Healthy Arizona
WORKSITES
A PUBLIC HEALTH INITIATIVE

HEALTHY ARIZONA WORKSITES PROGRAM (HAWP) PRESENTS:

COLON CANCER SCREENING AND TREATMENT

Presented by:

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The University of Arizona Cancer Center at Dignity Health
St. Joseph's Hospital and Medical Center

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WEBINAR HOUSEKEEPING

WELCOME

All lines have been muted.

Please type any questions into the chat or Questions panel and we will do our best to answer them all at the end.

All handouts and a copy of the presentation slides are available in the Handouts panel.

Please complete the survey that will be emailed out after the presentation

A recording will be added to the library of HAWP webinars on our website within 48 hours.

Special thanks to our supporting partner Dignity Health for their generous support in making this webinar possible.

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Q&A

PLEASE ENTER YOUR
QUESTIONS IN THE CHAT.

Colon and Rectal Cancer Screening and Treatment

Early Detection Improves Outcomes

Anathea Powell, MD, FACS, FASCRS
Colon and Rectal Surgeon
July 21, 2020

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Outline

- Overview of Colon and Rectal Anatomy, Function and Cancer
- Colorectal Cancer Statistics in the US and Arizona
- Colorectal Cancer Screening Guidelines and Options
- Colonoscopy: What to Expect
- Colorectal Cancer Treatment and the Role of the Multidisciplinary Cancer Program at the Dignity Health Cancer Institute
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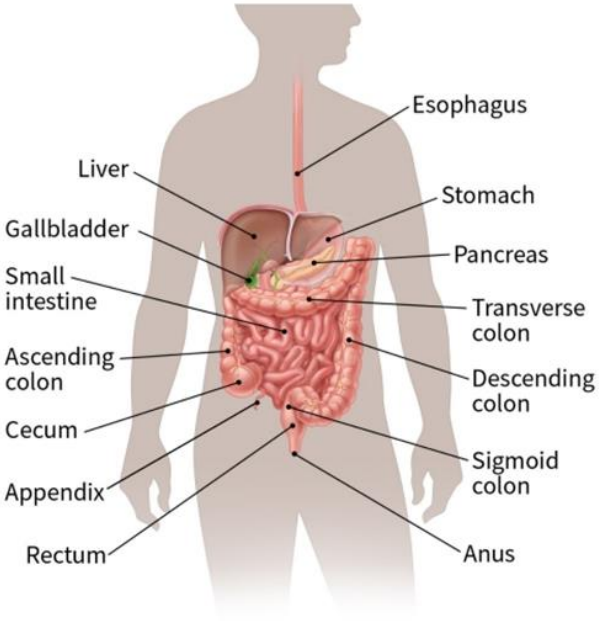
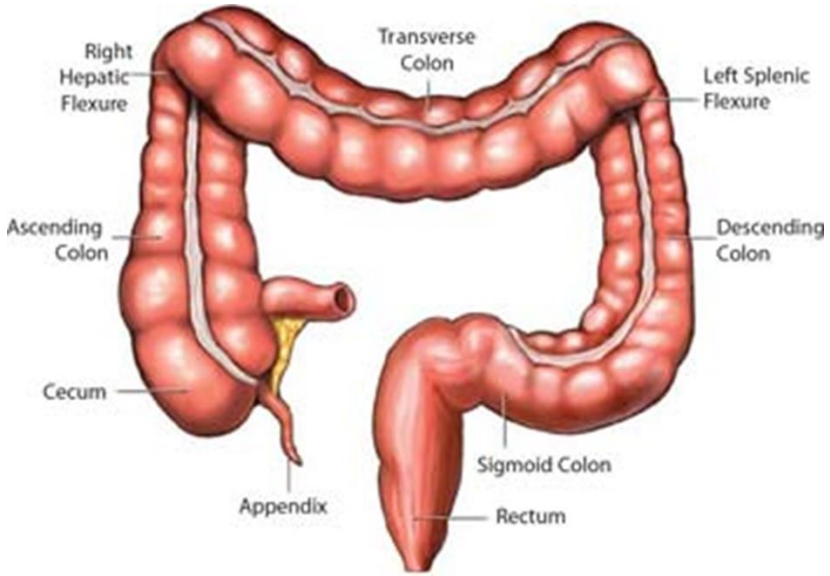
Colon and Rectal Anatomy





