

Colon Cancer

Introduction:

Cancer is a class of diseases that develop slowly as errors in the genetic makeup of cells uncontrollably divide and lead to mutations. The majority of these carcinogenic mutations are of unknown cause and therefore prevention becomes difficult to work out. Colorectal cancer is the second leading cause of cancer death. This cancer has many contributing risk factors like previous cancer diagnosis, polyps, Crohn's disease, colitis, and heredity. A person whose diet consists of high fat, red meat, and low fiber is at an increased risk for developing colon cancer. Other lifestyle factors that contribute to the risk of acquiring this cancer include excessive alcohol use and smoking. Some of the symptoms a person may experience include: abdominal pain and tenderness in the lower portion of the abdomen, blood in the stool, diarrhea, constipation or any other changes in bowel habits, narrow stools, unexplained anemia, and unexplained weight loss. If identified early, prior to the development of symptoms precancerous polyps and early-stage colon cancer leads to a 90% survival rate. I chose colon cancer, as my topic because I thought it would be interesting to analyze the reliability of the Internet's information for the second leading cause of death to Americans.

Section 1: Background and Problem Statement

- **Web site #1:** "Colon-cancer" (Score: 30)
- **Web address:** www.mayoclinic.com/health/colon-cancer/DS00035
- **Information:**

This Web site provides an easy to use layout of the topic by dividing the information into nine categories ranging from a succinct and clear definition to an empathetic coping and support section. The information within was clear and void of medical terminology that the public might find difficult to understand. Each section had its direct, easy to understand explanation; however, the Causes section was by far the most thorough because this section was broken down into further sections with helpful graphic images.

- **Web site #2:** “National Cancer Institute” (Score: 25)
- **Web address:** www.cancer.gov/cancertopics/types/colon-and-rectal
- **Information:**

This Web site was primordially concerned with all kinds of cancers and so the information presented detail, which was a plus. However, the information did not contain a copyright, date of publication or date it was last updated. Because the site lacked currency information, it substantially debilitated the reliability of its information.

- **Web site #3:** “Colon Cancer Foundation” (Score: 21)
- **Web address:** www.coloncancerfoundation.org/
- **Information:**

This Web site’s dedication to the memory of a young woman that died at an early age of colon cancer makes the information it presents that much more real. However, the site lacks a credentials page, copyright information, a site index, and a search capability. Furthermore, the currency information is missing and this seriously hinders the reliability of its information.

- **Web site # 4:** “Healthy People 2010” (Score: 21)
- **Web address:** www.healthypeople.gov/document/HTML/Volume1/03Cancer.htm
- **Information:**

This Web site is statistical in nature and does not address the topic of colon cancer in a simple way that most people can understand. In addition, despite the presence of copyright and currency information that give its claims weight, the Web site does not present its information in a logical manner. Navigation through the site is not user friendly, and its subheadings are not useful.

Section 2: Research

- **Web site #1:** “Colorectal cancer, one entity or three” (Score: 26)
- **Web address:**
www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=19283877

- **Information:**

This article discussed the importance of furthering research that will help further classification of colorectal cancer into three specific kinds. This is helpful, claimed the article, because if the data support that different mechanisms exist based on the location of the cancer; then treatment can be more targeted and specific, which will increase the chances of success. This site would be a great source of information for medical professionals and scholars, not for the average person.

- **Web site #2:** “Severe Toxicity related to the 5-Fluorouracil Leucovorin combination: A prospective study in Colorectal Cancer patients. (Score: 25)
- **Web site address:**
http://journals.lww.com/amjclinicaloncology/Fulltext/2003/02000/Severe_Toxicity_Related_to_the.21.aspx

- **Information:**

This article talks about the specific protocol of 5-Fluorouracil and Leucovorin, which is the Mayo Clinic regimen. This article seeks to establish the degree of toxicity this specific recipe of chemotherapy drugs produces; and it concludes that it is quite toxic. However, it does not say if the degree of toxicity is worth the degree of success the patients that did not acquire toxicity reached. This article, medically based, is not a useful information tool for the general public.

- **Web site #3:** “Colorectal Cancer” (Score: 26)

- **Web site address:**
<http://www.mayoclinicproceedings.com/content/82/1/114.full>

- **Information:**

This article talks about the vast improvement seen in adjuvant chemotherapy, which has gone from primarily using fluorouracil to now using oxaliplatin and irinotecan. The article goes into detail about the advancement of surgical and adjuvant treatments for colon cancer. This article tries to be simple in its presentation of the material; however, the author does assume a great deal of previous knowledge on part of the reader.

- **Web site #4:** “Adjuvant therapy for stage II colon cancer: an elephant in the living room?” (Score: 28)
- **Web address:**
<http://annonc.oxfordjournals.org/cgi/content/full/15/9/1310?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=colon+cancer&searchid=1&FIRSTINDEX=0&resourcetype=HWCIT>

- **Information:**

This article makes the distinction between the standard treatment for stage III colon cancer patients and those with stage II. The author makes the point that although resection is highly effective for many stage II patients, taking the regimen for these patients a step further with chemotherapy would ensure less chance of relapse. This article is clear in its message, however, the medical terminology makes it easy to misunderstand.

Section 3: Statistics

- **Web site #1:** “SEER stat fact sheets” (Score: 28)
- **Web address:** <http://seer.cancer.gov/statfacts/html/colorect.html>
- **Information:**

The information on this Web site was too technical to appreciate. However, the most interesting decipherable statistic is that African American men have

the highest incidence rate out of the white, Asian, American Indian races, and Hispanic ethnicity. Their incidence rate is 71.2 percent per 100,000 men compared to the American Indian race with 46.0 per 100,000 men.

