



KANSAS CITY HEALTH DEPARTMENT

# Environmental Health Services Annual Report 2004

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Air Quality Program  
Food Protection Program  
Community Environmental Health Program  
Childhood Lead Poisoning Prevention  
Program

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## **The Division of Environmental Health Services**

The achievement of the City's public health vision of Healthy People in a Healthy Community is very much dependent upon a healthful environment, one that is safe, protective and reduces risk for disease and unhealthy conditions. In order to achieve that healthful environment, the City must assure a safe food supply, housing, public facilities and recreational activities that are safe, protective and free of contaminants, as well as an air quality that promotes good health and prevents disease. The Kansas City Missouri Health Department strives to meet these goals through the implementation of four programs to address specific environmental threats to the public's health. These include the Air Quality Program, the Food Protection Program, the Community Environmental Health Program and the Childhood Lead Poisoning Prevention Program. The following describes program activities and efforts in 2004 to achieve the community's goal of Healthy People in a Healthy Community.

### **The Air Quality Program**

#### **Introduction:**

The Air Quality Program is designed to promote good air quality and to protect the health of Kansas City's residents and visitors through permitting, inspections and responding to citizens concerns and complaints. The program operates with a dedicated staff of five engineers, three Public Health Specialists and two administrative support staff.

#### **Highlights of 2004 Activities and Events:**

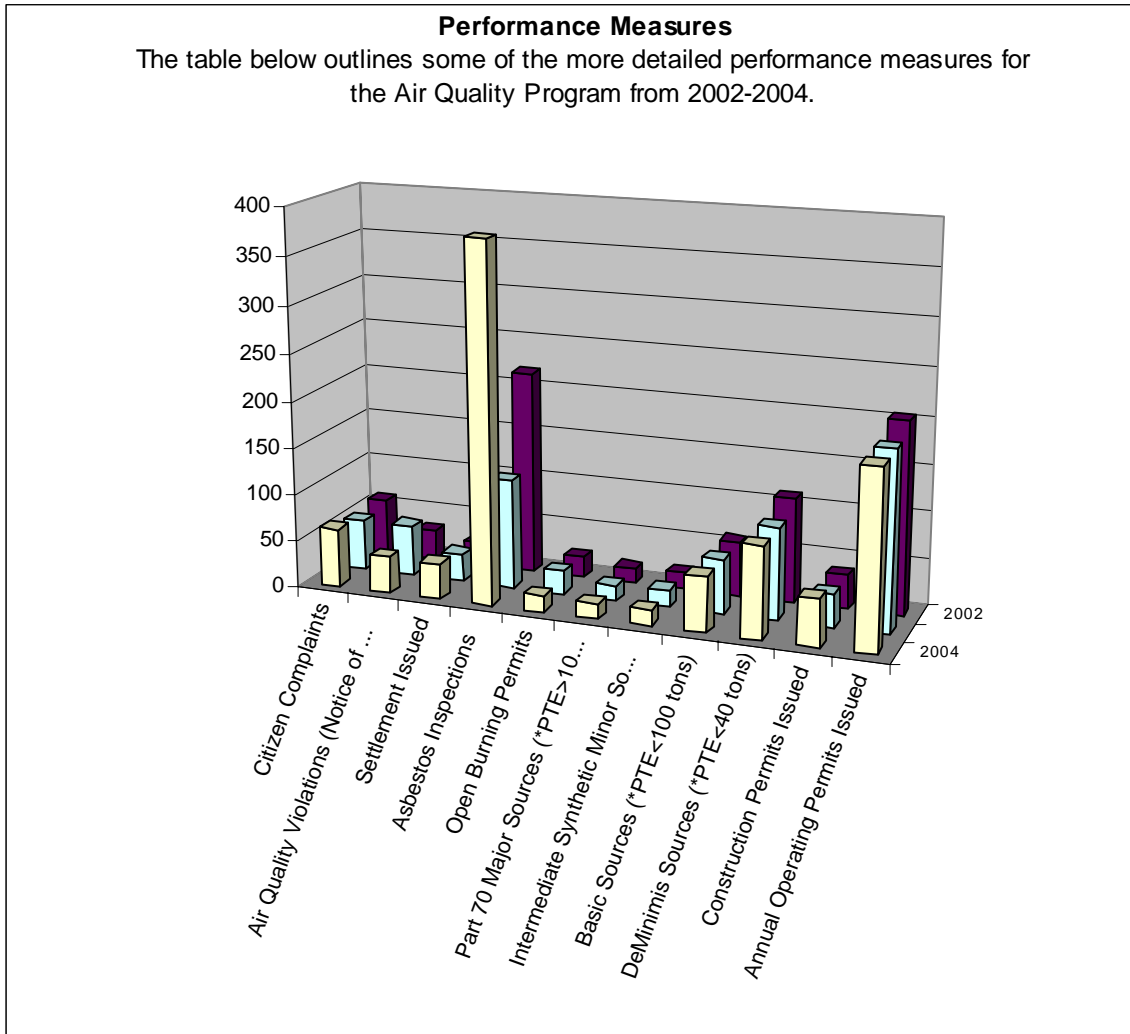
2004 was in general a stable year for the Air Quality Program. Total grant funds did not increase, but fortunately did not decrease either. The Program experienced no significant staff changes. Following are a few of the notable events that occurred in 2004:

