

Environmental Health Metrics

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EXECUTIVE SUMMARY:

The Department for Public Health's Division of Public Health Protection and Safety (PHPS) includes programs related to the enforcement of public health regulations for environmental health and community safety. As the department's regulatory arm, the division is charged with the oversight of approximately 20 statutorily mandated environmental health (EH) programs and regulates over 31,000 active establishments across Kentucky. The division's staff works closely with local health departments to make sure that Kentuckians are protected from unsafe consumer products, lead hazards, unnecessary radiation exposure, unsanitary milk, adulterated and misbranded food, unsanitary public facilities, and malfunctioning sewage systems. State staff are also responsible for Grade "A" milk production, and certification of public swimming pool designs. The division works daily to enable new businesses to open, provide assistance to citizens' inquiries, and address citizens' complaints. The staff routinely provides informational requests and technical assistance to a multitude of industries and citizens. PHPS and the Local Health Department's regulatory processes has an impact across the state and effects over 20% of the state's economy and business. This division uses the expertise of approximately 400 Registered Sanitarians or Environmental Health Specialists located at the state and throughout the 56 local health departments to perform the mandated regulatory work.

The current data system used to collect and store all the information from these EH activities is the Environmental Health Management Information System (EHMIS), and it has existed since the 1980s. EHMIS is a state-wide system supporting 74 local state and federal mandated programs and is used by all 56 local health departments and the state as a critical information management tool. It also houses all the inspection/compliance data along with the permitting and licensing information that annually generates over \$5 million dollars of agency funds. Management staff has the capability of reviewing standard reports to help them in making decisions that impact the EH community. These reports have changed minimally since their inception. Thus, the decision-making capabilities and potential of the state and LHDs have also changed minimally throughout the years. A simple diagram of the EH environment and EHMIS can be seen in Figure 1.

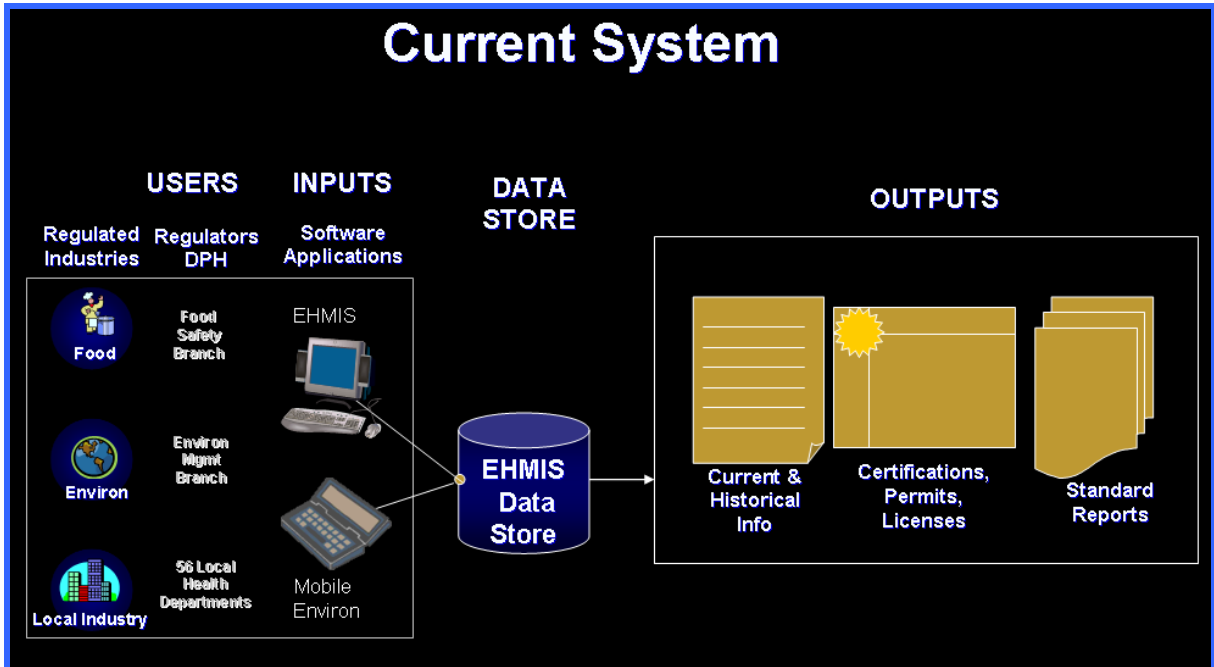


Figure 1.

INTRODUCTION/BACKGROUND:

Since there are approximately 400 inspectors that produce thousands of activities on an annual basis, there is an abundance of inspection/compliance data collected through the EHMIS system. For example in 2007, there were over 77,000 regular inspections, 30,000 follow-up inspections and over 288,000 critical violations recorded as activities. Currently the system employs standard reports along with a query tool, and it is very useful. Because this data is being collected on a state-wide basis, it presents a great opportunity for using this large cache of data as a tool to help identify problem areas, detect trends, understand workloads, assess performance, and possibly even identify health risks in order to become proactive in decision-making and setting priorities to help prevent problems before they occur.

Therefore, this project set a course for using this data cache in a way to develop a standard set of EH metrics that can be displayed in a summarized fashion and used in a chart format that can easily be interpreted to help the EH community to make better decisions. The team quickly realized that the potential for opportunities is tremendous and all the possibilities for research could lead us down a extremely wide path of options, so the team decided to set specific boundaries for this project in order complete it within the year timeframe for KPHLI. We believe that this project represents only the first phase of an effort that will continue to grow and evolve either through KPHLI or the DPH's own initiatives.

Problem Statement:

The focus statement for this project evolved as the project progressed. The final statement chosen by the team is as follows:

Why haven't there been any new methods/data tools developed to extract the key inspection/compliance metrics that are available from the abundance of EH activities?

