



Dear Healthcare Provider,

As you may be aware, several human papillomavirus (HPV) types have been found to cause cancer in men and women. HPV causes most cervical cancers, as well as some cancers of the vulva, vagina, penis, anus, and oropharynx. According to the Centers for Disease Control and Prevention (CDC), HPV infections are responsible for about 27,000 new cancer diagnoses each year in the U.S.

In order to prevent these types of cancers, the CDC recommends pre-teen boys and girls get the HPV vaccine to protect against the contraction of these viruses and ultimately prevent the development of HPV related cancers. Two safe and effective vaccines against HPV are available, yet uptake rates of the vaccines remain below average, and a majority of our boys and girls in Kansas and Missouri are being left unprotected against HPV. In Kansas and Missouri, less than 49 percent of girls have received the vaccine. Kansas ranks dead last in the nation, and Missouri is near the bottom. Both states rank low for the number of boys who are vaccinated, as well.

In an effort to increase awareness and vaccination rates in your area, the MCA has compiled an assortment of resources in a toolkit to assist you in sharing factual information with your colleagues, healthcare partners and patients. This toolkit is intended to provide important resources to community stakeholders from diverse settings across Kansas and Missouri. We hope it will influence you to be an advocate for HPV vaccination. This toolkit includes materials to help you communicate with our local communities about the importance of receiving the HPV vaccine, including fact sheets; social media posts, informational flyers, and tips on addressing HPV vaccine with parents and patients

We encourage you to get involved, support and share the messages of HPV cancer prevention.

Thank you for all that you do to improve the health of Kansans and Missourians and for joining this important fight against HPV.

Sincerely,

Medical Director
Midwest Cancer Alliance & Center for Telemedicine & Telehealth

Background

What is HPV?

Human papillomavirus (HPV) is a group of over 200 different types of viruses. They can cause several different diseases, depending on the specific type of HPV, as well as where the infection occurs. Some diseases that HPV can cause include warts, precancerous changes, and cancer.

HPV is typically transmitted through direct skin-to-skin contact. There are over 200 known human papillomaviruses in existence and more than 40 of these viruses can be spread from person to person through direct sexual contact.

According to the Centers for Disease Control and Prevention (CDC), HPV is so common that almost everyone will be infected with HPV at some point in their lives. Although most HPV infections are asymptomatic, some persistent infections can lead to cancer in both men and women. HPV exposure can occur with any type of intimate sexual contact. In the U.S., HPV infections cause over 17,000 cancers in women and over 9,000 cancers in men each year.

If HPV infection is so common, is it really that bad?

High risk HPV are those that have been identified in causing cancer. High risk HPV types 16 and 18 are responsible for a majority of HPV attributed cancers. Each year, about 33,000 new cases of cancer are found among areas of the body where HPV is commonly present and nearly 27,000 of these cancers are thought to be caused by HPV. Alarmingly, virtually all cervical cancers are caused by HPV infections. Additionally HPV is attributed to 91% of anal cancers, 75% of vaginal cancers, 69% of vulvar cancers, 63% of penile cancers, and 72% of oropharyngeal cancers.

How do we prevent HPV infections?

Vaccination. HPV vaccines are safe and effective. They can protect against diseases (including cancers) caused by HPV when given in the recommended age groups. HPV vaccines are given in three shots over six months; it is important to get all three doses.

Two HPV vaccines—Gardasil® and Gardasil® 9—are recommended for girls and boys between 9 and 11 years old. Teen boys and girls who did not get the vaccine when they were younger should get it now. Young women can get HPV vaccine through age 26, and young men can get vaccinated through age 21. The HPV vaccine greatly reduces the likelihood of getting HPV related cancers.

Who should get the HPV vaccine & When?

The Advisory Committee on Immunization Practices (ACIP) is a committee established by the CDC and is comprised of medical and public health experts that develop recommendations on how to use vaccines to control diseases in the United States. The ACIP recommends routine vaccination at 11 or 12 years of age with Gardasil or Cervarix for females and Gardasil for males. Vaccinating against HPV can begin as early as 9 years of age in males or females. Research shows that vaccinating at 11 or 12 years old is most effective because it produces the highest amount of protective antibodies and provides protection before exposure to HPV. Catch-up vaccination is recommended for females 13–26 years old and males 13–21 years old. Males 22–26 years old may also be vaccinated if they are immunocompromised or have sex with men and were not previously vaccinated.