- Kansas City Power & Light (KCPL) completed the third year of operation of the coal-fired boiler at Hawthorn. When permitted in 1999, this Unit was the first coal-fired plant to be built in the United States in decades. The air pollution permit included state of the art emission limitations. The process and materials used at Hawthorn are different than those used at other plants. For this reason, KCPL was allowed a 36-month evaluation period to learn how to operate and tune the Nitrogen Oxides (NOx) control device. KCPL was able to meet the final limit when it became effective in June 2004. The Air Quality Program meets with KCPL, MDNR and EPA to discuss ongoing SCR operating issues. The new catalyst has experienced problems, but continues to achieve low NOx levels. The Air Quality Program has worked closely with KCPL to assure compliance with other pollutant emission limits since start-up. Only minor violations have occurred.
- As part of the city-wide Ozone Action Plan to reduce ozone, the Air Quality Program took several steps to support that plan. On June 21, 2004, the program sent a letter to over two hundred cutback asphalt paving contractors and suppliers to inform them of the state regulation which restricts asphalt paving activities on high ozone days.
- As part of an ongoing effort to identify sources of nitrogen oxides (NOx) in the City, the program established a plan with Department of Code Administration (DCA) to account for all new emergency generators in the City. In order for facilities to receive a building permit in

the city, facilities must provide information on all Emergency Generators. This allows the program to keep track of NOX emissions from these units. It is possible in the future that these types of engines will be regulated. The Air Quality Program will issue the permit with one week in order to assure no delay in construction.

- In 2004 the Air Quality Program issued a total of 50 construction permits to various industries in Kansas City. Seventeen of those 50 construction permits were issued due to the newly adopted emergency generator permit policy. The remaining 33 construction permits issued included amendments to permits, new concrete plants, new rock crushers, paint booths, lithographic printers, incinerators, and others. Also in 2004 the Air Quality Program received four Missouri State Operating Permit renewal applications and one initial Missouri State Operating Permit application.
- Community outreach remains a program priority, although in ways that are markedly different from earlier years' outreaches. The Program continues to put an emphasis on Smoke School, a training program for the regions' regulated community as well as other regulatory agencies. For each of the spring and fall training sessions attendance was over 200 students. This resulted in revenues of over \$50,000 for the program.
- The Program actively participates in the MARC education committee that assists in the development of the Metro Clean Air Action Plan.

## Air Quality Program Performance Measures:



Performance Measure	2002	2003	2004
Citizen Complaints	60	54	62
Air Quality Violations (Notice of Violations Issued)	32	55	39
Settlements Issued	25	30	38
Asbestos Inspections	216	117	379
Open Burning Permits	22	25	18
Part 70 Major Sources (*PTE>100 tons)	16	16	16
Intermediate Synthetic Minor Sources (*PTE<100 tons)	18	18	17
Basic Sources (*PTE<100 tons)	58	58	59
DeMinimis Sources (*PTE<40 tons)	111	98	97
Construction Permits Issued	36	36	50
Annual Operating Permits Issued	203	190	189

\*PTE = Potential To Emit for any criteria pollutant listed on the next graph.

**Note:** Hazardous Air Pollutants (HAP) emitted in amounts over 25 tons for combined HAP or over 10 tons for a single HAP would make a source a Part 70 Major Source.

**Note:** Intermediates have a PTE above 100 tons per year but have taken voluntary limits to limit themselves below 100 tons.

# Food Protection Program

## **Introduction:**

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The mission of the Food Protection Program is to protect the citizens and visitors of Kansas City, Missouri from foodborne illness. This is accomplished through food safety education and the permitting and regulatory inspection of all retail food establishments in Kansas City, Missouri. The Program is staffed by 13 inspectors and administrative support staff, as well as field supervisors and program managers.

Regulatory authority to permit and inspect retail food establishments in Kansas City is assigned to the Health Department as stated in Chapter 30 of the Code of Ordinances, which adopts the FDA's 2001 Food Code with modifications and incorporates the Code by reference.

