

JACKSON COUNTY ENVIRONMENTAL PUBLIC HEALTH DIVISION ANNUAL REPORT 2011

INTRODUCTION

The mission of the Environmental Public Health Division (EPH) is to promote the health and safety of the community through education and enforcement of public health regulations pertaining to food, pool, and lodging facilities; public drinking water systems; and wood stoves and open burning.

EPH licenses and inspects food service facilities (restaurants, mobile units, and temporary restaurants), pools and spas, and tourist facilities (hotels/motels, recreational parks, and organizational camps) pursuant to Oregon Revised Statutes (ORS), Oregon Administrative Rules (OAR), and contractual agreements with the Oregon Health Authority (OHA). In addition, EPH provides consultation and inspection services to day care centers, school food services, and other group use facilities, including county detention facilities.

Separate from the facility inspection services, public water systems are surveyed and monitored, through contract with OHA, to help ensure that safe drinking water standards are met. A contract with the Oregon Department of Environmental Quality funds the Wood Stove and Open Burning Program, which provides public education and enforces the county wood stove and open burning regulations in order to maintain compliance with federal particulate matter air pollution standards (*Note: The Wood Stove and Open Burning Program is not included in this report, as it is addressed in a separate report issued in spring*).

LICENSING AND INSPECTIONS

The Licensing and Inspection Program (LIP) is the informal term used to describe all programs in which licensure and/or inspections are required to ensure compliance with applicable health and safety regulations. The LIP program is funded 100% by license and inspection fees. The following programs are part of LIP:

- **Food Program:** The primary goal of the Food Program is to prevent foodborne illness. An intergovernmental agreement with the OHA delegates authority to EPH to perform all licensing and inspection services for restaurants, temporary restaurants, mobile units, commissaries, warehouses, and vending machines. Food Program activities are conducted pursuant to the following statutes and rules:

ORS Chapter 624 Food Service Facilities; OAR 333 - Division 12 Procedural Rules; OAR 333 - Division 150 Food Sanitation Rule; OAR 333 - Division 157 Inspection and Licensing Procedures; OAR 333 - Division 158 Combination Food Service Facilities; OAR 333 - Division 160 Destruction of Food Unfit for Human Consumption; OAR 333 - Division 162 Mobile Units; OAR 333 - Division 175 Food Handler Training; OAR 581 - Division 051 School Food and Nutrition Services.

- **Swimming Pools/Spas:** The purpose of the Swimming Pool/Spa Program is to prevent injuries and waterborne illness. EPH is delegated authority by OHA to conduct program activities for licensing and inspection of public pools/spas pursuant to the following statutes and rules:

ORS Chapter 448 Pool Facilities; OAR 333 - Division 12 Procedural Rules; OAR 333 - Division 60 Public Swimming Pools; OAR 333 - Division 62 Public Spa Pools

- **Tourist Facilities:** The Tourist Facilities Program serves to prevent illness and injuries. EPH is delegated authority by OHA to conduct licensing and inspections of traveler’s accommodations (hotels/motels, hostels, bed and breakfasts), organizational camps, and recreation parks (RV parks, campgrounds). Program activities are conducted pursuant to the following statutes and rules:

ORS Chapter 446 Tourist Facilities; OAR 333 - Division 12 Procedural Rules; OAR 333 - Division 29 Travelers’ Accommodations Rules; OAR 333 - Division 30 Organizational Camp Rules; OAR 333 - Division 31 Construction, Operation, and Maintenance of Recreation Parks

- **Group Use:** The goal of the Group Use Program is to prevent illness and injuries. This program is distinguished from other LIP programs in that the facilities are not licensed by EPH. Inspections are conducted by EPH at the request of the facility due to the organization’s licensing body requiring inspection by the “local health department” or a Registered Environmental Health Specialist. The primary facilities involved are school food service, child care facilities (day cares and group care homes), and detention facilities.

LIP Targets

In 2010, there were three primary targets in the LIP program. Target data are monitored and reviewed during monthly staff meetings. The targets and associated outcomes are represented in Table 1 below.