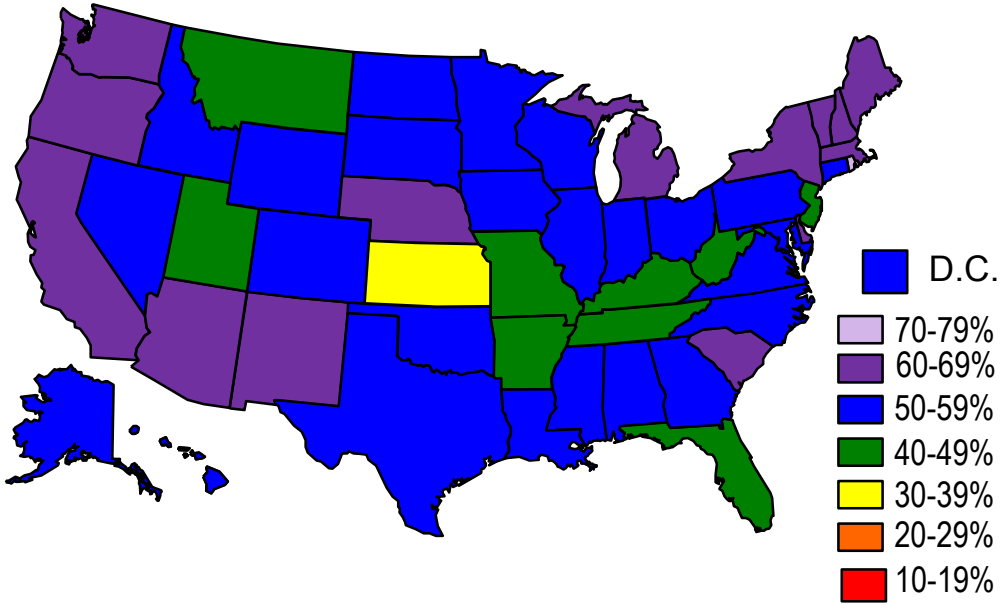
Where do we want our HPV vaccination rates to be?

The U.S. Department of Health and Human Services set a goal to have 80 percent of American girls ages 13 to 15 fully vaccinated by the year 2020. But four out of 10 girls remain unvaccinated, according to CDC statistics, and fewer than 6 out of 10 boys have been vaccinated.

HPV VACCINATION DATA

HPV Vaccination Rates by State

Estimated Vaccination Coverage with 1+ HPV
among Adolescent Girls, 2013
National Coverage = 57%

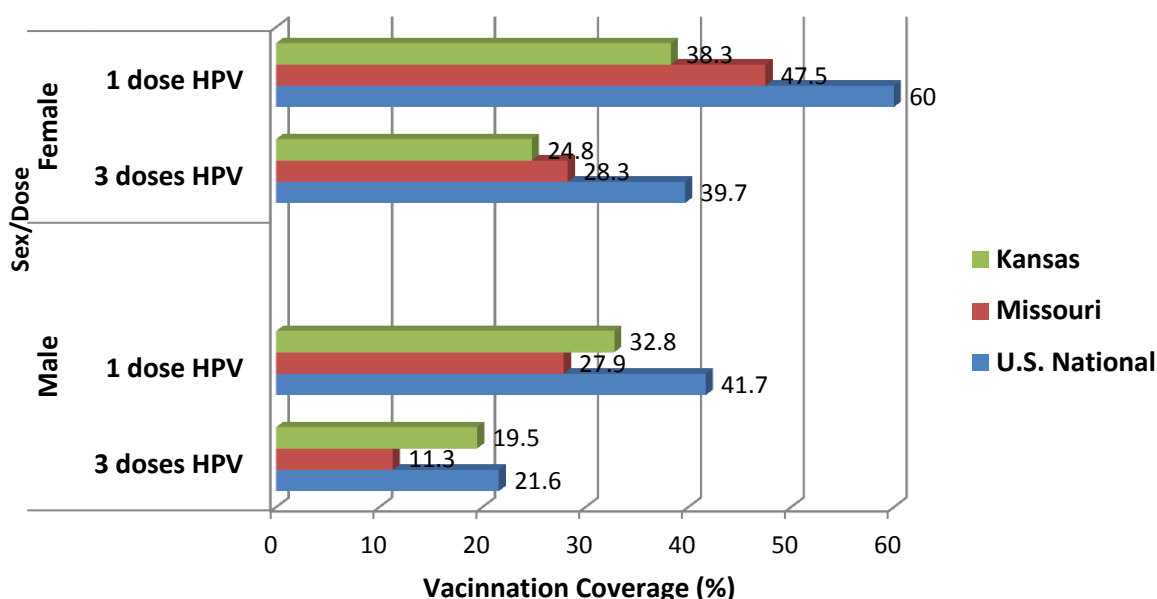


Source: CDC. National, state, and local area vaccination coverage among adolescents aged 13-17 years---United States, 2013.

