



Public Health - Seattle & King County

# Environmental Health Services

ANNUAL REPORT 2009

## Environmental Health Sites and Contact Information

**Black River**  
Environmental Health  
900 Oakesdale Ave. SW,  
Suite 100  
Renton, WA 98057  
Phone: 206-296-4932  
Open M-Th 7:00 AM to 5:00 PM,  
closed Friday  
Services: *Community Environmental  
Health Services*

**Downtown**  
Environmental Health  
401 5th Ave, Suite 1100  
Seattle, WA 98104-2333  
Phone: 206-296-4632  
Food Worker's Card: 206-296-4791  
Open M-F 8:00 AM to 5:00PM  
Services: *Food and Facilities Protection  
Program, Environmental Hazards,  
Community Environmental Health  
Services, Administration Services*

**Eastgate**  
Environmental Health  
14350 SE Eastgate Way  
Bellevue, WA 98007  
Phone: 206-296-9791  
Open M-F 8:00 AM to 5:00PM  
Services: *Food and Facilities  
Protection Programs*



# PART OF YOUR LIFE... EVERYDAY



David Fleming M.D.

King County – diverse, beautiful, and rich in natural resources and human potential – is a place we can all be proud to call home. And as in any complex community, protecting and promoting the health of those who live and/or work here is an on-going challenge. Most importantly, our environment must be healthy if we are to be healthy.

Through education, collaboration and regulation, the Environmental Health Division, works tirelessly to protect our environment, prevent disease and promote healthy people and communities. The Division's 150 employees work with residents, businesses, organizations and other agencies. Staff also recognize that not all residents have the same opportunities, resulting in significant health disparities in King County, and that inequitable environments have much to do with this.

In this report, you'll see that the work of Environmental Health impacts your life everyday. Environmental Health truly is a foundation for a healthy community, where all people can be as healthy as possible. I encourage you to read this report from cover to cover, and discover how Environmental Health works for you and all people in King County. I know you'll be impressed.

Sincerely,

David Fleming, MD  
Director and Health Officer  
Public Health – Seattle & King County



Ngozi Oleru, Ph.D.

Hello!

As you know, the foundation of good health is a healthy environment. That includes clean water, air, and soils, pest and toxic-free homes and businesses, safe, wholesome foods, adequate waste disposal and socially healthy neighborhoods. Our job in Environmental Health is to address the challenge of providing safer, healthier places to live, learn, work and play everyday.

We address the challenge in several ways by: advocating for and integrating a health focus in land use development; encouraging healthy behaviors and the use of healthy products; developing and implementing new policies; and, ensuring that community needs are included in our program planning while enforcing our current mandates. All of our work and planning is based on the core principle of equity for all residents.

Over my ten years with Environmental Health, I have repeatedly witnessed how our staff's unique knowledge, skills and dedication to their daily work makes King County a great place to be. Therefore, I am pleased to present this 2009 Annual Report that highlights the tremendous work of Environmental Health. You'll find our work and accomplishments organized into the following sections:

- The Food and Facilities Protection programs, which send staff into the community to make sure that restaurants, schools, swimming pools and other public facilities are operating with the public's health in mind and within health-based codes;
- The Environmental Hazards program, which in cooperation with other agencies, consult on hazardous materials management, educate both the public and businesses about toxic exposures, oversee solid waste disposal, control rodent infestations, and investigate illegal drug labs;
- The Community Environmental Health programs, which protect our health by issuing permits, inspecting, and enforcing sewage, plumbing, and water system regulations;
- The Cross-cutting programs that work on emergency preparedness, community engagement and communication, enforcement, and creating healthy land use and built environment development policies; and,
- A snapshot of our 2009 budget revenues and expenditure.

As you will see, the work we do in Environmental Health touches everyone's life in one way or another. On the "river" at the bottom of each page are examples of how the valuable services we provide contribute to your health and safety everyday. I am pleased to share with you the breadth of effort and dedication our staff brings to King County.

I hope you enjoy reading the report and I welcome your feedback.

