A Regular Meeting of the Durham County Board of Health, held March 14, 2013 with the following members present:

James Miller, DVM; John Daniel, Jr., MD; Stephen Dedrick, R.Ph, MS; Commissioner Brenda Howerton; F. Vincent Allison, DDS; Jill Bryant, O.D.F.A.A.O; Nancy Short, DrPH, MBA, RN Bergen Watterson, MSCP, BA and Heidi Carter, MSPH

Excused Absence: Michael Case, MPA

Others present: Gayle Harris, Eric Ireland, Becky Freeman, Rosalyn McClain, Melissa Downey-Piper, Robert Brown, Dr. Jim Harris, Dr. Miriam McIntosh, Dr. Arlene Sena, Eric Nickens, Hattie Wood, Marcia Robinson Michele Easterling, Marcia Johnson, Attorney Bryan Wardell, Vicki Westbrook, Amy Keyworth, Dr. Rebecca King, Dr. Tim Wright, and Corey Sturmer. (There were others in attendance that neither signed the attendance roster nor signed up to speak during the Public Comment period.)

CALL TO ORDER: - Chairman Jim Miller called the meeting to order at 5:13pm with a quorum present.

DISCUSSION (AND APPROVAL) OF ADJUSTMENTS TO AGENDA: The following item was added to the agenda.

- Health Director's Job Description
- Policy Review
- Board of Health Participation on Community Boards
- Environmental Health On-site Water Protection-Notice of Violation
- Policy Matrix
- Board Accreditation Interviews

Dr. Allison made a motion to add the additional items to the agenda. Mr. Dedrick seconded the motion and the motion was approved.

REVIEW OF MINUTES FROM PRIOR MEETING/ADJUSTMENTS/APPROVAL: Commissioner Howerton made a motion to approve the minutes for February 14, 2013 meeting. Dr. Short seconded the motion and the motion was approved.

PUBLIC COMMENTS:

Mr. Corey Sturmer stated, "For those who do not know me I have been speaking about the issue that is going to be discussed tonight for about a year now. In that year's time I have learned a lot about how government works and I am always trying to learn more. I am just looking at the agenda here and see the folks who have been invited to participate and so before we get into the discussion I would like to encourage the board to really ask them the hard questions, the questions that matter as it pertains to this issue. Let's go down the line here, Ms. Westbrook the spokesperson for the Water Management Department, a great question to ask her is 'Where does fluoride come from?' I followed the paper trail and we purchase it from a fertilizer manufacturer and I would like to know, and this would be a question to ask the public health representatives; 'How is fertilizer waste beneficial in any way to the human body?' I don't see any internal medicine doctors here on this list and I think that is really important because we have to keep in mind and remember this is being topically applied and digested through our bodies and so it is not just about the teeth. It's about what we ingest and how it affects all systems of the body. Remember our bodies are seventy-five percent water, every organ requires water. If you read the literature the human body has no single lined process that requires the fluoride that is put in our water. Another topic that should be discussed with Mr. Tim

Wright, dental department, again ask him if it is his professional opinion that fluoride is beneficial to our bodies when ingested. If he is honest, he would not be able to answer that because he is not an internal medicine doctor. He is a dentist and there are different rules that apply. I just want to address the idea of the public health department, most of the times the City will say we follow the public health rules; that's not actually true, the decision is up to the citizens, the people in Durham who are drinking water. It is not the water department's decision, the public health department's decision; it is all of our decisions; so understand, that there are cities that have ended fluoride in spite of the reservations of their state health department and they did so because the citizens said so. So no matter what is said with these folks today, I hope that you give the choice to the citizens, we should have a vote, not a decision made behind closed doors where the citizens don't get to weigh in. Given the fact that Durham is a very equitable standing group of people that is a very reasonable request to ask, let's just have a vote and let the citizens decide. That's all I have to say today and that you guys will hold their feet to the fire and ask the right questions and consider the right relevance in relation to the issue. Thank you.'

PANEL DISCUSSION: FLUORIDATION IN THE MUNICIPAL WATER (Activity ***14.3 and 34.5***)
Chairman Jim Miller stated "The Ad-Hoc Committee, chaired by Dr. Vincent Allison, has brought these panelists together tonight to give the board more information related to fluoridation and more information in the area of water fluoridation, especially in municipal drinking water. This panel is, in part, the committee's effort to do due diligence in providing a careful, open, considered, educated recommendation to the City of Durham in regards to water fluoridation. We are trying to definitely take into consideration the public comments and will always entertain public comment and not making decisions behind closed doors and keeping this very much transparent. This evening's panel is here for the board and the committee to hear their presentations as well as to ask questions to the panel. Public questions will not be a part of this meeting and as such I expect no disruptions with the board and the panel that will allow them the time to get through the discussion and questions that we need. With that instruction, we will ask anyone who leads these disruptions to leave the facility for the rest of the evening. The other thing I would like to ask of the panelists is during your introductions, give us a little incite to your credentials, educational and additional training that will help us understand the area of your expertise." Chairman Miller asked if there was a particular order that the panel should begin discussion. Ms. Harris requested the panelists begin as they are listed on the agenda.

Vicki Westbrook: "I am Vicki Westbrook, BS Medical Technology and Grade IV Wastewater Operator Certification, (successfully completed 14 week Water Operators certification class), Assistant Director, City of Durham, Department of Water Management, I have been working with the City under its three different names for 27 years, I have been the Assistant Director since 2006 and my areas of responsibility are the water supply facility, waste-water treatment facility, regulatory compliance and the administrative divisions of Water Management. Thomas Harden, BS in Environmental Science, Grade A Surface Water Operator Certification, Grade IV Wastewater Operator certificate, Water Supply & Treatment Superintendent, is here tonight to my right, has 30+ years of experience in the business and is here for any more technical questions that you would like to ask. The reason we are here is because we have been adding fluoride to our city water supply since 1962. In 1957, Durham water customers cast post card votes to support the addition of fluoride in the City drinking water. Following State Board of Health rules, formal action by Durham's City Council was taken on March 19, 1962 to add fluoride. Once the formal action was taken, equipment and supplies were ordered

and the installation was inspected and approved by the NC Board of Health's Division of Sanitary Engineering. Fluoride was added to the water beginning May 1, 1962."

"Since that time, the City's Water Supply and Treatment staff have strictly adhered to guidelines established by the US Environmental Protection Agency (EPA) and overseen by NC Department of Environment and Natural Resources (DENR)-Division of Water Resources, Public Water Supply Section."

"The limits of fluoride go up to 4.0 milligrams per liter dosage. However, we have always had a target of 1.0 milligram per liter dosage and pretty much meet that consistently. Based on US EPA and US Health and Human Services recommendations, in February of 2011, NC DENR implemented 0.70 milligrams per liter dosage to balance the benefits of preventing tooth decay while limiting any unwanted health effects. This is in recognition that Americans have access to more sources of fluoride that when fluoridation was first introduced in the 1940s. Based on the recommendation we have modified our dosage consistently of 0.70 milligrams per liter dosage to meet that requirement. We test daily, and the information is submitted to the state on the operating reports on a regular basis."

"City staff made minor adjustments to meet the new target fluoride dosage; prior to the February 2011 Position Statement, the City had a target dosage of 1.0 mg/l. The staff continue to monitor all information provided by regulatory agencies and will adjust level as recommended."

"Information about the water treatment processes, chemicals used and levels in treated water is included in the City's Annual Water Quality Report. This report, first developed in 1997, is mailed to postal customers in Durham's service area on or before June 30 of each year. This report provides all our customers information on what is in the water; how the water is treated and the level of the different chemical that are used in the water. Annual reports are also posted on the www.DurhamSavesWater.org website. The City took the mandate from the customers at the time and the mandate to add fluoride at the appropriate levels."

"The total budget for 2012 for chemicals at the water treatment facilities was $2.3 million; fluoride purchases (in the form of hydrofluorosilicic acid) comprise about 3% of the chemical budget or just under $70,000."

"According to Kevin Buchholtz, DDS, with the NC Department of Health & Human Services (HHS), Oral Health Section:

a) Between 88% of public water systems in North Carolina fluoridate water.
b) Only one small community (5,000 customers) in Western NC has ceased adding fluoride to their drinking water (in 2007) and they are reconsidering this action.
c) The NC HHS supports the continued addition of fluoride to public drinking water for the reasons expressed above.
d) The majority of public water systems use the same fluoride additive as Durham----Hydrofluorosilicic Acid."

"The Department defers to dental health experts regarding the benefits of fluoride in drinking water."

Amy Keyworth: "I am Amy Keyworth a Hydrogeologist with NCDENR, Division of Water Quality, Aquifer Protection Section. My current responsibilities include helping to implement a statewide program for resource evaluation, groundwater quality monitoring, and groundwater

protection program development. I have 13 years experience working for the State of North Carolina, as a Geological Technician and Geologist with the NC Geological Survey, and as an Environmental Specialist and Hydrogeologist with the NC Division of Water Quality. I have a BA in Botany from Duke University and an MS in Geology with a concentration in Hydrogeology from NC State University."

"I was asked to be the expert on naturally occurring fluoride in groundwater in North Carolina. That is what I am going to speak to you on tonight."

"Fluoride is a naturally occurring ion of the element fluorine. It combines with many cations to form a variety of naturally occurring minerals such as calcium fluoride, sodium fluoride, aluminum fluoride, etc. Fluoride is found in groundwater in varying concentrations, depending on the local geology. Fluoride-bearing minerals are found in both igneous and sedimentary rocks."

"In Durham County, there are two primary geologic types – the Carolina Terrane to the north and west, and the Triassic Basin to the south and east. The Carolina Terrane is made up of rocks resulting from ancient, extinct volcanic activity. The Triassic Basin rocks are sedimentary rocks formed from the weathering and erosion of Carolina Terrane rocks. Both Carolina Terrane and Triassic Basin rocks contain some fluoride-bearing minerals."

"The attached map, produced by the NC Geological Survey, depicts analytical results of private drinking water well samples from the State Public Health Lab on a geologic map of Durham and Orange Counties. Fluoride in the groundwater in these counties varies from less than 0.2 mg/L to 1.07 mg/L. No private drinking water wells in Durham County had test results exceeding either the NC Groundwater Standard (2.0 mg/L) or the Federal MCL (4.0 mg/L) for fluoride."