The team's focus and beliefs centered around possible modifications to the current system that could enhance its ability to utilize standard metrics in order to help the EH community. The portion highlighted by the red dashed lines in the Figure 2 represents the types of changes recommended to the current system.

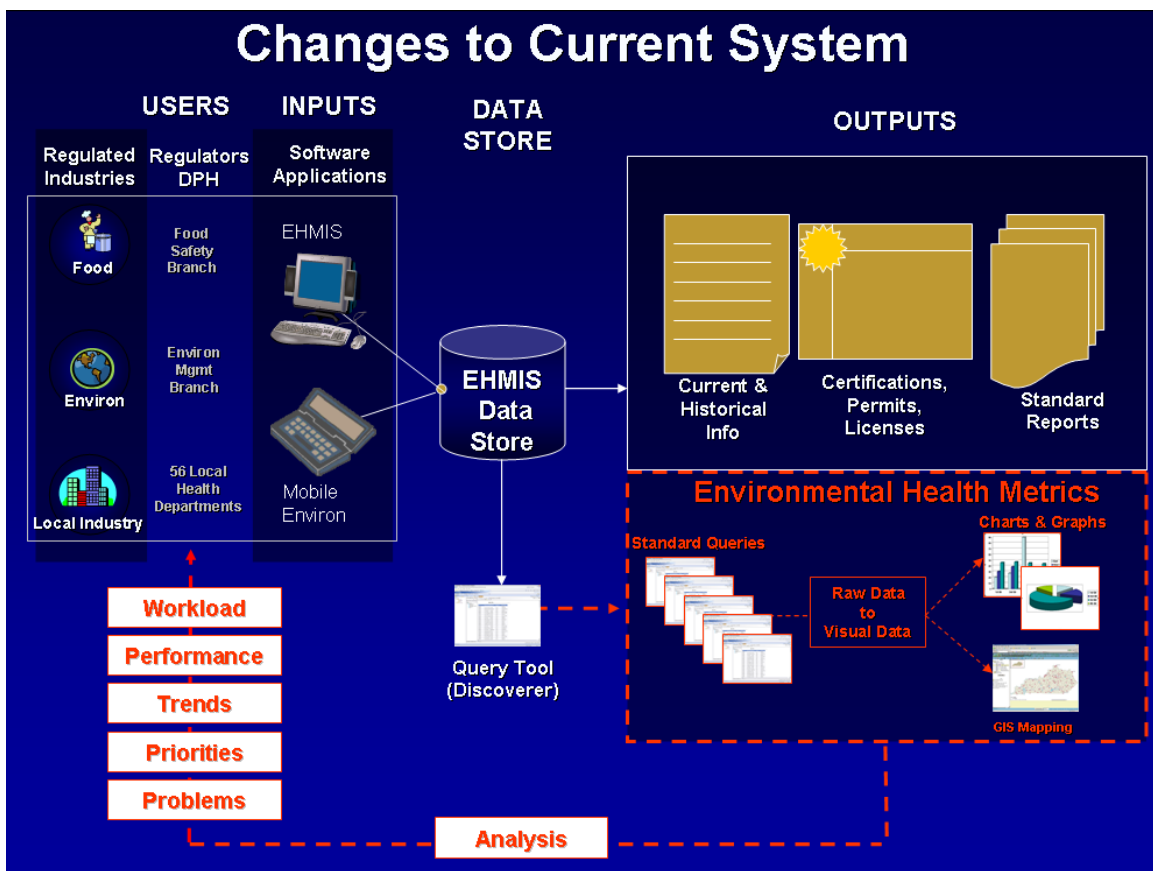


Figure 2.

Behavior Over Time Graph:

As part of the system’s thinking approach, a behavior over time graph, Figure 3, was developed and represents two areas: 1) amount of cumulative activities/data and 2) the current level of data tools along with the decision making potential provided by these tools.