## **Highlights of 2004 Activities & Events**

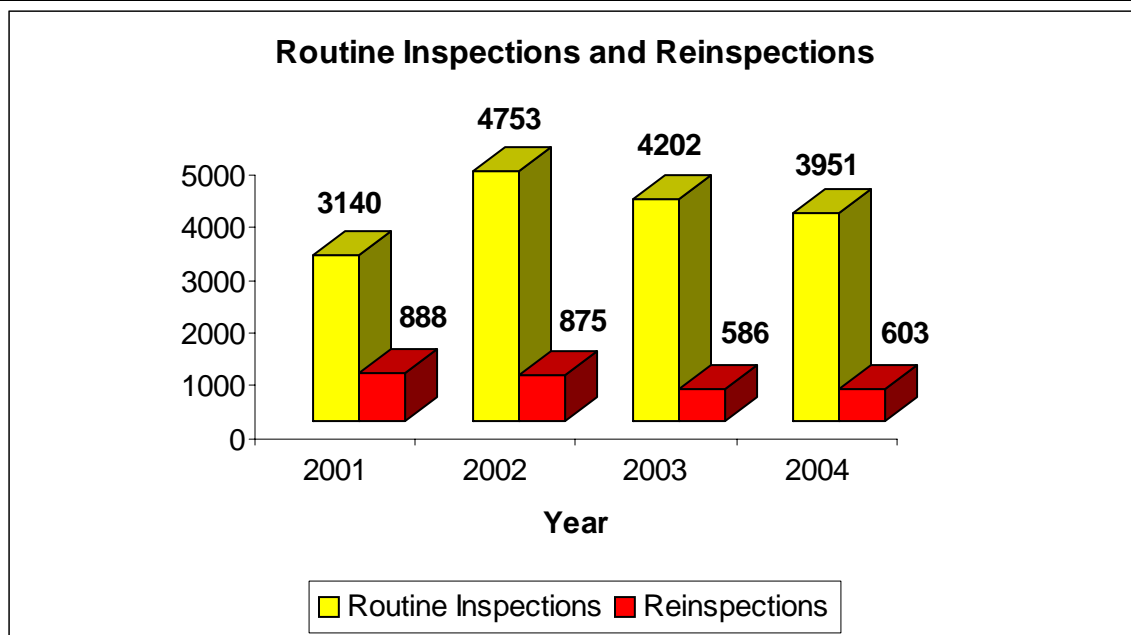
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- The Program hired five new food inspectors throughout the year to increase the number of inspectors from nine to thirteen.
- In May, five staff members passed the Certification for an Environmental Health Specialist. This certification tests the individual on all facets of environmental health such as food protection, sewage, communicable disease, water, salvage, lodging, lead poisoning, emergency response, vector control, daycare and pools.
- In June, the FDA sponsored a Voluntary National Retail Food Regulatory Program Standards conference which enabled the management team to audit their progress on two of the nine standards completed. The purpose of this program is to achieve national uniformity in how state and local government agencies inspect retail food establishments by evaluating nine standards. The standards apply to the operation and management of a regulatory retail food program focused on the reduction of risk factors known to cause food borne illness and the promotion of active managerial control of all factors that may cause it. Two staff members were trained on conducting plan reviews.
- The Food Program adopted the FDA 2001 Food Code in July with minor revisions. A summary of the changes include: revised hot holding temperatures from 140 degrees to 135 degrees, two new permit types, Catering and Seasonal Vendor, an exemption for those establishments whose principle mode of business is not the sale of food or beverages who offer non-potentially hazardous foods offered free to their clientele. A food handler card activity was also added to require all food employees to have a two-hour food safety training session. This activity will be phased in at 30% of the establishment's workforce being trained the first year and 30% each year thereafter up to 90% the third year.
- Five additional staff received plans review training, bringing to six the number of staff qualified to review and approve food establishment plans.

