

**Performance Audit
Health Department Food Protection Program**

January 2001

City Auditor's Office

City of Kansas City, Missouri

January 31, 2001

Honorable Mayor and Members of the City Council:

This performance audit of the Health Department's Food Protection Program was initiated by the city auditor pursuant to Article II, Section 13 of the city charter. The performance audit focuses on the adequacy of city food protection ordinances as compared to current federal guidelines, and on identifying the resources necessary to implement a food protection program based on the current guidelines.

Kansas City's Food Protection Program enforces ordinances based on outdated federal guidelines. Since the city's ordinances were adopted, the federal guidelines have been revised based on progress in efforts to monitor and prevent foodborne diseases, and to ensure that consumers are provided the safest food possible. By not updating its food ordinances to incorporate progress made on the federal level, the city Health Department enforces rules that, in some cases, may not provide a sound scientific and legal basis for regulating retail food establishments.

The city's inspection resources are not adequate to comply with even the outdated ordinances. As a result, establishments are not being inspected as frequently as required. Under current city law, establishments are to be inspected twice a year. Less than half of the city's retail food establishments have been inspected within the previous six months of our review, and more than a third had not been inspected for a year. Permit fees have not been increased since 1989 and do not cover the program's expenses. Increased permit fees could help fund a program that would be large enough to conduct the needed inspections. Increasing the fees will require voter approval.

We recommend that the city's food protection ordinances be updated to incorporate progress made at the federal level and that the voters be asked to increase permit fees.

The draft audit report was sent to the city manager and the director of health on December 26, 2000. Management's written response is included as an appendix. We appreciate the courtesy and cooperation extended to us during this project by the staff in the Health Department. The audit team for this project was Michael Eglinski, Chanel Goodwin-Watkins, Sharon Kingsbury, and Martin Tennant.

Mark Funkhouser
City Auditor

Performance Audit: Health Department Food Protection Program

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Introduction

Objectives

This audit of the Health Department's Food Protection Program was conducted pursuant to Article II, Section 13 of the Charter of Kansas City, Missouri, which establishes the Office of the City Auditor and outlines the city auditor's primary duties.

A performance audit is an objective, systematic examination of evidence to independently assess the performance of a government organization, program, activity, or function in order to provide information to improve public accountability and facilitate decision-making.¹ This audit was designed to answer the following questions:

- Should the city food protection ordinances be updated based on current federal guidelines?
- What would be necessary to implement a food protection program based on the current guidelines?

Scope and Methodology

Two Health Department programs help ensure food safety in Kansas City. The Food Protection Program inspects retail food establishments and enforces the city's food code. The Communicable Disease Control Program monitors diseases including foodborne illnesses. Both programs are involved in investigating outbreaks of suspected foodborne illnesses. Our audit work was limited to the Health Department's Food Protection Program. We will consider a performance audit of the Communicable Disease Program in our audit plan for 2002.

We conducted this audit in accordance with generally accepted government auditing standards, except for the completion of an external quality control review of the City Auditor's Office within the last three years.² Our methods included:

¹ Comptroller General of the United States, *Government Auditing Standards* (Washington, DC: U.S. Government Printing Office, 1994), p. 14.

² The last review was in April 1995. An external review is scheduled for March 2001.

- Interviewing Health Department staff.
- Interviewing staff of the Missouri Department of Health and the U.S. Food and Drug Administration (FDA).
- Reviewing city ordinances and the 1999 FDA food code.
- Analyzing a sample of 351 inspection records.
- Analyzing a sample of 100 risk assessments the Health Department completed for establishments in Kansas City.
- Reviewing food protection policies and procedures, job descriptions, inspection reports, and other documents.
- Attending the FDA Southwest Regional Food Protection Conference, October 17-19, 2000.

No information was omitted from this report because it was deemed privileged or confidential.

Background

Foodborne Illness

Foodborne illnesses are common and pose a serious public health threat. Each year in the U.S. about 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths are related to foodborne illness.

Foodborne illnesses are caused by eating contaminated food or beverages. There are many different viruses, bacteria, and parasites that can cause foodborne illness. The most common symptoms are diarrhea and vomiting. While everyone is at risk for foodborne illness, infants, the elderly, and immuno-compromised people are at the highest risk.