Anatomy of Large Intestine

www.cancer.org/cancer/colon-rectal-cancer/about/what-is-colorectal-cancer.html

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Functions of Bowel

SMALL BOWEL

- Absorption of
  - Fluid
  - Electrolytes
  - Vitamins and minerals
- Digestion and absorption of
  - Carbohydrates
  - Protein
  - Fat

LARGE BOWEL (COLON)

- Water absorption
- Electrolyte exchange

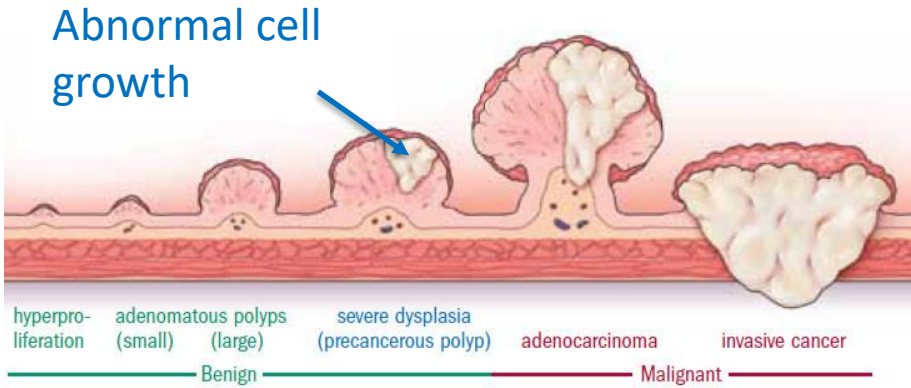
RECTUM

- Last part of the colon
- Stores stool for bowel movement

Colon and Rectal Cancer

- What is colon or rectal cancer?
  - A cancer that starts in the colon or rectum

- How does it start?
  - Most start as a polyp
  - Growth on the lining of the colon



Source: Harvard Health

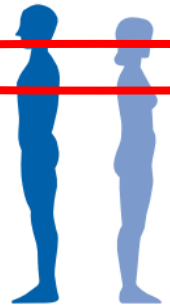
https://www.cancer.org/cancer/colon-rectal-cancer/about/what-is-colorectal-cancer.html

New Cases and Death Estimates for Common Cancers in the US: 2020

Figure 3. Leading Sites of New Cancer Cases and Deaths – 2020 Estimates

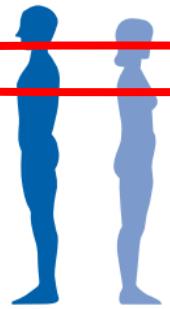
New Cases (Estimate)

Male			Female		
Prostate	191,930	21%	Breast	276,480	30%
Lung & bronchus	116,300	13%	Lung & bronchus	112,520	12%
Colon & rectum	78,300	9%	Colon & rectum	69,650	8%
Urinary bladder	62,100	7%	Uterine corpus	65,620	7%
Melanoma of the skin	60,190	7%	Thyroid	40,170	4%
Kidney & renal pelvis	45,520	5%	Melanoma of the skin	40,160	4%
Non-Hodgkin lymphoma	42,380	5%	Non-Hodgkin lymphoma	34,860	4%
Oral cavity & pharynx	38,380	4%	Kidney & renal pelvis	28,230	3%
Leukemia	35,470	4%	Pancreas	27,200	3%
Pancreas	30,400	3%	Leukemia	25,060	3%
All sites	**893,660**		**All sites**	**912,930**	



Deaths (Estimate)

Male			Female		
Lung & bronchus	72,500	23%	Lung & bronchus	63,220	22%
Prostate	33,330	10%	Breast	42,170	15%
Colon & rectum	28,630	9%	Colon & rectum	24,570	9%
Pancreas	24,640	8%	Pancreas	22,410	8%
Liver & intrahepatic bile duct	20,020	6%	Ovary	13,940	5%
Leukemia	13,420	4%	Uterine corpus	12,590	4%
Esophagus	13,100	4%	Liver & intrahepatic bile duct	10,140	4%
Urinary bladder	13,050	4%	Leukemia	9,680	3%
Non-Hodgkin lymphoma	11,460	4%	Non-Hodgkin lymphoma	8,480	3%
Brain & other nervous system	10,190	3%	Brain & other nervous system	7,830	3%
All sites	**321,160**		**All sites**	**285,360**	



Estimates are rounded to the nearest 10, and cases exclude basal cell and squamous 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.

