Commonwealth of Kentucky

Cervical Cancer providers girls HPVCo-testing Immunization Prevention advocacy POVScreening Kentucky Strategic Plan parents Vaccine boys infection Woman's Health

HPV Strategic Plan

A comprehensive statewide strategic plan, created by stakeholders across the Commonwealth, which engages partners to prevent and control HPV infections across the lifespan in Kentucky

June 2016



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The HPV Initiative in Kentucky

Human Papilloma Virus (HPV) prevention through vaccination and screening became a noted strategy for preventing cancer deaths in the 2014 'kyhealthnow' plan, which outlines goals for improving the health status of Kentuckians. The Kentucky Cabinet for Health and Family Services (CHFS), through the Kentucky Department for Public Health (DPH), organized an HPV Initiatives Team (HIT) which has been charged with generating HPV prevention and intervention activities. The team is comprised of the Commissioner's Office plus numerous DPH representatives, including: Adolescent Health, Family Planning, Human Immunodeficiency Virus (HIV) Prevention, Immunization, Health Equity, Oral Health, School Nursing, Sexually Transmitted Disease (STD), and the Woman's Breast and Cervical Cancer Screening. External partners include the UK College of Public Health, the University of Louisville Division of Pediatric and Adolescent Gynecology, local health department (LHD) immunization staff, and pharmaceutical representatives. The development of this team served as the first step in creating a statewide network of stakeholders concerned about HPV prevention in Kentucky.

Early discussions determined that a lack of accurate HPV-related information existed in many communities and misinformation was widespread. This medically inaccurate information seemed to be common, not only in the community, but also among healthcare providers. The team further concluded that Kentucky's low vaccination rate could be attributed to this misinformation. To combat this issue, the HIT agreed that its first goal would be to increase HPV education and awareness at multiple levels of the socioecological model. DPH's Adolescent Health Coordinator assures that medically accurate information is provided to students during the STD lessons included in the abstinence and personal responsibility programs which are conducted in middle schools and high schools across the state. The DPH Immunization staff provides educational programs and materials to local health departments, Vaccine for Children (VFC) providers, clinics, and school-based nurses. Ongoing educational outreach is conducted via webinars and conferences for healthcare, and public health professionals. Education is provided to the general public through activities at local health events and the Kentucky State Fair. Through these efforts, the HIT is working to assure that medically accurate information is disseminated throughout the state.



If there was a vaccine to prevent cancer, would you provide it to your kids?

Addressing the Problem of HPV

Human Papillomavirus — HPV

Despite the availability of safe and effective human papillomavirus (HPV) vaccines, HPV infection remains the most common sexually transmitted infection. Approximately 79 million persons in the United States are infected with HPV and nearly 14 million will become newly infected each year (Centers for Disease Control and Prevention (CDC), 2015). Certain HPV types are known to cause cervical, vaginal, and vulvar cancer among women and penile, anal and oropharyngeal cancers among men. Based on data from 2006–2010, about 33,200 HPV-associated cancers occur in the United States each year: about 20,600 among females and about 12,600 among males. Cervical cancer is the most common HPV-associated cancer among women, and oropharyngeal cancers (cancers of the back of the throat, including the base of the tongue and tonsils) are the most common among men (CDC, 2014).

While there is no cure for HPV infection, the HPV vaccine is a strategy for prevention of infection. The CDC (June, 2014) reported about 14 million people, including teens, become infected with HPV each year. When infections persist, people are at risk for cancer and genital warts. Every year approximately 17,600 women and 9,300 men are affected by cancers caused by HPV. HPV vaccines, which have been available since 2006 for females and 2009 for males, could prevent many of these cancers. For the HPV vaccine to work best, the CDC recommends all three doses be given before the initiation of sexual activity. The CDC guidelines state the second dose should be given one to two months after the first dose and the third dose should be given six months after the first dose. This vaccination is recommended for 11 and 12 year-old boys and girls, though vaccinations can be administered to males and females through 26 years of age if not received at the recommended age. It is not yet known how much HPV protection is attained from receiving only one or two doses of an HPV vaccine. Therefore, it is very important for individuals to receive all three doses. Currently, three vaccines, GARDASIL[®], GARDASIL ^{9®} and CERVARIX[®], have been licensed by the Food and Drug Administration and approved as safe and effective by the CDC. Approximately 70% of cervical cancers will be prevented by these vaccines.

CDC data continues to show that most HPV infections are asymptomatic, unrecognized or subclinical. There are known to be more than 150 different strains of HPV, with effects ranging from warts and cancers to no effects at all. About 40 types of HPV infect the body. There are high risk types and low risk types based on whether the strain is oncogenic, that is, puts a person at risk for cancer. The World Health Organization's International Agency for Research on Cancer in 2007 showed that 13 HPV types can cause cancer of the cervix. Several of these types can cause other cancers such as cancer of the vulva, vagina, penis, anus, and the oropharynx, which includes the back of the throat, base of the tongue, and tonsils. The types of HPV that can cause genital warts are not the same as the types that can cause cancer.

High risk HPV types: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, or 68

- Can cause high grade cervical cancer abnormalities that are precursors to cancer
- High risk types are detected in 99% of cervical cancers
- Type 16 is the cause of approximately 50% of cervical cancer worldwide
- Type 16 and 18 together account for about 70% of cervical cancer
- Type 16 is the type most frequently associated with other anogenital cancers and oropharyngeal cancer

While 90% of genital warts are caused by HPV 6 or 11, HPV types 16, 18, 31, 33, and 35 are found occasionally in visible genital warts (usually as co-infections with HPV 6 or 11).

