District 4 Environmental Health Report

Key Environmental Health Indicators FY 2014

This report is designed to serve as a baseline for measuring changes and improvement in Environmental Health services that ultimately impact the health status of the citizens and visitors of District 4.

District 4 Population: 816,382 (US Census 2013)

District 4 Land Area: 3771.57 square miles
Food Service Program

Foodborne illness in the United States is a major cause of personal distress, preventable death, and avoidable economic burden. The Centers for Disease Control and Prevention (CDC) estimate that each year roughly 1 in 6 Americans (or 48 million people) get sick, 128,000 are hospitalized, and 3,000 people die of foodborne diseases. Food can become contaminated by bacteria, viruses, chemicals or physical objects and with the threat of terrorism, it is more important than ever for public health to educate and work with operators to ensure the safety of our food supply.

Georgia requires all food service establishments to be permitted and inspected by county health departments utilizing the Department of Public Health Rules and Regulations for Food Service Establishments. The mission of the Department of Public Health (DPH) Food Service program is to minimize food-borne related illnesses. Environmental Health Specialists (EHS) are responsible for conducting routine risk-based inspections, providing food safety education, investigating food-borne related complaints and illnesses, and enforcing the DPH Rules and Regulations for Food Service Establishments for more than 1700 food service establishments in the District.

The Georgia Department of Public Health collaborated with the Georgia Restaurant Association and the Departments Food Service Rules Advisory Committee that represents public health, Department of Agriculture, industry and academia to adopt the Food and Drug Administration (FDA) model food code. This food code was developed for a risk based inspection process that maximizes utilization of resources and ensures a consistent science-based code throughout the State. The code focuses on controlling risk factors most likely to cause foodborne illness and a 2009 FDA study indicated priority should be placed on improper holding, time and temperature, poor personal hygiene, contaminated equipment, and protection from contamination.
The CDC has designated five broad categories of risk factors contributing to foodborne-related outbreaks - Improper Holding Temperatures, Inadequate Cooking, Food from Unsafe Sources, Poor Personal Hygiene, and Contaminated Equipment. These Risk Factors are improper practices or procedures, which have been identified by the CDC through epidemiological data as the most prevalent contributing factors of foodborne illness or injury.

**Risk Based Inspections**

Environmental Health Specialists in Georgia are standardized in food service inspections utilizing the DPH Standardization Procedures modeled from the United States Food and Drug Administration (FDA) Inspector training program and are trained to conduct a risk-based inspection focused on reducing public health risk factors. The goal of conducting proper risk based inspections is for the EHS to utilize a practical, HACCP-based approach to evaluate the food service establishment through his or her assessment of active managerial control of foodborne illness risk factors within the establishment. Since food safety management systems are designed by food service operators to best meet their own needs, the EHS uses a risk-based methodology during his or her inspections to uncover the systems used and to evaluate their effectiveness.

This indicator is the number of CDC designated top 5 foodborne illness risk factor violations cited.

The CDC has identified Norovirus as “the most common cause of acute gastroenteritis in the U.S.”. The poor personal hygiene risk factor comprised of Employee Health (i.e. excluding/restricting ill workers), Good Hygienic Practices (such as proper hand washing), and Preventing Contamination by Hands (such as preventing bare hand contact with ready to eat foods) is the primary means of transmitting this illness.
On-site Sewage Management (OSSM) Systems

The mission of the DPH OSSM system program is to minimize health problems related to untreated human sewage through: regulation and inspection of new on-site sewage management systems installed; investigation and inspection of repairs to improperly functioning on-site sewage management systems.

Onsite Sewage Management System Failures

When OSSM systems fail within the first 5 years, it is generally recognized that the problems are related to poor installation, lack of maintenance, inappropriate system type, improper site evaluations and/or system abuse. It is important to know the age of systems at the time of failure and to identify the potential causes of failure, such that proper repairs can be made.

This indicator is a measure of the percent of OSSM system failures age 5 years or less. Preventing system failure within this age range will help protect public health and save the homeowner time and costly repairs of their OSSM system.