Table 1: Annual LIP Target Data

Target	Outcome
Achieve at least 95% of required inspections.	Achieved 99.4% of inspections.
Conduct all reinspections of food service critical violations (violations that can directly contribute to food contamination or illness) within 14 days.	96 of 97 reinspections conducted within 14 days. The one noncompliant reinspection was reviewed and corrective action taken.
Investigate all report of suspect foodborne illness within 24 hours of receiving the report.	58 of 58 suspect foodborne illness complaints investigated within 24 hours of receipt.

LIP Summary

There were approximately 2,374 inspections due in 2011, and staff completed 2,362 of these inspections to yield a 99.4% inspection rate (Figure 1 offers historic annual inspection data). Due to a staff member retiring midyear, the program was understaffed for approximately six weeks while finding a replacement. When fully staffed, there were 3.95 field FTE in the licensing and inspection programs, resulting in an average of 598 inspections conducted per field employee in 2011. *(Note: There are about 50 more inspections of traveler’s accommodations due in even-numbered years, as they are inspected every two years, and the inspections are not distributed evenly among years. Normalizing for this factor would result in the number of required inspections being about the same for 2010 and 2011).*

Figure 1

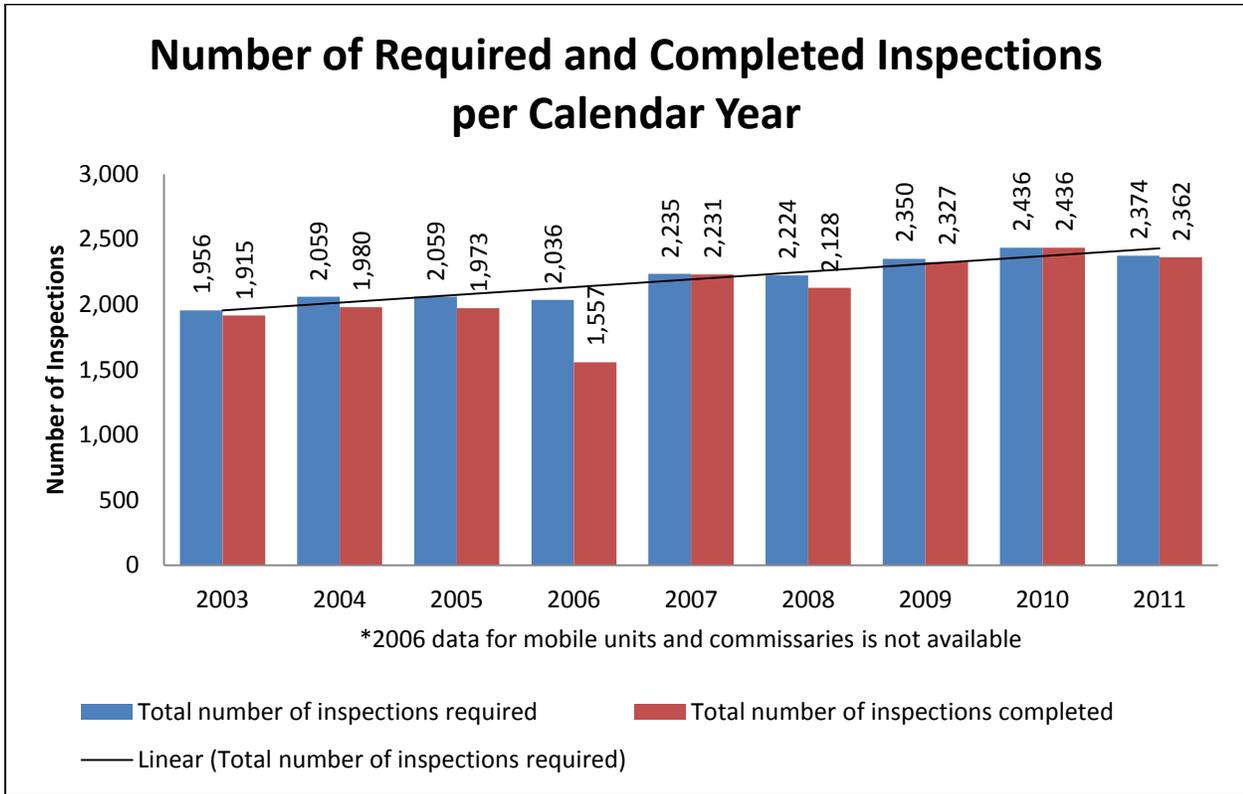
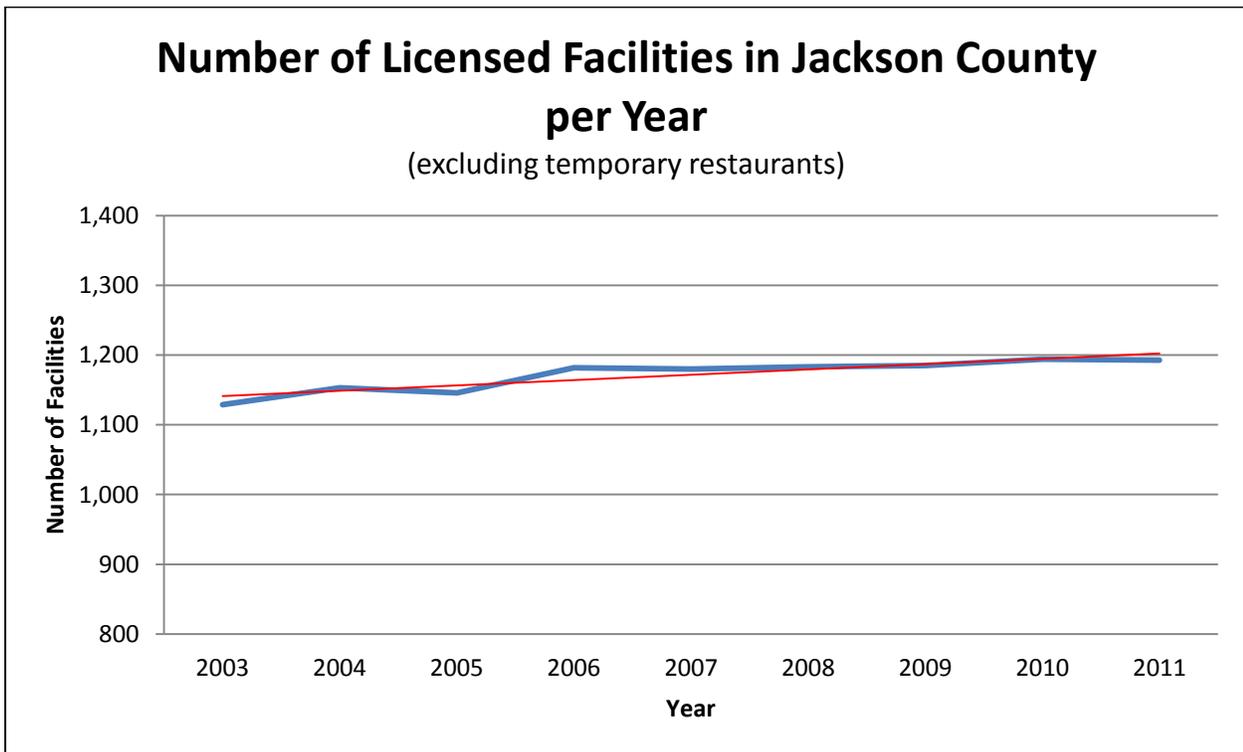


Figure 2



In respect to the number of licensed facilities per total FTE (including supervisor and clerical), in 2011 Jackson County had 227 licensed facilities per FTE (excluding temporary restaurants). Comparing this to other counties, only data from 2010 is available via 2010 State Licensed Facilities Report. Using this 2010 data, Jackson County had a facility-to-total FTE ratio of 225, which is the largest ratio among comparable counties (Clackamas, Deschutes, Lane, Marion, and Washington), demonstrating a comparatively high workload.

The number of licensed facilities (excluding temporary restaurants) has remained relatively flat over the past six years at just less than 1,200 facilities (see Table 2 and Figure 2). The extent to which the recent economic recession has contributed to this trend is unknown; although since 2008 new restaurant plan reviews have slowed, averaging just fewer than 20 per year. This is significantly less than the historic average of approximately 50 conducted per calendar year prior to 2008. Plan review activity is associated with annual growth in the local restaurant industry.

