

Indiana cervical cancer

The cervix is part of the female reproductive system – connecting the uterus to the vagina (or birth canal). Cervical cancer is an abnormal growth of cells on the cervix, or an abnormal growth of cells that began in the cervix. Cervical cancer is almost 100 percent preventable through regular screening, avoidance of controllable risk factors, and vaccination against the human papillomavirus (HPV).¹

Signs and symptoms of early-stage cervical cancer:

- Vaginal bleeding after sex
- Vaginal bleeding after menopause
- Vaginal bleeding between periods or periods that are heavier or longer than normal
- Vaginal discharge that is watery and has a strong odor or that contains blood
- Pelvic pain or pain during sex

Signs and symptoms of advanced cervical cancer:

- Difficult or painful bowel movements or bleeding from the rectum when having a bowel movement
- Difficult or painful urination or blood in the urine
- Dull backache
- Swelling of the legs
- Pain in the abdomen
- Feeling tired²

Diagnosis

If you have symptoms or screening test results that suggest the possibility of [cervical cancer](#), your doctor will do follow-up tests to find out if it is due to cancer or some other cause. They will usually start by asking about your personal and family medical history and by doing a physical exam, which will include a [pelvic exam](#) and rectovaginal exam. They may recommend diagnostic tests to find out if you have cervical cancer, and if so, whether it has spread to another part of the body. The results of these tests will also help you and your doctor plan treatment.³

How is cervical cancer diagnosed?

Colposcopy: Colposcopy is a procedure in which the healthcare provider inserts a [speculum](#) to gently open the [vagina](#) and view the [cervix](#). A vinegar solution will be applied to the cervix to help show abnormal areas. The healthcare provider then places an instrument called a colposcope close to the vagina. It has a bright light and a magnifying lens and allows the healthcare provider to look closely at the cervix. A colposcopy usually includes a biopsy.³

Biopsy: Biopsy is a procedure in which a sample of tissue is removed from the cervix so that a [pathologist](#) can view it under a microscope to check for signs of cancer.³

What can you do to prevent cervical cancer?

Cervical cancer is highly preventable and highly curable if caught early. Nearly all cervical cancers could be prevented by HPV [vaccination](#), routine cervical cancer screening, and appropriate follow-up treatment when needed.⁴

HPV vaccination: HPV vaccination is a safe and effective way to help prevent cervical cancer. [Gardasil 9](#) is the [FDA](#)-approved vaccine for females and males aged 9 to 45 in the United States. Gardasil 9 is approved to prevent precancers and cancers caused by seven cancer-causing HPV types (16, 18, 31, 33, 45, 52, and 58) and to prevent genital warts caused by HPV types 6 and 11. The HPV vaccine does not treat an existing HPV infection. Timing of HPV vaccination is important to consider. The HPV vaccine offers the most protection when given before a person becomes sexually active and could possibly be exposed to the types of HPV covered by the immunization.⁴

Cervical cancer screening: Two widely used screening tests are HPV tests and cytology tests (also known as Pap test or Pap smear). These tests can find high-risk HPV infections and abnormal cell changes and precancers that can be treated before they turn into cancer. So, it is important for people with a cervix to have regular screening tests starting in their 20s. For cervical cancer screening to be effective, people need to get timely screening and follow up of abnormal test results. Because of social, environmental, and economic disadvantages, certain groups may have difficulty accessing health care and, as a result, bear a disproportionate burden of cervical cancer.⁴

Condoms: Condoms, which prevent some sexually transmitted diseases, can decrease the risk of HPV transmission. However, they do not completely prevent it. Therefore, exposure to HPV is still possible in areas that are not covered by the condom.⁴

Risk factors

Long-lasting (persistent) infection with high-risk types of human papillomavirus (HPV) causes virtually all cervical cancers. Two high-risk types, HPV 16 and HPV 18, cause 70% of cervical cancers worldwide.

Nearly all people who are sexually active will become infected with HPV at some point in their lives. Most HPV infections go away on their own within a year or two as the [immune system](#) controls the infection. These short-term infections do not cause cancer. When a high-risk HPV infection lasts for years, it can lead to changes in the cervical cells, resulting in a precancerous lesion. If the precancerous lesion is not found and removed, it may eventually develop into cervical cancer.