"So to look at this map again, there is a legend up at the right that shows the yellow triangle, circles squares and blue dots. All the blue dots are basically are private well samples; and the analytical results for fluoride were below the 0.2mg/l to 1.07 mg/l levels. The yellow triangles show the fluoride levels are between 0.5 mg/l and 0.2 mg/l. The yellow circles are 0.2-0.3 mg/l and the yellow squares are 0.3-1.07 mg/l. These are all samples from private drinking waters in Durham and Orange Counties. Actually, if you go to the next map I will explain a little about where this data comes from. The red dots on this map are fluoride samples that were greater than 0.2 mg/l. There are 131 in this database over 19,000 samples that came back exceeding the NC water standard. This data is all from private wells and is a little squid. Some counties are on a public water supply and there are no private wells being sampled. There are some counties that had private wells going back way beyond what the state starting requirements. There are many more samples from those counties than from counties that just came into the program in 2007. Then there are samples resulting in complaints (issue with water color, taste etc). ***(A copy of the water sample maps are attached to the minutes).***"

"The State has resource protection standards that apply to all groundwater in the state. The resource is protected as a source of drinking water for both public and private wells.

"From the NCDENR Division of Water Quality "Groundwater Standards" webpage, the below are quoted from the "Frequently Asked Questions" section (http://portal.ncdenr.org/web/wq/ps/csu/gwstandards). I picked three of the questions that were most relevant to our discussions tonight.

> **What are groundwater quality standards and how are they established?**
>
> Groundwater quality standards are the maximum allowable concentrations of pollutants in groundwater which may be tolerated without creating a threat to human health or which would otherwise render the groundwater unsuitable for use as a drinking water source.
>
> The Division of Water Quality's Classifications and Standards Unit is responsible for the development and maintenance of North Carolina's groundwater standards. Regulations pertaining to the classifications and water quality standards applicable to groundwaters of North Carolina are located in Title 15A of the North Carolina Administrative Code, Subchapter 2L, Sections .0100, .0200, .0300 and .0400. These regulations can be located in the NC Administrative code at CSU Rules webpage.
>
> **How are groundwater quality standards established?**
>
> Groundwater quality standards are established as the lowest of the following six criteria:
>
> 1. A concentration protective of the non-cancer or systemic effects of a contaminant.
> 2. A concentration which corresponds to an incremental lifetime cancer risk of one-in-a-million;
> 3. The taste threshold limit value;
> 4. The odor threshold limit value;
> 5. The National Drinking Water Maximum Contaminant Level (MCL); or
> 6. The National Secondary Drinking Water Standard.
>
> In addition to the standards listed in Section .0200 of the 2L rule, the DWQ Director may establish an interim maximum allow concentration (IMAC) for substances for which a standard has not been established.
>
> **What happens when naturally occurring background levels are higher than the groundwater standard?**
>
> Where naturally occurring substances exceed the established standard, the standard shall be the naturally occurring concentration as determined by the Division of Water Quality Director."

Dr. Rebecca King: "I am Dr. Rebecca King. I am a dentist and received both my dental degree and master's degree in public health from the University of North Carolina at Chapel Hill. I did my residency training in the specialty of dental public health at the North Carolina Division of Public Health, have been board certified in the specialty for 16 years; I am past president of the American Board of Dental Public Health and the American Association of Public Health Dentistry. I have worked in dental public health for 36 years, and my duties for the last 22 years have included support for community water fluoridation. I currently serve as

the North Carolina state public health dental director and chief of the Oral Health Section in the Division of Public Health.
The safety of the public water system is of paramount importance to health professionals and government agencies, so the potential for fluoride in drinking water to cause adverse effects has been carefully examined. More than 3,000 studies or research papers have been published on the subject of fluoridation, meaning few topics have been as thoroughly researched as fluoride. CDC states that: "the weight of the peer-reviewed scientific evidence does not support an association between water fluoridation and any adverse health effect or systemic disorder."
Leading health and medical organizations agree that there is strong evidence that water fluoridation is both safe and effective. A review of credible scientific studies concludes that water fluoridation safely reduces tooth decay between 18-40 percent for US schoolchildren, while also reducing tooth decay and tooth loss in adults, even with the widespread use of other forms of fluoride such as fluoride toothpaste. Even before the first community water fluoridation program began in 1945, epidemiologic data from the 1930's and 1940's revealed lower numbers of cavities in children consuming naturally occurring fluoridated water compared to children consuming fluoride-deficient water. Studies in Colorado, New York, Texas and Alaska show that a community that stops fluoridating or never starts this process will find that residents spend much more on decay-related dental procedures. For Durham residents, we would expect that cavities would increase if fluoridation was discontinued and that individuals and the health care systems would be absorbing the costs of treating the effects of increased dental disease. This is particularly significant for the Medicaid budget, as the low income population has the majority of the disease."

"Two published studies conducted by the CDC reaffirm the benefits and cost savings of community water fluoridation. I understand that Durham spends about $173,000 per year for fluoridation or less, or a cost of $.74 per person per year or less. Based on the CDC's estimate that every $1 invested in this preventive measure yields approximately $38 savings in dental treatment costs, this is a cost savings of more than $6.5 million. Put another way, the individual lifetime cost of fluoridation is less than the cost of one filling. Fluoridation saves money for families, and it saves money for taxpayers supporting public programs."

"Fluoride protects teeth two ways – systemically (before teeth erupt into the mouth) and topically (after they erupt). Fluoride exposure before teeth erupt remains important; however, current consensus recognizes fluoride's *primary* benefits—but not all of its benefits—are from topical sources. We drink fluoridated water and the trace levels of fluoride return to the mouth in the saliva. There, it provides topical protection as the teeth are continuously bathed by fluoride rich saliva."

"Caries rates have declined in all racial and ethnic groups in NC since community water fluoridation began, remarkably so. However, there are still major disparities in tooth decay rates according to race, ethnicity and income status. Overall, non-Hispanic blacks, Hispanics, American Indians and Alaska Natives have the poorest oral health of any racial and ethnic groups in the United States. Minority adults have nearly twice as much untreated tooth decay as non-Hispanic whites, and adults with less than a high school education have nearly three times the amount of untreated tooth decay than adults with at least some college education. The higher the risk status and level of decay, the greater the potential for benefits from preventive measures. Community water fluoridation is our most effective and efficient way to reduce decay. One of the strengths of water fluoridation is that it is an equitable method of disease prevention and ethical public health intervention – all people benefit regardless of their incomes, ages, race/ethnicity and whether or not they have dental

insurance or are able to get dental treatment. All you have to do is drink the water."

"I grew up in an area of North Carolina that did not fluoridate its water until I was a teen-ager. As a result, I suffered from a fairly high level of tooth decay as a child. Once a tooth has a filling, over time, that filling has to be replaced, and each time it is replaced, the filling gets larger until a number of my teeth eventually needed crowns, which was a significant expense. It is much better if we can prevent the decay process from beginning in the first place. Since my teen-age years, I have always chosen to live in an area with a fluoridated water system. I made sure that my children drank fluoridated water and as a result, they are now cavity-free young adults."

Dr. Tim Wright: "I am Tim Wright, Dentist. I received my dental training at the University of West Virginia, then went into public health for about a year, and then did my pediatric dentistry residency at the University of Birmingham Alabama. During that time I also completed a four year excellence to Health Cariology Research Training Fellowship that was primarily directed at understanding fluoride and fluoride effects and caries prevention. Since that time I have been in full-time academics in pediatric dentistry patient care. I am presently the Bawden Distinguished Professor and Chair at UNC-CH Department of Pediatric Dentistry. I have over 30 years of experience."

"Three key issues that are main components to this issue and that have been brought up in public hearings and when I lecture on fluoride to students.

1. Safety
2. Effectiveness
3. What is the Cost

As far as safety there have been and continue to be challenges and will continue to be challenges to the safety of fluoride. If you go back in fluoride history, when it was discovered 100 years ago it has been looked at as a great health benefactor. So what does the data suggest? It has accused fluoride and its derivatives, compounds of everything from down-syndrome to retardation, Osteosarcoma most recently the literature has been on the IQ side on fluoride exposure in children. So what are the facts: osteosarcoma the earlier one, where they looked at different communities with different water levels. It is one of the only preventive health measures tested at the community level. The initial trials in Grand Rapids Michigan in 1945 was a comparison of one community that was fluoridated and one that was not. This has been going on for over 65 years of water fluoridation in the United States. Concerns about osteosarcoma where big, there was a rat study, in RTP that leaked some of the early information before they had completed the trial data that said there was evidence of high levels of osteosarcoma. When they went back and analyzed all the data and it didn't pan out. The most recent scare of that was in Dr. Douglas's data from Harvard where he was accused of hiding data by one of his post docs. Where it appeared males were having a higher level of osteosarcoma based on the epidemiological studies of humans. They went back and analyzed the data fully with other groups and it didn't pan out. Osteosarcoma is extremely rare, and it had an effect you would expect to see a massive population base with these kinds of fluoride effects. The most recent IQ data would say it's a Harvard Study so therefore it has to be great. Well if you read the data what it says is that they sampled communities in China and two communities in Iran. What they are comparing is called high fluoride levels which are anywhere from 4-to-10-to-20 times above .07 mg/l levels that the United States would

consider to be optimally fluoridated. In most of those communities; not all of them, but most of them, there isn't a problem of lower IQ scores in those communities that are high. But if you are drinking level parts per million, you for sure are going to have problems. So the data, overwhelming, show in thousands of studies that at the right level fluoride is beneficial and safe.

Dental caries is the most common disease in children in the United States and in North Carolina. Over 30% of North Carolina children entering kindergarten having experienced tooth decay and 17% have untreated dental caries. While this disease is disproportionally represented in low socioeconomic populations, it crosses all social, economic and racial boundaries. The idea of optimizing the population's exposure to fluoridated water to prevent dental caries evolved from observations in populations that had naturally low levels of fluoride to those with higher levels. Fluoride is the 13th most common element in the earth's crust and is found to naturally occur in many water sources depending on the type of rock formations the water flows over and through. These early epidemiological studies revealed that optimal caries reduction and safety occurred around 0.7 to 1.2 ppm. Since the first community experiments on water fluoridation in the 1950's the scientific evidence continues to overwhelmingly support the benefit and safety of water fluoridation. The Center for Disease Control currently recommends an optimal level of water fluoridation to prevent caries and be safe at 0.7ppm which is the level of the Durham County water supply. Water fluoridation has several notable benefits over other approaches directed at preventing dental caries. Fluoridated water is available to all segments of the population served by that water source regardless of socioeconomic status.

Water fluoridation is the most cost effective method available to prevent dental caries. (Cost of Durham County residents estimated at less than $1 per year) and results in a marked reduction in dental caries in the population. This translates to significant health care cost reductions in the population (estimated millions of $ in dental care savings to Durham Country residents). Lower disease levels are associated with fewer missed work days, fewer missed school days, fewer emergency room visits for dental caries and a reduction in tooth loss. Untreated dental caries in children has been associated with lower test scores in school. Studies continue to show

Groups arguing against water fluoridation site information regarding the risks of fluoride such as recent publications on children exposed to fluoride having lower IQ levels. In all of these study populations the children studied were exposed to many times greater the optimal level of fluoride (sometimes as much as 20 times) and the normal comparison group was typically children with fluoride exposure levels similar to or even greater than those drinking Durham Country water. Providing water fluoridation in fluoride deficient communities has been present in the United States for over 60 years, has been evaluated for safety on millions of people, and there remain no validated and scientifically supported harmful effects. The UNC Department of Pediatric Dentistry strongly supports continuing water fluoridation as a safe and effective approach to reducing the burden of dental caries in the population. She is a wonderful supporter of all caries prevention, especially fluoridation.