The nature of foodborne illness has changed in recent years. The median age of the population has increased, and the elderly are more susceptible to foodborne illness and disease. Individuals are increasing their consumption of fresh produce, which is susceptible to foodborne pathogens that can cause illness. People are eating outside the home more often than they used to. In addition, foodborne pathogens are adapting to, and becoming resistant to, traditional methods of control.

The Government's Role in Food Safety

In the United States, food safety is addressed by federal, state, and local governments. The U.S. Food and Drug Administration (FDA), the Food Safety and Inspection Service (FSIS), and the Centers for Disease Control and Prevention (CDC) are among the federal agencies with food safety responsibilities. The FDA is responsible for ensuring the safety of domestic and imported food products except for meat, poultry and processed eggs. The FSIS is responsible for ensuring the safety of meat, poultry and some egg products. The CDC does surveillance work and investigates foodborne illness outbreaks.

State departments of health work with the FDA and other federal agencies to implement food safety standards and ensure that retail food establishments are inspected. States also inspect milk processing plants and other food manufacturing plants.

In Missouri, counties and municipalities are responsible for inspecting retail food establishments. County health departments provide retail food inspections when a municipality does not assume the responsibility. For example, the Platte County Health Department inspects retail food stores and restaurants in Platte County that are not in Kansas City, Missouri.

The Kansas City Health Department is responsible for inspecting retail food establishments in the city. The city charter requires the director of health to inspect the food supply. City ordinances establish the rules for retail food establishments to be enforced by the Health Department. The Health Department's Food Protection Program relies largely on routine inspections to identify problems.

Food Protection Program

The purpose of the Food Protection Program is to prevent foodborne illness and protect public health. The main activities of the program are:

- Inspecting establishments that sell or serve food.
- Investigating consumer complaints about establishments.
- Investigating possible foodborne illnesses.
- Training and educating the public and industry personnel about food safety.
- Responding to emergencies and disasters involving food.
- Reviewing plans for new food establishments.
- Issuing permits and collecting fees.

Performance Audit: Health Department Food Protection Program

The Food Protection Program's budget for fiscal year 2001 is \$530,000. The program is authorized 13 positions including eight field inspectors. Revenue from permits issued to food establishments averages about \$340,000 a year.

Findings and Recommendations

Summary

Kansas City's Food Protection Program enforces ordinances based on outdated federal guidelines. Since the city's ordinances were adopted, the federal guidelines have been revised based on progress in efforts to monitor and prevent foodborne diseases, and to ensure that consumers are provided the safest food possible. By not updating its food ordinances to incorporate progress made on the federal level, the city Health Department enforces rules that, in some cases, may not provide a sound scientific and legal basis for regulating retail food establishments.

The city's inspection resources are not adequate to comply with even the outdated ordinances. As a result, establishments are not being inspected as frequently as required. Under current city law, establishments are to be inspected twice a year. Less than half of the city's retail food establishments have been inspected within the previous six months of our review, and more than a third had not been inspected for a year. Permit fees have not been increased since 1989 and do not cover the program's expenses. Increased permit fees could help fund a program that would be large enough to conduct the needed inspections. Increasing the fees will require voter approval.

We recommend that the city's food protection ordinances be updated to incorporate progress made at the federal level and that the voters be asked to increase permit fees.

City's Food Code Is Outdated

The Health Department's Food Protection Program enforces ordinances based on federal guidelines established in 1976 and 1982. Although the Food and Drug Administration's (FDA) guidelines have been revised several times in the intervening years, the city's ordinances have not been updated. As a result, the Health Department enforces rules that, in some cases, may not provide a sound scientific and legal basis for regulating retail food establishments. The latest FDA guidelines, which

focus inspections on the highest risk establishments, differ significantly from the city's current ordinances.

