

GASTROINTESTINAL CANCERS OVERVIEW

Gastrointestinal cancers include tumors of the colon, rectum, stomach, pancreas, esophagus, anus, gallbladder, liver and bile duct. These cancers vary significantly in their incidence, mortality and available screening options.

Incidence & Mortality

Each year more than 270,000 people in the United States are diagnosed with gastrointestinal cancers and almost 135,000 die of these diseases. The American Cancer Society estimates that gastrointestinal cancers accounted for 19 percent of all new cancer diagnoses and more than 24 percent of all cancer deaths in 2007.

Nationwide, colorectal cancer is the third most common cancer in both men and women, and accounts for almost 57 percent of all gastrointestinal cancer diagnoses. An estimated 52,180 people died from colorectal cancer in 2007, making up 10 percent of all cancer deaths. With advances in screening techniques and rising screening rates, the incidence of colorectal cancer is on the decline, and mortality rates are decreasing.

Pancreatic cancer—often called the “silent killer” because it produces few early symptoms—accounted for nearly 14 percent of gastrointestinal cancer diagnoses, nearly 25 percent of gastrointestinal cancer deaths and 6 percent of all cancer deaths in 2007.

Cancer type	Estimated New Cases	Estimated Deaths
<i>All GI cancers</i>	271,250	134,710
Colon & rectum	153,760	52,180
Pancreas	37,170	33,370
Liver & intrahepatic bile duct	19,160	16,780
Esophagus	15,560	13,940
Stomach	21,260	11,210
Gallbladder & other biliary	9,250	3,250
Small Intestine	5,640	1,090
Anus, anal canal & anorectum	4,650	690
Other digestive organs	4,800	2,200

Survival Rates & Screening Recommendations

The decline in colorectal cancer incidence and mortality is primarily due to rising screening rates and improved screening techniques such as polyp removal, which can prevent the development of invasive cancers. Yet the overall survival rates for many other GI cancers remain low due to few effective screening techniques and the absence of clear, early symptoms. For example, patients with pancreatic cancer are typically diagnosed at an advanced stage and have very low (5 percent) five-year survival rates.

Five-Year Survival Rates for Select Gastrointestinal Cancers, 1996-2002

Cancer Type	All Stages	Local	Regional	Distant
Colon & rectum	64.1%	90.4%	68.1%	9.8%
Stomach	23.9%	61.9%	22.2%	3.4%
Esophagus	15.6%	33.6%	16.8%	2.6%
Liver	10.5%	21.9%	7.2%	3.3%
Pancreas	5.0%	19.6%	8.2%	1.9%

Gastrointestinal cancers are typically found unexpectedly—when a patient is receiving treatment for another condition or experiences symptoms that are confirmed as cancer-related through ultrasound, CT scan, endoscopy or biopsy. Usually symptoms present late in the course of the disease, and, with the exception of colorectal cancer, there are few screening recommendations for gastrointestinal cancers due to limited clinical evidence of efficacy.

*Colorectal Cancer Screening Recommendations**—The American Cancer Society recommends that beginning at age 50, people at average risk of colorectal cancer undergo:

- A fecal occult blood test (FOBT) or fecal immunochemical test (FIT) every year, or
- Flexible sigmoidoscopy (FSIG) every five years, or
- FOBT or FIT every year, plus FSIG every five years, or
- Double-contrast barium enema every five years, or
- Colonoscopy every 10 years

Other Screening Recommendations—Individuals with a personal or family history of colorectal polyps or cancers are advised to pursue a more aggressive and frequent screening regimen. Many doctors also recommend that patients with Barrett’s esophagus, a known risk factor for esophageal cancer, have an upper endoscopy and biopsy every two to three years to check for esophageal cancer. There are no screening guidelines for stomach, pancreatic and liver cancers.

Efficacy of Colon Cancer Screening Methods—While studies in recent years have examined less invasive screening alternatives to colonoscopy, none has proven as effective as colonoscopy for detecting polyps associated with colorectal cancer. A study published in January 2005 in the *Lancet* showed that conventional colonoscopy remains much more sensitive than other screening tests for colorectal cancer, finding 98 to 99 percent of tumors—about twice as many as virtual colonoscopy or barium enema.