Dr. Laura Gerald was not able to be here in person, but sent her presentation by Dr. Rebecca King.

Dr. Laura Gerald is a pediatric physician with a Master's in Public Health from Harvard University. She did her pediatrics at John Hopkins University and she has a very distinguished career. She is originally from North Carolina, and came back to work in Robeson County for 10 years,

during that time she worked in a rural low-income county and saw many children who suffered with dental disease. That's where she learned first-hand about the problem and as a pediatrician about things that can prevent tooth decay. Dr. Gerald currently serves as North Carolina's State Health Director

Dr. King read Dr.Gerald's statement:"For more than 65 years, the safety of community water fluoridation has been studied more thoroughly than any other public health measure, and repeatedly confirmed as being both safe and the most cost effective preventative measure that can be taken to reduce tooth decay in people of all ages. A broad range of dental and non-dental health organizations (see http://www.ilikemyteeth.org/fluoridation/health-medical-authorities/), including the Division of Public Health, North Carolina Department of Health and Human Services, support fluoridation. North Carolina has supported the fluoridation of drinking water supplies for over sixty years-Charlotte fluoridated its water supply in 1949, and at that time was the largest water system in the world to adjust it fluoride level to the recommended optimal level. North Carolina has continued to be a leader in this area and the latest figures shows that, of those North Carolinians who receive their water from a community water system, 87 percent receive the benefits of fluoridated water. As the size of the population receiving fluoridated water has grown, our statewide dental surveys have documented dramatic improvements in the dental health of our citizens.

You may obtain more information at the following internet addresses:

- The Campaign of Dental Health: http://www.likemyteeth.org/fluoridation/
- The Center for Fluoride Research Analysis: http://www.fluoridescience.org
- The American Dental Association page on fluoridation: http://ada.org/fluoride.aspx
- The Centers of Disease Control and Prevention (CDC): http://www.cdc.gov/fluoridation
- Oral Health in America, A Report of the Surgeon General: http://www.nidcr.nih.gov/DataStatistics/SurgeonGeneral/sgr/
- NC Oral Health Section web page: http://www.oralhealth.ncdhhs.gov

The staff in the N.C. Division of Public Health, Oral Health Section, routinely monitor the literature to remain current on fluoridation issues. For additional information, please contact Dr. Rebecca King, Section Chief, N.C. Division of Public Health, Oral Health Section at 919-707-5487 or Rebecca.King@dhhs.nc.gov.

BOARD QUESTIONS/COMMENTS: FLUORIDATION IN THE MUNICIPAL WATER

Q: **Dr. Allison**: "This question is for Ms. Keyworth. What is the maximum standard for groundwater fluoride in North Carolina? And basically what you were saying that anything under 2.0 based on your department is safe to drink?"

A: **Ms. Keyworth**: "It is 2/mg/l in North Carolina. Yes".

Q: **Dr. Miller**: "I think I would like to add on to the question. Reflecting back to the maps, there were many wells, private wells that were sampled that had naturally occurring levels of fluoride."

A: **Ms. Keyworth**: "Yes and I am sorry that I did not think to break down the numbers."

Q: **Dr. Miller**: "It was 0.2 up to 1.07"

A: **Ms. Keyworth**: "Yes. up to 1.07. Durham didn't have anything above 1.07. That is in the naturally occurring ground water that has been tested in the private well program."

Q: **Dr. Miller**: "Is that the same fluoride?"
A: **Ms. Keyworth**: "Fluoride is an ion, so fluoride is fluoride. It doesn't matter what mineral it came from."

Q: **Dr. Miller**: "So the testing that is done on the Durham water is testing for the fluoride ion the same fluoride ion being tested in groundwater?"
A: **Ms. Keyworth**: "Correct, I can even give you the test that is being used. It is Fluoride Ion Chromatography EPA 300.0 RDV 2.1. Both the DWQ and the State of Public Health do the same test."

Q: **Commissioner Howerton**: "I am referring to the wells in Northern Durham that had some contamination years ago. We have been working with those. I was wondering if you had any idea if there would be any consequences around those wells."
A: **Ms. Keyworth**: "I am guessing that would be the Division of Waste Management that would be handling that. This is my supervisor, Evan King, who came along to support me; but there are incidents statewide of underground storage tanks leaks or spills on the surface that have effected local drought water in restricted areas. We call them containments elements. What I am talking about with fluoride is what is naturally in the water due to the rocks, so that is a different type of question."

Q: **Commissioner Howerton**: "I was just wondering if there would be any kind of back up due to contamination of those wells."
A: **Ms. Keyworth**: "It depends on the circumstances, often people who wells have been spoiled by pollution incidences, are getting bottled water through a state fund. Often a nearby municipality will hook them up to City water. Generally that is a waste management function in the plant."

Q: **Ms. Watterson**: "So listening to the man that just left about it being fertilizer and there is an article in our packet about detrimental effects on our health. I see random e-mails come through from friends about how bad fluoride is. Is there any merit to these claims at all? Why are these people saying this?"
A: **Dr. King**: "My personal opinion is that people fall into two categories. The first category is that people read these things and they are scared and concerned. They think if it's on the internet, it must be true and most people are in that category, they are really trying to find out what is right and what is best for their health. The second category is a group called the Fluoride Action Network. These are the people that mainly take creditable studies and misrepresent what's in there and they are deliberately misrepresenting the facts. There are authors that I have seen listed on articles and I have contacted them and said this is not what your article said, and they have said they have contacted the source and asked that the misinformation be removed and they refuse to do so. So there are people who deliberately misrepresent the information. Most people do read the types of things you are referring to and just want to know the truth."

Q: **Dr. Short**: "Given that this young man is so adamant that a derivative of fertilizer product is what is entering into our water supply and yet our expert is saying it is naturally occurring so"
A: **Dr. Wright**: "Fluoride is the 13th most common element in the earth's crust. It is a chemical, we are all chemicals. The comment about why is it a fertilizer. The phosphate, when they dig for fertilizer to add the phosphate. When they mine the phosphate, one of the by-products of that is different fluoride rich because it is the earth's crust, they are digging it up getting the phosphates, so it is a by-product of that industry. So that is

only one of the things that is used in municipalities. It is not the only thing that they would choose. When they say they are measuring fluoride ion that is true because when you put it into the water it dissolves. So you have the elements, the components of that. You will have sodium, silicate and fluoride and the fluoride is an ion. So you don't have fluorosilic acid but some actually use liquid feeders that are hydrofluoric acid… So yes, that is a true statement; it is a by-product of that. We have lots of by-products, probably the first people that saw penicillin and said OOO-yukee! It's mold on bread, but how many lives have been saved by that. So you have to tease out what is the reality versus the emotional. It is very emotional to say it is a by-product and it sound like a chemical name with acid in it and sounds terrible, but it disassociates the fluoride ion so what they are measuring is the disassociated ion. It is true that it is toxic, like most things if you have too much of it. It causes not only tooth problems, but systemic problems and if you take enough of it, it will kill you. Those are the truths as I see it, but at 0.7 parts per million, again these were studies done on humans from municipalities, thousands of people drinking at these different levels, that were you see between nothing and part per million as you got close to part per million, you got the best bang for your buck with no deleterious effects of any kind, systemic or anything else. That's how those were done back in 1940's when they did the first community trial."
Dr King: "Can I make a point on going down to the .7 part per million. I think that is very positive, it demonstrates that people are looking at what is going on, measuring, this does reflect increases in fluoride from other areas. In February 2011 the recommendation was drop the optimal level from one part per million to 0.7. So that is the level we now consider given today's environment to be the best level. I find that reassuring that when changes need to be made they are made."

Q: **Ms. Carter**: "Along those lines is there a lower level to see more benefit. Could we go lower and still see a significant benefit?"
A: **Dr. King**: "What we try to do with the optimal level, we use to have a range of .7 to 1.2 and that was based more on thinking that people in hot climates would drink more water, so they would get more fluoride, but in the 1940's they looked at a whole lot of different natural levels, plotted the decay rates and found the point where you got the best benefit. At that time it was .7 to 1.2. Below that point, you would start losing a lot of benefits, so that level today is probably lower, because back then there wasn't fluoridated toothpaste. It's lower but we don't want to get too low and it's a gradual wearing off where we would be losing benefit. When fluoridation was first discovered because of natural levels in the 1940's as Dr. Wright has mentioned; we knew even at that time, that about 10% of people would have mild levels of fluorosis. The question was, "what's the level where we get the greatest benefit, with the less amount of fluoride"? In my career I have seen tremendous changes in children's oral health, improvements, mostly to do with fluoridation."
A: **Dr. Wright**: "The only thing I would like to add is there is a dose respond to fluoride. It is clear, the levels, in toothpaste that most of you use are over a thousand times the level we are talking about. It is a dose response, it is where do you want to draw the line, if you go to .5 you will lose benefit."

Q: **Dr. Bryant**: "I would like for one of the dentist to explain what fluorosis is and how it occurs?"
A: **Dr. Wright**: "There is skeletal fluorosis, which is systemic, when you get really high levels, which is why you are not to have a municipality which is over 4 part per million because over that you start to have bone changes. Epidemiological studies were showing that post-menopausal, osteoporotic women were having an increase level of hip fractures. Skeletal fluorosis occurs from high doses over many years. The dental fluorosis occurs at the time of tooth development. So we are looking at

the young ages as being the most sensitive, especially, for the anterior teeth, up to 8-9 years old. For the front teeth it would be 1-3 years old. So if you get too much, like from eating toothpaste, in our society, or on a well with too much, or inappropriately prescribed. So whatever the exposure was during that window (1-3 years old), depending on the dosage, the higher the dosage the worst the defect is. Basically the enamel is mineralizing as well as it should. Fluoride has a variety of activities on cells and cell systems and physiology at those higher levels…People with minimal fluorosis have lower levels of caries."
A: **Dr. King**: "So it's like anything you want the proper levels, as far as discussion of fluorosis, there are some studies that say that changes the fluoridation levels probably wouldn't do much for fluorosis anyhow. As Dr. Wright mentioned, fluorosis comes from inappropriate use of toothpaste, little kids not being supervised and eating too much or kids getting a fluoride supplement when they are already on a community water system. So they are getting double the dosage of fluoride, we would expect there to be problems. It really is not so much related to the .7 one part per million that is in water."
Q: **Dr. Allison**: "Do you agree, and this is my opinion that the most of time when you see moderate or spear fluorosis is usually coming from young children unsupervised with toothpaste?"
A: Dr. King: I have had kids come see me and their teeth were dirty and we are talking about brushing their teeth and they would say "I couldn't brush my teeth, because my brother ate the hold tub."