Low risk types: 6 and 11

• Can cause low grade cervical cell abnormalities, genital warts and laryngeal papilloma

Study shows HPV vaccine helps lower HPV infection rates in teen girls

A study released by the CDC (2013) looks at the prevalence of HPV infections in girls and women before and after the introduction of the HPV vaccine. The study shows a significant reduction in vaccine-type HPV in U.S. teens. The study, published in June 2013 in *The Journal of Infectious Diseases,* reveals that since the vaccine was introduced in 2006, vaccine-type HPV prevalence decreased 56 percent among female teenagers 14 to19 years of age, indicating the vaccine works well. In their reporting, Dr. Markowitz and colleagues acknowledged that the decline in vaccine-type disease prevalence is higher than expected and could be due to factors such as herd immunity, high effectiveness with less than a complete three-dose series, and/or changes in sexual behavior they could not measure. This decline is encouraging given the substantial health and economic burden of HPV-associated disease.

Public health experts and clinicians look forward to more people getting vaccinated against HPV. While routine vaccination at age 11 to 12 for both boys and girls is recommended, according to recent national immunization surveys, only about half of all girls in the U.S. — and far fewer numbers of boys— have received the first dose of HPV vaccine (CDC, 2013).

Cervical Cancer Statistics

Cervical cancer used to be the leading cause of cancer death for women in the United States. In the past 40 years the number of cases of cervical cancer and the number of deaths from cervical cancer have decreased significantly. This decline largely is the result of more women getting regular Pap tests, which can identify cervical pre-cancer before it turns into cancer.

HPV-Associated Cervical Cancer Incidence Rates by State, United States, 2006-2010



Data from population-based cancer registries participating in the CDC s supported National Program of Cancer Registries (www.cdc.gov/cancer/npcr) or NCl's -supported Surveillance, Epidemiology, and End Results Program, includes all states meeting USCS publication criteria for all years 2006-2010 and covers approximately 94.8% of the US population.

How Many Cancers Are Linked with HPV?

The CDC reports that each year, about 33,000 new cases of cancer are diagnosed in parts of the body where HPV is often found. These include the cervix, anus, penis, vagina, vulva, and oropharynx. HPV causes about 26,800 of these cancers. CDC researchers used cancer registry data to estimate the number of HPV-associated cancers in the United States by looking at cancer in parts of the body and cancer cell types that are more likely to be caused by HPV. Cancer registries do not routinely collect data on whether HPV is in the cancer tissue. See the article at www.cdc.gov/cancer/hpv/statistics for more information.

Number of HPV-Attributable Cancer Cases

An HPV-attributable cancer is a cancer that is likely caused by HPV. CDC studies used populationbased data from cancer tissue to estimate the percentage of these cancers that are probably caused by HPV. For example, CDC reports that about 11,422 women are diagnosed with cervical cancer each year and about 91% of all cervical cancers, or 10,400 cases, are thought to be caused by HPV.

The following HPV-related disease data have been reported by CDC and the Kentucky Cancer Registry. CDC data are derived from cancer diagnoses from 2006 to 2010. Kentucky Cancer Registry data are cancer diagnosis from 2003 to 2012.

Cervical Cancer

	Number of cervical cancers			Percentage Probably Caused	Number Probably Caused by HPV			
		Male	Female	Total	by HPV*	Male	Female	Total
U.S.	average per year	NA	11,422	11,422	019/	NA	10,394	10,394
Kentucky	average per year	NA	203	203	91%	NA	185	185

NA-Not Applicable *<u>www.cdc.gov/cancer/hpv/statistics</u>

- Incidence in KY: White women comprised 90% of the cases, black women comprised 8% of the cases, and the remaining 2% were women of other ethnicities.
- Kentucky Mortality: 693 deaths were reported from cervical cancer in the same ten year time frame.

Vaginal Cancer

		Nu	mber of va cancers	nginal	Percentage Probably Caused	Number Probably Caused by HPV			
		Male	Female	Total	by HPV*	Male	Female	Total	
U.S.	average per year	NA	735	735	750/	NA	551	551	
Kentucky	average per year	NA	23	23	75%	NA	17	17	

NA-Not Applicable *<u>www.cdc.gov/cancer/hpv/statistics</u>

• Incidence in Kentucky: White women comprised 94% of the cases.

• Kentucky Mortality: 62 deaths were reported from vaginal cancer in the same 10 year time frame.



CENTERS FOR DISEASE CONTROL AND PREVENTION



Anal Cancer

		Number of anal cancers			Percentage Probably Caused	Number Probably Caused by HPV		
		Male	Female	Total	by HPV*	Male	Female	Total
U.S.	average per year	1,549	2,821	4,370	01%	1,410	2,567	3,977
Kentucky	average per year	43	78	121	91%	39	71	110

*www.cdc.gov/cancer/hpv/statistics

 Incidence in Kentucky: Men and women of white ethnicity comprised 72% of the cases, men and women of black ethnicity comprised 4% of the cases. The remaining 24% were other ethnicities.

• **Kentucky Mortality**: 116 deaths were reported from anal cancer in the same 10 year time frame.

