# Decreasing the Incidence Of Cervical Cancer In Kentucky Women

### **Kentucky Public Health Leadership Institute Scholars:**

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#### **EXECUTIVE SUMMARY:**

The Pap Peers 2006 -2007 KPHLI group began their journey by expressing interest in the recent media attention concerning cervical cancer and its vaccine. Then we began to ask the question "Why do women not get Pap tests?" since early detection is known to prevent and treat cancers.

The Pap Peers decided to focus on the barriers that under and non - insured women age 40-64 face for not receiving annual Pap tests. As a team, we also wanted to educate women on the importance of having annual Pap tests. This project affects public health by providing an educational tool to increase early intervention of cervical cancer through Pap tests. It is our expectation that this project will be the beginning stage that leads to increasing the number of non-insured and/or under insured women that receive Pap tests by 2%, therefore, decreasing the number of cervical cancer cases in Kentucky.

#### INTRODUCTION/BACKGROUND:

In recent months, cervical cancer has been receiving a great deal of media attention. Many dynamics in our society have begun to embrace this health disparity in hopes that one day it will not be a threat to our mothers, our daughters, our sisters, and our friends. "Cervical cancer was once one of the most common causes of cancer death for American women." Similar to many forms of cancer, making the decision to have a simple screening test can be the first step in protection and detection. However, Kentucky has a population of women who have been unwilling to take the first step; of women who have never or rarely been screened, one in five have not been tested in the last six months.

The American Cancer Society states that approximately 3,700 females will die each year due to cervical cancer. "According to DPH, approximately 60 percent of all women who die of cervical cancer have either never been screened or have not been screened in the past five years."

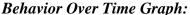
In 1943, a doctor by the name of George Papanicolaou developed the Pap test. The Pap test includes a doctor or nurse scraping a small sample of cells from a woman's cervix. Through observation under a microscope, a technologist can look at the sample for any signs of abnormalities. The discovery of the Pap test has been a major factor in decreasing the incidence of cervical cancer.

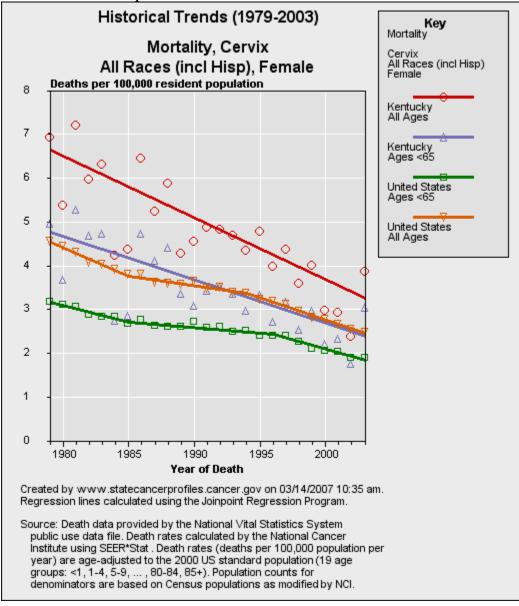
As with any public health concern, a multitude of barriers can be targeted in hopes of eliminating the issue. Lack of childcare, inflexible work schedules, embarrassment, under to non-insured, and family history of the disease can contribute to why women do not make Pap tests a priority. The Kentucky Women's Cancer Screening Program, an integral part of the Kentucky Department for Public Health, offers low-cost Pap tests through local health departments across the state of Kentucky in every county.

Improving awareness and knowledge regarding cervical cancer and the Pap test as well as intensifying outreach to women who have rarely or never been screened should become a priority across the state to ensure cervical cancer rates will continue to decrease.