Q: **Dr. Allison**: "I just want to make a point that the public commenter made a point that there was no internal medicine people on the panel and I am so sorry that Dr. Gerald couldn't be here but as a dentist would you say that you have both the education, training and passion to take care or the whole body?"
A: **Dr. King**: "Absolutely and as far as groups that support it and the references on Dr. Gerald's sheet, one of the ADA references has a list of over a hundred health and professional groups that support it (American Academy of Pediatrics, Cancer Academy, etc.). These are all groups that support water fluoridation. If there were issues they would not be supporting it."

Q: **Dr. Short**: "When Mr. Sturmer was here back in the fall, he made a statement that really caught my attention and I have pondered on. He made the statement that it was unethical to medicate people through the water supply without their consent. I thought Dr. King in particular, you mentioned something about it was very ethical and that reawake that thought back from the fall."
A: **Dr. King**: "Fluoride is not a medication. It is in there to prevent tooth decay. It's like vitamins. It is a preventive measure not a medicine".
A: **Dr. Wright**: "It is not a drug, it available, if you look up the definition of a drug or medication, it is not, it is an ion, it is an element. You are medicating people when you chlorinate the water...This is another prevention measure that is accepted."

Q: **Dr. Short**: "He further stated that there are no readily available or inexpensive filters, that if you really do feel like somehow that the City of Durham is forcing you to drink something that is against your will, there is no filters you can put on the whole house that are intensive enough, in other words, it's priced out those people that may be lower income. There was comment about it being aerosolized in our showers. Do you have anything you want to say to those concerns?"
A: **Dr. King**: "As far as if someone chose not to drink fluoridated water, they could go to the grocery store and buy Food Loin brand distilled water at a very low price."
A: **Dr. Wright**: "Fluoride gas doesn't float around. The other thing about fluoride is not only is it the 13th most common element in the crust,

it is the most active element in the periodic table. It doesn't hang out, it bonds up with stuff, it's made in the earth's crust. It is the most reactive element in the earth's crust. It sticks to things. It doesn't exist as a floating gas. There is no scientific evidence to support that comment. It is just not the way fluoride works…It is true that those Brita filters do not remove fluoride."
A: **Dr. King**: "One concern I have with those last statements is that the people who benefit the most is the low-income people he is talking about are the one who benefit the most and need it the most. I am really concerned when people get inaccurate information and out of fear they try to do things that harm themselves."

Q: **Dr. Allison**: "If Durham decided to take the fluoride out of water, what segment of the population do you think would be hurt the most?"
A: **Dr. King**: "It would be all the minorities, low-income, low education level because those are all factors that influence high decay rates. So it would influence a tremendous part of the population, it would influence everybody, but the one who would hurt the most would be the low-income, low education and minorities."

Q: **Ms. Carter**: "Are you familiar with studies that show a correlation between fluoride in the water and student achievement in school?"
A: **Dr. Wright**: "Yes, there was a study most recently, in 2009 in North Carolina (Bill Vann and Stephanie Jackson) published on a North Carolina School kids was there looking at the effect of caries. It wasn't looking at specifically the type of fluoride, but what they found out was that the kids that had caries were three times likely to be missing days out of school. The same kids had lower aptitude test scores than their counterpart without caries. In North Carolina the studies show that kids with caries miss more school, have lower aptitude test scores and have learning issues. It is a huge issue for those kids and their development in school. If you do decide to de-fluorinate, that would increase."
A: **Dr. King**: "The other thing that they looked at in that study was kids who routinely missed school for dental appointments didn't have those problems. We also had one of the dental residents o look at fluorosis and the quality of life. He found that the fluorosis which is very, very mild was not negatively associated with the quality of life, but having tooth decay was certainly associated with quality of life as you might suspect. But is nice to document those facts and get them published."

Q: **Mr. Dedrick**: "Do you discourage the use of bottled water?"
A: **Dr. King**: "There are a lot of concerns with bottled water a lot of it doesn't have fluoride and it is hard to measure. Some people drink a lot of bottled water, so they are missing out on getting the fluoride. Now some of the newer bottled waters, some of the nursery bottled water, where they put the fluoride back in at optimal levels and you are paying a healthy price for a little teeny-tiny amount of something you could get from your community water for a fraction of a penny. Also, with bottle water you don't have the same protections and controls that you have going through the state accreditation of the water systems. So you really get better quality water from your water system."

Q: **Dr. Allison**: "Ms Westbrook, one thing that I heard from another county that Graham just recently took the fluoride out of the water and one of the things that was discussed at that particular meeting was that the water utility folks wanted it out because they said that it was a cumbersome process in putting it in. Could you speak to that? They said that it was dangerous and they had to put on all of these bio- hazard suits and things on to put it in there."
A: **Ms. Westbrook**: "It doesn't require that level of guarding up. But at the highly concentrated levels that we receive it, it does require that you handle it carefully just as you would handle most of the other chemicals

that we handle in the water treatment process. You just have to handle it carefully, we have the appropriate training, the appropriate personal protection and the equipment that we have to use and we are very careful about it. Would they mind not handling it? Probably not. The workers take their job seriously and they know that it is there for the good of the public's health. They wouldn't miss it on one hand; on the other hand they would because of their own health."
Dr. King: "But I would hope that the decision whether or not to take this preventative measure is not based on the ease of work for someone working in the water plant."
Ms. Westbrook: "If I could reiterate, this was done as a matter of a public vote, the vote occurred in 1957, but it took them about 5 years to actively get the equipment in place and start adding it to the water. So it was a public opinion sway at that time and we wouldn't let certainly any ease or challenges with using fluoride or any other chemical change how we operate as more and more stringent limitations come down for all sorts of water quality standards we do what we need to do to make sure that the water we are providing meets and is better than any of those standards in place."
Dr. Allison: "But the bottom line is that with proper training and the proper precautions there is no risk to the workers."
Ms. Westbrook: "If they follow all the directions, use their PPE the risk is next to minimum."
Dr. King: "I have had a number of calls and e-mails from the folks in Graham, and Graham and Mebane have a joint water system. It is my understanding that it came up in the Graham City Council and they did not get good information and they voted immediately to stop but then they had to have Mebane to agree. My prospective from communicating with the folks in Graham is that they are embarrassed that they made the decision to stop without getting good information and that they would have no problem if Mebane decided not to stop. So they are kind of passing the buck to Mebane now."

Q: **Attorney Wardell**: "Given the efficacy of toothpaste and the occurring of fluoride in natural well water and ground water, I think one of the questions that came up in the past was do you really need fluoridation in the general system because it is not as effective as what we all do anyway which is brush."

A: **Dr. Wright**: "Actually, if you look historically the data of water fluoridation is more effective than tooth-brushing and tooth-brushing is a thousand times stronger. If you have safety concerns, the best bang for your buck is that. Here is the deal with water fluoridation, not only does it reach all communities and all peoples out there, but it reaches you every time you take a sip of water, every time you consume anything that was made with that water and the thing about fluoride is that you can have a dose response but it is the frequency that is most important so if I can sit down and sip on water all day long every time I do that there is an opportunity for that fluoride to get into my enamel and help rebuild those crystallites. So there is no mechanism, there is nothing that we have other than water fluoridation that has that kind of benefit. At best people brush twice a day, a lot of people once a day, so it is a high-dose low frequency and low-dose high frequency. The game you want to play is low-dose, best safety, cheapest thing you got and high frequency. That's the most effective, so if you control disease with that, almost any time that the arena you want to play in. Water fluoridation is far way the best. I am the most expense prevention you can buy. You come to my office that is the most expensive. That is the least expensive, and some people need to have each of the tiers of prevention to control the disease and in some people that doesn't work. But for the majority of people that the area want-low-dose, high frequency. It is **the** best delivery system we got for a lot of reasons."

A: **Dr. King**: "And talking about just using fluoride toothpaste to brush your teeth. In the health setting we see a lot of families who don't have fluoridated toothpaste; the parents don't supervise the brushing. We see kids who don't have a toothbrush. So these are the kids with the biggest potential for problems, so taking the fluoridated water away from them-a lot of them have nothing."

Q: **Dr. Miller**: "I am trying to get an appreciation for how much fluoride 0.7 parts per million I guess 0.7 milligrams per liter is the same. I was early trying to figure out how much water I drink. It sounds like it could be something such as a thousand liters a year. And then I am basically trying to figure out how much fluoride I am getting from drinking water and if I am drinking a thousand liters per year 700 milliliters. I am trying to figure out am I looking at it right."
A: **Dr. King**: "It is the same. A part per million is like one drop in a bathtub. You should probably be looking at the daily dose. The amount of fluoride in one part per million-one milligram per liter is like a drop of fluoride in 16 gallon bathtub. Are you asking are you getting enough or are you getting too much?"
Dr. Miller: "It just feels like it's a minuscule amount even on a yearly basis that you get from water."
A: **Dr. King**: "It is a minuscule amount but as Dr. Wright has said that's what you want is the very low level and continuance as much as possible. You continually get that very low level. That's what works."
A: **Dr. Wright**: "People had done studies that actually look at your daily dose and how much you get from what sources. So they did it in communities that have .3 parts per million above grounds 0.7 up-to 1. So what would be considered low fluoride and optimal fluoridated and you find that in the optimal fluoridated that it is coming a lot from water. If you have really low level a lot of it is coming from a supplement, you took a supplement, if you didn't take a fluoride supplement you have overall pretty low levels. Overall it is a minuscule amount if you took it all; had a powder substance of fluoride it would probably fit into a little satchel for the entire year. The maximum optimal dose is .05 milligrams per kilogram per day. That is a teeny-tiny amount and if you look at the most people get over the course of the day is around that amount if you are in an optimally fluoridated area."
Dr. Miller: "It sounds like one brushing has more fluoride in it than what we drink in a whole year."
Dr. King: "Probably so but hopefully you would spit that out. You would not be swallowing that. The lady who talked about pea size amount of toothpaste has the message for children. The ages that Dr. Wright was talking about we want to get a little tiny bit of fluoride-pea size because those young kids can't spit it out."

Dr. King stated she appreciated the board allowing them to come and answer the questions. Dr. Miller stated the board definitely appreciated the panel coming.

Dr. Short asked the panel if they had any suggestions on how to put those individuals - there must be a certain population in our community feel very nervous about having this additive- Do you have any suggestions on how we as a board or public health department might be able to allay some of these fears?"

Dr. King: "I say good luck, they don't want to hear anything but what they read. This is my experience over many years of dealing with this it is all about providing good information. They got their mind made up and don't want to defer. There is a point where I would just discontinue the conversation and say we have to agree to disagree."
Dr. Wright: "Education is the best you can do."