People who become sexually active at a young age, especially before age 18, or have multiple sexual partners are more likely to become infected with a high-risk type of HPV.⁴

Factors that increase the risk that an HPV infection will cause cancer:

- Having a weakened immune system
- Smoking or breathing in secondhand smoke



- Reproductive factors
- Obesity⁴

Cervical Cancer Awareness Month, also sometimes referenced as Cervical Health Awareness Month, takes place nationally every January. Here are five easy steps to take to promote cervical cancer screening and HPV vaccination.

1. Use social media messaging to encourage cervical cancer screening. Consider one of these examples:

- Annual wellness exams are an important part of staying healthy! Start the conversation with your healthcare provider today to understand your risks for certain diseases and catch any potential issues early.
- January is #CervicalCancerAwarenessMonth. Set an example for the people you love by scheduling your annual wellness exam and encourage them to do the same.
- Screenings save lives! They're key to preventing and detecting breast and cervical cancers early.
When you know your risks, you're better equipped to take charge of your health. Some risks are in your control, like physical activity and alcohol use, while others, such as age and family history, aren't. Talk with your healthcare provider to find the screening that is right for you.
- The Indiana Breast and Cervical Cancer Program (IN-BCCP) provides access to breast and cervical cancer screenings, diagnostic testing and treatment for low-income Hoosiers across the state.
Call 317-233-7901 for more information.

2. Use these tools to increase human papillomavirus infection (HPV) vaccinations

- Protect your child from certain cancers later in life with HPV vaccine at age 11-12 years old. Visit the Indiana Department of Health's [Child and Teen Immunizations](#) page for more information and resources.
- Visit [Indiana Immunization Coalition](#) for more vaccination information for the state of Indiana.

3. Encourage clinicians to review educational materials for HPV vaccination and share that information with parents

- [Materials](#) for healthcare professionals, their office staff, and parents to help them understand the importance of vaccinating their children.

4. Support cervical cancer survivors

- Review the [free audio program](#) provided by the National Coalition for Cancer Survivorship.
- Provide survivors and their caregivers with a link to the Indiana Cancer Coalition's [Indiana Gynecological Cancer Toolkit](#), which is full of helpful information and resources.
- Link to the Option 3/MA 12 program if treatment for cancer is needed for low income (under 200% of poverty level) by calling 317-607-8393. Many individuals who are below 200% of poverty level are eligible for Medicaid coverage of their treatment through the Option 3/MA 12 program.



5. Stay current on cervical cancer prevention, screening, and treatment by reviewing these resources
 - a. American Cancer Society (ACS)
 - i. [Cervical Cancer](#)
 - b. Center for Disease Control and Prevention (CDC)
 - i. [Cervical Cancer](#)
 - c. Indiana Department of Health
 - i. [Indiana Cancer Facts and Figures](#)
 - ii. [Cancer Dashboard](#)
 - d. American Society of Clinical Oncology
 - i. [Cancer Treatment and Survivorship Care Plans](#)

HPV vaccination rates in Indiana

HPV two-dose vaccination coverage by sex and age among adolescents (2025)

HPV Coverage		
	Male	Female
9-12 Years	4.8%	4.2%
13-18 Years	29.6%	32.1%

- Data source: Children and Hoosier Immunization Registry Program

HPV two-dose vaccination coverage by age (2025)

HPV Coverage	
19-26 Years	37.3%
27-49 Years	10.6%
50-64 Years	0.0%
65+ Years	0.0%

- Adult age cohorts are determined based on ACIPs adult immunization schedule
- Data source: Children and Hoosier Immunization Registry Program

Incidence and mortality

Indiana cervical cancer incidence and mortality 2018-2022

	Cervical Cancer Incidence		Cervical Cancer Mortality	
	Count	Rate	Count	Rate
White non-Hispanic	1,200	8.72	419	2.91
Black non-Hispanic	134	7.99	61	3.60
Hispanic	102	11.00	27	2.90
Other	36	7.45	8	1.57U



Data Source: Indiana State Cancer Registry

- Excludes in situ and benign tumors
- Rates are age-adjusted per 100,000 people to 2,000 standard population
- *Statistically significantly different (high or low) compared to Indiana ($p<0.05$)
- X suppressed due to low counts
- U rates for case counts less than 20 are unstable

As shown in the table above, cervical cancer incidence in Indiana is higher in Black women and Hispanic women when compared to rates in white women. Similarly, Black women have the highest cervical cancer mortality rate of all races and ethnicities. This is similar to many other types of cancers in which disparities are seen.