National Immunization Survey (NIS)-Teen

The CDC conducts the National Immunization Survey (NIS) by random-digit-dialing on an annual basis for teens 13-17 years old. The NIS provides a nationally representative sample and estimates of vaccination coverage throughout the United States that can be analyzed nationally, by region, state, or metro areas.

2014 NIS Data: HPV Vaccination Coverage



Kansas and Missouri both fall behind the national average for both females and males among HPV vaccination coverage. The 2014 NIS teen data shows that the rates of HPV vaccine series initiation were 38.3% (KS) and 47.5 (MO) among females and 32.8% (KS) and 27.9 (MO) among males. Regarding HPV vaccine series completion in Kansas and Missouri, only 39.7% (KS) and 28.3 % (MO) of females and 11.3% (KS) and 19.5% of males completed the entire series in 2014. The vaccination rate for Tdap among adolescents is 79% for Kansas and 86% for Missouri, which exemplifies that high vaccination coverage is possible. However, HPV vaccination rates remain far too low demonstrating an HPV vaccination gap exists.

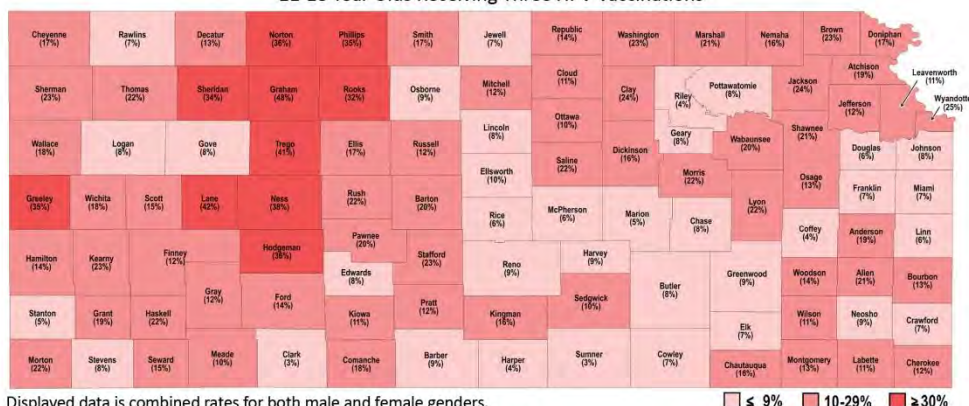
Limitations are present among the NIS data including: errors with self reporting, reliance on a single source for critical immunization data, issues with response rates and exclusion of rural immunization data.

Strike 3 Against HPV

Kansas is Last in the Nation for HPV Vaccination Coverage

Kansas HPV Vaccination Rates

11-18 Year Olds Receiving Three HPV Vaccinations

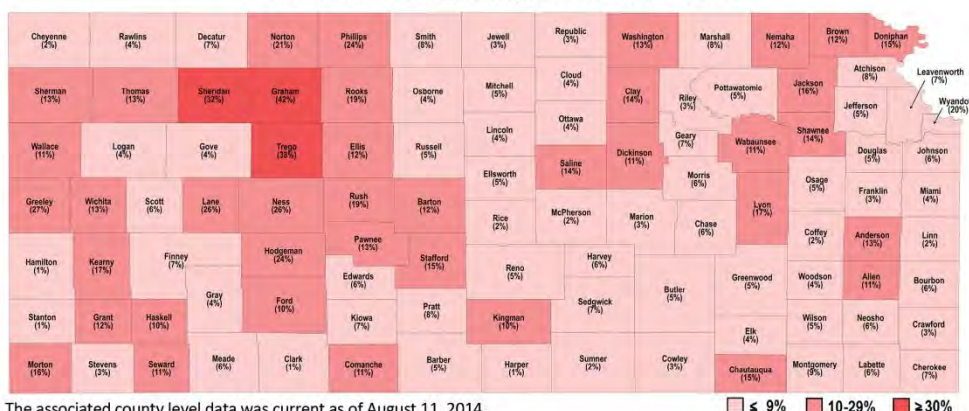


Displayed data is combined rates for both male and female genders.
The associated county level data was current as of August 11, 2014, when obtained from the Kansas Immunization Registry (KSWebIZ).