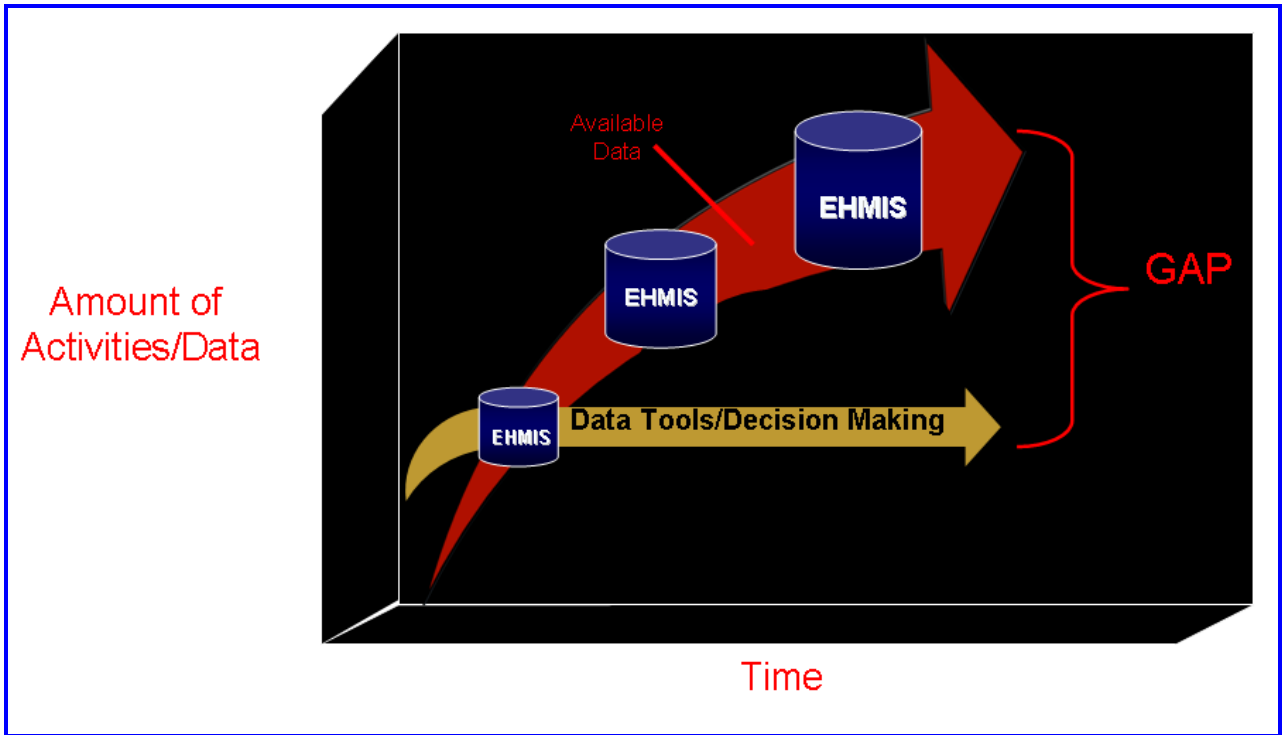


Figure 3.

The red line represents an increasing trend of overall cumulative activities that are performed and then captured through the EHMIS database. The amount of cumulative data available increases also. Because this data is being captured historically, it presents an opportunity to examine changes over time and use this trending data for use in decision making. The gold line represents a flat trend of new data tools/reports that have been developed over time along with the associated level of potential decision making. As one trend increases and the other remains flat, the two create a gap. And as time continues, the gap between the available data and effective decision making is only going to get wider if no action is taken to improve the data tools.

National Goals:

The primary goal of the National Environmental Public Health Performance Standards is to promote continuous capacity improvement of Local Environmental Health Programs. The implementation of these standards is intended to foster environmental health excellence at the state, tribal, local, and national levels through the following three goals:

1. Build individual agency capacity to provide the ten Essential Environmental Health Services
2. Build community accountability for environmental health services
3. Build consistency of services across agencies

The implementation of this KPHLI project will directly support at least 4 of the 10 Essential Environmental Health services that support the national goals and could indirectly support 3 additional services.

The entire list of Essential Services of Environmental Health is presented below:

1. Monitor environmental and health status to identify and solve community environmental health problems
2. Diagnose and investigate environmental health problems and health hazards in the community
3. Inform, educate and empower people about environmental health issues
4. Mobilize community partnerships and actions to identify and solve environmental health problems
5. Develop policies and plans that support individual and community environmental health efforts
6. Enforce laws and regulations that protect environmental health and ensure safety
7. Link people to needed personal environmental health services and assure the provision of healthcare when otherwise unavailable
8. Assure competent environmental health and personal healthcare workforce
9. Evaluate effectiveness, accessibility and quality of personal and population based environmental health services
10. Research for new insights and innovative solutions to environmental health problems

National Goals Supported:

The 4 essential EH services that are **directly** supported by this KPHLI project are 1, 3, 9, and 10. This assessment is based on the key underlined words in the four services.

National Standards (10 Essential EH Services)										
	1	2	3	4	5	6	7	8	9	10
EH Metrics	✓		✓						✓	✓

1. Monitor environmental and health status to identify and solve community environmental health problems.

3. Inform, educate, and empower people about environmental health issues.

9. Evaluate the effectiveness, accessibility, and quality of personal and population based environmental health services.

10. Research for new insights and innovative solutions to environmental health problems and issues.

The 3 essential EH services that are **indirectly** supported by this project are 2, 5, and 8.

National Standards (10 Essential EH Services)										
	1	2	3	4	5	6	7	8	9	10
EH Metrics		✓			✓			✓		

2. Diagnose and investigate environmental health problems and health hazards in the community.

5. Develop policies and plans that support individual and community environmental health efforts.

8. Assure a competent environmental health workforce.

Project Objectives:

The following were the four primary objectives of this project:

- Confirm that the data within the EHMIS database can be utilized for developing inspection/compliance type metrics
- Identify and recommend a standard set of metrics for Kentucky’s Environmental Health community
- Provide a method to show how these metrics could be displayed in a summarized and visual way
- Investigate the relationship between the metrics and CDC’s national standards

DELIVERABLES:

The team agreed on delivering the three deliverables: 1) Standard Set of Key Metrics for EH, 2) Prototype Reporting Tool, and 3) Recommendations to DPH/PHPS on How to Implement. These deliverables will be provided with the understanding that this project will continue to evolve even after the end of this particular phase.

METHODOLOGY:

The team considered several avenues to this project and ultimately performed the following methods:

- Researched CDCs National Environmental Public Health Standardized Performance Metrics to determine if there is a common relationship
- Contacted and interview selected environmental directors at LHDs and captured their thoughts/ideas about standardized key metrics
- Analyzed the current Environmental Health Management Information System (EHMIS) and identified the data elements that could possibly be used as standardized key metrics across LHDs
- Created queries to extract the data from EHMIS and analyzed the data for possible use as a metric
- Created a prototype tool to help enhance and sell the idea for implementation
- Determined an user-friendly format (i.e. Excel Charts) for displaying and interpreting metrics

By utilizing the system approach, the team considered barriers to possible implementation. The most likely barrier to implementing standard metrics for all the Local Health Departments is fear of being measured or compared. The team used cycle diagrams to better understand how to possibly minimize this fear (See Figure 4).