Interestingly, in 2010 and 2011 a total of 43 mobile unit plan reviews were conducted (24 in 2010; 19 in 2011), yet many of these new units ceased operation, resulting in an increase of only nine mobile units since 2009. Mobile units can be an appealing business enterprise due to their relatively low start up cost and overhead, in addition to the allure of self employment. However, it appears the supply has been exceeding the demand, resulting in closure of many mobile units.

Table 2: Historic Licensed Facility Numbers

Facility Type	2004	2005	2006	2007	2008	2009	2010	2011
Restaurants	610	614	636	637	629	629	631	636
Mobile Units	102	88	92	94	84	92	96	104
Commissaries	10	9	8	8	11	13	15	11
Warehouses	16	17	19	17	13	13	12	12
Vending	3	3	3	3	2	2	1	1
Pools/Spas	197	199	208	212	214	211	212	205
Tourist Accommodations	141	140	140	135	142	138	138	135
Bed and Breakfasts	32	32	33	30	30	30	29	29
Recreational Parks	34	35	34	35	34	34	33	33
Organizational Camps	8	9	9	9	8	7	8	7
Benevolent Restaurants	nd	nd	nd	nd	16	16	19	22
Totals	1,153	1,146	1,182	1,180	1,183	1,185	1,194	1,195
Temporary Restaurants (non-benevolent)	nd	nd	nd	170	202	220	219	223
Temporary Restaurants (benevolent)	nd	nd	nd	146	145	152	152	153
Temp Restaurants Total	320	369	nd	316	347	372	371	376

In 2011, four restaurants received “Failed to Comply” inspection scores (see Table 3 for historic data). All four facilities were able to correct the critical violations (a violation that is more likely than other violations to contribute to food contamination, illness, or environmental health hazard) and eventually

become compliant upon reinspection. Only one restaurant was closed, and this was due to a failure to correct a critical violation, despite repeated visits to the facility.

Table 3: Historical Restaurant Failure to Comply and Closures

Year	2004	2005	2006	2007	2008	2009	2010	2011
Failure to Comply	9	13	9	6	1	2	2	4
Closures	0	1	1	0	0	0	1	1

In 2011 there were 141 total facility complaints received (Table 4), which is comparable to recent years, but less than historically received in a calendar year. The economic recession caused some reduction in restaurant patronage, which may have contributed to the decrease in complaints. Most complaints involve unsanitary conditions (real and perceived). Such general complaints of unsanitary conditions are investigated and resolved.

Table 4: Historic Licensed Facility Complaint Data (vast majority are food service facility complaints)

Year	2004	2005	2006	2007	2008	2009	2010	2011
Total Facility Complaints	163	214	223	183	189	134	148	141

In respect to public pools and spas, of the 284 inspections, 24 resulted in temporary closure, commonly due to insufficient levels of chlorine disinfectant (Table 5). The facilities are allowed to reopen as soon as their disinfection levels meet the appropriate parameters.

Table 5: Pool and Spa Temporary Closures

Year	2004	2005	2006	2007	2008	2009	2010	2011
Number of Closures	nd	3	nd	nd	nd	28	24	35

In addition to the licensed facility inspections, Environmental Public Health staff conducted 196 total inspections of day cares, school food service, and other group use facilities (Table 6). Ten fewer day care inspections were requested in 2011 than the previous two years. (Note: The required number of inspections for school food service increased from one per year to two per year in 2005.)

Table 6: Historic Non-Licensed Facility Inspections

Year	2004	2005	2006	2007	2008	2009	2010	2011
Day Care, School Food Service, and Group Use Inspections	147	192	197	195	202	205	204	196

Illness and Outbreak Investigations

Fifty-eight of the aforementioned 141 complaints were reports of illness thought to be associated with a restaurant. (It is unknown how this number compares to historic data because only complaints of two or more ill persons from different households were counted as suspect foodborne illness complaints in years prior to 2010.) Because a large portion of the population associates gastroenteritis with the last meal they consumed, illnesses are often attributed to restaurants. In reality, seldom are illnesses caused

by the suspect facility. In addition, viral gastroenteritis (i.e., norovirus) circulates throughout the world each year, including Jackson County, and causes much of the illness mistakenly attributed to restaurants. All reports of illness are investigated, foodborne illness education is provided, and the facility is notified of the complaint.

