State meat inspection program was certified “equal to” the federal program by USDA in October of 2009, after a comprehensive audit. Our record of performance matters. Conversely, it is important to note that the overwhelming majority of recalls and food borne illnesses in the United States, related to meat and poultry products, originate from firms which are under federal inspection. This is not simply due to the much larger volume of product being processed at federal facilities, as noted on page 22, paragraph 3 in the audit.

One way to partly evaluate the potential performance of the federal program as a sole provider of inspection in Arizona is to examine past performance information from USDA's website. According to recall information posted on the USDA-FSIS website on March 28, 2010:

From January 2005 – March 2010, more than 207,135,038 pounds of product, produced under continuous USDA inspection, were recalled for bacterial contamination; undeclared allergens; “mad cow” disease risks and for other reasons. This includes product recalled from Hallmark meats in California, for potential risks associated with mad cow disease (Bovine spongiform encephalopathy). With respect to the Hallmark plant: The Los Angeles Times, quoting USDA officials, noted that some 37 million pounds of the recalled meat was distributed through the USDA school lunch program for consumption by school children.

Given the number of pounds of meat and poultry products recalled since 2005: Is the USDA's performance improving? Not according to a recent story in USA today, from March 4, 2010. The subject of the story, Dr. Dean Wyatt, DVM, testified to Congress as to USDA-FSIS failures to enforce its own regulations:

*“By [Peter Eisler](#), USA TODAY  
WASHINGTON — Department of Agriculture officials failed to act on reports of illegal and unsafe slaughterhouse practices, letting suspect operations continue*

*despite public health risks, a USDA veterinarian alleges in testimony to be aired today at a congressional hearing.*

*The charges by Dean Wyatt, a supervisory veterinarian at the USDA's Food Safety and Inspection Service, detail instances in which he and other inspectors were overruled when citing slaughterhouses for violations such as shocking and butchering days-old calves that were too weak or sick to stand. He also describes being threatened with transfer or demotion after citing a plant for butchering conscious pigs, despite rules that they first be stunned and unconscious.*

***IN USA: [Food-borne illnesses cost \\$152B a year](#)***

*"When upper-level FSIS management looks the other way as food safety or humane slaughter laws are broken ... then management is just as guilty for breaking those laws," Wyatt says in testimony sent to the House Oversight and Government Reform Committee. USA TODAY obtained a copy of the testimony in advance of today's hearing.*

*Wyatt's testimony follows several outbreaks of E. coli O157:H7 and other potentially deadly illnesses linked to contaminated meat. It also raises issues linked to the 2008 recall of 143 million pounds of beef from the Westland/Hallmark processing plant in Chino, Calif., which was caught slaughtering "downer" cows that were too sick or weak to walk on their own. Such animals are considered risks for carrying mad cow disease and other illnesses.*

*USDA spokesman Caleb Weaver says inaction on Wyatt's reports occurred before the tenure of current Agriculture Secretary [Tom Vilsack](#), who is "fully committed" to enforcing safe and humane slaughtering rules.*

*In 2008 and early 2009, Wyatt ordered suspensions in operations three times at Bushway Packing Inc., in Grand Isle, VT. Among other things, he found downed calves being dragged through pens to slaughter — a violation because contact with excrement can contaminate animals. In each case, he says, managers overruled him and allowed the plant to keep running. Bushway subsequently made headlines last fall when the [Humane Society of the United States](#) filmed undercover video of workers hitting and using electric prods to move calves. The plant was shut down. Vilsack ordered a criminal investigation.*

*Bushway has "made changes to comply fully with the Humane Slaughtering Act and we hope to ... reopen in the near future," says Peter Langrock, a lawyer for the company.*

*Wyatt also says superiors dismissed violations he reported in 2007 and 2008 at a Seaboard Foods pork plant in Guymon, Okla. He cited the plant for slaughtering conscious pigs, beating pigs and trampling of pigs.*

*In some cases, Seaboard successfully appealed Wyatt's citations, says company marketing director David Eaheart. And Seaboard always "took steps to ensure that if there were any deficiencies, they were addressed."*

*But Wyatt says his reports and those of other inspectors were shelved by regional supervisors without consulting on-site personnel. Instead, he says, writers of citations were chastised and threatened with transfer.*

*Wyatt's experiences "illustrate a pattern that FSIS is broken and must be fixed," says Amanda Hitt of the Government Accountability Project, a whistle-blower organization representing Wyatt.*