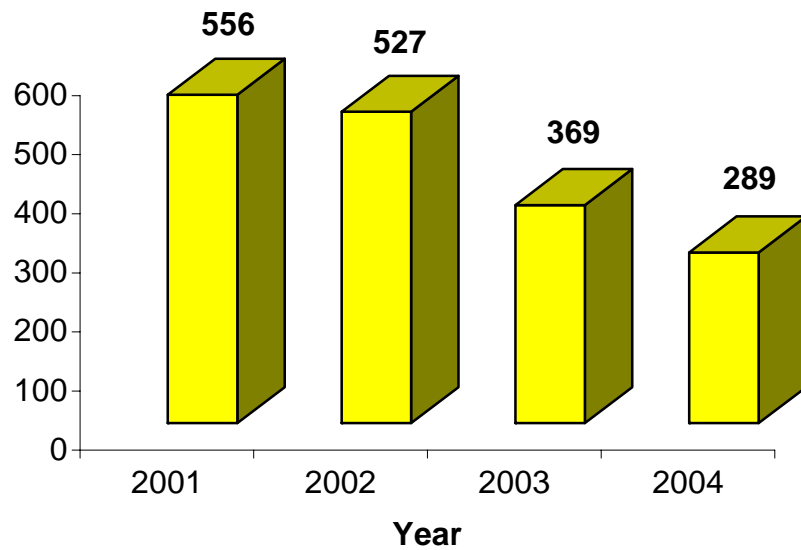
- September is “National Food Safety Education Month” and the Greater Kansas City Chapter of the Missouri Restaurant Association co-sponsored “Greater Kansas City Food Safety Education Day” with the Food Program and other area health departments. Quality Awards were given to 168 establishments for meeting the Department’s strict criteria based on risk, type of food served, population served and number of violations allowed.
- Two staff members attended the FDA Southwest Regional Conference in St. Louis in October. Two staff members completed the Successful Facilitator Certificate Program sponsored by the Mid-America Regional Council’s Government Training Institute.

**Summary of Activities of Food Protection Program:**

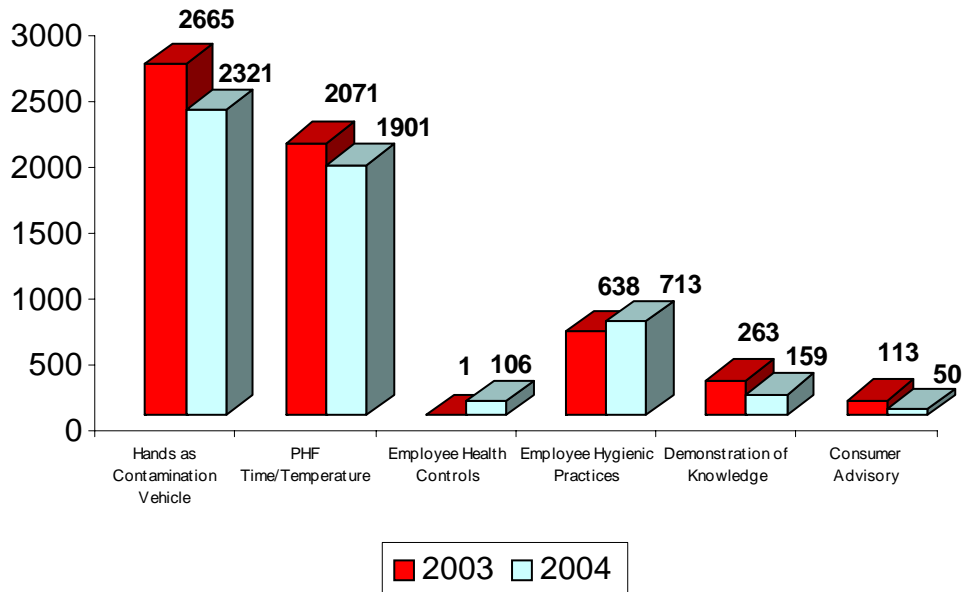
Activity	2001	2002	2003	2004
Revenue	\$332,160	\$677,553	\$849,547	\$949,770
Critical Violations	6,351	12,299	9,135	8,554
Non Critical Violations	13,251	22,153	13,616	12,023
Plan Reviews	119	110	158	136
Educational Presentations	32	39	35	14
# Of Individuals Trained	358	833	581	441



### Number of Complaints Received



### Key Intervention Violations



# **Community Environmental Health**

## **Introduction:**

The Community Environmental Health (CEH) Program is responsible for ensuring that public facilities are safe and healthy for the citizens of Kansas City. The CEH Program does this through permitting, inspecting, and responding to citizen concerns and complaints. The Program employs four Public Health Specialists who are responsible for conducting these inspections, as well as one Program Manager and an administrative support person.

The CEH Program inspects all lodging facilities, childcare facilities, water recreational facilities, and septic haulers in Kansas City, Missouri. Childcare and lodging facilities are regulated and licensed by the State of Missouri. The office is under contract with the Missouri Department of Health and Senior Services (MDHSS) to inspect approximately 300 childcare facilities and 100 lodging facilities annually. Water recreational facilities are regulated by the City and are permitted by this office. By City ordinance, all water recreational facilities are to be inspected once every thirty days while in operation. There are approximately 125 water recreational facilities that operate year-round and 375 that operate during the spring and summer. This office also permits septic haulers. Currently, there are 50 septic haulers inspected on an annual basis for basic health and safety issues.