Sincerely,

Ngozi Oleru, Ph.D.  
Director, Environmental Health Services Division

## Environmental Health Services

6:00 AM

*brush teeth, shower,  
flush toilet, wash hands*

Plumbing inspectors assure us fresh, clean water piped into the house and wastewater piped out...without a chance of them getting mixed!



## WE ARE PART OF YOUR LIFE...EVERYDAY!

6:30 AM  
*garbage pick up*

EH permits the trucks, transfer stations, and the county landfill.



6:45 AM  
*yard waste/food  
waste pick up*

EH permits all transfer stations and permits and inspects Cedar Grove Composting in Maple Valley.



# FOOD & FACILITIES PROTECTION

Each year, millions of people suffer from diarrhea and vomiting caused by foodborne illnesses. Of these millions, hundreds of thousands of ill people are hospitalized, and thousands die as a result of their illness. The Food and Facilities Protection Section reduces the risk of foodborne illness in King County through education and regulatory oversight for restaurants and other food establishments. When foodborne illnesses do occur, our staff investigate the source of the disease and ensure that the source of the contamination is removed.

The Food and Facilities Protection section also protects people from waterborne disease, drowning, and injury in pools and spas by reviewing and approving pool designs and conducting annual inspections. At local beaches, water quality is monitored throughout the summer.

Food Establishments reflect King County's rich cultural diversity. A magnificent variety of foods are on the menus at the nearly 11,000 permitted restaurants and food service operations. Before any food establishment receives its first permit, the space design plans are reviewed for compliance with regulations. All permitted establishments receive routine inspections and for some, an educational visit each year. The program inspects for food safety compliance and keeps establishments current on the latest food safety information. Inspection reports are available online at <http://www.kingcounty.gov/health/foodsafety/>. Health concerns or complaints about food establishments can also be submitted on this site, and an inspector will follow up.

Food Worker Training, passing a test, and having a current food worker card are required for all food workers in Washington who handle unwrapped or unpackaged food. Environmental Health provides food worker training classes each week. Training ensures that food workers have the

minimum level of food safety knowledge to work in the food industry. Training materials are available in several languages and an interpreter can be requested when translated material is not available. Our partner, the Washington Restaurant Association Education Foundation, also provides classes and testing for their members.

Temporary Food Events, defined as serving food to the public at a one-time event or for less than 21 days in the same location, are required to have food service permits. Farmers' Markets and other recurring events that operate no more than 3 days a week are in a special category of temporary events. A pre-review of the site is conducted prior to each event and higher risk sites are inspected during the events. In 2009, 2,031 temporary event permits were issued.

Trans Fat Elimination, phase II, went into effect on February 1, 2009. Establishments can no longer prepare and/or serve any products with 0.5 g of trans fat or more per serving. In the 16,218 inspections in 2009, 432 violations were noted while over 97 percent of facilities were in compliance.

Nutrition Labeling, a healthy eating initiative in response to the obesity epidemic, became effective January 1, 2009. It applies to 1,480 chain food establishments that have 15 or more locations nationally offering 80 percent or more of the same standard menu items. In 2009, 2,196 inspections at chain food establishments revealed 361 violations, which is an 84 percent compliance rate.

The Biotoxin Program works year-round sampling mussels and clams from salt water beaches for Paralytic Shellfish Poison ("red tide") and Amnesic Shellfish Poison.

A combination of warm temperatures, sunlight, and nutrient-rich waters can cause rapid reproduction or "blooms" of biotoxin producing algae. While these biotoxins occur naturally in marine waters, contact with "blooms" can make people sick or even cause death. When we detect a toxin at dangerous levels, the harvest areas are closed and posted with "shellfish harvest closure" signs in seven languages. The harvest areas are opened when the toxin levels are safe again.

Swimming Beach waters are monitored for bacteria levels at King County's 19 fresh water and 10 salt water public swimming beaches. This program helps identify the sources of bacteria, whether from bathers, animals or sewage system overflows. When bacteria levels are too high, the beaches are closed to swimmers. In 2009, two salt water beach closures and one fresh water closure were enforced. The program is a collaborative effort between Environmental Health, King County's Department of Natural Resources and Parks, Washington State departments of Ecology and Health, and local cities and parks.