Risk:
Men: 4.4% (1 in 23) and Women: 4.1% (1 in 25)

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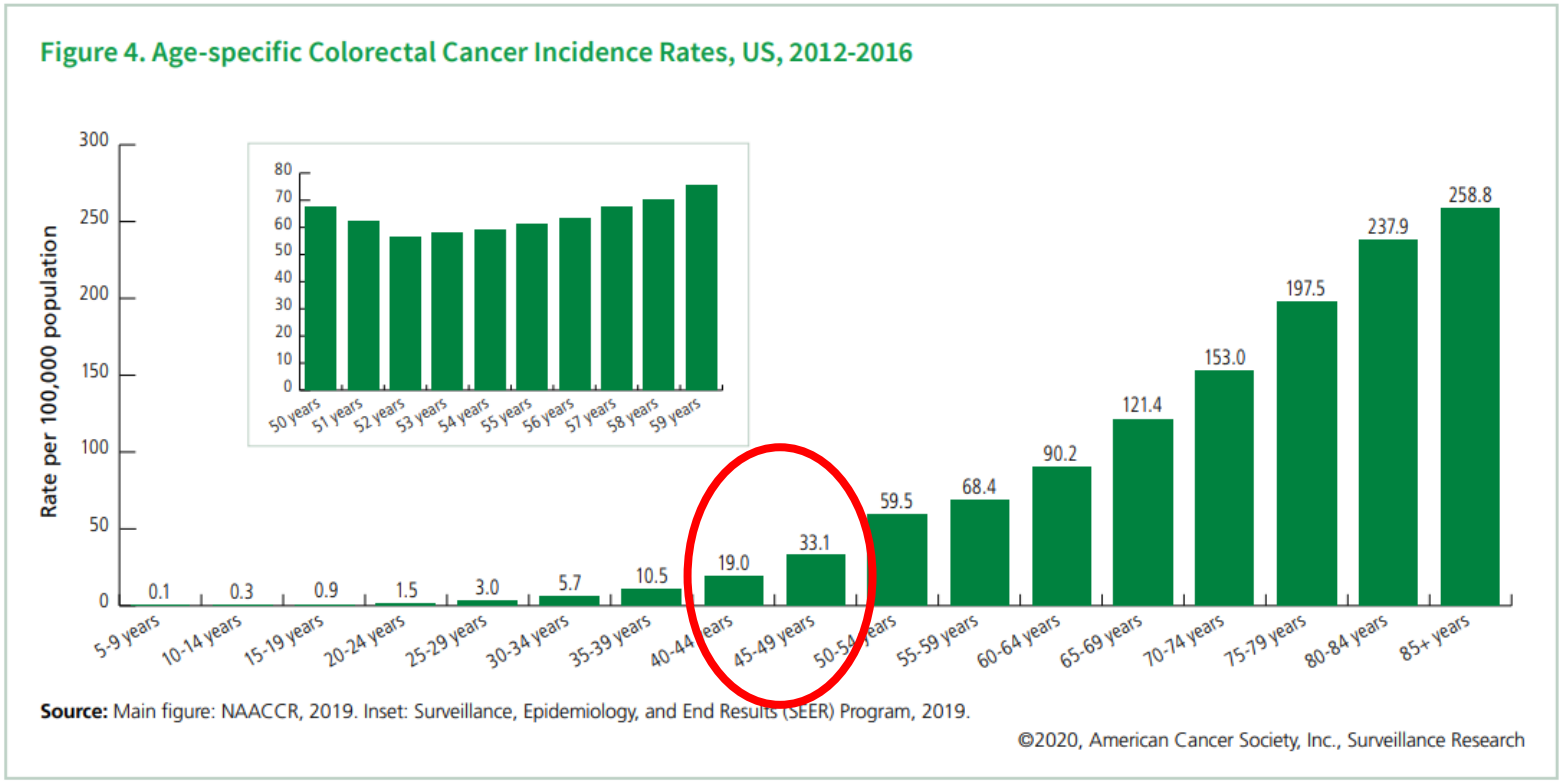
Colorectal Cancer Incidence by Age