#### **Problem Statement:**

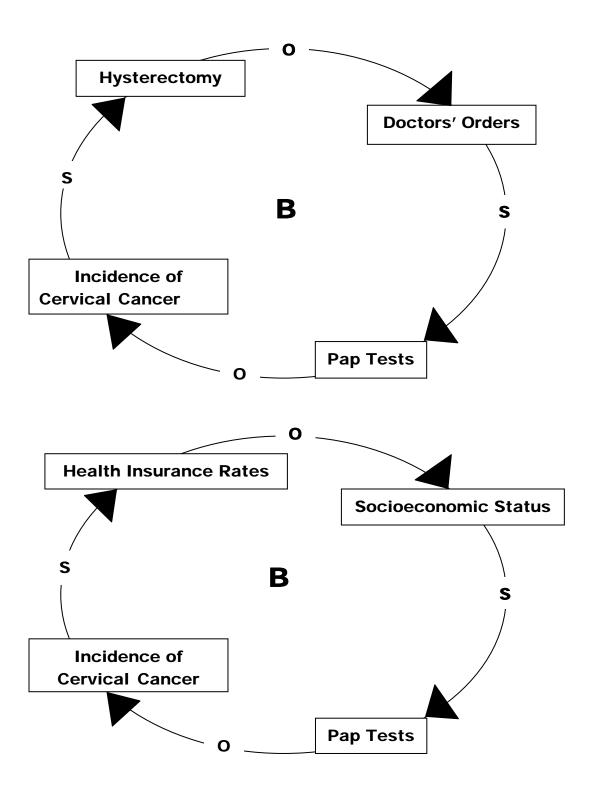
In the state of Kentucky, 40-64 year old women who are non-insured and/or under insured are rarely (>5years) or never screened for cervical cancer.

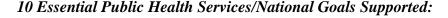




This graph shows the number of Kentucky that have died from cervical cancer compared to the number of United States women who have died from the same type cancer. <sup>4</sup>

# Causal Loop Diagram:







Our Change Master Project wanted to correlate with the ten Essential Public Health Services. In addition, we also wanted to integrate the Healthy People 2010 goals.

#### ESSENTIAL PUBLIC HEALTH SERVICES (EPHS):

- EPHS #1: Monitor health status to identify and solve community health problems
- EPHS #3: Inform, educate and empower people about health issues

#### **HEALTHY PEOPLE 2010:**

- 3.4 (Reduce the Death Rate from Cancer of the Cervix) because screening can reduce the number of deaths from cervical cancer.
- 3.11 (Increase the proportion of Women who receive a Pap Test) which will strive to increase the percentage of women that get a yearly Pap test from 18% to 20% by educating the public about programs that are available for women.

#### PROJECT OBJECTIVES/DESCRIPTION/DELIVERABLES:

The original vision of our project was to increase the state average of women that receive annual Pap test by 2% to decrease cervical cancer.<sup>2</sup> We guickly discovered that this task would take more time than was available to complete this project. While the overall goal of this project is to eventually increase the number of Pap tests received by Kentucky women, we refocused our goal to find out why women in Kentucky between the ages of 40-64 do not receive Pap tests. A Public Service Announcement was made to educate women on why Pap tests are needed and will be distributed.

Our projects objectives are as follows:

- 1. Develop a survey to distribute to Kentucky women that will focus on the age group of 40-64 year olds.
- 2. Discover the barriers women face in receiving a Pap test.
- 3. Educate women on ways to overcome barriers and why Pap tests are needed.
- 4. Educate women on public programs that are available for women that are non-insured and/or under insured.

#### **METHODOLOGY:**

This team met for the first time under a different name in April 2006. Originally our team wanted to do something with mental health. However, that quickly changed after reviewing Healthy People 2010 goals. As a group we were more interested in Pap tests and why women in Kentucky were not receiving this screening. Therefore, we decided to be known as *Pap Peers* and formed our Team Charter, Problem and Vision Statements.