Of the 58 reports of suspect illness, five of the complaint investigations were initially identified as a suspect outbreak (broadly defined as two or more non-householders who develop the same clinical illness after eating at the same place). However, further investigation of these potential outbreaks revealed that the parties involved likely had other contacts or relationships with one another aside from the suspect meal (these commonly involved extended families or friends with previous contact). In such circumstances, the complainant is provided education about foodborne illness, the food service facility is notified, and food safety is discussed. Because there may be other causes of illness aside from the food service facility (including person-to-person transmission), full outbreak investigations are not conducted when the parties involved have other epidemiological relationships aside from eating at the facility.

FOOD HANDLER TRAINING

EPH operates a Food Handler Training Program in order to reduce foodborne illness by promoting workers knowledge of basic food safety principles. The program activities are conducted pursuant to the following statutes and rules:

ORS Chapter 624 Food Service Facilities; OAR 333 - Division 12 Procedural Rules; OAR 333 - Division 175 Food Handler Training

Food Handler Training Targets

Jackson County EPH is committed to offering food handler testing in-office. As such, the target of the food handler training is to offer food handler training in-office during all days the EPH office is open. In 2011, live-proctored food handler cards were conducted in-office 252 days.

Food Handler Summary

All food service workers in Oregon are required to obtain a Food Handler Certificate by passing a 20 question Oregon Food Handler Examination with score of 75% or greater. Food service workers in Jackson County can take the test at the EPH office during business hours. They may also elect to take the training online at their convenience, which is becoming increasingly popular (Table 7). In 2011 there were 0.55 FTE dedicated to this program.

Table 7: Historic Food Handler Certificate Information

Year	2004	2005	2006	2007	2008	2009	2010	2011
Cards Issued via Live Proctor*	4,397	4,023	3,301	1,679	2,043	1,234	1,358	1,358
Cards Issued Online	nd	nd	nd	2,062	2,761	3,771	4,123	4,208
Total Cards Issued	4,397	4,023	3,301	3,741	4,804	5,005	5,481	5,564

*Includes examinations give on-site, off-site by ServSafe-certified staff, and re-issued cards.

DRINKING WATER PROGRAM

The primary goal of the Drinking Water Program is to prevent illness from public drinking water sources. An intergovernmental agreement with the Oregon Health Authority Drinking Water Program delegates authority to EPH to perform services for subject public drinking water systems. Activities are conducted pursuant to the following statutes and rules:

ORS Chapter 448 Water and Sewage Systems; OAR 333 - Division 61 Public Water Systems

EPH provides water system surveys, monitoring, and compliance activities for 222 public drinking water systems in Jackson County that provide clean water to approximately 23,000 citizens. There were 0.8 field FTE (1.0 total FTE) dedicated to this program in 2011. (*Note: Water systems that serve more than 3,300 people are monitored by the State of Oregon Drinking Water Program staff, not Jackson County EPH staff.*)

Public water systems are classified by the following definitions:

- **Community Water System:** A water system which has at least 15 service connections or which supplies drinking water to 25 or more of the same people year-round in their residences. Examples are cities, towns, subdivisions, mobile home parks, and the like.
- **Nontransient Noncommunity Water System:** A water system which supplies water to 25 or more of the same people at least six months per year in places other than their residences. Examples include schools, hospitals, and work places.
- **Transient Noncommunity Water System:** A water system which provides water in a place such as a restaurant or campground where people do not remain for long periods of time.
- **State Regulated Water System:** Water systems which provide water to small residential communities between four and 14 connections, or serves from ten to 24 persons a day at least 60 days a year, or is licensed by the Health Division or delegate county health department but is not a Transient Water System.

Drinking Water Targets

The following targets were monitored monthly to ensure systems were being surveyed as needed and that *E. coli* alerts were responded to in a timely fashion. *E. coli* alerts were targeted due to the potential for acute and severe illness, as opposed to chronic health issues that may result from long-term ingestion of other contaminants.