The CEH Program is also responsible for responding to citizen complaints on the sanitary conditions of public facilities and noise. By City ordinance, public facilities are to maintain a basic level of cleanliness in order to ensure the health and safety of the public. Also by City Ordinance, noise cannot cause a disturbance across residential property lines. Complaints are generally responded to within two business days by an on-site visit of the facility.

## **Highlights of 2004 Activities and Events:**

### **Child Care Consultation Contract**

- The Community Environmental Health Program and the Childhood Lead Poisoning Prevention Program accepted a contract with MDHSS Bureau of Child Care to conduct outreach and training activities to child care providers and children attending child care facilities. Both of these programs already conduct these types of activities. This contract reimburses our programs for these training activities and allows the programs to expand trainings to more providers.

### **Community Environmental Health Assessment**

- The Community Environmental Health Assessment (CEHA) final report was completed in 2004. The three-year project involved community members and staff from various City Departments and was led by the Health Department. The information gathered from the survey and published in the report gives an idea of how the community views and defines environmental health issues in Kansas City.

## **Mosquito Control/Larviciding**

- Staff from several Health Dept. programs met to discuss West Nile strategies for this mosquito season. The decision was made to again larvicide City-owned property. The Health Dept. purchased the larvicide while staff from the Parks & Recreation Department distributed it in spring and again in late summer to all of the parks, lakes and golf courses owned by the City.
- MARC coordinated the efforts of several local health departments regarding West Nile Virus outreach for spring/summer 2004. The Missouri Department of Health and Senior Services awarded Kansas City, along with many other local health departments, small outreach grants to be used for West Nile prevention efforts. The Kansas City Health Department contributed \$9,000 toward a metro-wide outreach campaign consisting of bus, newspaper and radio ads.
- At the end of the year, the CEH Program met with representatives from Wellmark International and Clarke Mosquito Control to discuss the 2005 mosquito season. The CEH program was eligible for a rebate from the 2004 larvicide purchases. Additionally, Clarke allowed the Program to purchase larvicide for the 2005 next season at the same price paid in 2004.

## **Noise Control**

- Several members of the Kansas City Police Department met with the Health Department to discuss the departments' joint roles in enforcing the noise control ordinance. KCPD has procedures in place for handling these types of complaints. KCPD staff indicated that they would meet with other members of the Police Department to ensure that all stations are complying with these procedures. The Health Department continues to notify possible violators of the ordinance and works with the Police Department for repeat offenders and those unwilling to comply. The Police Department handle noise complaints occurring during the evening hours.
- The Country Club Christian Church started work in early 2004 to remediate the noise violation caused by their rooftop air chiller unit. While there has been some reduction in the sound level, the measurements taken at the vertical extension of the property line remained above 60db(A). The Church was asked not to operate the air chiller until the sound was reduced to below that level. The Prosecutor's office was contacted regarding this issue. Noise readings were taken at the Country Club Christian Church again later in 2004. After additional sound proofing, the noise levels fell below 60 db(A). A letter was sent to the church stating that the chiller unit could operate during the hours of 7am to 10pm but any time after that would be a violation of the 55 db(A) nighttime limit.
- Councilwoman Hermann requested a meeting regarding skateboard ramps in residential areas. Some time ago the Noise Ordinance was amended to include a specific prohibition of skateboard ramps in or near residential areas. That amendment was not transferred over to the new Noise Ordinance chapter. A citizen contacted the Councilwoman requesting that this be reinstated. The amendment did not mention noise only building restrictions. We will be discussing whether or not it is appropriate for this to be a part of the Noise Ordinance or if it should be a section of the building code. The decision was made that since this is a building issue, it should be part of the Codes ordinance, not the Noise ordinance. Councilwoman Hermann requested that the Law Department pursue this.