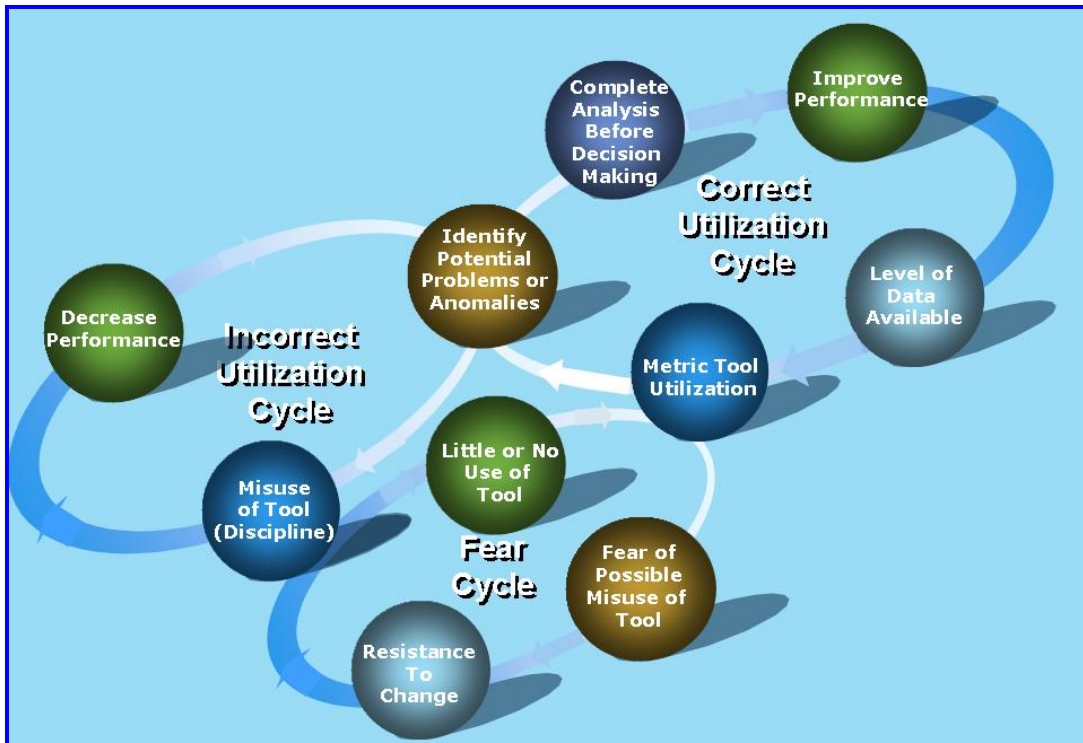


Figure 4.

The figure shows three cycles: 1) Correct Utilization Cycle, 2) Fear Cycle, and 3) Incorrect Utilization Cycle. The correct utilization cycle ultimately leads to better performance while the other two cycles flow against it and ultimately decreases performance. The key approach to minimizing this fear is to educate the users concerning the correct use of this tool. A tool is designed to help identify problems and/or anomalies. In this instance, the numbers or metrics produced through this tool cannot be fully interpreted without a complete analysis before decision making (with the key being a complete analysis). If a user of the tool goes directly from problem identification to judgment or discipline without the benefit of a complete analysis, they would be utilizing the tool incorrectly and could possibly decrease overall performance. This could will probably also increase the feelings of fear associated with the use of the tool. This principle of a complete analysis is a key aspect for using the tool and an essential part of the responsibility for an effective leader.

RESULTS:

The team provided the deliverables as promised for the project and laid some solid groundwork for future evolvement of the project.

- **Deliverable 1 - Standard Set of Key Metrics for EH**

The team performed 70 queries from the EHMIS database and developed four primary categories for the metrics: 1) Informational/Workload, 2) Inspection Compliance, 3) Inspection Scores, and 4) Other Establishment Performance Information. Each query was evaluated to

determine if they could be presented at four different levels: 1) State, 2) District, 3) Sanitarian, and 4) Reporting Area. The checkmarks in the tables below show which of the four levels apply to each of the queries.

Informational/Workload

	State	District	Sanitarian	Report Area
No. of Active Establishments	✓	✓	✓	✓
No. of Active Sanitarians	✓	✓		
No. of Regular Inspections/Yr	✓	✓	✓	✓
No. of Services/Yr	✓	✓	✓	✓

Inspection Compliance

	State	District	Sanitarian	Report Area
Inspections Past Due (1-30 Days)	✓	✓	✓	✓
Inspections Past Due (31-60 Days)	✓	✓	✓	✓
Inspections Past Due (61-90 Days)	✓	✓	✓	✓
Inspections Past Due (91-180 Days)	✓	✓	✓	✓
Inspections Past Due (180 Days or More)	✓	✓	✓	✓

Inspections Scores

	State	District	Sanitarian	Report Area
Total, Min, Max, & Average Regular Inspection Score per Year	✓	✓	✓	✓
Total, Min, Max, & Average Follow-up Inspection Score per Year	✓	✓	✓	✓
Total, Min, Max, & Average Service Inspection Score per Year	✓	✓	✓	✓

Other Establishment Performance Information

	State	District	Sanitarian	Report Area
No. of Current Suspended Establishments	✓	✓	✓	✓
No. of Critical Violations/Yr	✓	✓	✓	✓
No. of Follow-up Inspections/Yr	✓	✓	✓	✓
No. of Regular Inspections Below 85/Yr	✓	✓	✓	✓
No. of Follow-up Inspections Below 85/Yr	✓	✓	✓	✓
No. of Services Inspections Below 85/Yr	✓	✓	✓	✓

Each query contains the raw data necessary for the metric. A user interface was developed with hyperlinks to the various query results (See Figure 5).