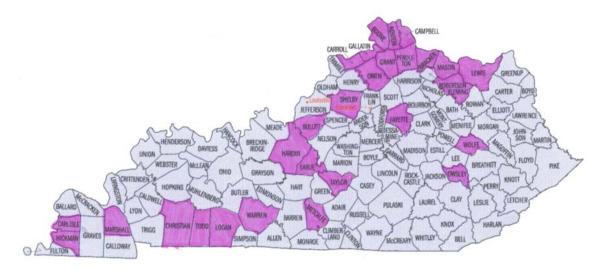
As a team, we discussed the recent media attention that cervical cancer and its vaccine has received. We wondered why women do not take measures to prevent cervical cancer. This discussion led our team to find out the answer to this question, "Why do women not get Pap tests?" Therefore we began researching to find the answer to this question and also to work toward the team's problem statement. During our research, we realized that Kentucky was below the national average of women who receive Pap tests on a regular basis. Based on this information, our group decided to form a survey (Appendix A) to find the barriers women have for not getting a Pap test on a regular basis and then educate women about programs that are available and how they can reduce their risk of cervical cancer by getting a Pap test.

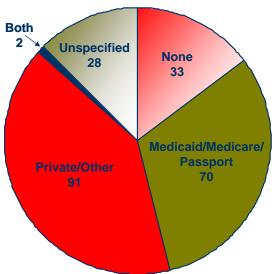
A survey was drafted and received the Cabinet For Health and Family Services Internal Review Board (IRB) approval. It was also endorsed by Kentucky Women's Cancer Screening Program (see Appendix A). After the survey was granted IRB approval in November, the surveys were distributed statewide.

The survey results were be recorded in an Excel spreadsheet and utilized in SPSS software. We continued to research information related to Pap tests and cervical cancer. With the help from a high school media class, a Public Service Announcement (PSA) was developed and filmed to educate women on the prevention of cervical cancer by receiving Pap tests.

#### **RESULTS:**

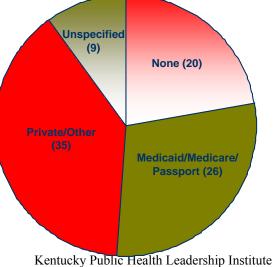
We received 224 surveys from 29 out of the 120 Kentucky Counties. The map below highlights the counties that we received surveys from.<sup>5</sup>

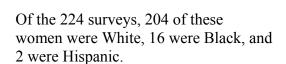


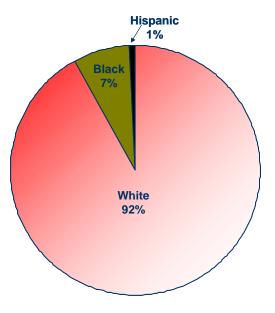


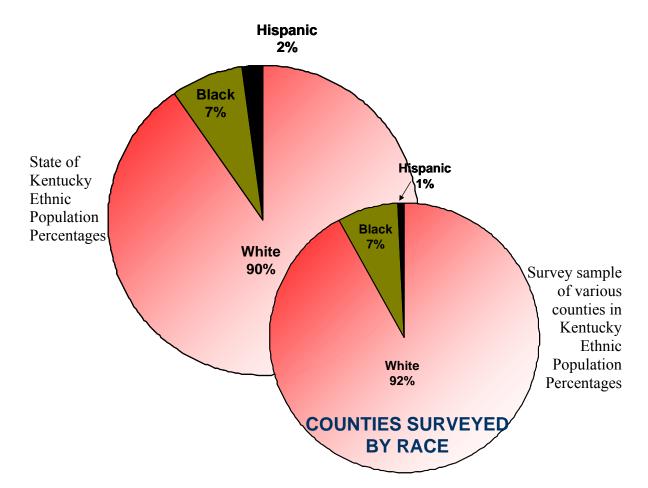
Of the 224 surveys returned, 91 women had Private/Other insurance while 70 had either Medicaid, Medicare or Passport coverage. There were only 2 surveys returned that had both while 33 women had no insurance coverage at all.