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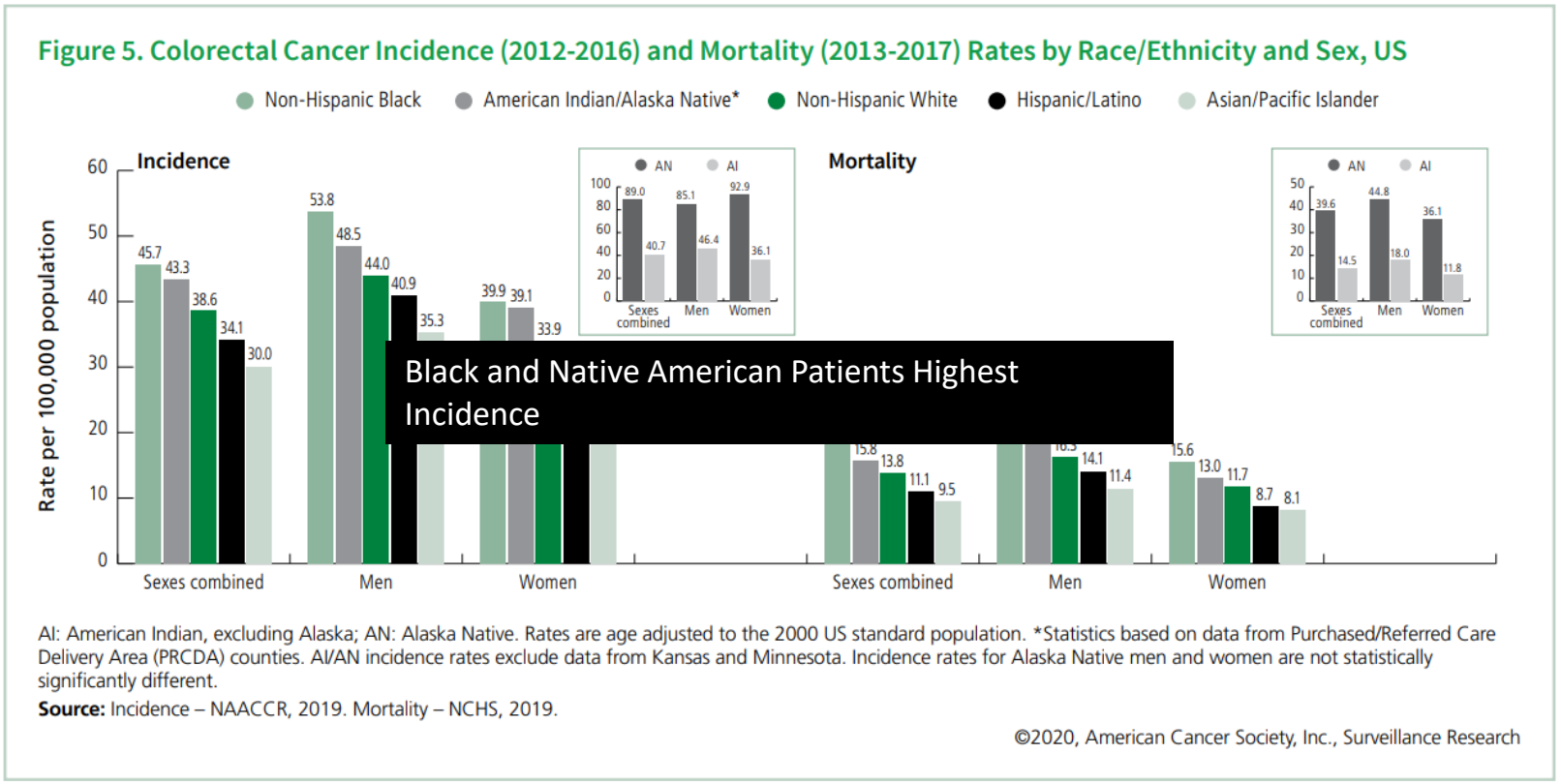
Colorectal Cancer Incidence and Mortality by Race/Ethnicity and Sex