Oropharyngeal Cancers

		Number of oropharyngeal cancers			Percentage Probably Caused	Number Probably Caused by HPV		
		Male	Female	Total	by HPV*	Male	Female	Total
U.S.	average per year	9,974	2,443	12,417	700/	7,181	1,759	8,940
Kentucky	average per year	457	178	635	12%	329	128	457

- Incidence in Kentucky: The majority of the cases (93%) occurred in the white population. Breakdown of the other ethnicities was not available.
- Kentucky Mortality: 1,303 deaths were reported from oral pharyngeal cancers in the same 10 year time frame.

Penile Cancer

		Number of penile cancers			Percentage Probably Caused	Number Probably Caused by HPV		
		Male	Female	Total	by HPV*	Male	Female	Total
U.S.	average per year	1,048	NA	1,048	629/	660	NA	660
Kentucky	average per year	39	NA	39	03%	25	NA	25

*<u>www.cdc.gov/cancer/hpv/statistics</u>

Incidence in Kentucky: White men comprised 93% of the cases, black men comprised 4% of the 0 cases, and the remaining 3% were men of other ethnicities.

• **Kentucky Mortality**: 34 deaths were reported from penile cancers in the same 10 year time frame.

HPV-Related Cancers Diagnosis by Age

In 2014, CDC also indicated that cervical cancer is usually diagnosed at younger ages than other HPV-associated cancers. HPV-associated anal and oropharyngeal cancers generally are diagnosed at slightly younger ages in men than in women.

HPV Test

According to Centers for Disease and Prevention Control (2013), cervical cancer is the easiest female cancer to prevent with regular screening and follow-up. Two tests can help prevent cervical cancer or find it early.

The <u>Pap test</u> (or Pap smear) helps find precancers or cell changes on the cervix that might become cervical cancer if they are not treated appropriately. Women should start getting the Pap test at age 21 and, if findings are within normal limits, every three years after that. More frequent testing may be

required with abnormal findings or if clinically indicated.

• The <u>HPV test</u> checks for the virus that can cause these cell changes on the cervix. It may be used to screen for cervical cancer with the Pap test in women aged 30 years and older. If both tests are negative, the risk for cervical cancer is very low and women can wait five years before another screening. HPV tests also may be used to provide more information when a Pap test has unclear results.

The CDC provides funding to the Kentucky Women's Cancer Screening Program for breast and cervical screening and diagnostic services which are provided through local health departments. These services are provided to women 21 to 64 years of age who have no health insurance and are at or below 250% of the annual federal poverty guidelines. The program prioritizes the engagement of women who have never been screened or have not been screened in the past five years (rarely screened) for cervical cancer. Cervical cancer screening includes Pap tests for all clients and HPV co-testing for women age 30 and older.

Primary Prevention

HPV Vaccine

CDC Recommendation for HPV Vaccine (http://www.cdc.gov/hpv/vaccine.html)

HPV vaccines are given as a series of three shots over six months to protect against HPV infection and the health problems that HPV infection can cause. There are three HPV vaccines (CERVARIX[®], GARDASIL[®], and GARDASIL 9[®]). Girls and young women should complete the HPV vaccine series to prevent most cervical cancer.

Two of the HPV vaccines (GARDASIL[®] and GARDASIL 9[®]) also protect against genital warts and anal cancer in both females and males. In addition, females can get either of these vaccines to prevent cervical cancer, vulvar cancer, and vaginal cancer. CERVARIX[®] does not protect against genital warts and is not available to males.

Who else should get the HPV vaccine?

Girls and boys who are 11 or 12 years old should get the three-dose series of HPV vaccine to protect against HPV. The vaccine promotes the development of an immune response prior to being sexually active with another person. Teen boys and girls who did not start or finish the HPV vaccine series when they were younger are encouraged to get it now. Young women can get HPV vaccine through age the 26, and young men can get vaccinated through age 21. The vaccine is also recommended for any man who has sex with men through age 26, and for men with compromised immune systems (including HIV) through age 26, if they did not get the HPV vaccine when they were younger.

HPV Vaccination Coverage

The National Immunization Surveys (NIS) is a group of telephone surveys sponsored and conducted by CDC's National Center for Immunization and Respiratory Diseases (NCIRD). Since 2011, the NIS has used a dual frame survey design, including landline and cell phone numbers for household interviews with parents or guardians. The 2012 through 2013 NIS (see tables below) reveal that the HPV vaccination rate in Kentucky is lower in most years than the United States rate. However, the rate of completion of the three vaccine series is higher than the national average in two of the three survey years. Nationally, Black and Hispanic populations have higher vaccination rates than the White population. Also, adolescents living below the poverty level have higher vaccination rates than adolescents living at or above the poverty level. Kentucky-specific vaccination data by race, ethnicity and poverty level is not available.

HPV Vaccination Coverage

Estimated HPV vaccination^s coverage with selected vaccines and doses among adolescents aged 13–17 years— National Immunization Survey–Teen (NIS-Teen), United States and Kentucky

Veer	United States					Kentucky						
rear	Females*		Males*		Females**			Males**				
	≥1 Dose	≥2 doses	≥3 doses [†]	≥1 dose	≥2 doses	≥3 doses [†]	≥1 dose	≥2 doses	≥3 doses [†]	≥1 dose	≥2 doses	≥3 doses [†]
2012	53.8%	43.4%	33.4%	20.8%	12.7%	6.8%	51.2%	43.5%	34.9%	NA	NA	NA
2013	57.3%	47.7%	37.6%	34.6%	23.5%	13.9%	47.6%	38.6%	26.8%	19%	10.8%	NA
2014	60%	50.3%	39.7%	41.7%	31.4%	21.6%	52.1%	45.1%	37.5%	23.7%	17.5%	13.3%

Source: http://www.cdc.gov/vaccines/imz-managers/coverage/articles.html

NA- Not available

[§] all doses of HPV vaccine are either quadrivalent or bivalent.