Age of System at Failure - District 4 FY2014

- Over 40 Years, 14.36%
- 31 to 40 Years, 18.51%
- 21 to 30 Years, 25.69%
- 11 to 20 Years, 23.17%
- 6 to 10 Years, 7.68%
- Unknown Age, 9.32%
- 1 to 5 Years, 1.01%
- Less Than A Year, 0.25%

State of Georgia’s Target: Less than 1% systems failed within first 5 years. Current State of Georgia rate is 2.64%. Current District 4 rate is 1.26%.
Non-Public Water Program

A major public health achievement in the prevention of infectious diseases is the development of standards for the proper siting, construction and maintenance of private water systems. Some people take for granted the quality of our water supply, but many countries in the world do not have the public health infrastructure in place to ensure safe, potable drinking water. Local Environmental Health Specialists provide assessment and consultation on water well issues and take water samples to ensure a homeowner’s water supply is safe. The mission of the Department of Public Health Non-Public Water Supply Program is to minimize water-related illnesses by providing education, training and guidance related to well installation, protection, evaluation, chlorination, sampling and abandonment; providing technical assistance and support to local partners regarding enforcement of the Well Water Standards Act; and assistance in waterborne disease outbreak investigations through monitoring and assessment programs.

The non-public water program initiated development and implementation of a well assessment tool for evaluation of individual well water supplies. In addition to EHS taking a water sample, a completed well assessment tool provides the homeowner with information related to their individual well construction, protection, and location from pollution sources. This tool will assist homeowners with making informed decisions regarding the protection of their water supply, thereby reducing the potential for illness. Properly constructed wells that adhere to wellhead protection standards prevent contamination of drinking water from outside pollution sources. This indicator is a measure of the percent of wellhead protection items not met during the well assessment.

Target: 25% reduction in the percentage of wellhead protection items out of compliance.
Public Swimming Pool Program

According to the United States Census Bureau, swimming is the 3rd most popular U.S. sport or exercise activity, with over 314 million visits to recreational venues annually. Swimming provides fun and exercise to all ages, but swimming pools and spas must remain safe and clean for all to enjoy. All public pools in Georgia are permitted and inspected by the local county health departments utilizing a combination of Georgia Department of Public Health or local health department rules and regulations. **The mission of the Department of Public Health Public Pool program is to minimize illnesses and injuries associated with contaminated or hazardous conditions in or around swimming pools through**: regulation and inspection of existing swimming pools; consultation and inspection of new swimming pool construction and installation; and education and training for swimming pool operators and county Environmental Health Specialist (EHS).

Pool Closures

The local county health department closes a public pool when there are imminent or substantial health hazards found during an inspection. The act of closing a pool is an enforcement option that is not taken lightly by an EHS. A permit suspension or voluntary closure immediately protects the health and safety of any resident, tourist or guest from exposure to the hazard or health risk. In **FY 2014**, Environmental Health Specialists cited 256 critical violations that indicated a need for pool closures or immediate correction.

Operators not maintaining an adequate amount of disinfectant in the pool water is the 2nd most commonly cited critical violation in District 4. Disinfectants kill and reduce disease causing microorganisms like viruses, bacteria and parasites in the pool water. **The indicator for this period is the number of critical disinfectant residual violations cited during the swimming season.**

Public Pool Inspections

Public swimming pools must obtain an operational permit before opening. Local health departments issue an operational permit for annual or seasonal use. Seasonal pools, open April to October, must have an opening inspection and one operational inspection during the season. The Department rules require pools open year round to have two inspections each year, plus the opening inspection. In FY 2014, District 4 had 559 pools permitted.

<table>
<thead>
<tr>
<th>Critical Swimming Pool Violations District 4 FY 2014</th>
<th>256 Violations</th>
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<tbody>
<tr>
<td>Skimmers/Gutters maintained &amp; operating properly</td>
<td>103</td>
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<tr>
<td>Pump operating properly</td>
<td>54</td>
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<tr>
<td>pH (7.2-7.8)</td>
<td>55</td>
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<tr>
<td>Filters functioning properly</td>
<td>10</td>
</tr>
<tr>
<td>Disinfectant residual concentration</td>
<td>15</td>
</tr>
<tr>
<td>Clarity</td>
<td>12</td>
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<tr>
<td>Chemical feeders operating properly</td>
<td></td>
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**Target:** 10% reduction in pH and disinfectant residual violations cited over time

**Target # 2:** Identify correction measures for skimmers/gutters maintenance – work with pool operators to educate the owners of the out of compliance public pools.
Tourist Accommodation Program

Tourism in Georgia is the second leading industry in the state, earning $34 billion in revenue. Millions of people visit our state for its national and state parks, urban centers, historic sites, beautiful mountains and scenic coast. Georgia requires all tourist accommodations to obtain a permit and post inspection reports completed by the local county health department Environmental Health Specialists. The Department of Public Health (DPH) develops and maintains rules and regulations to ensure that the health and safety of its citizens and visitors are protected during their stay in a facility. The mission of the DPH Tourist Accommodation program is to minimize illnesses and injuries associated with insanitary or hazardous conditions through: regulation and inspection of tourist accommodations, investigation of complaints, and education and training. The indicator for this program is the number of critical and housing public health risk factor violations cited.