Indiana cervical cancer incidence 2018-2022 by county

County	Count	Age-Adjusted Rate
Indiana	1,472	8.67
Adams	X	X
Allen	110	10.90*
Bartholomew	17	8.57U
Benton	0	0
Blackford	5	15.75U
Boone	11	5.82U
Brown	X	X
Carroll	X	X
Cass	11	11.25U
Clark	35	10.86
Clay	9	14.57U
Clinton	10	12.56U
Crawford	X	X*
Daviess	8	12.89U
Dearborn	14	10.49U
Decatur	7	10.28U
DeKalb	12	11.22U
Delaware	31	12.00



Dubois	7	7.00U
Elkhart	61	12.60*
Fayette	12	20.53U*
Floyd	17	8.08U
Fountain	X	X
Franklin	X	X
Fulton	X	X
Gibson	11	12.35U
Grant	19	10.00U
Greene	10	14.51U
Hamilton	37	4.10*
Hancock	7	3.33U*
Harrison	9	10.71U
Hendricks	30	6.51
Henry	14	11.47U
Howard	27	13.38
Huntington	10	10.60U
Jackson	10	8.85U
Jasper	X	X
Jay	X	X
Jefferson	11	11.79U
Jennings	7	11.66U
Johnson	25	6.26
Knox	13	17.90U
Kosciusko	18	8.86U
LaGrange	9	11.17U
Lake	118	8.90
LaPorte	23	7.74
Lawrence	6	5.58U
Madison	32	9.25



Marion	223	9.18
Marshall	8	7.23U
Martin	X	X
Miami	15	17.76U*
Monroe	16	5.57U*
Montgomery	9	9.82U
Morgan	11	6.86U
Newton	X	X
Noble	11	10.36U
Ohio	X	X
Orange	X	X
Owen	9	15.33U
Parke	X	X
Perry	X	X
Pike	X	X
Porter	24	5.73*
Posey	X	X
Pulaski	X	X
Putnam	9	11.30U
Randolph	7	11.73U
Ripley	9	10.83U
Rush	X	X
Scott	X	X
Shelby	6	5.02U
Spencer	X	X
St. Joseph	56	8.26
Starke	X	X
Steuben	10	11.14U
Sullivan	X	X
Switzerland	0	0



Tippecanoe	35	9.69
Tipton	X	X
Union	X	X
Vanderburgh	34	7.33
Vermillion	5	11.73U
Vigo	12	5.00U*
Wabash	X	X
Warren	X	X
Warrick	9	5.09U*
Washington	X	X
Wayne	29	18.14*
Wells	X	X
White	9	13.64U
Whitley	16	19.58U*

Data source: Indiana State Cancer Registry

- Excludes in situ and benign tumors
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- U rates for case counts less than 20 are unstable
- Cervical cancer in Indiana Office of Technology

National Breast and Cervical Cancer Early Detection Program (NBCCEDP): To find out if you qualify for free or low-cost breast and cervical cancer screening services in Indiana and where to get screened, contact [Indiana Breast and Cervical Cancer Program](#).

References:

1. <https://indianacancer.org/resources/cervical-cancer/>
2. <https://www.cancer.gov/types/cervical/symptoms>
3. <https://www.cancer.gov/types/cervical/diagnosis>
4. <https://www.cancer.gov/types/cervical/causes-risk-prevention>
5. <https://www.cdc.gov/hpv/hcp/educational-materials.html#office>
6. <https://indianacancer.org/resources/cervical-cancer/>
7. <https://www.cdc.gov/cancer/cervical/index.htm>