Kansas HPV Vaccination Rates

11-18 Year Old Males Receiving Three HPV Vaccinations

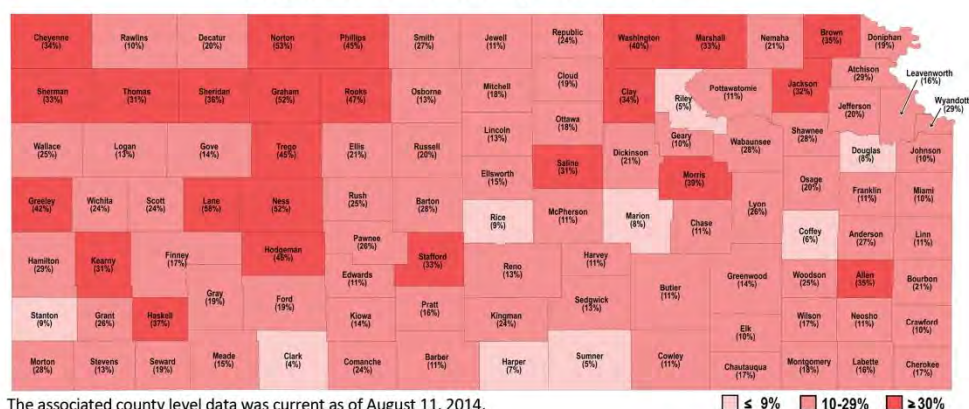


The associated county level data was current as of August 11, 2014, when obtained from the Kansas Immunization Registry (KSWebIZ).



Kansas HPV Vaccination Rates

11-18 Year Old Females Receiving Three HPV Vaccinations



The associated county level data was current as of August 11, 2014, when obtained from the Kansas Immunization Registry (KSWebIZ).



Action Plan

Rationale

HPV vaccination rates remain low across Kansas and Missouri in regards to both series initiation and series completion. Low HPV vaccination rates leave our communities vulnerable to HPV and HPV-associated cancers. This issue is a public health priority that requires urgent action. The use of an integrated, multifaceted approach is essential in the success of increasing HPV vaccination rates.

Target Audience

- Health care providers for adolescent boys and girls.
- Parents & guardians of adolescent boys and girls, especially 11 and 12 year olds.
- Adolescents
- Community partners promoting immunizations

Mission

To promote adolescent health through awareness and advocacy

Objectives

- Increase HPV vaccination rates
- Increase provider knowledge of the HPV vaccine
- Increase provider skillset to recommend & administer the vaccine
- Increase parent, caregiver, & adolescent knowledge & awareness regarding the HPV vaccine

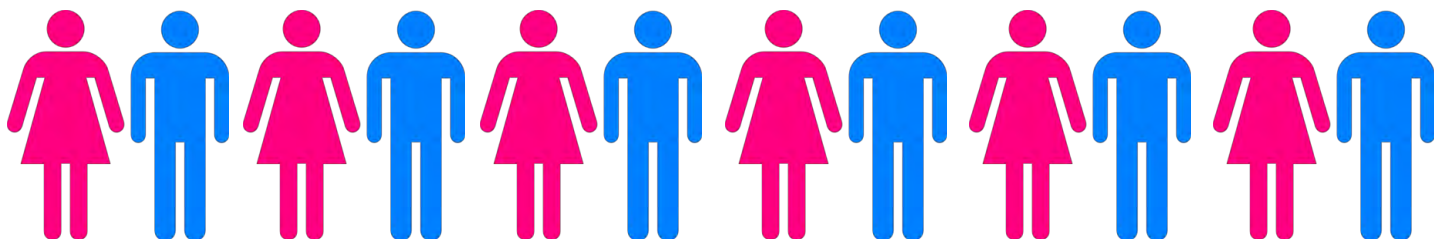
THE STAKEHOLDERS ROLE

- Spread the word using the messaging provided within this toolkit.
- Talk with parents & adolescents to increase knowledge and awareness about HPV, its associated cancers, and the HPV vaccine.
- Reach out to providers and tell them that their HPV vaccine recommendations matter.
- Share this project and toolkit with other community stakeholders in your network.
- Reach out and spread the message through social media. Use the sample Tweets and Facebook posts below to let your networks know what we're doing for HPV vaccination and how they can get involved! Hashtag is #Strike3againstHPV
- Always be an advocate for the HPV vaccine

Let's Talk About HPV

Human papillomaviruses are a group of more than **200** related viruses. More than **40** HPV types can be easily spread through direct contact with the skin and mucous membranes of infected people.

Not just for girls!



HPV vaccination is the best way to prevent many types of cancer in males and females

High-risk HPVs, can cause cancer. About **12** high-risk HPV types have been identified. **2** of these, HPV types, 16 and 18, are responsible for most HPV-caused cancers.