Tourist Accommodation Inspections

Environmental Health Specialists inspect Tourist Accommodations a minimum of two times a year. Local EHS assign a grade and identify corrective actions necessary for compliance with the Department of Public Health’s rules and regulations. This inspection gives the public and operator a snap shot of the overall condition of the hotel, campground or bed and breakfast inn. There are currently 156 permitted tourist facilities in District 4.

Target: 20% reduction in critical and housing risk factor violations cited over time
Healthy Homes and Lead Poisoning Prevention

The mission of the Georgia Healthy Homes and Lead Poisoning Prevention Program (GHHLPPP), in keeping with the proposed Healthy People 2020 objectives, is to eliminate childhood lead poisoning in Georgia. GHHLPPP partners with the 18 public health districts to ensure case management of children with elevated blood lead levels (EBL) and advises EHS certified as Lead Inspector/Risk Assessors on environmental inspections and risk assessment of potential lead exposure sources.

According to the Centers for Disease Control (CDC), over 250,000 children ages 1-5, in the United States, have been exposed to lead and have elevated blood lead levels (EBL) greater than 10 micrograms per deciliter (ug/dL). New research recognized by CDC suggests there is no safe threshold of lead in a child’s blood. In 2012, CDC amended their case management recommendations and established a new “reference level” of 5 ug/dL.

In keeping with CDC recommendations, the Georgia Department of Public Health reduced the EBL environmental investigation level from 15 ug/dL to 10 ug/dL and recognized 5 ug/dL as a pre-EBL. The GHHLPPP program is working with the 18 public health districts utilizing census data and GIS technology to identify and target high risk areas, generally pre-1978 rental housing, where children are potentially being exposed to lead. This important step will protect the health of many children, but increases the workload of Certified Lead Inspector/Risk Assessors at a time of reduced federal funding.

CDC has established indicators to evaluate the success of the Lead and Healthy Homes program. The following indicators will be tracked to evaluate the program:

1) Number of Lead and Healthy Home investigations at an EBL of ≥ 10 ug/dL
2) Adherence to investigation timelines as established by case management guidelines
3) Number of investigations where lead hazards were identified and homes made lead safe by reducing or eliminating lead hazards

Number of children less than 6 years old screened for lead poisoning, Georgia, 2013

<table>
<thead>
<tr>
<th></th>
<th>Total Number Screened</th>
<th>5 – 9 ug/dL</th>
<th>&gt;=10 ug/dL</th>
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<tbody>
<tr>
<td>Georgia</td>
<td>104,492</td>
<td>2603</td>
<td>484</td>
</tr>
<tr>
<td>District 4</td>
<td>7,533</td>
<td>230</td>
<td>40</td>
</tr>
</tbody>
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Targets:
1. 100% of lead and healthy home investigations at EBL of ≥ 10 ug/dL
2. 100% adherence to case management investigation timelines
3. 100% of homes made lead safe as required by Georgia law
Georgia - High Risk Districts for Lead Exposure Based on Housing Age (2012)

Health District Based Risk
Average Percentage - Pre 1955 Housing
- 0 - 5%
- 6 - 10%
- 11 - 15%
- 16 - 20%
- 21% +
Tattoo Studios Program

According to an article by the U.S. News and World Report, tattooing or “body art” has become one of America’s fastest growing professions with over 20,000 tattoo studios in the United States alone. With the popularity of tattooing increasing, there is a need for public health to partner with the tattoo industry to ensure the health and safety of the tattoo artist and the public receiving the tattoo. The mission of the Department of Public Health Tattoo Studio Program is to ensure a safe environment for tattooing, ensure safe industry practices and prevent the transmission of disease in tattoo studios. In order to achieve this mission, the DPH set a goal for all local health departments to adopt tattoo rules and regulations with guidance from the DPH.

Unsterile tattooing equipment and needles can transmit infectious diseases, such as HIV, hepatitis, and skin infections caused by Staphylococcus aureus (“staph”) and other bacteria.