Conversely, a study published in the *Annals of Internal Medicine* in 2005 found that a one-time, in-office FOBT detected blood in the stools of less than 5 percent of 2,665 patients later found to have tumors or precancerous colon polyps; the study showed blood was detected in the stools of 24 percent of patients who used a take-home FOBT, which requires two samples from three different bowel movements.

Adherence to Clinical Guidelines—The National Cancer Institute’s *Cancer Trends Progress Report 2007 Update* showed that screening for colorectal cancer remains low, though it is increasing. The report showed that between 1987 and 2005, the percentage of adults over 50 who had a colorectal endoscopy (e.g., sigmoidoscopy or colonoscopy) nearly doubled, from 27 percent to 50 percent, but that the number of those who had a home FOBT decreased from 22 percent in 2003 to 17 percent in 2005. Additionally, a study of more than 129,000 Americans, published in the October 2005 issue of the *American Journal of Public Health*, found that only 42 percent of men and 31 percent of women had ever received a colonoscopy or sigmoidoscopy for early colon cancer detection.

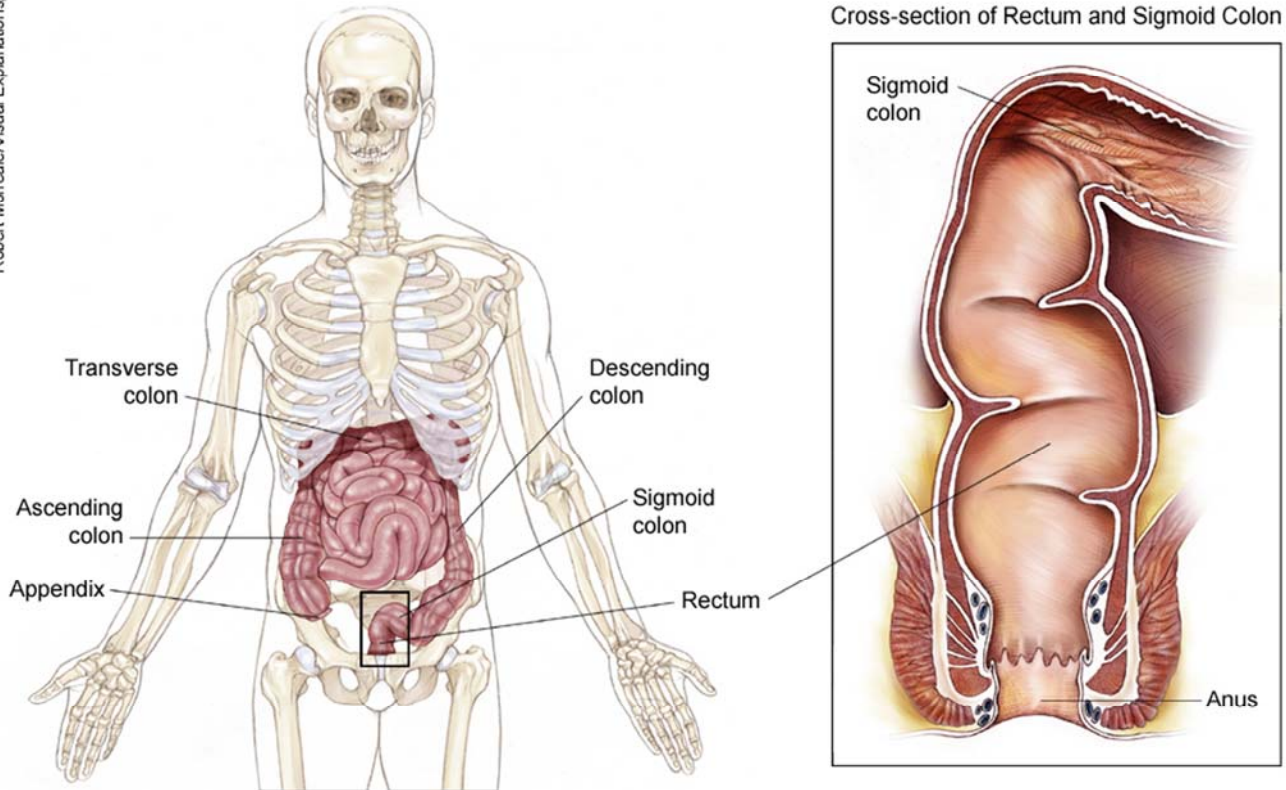
* The FOBT evaluates a stool sample smeared on a tissue pad treated with a blood-detecting chemical to assess stool blood content; the FIT evaluates stool blood content by testing a stool sample for hemoglobin; the flexible sigmoidoscopy procedure uses a lighted tube, inserted through the rectum, to view the lower colon; a double-contrast barium enema is used to coat the colon wall before a detailed X-ray is taken; and colonoscopy uses a longer version of a sigmoidoscope, also inserted through the rectum, to view the entire colon.