City Enforces Outdated Ordinances

Kansas City's Food Protection Program enforces outdated ordinances. The city ordinance applying to establishments that sell or serve retail food, adopted in 1984, was based on the 1982 FDA Retail Food Store Sanitation Code. The city's food service ordinance, adopted in 1980, was based on the 1976 FDA Food Service Sanitation Ordinance.³ The FDA food code was extensively revised in 1993, and has been updated every two years since. The code was revised based on progress in efforts to monitor and prevent foodborne diseases and to ensure that consumers are provided with the safest food possible.

FDA Guidelines Differ Significantly From the City's Ordinances

Because the city's ordinances have not kept pace with developments on the federal level, the Health Department enforces rules that may not provide a sound scientific and legal basis for regulating retail food establishments. The latest FDA guidelines, from 1999, are intended to provide a model food code with sound scientific, technical and legal grounds to assist jurisdictions in regulating the retail segment of the food industry. The code was developed in collaboration with government agencies, academics, and food industry representatives. The FDA guidelines differ significantly from the city's current ordinances.

The federal code determines inspection frequency based on the level of risk. The city's current ordinances require that all retail food stores and food service establishments be inspected at least once every six months, regardless of the risk for foodborne illness. The 1999 FDA food code requires that the frequency with which establishments are inspected be based on risk factors known to cause foodborne illness. The rationale is to target higher risk establishments, where foodborne illness is more likely to occur, with more inspection time.

Establishments considered high-risk include those that perform complex processes, with extensive handling of raw ingredients, combining raw and cooked foods. Establishments serving populations susceptible to foodborne illness, such as the young and the elderly, are also considered to be high-risk. Low-risk establishments include stores and establishments selling prepackaged foods. Under the FDA guidelines,

³ The city revised several of the administrative requirements in 1985 and 1986. The revisions affected the issuance of permits, correction of violations, and reports of inspections. The rules that apply to the storage, preparation, and handling of food were not revised.

inspection frequency would range from four inspections a year for high-risk establishments to one inspection a year for those posing a low risk.

Some FDA requirements are not addressed by city ordinances.

Other significant differences exist between the 1999 FDA food code and the city's current ordinances. The FDA's food code:

- Requires that the “person in charge” of an establishment demonstrate knowledge of the code, factors contributing to foodborne illness, and appropriate preventive and corrective actions to protect consumers. The city ordinances do not include such a requirement.
- Prohibits bare hand contact with ready-to-eat food and minimal bare hand contact with other food. The city ordinances require the “least possible” or “minimal” bare hand contact.
- Requires that establishments inform consumers of the increased risk of eating raw or undercooked animal foods. The city ordinances do not include such a requirement.
- Requires refrigerated food to be kept at or below 41 degrees. The city requires such food to be kept at 45 degrees or less.

The City Should Adopt the 1999 FDA Food Code

In order to improve the safety of retail food in Kansas City, the city should adopt the latest FDA food code. The city's current inspection frequency is not based on categories of risk, and the ordinances do not include requirements addressed by the federal code. Adopting the latest guidelines would improve food safety by focusing inspection resources on establishments with risk factors known to cause foodborne illness.

The Health Department and restaurant industry support adopting the current FDA code. The director of health expressed interest in adopting the most current FDA food code. The city manager has also identified updating the ordinance as an issue for the Health Department. According to a September 2000 report, “important changes based on scientific research are the driving factors behind implementing the new code. The new code will allow the staff to inspect using the most up-to-date methods possible.”⁴

The restaurant industry also supports the FDA guidelines. The National Restaurant Association has worked with the FDA through the

⁴ City of Kansas City, Missouri, *Service Efforts and Accomplishments*, September 2000, p. 21.

Conference for Food Protection, which meets every other year to recommend changes to the FDA Food Code. The National Restaurant Association also reports working with state restaurant associations and members to encourage state and local jurisdictions to adopt and follow the federal code. Representatives of the Greater Kansas City Restaurant Association are aware of the new code and the potential for change in rules and regulations governing food safety.

Other jurisdictions, including the states of Kansas, Missouri, Iowa, and Nebraska, have adopted regulations based on the latest FDA guidelines. The regional FDA office and the Missouri Department of Health encourage adoption of the code by local jurisdictions and provide program support and training.