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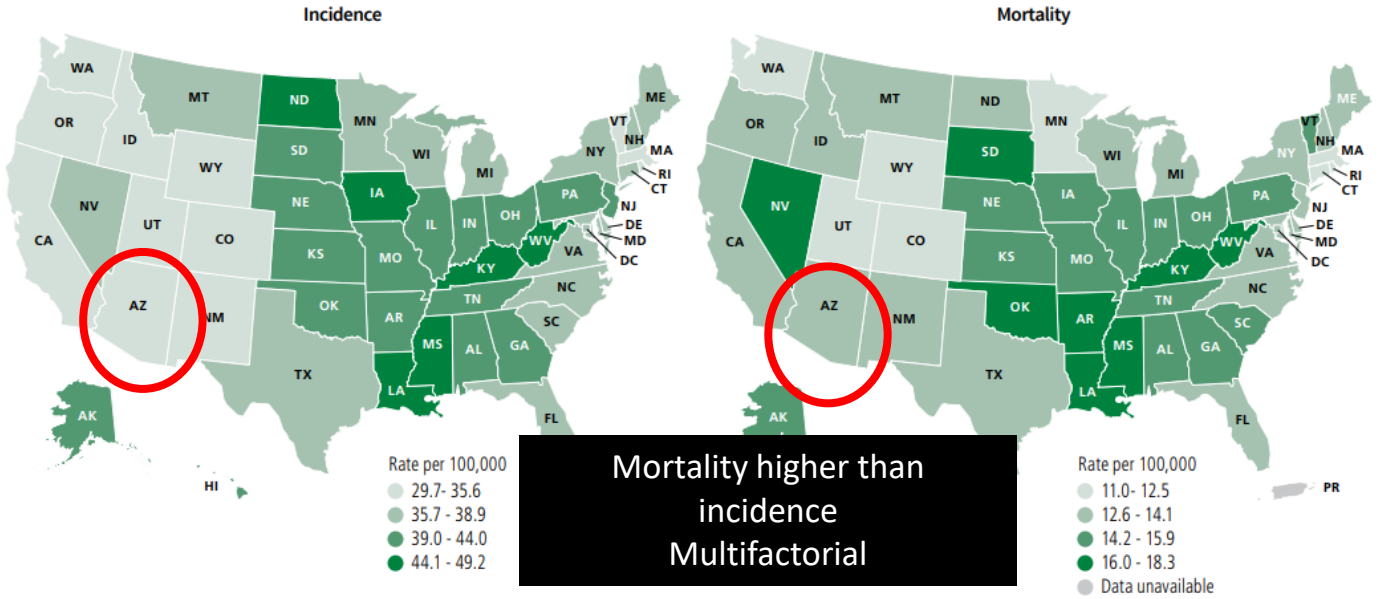
Colorectal Cancer Incidence and Mortality in Arizona

Figure 9. Colorectal Cancer Incidence (2012-2016) and Mortality (2013-2017) Rates by State, US