*NIS-Teen Participants- 2012: Females=9,058 Males=10,141, 2013: Females=8,264 Males= 9,554, 2014: Females=10,084 Males=10,743.

* * Number of Kentucky survey participants is not available

[↑] ≥3 doses: Some adolescents may have received more than three recommended HPV doses.

HPV Vaccine 3-Dose Series Completion National Immunization Survey–Teen (NIS-Teen), United States and Kentucky

Definition: The completion rate for the 3-dose HPV vaccination series represents the percentage of adolescents ages 13-17 who completed the 3-dose series within 24 weeks of the first dose.

Voar	United	d States	Kentucky		
Tear	Females	Males	Females	Males	
	HPV 3-dose	HPV 3-dose	HPV 3-dose series	HPV 3-dose series	
series completion		series completion completion		completion	
2012	66.7%	45.1%	68.2%	NA	
2013	69.8%	48.2%	56.3%	NA	
2014	69.3%	57.8%	71.9%	56.1%	

NOTE: These charts examine vaccine completion data from different perspectives.

Above chart: the percentage of all survey participants who received one, two, or three HPV vaccine doses.

Chart to left: the percentage of survey participants who started the vaccine series and received all three doses within 24 weeks of the first dose.

Source: <u>http://www.cdc.gov/vaccines/imz-managers/coverage/articles.html</u> NA- Not available

Estimated H	Estimated HPV vaccine coverage [®] among adolescents aged 13-17 years by certain race/ethnicity							
HPV			Race/Ethnicity	vey-reens, on	Poverty Level			
vaccine coverage by doses	U.S. Totals	White only, non- Hispanic	Black only, non- Hispanic	Hispanic	Below poverty level	At or above poverty level		
Females								
≥1 dose	60%	56.1%	66.4%	66.3%	67.2%	57.7%		
≥2 doses	50.3%	47.1%	53%	57.4%	58%	47.9%		
≥3 doses	39.7%	37.5%	46.9%	46.9%	44.7%	37.9%		
Males								
≥1 dose	41.7%	36.4%	42.1%	54.2%	51.6%	39.5%		
≥2 doses	31.4%	27.4%	32.0%	39.4%	39.4%	29.5%		
≥3 doses	21.6%	18.8%	20.4%	27.8%	27.2%	20.2%		

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6429a3.htm

[§] all doses of HPV vaccine are either quadrivalent or bivalent.

Condoms

For those who are sexually active, condoms may lower the risk of HPV infection. To be most effective, condoms should be used with every sex act, from start to finish. Condoms may also lower the risk of developing HPV-related diseases, such as genital warts and cervical cancer. However, it is important to note that HPV can infect areas that are not covered by a condom; therefore, condoms will not fully protect against HPV.

Kentucky HPV Strategic Plan Process

From the beginning, HIT recognized the need for a comprehensive strategic plan for providing HPV vaccination and education and to expand efforts involving cervical cancer screening, diagnosis, and treatment. In 2013, the team applied for and was awarded a grant from Cervical Cancer Free America in order to develop and implement a statewide HPV strategic plan. An initial strategic planning meeting with team members as well as other DPH representatives and external partners was held in early 2014. The goals of this meeting were to develop a mission and vision statement and objectives for the strategic plan. Under the guidance of a facilitator from the Eastern Kentucky University Facilitation Center, the meeting attendees first conducted a strengths, weaknesses, opportunities, and threats (SWOT) analysis of current HPV initiatives in Kentucky. Findings from the SWOT analysis were then used to develop the mission and vision statement of the plan. Results were then categorized into six planning themes: access, education/promotion, research/evidence-based information, policy/advocacy, capacity/diversity/sustainability, and funding/resources.

In the subsequent HIT strategic planning meeting, four of the themes were chosen as the primary goals for the strategic plan:

Access

- Research/Evidence-Based Information
- Education/Promotion
- Policy/Advocacy

It was agreed that the remaining themes, capacity/diversity/sustainability and funding/resources, were to be considered throughout the development of the plan. The team was then divided into workgroups which were asked to develop strategies for each goal. The strategies, which were presented at the next planning meeting, were a mix of DPH and state partner-led initiatives and actions. There was also discussion about the trajectory of the HPV strategic plan as well as whether to have a DPH-centered plan and a separate statewide plan. The team decided that separate plans would not be productive and began preparations for a statewide HPV strategic planning conference.

HPV-Free Kentucky Conference

In September 2014, HIT hosted the HPV-Free Kentucky Conference. To encourage participation, invitations were sent to a multitude of stakeholders across the state including: the Governor's Office, CHFS Cabinet Secretary's office, legislators, governmental agencies (e.g., Department of Insurance and Department for Medicaid Services), provider organizations (e.g., Kentucky Chapter of the American College of Obstetrics and Gynecology (ACOG), Kentucky Academy of Family Physicians (KAFP), Kentucky Chapter of American Academy of Pediatrics (AAP)), local health departments, managed care organizations, federally qualified health centers, school youth resource center staff, and school nurses. Eighty-five stakeholders representing many geographic regions, organizations, and populations from across the state attended the conference.