Medical Illustrations

The medical illustrations below, and others depicting different stages of cancer growth, are available for unrestricted print and broadcast media usage, at www.plwc.org/illustrations. Please use the following source credit: Illustration courtesy of the American Society of Clinical Oncology.

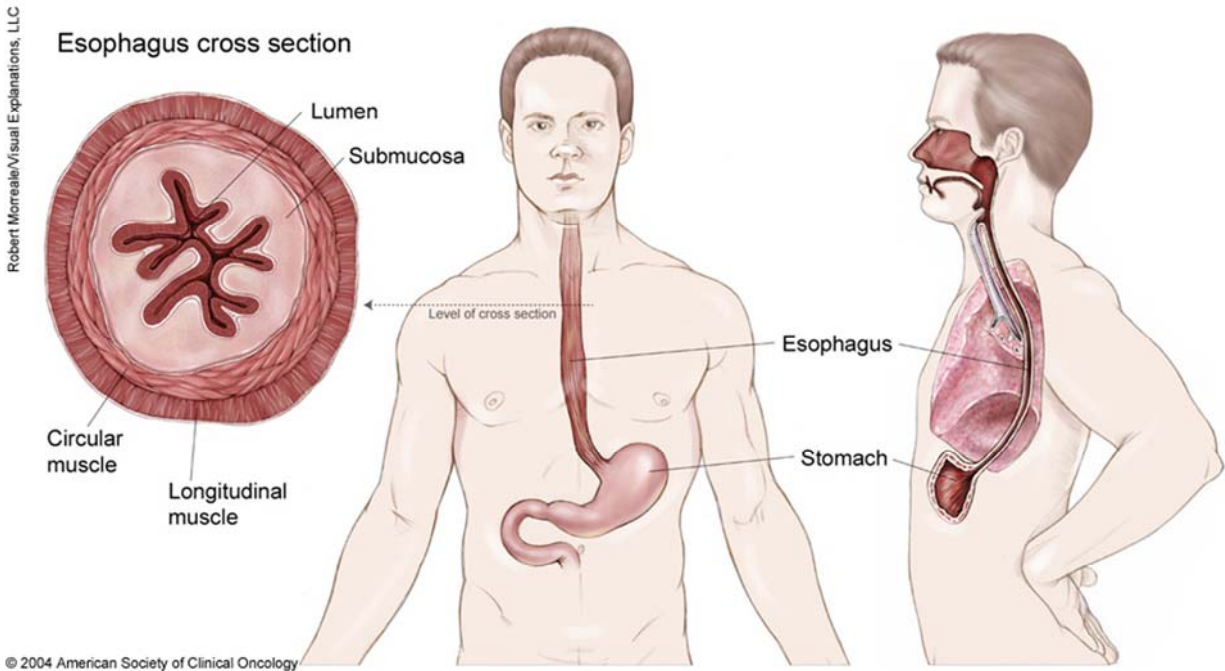
Colorectal Cancer

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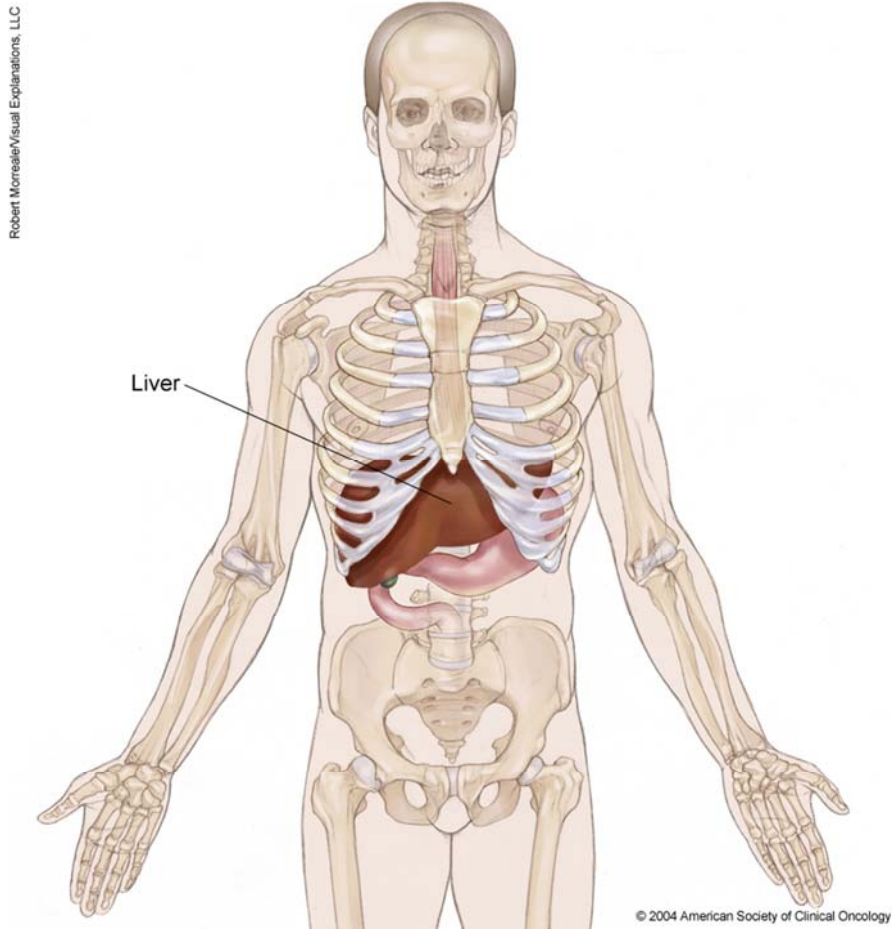


