

In Hereditary Colorectal Cancer, Knowledge Is Power

- and here's what you need to know.

Current Facts about Colorectal Cancer:

In 2018, there will be **~140,250 new diagnoses** of colorectal cancer¹

Colorectal cancer will be responsible for over **50,000 deaths**¹

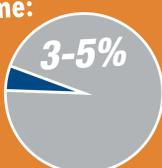
Inherited mutations will cause **over ~14,000 cases** of colorectal cancer²

Colorectal cancer is preventable – and knowledge gives you the power to make better decisions.

The #1 hereditary cause of colorectal cancer is called **Lynch syndrome** (also known as Hereditary Nonpolyposis Colorectal Cancer or HNPCC).

Lynch syndrome:

Accounts for **3-5%** of all colorectal cancers.³



Increases risk of colon cancer.



Put's people at an **80% greater risk** of developing colon cancer.⁴



↑ risk of cancer may increase with age.



1 in every 4 affected family members are found to have colorectal disease **by age 50**.⁴

By age 70 there is up to an **82% greater risk** for colorectal cancer.^{5,6}



Cancer risk matters.

In addition to colorectal cancer, Lynch syndrome increases risk for many other cancers:



Endometrial cancer by up to **71%**⁷



Stomach cancer by up to **19%**³



Ovarian cancer by up to **15%**⁷

Lynch syndrome can also lead to multiple cancer diagnoses.

People with Lynch syndrome who have been diagnosed with one cancer have a **50% greater risk** of developing a second cancer within **15 years**.⁷

Family and personal history matters when determining your hereditary risk.⁸

Lynch syndrome is caused by gene mutations involved in the repair of DNA replication errors.



These cancer-causing gene mutations run in families.

The following **three red flags** in family history may indicate an increased risk for Lynch syndrome.⁷

- First or second degree relative with colorectal or endometrial cancer before age 50
- 2 or more relatives with a lynch syndrome cancer, one before age 50
- Three or more relatives with a lynch syndrome cancer at any age

Your personal medical history is also important in determining risk.

The following **red flags** in your personal medical history may help identify if you would benefit from genetic testing.⁷

- Colorectal or endometrial cancer before age 50
- 2 or more Lynch syndrome cancers at any age
- Known Lynch syndrome mutation in the family

Genetics, family and personal history matters – armed with the right knowledge, preventative actions can be taken.



Millions of people may face the risk of **colon cancer** in their lifetimes – genetic testing can be used to determine increased risk.

Genetic testing for gene mutations associated with Lynch syndrome helps identify people who may be at risk for colorectal and other cancers.

Medical management may help to reduce your cancer risk or detect cancer earlier.

Preventive measures may significantly reduce the risk of colorectal cancer.



Colonoscopy reduces colorectal cancer mortality by **72%**⁹



Surgical removal of the uterus & ovaries reduces the risk up to **100%**

Knowing about a hereditary cancer mutation can help people to be a "Previvor".

Previvors are people with a predisposition to cancer, like a hereditary cancer mutation who have not had cancer.

Previvors know:

When decisions matter most – Genetic testing gives you the power of knowledge. Go to www.hereditarycancerquiz.com to see if you may be appropriate to be tested.



References:
 1. <https://www.cancer.org/cancer/colon-rectal-cancer/about/key-statistics.html> Accessed February 2018.
 2. <http://ascopubs.org/doi/abs/10.1200/JCO.2016.71.0012> Matthew B. Yurgelun, Matthew H. Kulke, Charles S. Fuchs, Brian A. Allen, Hajime Uno, Jason L. Hornick, Chinedu I. Ukaegbu, Lauren K. Brais, Philip G. McNamara, Robert J. Mayer, Deborah Schrag, Jeffrey A. Meyerhardt, Kimmie Ng, John Kidd, Nanda Singh, Anne-Renee Hartman, Richard J. Wenstrup, and Sapna Syngal Journal of Clinical Oncology 2017 35:10, 1086-1095.
 3. <https://www.cancer.net/cancer-types/lynch-syndrome> Approved by the Cancer.net editorial board May 2017. Accessed Feb 2018.
 4. Health benefits and cost-effectiveness of primary genetic screening for Lynch syndrome in the general population. Dinh TA, Rosner BI, Atwood JC, Boland CR, Syngal S, Vasen HF, Gruber SB, Burt RW Cancer Prev Res (Phila). 2011 Jan; 4(1):9-22.
 5. Aarnia M, Sunikila R, Pukkala E, et al. Cancer risk in mutation carriers of DNA-mismatched-repair genes. Int J Cancer 1999;81:214-218.
 6. Vasen F, Juul T, et al. Cancer risk in families with hereditary nonpolyposis colorectal cancer diagnosed by mutation analysis. Gastroenterology 1996;110:1020-1027.
 7. Rev Obstet Gynecol. 2012; 5(1): 42-29. PMID: PMC3349923 Genetic Testing for Lynch Syndrome, an inherited Cancer of the Bowel, Endometrium, and Ovary. J. Craig Strafford, MD, MPH, Principal Investigator.
 8. <https://lynchcancers.com> Accessed Feb 2018.
 9. Prevention of colorectal cancer by colonoscopy surveillance in individuals with a family history of colorectal cancer: 16 year, prospective, follow up study, Isis Dove Edwin et al (2005) BMJ.