Pools and Spas in King County are enjoyed by tens of thousands of residents, tourists and visitors each year. Environmental Health inspectors check every public pool and spa for proper water disinfection, temperature, safety barriers, and safety equipment. Staff also review plans for new construction or remodeling of pools, spas, wading pools, and spray pools. During 2009, a primary focus was to educate pool operators on new regulations for safety barriers and drains. Any injury, illness, or death including a drowning or near drowning in a pool or spa must be reported, and in 2009, two injuries were reported in permitted facilities.

## QUICK FACTS

### Food & Facility Protection Activities in 2009

Trained and tested food workers

65,000 food worker cards

Provided routine food establishment inspections

18,038 inspections

Provided food establishment educational visits

6,394 educational visits

Permitted food establishments

10,993 permits

Investigated food establishment complaints

1,071 complaints

Inspected for trans fat and nutrition labeling requirements

18,414 inspections

Investigated suspected cases of foodborne illness with public health epidemiologists

142 investigations

Reviewed food establishment plans

763 plans

Provided routine pool and spa inspections

3,305 inspections

Reviewed pool plans

400 plans

Opening inspections for tattoo facilities, Seattle

9 opening inspections

7:00 AM  
take Saffron  
to "doggie  
daycare"



Permits required for pet shops, commercial kennels, pet daycares, grooming businesses, animal shelters, and pet aquatic facilities keep the risk of zoonotic diseases low.



7:30 AM  
catch the bus or train

Land use and the built environment – where you live in relation to work, school, services, impacts your health.



11:30 AM stop by the  
farmer's market

These markets have food permits and are inspected.

# ENVIRONMENTAL HAZARDS

The proper management of environmental hazards is an essential component of public health work. Working in cooperation with state and local agencies, non-governmental organizations, and communities, Environmental Hazards teams advise on chemical waste management, educate about toxic exposures such as lead and arsenic, supervise solid waste disposal, control rodent infestations, coordinate responses to vector-borne illnesses such as West Nile virus, assess hazardous waste sites, and investigate illegal drug laboratories.

## The Local Hazardous Waste Management Program

in King County is an intergovernmental collaboration between Public Health – Seattle & King County, Seattle Public Utilities, King County Department of Natural Resources and Parks, and the Suburban Cities Association. The program works to protect and enhance public health and environmental quality by reducing the production, use, storage and disposal of hazardous materials. For two decades, it has helped people and businesses learn what materials are hazardous, identify safer alternatives, and manage the hazardous waste they may have or produce.

In 2009, some of the activities included: providing information on proper waste management to small businesses and residents; contracting with the 37 suburban cities to collect 123 tons of hazardous waste; expanding the pilot pharmaceutical “take back” project and working toward establishing a permanent, funded, pharmaceutical collection system; organizing the first Northwest Children’s Environmental Health Forum; presenting a “green” toy purchasing workshop; and, coordinating the annual City of Seattle Paper Cuts Green Purchasing Workshop.

**The Physical and Chemical Hazards Program**, supported by grants from the Washington Department of Ecology, protects community and environmental health by identifying chemical and physical hazards and promoting conditions and behaviors that minimize exposure. The program does this by investigating and ranking contaminated properties (contamination is most often caused by fuels, oils and heavy metals); assuring clean up of illegal drug labs; and providing education and data on health and environmental impacts from arsenic and lead contamination due to the Tacoma ASARCO copper smelter plume

**The Solid Waste Program** ensures that garbage is handled in a safe manner for people and the environment by reviewing plans for solid waste-handling facilities, issuing permits to operate facilities and garbage trucks, and inspecting and monitoring these facilities. The program also works directly with residents by investigating complaints about unlawful garbage dumping.