Table 8: Annual Drinking Water Program Target Data

Targets	Outcome
Conduct all required public water system services.	41 of 41 of required surveys were conducted.
Respond to <i>E. coli</i> positive water sample alerts within 24 hours of notification.	2 of 2 <i>E. coli</i> alerts were responded to within 24 hours.

Drinking Water Summary

Water systems are surveyed every three or five years (depending on the classification) via on-site physical review of the water system and discussion with the system operator regarding operations and maintenance. Forty-one drinking water systems were surveyed in 2011. In addition to the system

surveys, staff responded to 96 alerts. When a water sample exceeds the maximum contaminant level (MCL) or other designated threshold, an alert is issued by the Oregon Drinking Water Program to EPH to ensure follow-up. The water system operators are often also notified by the water laboratory that conducted the analysis. EPH staff provides consultation to the subject water system operator on appropriate actions to assure that follow-up sampling is completed and to assure that corrective action is taken as necessary.

COMMUNITY HEALTH HAZARDS

“Community health hazards” is a term used to describe the miscellaneous public health concerns that involve EPH. Activities in this area are funded by a small amount of General Fund. No FTE are formally dedicated to this program. The funding is applied on a discretionary basis depending on the need.

Harmful Blue-green Algae Blooms: The Oregon Health Authority’s Harmful Algae Bloom Surveillance program is the lead agency concerning blooms. Locally, EPH is often involved in answering questions from the public and media about the blooms.

Three blue-green algae blooms were identified in two Jackson County lakes in 2011 (Fish Lake and Lost Creek Lake), compared to six total blooms in 2010. When a bloom is detected, a health advisory is issued by Oregon Health Authority’s Harmful Algae Bloom Surveillance (HABS) program for the water body until tests show the bloom is below the established threshold considered safe. Fish Lake’s advisory was in effect from July 1, 2011 to July 25, 2011 (24 days). The Lost Creek Lake advisories lasted 21 days (July 1, 2011 to July 25, 2011) and 110 days (September 23, 2011 to January 11, 2012).

Animal Bites/Rabies Prevention: In addition to providing rabies consultation to citizens that have been bitten by dogs and cats, EPH also provides investigation and rabies consultation when people or pets may have had contact with suspect rabid animals (typically bats). This service has a substantial return on investment for the public when human exposure occurs in that 1) rabies is a fatal illness, and 2) rabies post-exposure prophylaxis (rabies shots) is expensive and often unwarranted.

The August 31, 2010 edition of the *CD Summary* reported the average direct costs of a suspected human rabies exposure was \$2,564 based on a southern California study. The biologics are expensive and requires at least four visits to a healthcare provider. In contrast, the total direct cost of shipping and testing an animal specimen at the Oregon Veterinary Diagnostic Laboratory is approximately \$100 (\$70 for testing and about \$30 for shipping). If there is known human contact with a suspect rabid animal, Oregon State Public Health Lab will perform the test and incur the costs. Submitting the wild animal for rabies testing is clearly the priority and may avoid the expense and burden of a person receiving post-exposure rabies shots.

In respect to unvaccinated pet contact with a suspect rabid animal, the pet must be euthanized or immediately vaccinated and quarantined for six months (usually confined at home), making testing of the wild animal an appealing alternative when available.

In 2011, EPH provided investigation/consultation in 81 cases: 57 cases involving bats, two involving raccoons, one involving a fox, and 21 involving other wild animals (mostly mice and squirrels). As part of rabies prevention efforts, a total of 41 mammals (31 bats; 6 cats; 1 dog; 1 raccoon) were submitted by EPH to laboratories for rabies analysis due to suspect contact to people or pets with potential to transmit rabies. This represented an increase of 11 animals being tested compared to 2010. Of the specimens

submitted, two bats were found to be rabid. Historically, one to four bats are found to be rabid in Jackson County per calendar year (approximately 10% of bats submitted for testing).

Don't Let Rabies Get Your Goat!