Of the 224 surveys, 90 of these women stated they did not receive yearly Pap tests. Note that 20 of these women have no insurance coverage and fall into our target population of the non-insured or underinsured.



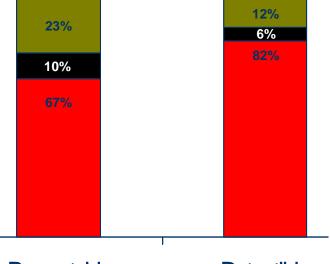






If you look at the percentage of represented ethnic groups in the state of Kentucky, our county survey sample fell within these same percents.





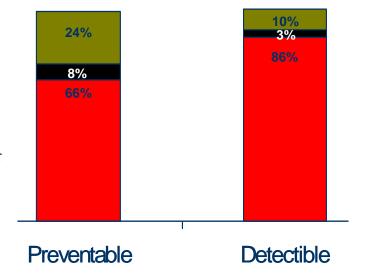
Of the 224 surveys returned, 147 women felt cervical cancer was preventable with regular Pap testing, while 181 women felt cervical cancer was detectible with regular Pap testing.

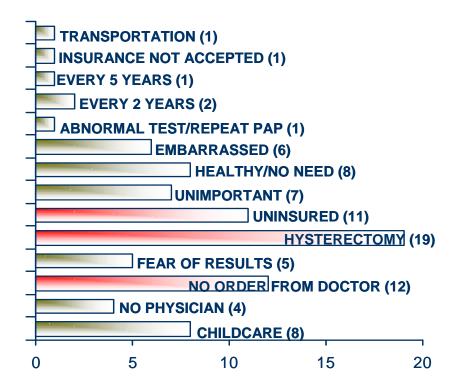
**Preventable** 

**Detectible** 



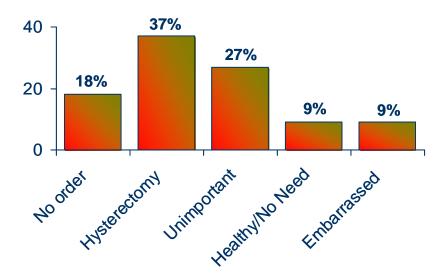
Of the 224 surveys returned, 90 of these women stated they did not receive yearly Pap tests. However, of these 90 women, 59 felt cervical cancer was preventable with regular Pap testing while 77 felt it was detectible with regular testing.

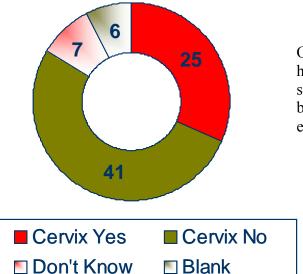




For the 90 women who don't get yearly Pap tests, the above chart lists excuses to why they don't get them. The top 3 excuses were no order from their doctors to have the test done, have had a hysterectomy and don't think it is any longer necessary to be tested and aren't tested due to lack of insurance coverage.

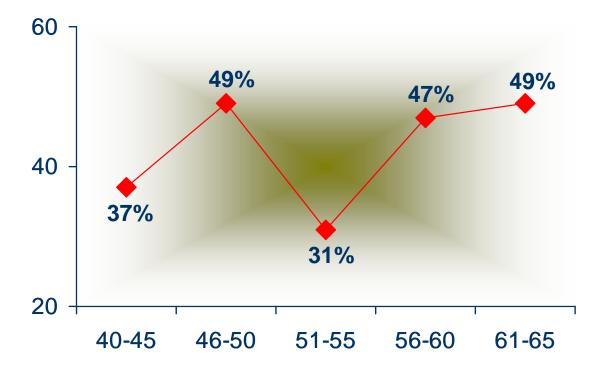
In the chart below, of these same 90 women that aren't tested yearly, 11 of them reported having a hysterectomy but still have their cervix. We need to do more educating in this area. Five (5) of these 11 women felt they no longer needed yearly exams, yet they still have their cervix.