In 2009, the program began assessing the approximately 150 recycling and material recovery facilities that are currently exempt from permit to determine regulatory compliance. Recycling of construction, demolition and other materials is a rapidly evolving industry.

Garbage and rodents often go hand in hand. Since rodents can carry diseases, destroy property, cause electrical fires, and contaminate food, Solid Waste staff provide information on what attracts rodents and how to maintain an environment that will not attract them. Educational materials were updated this year and are available in print as well as on the Web at <http://kingcounty.gov/health/rats/>.

**The Zoonotic Disease Program** focuses on infectious diseases that can be spread from animals to humans such as rabies, leptospirosis, ringworm, some types of influenza, and West Nile virus. The public’s health is more vulnerable to zoonotic disease due to human activities including increased travel, trade, and contact with wildlife. Climate change may also be upsetting the balance of the human/animal ecosystem.

Our staff consult with veterinarians and other medical professionals on potential cases of zoonotic disease in animals; investigate animal cases or outbreaks; provide infection control recommendations for animal exhibits such as zoos and fairs; conduct active monitoring of disease outbreaks; and provide disease prevention education. The program is also responsible for licensing, inspecting, and responding to complaints about pet shops, boarding kennels, and pet daycare businesses in King County. At the direction of the King County Council, our Veterinarian began supervising King County shelter veterinarians and wrote protocols for infection control, controlled substance management, and medical triage in the shelters.

## QUICK FACTS Environmental Hazards Section Activities in 2009

- Conducted site hazard assessments
  - 23 assessments
- Investigated unlawful dumping complaints
  - 1,263 field investigations
- Investigated rodent complaints
  - 1,000 field investigations
- Surveillance for West Nile virus (WNV)
  - 1,277 citizen reports of dead birds collected
  - 1,129 dead birds mapped
  - 51 dead birds tested for WNV
  - 2 dead birds positive for WNV
- Consulted with residents on questions about mosquitoes, birds and WNV
  - 305 consultations
- Issued Waste Clearances to ensure dangerous waste is not going to landfill
  - 294 clearances
- Aided in controlling rat population
  - 4,783 manholes inspected (City of Seattle)
  - 1,958 manholes baited (City of Seattle)
- Released decontaminated illegal drug lab sites for re-occupancy
  - 6 sites released for re-occupancy
- Saved businesses money through the IMEX program
  - 23 exchanges
- Consultations and investigations by the Zoonotic Disease Program
  - 131 potential animal rabies exposures evaluated
  - 430 rabies consultations
  - 15 animal Leptospirosis case investigations
  - 1 Cryptococcus gattii field investigation
  - 1 ringworm outbreak response
  - 88 other zoonotic disease consults or investigations
- Sampled soil for lead/arsenic (Tacoma Smelter Plume project)
  - 618 samples taken at 96 play areas
- Pet shops, kennels, and dog daycares in the City of Seattle
  - 91 office consultations
  - 2 complaint investigations
  - 47 inspections

## NOON time for lunch

All food establishments are permitted and inspected. Chain establishments have calories and nutritional information easily visible at or before point of ordering.



## 1:30 PM sewers are baited for rats

Rats are a common problem. In Seattle, sewers are baited to control them. Information on how to get rid of and stay free of rats is available to residents and businesses.



# COMMUNITY ENVIRONMENTAL HEALTH

## The Community Environmental Health Section

includes programs for onsite sewage, small drinking water systems, and plumbing. These programs assure that water stays clean until you use it and that waste water does not contaminate clean water on its way to a municipal sewer or individual onsite system for treatment.