- **Web site #2:** “Smoking Ups Colon Cancer Risk” (Score: 26)

- **Web address:** <http://www.bio-medicine.org/medicine-news-1/Smoking-Ups-Colon-Cancer-Risk-32384-1/>

- **Information:**

An interesting statistic found in this article said that smoking increases the risk of developing colorectal cancer by 18% and the risk of dying by 25%. This article was not difficult to understand because the information was printed as part of a news site.

- **Web site #3:** “Declines in New Cancer Cases and Mortality Rates Reported in the US” (Score: 25)

- **Web address:** <http://www.mskcc.org/mskcc/html/89541.cfm>

- **Information:**

The most notable statistic reported in the article was that the five-year survival rate between 1975 and 2003 went from 50% to 66%. This is an indication that treatment modalities are working. This article was informative and easy to understand.

- **Web site #4:** “Healthy People 2010” (Score: 21)

- **Web address:** www.healthypeople.gov/document/HTML/Volume1/03Cancer.htm

- **Information:**

The most interesting statistic found in this report was that in 1998 only 35% of adults aged 50 and older have received a fecal occult blood test within the last two years. The Healthy Person 2010 seeks to increase that by 15%. The

layout of the site was not useful, and it lacked graphics but the information was understandable.

Section 4: Consumer Information

- **Web site #1:** “Colorectal Cancer Basic Facts” (Score: 30)
- **Web address:** <http://www.cdc.gov/cancer/colorectal/pdf/fs-patient-basic.pdf>

- **Information:**

This Web site is perfect for someone who knows nothing about colon cancer because the information is straight to the point and basic. The information presented is helpful in part do to its simple subtitles like, what is colorectal cancer? And, who gets colorectal cancer, another subtitle, which is not intimidating.

- **Web site #2:** “NIH Senior Health” (Score: 27)
- **Web address:** <http://nihseniorhealth.gov/colorectalcancer/colorectalcancerdefined/01.html>

- **Information:**

This Web site is ideal for someone that knows absolutely nothing about colorectal cancer, because it defines the disease very specifically. This site also provides videos to enhance the learning.

- **Web site #3:** “Medline Plus Medical Encyclopedia: Colon Cancer” (Score: 31)
- **Web address:** <http://www.nlm.nih.gov/medlineplus/ency/article/000262.htm>

- **Information:**

This Web site uses simple language and provides the basic information for someone that knows little about the disease. This site would be ideal for a

novice Internet user. However, the best part about this site is, by far, its illustrations subsection, which helps paint a picture in the mind of the reader.

- **Web site #4:** “Just the Facts...Colorectal Cancer” (Score: 28)
- **Web address:** http://www.mdanderson.org/pdf/fs_mda_coloncancer.pdf
- **Information:**

This web pamphlet from the University of Texas is simple and succinct. The title “Just the facts”, describes exactly the amount of information provided inside. This means the person reading this pamphlet may need to consult other sources to learn more detail.

Conclusions

- **Section 1: Background and Statement**
 - **The best Web site:** Colon-Cancer
This was the best Web site because it received a grand total of 30 points, and that was because it was not a .gov, .edu or .org site. The information was easy to understand, and although it did not have many illustrations, the subsections were very informative.
 - **The worst Web site:** Healthy People 2010
This was the worst Web site because it received 21 points from the critique grid. This Web site lacks simple information that a person can remember and understand. The worst aspect of the site is its layout and subheadings, which do not make sense.
- **Section 2: Research**
 - **New information I learned:** I learned that if a cancer patient has an early staged cancer, it means they will probably not receive adjuvant therapy and they will likely relapse. I, also, learned that each specific cancer receives a special recipe of chemotherapeutic drugs.
- **Section 3: Statistics**
 - **New statistics I learned:** I learned that African American men have about 30% increased chance of acquiring colorectal cancer compared to American Indian men. I also learned that smoking increases a person’s chances of dying from colorectal cancer by 25%.

- **Section 4: Consumer Information**

- **The best Web site:** Medline Plus Medical Encyclopedia: Colon Cancer

This was the best Web site for basic information presented in a simple manner. In addition, this Web site received 31 points on the critique-grading grid.

Back to Betty C. Jung's Web site	http://www.bettyjung.net/
Back to Web site Critique Reports Directory	http://www.bettyjung.net/Pch201wsreports.htm

Web Critique Presentation

Background/Problem Statement

- **Why is your topic a Public Health Issue?** My problem is a public health issue because it is the second leading cause of death in the United States. More specifically colon cancer is a Public Health issue because with early detection it is curable.
- **Definition:** Colon cancer is a cancer, fast dividing cells, that start in the large intestine (colon) or the rectum (end of colon).

Research

- **Most interesting finding:** Patients diagnosed with early stage colon cancer do not usually receive chemotherapy.
- **Why interesting?** This was interesting because I assumed all cancer patients received chemotherapy.

Statistics

- **Most interesting finding:** African American men are about 30% more likely to acquire colon cancer than American Indians who have the lowest incidence of colon cancer.
- **Why interesting?** This was interesting to me because this is not a popular fact commonly reported on when colon cancer makes the news or in magazines; I always heard it was the elderly.

Consumer Information

- **Most interesting information:** The most interesting information that I found explained that a zero stage colon cancer diagnosis treatment means removing the cancer cells during a colonoscopy, and a stage I, II, and III cancer needs more extensive surgery to remove the part of the colon that is cancerous.
- **Why is it interesting?** This was interesting to me because I assumed all cancer stages required removal of the colon.