*"The new administration must recognize past wrongs and ... ensure the proper treatment of animals and the safety of our food supply," says Rep. [Dennis Kucinich](#), D-Ohio, who will chair today's hearing."*

It is possible to dismiss Dr. Wyatt's accounts as the accusations of a disgruntled USDA employee, who somehow managed to obtain the attention of Congress. However, the USDA's own Office of the Inspector General (OIG) has chronicled the agency shortcomings over the years. The evidence presented by the OIG may be considered neither anecdotal nor biased against the USDA. The findings of the OIG with respect to USDA-FSIS inspection effectiveness may be viewed on the USDA website. The previously mentioned Hallmark matter has raised particular concerns, due to the massive amount of meat products recalled.

How effective has USDA been on performing recalls of its own products? According to an April 28, 2008 study titled "The USDA's Authority to Recall Meat and Poultry Products", published by the Congressional Research Service for members of Congress:

*"Recalls rarely recover all products. Since 1994, the quantity of products actually found have constituted anywhere from 17% to 28% annually of the total pounds recalled."*

The Arizona Department of Agriculture contrasts the USDA record of more than 207 million pounds of product recalled since 2005, at a 17% - 28% recovery rate, with the record of Arizona State inspected facilities over the past 12 years:

No products recalled.

The audit report suggests that the disparity in these numbers relates to most animals being processed in federal facilities. Looking at documentation, anecdotal and otherwise, there is a pervasive absence of reports of meat and poultry products being recalled which were processed under state inspection from any state. At the top of page 22 in the audit report, this statement is made: "Transferring meat and poultry inspections should not compromise public health." However, few if any facts are offered in the audit report to support this conclusion.

Given the vast amount of meat and poultry products recalled from 2005 to present, and a recall rate of 17%-28% reported to Congress, the ADA offers its record for comparison with that of the USDA. Conversely, a fair minded person might ask this question: "*Will food safety and public health improve as a result of designating Arizona for federal inspection?*" The evidence suggests that public health would not improve with the federal government being the sole provider of inspection in Arizona. Arguably, the state of California did not improve public health or food safety with its transition to federal inspection in 1976.

The audit report states that, with respect to custom exempt operations and illegal slaughter, USDA oversight would replace state inspection activities. A letter from the California Department of Food and Agriculture is attached as an addendum to this document. There is no basis to assume Arizona would fare better than California did, after a federal takeover of inspection.

There is a growing movement to "know your food" nationwide and in Arizona. Consumers want to know where their food is being produced and processed and this segment of the industry is growing. These niche meat and poultry products are not being produced by USDA facilities. Rather, at small locally owned businesses under state oversight. State inspection facilitates this type of business environment in that it is accessible to the industry, able to rapidly approve new labels and formulations and is locally available to regulate and problem solve.

In 2007, during a strong economy, the state of New Mexico transferred all inspection to USDA. According to the audit report, about 16% of the firms in that state closed and did not transition to federal inspection. Arizona has more official plants under state inspection than New Mexico did during their transition. Current economic conditions are unprecedented and there is every reason to expect a larger percentage of plant closures in Arizona, with the loss of the state program. Inevitably, this would result in loss of jobs, loss of vertically integrated markets and a subsequent reduction in business and payroll taxes collected by the State of Arizona.



It is a reasonable conclusion that business closures will offset any savings of general funds realized, by allowing the federal government to designate Arizona. Or, as characterized by the Auditor General: "federalizing the state meat and poultry inspection program."

The audit report states: "Transferring inspections would likely have minimal impacts to state-inspected establishments." And that: "Some establishments may incur minor transition costs." However, nothing more than anecdotal information is offered to support these statements. It is important to note that owners of state inspected facilities have expressed serious concern to the agency, members of the state legislature, the Governor and both U.S. senators, with respect to the impacts of terminating the state program. The audit report downplays these impacts.

The audit report mentions that some owners of state inspected facilities had a concern that they would not receive the individualized attention from the federal government that they have experienced under the state program. It further states the USDA took steps in 2008 to improve its outreach to small and very small establishments. These are the types of facilities regulated by ADA.

The agency offers its record with respect to outreach to all state inspected facilities.