June 6, 2008		LEVEL			
METRIC	PURPOSE	a. State	b. District	c. Sanitarian	d. Reporting Area
1 No. of Active Establishments	Informational/LHD Workload	12-May-08	12-May-08	12-May-08	12-May-08
2 No. of Active Sanitarians	Informational/LHD Workload	12-May-08	12-May-08		
3 No. of Regular Inspections per Year	Informational/LHD Workload	2007	2007	2007	2007
4 No. of Services (Excludes D8 & 10) per Year	Informational/LHD Workload	2007	2007	2007	2007
Compliance					
5 Establishment Inspections Past Due Totals (30 Days or More)	LHD Performance	12-May-08	12-May-08	12-May-08	12-May-08
6 Establishment Inspections Past Due (31-60 Days)	LHD Performance	12-May-08	12-May-08	12-May-08	12-May-08
7 Establishment Inspections Past Due (61-90 Days)	LHD Performance	12-May-08	12-May-08	12-May-08	12-May-08
8 Establishment Inspections Past Due (91-180 Days)	LHD Performance	12-May-08	12-May-08	12-May-08	12-May-08
18 Establishment Inspections Past Due (Over 180 Days)	LHD Performance	12-May-08	12-May-08	12-May-08	12-May-08
Inspection Scores					
9 Total, Min, Max, & Avg Regular Inspection Score per Year	Establishment Performance	2007	2007	2007	2007
10 Total, Min, Max, & Avg Follow-up Inspection Score per Year	Establishment Performance	2007	2007	2007	2007
11 Total, Min, Max, & Avg Service (Excludes D8 & 10) Score per Year	Establishment Performance	2007	2007	2007	2007
Other Establishment Performance Information					
13 No. of Current Suspended Establishments	Establishment Performance	12-May-08	12-May-08	12-May-08	12-May-08
14 No. of Critical Violations per Year	Establishment Performance	2007	2007	2007	2007
15 No. of Follow-up Inspections per Year	Establishment Performance/LHD Rework	2007	2007	2007	2007
12 No. of Reg Inspections below 85 per Year	Establishment Performance	2007	2007	2007	2007
16 No. of follow-up Inspections below 85 per Year	Establishment Performance	2007	2007	2007	2007
17 No. of Services (Excludes D8 & 10) Inspections below 85 per Year	Establishment Performance	2007	2007	2007	2007

Figure 5.

Once a user clicks on a hyperlink, the reporting tool displays a detailed report showing the raw data for the metric. For example in Figure 6, it displays the report for metric 9.c. *Total, Min, Max, & Avg Regular Inspection Score per Year* by sanitarians.

1	Dist	Dist Name	Sanit#	First Nm	Last Nm	No. of Regulars	Minimum Score	Maximum Score	Average Score
2	2	ALLEN COUNTY HEALTH DEPT.	G1621	MARGARET	VICK	154	81	100	93.60
3	3	ANDERSON COUNTY HEALTH DEPT.	G1604	BRENDA	HAYDON	328	84	100	98.86
4	9	BOURBON COUNTY HEALTH DEPT	G3041	LARRY	TRUSSELL	307	83	100	96.43
5	10	BOYD COUNTY	G1440	BRENT	BARBER	105	72	100	90.30
6	10	BOYD COUNTY	G1386	STEPHEN	RUDD	213	54	100	89.12
7	10	BOYD COUNTY	G3046	SUZANNE	SMITH	434	52	100	90.84
8	11	BOYLE COUNTY HEALTH DEPARTMENT	G1404	DANIEL	TROUTMAN	101	71	100	97.35
9	11	BOYLE COUNTY HEALTH DEPARTMENT	G1510	JASON	STEVENS	434	71	100	96.23
10	11	BOYLE COUNTY HEALTH DEPARTMENT	G3039	LARRY	HALCOMB	19	94	100	98.53
11	12	BRACKEN COUNTY HEALTH DEPT	G1905	JOHN	DELLS	106	85	100	97.67
12	13	BREATHITT CO. HEALTH DEPT.	H8426	JARROD	CRASE	94	78	100	95.21
13	13	BREATHITT CO. HEALTH DEPT.	G1496	WILLIAM	SIZEMORE	163	80	100	95.21
14	14	BRECKINRIDGE CO. HEALTH CENTER	G1586	JEREMY	HINTON	111	74	100	95.62
15	14	BRECKINRIDGE CO. HEALTH CENTER	G1564	SCOTT	SHREWSBERRY	82	72	100	93.78
16	15	BULLITT CO HEALTH DEPT	G1377	CONNIE	BACK	88	87	100	97.28
17	15	BULLITT CO HEALTH DEPT	G1536	DAVID	DOTT	120	88	100	97.58
18	15	BULLITT CO HEALTH DEPT	G3055	MARY	BLANTON	435	80	100	96.58
19	24	CHRISTIAN COUNTY HEALTH DEPT.	G1356	ELIZABETH	FUTRELL	170	75	100	95.26
20	24	CHRISTIAN COUNTY HEALTH DEPT.	G1668	JILL	HARTON	62	70	100	91.42
21	24	CHRISTIAN COUNTY HEALTH DEPT.	G1665	KRISTY	WYATT	157	67	100	93.14
22	24	CHRISTIAN COUNTY HEALTH DEPT.	G1613	MINDEE	ALLEN	265	66	100	93.76
23	24	CHRISTIAN COUNTY HEALTH DEPT.	G3089	THOMAS	FORT	233	77	100	94.28
24	24	CHRISTIAN COUNTY HEALTH DEPT.	G1556	WYATT	MOODY	2	85	85	85.00
25	25	CLARK CO. HEALTH DEPT.	G1385	CARLENE	WHITT	3	93	98	96.00
26	25	CLARK CO. HEALTH DEPT.	G3086	CARLENE	WHITT	374	71	100	93.89
27	25	CLARK CO. HEALTH DEPT.	G1331	JAMES	COWAN	36	70	100	86.83
28	33	ESTILL CO. HEALTH DEPARTMENT	G1638	CANDIE	RADER	18	84	100	92.56
29	33	ESTILL CO. HEALTH DEPARTMENT	G1310	KENNY	COLE	106	63	100	92.96
30	34	FAYETTE COUNTY	F2740	AARON	ANDERSON	52	84	100	96.69
31	34	FAYETTE COUNTY	F2803	AMY	WILLIAMS	56	75	100	95.09
32	34	FAYETTE COUNTY	F2689	BARRETT	SCHOECK	334	84	100	98.10
33	34	FAYETTE COUNTY	F2806	BEN	WHITE	124	87	100	97.27
34	34	FAYETTE COUNTY	F2668	JAMES	EDWARDS	58	84	100	95.62
35	34	FAYETTE COUNTY	F0838	JANICE	HOLLAN	211	84	100	97.45
36	34	FAYETTE COUNTY	F2648	JASON	FERRY	425	72	100	96.06
37	34	FAYETTE COUNTY	F2667	JASON	HENNINGER	1	100	100	100.00
38	34	FAYETTE COUNTY	F2450	JESSICA	COBB	52	83	100	96.79
39	34	FAYETTE COUNTY	F2589	JOHN	MILLER	431	69	100	97.30
40	34	FAYETTE COUNTY	F0587	JOHN	TOWNES	375	78	100	96.43
41	34	FAYETTE COUNTY	Z753	KATHERINE	SCHULMAN	1	100	100	100.00
42	34	FAYETTE COUNTY	F2573	KATHERINE	SCHULMAN	2	97	100	98.50
43	34	FAYETTE COUNTY	F2753	KATHERINE	SCHULMAN	388	68	100	96.82
44	34	FAYETTE COUNTY	F2688	KEVIN	GABHART	396	75	100	96.61
45	34	FAYETTE COUNTY	F2574	LESLIE	COBB	370	64	100	95.05
46	34	FAYETTE COUNTY	F2467	LUKE	MATHIS	27	87	100	96.37