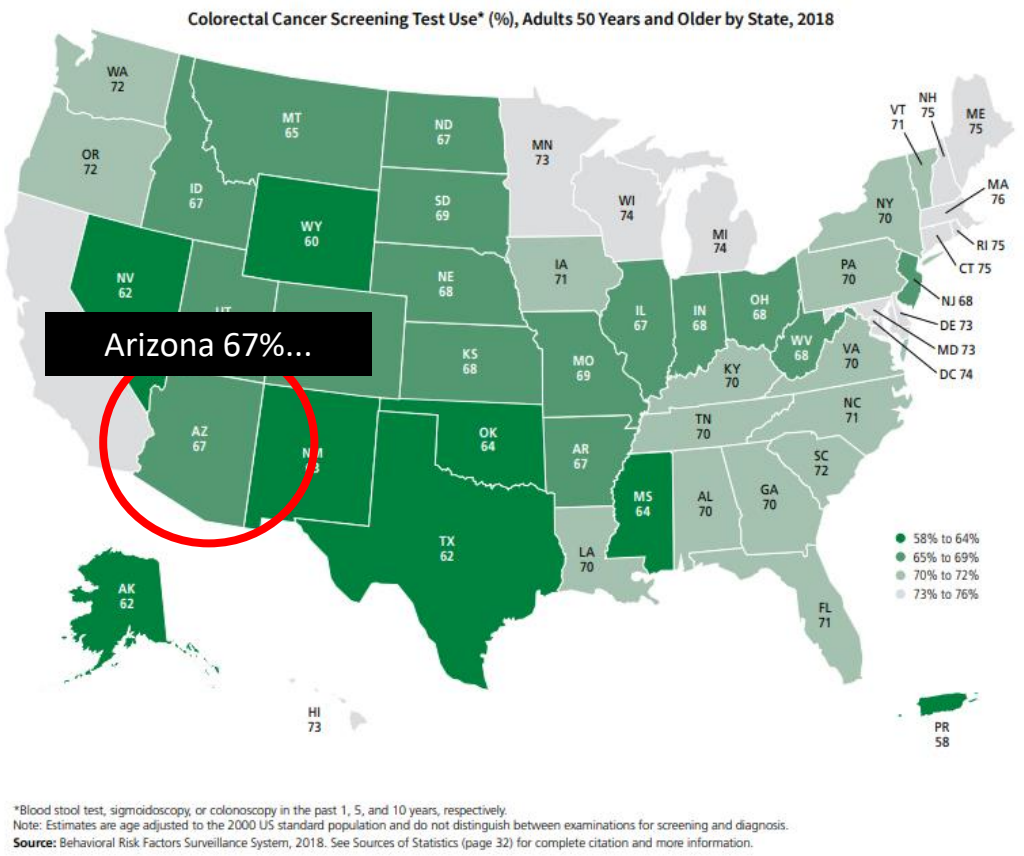


Nevada and the District of Columbia did not meet NAACCR high-quality incidence data standards for one or more years during 2012-2016. Incidence rates for the District of Columbia are based on data years 2012-2014. Rates are age adjusted to the 2000 standard population.

Sources: Incidence – NAACCR, 2019. Mortality – NCHS, 2019.

Colorectal Cancer Screening in Arizona

American Cancer Society National Goal: 80% in every community



https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2020-2022.pdf

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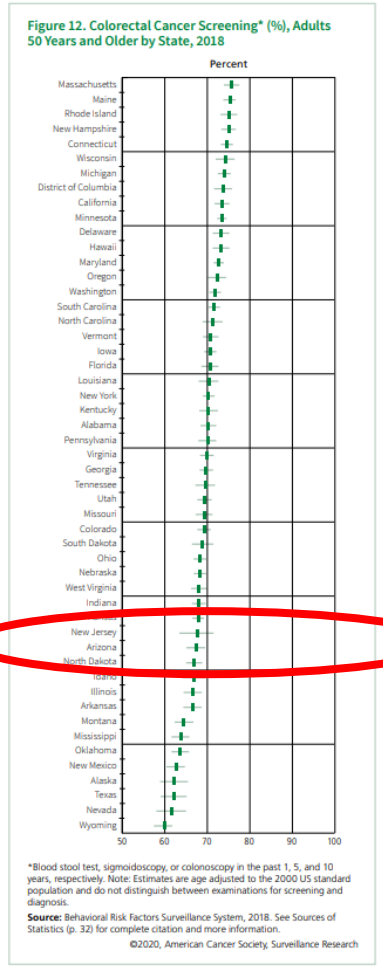
Colon Cancer Screening in Arizona

We are #39
in US



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Risk Factors for Colorectal Cancer: What can you do?

Family History (things that can't be changed)

Things that can be changed

Table 3. Relative Risks for Established Colorectal Cancer Risk Factors

	Relative risk*
Factors that increase risk:	
Heredity and medical history	
Family history[84]	
CRC	
1 or more first-degree relatives	2.2
1 or more first-degree relatives diagnosed before age 50	3.6
2 or more first-degree relatives	4.0
1 or more second-degree relatives	1.7
Adenoma	
1 or more first-degree relatives	2.0
Inflammatory bowel disease[115]	1.7
Type 2 diabetes[124]	
Male	1.4
Female	1.2†
Modifiable factors	
Heavy alcohol (daily average >3 drinks)[195]	1.3
Obesity (body mass index ≥30 kg/m²)[146]	1.3
Colon, male	1.5
Colon, female	1.1
Rectum, male	1.3
Rectum, female	1.0†
Red meat (100 g/day)[166]	1.1
Processed meat (50 g/day)[166]	1.2
Smoking[190]	
Current vs. never	1.5
Former vs. never	1.2
Factors that decrease risk:	
Physical activity[138]	0.7
Dairy (400 g/day)[166]	0.9

*Relative risk compares the risk of disease among people with a particular exposure to the risk among people without that exposure. Relative risk for dietary factors compares the highest with the lowest consumption. If the relative risk is more than 1.0, then risk is higher among exposed than unexposed persons. Relative risks less than 1.0 indicate a protective effect.
†Relative risk was not statistically significant.

HIGHEST MODIFIABLE RISK FACTORS!