The morning plenary session was dedicated to ensuring that all attendees had an accurate knowledge of HPV and current prevention and control measures. In-depth information on HPV was provided, including the prevalence of the HPV virus and current prevention efforts. The HIT also reported on progress in regards to the Kentucky HPV strategic plan. The afternoon sessions focused on each conference participant's involvement in one of four workgroups aimed at furthering progress towards the strategic plan's goals. Each workgroup spent two to three hours assessing the HIT's prior work and developed objectives and actions for each goal.

The KDPH Adolescent Health Coordinator aggregated the information gleaned from stakeholders at the conference and presented these recommendations to the HIT members. The following strategic plan was developed and implemented from the work of the HIT and stakeholders from across the Commonwealth.



The HPV Strategic Plan was developed through the collaborative efforts of the DPH HPV Initiatives Team and the attendees of the HPV-Free Kentucky Conference (September, 2014).

<u>Vision</u>

Kentucky will lead the nation in preventing HPV infections and reducing HPV-related diseases.

<u>Mission</u>

The HPV Initiatives Team (HIT), with partners and stakeholders, will implement the comprehensive statewide strategic plan to prevent HPV and control HPV infections and diseases across the lifespan of all Kentuckians.

<u>Goals</u>

- 1. Access. Remove barriers and facilitate access to HPV vaccination, comprehensive screening (pap tests, HPV co-testing, etc.), and HPV-related disease* control measures, and increase opportunities to prevent HPV infections and HPV-related disease.
- 2. Education/Promotion. Provide population focused education using multiple strategies to increase knowledge, promote vaccination and screening and decrease HPV-related disease.
- 3. **Policy/Advocacy**. Provide on-going awareness of new and current policies and funding/resources related to HPV prevention and control. Support/advocate for needed policy changes and needed funding and resources.
- 4. **Research/Evidence-Based Information**. Conduct research, collect and analyze data and produce reports to provide evidence-based information and evaluate outcomes related to HPV prevention and disease control.

*HPV-related diseases: HPV-related cancers (cervix, vagina, vulva, penis, anus, oropharyngeal, and others) and genital warts.

Goal #1: Access

Remove barriers and facilitate access to the HPV vaccination, comprehensive screening (pap tests, HPV co-testing, etc.) and HPV-related disease control measures, increasing opportunities to prevent HPV infections and HPV-related disease.

Strategies:

Kentucky Department for Public Health and Local Health Departments

(Immunization Program, Division of Women's Health, STD Program, School Health, HIV Program)

- Administer the Vaccine for Children (VFC) program for both males and females.
- Provide cervical cancer screening, including HPV co-testing, and diagnostic services for qualifying women rarely or never screened through the Kentucky Women's Cancer Screening Program.
- Reminder Recall System
 - Build reminder recall system in the Immunization Information System (IIS).
 - Establish a policy/regulation requiring all VFC providers use a reminder recall system.
 - Provide IIS system access to school nurses.

Insurance Carriers/ Medicaid/ MCOs

 All insurance carriers will continue to include HPV vaccine coverage for qualifying males and females.

Primary and Secondary Education Associated Agencies

(e.g.. Board of Education, KY High School Athletic Association, Schools, parent organizations, Family Resource and Youth Service Centers (FRYSCs), Site-Based Decision Making (SBDM) Councils, etc.)

- Strongly encourage HPV immunization.
 - In-school promotional campaigns; involve students in planning and implementation.
 - On-site immunization clinics.
 - Include immunization information on school and athletic physicals.
 - Encourage screenings (pap tests, HPV co-testing, etc.) with staff and parents.
 - Provide current national screening/testing guidelines and updates to staff and associates in a timely manner.



Colleges/Universities

- Promote vaccine and screening through multiple strategies including campaigns, social media, health fairs, etc.
- Provide vaccine at multiple venues around campus, in addition to the health center.
- Promote cervical cancer screening, including HPV co-testing.
- Provide cancer screening, including HPV co-testing at health centers.
- Implement vaccine reminder/recall system for students and staff.
- Involve fraternities and sororities and other organized student groups.

Healthcare Providers

(including Local Health Departments, Federally Qualified Health Centers (FQHCs), Rural Health Centers (RHCs), private providers, dentists, pharmacists, etc.)

- Provide a strong and consistent recommendation for HPV vaccination.
- Provide cancer screening, including HPV co-testing per national guidelines.
- Take advantage of every office visit to vaccinate patients of appropriate age.
- Promote vaccine and screening through multiple strategies with increased focus on vulnerable populations*.
- Involve parents and teens in strategic planning to increase vaccination rates.
- Provide vaccine at multiple venues including schools, neighborhood centers, etc.
- Implement vaccine reminder/recall system to ensure vaccine series completion.
- Provide extended clinic hours to provide better access.
- Consider transportation vouchers. Partner with local Department of Community Based Services (DCBS) office, free clinics, community-based organizations (i.e., Salvation Army, community centers), behavioral health clinics, Juvenile Justice Centers, etc., to provide HPV vaccination and screenings.

Other

- Provide vaccine to vulnerable populations.
- Engage pharmaceutical companies to provide free vaccine to vulnerable populations.