The director of health should propose a city food code based on current Food and Drug Administration guidelines for consideration by the mayor and City Council.

The City Does Not Conduct Enough Inspections

The city does not have enough inspectors to handle the number of permitted establishments in the city. As a result, the city does not inspect establishments once every six months as required by current ordinances. Inspection records show that inspectors visited less than half of the permitted establishments during the previous six months. Over a third of the establishments had not been visited within a year. Meeting the current, outdated requirements would require about 2,300 more inspections each year. If the city were to adopt the latest federal guidelines, the inspection workload would increase an additional 25 percent.

City Does Not Inspect Every Six Months as Currently Required

The city does not inspect each food establishment once every six months as required by current ordinances. Based on a sample of inspection records, only 41 percent of all the food establishments were inspected during the previous six months. In addition, 37 percent of establishments had not been visited for over a year.

The food protection program's eight authorized inspector positions are not adequate to inspect all of the permitted establishments. The FDA guidelines suggest that each permitted establishment be allocated eight to 10 hours per year for inspections, re-inspections, complaint investigations and administrative work. Following these guidelines eight

full-time inspectors could handle about 1,500 to 1,900 establishments. But, the current workload is about 2,800 permitted establishments.

Turnover may be a problem. Program staff and the regional FDA food specialist indicated that the Health Department's Food Protection Program has experienced difficulty in hiring and retaining staff. Four inspectors and the program manager have left since June 2000. Of 20 full-time employees involved in the program during 1998 and 1999, only eight are still employed in the program.

Compliance with Inspection Frequency Requirements Would Require More Inspections

In order to comply with the current city ordinance, city inspectors would need to perform about 75 percent more inspections over their current workload. If the city were to adopt the FDA food code guidelines, we estimate that the inspection workload would increase by another 25 percent.

The FDA guidelines call for more inspections of establishments with higher risk for foodborne illness, and fewer inspections for establishments with lower risk. The FDA developed an example of risk categories and inspection frequencies. According to the FDA model, the highest risk establishments would require at least four inspections per year⁵ while the lowest risk establishments would require at least one inspection per year.

About half of Kansas City's food establishments are in higher risk categories. Risk assessments completed by the city's Food Protection Program suggest that about half of Kansas City's food establishments are in risk categories requiring three or four inspections a year under the FDA guidelines. The remaining establishments would require one or two inspections a year.

The Food Protection Program completed risk assessments for some of the establishments in Kansas City. We analyzed the assessments for 100 of the establishments. The assessments are based on factors including the nature of food prepared, served, and stored; the number of people served; and the susceptibility of consumers to foodborne illness. A little more than half of the establishments are at higher risk and would require more frequent inspections. (See Exhibit 1.)

⁵ The FDA identifies a number of characteristics of retail operations that increases risk. The type of food served, the steps to prepare the food, the volume of food, the population served, and the compliance history can affect the occurrence of foodborne illness.

Exhibit 1. Number of Inspections Required, Based on Risk Categories

Inspection Frequency (number per year)	Level of Risk	Percent in the Category
1	Lowest risk	16%
2		32%
3		40%
4	Highest risk	12%

Source: Health Department, Food Service Establishment Risk Profiles.

Increased Fees Could Fund an Improved Program

The current permit fees are too low to generate enough revenue to fund the Food Protection Program. Even if the city does not adopt the latest federal guidelines, the food protection program needs at least \$215,000 more a year to conduct enough inspections to comply with current city ordinances. Permit fees would have to increase substantially to fund a program that would be large enough to conduct the needed inspections. The voters would have to approve an increase in permit fees.

Current Fees Are Too Low to Fund the Current Program

The current permit fee level was established in 1989. The city's current permit fees are based on the type of establishment and number of employees or size of store. (See Exhibit 2.)