Figure 6.

- **Deliverable 2 - Prototype Reporting Tool**

A prototype reporting tool that displays the metrics was developed as part the project (See Figures 7 and 8). Once the 70 queries for the standard metrics were created, the raw data was in a format that was very detailed. The data was not summarize in a meaningful way. The reporting tool was developed as a way to showcase the data in a summarized way that could be useful to an EH manager. The report is divided into four sections: 1) state-wide metrics, 2) district metrics, 3) sanitarian metrics, and 4) Charts. The user of the tool would select the LHD district of interest up in the left hand corner of the tool. This would automatically populate the drop down box next to it with a list of sanitarians that are assigned to that district only. The user would then select a specific sanitarian. The four sections (state, district, sanitarian, and charts) are filled with metrics that can be compared at all levels such as average inspections score. The Excel charts presents the metrics in a visual context (See Figure 8). The tool serves as a tangible product that proves the concept of this project.

KY Environmental Health Statewide Metrics						
Informational Data:		Total Inspections & Scores:				
	As of: 12-May-08	2007	Avg Score	Min Score	Below 85	Critical Violations
Active Establishments	31,030	77,132	95.58	42	2,819	288,188
Active Sanitarians	575	30,775	95.73	46	248	
Avg No. of Establishments per Sanitarian	54	288,357	95.61	46	3,217	
Suspensions:		Inspection Compliance:				
	As of: 12-May-08	Total	31-60 Days	61-90 Days	91-180 Days	Over 180 Days
Suspended Establishments	10	2,731	544	309	456	808
34 - FAYETTE COUNTY District Metrics						
Informational Data:		Total Inspections & Scores:				
	As of: 12-May-08	2007	Avg Score	Min Score	Below 85	Critical Violations
Active Establishments	2,268	5,381	96.76	63	106	27,219
Active Sanitarians	45	2,183	96.03	71.00	15.00	
Avg No. of Establishments per Sanitarian	50		96.66	63	129	
Suspensions:		Inspection Compliance:				
	As of: 12-May-08	Total	31-60 Days	61-90 Days	91-180 Days	Over 180 Days
Suspended Establishments		245	133	37	21	10
F2473 - NATASHA COLLINS Sanitarian Metrics						
Informational Data:		Total Inspections & Scores:				
	As of: 12-May-08	2007	Avg Score	Min Score	Below 85	Critical Violations
Active Establishments	17	247	96.59	81	3	2,700
		155	97.40	90		
		1,126	96.71	81	3	
Suspensions:		Inspection Compliance:				
	As of: 12-May-08	Total	31-60 Days	61-90 Days	91-180 Days	Over 180 Days
Suspended Establishments		6	3	3		

Figure 7.