- **Heavy drinking**
- **Smoking**
- **Obesity**

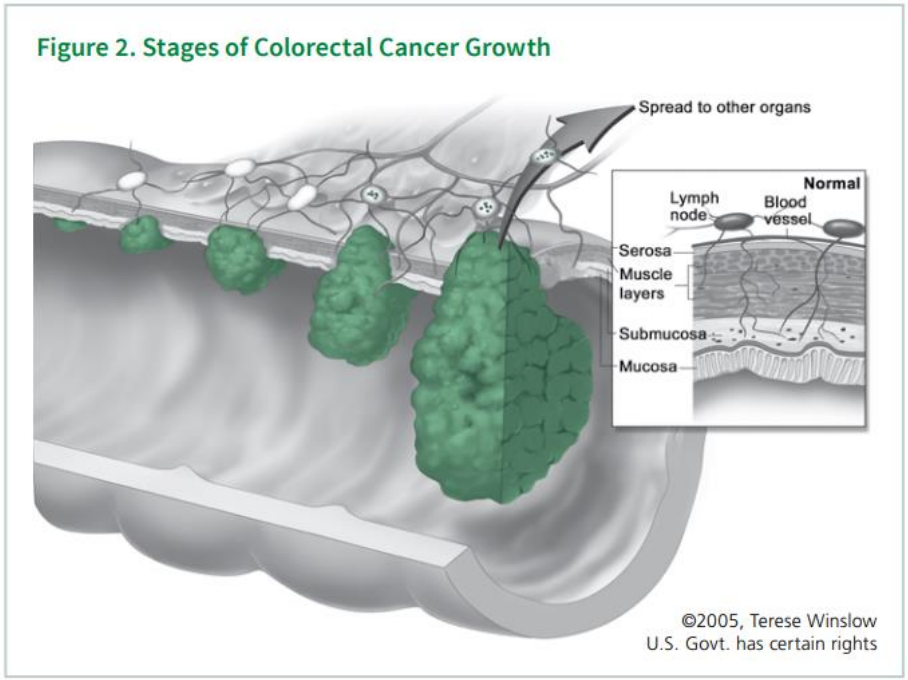
Colon Cancer TNM Staging: Local (T Stage), Regional (N Stage), and Distant (M Stage)

Local: T Stage
How far does it go into the bowel wall?

Regional: N Stage
Does it go into the nearby lymph nodes?

Distant: M stage
Does it go to other organs like the liver or lungs?

The more confined the tumor, the earlier the stage



https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2020-2022.pdf

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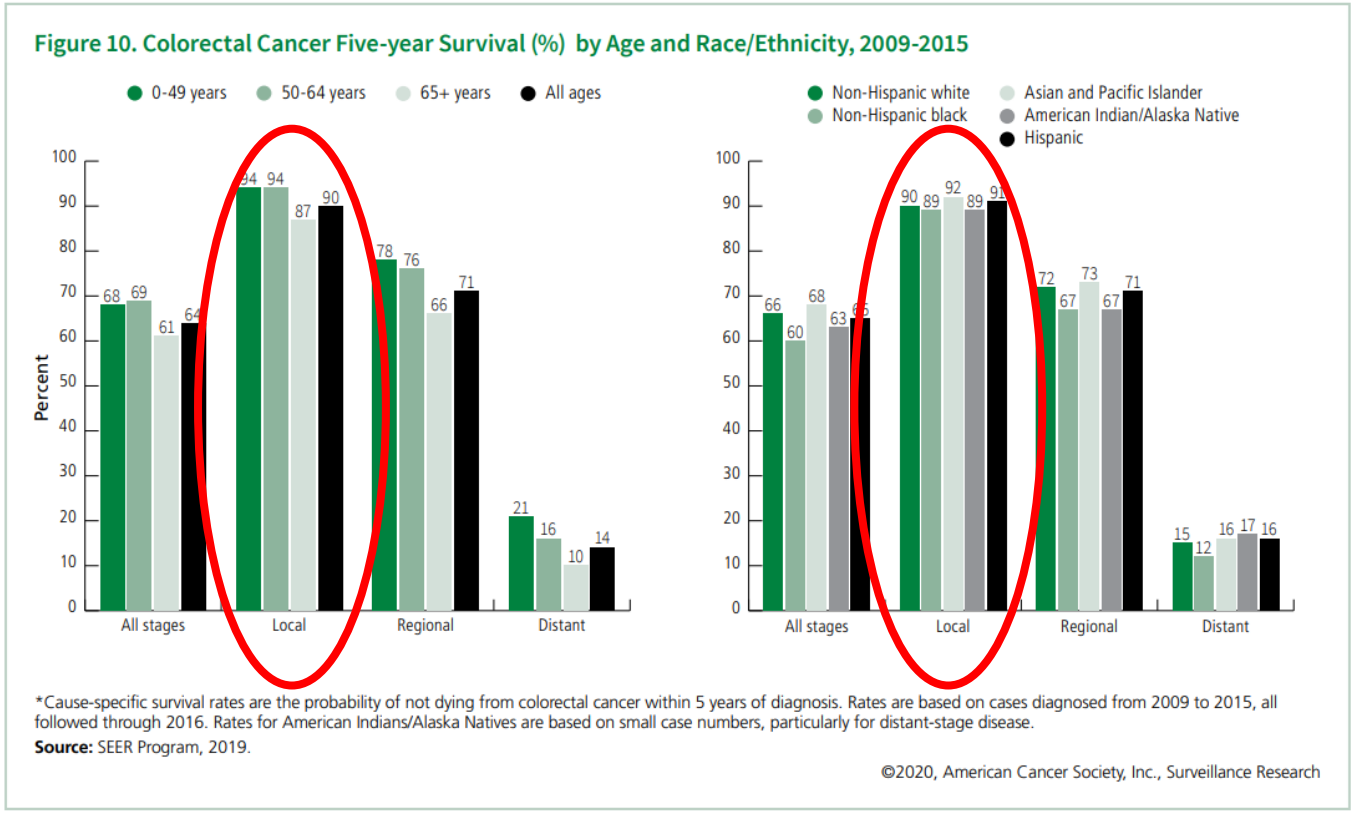
Colorectal Cancer 5 Year Survival by Age and Race/Ethnicity