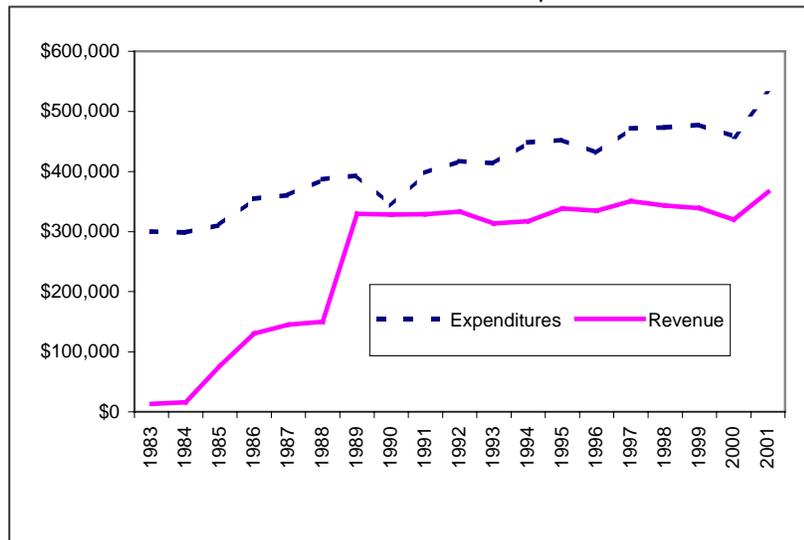
Exhibit 2. Current Annual Permit Fees

Type of Establishment	Fee
Restaurant, tavern, cafeteria (fee based on number of employees)	\$100 to \$175
Retail food store (fee based on size of store)	\$75 to \$375
Mobile unit/pushcart	\$50
Ice cream street vendor	\$15

Source: Health Department, Application for Food Service Permit.

Revenue from permit fees does not cover the direct costs of the Food Protection Program. The gap between revenues and expenditures has been increasing; in 1990, permit fee revenue covered all but \$14,000 of the program's expenditures. By fiscal year 2001, the gap between revenues and expenditures had grown to \$164,000. (See Exhibit 3.)

Exhibit 3. Food Protection Revenues and Expenditures



Sources: Adopted Budgets and the city's financial management system (AFN).

The Food Protection Program Funding Should Be Increased

In order to adequately protect the public against the risk of foodborne illness, the Food Protection Program needs more inspectors, support staff, and equipment. The program's budget for 2001 is \$530,000. Meeting the city's current requirement that each establishment be inspected every six months would require the city to budget \$744,000 to \$1 million⁶ for the Food Protection Program. Complying with the FDA guidelines of risk-based inspection frequency would cost approximately \$781,000 to \$1.1 million a year.

Substantial Fee Increases Necessary to Fund Food Protection

For permit fee revenue to fully fund the Food Protection Program, fee revenue would need to generate \$744,000 to \$1.1 million annually. Full funding of the program by fee revenues would necessitate increasing permit fees two to three times their current levels – levels which were established in 1989.

Increasing annual permit fees will require voter approval under the Missouri Constitution. In order to more fully recover the costs of inspecting food establishments, the city manager should propose an ordinance for mayor and City Council consideration that would allow voters to consider increasing city food establishment permit fees.

⁶ The range depends on the amount of time that inspectors need to devote to establishments. The FDA suggests a range of 8 to 10 hours should be allocated to each establishment.

Recommendations

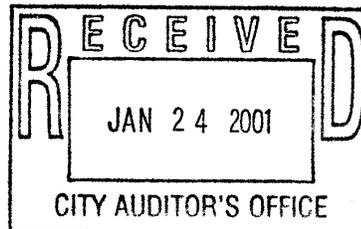
1. The health director should propose a city food code based on current Food and Drug Administration guidelines for consideration by the mayor and City Council.
2. The city manager should propose an ordinance for mayor and City Council consideration that would allow the voters to consider increasing city permit fees to fund inspections of food establishments.

Appendix A

Management's Response



Office of the City Manager



DATE: January 24, 2001
TO: Mark Funkhouser, City Auditor
FROM: Robert L. Collins, City Manager
SUBJECT: Department Response to Draft Audit Report on the Food Protection Program

As stated in Dr. Archer's memorandum dated January 17, 2001(see attached) I concur with the Health Department's response to Recommendation #2, as stated.