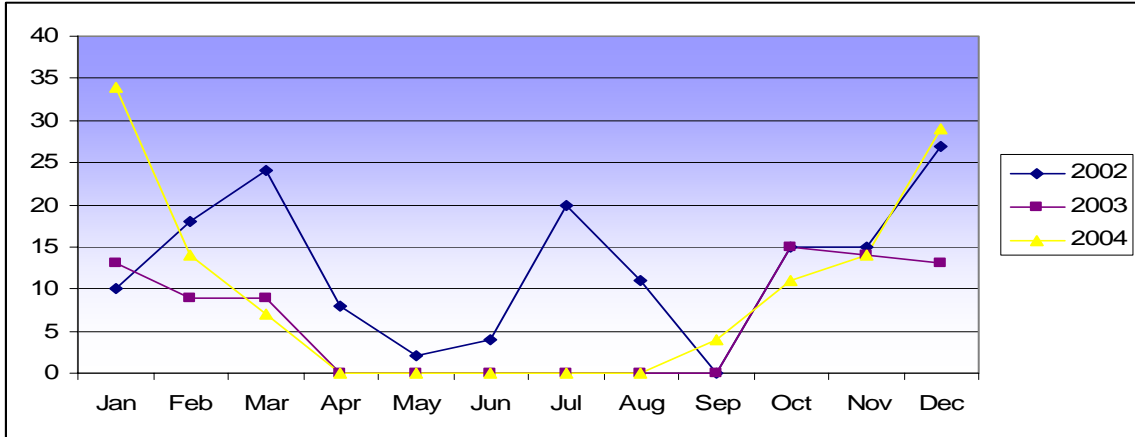
## Swimming Pools & Spas

- Program staff met with Councilwoman Hermann to discuss the proposed changes to the swimming pool ordinance. Councilwoman Hermann had some concerns regarding the fee changes, specifically for non-for-profit pools. She requested a separate fee schedule for those facilities. After consulting with the Law Department, it was determined that a separate fee structure would not be advisable. The proposed revisions were then submitted to the budget office. The changes included clarification on how to revoke a permit, new pool classification definitions, and an increase in the permit fees to more accurately reflect the cost of annual inspections. The increase in fees is projected to equal an additional \$25,000 in annual revenue. After analyzing current costs, the Budget Office felt the fees should be higher than originally requested. It is the opinion of the Budget Office that the inspection of swimming pools should be entirely fee supported. The ordinance was sent back for further revisions and finally adopted in January 2005.
- Channel 41 conducted an interview with the CEH Program Manager regarding swimming pools and water quality, specifically pools operated by City's Department of Parks & Recreation. The reporter had conducted her own chemical testing and stated that nine of the ten City pools tested had water quality issues. The results of her testing did not match that of the Parks Department. Two articles also ran in the Kansas City Star about the Channel 41 story.
- The swimming pool inspection forms and database were revised in August to better capture violation data. The program now has the capability to view data by chlorine level, pH level, type of violation, closures, etc. This will allow the Program to easily run reports by pool and by violation and to do some analysis of water quality/safety problems within the community.

## Program Collections:

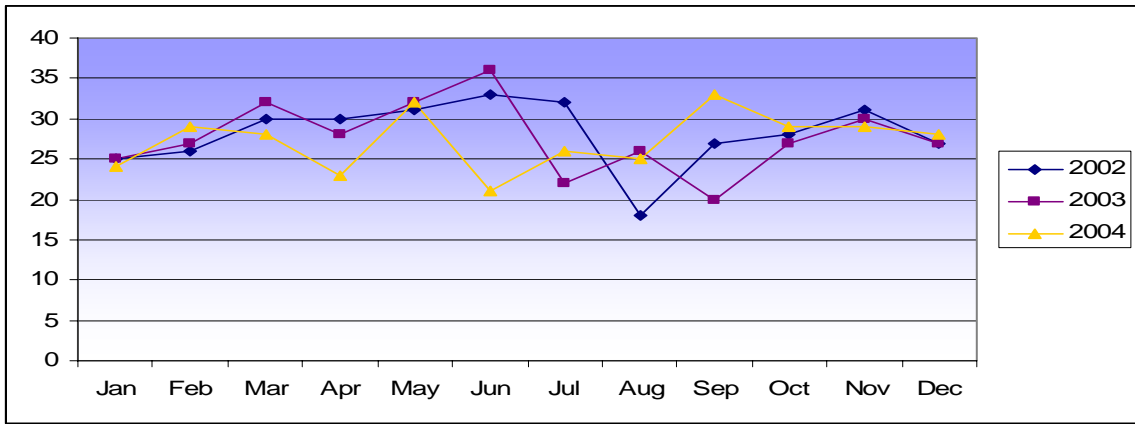
Collection Source	Year 2003	Year 2004
Pool Permits	\$112,400.00	\$122,090.00
Childcare Inspection Reimbursement	\$34,730.00	\$34,610.00
Noise Permits	\$5,150.00	\$5,500.00
Septic Hauler Permits	\$2,137.75	\$1,856.25
<b>Total</b>	<b>\$154,587.75</b>	<b>\$164,056.75</b>