In late 2010 and early 2011, eastern Josephine County had a spike in animal rabies cases, including a milking goat, a coyote, and more than ten foxes. To augment rabies prevention and education efforts, Jackson County EPH and Jackson County Animal Care & Control collaborated with Josephine County Public Health, Oregon Health Authority, Oregon State University Extension Service, and 4-H. This partnership was made possible via a grant from Oregon State University's Outreach Collaborative for a Healthy Oregon (OCHO). The project was aptly titled, "*Don't Let Rabies Get Your Goat!*"

Collectively, public education was provided at both county fairs, in addition promoting awareness through newspaper, television, and radio media outlets. In August of 2011, six low-cost (\$5 or free with flyer) rabies clinics were conducted in each county for a total of 12 vaccination clinics. Jackson County clinics were at the public library in the Applegate, while Cave Junction was the site of the Josephine County clinics. Combined, 1,022 animals (760 dogs; 198 cats; 27 goats; 37 horses) were vaccinated against rabies (287 animals vaccinated at the Applegate clinics).

Note: Special thanks to Sharon Johnson, Associate Professor, Oregon State University Extension Service, for taking the lead in the grant process.

DISCUSSION

While current staffing level is adequate to meet requirements and targets in the core programs, any reduction in FTE will likely result in falling short of our contractual and delegated obligations. EPH staff provides specialized services to many businesses and organizations, emphasizing the importance of maintaining a highly qualified, well trained, and professional staff to maximize the effectiveness of the services to the community. Because the licensing and inspection programs are fee-based, it is imperative for EPH to maintain fees that are adequate to cover associated program costs. This is particularly difficult within the current economic climate.

While EPH receives a modest contribution of General Fund to address community health hazards, there is inadequate funding to fully address the multitude of citizen concerns regarding various local community health hazards, such as rabies prevention, blue-green algae, recreational water quality, and indoor air quality, among other environmental public health hazards.

LOOKING AHEAD

Wood Stove and Open Burning: The Wood Stove and Open Burning program is addressed in a separate report, as most of the work in the program is typically conducted between October and May. However, it is worth mentioning that funding for this program via grant from the Department of Environmental Quality (DEQ) has been cut in half (from \$30,000 to \$15,000). Such cuts not only directly affect the level of service provided within the program, but also have a ripple effect throughout EPH, as staff work needs to be reallocated to other programs or FTEs reduced.

Adoption of 2009 FDA Food Code: Current Oregon Food Sanitation Rules are based on the 1999 FDA Food Code. The OHA is in the final stages of updating the rules with the 2009 FDA Food Code, which will be effective July 1, 2012. During the past year, staff has been providing information regarding

these changes to food service operators in an effort to minimize problems in this transition. Nonetheless, as with any rule changes, there will be an additional consultative workload as the rules are implemented.

Organizational Camp Rules: The Oregon Health Authority has made a commitment to modify the administrative rules (OAR 333 - Division 30) pertaining to organizational camps. The EPH Division Manager has volunteered to take part in this process and is a member of the advisory committee that was formed by OHA to address this issue. Meetings are scheduled to be held the latter part of 2011.

Temporary Restaurant Rule Changes: Effective March 1, 2012, Oregon statutes and rules pertaining to temporary restaurants were modified. Much of these changes involved better accommodating temporary restaurants at grower's markets. However, the changes also affect benevolent temporary restaurants, such as little league baseball concession stands. Such operations will now be required to be inspected, whereas a consultation was sufficient under previous rules. Many such concessions prepare hamburgers and chicken using raw product, which presents potential foodborne illness risks. These new rules are intended to help prevent foodborne illness by providing additional oversight and education via the inspection process. EPH will implement the associated license and inspection fees at a reduced cost to minimize the financial impact to the operations, while still providing food safety oversight.

Drinking Water Program Funding: Funding for Jackson County's Drinking Water Program is currently remaining flat, but with costs increasing locally, and budgetary cuts at the state level, it is unknown how the local program will be affected.

Relocation of HHS: As the relocation of Jackson County HHS comes to fruition, EPH will look for opportunities to collocate with other programs and services that relate to EPH activities. One such program is the Jackson County Public Health Communicable Disease Program. Because communicable diseases sometimes involve licensed facilities (e.g. foodborne illness from a restaurant) or other environmental public health issues, being in close proximity would serve both programs well.