Ms. Harris referred the board to a fluoride article in their packets to review as part of the information given today on Fluoridation.

Ms. Harris acknowledged the article in the board packet "Don't drink the water" came from a Ms. Doris T. Brown, who has a Durham County telephone number. Ms. Brown faxed this to her with note marked "urgent." Through e-mail Ms. Harris received a 19-page document from a lady from Pagosa Springs Colorado, Cathy Justice began "I have the sad distinction of owning the first horses to have ever died from chronic fluoride poisoning from artificially fluoridated municipal water."
Ms. Harris will send this article to the Board.
Dr. Wright: "That's unfortunate. This has never happened to humans."

Q: **Attorney Wardell**: "Do you know of any studies about the effect of fluoride regarding orthopedic issues such as osteoporosis and things of that sort?"
A: **Dr. Wright**: "I mentioned this a little earlier, so at low levels there is no evidence that there are any measurable system effects on the skeleton. Although there are deposits in growing children a large percentage of it is deposited but there is no positive or negative influence noted. When you get to the high levels, toxic levels, there are systemic skeletal changes that range from a slight increase of bone fracture to actual deformities when you get into the 10-20-30 times higher than the water fluoridation we are talking about.

Q: **Heidi Carter**: Who actually makes the decision to keep water fluoridated or not? Does it vary from community to community? It seems like it would be a City Council decision.
A: **Dr. King**: The Board of Health, although in North Carolina we are abolishing these rules.

Ms. Harris: "The request came to us from Mayor Bell after he had several appearances from residents before the City Council about water fluoridation. In August, Mayor Bell punted it over to us and asked that you make a recommendation to the City Council about this issue. As a result he also copied Mr. Sturmer on the message. Mr. Sturmer came to visit Sue McLaurin, former Board Chair and me to talk about the process. He appeared before the Board in September 2012."

Q: **Dr. Allison**: "Ms. Westbrook that would be a decision of the City Council that would make the final decision."
A: **Ms. Westbrook**: "That is my understanding and it took an act of City Council to add it to the municipal water supply and they have not given us any charge to un-act that so we consider that we have been charged to continue adding it."

Dr. Allison: "So let me understand it is our charge to give a recommendation back to the Mayor?"
A: **Ms. Harris**: "Yes, and I sent the Mayor a copy of our plans for this meeting".

Q: **Dr. Miller**: "There was a statement from the Center of Disease in packet as well. Will that be included in the minutes?"
A: **Ms. Harris**: "Yes it is behind tab#6 in your packet."
We also reached out to the EPA to get a statement regarding the EPA report. The report came from the EPA Union rather than the EPA. The EPA would not make a comment or recommendation because it is regulatory agency.

Q: **Dr. Allison**: "If you were raising children would you be concerned at all about having them drinking optimal fluoridated water?"

A: **Ms. Westbrook**: "I have an adult son who is twenty-nine and I am starting to believe that my decision to live in a home that had a well, not community water may have led to some of his ongoing dental issues today. I was raised in Norfolk Virginia and that was one of the first municipalities to have fluoridated water. I have really good teeth, and would like to attribute it to that and I am fortunate that I have a house on well but I can take my city water home in a jug every day."
A: **Dr. King**: "I have mentioned that I have always made a conscience effort to live in a fluoridated water system and to ensure that my children where raised on a fluoridated water system."
A: **Dr. Wright**: "I have three kids and had a lot of concerns about other things but the fluoridated water was not one of them. Half of your caries risk is generic and the other half is what we manipulate environmentally. None of my kids have caries; they benefited from sealants and fluoridated water."

Dr. Allison stated he was born in Durham and got the benefits of fluoride when he was very young.

The Board took a 10 minute break to transition to the remaining agenda items.

COMMITTEE REPORTS:

- **Finance Committee Report** ***(Activity 33.6)***
  The Finance Committee met with division directors on February 28, 2013 to review the budget. The Finance Committee received details about all the needs of the department by cost centers. Ms. Robinson presented highlights of the requested 2014 Public Health budget to the Board including changes recommended by the Finance Committee. The following budget summary was presented to the Board:
- FY 2013 Approved Budget $20,238,782
- FY 2014 Recommended Budget $21,585,078
- Total Increase $ 1,346,296
-
- New Personnel Request – County Funds $ 461,088
- 8 Full-time positions
- 1 – 30% position
- 1 -45% position
- 1 -20% position
- Funds to replace grant reduction $ 51,831
-
- New Personnel Request –Grant Funds $ 49,701

1 Public Health Education Specialist

- Insurance & Bonds Increase $ 289,974
- County Attorney (Part-time) $ 66,000
- National Accreditation $ 31,000
- Overall Operating Increase $ 334,092
- Training Requests $ 83,947
- Replacement Vehicle for Health Dir. $ 30,494
-
- **REVENUE**
- Revenue – FY 2013 $5,973,200
- Revenue – FY 2014 $5,700,279
- Revenue Reduction $ 272,921
- Fees-very little changed in our fees. We added the nutrition and dental fees.

We started providing the pharmaceuticals through the department's pharmacy for Correct Care Solutions (CCS) (contractor for jail health

services) because we could get a better rate than that CCS was getting through Diamond Pharmacy. As such we also added a part-time pharmacist to help with the new workload. For this current budget year we took the money for the pharmacist position from the CCS contract (2nd tier-$200,000-shared expenses beyond the base 1st tier of the contract). In the contract, there is a base level of funding for staffing and operational expenses; the second level in the contract is $650,000 for pharmaceuticals and off-site medical care. If we exceed that amount, expenses are assigned in the third tier, where our liability is capped at $140,000. We are proposing to take the pharmaceuticals out of the CCS contract reducing the 2nd tier by $200,000, leaving $450,000 for off-site hospital services. As a result of changes in the medication administration process, CCS is taking a longer time to deliver medication, particularly on the weekends. They requested to add a 0.4 Medical Technician and a 0.4 LPN for the weekend shifts ($30,000). We agreed to add $30,000 to their base amount so that they can increase the staffing and we moved $170,000 into the expense line of the pharmacy budget ($150,000 revenue from CCS was deleted from the pharmacy budget.) The CCS contract also calls for a medical consumer price index increase every year. To honor that agreement the adjusted rate of 3.2% was applied to the reconfigured base contract to get an increase of $95,000.

Q: **Dr. Allison:** "If the state decided to change their minds about accepting Medicaid Expansion as part of the Affordable Care Act in a future budget, would that help in terms of revenue?"
A: **Ms. Harris**: "It certainly could. However, we do serve a population that is undocumented. They would not have Medicaid. Others in our patient population could be eligible. We could lose patients to private providers who still accept Medicaid patients. The other piece of the puzzle is that it if Medicaid is expanded, the details of the benefits would have to be defined.

Q: **Commissioner Howerton**: "What is the difference in your budget from last year?"
A: **Ms Robinson**: "It is actually specified on pages 13-14."
Q: **Dr. Allison**: "Commissioner, do you think that the County would be acceptable of this increase coming from the health department?"
A: **Commissioner Howerton**: "Right now we are in the process of reviewing everything in every department. We have asked the Manager to find some fluff somewhere. It is going to be difficult no matter which way you go with the cuts coming from Raleigh, federal cuts. I have no idea at this point what it is looking like."

The Public Health budget meeting is scheduled Wednesday, April 10, 2013.

Commissioner Howerton, as a member of the Finance Committee, made a recommendation to approve the 2013 Budget for Public Health and the motion was unanimously approved.

OLD BUSINESS:
HEALTH DIRECTOR'S JOB DESCRIPTION: ***(Activity 37.4)***
Ms. Harris provided the Board the opportunity to see/discuss Health Director's job description according to Accreditation Activity 37.4.

At the November 10, 2011 Board meeting, in preparation for the Health Director's 2012 annual performance review, Michael Case, Chair of Personnel Committee presented a timeline for the review process and copies of the workplan and job description. The Health Director did not put the job description in the format that included signature lines. During the February 9, 2012 Board meeting, an additional work objective was added to the Director's workplan in response to a request from the County

Manager: Serve as Goal Champion for Goal 2- "Health and Well-being for All" in Durham County's Strategic Plan. The attached job description combines the workplan and the job description and adds the Goal Champion component into a format that has signature lines. Upon approval, the Board Chair and the Health Director will sign the document. These changes will comply with Activity 37.4.

There may be revisions to the workplan and/or the job description when the 2013 performance review process is finalized. (A copy of revised work plan/job description is included in the minutes)

Dr. Allison made a motion to accept the job description with the additional work objective Mr. Dedrick seconded the motion and the motion was unanimously approved.

POLICY REVIEW/DISCUSSION/APPROVAL *(Activity 35.1)* *(Eric Ireland)*
Mr. Ireland discussed the procedure revisions to the Policy/Procedure Introduction, Implementation, and Review Policy. The State Consultant suggested changes to this policy/procedure that will clarify Board/departmental processes. The Board is asked to consider and approve recommended changes to this policy/procedure.

DURHAM COUNTY DO NC 1881 | Public Health

Policy Name:	Durham County Board of Health Policy/Procedure Introduction, Implementation and Review
Policy Number:	BOH-001
Effective Date:	01/13/2011

Policy:
BOH Policy and Procedures shall become effective as of the date on each policy/procedure. If any policy or procedure of this manual is held invalid, the remaining policies and procedures of this manual will not be affected. Any employee violating any of the provisions of this manual may be subject to disciplinary action up to and including dismissal.

Purpose:

The purpose of this policy is to:

- Establish guidelines for implementation and maintenance of Durham County Board of Health (BOH) general policies and procedures.
- Provide a framework for consistency in methods of practice, personnel, fiscal operations, management, public health programs and rule making.
- Establish guidelines in accordance with state statutes and applicable rules and regulations.

Scope:

The scope of this document applies to all members of the BOH and Durham County Department of Public Health (DCoDPH) workforce. The workforce of the DCoDPH shall be all those persons or disciplines that are listed below whose conduct - in the performance of work for the DCoDPH - is under the direct control of the DCoDPH and must abide by its policies and procedures while performing their duties.

Board of Health: Those persons appointed by the Durham County Board of Commissioners, in accordance with NC GS 130A.

