

TOGETHER, THE STRENGTH TO FIGHT CANCER



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FIGHTING CANCER WITH THE
PEOPLE YOU TRUST

Decatur County Hospital's 2011 Cancer Report

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Prepared by Community Cancer Care



DECATUR COUNTY HOSPITAL 2011 QUALITY IMPROVEMENT DATA STUDY: COLON CANCER

ABOUT COLON CANCER

Colorectal cancer, or large bowel cancer, includes cancerous growths in the colon and rectum. Many colorectal carcinomas are thought to arise from polyps in the colon. These mushroom-like growths are usually non-cancerous, however, some may develop into cancer over time. The diagnosis of colon cancer is usually through a colonoscopy, which involves the insertion of a thin, flexible, lighted tube to look at the inside of the colon. Colonoscopy after the age of 50 is recommended as a routine screening procedure.

Colorectal cancer affects approximately 147,000 patients in the United States every year. Among all cancers, it is the second leading cause of cancer death, affecting both men and women equally. Colorectal cancer is both sporadic and familial. Cancer of the colon arises sporadically in about 80% of those who develop the disease. Twenty percent of people are thought to have a genetic predisposition. Age also plays a definite role in the predisposition to colon cancer. Most cases occur after age 50, and the average age for those who develop the disease is 62.

The lifetime risk of developing colorectal cancer is 1 in 18 people. Surgery will cure almost 50% of all diagnosed patients, although almost 80,000 people develop metastatic colorectal cancer (which means the cancer has spread to other organs and/or lymph nodes) each year. US mortality rates from this cancer continue to decline (2.3% decrease from 1998 to 2004) as a result of effective screening programs, diagnosing early disease and effective therapies.

Colon cancer may be associated with a diet high in fat and calories. If you're inactive, you're more likely to develop colon cancer. Getting regular physical activity may reduce your risk. Obese people have an increased risk of colon cancer and an increased risk of dying of colon cancer when compared to people of normal weight.

Some colon polyps are a risk factor for colon cancer. Removing them at the time of colonoscopy reduces

the risk of colon cancer. Your risk of colon cancer increases if you have a family history of this cancer, especially in a close relative before the age of 55. Also, smokers are more likely to die of colorectal cancer than nonsmokers. An American Cancer Society study found that women who smoked were more than 40% more likely to die from colorectal cancer than women who had never smoked.

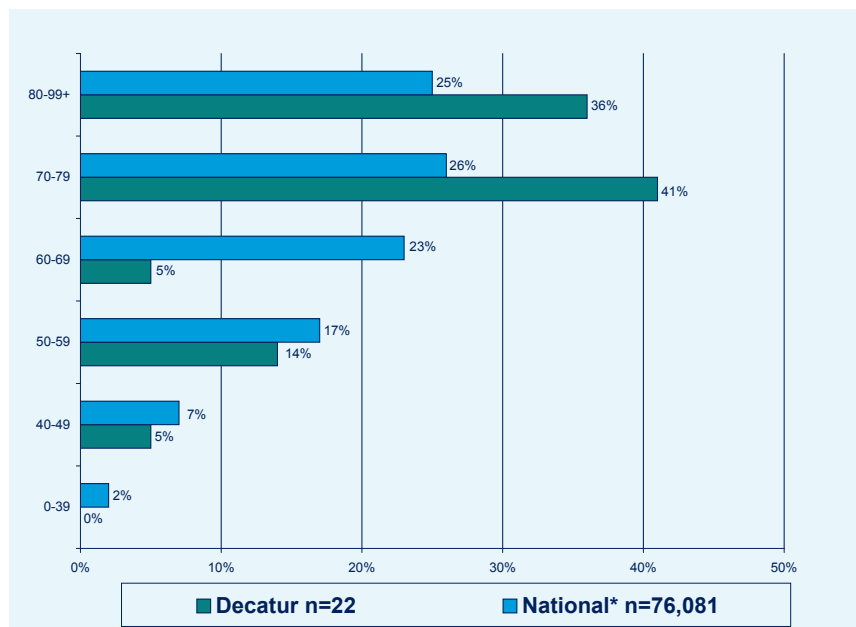
In our short-term study, we analyzed our colorectal cancer data at Decatur County Memorial Hospital between the years of 2006 and 2010. We reviewed the age, stage and treatment in the years 2006-2010, and we reviewed the data of five-year overall survival in the years 2001-2005.

Decatur County Memorial Hospital treated 22 patients with colon cancer from 2006-2010. We have analyzed these cases in detail, and have compared our experience to the National Cancer Data Base.

