# Corectal Cancer: Raising Awareness, Saving Lives

Presented by Michael J. Gilbert, MD, MHCDS

Monadnock Gastroenterology

Associates

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Your life. Your health. Your Hospital.



### Dr. Michael J. Gilbert



Gastroenterologist – Monadnock Gastroenterology Associates

#### **Clinical Focus:**

- Colorectal cancer prevention & screening
- Endoscopic procedures
- (colonoscopy, upper endoscopy)
- Managing chronic digestive conditions

Dr. Gilbert is dedicated to patient education and preventive care. With extensive expertise in quality care while empowering patients to take charge of their health.

gastroenterology, he provides compassionate, high-



#### **Cancer Incidence by Gender**

- Colorectal cancer is the 3rd Most
   Common Cancer in both men and women.
- Early screening reduces mortality.
- Lifestyle changes can lower risk.

Mala				Comple		
	mate			remate		
Prostate	299,010	29%		Breast	310,720	32%
Lung & bronchus	116,310	11%	Y	Lung & bronchus	118,270	12%
້ອຼິ Colon & rectum	81,540	8%		Colon & rectum	71,270	7%
3 Urinary bladder	63,070	6%		Uterine corpus	67,880	7%
§ Melanoma of the	skin 59,170	6%		Melanoma of the skin	41,470	4%
Z Kidney & renal p	elvis 52,380	5%		Non-Hodgkin lymphoma	36,030	4%
Non-Hodgkin lyr	nphoma 44,590	496		Pancreas	31,910	3%
2 Oral cavity & pha	arynx 41,510	496		Thyroid	31,520	3%
E Leukemia	36,450	496		Kidney & renal pelvis	29,230	3%
Pancreas	34,530	3%		Leukemia	26,320	3%
All sites	1,029,080			All sites	972,060	
Male				Female		
Lung & bronchus	65,790	20%		Lung & bronchus	59,280	21%
Prostate	35,250	1196		Breast	42,250	15%
Colon & rectum	28,700	9%	<b>A T</b>	Pancreas	24,480	8%
E Pancreas	27,270	8%		Colon & rectum	24,310	8%
2 Liver & intrahepa	atic bile duct 19,120	6%		Uterine corpus	13,250	5%
p Leukemia	13,640	496		Ovary	12,740	4%
Esophagus	12,880	496		Liver & intrahepatic bile duct	10,720	4%
E Urinary bladder	12,290	4%		Leukemia	10,030	3%
3 Non-Hodgkin lyr	nphoma 11,780	4%		Non-Hodgkin lymphoma	8,360	3%
Brain & other ner	vous system 10,690	3%		Brain & other nervous system	8,070	3%
All sites	322,800			All sites	288,920	

Estimates are rounded to the nearest 10, and cases exclude basal cell and squarnous cell skin cancers and in situ carcinoma except urinary bladder. Estimates do not include Puerto Rico or other US territories. Ranking is based on modeled projections and may differ from the most recent observed data.

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#### Introduction to Colorectal Cancer

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MARCH IS COLORECTAL CANACENESS MONTH

- 1 in 3 people will have an adenoma (benign tumor) by age 45.
- ~1 in 20 will get colorectal cancer in their lifetime.
- Approximately 150,000 new cases are diagnosed each year, with 52,000 deaths annually.



#### nign tumor) by age 45. r lifetime. agnosed each year,



### Local Impact: Colorectal Cancer at MCH

### MARCHIS COLORECTAL AWARENESS MONTH

- 10 colorectal cancer cases discovered at MCH since March 2024.
- What this means:

Screening at Monadnock Community Hospital is actively detecting and preventing cancer.

• Reinforces why early detection saves lives.



#### Anatomy of the Colon



- Colorectal Cancer can develop anywhere in the colon.
- Most cancers start as polyps in the lining.
- Different locations can cause different symptoms.



### Warning Signs of Colon Cancer



Common Symptoms:
Blood in stool
Persistent diarrhea or constipation
Unexplained weight loss
Abdominal pain or bloating
Weakness and fatigue

Early detection improves outcomes.
Seek medical advice if symptoms appear.



#### **Colon Polyp Progression to Cancer**

• Stages of Progression: Hyperproliferation  $\rightarrow$ Adenomatous polyp  $\rightarrow$ Precancerous dysplasia → Invasive cancer



hyperproliferation

benign

- Regular screening prevents progression.
- Polyp removal during colonoscopy reduces cancer risk.

malignant



### The Development of Colorectal Cancer – Polyp to Cancer





- Early-stage polyps: Often benign but have the potential to become cancerous.
- Precancerous polyps: Show changes that increase the risk of cancer.
- Advanced colorectal cancer: Can spread if not detected early.
- Prevention: Early removal of polyps through colonoscopy significantly reduces cancer risk.



### **Colon Cancer Survival Rates by Stage**

Colon Cancer Stage	Survival Rate
Stage 1	92%
Stage IIA	87%
Stage IIB	63%
Stage IIIA	89%
Stage IIIB	69%
Stage IIIC	53%
Stage IV	11%



- Stage IIA: 87% Stage IIB: 63% Stage IIIA: 89% Stage IIIB: 69% Stage IIIC: 53% Stage IV: 11%
  - Emphasizes the Importance of Routine Screening.

#### • Early Detection is Key: • Stage 1 survival rate is 92%

#### Survival Drops with Progression:



### **Colorectal Cancer Screening Guidelines**







#### • Average Risk: Start screening at age 45. • Family History of CRC or Polyps: More frequent screening is needed. Personal History of Colon Polyps: Surveillance based on findings. • Methods:

- Colonoscopy, stool-based tests (FIT, Cologuard), CT colonography. • Follow-Up:
- Positive tests require colonoscopy.