Workforce: DCoDPH Employees (full-time, part-time, temporary and contract)
DCoDPH Volunteers
Students/Interns assigned to DCoDPH

Procedure:

New Policy Development

1. Define the issue, problem or task, need for a policy or procedure, or need for policy or procedure revision.
2. New policies or procedures may be recommended by Board members or the Public Health Director through the Public Health Director's office.
3. The medical director and/or program specific medical specialists will be involved when developing policies, standing orders and procedures related to clinical and community health services as appropriate.
4. Appropriate rules, regulations and/or standards of practice will be referred to as needed. Legal review by the county attorney may also be requested by the Public Health Director or Board of Health.
5. The Public Health Director or designee will draft the new policy or procedure and forward to the BOH for review and approval.
6. Policies and procedures may be reviewed and discussed at Board meetings prior to sending to the Public Health Director's office or County Attorney's office if additional clarification is necessary.
7. The draft policy or procedure will be forwarded to Board members via e-mail attachment. A period of ten (10) days is allowed for returning comments to the Board Chair and Public Health Director.
8. Feedback is reviewed by the Board Chair and Public Health Director, where appropriate changes are made for final policy/procedure approval at the next Board meeting.
9. Approved policies/procedures will be available on the "L" drive and DCoDPH intranet.
10. A hard copy will be maintained by the Public Health Director and Board members. The Public Health Director's Administrative Assistant will update the hard copies.
11. The Board member's signature on the attendance roster during the meeting in which the policy was approved will serve as verification that each Board member has read and understands the policy or procedure. All members will receive a signed copy of the policy and procedure after approval. Members not in attendance will sign a document indicating the policy and procedure have been read.
12. Completed attendance rosters and signature sheets will be returned to the Public Health Director's Administrative Assistant.

Policy Reviews and Updates

1. All BOH policies and procedures will be reviewed annually by the Board and signed off by the Board Chair and Public Health Director each fiscal year.
2. Policy and procedure reviews, updates, and changes will be tracked on the individual policy change history.
3. The Public Health Director's Administrative Assistant will track all reviews on the Policy & Procedure Index list. (L drive)
4. Policies and procedures can be reviewed and/or revised more often, as required by changing technology, rule or law changes, change in standard of practice, etc.
5. Significant policy and procedure updates or revisions will be processed for feedback in the same manner as new policies, to allow for Board input.
6. Revisions shall be documented as such and distributed to all individuals who are impacted by the policy/procedure.
7. BOH members shall approve all completed policies annually after the policy review period.
8. End dated policies and procedures shall be kept in an "archive folder" on the local server (L drive).
9. Implemented changes (i.e., new logo, formatting, etc.) that do not impact the content of the policies / procedures will be made when during the annual review of the policy.

C. Assess Internal and External Resources for New and Updated Policies (Accreditation Activity 15.4 Assess Internal and External Resources for policy development

1. A comprehensive and appropriate system of internal and external assessment of resources shall be used in the development of and/or updating of all policies for the BOH. The BOH will ensure that:

    - resources are adequate and efficiently and effectively utilized
    - risks are identified and realistically managed
    - operational impacts are considered and planned for
    - compliance with applicable legislation, regulations, policies and prevailing evidence based practice is in place
    - consideration of strategic plan goals and objectives is given
    - reporting information is accurate and reliable to facilitate sound decision making

2. Assessment Tools to be utilized shall include and not be limited to the following:

    - Cost Benefit Analysis Report
    - Impact Report
    - Budgetary projections for the new or updated policy
    - Presentation to and discussion with the BOH

References:

Durham County Human Resources Policy Manual

NC General Statute 130A

CHANGE HISTORY:

Version	Date	Comments
A	01/13/2011	Original document.

B	12/13/2012	Logo changed, DCHD changed to DCoDPH, Health Department changed to Durham County Department of Public Health (DCoDPH), Health Director changed to Public Health Director, annual review date added. Changed DCBOH to BOH.
C	3/11/2013	Added section on Internal Controls to the document.
D	3/14/2013	Added BOH review and approval of DCoDPH Policies and Procedures.
Annual Review		12/13/2013;

Approved By: _____ Chair, Board of Health _____ Public Health Director	Program Area(s) Affected: Durham County Board of Health Durham County Department of Public Health

The board requested to be only apprised of all departmental policies.

Q: **Dr. Short**: "The language under item C says 'The BOH will ensure that

- resources are adequate and efficiently and effectively utilized
- risks are identified and realistically managed
- operational impacts are considered and planned for
- compliance with applicable legislation, regulations, policies and prevailing evidence based practice is in place
- consideration of strategic plan goals and objectives is given
- reporting information is accurate and reliable to facilitate sound decision making'

"In light of our last discussion, if there is a young lady that is turned away from the STD clinic or we shut down the dental clinic will I be held responsible?"
A: **Attorney Wardell**: "No, you ensure to the extent that you can. You have to propose an adequate budget it doesn't mean that it has to be approved. You recommend an adequate budget and the County Commissioners approve the budget. So that is all that you can. As long as you give it your best effort you are fine."

Dr. Short made a motion to approve the revisions to the Procedure Introduction, Implementation and Review policy. Commissioner Howerton seconded the motion and the motion was unanimously approved.

ENVIRONMENTAL HEALTH-ON-SITE WATER PROTECTION NOTICE OF VIOLATION: *(*

The board received a copy of the February 2013 Environmental Health On-site Water Protection-Notice of Violation to review. Mr. Brown spoke on the violation at the Speed Way Café is under the inspection of the food and lodging staff. Basically, it is an old café and has an old septic system that hasn't been functioning well for quite a number of years and they have been limping by. It has gotten to the point where the system no longer functions. Environmental Health staff has been in discussions with the owner of the building. The café owners don't actually own the building. They are renting space but the building owner is interested in fixing it. However, he is being confronted with expensive bills and space issues with respect to repairing the system. His options are going to the

state for a discharge permit and that is going to be difficult because they are so expense or a permanent pump and haul. They have appealed the notice of intent to suspend the permit to the Office of Administration Hearings. This may be a situation where the café may have to close because they don't have adequate waste disposal services.

Q: Attorney Wardell: "When did they appeal?"
A: Mr. Brown: "I think they filed the appeal it was back in December. I have all those dates in the file and will send the information to you." The AG office is handling the appeal.
Q: **Dr. Allison**: "Is there any visible problems, like standing waste water odor, or anything like that out there at this point?"
A: **Mr. Brown**: "Yes, there was a situation like that out there that was part of it. We have been trying to get them to do some informal pumping and hauling. Technically, that is not allowed by our state rules. We are supposed to have an adequate means of waste disposal. So they are going to have to have a permitted pump and haul system which requires some large holding tanks. We have been working with them on their water flows to try to reduce that size to the smallest area as possible but a lot of the problem they are facing here is that they have almost no lot, no space to put it so they are going to have to get an easement to put in some of these components."
Q: **Dr. Allison**: "Are there any grant funds for people when they try to fix things like this?"
A: **Mr. Brown**: "Occasionally there have been some funds that are targeted to private home owners. I am not aware of any for commercial establishments or businesses"
(A copy of the report is attached to the minutes)

SMOKE-FREE INITIATIVE UPDATE ***(Activity 34.5)*** (*Gayle Harris/Attorney Bryan Wardell*)
During the February Board meeting the Board approved a letter to the City Manager requiring City compliance with the Board of Health Smoking Rule by April 15th. Following the meeting, the Health Director received a copy of an Advisory Letter: Territorial Jurisdiction of Local Board of Health Smoking Rules from Robert Hargett, Senior Deputy Attorney General and Mabel Bullock, Special Deputy Attorney General sent to the Orange County Health Director. The final paragraph in that letter states: "In our opinion, it is within the power of a county Board of Health to adopt a rule to prohibit smoking in county and town buildings, vehicles and grounds and in public places in that county and the towns within that count." The letter was attached to the Board approved letter and sent to the City Manager. In a letter dated, February 28th, the City Manager affirmed that the City of Durham properties will be in compliance with the Board of Health Smoking Rule no later than April 15, 2013.

In order to move forward with on-the-ground education, the Board is asked to approve a budget amendment to establish a fulltime Health Educator I position for three years at an annual cost of $54,148.

Public Health Educator I	
Salary	$34,714
Benefits	6,846
Flex	7,882
10% above base	3,471
Training	735
Local Travel	l,300
Docking station	200
Total	**$54,148**

The total support for this time limited project will come from the Home Health Sale proceeds.

 A Regular Meeting of the Durham County Board of Health, held March 14, 2013.

Dr. Allison made a motion to approve the budget amendment to establish a full-time Health Educator I position for three years at an annual cost of $54,148. Mr. Dedrick seconded the motion and the motion was unanimously approved.

ACCREDITATION SITE VISIT *(Activity 36.3)* *(Gayle Harris)*
Chairman Jim Miller, Vice-Chair Teme Levbarg and Dr. Nancy Short will be the Board of Health representatives for the interviews on April 24, 2013.

The Board received a copy of an updated Board of Health Procedure Handbook. Ms. Harris stated that the organizational chart will be added once it is updated.

BOARD OF HEALTH MEMBER PARTICIPATION ON COMMUNITY BOARDS/COALITIONS/ADVISORY COMMITTEES: *(Activity 41.3)*
The board received a copy of the Board of Health Member participation on Community Boards/Coalitions/Advisory Committees to complete.

Ms. Bergen Watterson, new BOH member , Commissioner Howerton and Dr. Nancy Short received a copy of the August 2012 BOH training materials and the link to complete the New Board Of Health Members training on-line. Ms. Harris requested a copy of Ms. Watterson's certificate of completion be sent to the Health Director's office to meet the New Board of Health Member training accreditation benchmark.

The Board received a copy of the internal auditor's report on our Preparedness Program. He found that we were in compliance and the state said we had a model program.

The Board received a copy of the Six Functions of Public Health Governance for review. Ms. Harris stated if the Board wants to get more training we can arrange for someone to come in.

Ms. Harris stated that the Quasi-Judicial (Appeals Process) training will be held at the next Board of Health Meeting in April. County Attorney Lowell Siler will conduct the training.

Ms. Harris stated that Commissioner Howerton and Mr. Henry McKoy would like to come before the Board with a proposal for approaching the Gate Foundation. They would like the Board's support and involvement in addressing social determinants of health in the proposed demonstration project.

- **Health Director's Report**: **March 2013** ***(Activity 39.2)*** *(Gayle Harris)*

Division / Program: Administration / Information and Communications—Professional Development

Program description

- The Information and Communications program provides timely and relevant information to the residents of Durham County on key health issues.

Statement of goals

- Complete advanced professional development training to increase skills and competencies in crisis communications.

Issues

- **Opportunities**
  - The Information and Communications Manager attended the Advanced PIO Training for Health and Hospital Emergencies in Anniston, AL, from February 3-7, 2013. FEMA incurred all expenses for this training opportunity.
  - The national training provided the Information and Communications Manager the opportunity to network with other communications professionals and participate in simulated emergency situations.
- **Challenges**
  - Completing assigned exercises often included work during the early morning and late night hours.
  - Staying abreast of activities and fulfilling urgent needs for DCoDPH often resulted in work taking place before and after training exercise activities, usually in the wee hours of the morning.

Implication(s)

- **Outcomes**
  - As a result of this training, the Information and Communications manager now possesses an advanced level of crisis and risk communication response. This level of training will not only benefit DCoDPH, but also strengthen Durham County's crisis communication response.
  - DCoDPH now has a member of the workforce with advanced level training to deliver timely and relevant information crisis and risk communication messaging in the event of a public health, natural, or man-made emergency.
  - Failure to further strengthen our staff of communicators and key members of the workforce will place the agency at a severe disadvantage in the event of a public health, natural, or man-made emergency.