Tattoos received at facilities not regulated by your state or at facilities that use unsterile equipment (or re-use ink) may prevent you from being accepted as a blood or plasma donor for twelve months.

Infections also have resulted from contaminated tattoo inks, even when the tattoo artist has followed hygienic procedures. These infections can require prolonged treatment with antibiotics.

As of FY 2014, 100% of District 4 counties have adopted local Board of Health regulations for Body Art/Tattoo Facilities and Artists. Existing facilities and Body artists have been permitted – indicators will be available for future reporting.
Animal Bites and Rabies Control

Rabies is a zoonotic disease that is most often transmitted through infected saliva that enters the body by way of an animal bite. The virus causes inflammation of the brain and is fatal once symptoms occur. County Environmental Health Specialists, animal control agencies and Epidemiology partners investigate all reported animal bites in Georgia. It is extremely important to report animal bites and seek medical attention in a timely manner if bitten by a wild or unvaccinated animal or bat so the potential risk of rabies can be assessed and if appropriate, rabies post-exposure prophylaxis can be administered.

Investigation of animal bites is an important public health program for rabies prevention and primary responsibility is assigned to the Boards of Health (BOH) via OCGA 31-19. In many counties, the BOH has delegated this responsibility to animal control.

During 2012 in an effort to improve reporting and investigations, the DPH Environmental Health and Epidemiology programs developed and implemented a new central and unifying rabies reporting and investigation tool that utilizes the State Electronic Notifiable Disease Surveillance System (SendSS). This surveillance system allows accurate reporting, investigation and follow-up in cooperation with the variety of public health partners across the state, including animal control officers, hospitals, and physicians.

As of January 1, 2013, all counties in Georgia use this new reporting system.

Indicators for this program will measure the average number of days from bite report to initial investigation of animal bite (FY2014 – 24 days as recorded in SendSS) NOTE: Data entry with duplicate entries is primary reason for this figure in SendSS – data indicates normal response time for investigations is less than 1 day for District 4. District 4 target: identification and reduction of data entry issues.

OCGA 31-19-5 requires all dogs and cats in Georgia to be vaccinated for Rabies

FY 2014 District 4 Animal Bite and Rabies Statistics*

72 = Animal/Human Investigations
96 = Animal/Animal Investigations
21 = Animals Confined
132 = Animals Euthanized
132 = Tested Specimens
16 = Positive Rabies Cases
9 = Treatment Recommended for Bite Victim

State Target:
2 day average investigation time
Environmental Health Complaints

Mission:
Environmental Health provides primary prevention through a combination of surveillance, education, enforcement, and assessment programs designed to identify, prevent and abate environmental conditions that adversely impact human health. In addition to the disease prevention resulting from complaint investigations, Environmental Health Specialists provide communities a substantial economic contribution by maintaining sanitary conditions throughout the communities they serve. This work often preserves and improves quality of life issues like reduction of blighted properties, improved community development, and increased home maintenance.

Programs:
- Public Swimming Pool, Spa and Recreational Water Parks
- On-Site Sewage Management Systems
- Food Service
- Tourist Accommodations
- Childhood Lead Poisoning Prevention
- Solid Waste
- Non-Public Water
- Chemical Hazards
- Tanning Facilities
- Emergency Preparedness
- Mass Gatherings
- Tattoo Studios
- Indoor Air Quality
- Rabies Control
- Vector Borne Disease
- Other EH Programs

This graph demonstrates a trend line for the top 6 complaints by program type. The graph peaks coincide with specific events, time of year, or seasonal trends.

Response time for all received complaints is one indicator that demonstrates public health’s capacity to respond and abate health hazards in a timely manner. This indicator may demonstrate the need for more Environmental Health Specialists across the state or in a particular county. For FY 2014, the average number of days from receipt of any complaint to first investigation was 13 days, and 58 days to abatement or referral. Reducing the average number of days to investigate and abate complaints will result in protection of public health.

Target: Reduce number of days to investigate and abate complaints by 20%. Mediate any data entry errors.
District 4 has its own Environmental Health Strike Team (EHST) composed of 7 members— with each member also being a member on the State of Georgia’s Central EHST outlined above. We currently have 2 equipment supply trailers and 1 RV available for deployment during a disaster. One of the supply trailers is equipped with a small area and incubator for running total and fecal coliform tests for well water.