*Vulnerable populations: African-Americans, Latinos, Lesbian Gay Bisexual Transgender (LGBT) population, impoverished communities, persons with behavioral health challenges, incarcerated populations including teens in the juvenile justice system, the undocumented population, refugees and other populations that lack health access and accurate educational information.



Goal #2: Education/Promotion

Provide population focused education using multiple strategies to increase knowledge, promote vaccination, screenings and decrease HPV-related diseases.

Strategies:

Kentucky Department for Public Health and Local Health Departments

(Immunization Program, Division of Women's Health, STD Program, School Health, HIV Program)

- Provide medically-accurate, culturally relevant educational messages and programs that include prevention and disease control through multiple means. Examples:
 - o Health fairs, Kentucky State Fair
 - Conference workshops (e.g. FRYSC, School Nurse, Kentucky Youth Health Network (KYHN), Kentucky Public Health Association (KPHA), Statewide HIV/AIDS Conference, etc.)
 - Interactive Television (ITV) programs (e.g., Public Health Nurse (ITV) meetings)
- Include HPV education when promoting health initiatives across the Commonwealth.
- Develop TV, radio, print, and social media messages related to prevention and disease control and make these resources available to LHDs and communities for distribution.
 - Example: Utilize existing Cervical Cancer Free Kentucky Facebook page to provide education, personal stories, vaccine promotion, policy updates.
- Promote medically-accurate education to middle and high school students about HPV disease prevention and control through the Abstinence Education Program Grant and the Personal Responsibility Education Program Grant.
- Promote cancer screening and HPV co-testing.
- Take advantage of HPV educational resources at <u>www.cdc.gov/hpv</u> and <u>www.immunize.org/hpv</u>. Disseminate these links to LHDs and other healthcare providers.

Insurance Carriers/Medicaid MCOs

- Include HPV information in member handbooks and mailings.
- Utilize resources to promote the vaccine through public media outlets.

Primary and Secondary Education Associated Agencies

(e.g. Board of Education, Kentucky High School Athletic Association, Schools, parent organizations, FRYSCs, Site-based Decision Making Councils, etc.)

- Provide positive consistent messaging concerning the vaccine.
- Provide medically-accurate STD education, including HPV prevention and disease control, to all middle and high school students. Genital wart information should be included in education to teens.
- Provide educational activities for school staff and parents to increase knowledge and awareness about HPV prevention and disease control.
 - In-Service meetings
 - Parent organization meetings
 - Include student groups in promotional activities.

Colleges/Universities

- Use multiple venues to educate students and faculty about HPV prevention and disease control.
- Involve fraternities, sororities and other organized student groups in educational efforts.
- Encourage college and university partners to take advantage of educational resources at www.cdc.gov/hpv and www.immunize.org/hpv.

Healthcare Providers

(including Local Health Departments, FQHCs, RHCs, private providers, dentists, pharmacists, etc.)

- Assure all staff is educated on HPV prevention and disease control and that a clear and consistent message is given to all clients.
- Educate clients (parents, teens, and young adults) on current HPV prevention, disease control, and clinical protocols.
- Partner with local organizations, schools, businesses, and agencies to provide a variety of educational activities and vaccination events.
- Utilize presence in the community to provide education through multiple events and activities.
- Educate vulnerable populations* through a variety of ways that are culturally competent and individual to the audience.

*Vulnerable populations: African-Americans, Latinos, Lesbian Gay Bisexual Transgender (LGBT) population, impoverished communities, persons with mental health challenges, incarcerated populations including teens in the juvenile justice system, the undocumented population, refugees and other populations that lack health access and accurate educational information.



Don't forget your third poke.

The HPV vaccine is a three shot series. You need all three shots to be protected.





Kentucky State Fair

Goal #3: Policy/Advocacy

Provide on-going awareness of new and current policies and funding/resources related to HPV prevention and control. Support/advocate for needed policy changes and needed funding/ resources.

Strategies:

Insurance Carriers/Medicaid/MCOs

- Offer provider education regarding current guidelines for preventative immunizations.
- Support policy for all insurance companies to reimburse RNs to administer the HPV vaccine.

Healthcare Providers

(including Local Health Departments, FQHCs, RHCs, private providers, dentists, pharmacists, etc.)

- Follow recommended guidelines to administer a 3-dose series of HPV vaccine on a schedule of 0, 1-2, and 6 months to all adolescents aged 11 through 12 years.¹
- Allow declination of HPV vaccine after provider education, not before.

Policy/Lawmakers

- Support/advocate for the HPV vaccine to be included in mandatory vaccine regulations.
- Include HPV vaccine in KRS 214.185 (1) reproductive healthcare for minors without parental consent.
- Support/advocate for a reminder/recall system to be built and be required by all providers administering vaccinations.

> Policy Awareness Activities (for all stakeholders)

- For Legislators
 - \circ Provide HPV education.
 - \circ $\,$ Engage parents and young people to advocate to legislators.
- For General Public
 - Utilize information outlets such as websites, health fairs, health organizations, etc. to inform the public, especially parents and educators, of current policy guidelines.
- For Healthcare Providers
 - \circ Provide continuing education to healthcare providers, nurses, and other healthcare workers.
 - Engage professional organizations (KY Board of Nursing, KYACOG, KYAAP, KPHA, KAFP, etc.) in awareness and advocating for HPV prevention and disease control.
- For Schools
 - Promote school-based policies by providing HPV education to school administrators, parent organizations and SBDM Councils.