Agency inspectors and program staff actively work with industry to achieve compliance with regulations. When the USDA established HACCP (Hazard Analysis Critical Control Point) as the new inspection model in 1998 for large plants, it outlined the program and its requirements to industry. With the exception of written materials and CD's for distribution, the USDA did not actively provide assistance for the transition. In 1999, the date of implementation for small and very small plants, ADA staff actively facilitated the first major change to the inspection paradigm in more than 100 years

State program inspectors and supervisors sat down with industry staff and took the time to explain the new system and its ramifications. They answered questions about HACCP plan development and in communicating the principles of HACCP to owners and employees. This was a major shift from the previous "command and control" model used by inspectors, with many inspection duties and documentation being shifted to plant employees, and audited by inspectors. Our staff and inspectors have a continuing history of furnishing this type of support to business.

The agency serves the public health at large, Arizona industry, the USDA, FDA and local and international commerce with its cooperative federal-state programs. It does so efficiently and at the least cost. Consider that:

- ADA management and supervisory staff are not 3 time zones out of sync with the work being done. Our phones are picked up in a timely manner to facilitate commerce.
- Staff actively works to problem solve issues affecting consumers and commerce. Inspectors work closely with supervisors and the manager who will resolve the issue.
- We are the local folks serving the industry. We live here and our lives are vested here. We do not have to be flown in to Arizona to do the work.

The agency has had cooperative relationships with USDA and FDA going back scores of years. By accounts, these relationships have been of benefit to the public and to the cooperating partners. This is recognized by the federal government, with respect to the state meat and poultry program, which pays the majority of costs associated with the state program.

The majority of Arizona's meat and poultry industry has voted by choosing to be with state inspection. The audit report does not acknowledge that about 88% of regulated facilities including official plants, custom exempt processors, pet food industry, rendering plants and other segments are under ADA oversight, and not federal. Arizona's citizens want locally produced and processed products, which state inspected facilities provide. Will regulated Arizonans be permitted to make their own choice: Federal / State inspection or Federal inspection alone? There is an opportunity to facilitate an equitable answer.

Arizona firms have spoken by staying with state inspection. Fees have been increased in the past two years and the Department of Agriculture is working to codify a new fee structure. The firms currently under state inspection also have an additional choice: If they do not wish to maintain state inspection and take a larger share of supporting its costs: They may freely pursue federal inspection at any time.

The agency suggests that if the legislature allows industry to make a choice, equity will result. Thirty of fifty states, a clear majority, maintain some level of state meat and poultry inspection program, with most conducting inspections of official plants.

## Conclusion

The agency suggests there is a reason for nationwide state program support from the federal government and state legislatures. It is illogical to assume that anyone would support state inspection programs simply to expend dollars and merely duplicate federal inspection. It is more logical that it is done to foster local livestock producers, small business owners and local commerce.

The professional observations of two veterinarians, one a federal employee and the other a state employee, are captured in this response. The views of these two food safety experts may be taken within the context of nationwide concerns with respect to food safety. The Auditor General suggests federalizing Arizona's program will save money; that impacts on Arizona industry will not be widespread and that public health should not be compromised. Written documentation paints a different picture, with a strong likelihood of negative impacts on the state of Arizona, with the termination of the state program.

Will the Arizona Department of Agriculture continue to serve Arizona's meat and poultry industry? Will it continue to foster small business, facilitating vertically integrated markets and help encourage innovation? The agency believes that its Mission Statement embodies the core values of its state inspection program:

***To Regulate and Support Arizona Agriculture in a manner that encourages farming, ranching and agribusiness, while protecting consumers and natural resources.***

**Recommendation 2.2:** If the Legislature decides to retain the state meat and poultry inspection program, the Department should propose new fees to the Legislature to fund the cost of the program. In developing the fees, the Department should do the following:

- a. Develop equitable fees that address different types of industry members based on the work required to regulate each member such as meat and poultry slaughterers and processors;
- b. Ensure that it has an adequate process for tracking cost data for the meat and poultry inspection program, including meat and poultry product testing at the State Agricultural Lab;

- c. Evaluate the state meat and poultry inspection program's efficiency to ensure that program costs are not higher than is necessary to complete the work; and
- d. Consider the effect fee increases may have on different establishment types and obtain their input in proposing new fees. Because proposed fees would be significantly higher than current fees, the Department might recommend gradually increasing fees.

### **Agency Response:**

This finding and recommendation is predicated upon the actions of the Legislature and not the agency. The agency has no response.