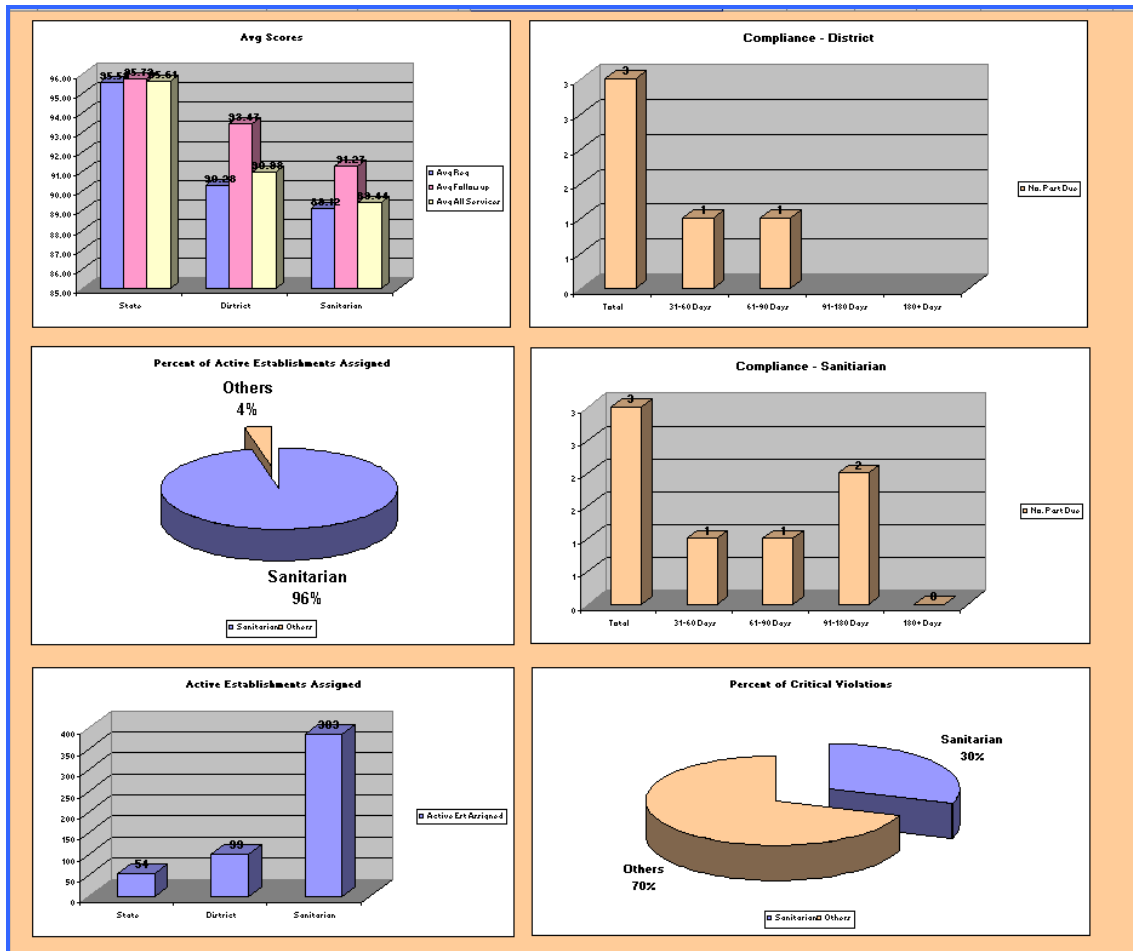


Figure 8.

- **Deliverable 3 - Recommendations to DPH/PHPS on How to Implement**

This project has a tremendous potential for a variety of options to research. Therefore, the team is recommending to continue this project in phases (See Figure 9).

Phase I encapsulates the work accomplished through this KPHLI project. It is recommended to take this work as a foundation and continue to build on it.

Phase 2 includes evolving the project to the next step by working through the data issues that were revealed while analyzing the EHMIS database. More analysis is needed to determine how to properly resolve the anomalies and accuracy problems. It is also recommended to keep looking for ways to improve the EH metrics. The team believes the data has many more stories to convey besides the ones presented in this project. The team also recommends researching the possible use of health-related metrics such as air quality, lead, water quality to compliment the inspection/compliance metrics. Utilizing both types of indicators may provide a more complete picture for EH. Lastly, the team recommends researching the possibility of assigning

risk factors to these metrics to help pinpoint problem areas and possibly be proactive in terms of prevention.

The objective of Phase 3 is to work toward actual implementation of the project. The team recommends having the metrics finalized by officially approving them for usage through the Public Health Protection and Safety Division and the EH Director's group. In addition, the prototype reporting tool should be used as a model for developing a production tool that should be included as a feature into the next update of EHMIS.

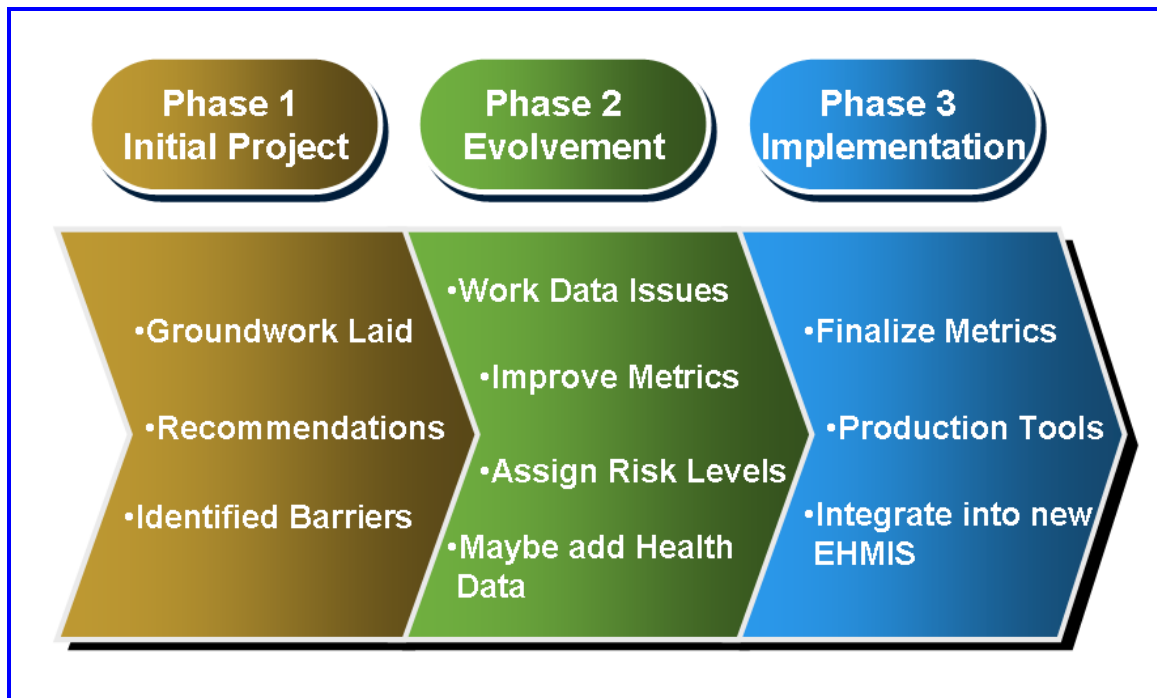


Figure 9.