### Lodging Facilities Inspection Comparison

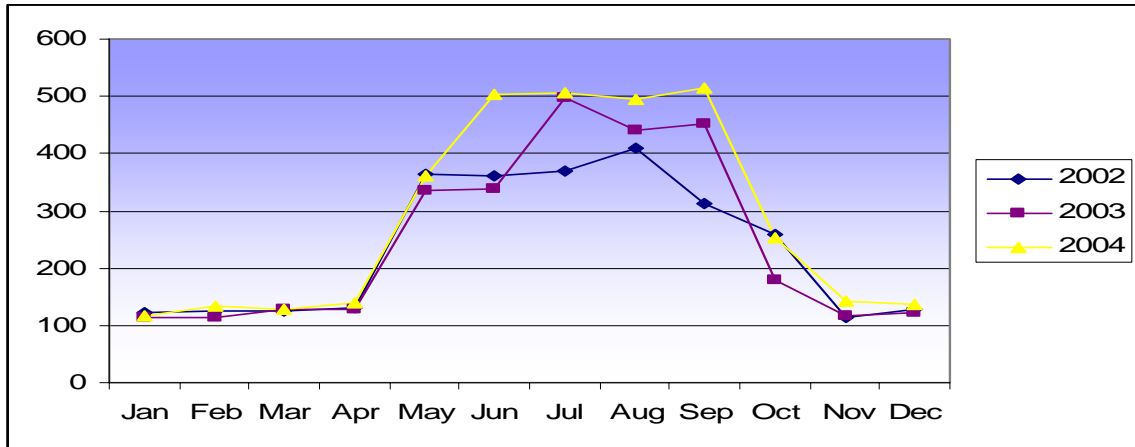


\*Note – more inspections were completed in 2002 than the number of facilities due to an overlap of the 2003/2004 licensing inspections at the end of 2002.

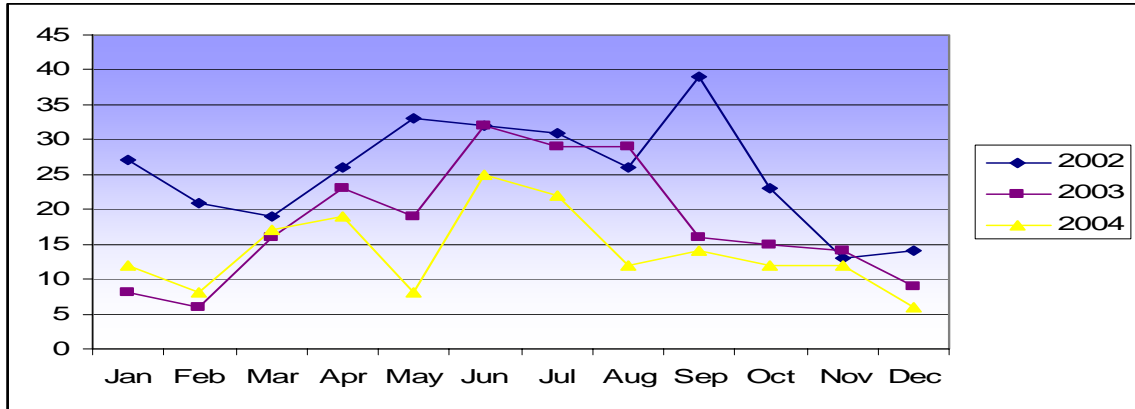
### Childcare Facilities Inspection Comparison



### Water Recreational Facilities Inspection Comparison



## Complaint Investigations Comparison



## Childhood Lead Poisoning Prevention Program

### Introduction:

The goal of the Childhood Lead Poisoning Prevention Program (CLPPP) is to eliminate lead poisoning in Kansas City's children. To attain this goal, the CLPPP provides: blood lead screening, case management services for lead poisoned children, community education and lead hazard control. The CLPPP serves to articulate and enforce Kansas City's lead ordinance, meet state contract obligations in promoting The Centers for Disease Control's guidelines for lead poisoning in children, and provide the services necessary for the U.S. Department of Health and Human Services to meet its national health objective of eliminating lead poisoning in children by the year 2010. The Program has a dedicated staff of three (3) nurse case managers, five (5) Public Health Specialists, two (2) administrative support personnel and a Program Manager. During 2004, the Program focused efforts in Case Management, Outreach, Lead Hazard Control, Screening and Program Development/Grant Awards. The following summarizes activities and efforts in those areas:

### Highlights of 2004 Activities and Events:

#### Case Management:

The following data illustrates the activities of the case management portion of the CLPP Program:

**Table 1. 2004 Environmental Case Management Totals**

Initial Inspections Performed	Reinspections Performed	EBL Homes* Remediated	Average Total Open Cases
54	89	25	80-90

\*homes in which a child with an elevated blood lead level resides;

The initial inspections performed total, noted in the above table is a slight decrease from last year's total of 66. The decrease may be related to low testing rates, low reporting rates or a lowering of the lead levels in the population (Blood test results >10mcg/dl are considered lead poisoned but case management services are currently only available to children with blood test results >15 mcg/dl.)