¹ http://www.cdc.gov/vaccines/hcp/acip-recs/index.html.



Goal #4: Research/

Evidence-Based Information

Conduct research, collect and analyze data and produce reports to provide evidence-based information and evaluate outcomes related to HPV prevention and disease control.

Strategies:

Desired Data Collection

- HPV Immunizations, including # of doses/ series completion
- Screening data
- Co-testing genotype results for strain frequency
- Disease frequency and geographical mapping
- Minority group data
 - Immunizations
 - Screening results
- Successful efforts or "best practices"
- Barriers to success
- Survey data on various aspects of HPV prevention and control including best practices, barriers and successes from:
 - Healthcare Providers
 - o Parents
- Data Sources
 - Centers for Disease Control and Prevention
 - Kentucky Department for Public Health
 - Kentucky Cancer Registry
 - Universities
 - Surveys conducted by multiple individuals/organizations
- **Resource Directory**
 - The Department for Public Health, through the Immunization Program and the Division of Women's Health, will make available documentation of evidence-based information:
 - Print materials
 - Web-based resources
 - Papers and reports
- **Pharmaceutical Companies**
 - Continue research on existing and new vaccines
 - Develop a vaccine that covers more disease causing strains



- Genotype frequency 0
- Differences

Young adults

Other

News media

o Teens

0

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Stakeholder Actions

Definition of Stakeholders:

Organizational Stakeholders:	State-level partners. Examples include: Governor's Office, Department for Public Health (DPH), Department of
	Education (KDE), Medicaid Managed Care Organizations, Department of Community Based Services (DCBS),
	insurance companies, legislators, professional organizations (KYACOG, KYAAP, KAFP), pharmaceutical companies.
Community Stakeholders:	Local health departments (LHDs), Federally Qualified Health Centers (FQHCs), Rural Health Centers (RHCs), health
	clinics, community-based organizations, schools, parent organizations, Site-based Decision Making (SBDM) councils,
	faith-based organizations, Family Resource/Youth Service Centers (FRYSCs).
Individuals:	Community members, nurses, healthcare providers, educators, school administrators.

Note: Identified vulnerable populations: African-Americans, Latinos, Lesbian Gay Bisexual Transgender (LGBT) population, impoverished communities, persons with mental health challenges, incarcerated populations including teens in the juvenile justice system, undocumented population, refugees and other populations that lack health access and accurate educational information.

Goal	Organizational Stakeholder Actions	Community Stakeholder Actions	Individual Stakeholder Actions
Access Action Initiatives	 <u>All Organizational Stakeholders</u>: Provide funding to community stakeholders for transportation vouchers, vaccine, and promotional material. Utilize funding resources to develop and disseminate HPV prevention and disease control messages via TV, radio, print, social media. Seek well known personality for PSAs and other media campaigns. <u>Specific Organization Actions</u>: DPH Immunizations Program manages Vaccine for Children (VFC) program. KY Women's Cancer Screening Program (KWCSP) provides funding for screening and diagnostic services for qualifying women. DPH and professional organizations promote reminder recall systems. VFC program initiates and requires reminder recall system for all participants. Insurance coverage of HPV vaccine by all insurance carriers. 	 <u>All Community Stakeholders:</u> Provide vaccine clinics in low income areas where transportation is a barrier to access. Partner with local agencies (DCBS office, free clinics, Salvation Army, Juvenile Justice Centers, etc.) to provide vaccine and screenings to vulnerable populations, especially those rarely or never screened. <u>Specific Community Group Actions</u>: Provide onsite immunization clinics at schools. Assure HPV vaccine and staff health screenings are included in the School Health Plan. College/university health clinics, nursing and other health programs promote vaccine and screenings through multiple methods including campus campaigns, social media, health fairs, immunization clinics at various locations on campus. 	 School nurses, clinics, healthcare providers promote vaccine and provide screening through multiple strategies that includes reaching vulnerable populations. Providers become participants in the VFC program. Parents and teens participate in strategic planning to increase vaccination. Cervical cancer survivors tell their story to promote vaccination and screening. Volunteer to take a friend to get screening and/or vaccination. Encourage teens and young adults to get vaccinated and screened (when appropriate).