### **Discussion**

Regardless of whether the federal government pays or both federal and state pay, it is all taxpayer dollars. This is primarily a public health program and most public health programs derive the bulk of their support from the citizens who benefits from them. The agency does not believe that the Arizona industry should have to bear the full cost of the state's portion of the program. The agency is not aware of any other state which requires the local meat and poultry industry to pay more than a small portion of the state share of costs.

The agency agrees with the position of the Auditor General, on page 12 with respect to the public benefits of the dairy program. The agency agrees that the public supports the dairy program and receives benefits from that support. Clearly, this same concept of shared costs applies to the state meat and poultry inspection program, which benefits both the public and the industry, as does the dairy program.

The agency believes it is possible to achieve consensus with industry on new fees, and discussions with industry indicate there is common ground to do so, to prevent further reductions in staffing. However, industry members again emphatically stated their willingness to discuss increased licensing and other fees, was predicated upon the funds being used for the express purpose they were collected for.

**Recommendation 2.3:** After receiving the Department's proposal, the Legislature should consider modifying statute to raise existing fees or authorize the Department to create additional fees.

This finding and recommendation is made to the Legislature, the department has no response.

**Finding 3: Department helps to ensure egg safety and quality**

**This finding contains no recommendations.**

**Finding 4: Department can further promote produce safety**

**Recommendation 4.1:** The Department should consider initiating projects using available grant monies or encouraging applicants for grant monies to submit proposals focused on produce safety such as audit preparation or cost-share projects. The Department should do this on the basis of relative costs and benefits involved.

**Agency Response:**

The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

The Department has begun discussions with stakeholders and other industry representatives on the possibility of using a portion of the SCBGP-FB monies to fund an in-house GHP/GAP consultant and of using a portion of the SCBGP-FB monies in a cost-share program regarding GHP/GAP procedures.

**Finding 5: Department should better promote food defense measures**

**Recommendation 5.1:** The Department should help protect food and agriculture businesses in Arizona by further integrating food defense into its food safety activities through awareness and education in addition to the steps it has already taken in its meat and poultry inspection and egg inspection programs.

**Agency Response:**

The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

The agency has been distributing self assessment materials and food defense guidelines to some agency licensees of the food programs for several years. Inspectors in the meat and poultry and egg programs have previously completed food defense training which was required by USDA. The agency agrees with the concept of Website enhancement to disseminate information to the public and industry.

**Recommendation 5.2:** The Department should seek additional opportunities to collaborate with other government agencies or organizations to promote food security by preventing intentional contamination. For example, the Department could apply for federal Innovative Food Defense Program grant funding from the U.S. Department of Health and Human Services.

**Agency Response:**

The finding of the Auditor General is agreed to and the audit recommendation will be implemented.

The Department continues to actively collaborate with federal, state and county governments to promote food security, as it has since the agency formation in 1991. It has had involvement in food defense tabletop exercises where agro terrorism was the main topic. These included federal, state and county agencies such as the FBI, FDA, DHS, County Health and others. The agency has worked since its inception as a lead agency in coordinating responses for emergencies involving a release of nuclear materials from the Palo Verde Nuclear Plant. A number of the recent exercises have had terrorist elements written into the scenarios.

The agency also participated in the TopOFF IV exercise, which had both food safety and food defense elements. TopOFF IV was conducted with international participation. The Arizona Food Safety Task Force was also established by the agency, with some funding from FDA. The Food Safety Task Force brings federal, state and county staff together with academia, food producers and processors. It is a diverse group that utilizes its members to facilitate an integrated problem solving network, to address food safety concerns.

The agency has participated in Safe Food 2010, a multi-year food education project sponsored by the University of Arizona cooperative extension program. The agency has both participated as conference attendees and provided multiple speakers to address issues such as food trace back and how regulators can identify illegally produced raw milk and meat products.

The agency has been working during the past year with USDA to coordinate the usage of the National Veterinary Stockpile in Arizona. This joint effort with USDA's Animal and Plant Health Inspection Service will make federal resources available to respond to intentional introduction of zoonotic diseases which threaten both human and animal health. This federal resource will be integrated into agency response exercises and planning.