AGE AT DIAGNOSIS

In our study, the mean age at diagnosis was 70-79 years-old compared to 60-69 years-old seen on national data (see "Colon Cancer By Age" chart below). This illustrates that colorectal cancer presents in an older age group in our community compared to the national average.

DECATUR COUNTY HOSPITAL'S 2006-2010 ANALYTIC COLON CANCER BY AGE



*This chart illustrates the number of colon cancer patients by their age at Decatur County Memorial Hospital between 2006-2010 compared nationally. The word "analytic" refers to those cases diagnosed and/or treated initially at Decatur County Memorial Hospital. *National comparison: 2008, National Cancer Data Base, Chicago, IL.*

STAGE AT DIAGNOSIS (see chart this page)

Several medical societies have developed screening guidelines for colorectal cancer early detection. The American Cancer Society screening guidelines are the most widely utilized. Starting at age 50, both women and men should discuss the most appropriate testing option with their physician. The American Joint Committee on Cancer staging of colorectal cancer uses what is known as the “TNM” classification which was updated in 2010 (Seventh edition). T stage defines the extent of bowel wall penetration and not the tumor size. Lymph node status, or N stage, is important for prognosis. It means that if more than four positive lymph nodes (N2) are involved, the outcome is worse than if one to three lymph nodes (N1) are involved. The M stage indicates whether the cancer has spread (or metastasized) to other organs of the body. The most common stage at diagnosis in our institution was Stage II, which is similar to the national data.

Stage is important to understand because it can determine treatments and survival. A stage is given to a tumor at diagnosis so the physician can understand the extent of the disease.

Stage 0: Neoplasm that meets microscopic criteria for malignancy except invasion

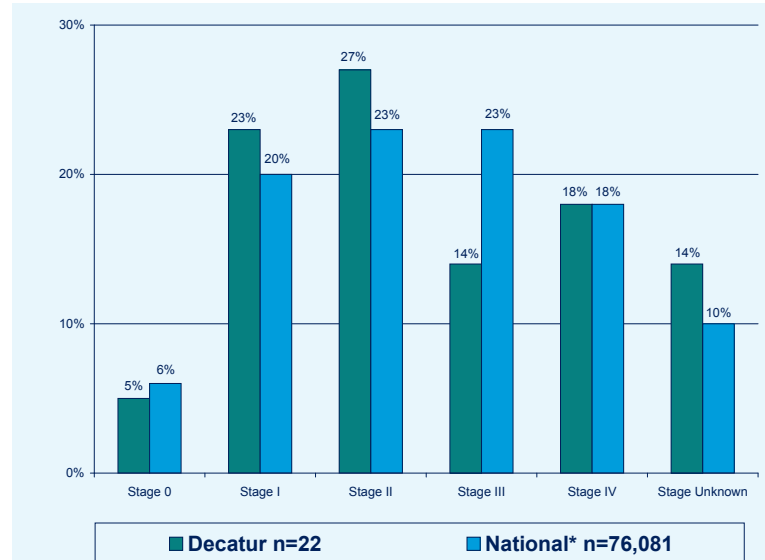
Stage I: Malignancy that is entirely confined to organ of origin

Stage II/III: Malignancy that has spread by direct extension to immediately adjacent organs/tissue or has metastasized to regional lymph nodes or organs

Stage IV: Malignancy that has spread beyond adjacent organs or tissues by direct extension or has developed secondary or metastatic tumors, metastasized to lymph nodes or is systemic in origin.

The AJCC (American Joint Committee on Cancer) formulates and publishes systems of classification of cancer, including staging and end results reporting, which is acceptable to and used by the medical profession.

DECATUR COUNTY HOSPITAL'S 2006-2010 ANALYTIC COLON CANCER BY AJCC STAGE



*This chart compares Decatur County Memorial Hospital with national statistics relative to “stage” for colon cancer. The word “analytic” refers to those cases diagnosed and/or treated initially at Decatur County Memorial Hospital. *National comparison: 2008, National Cancer Data Base, Chicago, IL.*

TREATMENT PROTOCOLS

The primary treatment for all invasive, non-metastatic colorectal cancers is surgery. For colon cancers, surgical resection of the involved bowel segment and mesentery is performed in conjunction with lymphadenectomy. For rectal cancers, resection of the primary tumor achieving negative margins is very important to decrease a local recurrence. In rectal cancer, the surgical approach will be determined according to location of the tumor in relation to the anal sphincter. Surgery alone is curative for more than 85% of stage I or early stage II patients. For patients with more advanced stage II disease, the five-year survival rate is approximately 70%. In stage III, which implies positive lymph node disease, the survival rate drops to 30 to 50% when surgery is used as the only therapeutic modality.