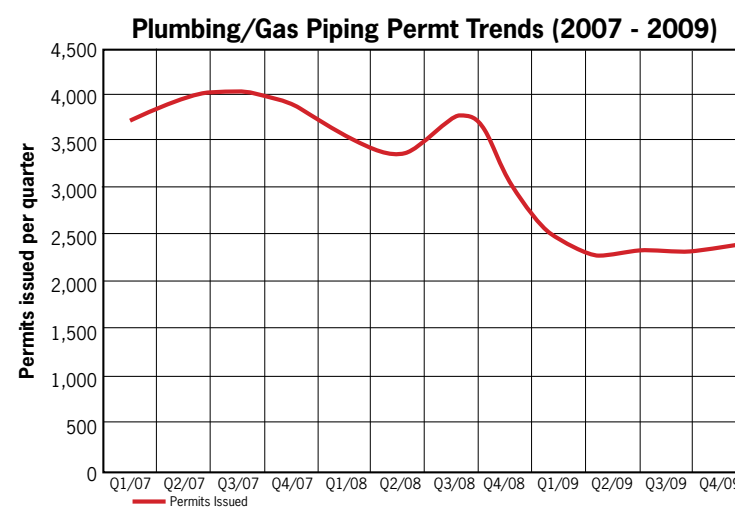
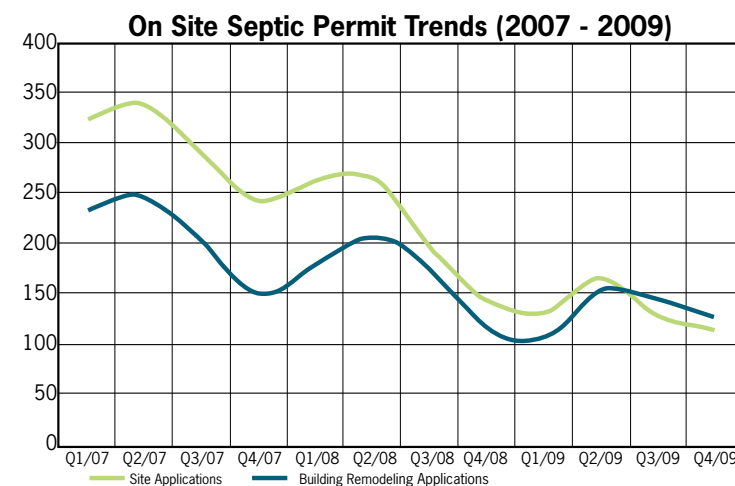
The economic downturn in the last quarter of 2008, tightening of the credit market, and the general decline in the construction industry contributed to a major decrease in permit applications across all three programs and a corresponding reduction in program revenue. This resulted in a nearly 40 percent layoff of onsite and plumbing inspection staff and administrative support staff.

**Onsite Septic Systems** are wastewater and sewage treatment systems on developed properties that are not connected to a community sewer. One contributor to water contamination is improperly treated sewage from failing septic systems. Currently, a complete inventory of all septic systems is not available to Environmental Health to aid in ensuring all systems are functioning properly. Starting in 2009, all onsite septic systems are required to be evaluated by a qualified inspector whenever a property is sold. The goal of these "time of sale" inspections is to assure that onsite systems receive a periodic inspection, and that failing systems are repaired where necessary. In the first ten months of this new regulation, nearly 1500 reports were received. Many hundreds of reports were for systems for which we had no previous records. In the same time period, repair permits nearly doubled, suggesting that the requirement is having the desired effect.

Outreach to onsite sewage owners in the Marine Recovery Areas on Vashon Island continued in 2009. The Vashon Island Septic Solutions Committee, the Ground Water Management Committee, and staff from Environmental Health and King County Department of Natural Resources and Parks sponsored an "onsite sewage" fair. The fair brought together onsite treatment product vendors, experts from the Washington Onsite Sewage System Association, and residents who have onsite systems. The fair enabled residents to see and touch many of the alternative systems available and to learn how these systems might work for them. The fair was successful and will likely be repeated in 2010.

**The Small Water System Program's** very basic level of service to operators, developers, and residents was threatened by lack of resources, but fortunately, the King County Board of Health approved a new "water review" fee. This fee will be added to the onsite sewage system site application or application for a building permit and will allow for the plan review, initial inspection and inspection of small water systems whenever properties are sold.

**The Plumbing and Gas Piping Program** consolidated from Black River and City of Seattle Department of Planning and Development sites to one location in the King County Chinook Building. This cost cutting measure has improved coordination and consistency of staff work.