CALIFORNIA DEPARTMENT OF  
FOOD & AGRICULTURE

A. G. Kawamura, Secretary

March 29, 2010

Mr. Stewart Jacobson  
Program Manager  
Meat and Poultry Inspection  
Arizona Department of Agriculture  
1688 W. Adams  
Phoenix, AZ 85007  
602-542-6398  
602-542-4194 Fax

Dear Mr. Jacobson:

The State of CA Dept. of Food & Agriculture has a small program to address meat & poultry operations that are exempt from inspection by USDA. This program began after the "Equal To" program in CA was discontinued and CA became a Designated State in 1976. After that, USDA FSIS was responsible for inspection of all major meat and poultry production plants. However, many categories of meat and poultry operations are exempt from inspection by FSIS.

In subsequent years, it was discovered that there was a sharp increase in the number of operations that were exempt from inspection by FSIS, and that they were typically producing meat and poultry products in very deplorable conditions. This commonly included slaughter and meat processing in corrals, barns and basements, where manure, dust, flies, pesticides, petroleum oil and other hazards were common.

This was exacerbated by FSIS policy that resulted in de facto non-investigation and enforcement of pertinent law. FSIS did not devote resources to situations where customers were fully aware of the conditions where their meat has been produced, regardless of the conditions. Typically, the exempt operations would slaughter and process in full view of their customers, so FSIS would not devote any resources to such operations, despite the fact that it was in clear violation of federal law. That FSIS policy continues today.

The State of CA determined that allowing such operations threatened public health. The threat exists not only to the customers, but also to the communities they live in, because disease organisms such as pathogenic E. coli, Salmonella and others are spread to other people at day-care centers, schools, churches, pot-luck dinners, and elsewhere. Often, the customers of the exempt operations were from communities of recent immigrants, with relatively low levels of education. They were and are amongst the most vulnerable members of the public.





Mr. Stewart Jacobson  
March 29, 2010  
Page # 2

Inspection of facilities in CA that are exempt from USDA inspection is quite efficient. They are not inspected full-time. However, the quality of those meat and poultry operations in CA has improved tremendously. CDFA has strived to emphasize education, and not just relied on enforcement. Having operators understand principles of sanitation and production of wholesome food has resulted in many voluntary efforts to upgrade facilities and systems. Those improvements have often led to more customers. The progress over 30 years has been a "win" for consumers and many thriving businesses that proudly display the legend of the State of CA.

Due to the breadth and volume of facilities exempt from inspection by FSIS, supplemental programs are absolutely necessary to protect consumers. This includes regulation and inspection of facilities that are categorized by USDA as Custom Exempt.

Sincerely,

Dennis L. Thompson, D.V.M., M.P.V.M.  
Chief, Meat & Poultry Inspection Branch  
Dept. of Food & Agriculture  
Animal Health & Food Safety Services

DLT/mdc



## Performance Audit Division reports issued within the last 24 months

---

<b>08-02</b>	Arizona's Universities— Technology Transfer Programs	<b>09-06</b>	Gila County Transportation Excise Tax
<b>08-03</b>	Arizona's Universities—Capital Project Financing	<b>09-07</b>	Department of Health Services, Division of Behavioral Health Services—Substance Abuse Treatment Programs
<b>08-04</b>	Arizona's Universities— Information Technology Security	<b>09-08</b>	Arizona Department of Liquor Licenses and Control
<b>08-05</b>	Arizona Biomedical Research Commission	<b>09-09</b>	Arizona Department of Juvenile Corrections—Suicide Prevention and Violence and Abuse Reduction Efforts
<b>08-06</b>	Board of Podiatry Examiners	<b>09-10</b>	Arizona Department of Juvenile Corrections—Sunset Factors
<b>09-01</b>	Department of Health Services, Division of Licensing Services— Healthcare and Child Care Facility Licensing Fees	<b>09-11</b>	Department of Health Services—Sunset Factors
<b>09-02</b>	Arizona Department of Juvenile Corrections—Rehabilitation and Community Re-entry Programs	<b>10-01</b>	Office of Pest Management— Restructuring
<b>09-03</b>	Maricopa County Special Health Care District	<b>10-02</b>	Department of Public Safety— Photo Enforcement Program
<b>09-04</b>	Arizona Sports and Tourism Authority	<b>10-03</b>	Arizona State Lottery Commission and Arizona State Lottery
<b>09-05</b>	State Compensation Fund		
<b>09-06</b>	Gila County Transportation Excise Tax		
<b>09-07</b>	Department of Health Services, Division of Behavioral Health Services—Substance Abuse Treatment Programs		

## Future Performance Audit Division reports

---

Arizona Department of Housing  
Board of Chiropractic Examiners