Goal	Organizational Stakeholder Actions	Community Stakeholder Actions	Individual Stakeholder Actions
Access (cont.)	 Primary and secondary education associated agencies add immunization data to school and sports physical forms, including HPV vaccine. Professional organizations promote vaccine and provide HPV tool kits. 	 Colleges/universities' specific student groups, such as fraternities and sororities, provide venues to receive vaccine and promote vaccine and series completion. LHDs, health clinics and provider offices implement a reminder/recall system to increase three dose vaccine completion. LHDs, health clinics and provider offices extend hours to allow for better access to screening and immunization. 	
Education Action Initiatives	 <u>All Organizational Stakeholders</u>: Make PSA and other promotional materials available to local organizations, as appropriate. Utilize HPV educational resources at <u>www.cdc.gov/hpv</u> and <u>www.immunize.org/hpv</u> to provide education to a variety of audiences. <u>Specific Organization Actions</u>: Organizations such as DPH, professional organizations and pharmaceutical companies will provide culturally relevant medically-accurate educators, and other appropriate groups. DPH, primary and secondary education associated agencies, and other groups will seek funding opportunities and disseminate funds to local groups to provide medically accurate, culturally sensitive education to middle and high school students and parents. Insurance companies, including private companies and Medicaid MCOs, will include HPV information in member handbooks. DPH, pharmaceutical companies, etc. will provide medically accurate education and data to legislative members. 	 <u>All Community Stakeholders:</u> Provide positive consistent messaging concerning the vaccine. Provide medically accurate STD education, including HPV prevention and disease control, to all middle and high school students. Genital wart information should be included in education to teens. Include teen input and/or teen mentors in educational efforts. Providers, clinics, campus health centers, etc. include HPV education and vaccine promotion at adolescent and young adult visits. Utilize HPV educational resources at <u>www.cdc.gov/hpv</u> and <u>www.immunize.org/hpv</u> to provide education to a variety of audiences. Schools and their partners (parent organizations, FRYSCs, SBDM councils, etc.) will provide educational activities for school staff and parents about HPV prevention and disease control. 	 Providers educate clients (parents, teens and young adults) on current HPV prevention, disease control and current clinical protocols. Ensure all staff is educated about HPV prevention and disease control and that a clear consistent message is offered. Utilize presence in the community to provide education through multiple events and activities. Partner with local organizations, schools, businesses and agencies to provide a variety of educational activities and vaccination events. Educate vulnerable populations through a variety of methods that are culturally competent and individual to the audience. Stay current on new medially accurate information, including evidence-based research, new products and any changes in protocols for prevention and disease control. Be aware of "urban legends" regarding the HPV vaccine (e.g. promotes sexual activity among teenagers) and be prepared to answer these statements and myths with medically accurate and statistically proven information.

Goal	Organizational Stakeholder Actions	Community Stakeholder Actions	Individual Stakeholder Actions
Education (cont.)		 Colleges, universities, middle and high schools use multiple methods (e.g. posters, text messaging, etc.) to educate students and faculty about HPV prevention and disease control. Provide transportation-vouchers for low-income clients seeking vaccination and screening services. Colleges/universities' student groups, such as fraternities and sororities, provide educational materials and promote vaccine/series completion 	
Policy Action Initiatives	 <u>All Organizational Stakeholders</u>: Provide information to LHDs, clinics, providers, etc. regarding current guidelines about prevention and services. All insurance groups will provide reimbursement for vaccine administration. Support/advocate for law changes: Mandatory HPV vaccination. Include HPV vaccine in KRS 214.185 (1) reproductive healthcare for minors without parental consent. Provide current HPV prevention and disease control policy guidelines and protocols to LHDs, clinics, healthcare providers and educators. Engage professional organizations in awareness campaigns and advocating for HPV prevention and disease control. 	 <u>All Community Stakeholders</u>: Implement a policy in health facilities (LHD, clinics, etc.) addressing refusal of the HPV vaccine can occur only after education has been delivered by a medical provider. Support/advocate for law changes: Mandatory HPV vaccine prior to 9th grade entry. Include HPV vaccine in KRS 214.185 (1) reproductive healthcare for minors without parental consent Promote school-based policies that include HPV education, vaccination, and health promotion (prevention and disease control activities). 	 Recommend healthcare personnel, including providers, RNs, etc. follow guidelines to vaccinate all children by age 11. Support/advocate for law changes: Mandatory HPV vaccine prior to 9th grade entry. Include HPV vaccine in KRS 214.185 (1) reproductive healthcare for minors without parental consent. Engage parents, teens and young adults in advocacy efforts. Provide current HPV prevention and disease control policy guidelines and protocols to patients, parents and educators.

Goal	Organizational Stakeholder Actions	Community Stakeholder Actions	Individual Stakeholder Actions
Research	 <u>All Organizational Stakeholders</u>: Engage DPH, universities and other relevant organizations to serve as a data resource for all partners and stakeholders. Assure data is evidence-based and medically accurate before disseminating. Disseminate statistical findings and other data to stakeholders and partners. Continue research and evaluation of existing vaccinations; development of new vaccines which cover more strains and develop/enhance other disease control methods by pharmaceutical companies and other research centers. 	 <u>All Community Stakeholders</u>: Stay current on new medially accurate information, including evidence-based research. Keep accurate records of immunization, screening and other HPV related prevention and disease control activities. Report information to the proper data collection point. 	 Stay current on new medially-accurate information, including evidence-based research. Keep accurate records of immunization, screening and other HPV related prevention and disease control activities. Report information to the proper data collection point.



- 1. Stakeholders will report HPV-related activities to the DPH HPV Initiatives Team (HIT) a minimum of one time a year. Additionally, the HIT will monitor vaccine ordering, educational and promotional activities and other HPV related activities throughout each year. A status report will be sent annually to stakeholders to report activities from the previous year, report health outcome data, and discuss plans for the upcoming year.
- 2. The HPV Strategic Plan will be evaluated each year for effectiveness by the HIT. Strategies will be updated and added as needed. Stakeholders will be provided the opportunity for input during the evaluation process. Stakeholders may contact the Kentucky Immunization Program or the Division of Women's Health at any time during the year to ask questions and to provide input for the strategic plan.
- 3. Stakeholders will be notified of any updates or changes to the strategic plan via email or a website link.



For more information contact: Division of Epidemiology and Health Planning Kentucky Immunization Program 502-564-4478

or

Division of Women's Health Adolescent Health, Cervical Cancer, or Family Planning Programs 502-564-3236