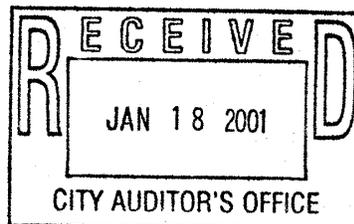
Please advise if additional information is needed.

Robert L. Collins

RLC:emm
Attachment



Interdepartmental Communication
HEALTH DEPARTMENT



DATE: January 17, 2001
TO: Mark Funkhouser, City Auditor
FROM: Rex Archer, M.D., M.P.H., Director of Health *Alicia R. Archer*
SUBJECT: Department Response to Draft Audit Report on the Food Protection Program

We have received a copy of a draft audit report on the Food Protection Program, and find it to be a fair and accurate report. Our response will address the recommendations set forth in your report, and other significant issues for the Food Protection Program.

Recommendation #1

The Health Director should propose a city food code based on current Food and Drug Administration guidelines for consideration by the City Council.

We agree with this recommendation. The program is in the process of preparing to adopt the 1999 U.S. Food and Drug Administration (FDA) Food Code and submit it for consideration by the City Council. The following is a summary of our progress to date:

October 30, 1999: the state of Missouri adopted a new food rule based on the FDA's 1999 Model Food Code.

February 18, 2000: the Food Protection Program mailed a survey to all permitted establishments outlining the changes in the food code. The purpose of the survey was to obtain restaurant industry input on the changes of the code.

June 2000: the Program organized a group of individuals that represented the restaurant industry and private citizens to review the major changes of the FDA's 1999 Model Food Code. Discussions were held and a recommendation to adopt the State rule was proposed by the former Food Protection Program Manager. Shortly after submitting his recommendation, the Food Protection Program Manager resigned for a better paying position. The process to hire a new manager began and delayed further work on the new code proposal.

December 15, 2000: the Environmental Health Services Division Manager, new Food Protection Program Manager, and the Food Protection Program Field Supervisor met to plan for implementation of the new code. It was decided to schedule a meeting with the Law Department to discuss drafting an ordinance for City Council review. That meeting with Assistant City Attorney Jim Brady is scheduled for today, January 17th.

It is our desire and plan to have an ordinance request to the City Council as soon as possible. The FDA Food Code is a recommended ordinance designed to be a general guide nationwide. We must now make any necessary specific changes to the enforcement chapter to fit our program operations. For example, we will need to insert language for fees including our reinspection fee. We also wish to include provisions on mandatory hand washing signs and a mechanism for recognizing the best operations we inspect.

Recommendation #2

The city manager should propose an ordinance for City Council consideration that would allow the voters to consider increasing city permit fees to fund inspections of food establishments.

We agree with this recommendation. We are in contact with the Budget Office and will furnish the necessary information to them in a timely manner. It is our understanding that the Budget Office needs the proposed fee amounts by the first week in February. We will meet that deadline.

Another significant issue is one that directly affects our ability to make the necessary number of quality inspections required to protect the public's health. We have been unable to maintain trained staff at a level that will allow us to function effectively. We have been unable to recruit the number of staff needed to fill all of our current positions and to retain them at the present salary. A study by the Environmental Health Division was conducted in 1999 to compare our job classification of Public Health Specialist (PHS) to other jurisdictions/agencies performing similar functions and responsibilities. The Environmental Health Services Division has experienced great difficulty in recruiting and retaining qualified employees. Our study found that the PHS job description is more closely related to duties performed by other staff in the Health Department, e.g. communicable disease investigators or health educators. We require a personnel job classification solely for environmental health staff that perform environmental health inspection and supervisory work, and a salary for staff that is competitive with other jurisdictions. For example, a classified advertisement in last Sunday's Kansas City Star by Johnson County for a food inspector (Environmental Health Specialist) listed a salary of \$36,836 to \$46,051. Our current salary for the same position is \$23,712 to \$37,128. I recommend the City adopt a new series of Environmental Health Specialist classifications with pay grades that will allow us to be competitive with other jurisdictions in recruitment and retention.

I agree with the audit findings that additional staff are needed if we are to manage an effective food safety program in Kansas City. However, in order to attract additional staff, we will first need to be competitive in the job marketplace.