CONCLUSIONS:

This KPHLI project has laid the foundation for EH Metrics that can be used as a springboard to move forward toward the future. One of the most important confirmations the team concluded was that the EHMIS data source is being underutilized in terms of potential for being a data-driven technology source for identifying problems and trends that could certainly help with decision making for EH management. Another important conclusion was that the data and differences in coding techniques of the various LHDs present a challenge that will need to be addressed to ensure that the data is interpreted correctly. Lastly, there are many opportunities to continue the evolution of this project into an automated Web-based system that can instantly produce some Excel charts with visual data and/or GIS maps that may highlight potential risk areas for EH. This project has the potential to evolve into an indispensable tool for helping to improve the environmental health of Kentucky and making it a safer place to live.

LEADERSHIP DEVELOPMENT OPPORTUNITIES:

Phillip Rosell, MS

The KPHLI experience personally revealed some leadership development characteristics that needed to be sharpened. I am a person who loves to grow by gaining insight and wisdom into my own strengths and weaknesses. At one point during the year, I noticed that I was battling with my own bad attitude. I was self-aware enough to know that I was complaining way too much. I started reading John Maxwell's book, *Attitude 101*, and it was a wonderful blessing that propelled me over the wall. Attitude is so foundational to every aspect of life. I hope I never lose the insight gained through his book. There were also some great practical tools and lessons that I took from this past year including handling difficult conversations and systems thinking. I also appreciated the fact that I could serve my team members who were always trusting, patient, and understanding of me. Thanks to all of you!!!

Rebecca Murphy

In my opinion, leadership development is something that everyone should aspire to achieve. The KPHLI experience has opened my eyes to new ways of thinking. I am the type of person that even though I personally recognize my own weaknesses, I've never enjoyed someone else pointing them out to me. KPHLI has taught me that pointing out your weaknesses is essential to personal and professional growth. Two books that I have read since joining KPHLI are *Crucial Confrontations* and *Crucial Conversations*. Without a doubt, these two books have given me more useful insight than any other book I've read thus far. The workplace is never perfect, but after reading this literature I realized that it's up to us to make it the best it can be. Difficult conversations can be uncomfortable, but they don't have to be unbearable. I've also enjoyed the systems thinking. I am always looking for new ways to approach various situations. Leadership development involves continuous improvement, which is something I strive to achieve. It has been a privilege to work with my team members on our change master project. I truly believe that we have achieved what we sought out to do. Thanks!!!

Natasha Collins

KPHLI has given me growth and development as a public health leader. It gave me edifying ideas on who I am and perceive myself to be to my peers, boss, and as a person. The 360 series really made me self-analyze and gave me some enlightening reflective moments. The Individual Development plan helped with my professional performance and personal relationships.

The master project our team has implemented is going to make positive influential changes through environmental health programs in Kentucky. The standardized key metrics tool we have employed will give all local health departments a greater understanding of their workers, workloads, trends, community growth and environmental health programs as a whole. I was privileged to be part of such a great program and a hardworking, diverse team. I would like to thank my group for all their diligent efforts and being so easy to work with. At the end of the day, I think we not only gained good professional working cohorts, but also friends. A special thanks to our M.V.P, Phil Rosell, he was the heart and soul of this project and we

would not have had the finished product without his vision. I would also like to thank our mentor, Clay Horton, for all his contributions and participation in helping us reach this end result.

Karen Allen

As a patient navigator, my role is to identify barriers to care, problem solve with patients and provide resources to access needed medical care. Whether on an individual basis, or as a community initiative, our goal is to equalize access to care and respond to the needs of medically disenfranchised citizens. Through my work as a KPHLI Scholar, I was introduced to systems thinking. I learned to focus on the vision for the future rather than a quick fix that could generate even more problems. “If we are not providing care to all of our community, we are not able to offer (advances) to all patients equally...The differences in risk, incidence, morbidity, and mortality by race, ethnicity, income, or access may hold keys to scientific inquiry on behavioral, social, cellular, and genetic levels.” As stated by Deborah Erwin, PhD, RCPI, Buffalo, NY.

As a member of the “Rule of Green Thumb” team, we addressed the complex public health issue of identifying metrics for environmental inspectors. We looked at how we might move Kentucky forward in terms of improving public safety, and standardizing the reporting system. Our registered sanitarians will provide data that will identify trends and contribute to a better understanding of our public health as Kentuckians. Our environmentalists are on the forefront of change and that is not an easy task. I thank them for their willingness to go into our counties throughout the state, and ensure our safety and health. And I encourage them to continue their fine work and accept new strategies for keeping our public areas clean and healthy.

Lora Beth Spears

This past year as a KPHLI participant has been insightful for me, both personally and professionally. Through the various assessment and assignments I have grown and developed a better understanding of my strengths and abilities. I have learned that I can challenge myself to make changes and make myself a better leader. It has helped me to understand that my abilities far exceed my own expectations.

Through this program one of the greatest experiences has been the friendships developed along the way. Our group is very diversified and many of us would have never worked together had this program not have brought us together. We have developed friendships that will last long after this program ends. This experience has been invaluable, and I would recommend this program to others who want to gain this leadership experience.

Michael Wilson

My participation in the Kentucky Public Health Leadership Institute has been a very fun and rewarding experience for me. From this experience I have learned many different aspects of both leadership and teamwork which will benefit me in my healthcare career for many years to come. Along with the lessons that have been taught in the various summits and assignments, the assessment tools that we were made available to us provided me with a very clear picture of

myself as a professional and clearly outlined the areas that can be improved upon. I am thankful for all of the KPHLI staff, special speakers, and the tools/resources that were provided to us. This has definitely been a worth while experience that I would recommend to anyone that wants to further their leadership skills and abilities.