#### **Guardant Shield – New Blood Test for Colorectal Cancer**

- **Effectiveness:** 83% overall detection rate for colorectal cancer.
- Sensitivity: 87.5% for early-stage cancer; 13.2% for precancerous lesions.
- **Convenience:** Requires a simple blood draw, making it easier than stool-based tests.
- Limitations: Lower detection rate for precancerous lesions compared to colonoscopy.





#### ALIST

#### SHIELD: NEW TEST FOR COLON CANCER

- Study of 7,800 patients
- Blood test found 83% effective
- 87.5% sensitivity for State I, II, or III colorectal cancer
- 13.2% sensitivity for advanced precancerous legions



#### Cologuard – At-Home Stool DNA Test & Awareness Campaign





- How It Works: Detects DNA mutations and blood in stool samples.
- Screening Recommendation: Every 3 years for average-risk individuals.
- Effectiveness: ~92% sensitivity for colorectal cancer but less effective for precancerous polyps.
- Follow-Up: A positive result requires a colonoscopy.
- Public Awareness Campaign:

Promotes the convenience of non-invasive, at-home screening. Encourages early detection and compliance with screening guidelines.

Uses a friendly mascot to make screening more approachable.



### **Comparing Colorectal Cancer Screening Methods**

• Next-Gen Cologuard:

**Sensitivity:** 94% for colorectal cancer, 43%

for precancerous lesions.

Advantage: Higher accuracy for earlystage detection.

• FIT Test (Fecal Immunochemical Test): **Sensitivity:** 67% for CRC, 23% for advanced lesions.

Advantage: Cost-effective and widely available.

 Cologuard improves early cancer detection, but colonoscopy remains the most definitive test.

Most advan colonoscop finding (ind lesion)
CRC, any
Stage I-I
Advanced P Cancerous I (APLs)
High-gra dysplasia



nced by dex	Next-gen Cologuard (N=20,176)	FIT (N=20,176)
	Sensitivity (%)	Sensitivity (%)
	94	67
	93	65
Pre- Lesions	43	23
ade a	75	47



### Virtual Colonoscopy vs. Standard Colonoscopy



• Virtual Colonoscopy (CT Colography): Uses low-dose CT scanning to create a 3D image of the colon. No sedation required, making it a non-invasive alternative to colonoscopy.

#### • Detection Rate:

90% of polyps greater than 10mm detected.

Less effective for detecting sessile (flat) polyps, which are harder to visualize.

#### • Limitations:

Requires full bowel prep.

If abnormalities are found, a follow-up colonoscopy is required for removal.

#### • Best For:

Patients unable or unwilling to undergo standard colonoscopy.

#### Standard Colonoscopy:

Direct visualization and removal of polyps. Most effective in detecting and preventing cancer.



### Colonoscopy – The Gold Standard for Colorectal Screening

- How It Works: A flexible camera is inserted to examine the colon for polyps or abnormalities.
- Polyp Removal: If found, polyps can be removed on the spot to prevent cancer.
- Effectiveness: Colonoscopy detects 88-93% of polyps and reduces colorectal cancer deaths by 67%.
- Who Needs It: Recommended starting at age 45 for average-risk individuals.



### **Understanding the Risks vs. Benefits of Colonoscopy**

Risk





1 in 95



 Colonoscopy is a Safe & Effective Screening Tool Detects 88-93% of polyps Reduces colorectal cancer deaths by 67%

• Complication Rates Are Low:

Overall risk: 0.5%-1% Perforation: 1 in 1,000 cases Bleeding: 1 in 3,000 cases Other risks: Range from 1 in 91 to 1 in 2,500

• Risk vs. Reward:

The lifetime risk of developing colorectal cancer is  $\sim 1$  in 20. Early detection saves lives and outweighs the rare risks of complications. Most complications are mild and treatable, while untreated colorectal cancer can be fatal.



- Car accidents caused 29K deaths in 2024
- 57K American deaths in the Vietnam War
- Colorectal cancer deaths: 52K per year



### **Colonoscopy and Polyp Removal – Step-by-Step**

#### Detection and Removal:

A colonoscopy allows direct visualization and removal of polyps before they become cancerous.

#### Managing Complications:

In rare cases of bleeding, medical clips are used to stop it effectively.

#### Effectiveness:

Removing polyps during colonoscopy significantly reduces colorectal cancer risk.

 Early detection and polyp removal are key to preventing colorectal cancer.





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#### Hemostatic Clips – Preventing and Treating Bleeding During Colonoscopy



 What Are Hemostatic Clips? patients.

When Are They Used?

After polyp removal, biopsies, or in cases of bleeding ulcers.

#### How They Work:

Securely hold tissue together, promoting healing and complications.

These tools make colonoscopy safer and minimize risks for patients.

### Small metal clips placed on the colon wall to prevent or stop bleeding and minimize risks for

- preventing



### The New Hampshire Colonoscopy Registry (NHCR) – Advancing Screening Data



• What is NHCR? colonoscopy data. patient outcomes.

• Why It Matters:

Tracks polyp detection rates, patient demographics, and procedure quality. Provides valuable insights to enhance colorectal cancer prevention efforts.

 Participation in registries like NHCR helps refine best practices and improve patient care.



- A statewide initiative to collect and analyze
- Helps improve screening effectiveness and





# **Monadnock** Gastroenterology associates



### Questions



## **Monadnock** Gastroenterology associates

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