Of the 224 women surveyed, 79 previously had a hysterectomy with 7 of them not knowing if they still have a cervix and 6 more leaving this field blank on the survey. Again, it appears that education in this area may be needed.

The chart below again represents 90 of the 224 women that don't receive yearly Pap tests. When looking at various age groups, it appears that the higher percentages represent women who are past childbearing age and are pre/post-menopausal. Again, this could raise the question of whether there is sufficient education within these specific age groups.



#### CONCLUSIONS:

For some reason women have a difficult time making their health a priority among the needs of their families, careers, and other important circumstances. Our project wanted to uncover the primary reasons that women were not receiving the appropriate screenings to detect cervical cancer. After surveying several hundred women across the state of Kentucky, we feel as though we have gained a better understanding of the barriers associated with cervical cancer screenings. Based on our results of the survey, educating women regarding the importance of Pap tests and receiving one annually would be the first step in solving this issue.

Looking back, we had hoped to reach more women with the survey in order to gain more knowledge. Our efforts in disseminating the surveys should have been more focused on establishments with women who had little or no insurance. Local health departments, county extension agents, and flu clinics were our primary means of data collection. Expanding that list to include Medicaid offices, local housing authorities, free clinics, etc., would have been beneficial to our survey results.

While working on our Change Master Project, the Merck pharmaceutical company marketed the first cervical cancer vaccine, Gardisal. This vaccine, available to young females ages 9-26 years old, provides immunity against four types of the Human papillomavirus that are linked to causing cervical cancer. With this advancement towards preventing cervical cancer, we are hopeful in the future cervical cancer will be a thing of the past. However, since Gardisal is not available to the population we targeted, we realize the need for education and prevention regarding cervical cancer is still necessary and will be for many years to come.

One goal our Change Master Team would like to pursue is utilizing our Public Service Announcement throughout the Commonwealth especially during January, Cervical Cancer month. We feel as though our PSA has the ability to reach and educate the target population of non-insured and/or under insured 40-64 year old women while uncovering the common myths and barriers that are present.

#### LEADERSHIP DEVELOPMENT OPPORTUNITIES:

#### Kim Flora

Participating in the Kentucky Public Health Leadership Institute has been an eye-opening experience. About a year ago, I was moved into a supervisory position for the first time in my life. The KPHLI experience has given me a new light and direction to use with my new position. It has taught me some very effective and efficient leadership skills. KPHLI taught me to realize each individual person's unique talents and gifts. With utilizing each team member's skills, we were able to function better even with such a

diverse group of people. The networking among public health leaders around the state was very much appreciated.

#### **April Harris**

My participation in the Kentucky Public Health Leadership Institute has been an extremely fulfilling and growing experience. As a young professional, I have been blessed to have had this opportunity early in my career. Not only did KPHLI reinforce my passion for public health, but I have been equipped with leadership skills that I plan to utilize for many years to come. Participating in so many thought-provoking activities, working with such knowledgeable peers, and effectively discovering personal development through KPHLI has been the most rewarding professional experience. I feel honored to have worked with a tremendously talented, dedicated and fun group of women within my Change Master Team. I know the vast amount of knowledge gained throughout the past year will stay with me and continue to enhance my life indefinitely.

#### Melissa Hawks

This past year has been a great experience for me both personally and professionally. I began KPHLI being relatively new to the Public Health world. This experience has enabled me to have a greater understanding of public health overall and I feel much more confident in my day to day work activities. Not only have I developed professionally, I have also improved personally. Making a few changes in what I learned from this leadership institute has allowed me to really understand what I do and relate to people in a different way. Meeting new people and working with a great group of people has been a wonderful learning experience! Being a leader starts from within and we grow by the people and things we are surrounded by. I have truly been able to grow as a leader by watching, listening, and talking with the people I have been surrounded by this past year in KPHLI. Again, this experience has been great for me and I want to say thank you for giving me this opportunity. It has been a year of hard work and discovery and I feel prepared to face the future of ever changing public health!