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Esophageal Cancer

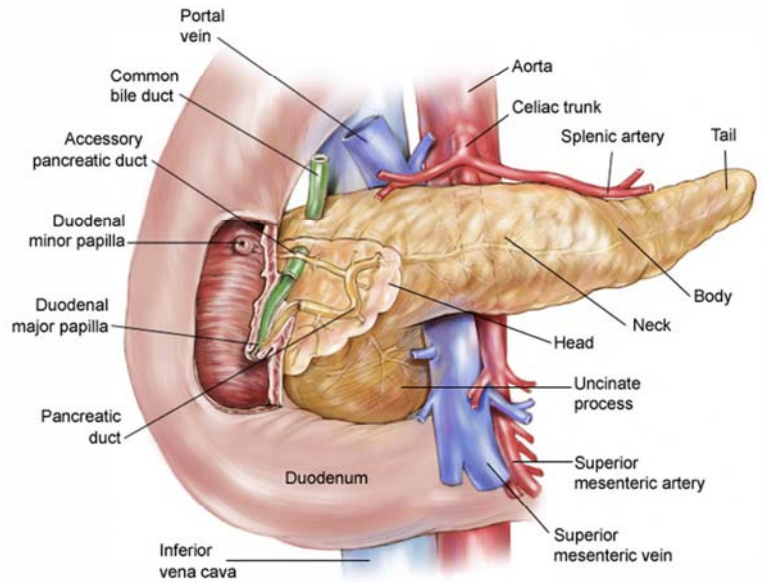
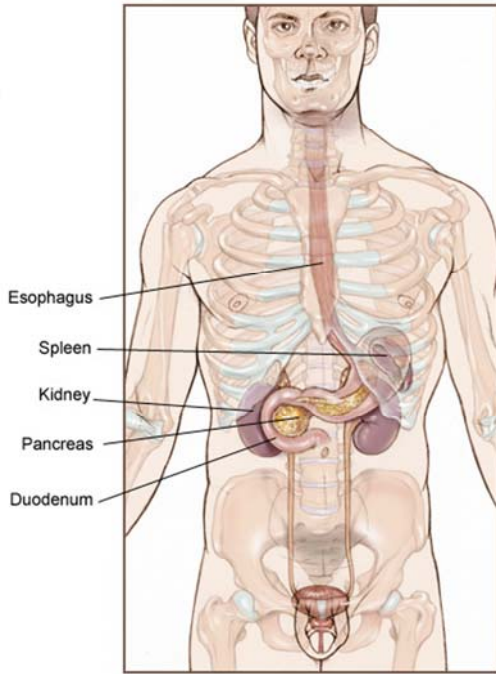


Liver Cancer



Pancreatic Cancer

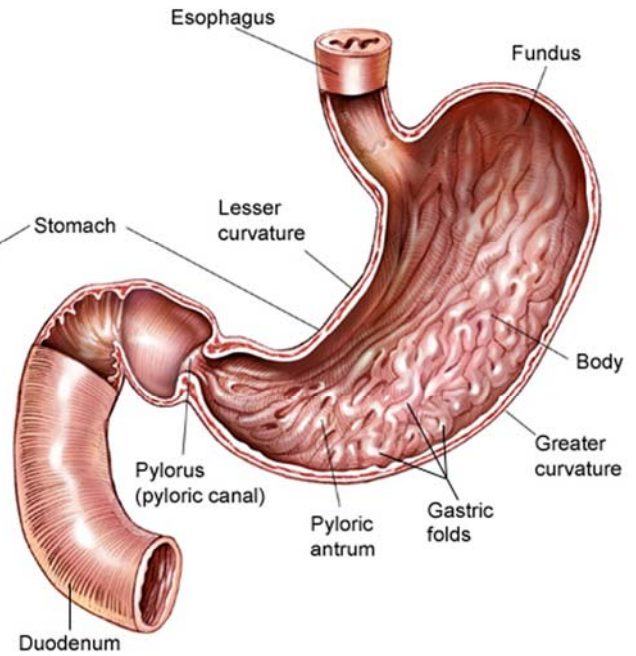
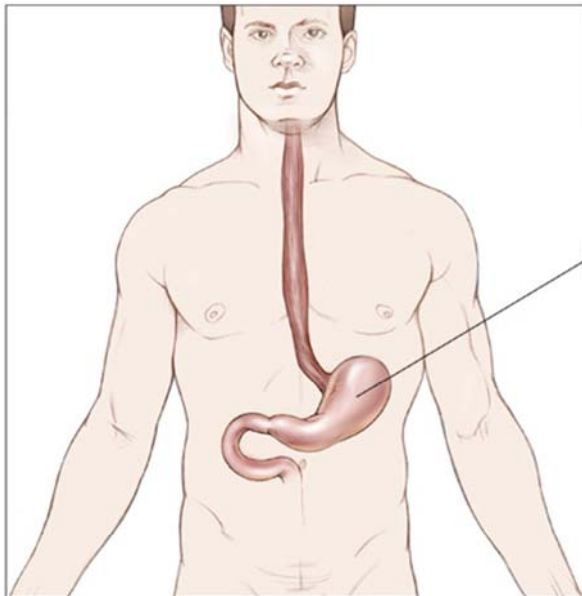
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Stomach Cancer

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