Radiation therapy is used as part of chemo-radiation therapy in rectal cancer to decrease local recurrence and improve resectability. There is limited role for radiation therapy in the management of colon cancer. As noted, Decatur County Memorial Hospital follows national trends and national guidelines for treatment recommendations. Fifty-nine percent of our patient population underwent surgery compared to 61% observed in the national data. Twenty-three percent received chemotherapy after surgery compared to 25% nationally.

SURVIVAL DATA

Pathologic staging remains the most important determinant of prognosis. Stage for stage rectal cancer has a worse prognosis than colon cancer. The survival data observed in our analysis demonstrates that Decatur County Memorial Hospital survival rates in the 50-59 age group are better than national numbers which might be correlated to early detection of colorectal cancer. This is most likely secondary to patients undergoing screening colonoscopy. The Stage I survival rate is lower (44%) compared to the national data (77%). The reason may be due to our small sample study. However, in more advanced stages (II, III, IV) our institution shows higher survival rates (73%, 69% and 17% respectively) than the national average for the same stages (66%, 54%, 9%).

CONCLUSION

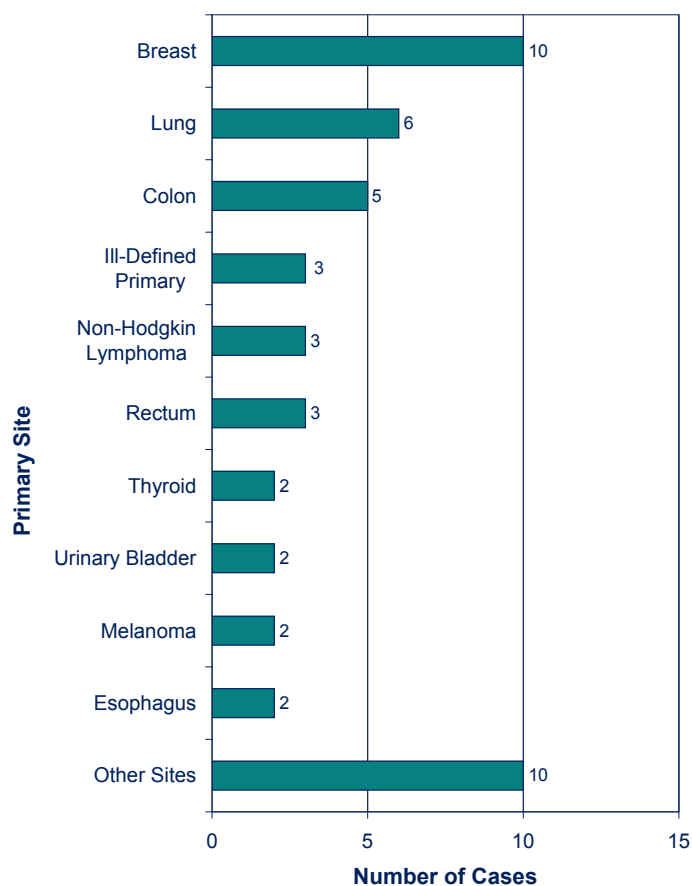
The first two years after initial treatment are critical since 80% of recurrences are observed within that time frame. The American Cancer Society recommends total colonic evaluation with colonoscopy or by obtaining double-contrast barium enema within one year from the day of resection, followed by either study every three to five years if no abnormalities are seen.

Jaime Ayon, MD
Medical Oncologist/Hematologist

DECATUR COUNTY HOSPITAL'S 2010 CANCER INCIDENCE BY SITE AND SEX COMPARED NATIONALLY

Male	Decatur		National		Female	Decatur		National	
	n=14		n=789,620			n=34		n=739,940	
Prostate	1	7%	217,730	28%	Breast	10	29%	207,090	28%
Lung	1	7%	116,750	15%	Lung	5	15%	105,770	14%
Colon & Rectum	3	21%	72,090	9%	Colon & Rectum	5	15%	70,480	10%
Urinary Bladder	1	7%	52,760	7%	Uterine Corpus	1	3%	43,470	6%
Melanoma Skin	0	0%	38,870	5%	Thyroid	1	3%	33,930	5%
Non-Hodgkin Lymphoma	2	14%	35,380	4%	Non-Hodgkin Lymphoma	1	3%	30,160	4%
Kidney	0	0%	35,370	4%	Melanoma Skin	2	6%	29,260	4%
Oral Cavity & Pharynx	0	0%	25,420	3%	Kidney	0	0%	22,870	3%
Leukemia	0	0%	24,690	3%	Ovary	1	3%	21,880	3%
Pancreas	0	0%	21,370	3%	Pancreas	1	3%	21,770	3%
All Other Sites	6	43%	149,190	19%	All Other Sites	7	21%	153,260	20%