#### Tina Whitlow

This past year has been a challenging one. Not coming from a Public Health background, KPHLI has given me valuable insight and understanding with public health issues. Andy Weiner played a key role in topics (System Thinking and Mental Models) I would have never understood without his "translation" and the connection of the ethics section and 10 Essential Services to Public Health was also very beneficial. The Change Master Project was extremely time-consuming but it made me dig deeper into public health issues. It helps me see things from a global perspective. My personal development with KPHLI was also a great highlight. I learned a lot about myself. . .some good and some that needs attention. Overall, I met some really great people and valued the experience.

#### REFERENCES

- American Cancer Society: How Many Women Get Cancer of the Cervix?
   Available at:
   <a href="http://www.cancer.org/docroot/CRI/content/CRI\_2\_2\_1X\_How\_many\_women\_g">http://www.cancer.org/docroot/CRI/content/CRI\_2\_2\_1X\_How\_many\_women\_g</a>
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## Appendix A

# CERVICAL CANCER SCREENING SURVEY (FOR WOMEN 40-64 YEARS OLD ONLY)

You are invited to participate in a research study to learn why more Kentucky women do not receive cervical cancer screenings. Your participation in this study is completely voluntary, and refusing to take part will not affect the services that you receive in any way. If you would like to help us learn why more Kentucky women are not being screened for cervical cancer, please take the next few minutes to complete the anonymous questionnaire below.

Kentucky Women's Cancer Screening Program 275 East Main Street HS2GWA Frankfort, Kentucky 40621

County of Residence:		
1. Age:		
2. Do you have insurar Yes,	nce? Please explain: Medicaid/Medicare/Passp Other	ort
□Whir □Blac □Asia □Natir □Ame	k or African American	ler
3b. Are you Spanish, I ☐Yes ☐No	Hispanic or Latino?	
□Yes □No	vical cancer can be prevented	1?
□Yes □No	p exam will detect cervical c	ancer?
□No	terectomy?  If yes, do you still have a cer  Yes  No Don't Know	vix?
<b>—</b>	hange Master Projects	Kentucky Public Health Leadership Institute

7. Do you na	ave yearly pap exams?  Yes			
	If yes, your survey is  No Don't Know	s complete. F	Please do	not continue.
8. Please che	eck all the reasons why you do	not get yearl	y pap exa	ams?
Child care issues/inflexible work schedule		□ Yes	□ No	□ Don't Know
Do not	Do not have a doctor		□ No	□ Don't Know
Doctors did not suggest order the exam		□ Yes	□ No	□ Don't Know
Family history		□ Yes	□ No	□ Don't Know
Fear of	Fear of test results		□ No	□ Don't Know
Had a	Had a hysterectomy		□ No	□ Don't Know
No health insurance/too expensive		□ Yes	□ No	□ Don't Know
No reason/never thought about it		□ Yes	□ No	□ Don't Know
Not needed		□ Yes	□ No	□ Don't Know
Too embarrassed/too painful		□ Yes	□ No	□ Don't Know
Transportation		□ Yes	□ No	□ Don't Know
Other,	please explain			
9. Please che	cek the <b>most</b> important reason of Child care issues/inflexible of Do not have a doctor Doctors did not suggest/order Family history Fear of test results Had a hysterectomy No health insurance/too exp No reason/never thought about needed Too embarrassed/too painfut Transportation Other, please explain	work scheduler the examensive		a yearly pap exam?

If you have any questions about this survey, you can contact the investigator, Kim Flora, BS at (270) 781-2490 ext. 218. If you have any questions about your rights as a research volunteer, contact the staff in the Office of Research Integrity at the University of Kentucky at 859-257-9428 (toll free at 1-866-400-9428) or the Cabinet for Health and Family Services IRB at 502-564-5497 x4102.