Girls and Boys
should begin
vaccine cycle at
age 11 or 12

All 3 doses
of the
vaccine
are required

HPV Vaccine
Protects
against several
types of HPV
related cancer

Vaccines are
safe and
effective

4 out of **10** adolescent girls AND **6** out of **10** adolescent boys have yet to start the HPV vaccine series of three shots, and are vulnerable to cancers caused by HPV infections

[#strike3againstHPV](#)



Strike 3 Against HPV



5 things Providers Can do to Increase Patient HPV Vaccination:

1. Give an effective recommendation for all preteen vaccines during the same office visit by telling parents their child needs three vaccines **today** to help prevent meningitis, HPV cancers, and pertussis.
2. Strongly recommend adolescent vaccines to parents of your 11 through 18 year old patients
3. Know the facts about HPV caused cancers and share them with patients and their parents.
4. Implement patient reminder and recall systems such as automated postcards, phone calls, and text messages to increasing completion of vaccination.
5. Utilize CDC's HPV resources in your office, on your websites and in your community to inform parents about the importance of HPV Vaccination.

Sources:

<http://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-fact-sheet>
<http://www.cdc.gov/vaccines/who/teens/vaccination-coverage.html>



HPV FACTS QUIZ

True or False

- | | | |
|--|---|---|
| 1. HPV caused cancers are rare | T | F |
| 2. Only females are at risk of developing cancer through HPV | T | F |
| 3. The HPV vaccine is only for the prevention of cervical cancer | T | F |
| 4. Only promiscuous individuals contract HPV | T | F |
| 5. All types of the HPV virus cause cancer | T | F |
| 6. Most adolescents have had at least one dose of the HPV vaccine prior to entering middle school | T | F |
| 7. Parents should consider the HPV vaccine after their child expresses an interest in sex | T | F |
| 8. The HPV Vaccine can be harmful to teens and adolescents | T | F |
| 9. Vaccinating pre-teens/teens for HPV increases their sexual activity | T | F |
| 10. The HPV vaccine should not be offered during the same visit as other vaccinations | T | F |
| 11. A strong recommendation from a healthcare provider may increase HPV vaccination rates | T | F |
| 12. Healthcare providers should wait for parents to initiate conversations around HPV vaccination | T | F |
| 13. Healthcare providers should put systems in place to remind patients to complete the HPV series | T | F |
| 14. Informing patients about HPV can be difficult for providers because there are not many materials to help address the questions parents and patients may have | T | F |



Answers: 1.F 2.F 3.F 4.F 5.F 6.F 7.F 8.F 9.F 10.F 11.T 12.F 13.T 14.F

Research Articles

Accelerating HPV Vaccine Uptake: Urgency for Action to Prevent Cancer. A Report to the President of the United States from the President's Cancer Panel. Bethesda, MD: National Cancer Institute; 2014; deainfo.nci.nih.gov/advisory/pcp/annualReports/HPV/PDF/PCP_Annual_Report_2012-2013.pdf

Annual Report to the Nation on the Status of Cancer, featuring incidence trends for human papillomavirus (HPV)–associated cancers and HPV vaccination. 2013; www.jnci.oxfordjournals.org/content/105/3/175

Beliefs, Behaviors and HPV Vaccine: Correcting the Myths and the Misinformation. Preventive Medicine. 2013; www.sciencedirect.com/science/article/pii/S009174351300176X

HPV Vaccination and Sexual Behavior in a Community College. Journal of Community Health. 2013; www.professorkinseth.com/uploads/1/9/1/2/19124971/hpv_and_risky_sexual_behavior.pdf

Safety of Quadrivalent Human Papillomavirus Vaccine Administered Routinely to Females. Archives of Pediatric and Adolescent Medicine. 2012; ncbi.nlm.nih.gov/m/pubmed/23027469/

Surveillance of Autoimmune Conditions Following Routine Use of Quadrivalent Human Papillomavirus Vaccine. Journal of Internal Medicine. 2012; ncbi.nlm.nih.gov/pubmed/21973261/

Reduction of HPV infections through vaccination among at-risk urban adolescents. Cummings T, Zimet GD, Brown D, et al. Vaccine 2012; ncbi.nlm.nih.gov/pubmed/22750043

Vaccine-Type Human Papillomavirus and Evidence of Herd Protection After Vaccine Introduction. Kahn JA, Brown DR, Ding L, et al. Pediatrics 2012; pediatrics.aappublications.org/content/early/2012/07/03/peds.2011-3587.abstract