**Table 2. 2004 Nurse Case Management Data**

<b>New Cases</b>	<b>Open Cases</b>	<b>Home Visits</b>	<b>Case Closure Decreased PB</b>	<b>Case Closure Other</b>
54	115	223	25	3

New cases decreased from last year's total of 63. Reasons may be similar to those mentioned for decreases in initial inspections. The majority of cases closed were due to decreased blood lead levels, a measure that underscores the importance of case management services. The academic community continues to value the CLPP as a resource with three local universities sending 75 students to observe field visits as part of their Community Health Nursing clinical rotation. CLPPP nurses gave 5 classroom lectures to nursing students over the past year. Special needs within the Health Department also presented nurses with the opportunity to further utilize their clinical skills in hepatitis C and flu clinics. Nurses, inspectors and clerical staff were utilized in a disaster preparedness drill last June.

**Outreach:**

Outreach continues to be an integral component of the CLPP Program and is included as a deliverable in all current grants. Outreach activities included health fairs, presentations to community groups, professionals and non-professionals at the local, state and national level, media campaigns, training and community capacity building.

**Table 3. 2004 Outreach Totals**

<b>Agency</b>	<b># Events</b>	<b># Persons Attended</b>	<b>Cleaning Kits Distributed</b>	<b>Lead Test Kits Distributed</b>	<b>Vacuum Distribution</b>
<b>KCHD</b>	202	15,838	0	121	19
<b>Healthy Homes Network</b>	33	4,179	100	0	Not Applicable
<b>Total</b>	235	20,017	100	121	19

**Lead Hazard Control:**

Lead hazard control is one of the most significant resources the CLPP Program offers to the community. 2004 remediation efforts provided lead-safe housing for 288 high-risk families, decreasing the risk of lead poisoning for 495 children under 7 years of age (based on HUD R8 average of 1.72 children under age 7 in remediated homes). The CLPP Program is currently reaching the end of its HUD R10 Lead Hazard Control Grant funding and will be reapplying for both lead hazard control and outreach grants.

**Table 4. 2004 HUD Round 10 Remediation**

<b>Owner Occupied Units</b>	<b>Rental Units</b>	<b>Total</b>
28	60	88

**Screening:**

Providing screening services and increasing screening rates is one of the deliverables required under our DHSS/CDC Childhood Lead Poisoning Prevention contract. Table 5 shows specific data for CLPP Program screening activities. 2004 total screenings exceeded 2003 by 25 clinics and number of children screened increased by 587(58%) which is 48% above the CDC grant deliverable. However, total area screening data (not shown in table) indicates, in some areas 52-98% of children 6yrs and under have not received a blood lead test. Current data shows 358 children to be lead poisoned city-wide. Projections based on census data and current prevalence rate show as many as 1155 unidentified lead poisoned children.

**Table 5. 2004 Screening Totals**

<b>Location</b>	<b>Number of clinics</b>	<b>Number of Children Screened</b>	<b>Number of Hemoglobin Tests</b>
<b>KCHD</b>	74	163	13
<b>Outreach Clinics</b>	66	1441	1182
<b>Total</b>	140	1604	1195

**Grant Awards:**

The CLPP Program is sustained by Health Levy funding as well as state and federal grant. Current CLPP Program grant awards include:

- HUD R10 Lead Hazard Control Grant (completion date 7/31/05)
- HUD Outreach Grant (completion date 9/30/05)
- United States Conference of Mayors-Dupont Spotlight on Excellence Grant (completion date 9/30/05)
- CDC/DHSS Childhood Lead Poisoning Prevention Grant(completion date 4/30/05)
- EPA Community Outreach Grant\*

\*Submitted

**Research**

Academic collaboration continues with the The Children's Mercy Hospital and the University of Kansas Medical Center on a Hall Foundation Grant evaluating drug biotransformation in children with low levels of lead exposure. The study titled, *The Effect Of Cytochromes P450 On Drug Metabolism In Children With Low Level Lead Exposure*, is in the final stage of data collection. The CLPP Program is also beginning partnering with KU PhD. candidate Kirsten Kakolewski in subject recruitment and outreach education for her study on the neurologic effects of lead poisoning in infants entitled, *Effects Of Prenatal Lead Exposure On Infant Visual Attention*.