This chart illustrates the total number of analytic cancer cases (those diagnosed and/or treated initially at Decatur County Memorial Hospital) in 2010 and breaks them down by site of origin and sex. National estimates provided by the "American Cancer Society: 2010 Cancer Facts & Figures." Excluded from the comparison are basal & squamous cell skin cancers and in situ carcinoma except urinary bladder.



DECATUR COUNTY HOSPITAL'S 2010 INCIDENCE OF CANCER BY SITE 48 ANALYTIC CASES

This chart illustrates the total number of analytic cancer cases (those diagnosed and/or treated initially at Decatur County Memorial Hospital) in 2010 and breaks them down by site of origin.

INDIANA UNIVERSITY HEALTH WORKS IN PARTNERSHIP WITH DECATUR COUNTY HOSPITAL'S CANCER CARE CENTER

Earlier this year, Indiana University Health acquired Indianapolis-based Community Cancer Care (CCC), the health care organization that has provided cancer care and programming to Decatur County Memorial Hospital for more than 25 years.

The acquisition will enable our cancer program to continue to grow and build on its successful history, as well as have greater access to the research and support services of the IU Simon Cancer Center. IU Health Cancer services works closely with Decatur County Memorial Hospital's leadership team, physicians and staff to further the CCC vision as well as maintain the highest level of service our patients have come to expect.

"When we started CCC 28 years ago, our vision was to provide access to high-quality cancer care for patients across rural Indiana – no matter where they lived. We worked together with Decatur County Memorial Hospital to build an infrastructure that is available 365 days a year, and patients have greatly benefited from our joint efforts. IU Health has additional resources to advance Decatur's oncology program, so it's time to pass the baton to them. CCC co-founder Sara Edgerton and I are honored to have worked with Decatur County Hospital's physicians, staff and patients. We are very proud of the accomplishments we've all worked toward," said William M. Dugan, Jr., MD, CCC co-founder and medical oncologist/hematologist.

"Because of CCC's efforts, cancer patients in Decatur County have had access to high quality oncology care here at our hospital for more than 25 years. We look forward to the opportunities this new relationship with IU Health presents," says Linda Simmons, Decatur County Memorial Hospital president and chief executive officer.

Decatur County Memorial Hospital's oncology program is accredited by the American College of Surgeons – Commission on Cancer – a national gold standard in cancer care. Of the 173 hospitals in Indiana, Decatur County Memorial Hospital is one of only 49 to hold this prestigious accreditation. In order to meet the standards necessary for Commission on Cancer approval, each cancer program must undergo an initial rigorous evaluation and performance review as well as document the 36 Commission on Cancer standards. Facilities with approved cancer programs (such as Decatur County Memorial Hospital's) must also undergo an on-site review every three years to maintain their approval. Decatur County Hospital was re-accredited in 2011 with five accommodations.

5 COLORECTAL CANCER QUICK FACTS

1. Colorectal cancer is the third most common cancer in both men and women.
2. Early stage colorectal cancer does not usually have symptoms. Therefore, it's important to detect colorectal cancer in its early stages via regular screening.
3. Colorectal cancer can be curable when diagnosed in early stages. Screening tests can often detect precancerous growths so that they can be removed before developing into cancer.
4. Your chance of developing colorectal cancer depends upon both genetic and non-genetic factors.
5. More than 90% of colorectal cancer new cases are diagnosed in individuals age 50 or older. Beginning at age 50, men and women who are at risk should begin screening. Talk to your physician regarding your individual risk factors.

Visit [cancer.org](https://www.cancer.org) for more information

RECOGNIZING THE SYMPTOMS OF COLORECTAL CANCER

If you experience any of the following symptoms, call your family physician right away. These could be related to colorectal cancer or other serious medical conditions.

- Change in bowel habits
- Diarrhea, constipation or a feeling that your bowel is not completely emptying
- Blood in the stool (bright red or very dark in color)
- Stools that are narrower than usual
- General abdominal discomfort (i.e., gas, bloating, fullness, cramping)
- Weight loss for no apparent reason
- Chronic anemia (i.e., constant tiredness)
- Vomiting

Visit [cancer.org](https://www.cancer.org) for more information

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