## QUICK FACTS Community Environmental Health Activities in 2009

- Approved new Group B wells  
8 wells
- Provided plumbing and gas piping permits  
9,715 permits
- Reviewed onsite septic system site applications  
486 applications
- Approved as-built designs for onsite  
205 designs
- Received Operation & Maintenance Reports  
2,717 reports



2:00 PM  
get a food worker card

All food workers must take a food safety class and pass a test to receive a food worker card. These cards are required for all people working in food establishments.



5:00 PM  
swimming lessons  
at local pool and  
a good walk



All public pools are inspected annually, including those in apartment and condo complexes. Pools must meet regulated safety standards for design, maintenance and water chemistry. Accidents and drownings are also investigated.

The Built Environment and Land Use Program supports prevention strategies to ensure King County residents have equitable access to environments that promote healthy lifestyles.



# CROSS CUTTING PROGRAMS

**Community Engagement** is an essential element for equitable service across the diverse communities in King County. Whether the “communities” are residential, businesses, other organizations or government agencies, collaboration is paramount. Several examples of community engagement in 2009 include working with chain restaurants to correctly implement the Trans Fat and Menu Labeling regulations; facilitating an advisory team of community organizations for a federal grant-funded project; and facilitating an interagency environmental justice group.

**Equity and Social Justice** is a King County initiative and a foundational principle in the Environmental Health strategic plan. All programs must consider the effect of their work through an equity lens. Supporting community engagement in our work is a prime example of applying equity and social justice principles.

**The Built Environment and Land Use Program** supports health promotion strategies to ensure King County residents have equitable access to environments that encourage healthy lifestyles. In 2009, we initiated a “Healthy Places for Everyone” website with resources for communities and other agencies, participated in the Seattle Neighborhood Planning process, and continued working to include healthy design principles into housing redevelopment and long-range transportation plans. In these efforts, Environmental Health encourages policy development that can prevent health problems by removing environmental threats and encouraging healthy actions and sustainable changes. This program also made strides in highlighting the public health role in climate change planning.

**The Enforcement Team** provides legal and enforcement support to Environmental Health programs. Their work includes day-to-day legal advice, guiding enforcement processes, drafting Board of Health Rules and Regulations, representing the division in hearings before the King County Hearing Examiner, coordinating communications with the Prosecuting Attorney’s Office, responding to Ombudsman inquiries, and recommending positions on proposed state and local legislation. The team works closely with Public Health’s Compliance Office to respond to public records disclosure requests. In 2009, 68 percent (307 requests) of Public Health’s Compliance Office public records requests were for Environmental Health.

**Emergency Preparedness** includes an Environmental Health component. During 2009, staff worked on regional planning teams and interagency task forces to develop emergency response plans for potential flooding in the Green River Valley. If flooding does occur, the environmental health consequences can be serious. Environmental Health planned for the possible release of raw sewage and hazardous materials into the floodwaters, water damage to property, and potential contamination of food products. Environmental Health staff were also very active during Public Health’s H1N1 Influenza (Swine Flu) response, working with the Public Information Call Center and Communication Teams and at Mass Vaccination Sites.



**6:00 PM**  
grocery shopping for dinner...  
return unused prescriptions  
to pharmacy

Grocery stores are permitted and inspected for safe food handling.

Unused antibiotics and hormones are just two examples of drugs that have been flushed down the drain or thrown in the garbage, and have ended up in our water supply. To protect our water and ourselves, EH piloted some pharmacies to take prescription drugs back to be disposed of safely.