Next Steps / Mitigation Strategies

- As a result of this training, opportunities for improvement in crisis and risk communication have been identified within DCoDPH and Durham County Government. The Information and Communications Manager, along with DCoDPH leadership, will work to address internal gaps.
- Opportunities to improve county-level information flow will be addressed, beginning with the agency Preparedness Coordinator.

Division / Program: Administration/Information Technology/Laserfiche Restructuring Project

Program description:

- Durham County's Department of Public Health (DCoDPH) uses information technology to decrease the time it takes to design, deliver, and market the benefits and services it offers, increase access to information, document care, bill for services delivered, and integrate value-added functions.

Statement of goals:

- Increase patient information security
- Improve staff knowledge of Laserfiche for easier retrieval of patient records.

Issues

- **Opportunities**
  - Develop a training plan
  - Develop policies and procedures

- **Challenges**
  - Repository must remain available during the restructuring phase
  - Staff must be able to find every document they need
  - Policies and procedures need to be written.

Implication(s)

- **Outcomes**
  - 118 staff members attended the training to learn about using the search ability tool of Laserfiche for the purposes of the Laserfiche Project.
  - Evaluated the operability of purchased technologies for the effectiveness of our technology capabilities.
  - Implement the appropriate processes, policies, and standards to ensure the department manages its resources effectively.
- **Service delivery**
  - Improved quality of service to patients
  - Faster retrieval of patient records
  - Improved search ability of patient records needed by nursing staff
- **Staffing**
  - Contract in place to support laser fiche implementation of the new process for repository setup.
- **Revenue**
  - Little to no negative impact on revenue.

Next Steps / Mitigation Strategies

- Work with County IT department to insure the appropriate implementation of the new process is on track
- Implement in house training for the new system setup
- Develop, review, approve and implement policies and procedures with regard to capabilities of Laserfiche.

Division / Program: Dental Division / Access to Dental Care for Adult Patients

Program description

- The Dental Division began collaborating with Project Access Durham to offer dental screenings to uninsured adults in need of care. A volunteer dentist completes screenings of referred adults in the Dental Clinic. Currently, the program is being "piloted" two afternoons per month (February – April), with six patients scheduled for each session. Based upon the screening results, Project Access then makes a referral to a local dentist that has agreed to treat patients at no cost.

Statement of goals

- To increase access to dental care to adult populations in Durham County.
- To work collaboratively with community partners to highlight the need for oral health services for uninsured patients.

Issues

- **Opportunities**
  - Offering dental screening to adults who may not otherwise receive treatment due to being uninsured.
- **Challenges**
  - Having to limit the amount of patients screened to 12 per month, at least for the outset of the program.

Implication(s)

- **Outcomes**
  - The Dental Division screened 12 patients in February.
- **Service delivery**
  - All patients received an evaluation, which includes a panoramic x-ray and individual treatment plan.
- **Staffing**
  - The Dental Division provides two dental assistants for the project, to take x-rays, chart notes, and print out the treatment plan.
- **Revenue**
  - The Department provides the screenings free of charge.
- **Other**
  - The adult patients have all been very appreciative of the services to date.

Next Steps / Mitigation Strategies

- At the end of April 2013, the Department, Project Access, and the volunteer dentist will evaluate the pilot process and outcomes to determine next steps.

Division / Program: Nutrition and Health Education Divisions – Veggie Van

Program description

- The Veggie Van is a program of the Community Nutrition Partnership, a local non profit that includes Durham County in its service area. The Veggie Van delivers weekly boxes of fresh, local produce for a set cost per box, similar to a CSA (community support agriculture) program. Their staff provides recipes, cooking demos, taste tests and nutrition information. Plans are underway to have the DCoDPH be a drop off site for the Veggie Van starting in April 2013. Produce "subscriptions" will be sold to Durham County Government (DCo) staff, customers and residents in the surrounding community.

Statement of goals

- To increase access to and consumption of fruits and vegetables.
- To increase nutrition and culinary knowledge and self-efficacy.

Issues

- **Opportunities**
  - This program could greatly improve the health of its participants. Preliminary evaluation data of the Veggie Van's program shows an increase in produce consumption by participants of two servings per day.
  - In a recent survey, over 275 DCo employees stated they are very interested or somewhat interested in participating in the program.
- **Challenges**
  - Recruiting lower income participants into the program has been difficult.
  - Working with the Durham Housing Authority to recruit at their housing units in the vicinity of DCoDPH may help reach lower income participants.

Implication(s)

- **Staffing**
  - A DCoDPH nutritionist and health educator are organizing/planning the program in collaboration with the

Durham Public School's (DPS) Hub Farm and Veggie Van staff.
    - DCoDPH staff will help recruit participants.
    - Veggie Van staff/volunteers will pack/deliver the boxes of produce and provide the cooking demonstrations
- **Revenue**
    - The Veggie Van program will generate no revenue nor cost any money for DCo.
    - The Veggie Van is a non-profit program. Boxes are sold at two price points, with lower income individuals eligible to purchase produce at a subsidized price. People who purchase the higher priced box help subsidize the lower priced box. Boxes can be paid for with cash, check, credit card, or EBT (electronic benefits transfer, i.e. food stamps card).
    - Participants will commit to buying a box of produce every week for an extended period of time but will pay for the box at pick-up.

Next Steps / Mitigation Strategies

- Offer a webinar to DCo employees and the community on the benefits of eating local.
- Continue to recruit lower income participants.
- Use some of the awarded Community Transformation Grant Program funds to help translate the Veggie Van written materials into Spanish. This would allow us to extend the program's reach to our Spanish-speaking customers, El Centro Hispano, and other agencies that serve the Latino population. This will also help with outreach to the Van's other drop off locations, such as the Durham YMCA and Durham Tech's campus.
- Partner with the DPS's Hub Farm in the fall of 2013. The vision is that students will sell produce grown on the farm along side of the Van. People will be able to purchase produce individually instead of just as a subscription. This will offer the DPS Hub Farm a venue to sell their products and will teach students entrepreneurial skills.

Division / Program: Nutrition and Family Planning Clinics—Collaboration to Remove Barriers to Services

Program description

- DCoDPH provides medical nutrition therapy to clients of the Family Planning Clinic.

Statement of goals

- To make medical nutrition therapy (MNT) readily available to clients receiving services in the Family Planning Clinic.

Issues

- **Opportunities**
    - Nutrition practices can play a significant role in an individual's overall health. Optimal health, including healthy weight maintenance and blood pressure and blood sugar control, is of particular importance for women of childbearing age and is a factor in the reduction of infant mortality.
    - Women referred for nutrition services are more likely to receive care if the nutritionist is available while she is at DCoDPH for Family Planning services.
    - Medical Nutrition Therapy (MNT) is provided for family planning clients with a range of diagnoses including diabetes, overweight or obesity, inappropriate weight gain or weight loss, and hypertension.

Implication(s)

- **Outcomes**
  - This collaboration assists the Department in meeting its mission to "promote health." Having a nutritionist available for family planning clients aids the Department's efforts to increase both patient compliance and satisfaction in optimal health maintenance.
- **Service delivery**
  - Staff at both DCoDPH's Nutrition Clinic and Family Planning Clinic are working together to ensure the best provision of service to the clients.
  - Family planning clinic staff measure heights, weight, blood pressures, and pertinent lab values for each client. The practitioners are now able to refer clients whose physical assessment indicates the need for nutrition intervention directly to the Nutrition Clinic.
  - After the client is seen for MNT, the registered dietitian sends a copy of the nutrition assessment to the Family Planning Clinic practitioner for review and inclusion in the medical record.
- **Staffing**
  - At least one, and often two, Registered Dietitian staffs the DCoDPH Nutrition Clinic Monday through Friday from 8:30am- 5:00pm and on Tuesday until 7:00pm. A processing assistant is also in the clinic during these hours. Family Planning clients referred for nutrition assessment can be seen by a nutritionist immediately following the Family Planning appointment or can schedule an appointment for a later date.
  - The DCoDPH Clinical Nutrition staff includes Registered Dietitians and Licensed Dietitians/Nutritionists who are credentialed providers for billable MNT services.
- **Revenue**
  - Fees for MNT are based on a sliding scale fee and Medicaid and other 3rd party reimbursement sources are billed if applicable.

Next Steps / Mitigation Strategies

- The DCoDPH's Nutrition and Family Planning Clinics will continue to collaborate in providing nutrition services to our clients.

Division / Program: Nutrition Division / DINE—E K Powe Fourth Grade Cooking Classes

Program description

- Eight weekly cooking classes, each highlighting a different nutrition topic and cooking skill are being taught between late January and mid-March 2013 at E K Powe Elementary School.

Statement of goals

- Students will learn basic cooking skills well enough so they will be able to successfully prepare simple meals or snacks with minimal or no help.
- Students will consider nutrition and energy balance when choosing foods.
- Students on the Backpack food program will be able to make healthy meals or snacks from foods that are likely to be in their weekend backpacks of food.
- Students will apply what they are learning about fractions to the recipes they make.

Issues

- **Opportunities**
  - Building bridges to the E K Powe parent community through volunteer participation and recipes and handouts sent home.
  - Teaching students life skills that promote their ability to eat in a healthier way.
  - Working with teachers to tailor classes to meet their programmatic needs (teaching fractions, for example) while teaching nutrition and culinary skills.
- **Challenges**
  - Transporting cooking equipment and ingredients.
  - Insuring that enough volunteers show up.
  - Finding the time in the school schedule to continue this program.

Implication(s)

- **Outcomes**
  - In place of regular 8-lesson interactive nutrition curriculum, E K Powe fourth grade teachers requested classes involving cooking. The program developed was the result of joint planning between the DINE Nutritionist and the teachers.
  - Students participating in the cooking classes are planning to use the recipes they have prepared and their new culinary skills to plan and cook a meal for their parents at a class event.
  - Students on the Weekend Backpack of Food program may be better able to use the foods in their backpacks to prepare reasonably healthy meals and snacks.
  - EK Powe teachers are more satisfied as they see their curricular needs combined with life-skill training for their students.
- **Service delivery**
  - The DINE Nutritionist offers a nutrition lesson either before or after the cooking activity. In addition, she reviews the recipe, emphasizing new vocabulary words and cooking skills along with math skills and science concepts. The students work in groups of four to six, each group with an adult helper, to prepare the week's recipe, then taste the result.
  - This service can continue as long as EK Powe is willing to provide the one-hour time frame for classes and adequate volunteers to assure class safety.
  - While challenging, it is possible to purchase most of what is needed for cooking class recipes within current budget guidelines.
- **Staffing**
  - This requires a greater allocation of staff time than conventional DINE nutrition classes, but some of that added staff time is unique to the first year of the program and its requirement for new curriculum and recipes development.
  - A single staff member along with an intern (or coworker) and volunteers recruited by the school, can carry out these classes successfully.