# BUDGET

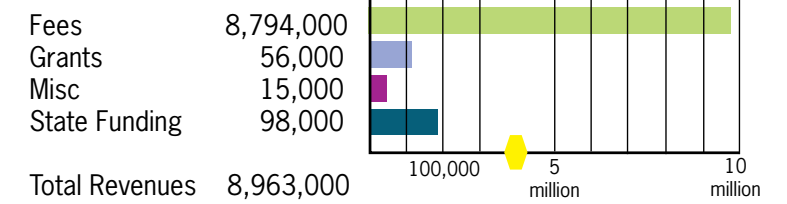
## Revenues

Regulatory programs in Environmental Health are funded through user fees paid by the businesses and residents of King County. For example, we charge each restaurant, public pool, or solid waste handling facility for inspections required by the King County Board of Health code. Other, primarily non-regulatory, work is funded by grants, contracts, and county and state general funds. The impact of the economic slowdown became evident in the last quarter of 2008, with significantly decreased revenues for land development and construction-related permits. Fee revenue dropped by 10 percent in 2009 over 2008 levels and support from county and state general funds was reduced by 37 percent. In 2009, revenues from contracts, grants and other sources were down by 9 percent.

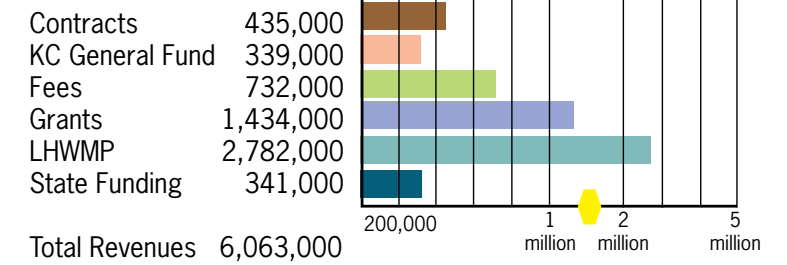
## Expenditures

Most of Environmental Health’s costs are related to employee salaries and benefits, affected by cost-of-living adjustments and other labor agreement provisions. When it became clear that revenue was coming in significantly below estimates, the only option was to lay off staff and eliminate unfunded positions. Nineteen positions, out of a total of 169 budgeted positions, were eliminated during 2009 resulting in layoffs, transfers to other Environmental Health programs, and other employee moves. In spite of these painful mid-year staff cuts, our 2009 expenses exceeded our revenues by more than \$2.5 million, which largely depleted the Environmental Health reserve in the Public Health Fund. The reserve will need to be replenished over time.

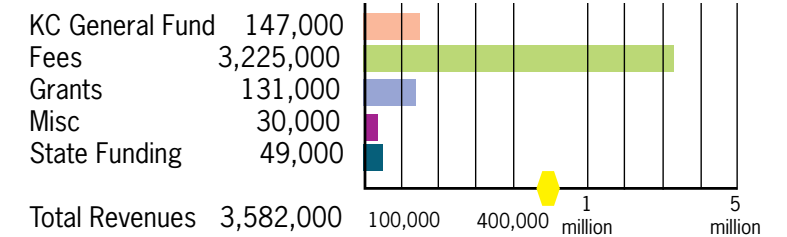
## Food and Facilities 2009 Revenues



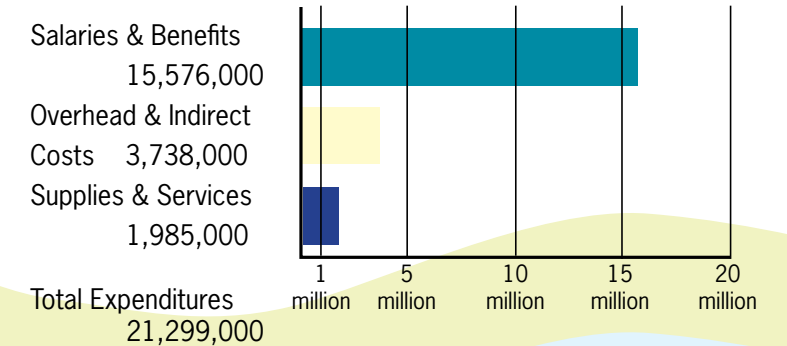
## Environmental Hazards 2009 Revenues



## Community Environmental Health 2009 Revenues



## Environmental Health 2009 Expenditures



**7:30 PM** community meeting



Community engagement is essential for understanding community issues and concerns, and promoting equitable solutions.