Next Steps / Mitigation Strategies

- While cooking classes have been costly as far as staff time this year, this cost will decrease when a curriculum and tested recipes are in place.
- As word about cooking classes spreads among E K Powe parents, it should become easier to secure volunteers to help with the classes.

Division / Program: Health Education/Syphilis Elimination Efforts

Program description

- Health Education's Syphilis Elimination Efforts (SEE), NCCU Student Health & Counseling Services and Project SAFE (Save A Fellow Eagle) conducted a free HIV, Syphilis, Gonorrhea and Chlamydia testing event and held a sexual health resource fair during National Condom Week. Both events took place Tuesday, February 12th from 10am – 4pm.
- Testing efforts were done in collaboration with Health Education's NTS (New Tactics & Strategies) & the Enhanced Jail team.

Statement of goals

- Educate students, faculty, staff and visitors on HIV/AIDS and other STIs.
- Offer free, convenient, confidential testing and community resources for education and awareness.

Issues

- **Opportunities**
  - Reaching freshman and the MSM (men who have sex with men) community
  - Reaching those who have never been tested and empowering them to get tested annually if risky behaviors are not an issue
  - Making testing a social norm
  - Partnering with NCCU
  - The event occurred during Valentine's Day Week, which provided an opportunity for students receive timely information, get tested and receive condoms.
- **Challenges**
  - Limited number of phlebotomists
  - Short turnaround time for completing paperwork and processing bloods

Implication(s)

- **Outcomes**
  - Tested 99 individuals, which is double the number generally tested
  - Reached over 30 individuals who had never been tested
  - Educated over 100 individuals on HIV/AIDS and other STIs and prevention methods
- **Service delivery**
  - Offered free HIV/Syphilis/Gonorrhea and Chlamydia testing
  - Provided HIV/AIDS and other STI education, resources and prevention methods as incentives.
- **Staffing**
  - 3 Health Educators

Next Steps / Mitigation Strategies

- Engaging more members of the MSM community

Division / Program: Community Health Division / Care Coordination for Children (CC4C)

Program description

- Care Coordination for Children (CC4C) provides nursing and social work services within a population care management framework to children from birth to age 5 who are high cost/high

users of services, have special health care needs, are in foster care and/or are exposed to toxic stress in early childhood.

Statement of goals

- Maximizing health outcomes among children birth to age 5 years of age
- Providing cost savings in a managed care model.

Issues

- **Opportunities**
  - Durham County's Care Coordination for Children (CC4C) program, excelled in North Carolina's CC4C Performance Measure #1, which measures the length of time of discharge from the Neonatal Intensive Care Unit (NICU) until the first visit to a primary care provider (PCP) or other appropriate specialty provider.
  - For the NC CC4C Performance Measure #1, Durham County's CC4C program excelled in 30 day PCP visits over four (4) of the other five (5) counties in the Northern Piedmont Community Care Region. Durham County's CC4C also excelled over all other counties in the network in primary care provider (PCP) visits at intervals of twenty-one (21), fourteen (14) and seven (7) days post NICU discharge.
- **Challenges**
  - Continuing the ongoing implementation of state mandated policies and procedures for working with CC4C eligible children/families
  - Continuing the establishment of active collaborations with community partners to educate/update regarding the inclusion of the Care Managers' roles/responsibilities.

Implication(s)

- **Outcomes**
  - Increased number of children and families affiliated with a medical home,
  - Decreased pre-school/school absences, use of emergency departments and number of hospitalizations,
  - Decreased duplication of services,
  - Improved communication and coordination between families and medical homes
  - Increased and strengthened child/family advocacy.
- **Service delivery**
  - Services are based on patient need and according to risk stratification guidelines,
  - Contacts are determined by individual needs and plan of care,
  - Contacts may occur in multiple settings,
  - Documentation is completed online in the Northern Piedmont Community Care Region Case Management Information System (CMIS);
  - Services continue until identified need(s) is/are met or until progress in meeting the need is no longer being made.
- **Staffing**
  - Registered Nurses and Social Workers who possess an appropriate mix of skills needed to work effectively with a population of children aged 0-5 years at high risk for poor health outcomes.

Next Steps / Mitigation Strategies

- The program will remain an active participant in the provision of CC4C services.

Division / Program: Community Health Division / Pregnancy Medical Home (PMH)

Program description

- Medical practices that provide prenatal care are encouraged by DMA to sign a contract with Community Care of North Carolina (CCNC) to provide comprehensive, coordinated maternity care to pregnant women with Medicaid for which the practices will receive certain incentives.
- DCoDPH is a Pregnancy Medical Home (PMH).
- PMH's (except local health departments) have been able to bill $50 to Medicaid for completing a "Risk Screening" assessment on each woman receiving Medicaid benefits since the PMH program began in April, 2011.
- The screening forms are used by Pregnancy Care Managers (PCM) to determine if the patients are eligible for care management. Local health departments have been required to complete them on each new patient with Medicaid although these agencies have not received reimbursement for doing it.

Statement of goals

- The goal of the Pregnancy Medical Home concept is to improve the quality of maternity care, improve outcomes for mothers and babies, and reduce medical care costs.

Issues

- **Opportunities**
  - Local health departments will soon be able to bill for the risk screenings and will likely be reimbursed for screenings performed from the beginning of the PMH program in April, 2011.
  - DCoDPH has completed almost 2,000 risk screenings from April, 2011, until the present.
- **Challenges**
  - Understanding the instructions for billing and identifying personnel to enter the data into Insight and HIS will be challenging.

Implication(s)

- **Outcomes**
  - The CPT code for the risk screening has been added to the Maternal Health Clinic encounter form.
  - In the future, that billing code can be entered and billed when the patient comes for the new OB orientation visit.
- **Revenue**
  - The new revenue source will bring in much needed additional Medicaid revenue to support the program.

Next Steps / Mitigation Strategies

- Administration will clear up any questions about billing for risk screenings performed more than a year ago and begin to input the data.

Division / Program: Community Health Division / Maternity Clinic--CenteringPregnancy®

Program description

- Maternity Clinic provides comprehensive prenatal services

- CenteringPregnancy® is method of providing prenatal care in a group setting.
- DCoDPH is one of six sites in North Carolina approved to conduct CenteringPregnancy® by the national Centering Healthcare Institute, Inc. https://www.centeringhealthcare.org/
- At DCoDPH, the groups are led by Certified Nurse Midwives employed by Duke University Health Systems.

Statement of goals

- Reduce infant mortality and morbidity.
- Deliver CenteringPregnancy® to improve birth outcomes.

Issues

- **Opportunities**
  - The group setting promotes a supportive network among group members.
  - Health assessment and education are conducted in the group setting while the practitioner provides individual assessments within the meeting space, but to the side while education and other activities are occurring.
  - A March of Dimes grant provided funds to purchase "Mother's Notebooks" for every participant in CenteringPregnancy® for the rest of the calendar year.
- **Challenges**
  - The traditional prenatal clinic continues to operate at the same time the CenteringPregnancy® groups meet. It can be difficult to stretch staff to cover both clinic and group meetings.
  - Absent grant funding, the participant notebooks and refreshments during group meetings are added clinic expenses.

Implication(s)

- **Outcomes**
  - Women who elect to participate in Centering groups are very satisfied with the program leading the clinic to initiate additional groups.
- **Service delivery**
  - There are currently six groups meeting. Each group has 8 to 12 participants and meets 10 times.
  - Six more groups should begin before the end of June, 2013.
- **Staffing**
  - A public health nurse III coordinates the CenteringPregnancy® program along with a certified nurse midwife from Duke.
  - Most of the Maternity Clinic staff have been trained as co-facilitators in the program.
  - Trained nurses and social workers who are part of the Pregnancy Care Management program are no longer able to participate as co-facilitators because of other job responsibilities.
- **Revenue**
  - CenteringPregnancy® visits are billed to Medicaid or on a sliding scale to the patient just as the traditional clinic visits are billed.

Next Steps / Mitigation Strategies

- Continue offering CenteringPregnancy® groups as an alternative to traditional prenatal care.

Division / Program: Community Health Division / Tuberculosis Control Program

Program description

- The Tuberculosis (TB) Control program investigates and reports all tuberculosis cases in Durham County to state public health, provides treatment for clients with tuberculosis (TB), and conducts outreach efforts to rapidly identify individuals who are high priority contacts to a confirmed case of tuberculosis.

Statement of goals

- To promote the health of the community through the identification and elimination of tuberculosis by decreasing the spread of tuberculosis among high risk individuals in Durham County, by assuring that those who test positive for tuberculosis receive appropriate treatment and services, and by providing education and outreach to the community at large.

Issues

- **Opportunities**
  - A national shortage of Tubersol®, a diagnostic agent used in tuberculin skin tests currently exits and is expected to last several months.
- **Challenges**
  - Use of Tubersol® will need prioritization and should be limited to those at greatest risk of infection.

Implication(s)

- **Outcomes**
  - Following the recommendations of the NC Tuberculosis Program, staff, in collaboration with TB Program consultant, has prioritized use of Tubersol® to determine who will receive skin testing and will provide targeted testing to those at greatest risk of infection.
- **Service delivery**
  - The Durham County Department of Public Health will provide TB skin tests in the following priority order:
    1. To contacts to a person with pulmonary or laryngeal TB
    2. To persons with symptoms suggestive of TB disease as part of the evaluation
    3. To persons who have arrived in this country within the past year from high TB incidence countries
    4. To persons infected with HIV
    5. To inmates in the custody of, and staff with direct inmate contact, in the Department of Corrections upon incarceration or employment
    6. To patients and staff in long-term care facilities upon admission and employment
    7. To staff in adult day care centers who provide care to persons with HIV infection
  - T-spot testing (rather than skin testing with Tubersol®) will be used with newly arriving refugees who receive a health risk assessment. This will further decrease the use of Tubersol®

Next Steps / Mitigation Strategies

- Modifications will be made in the way (Tubersol®) TB skin testing is provided by the Durham County Department of Public Health to persons who stay at homeless shelters. A new screening plan is currently being developed with a planned implementation date of April 1, 2013.

NEW BUSINESS:

- **Agenda Items March 2013 meeting**
  - Quasi Judicial Hearing Training
  - Proposal-Commissioner Howerton and Mr. Henry McKoy

INFORMAL DISCUSSION/ANNOUNCEMENTS:

There was no informal discussion.

Mr. Dedrick made a motion to adjourn the meeting at 8:30pm. Dr. Allison seconded the motion and the motion was unanimously approved.

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Jim Miller, DVM-Chairman

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Gayle B. Harris, MPH, Public Health Director