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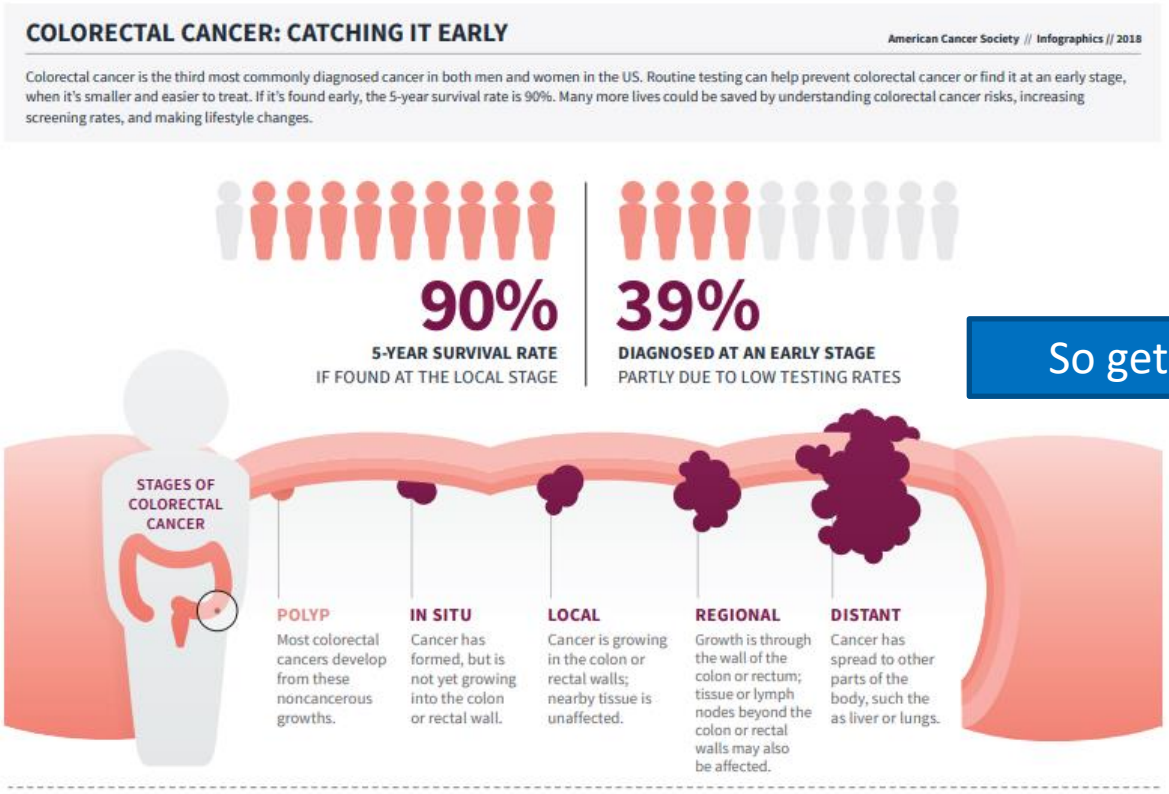
Colon Cancer Caught Early is Highly Treatable!



So get screened!

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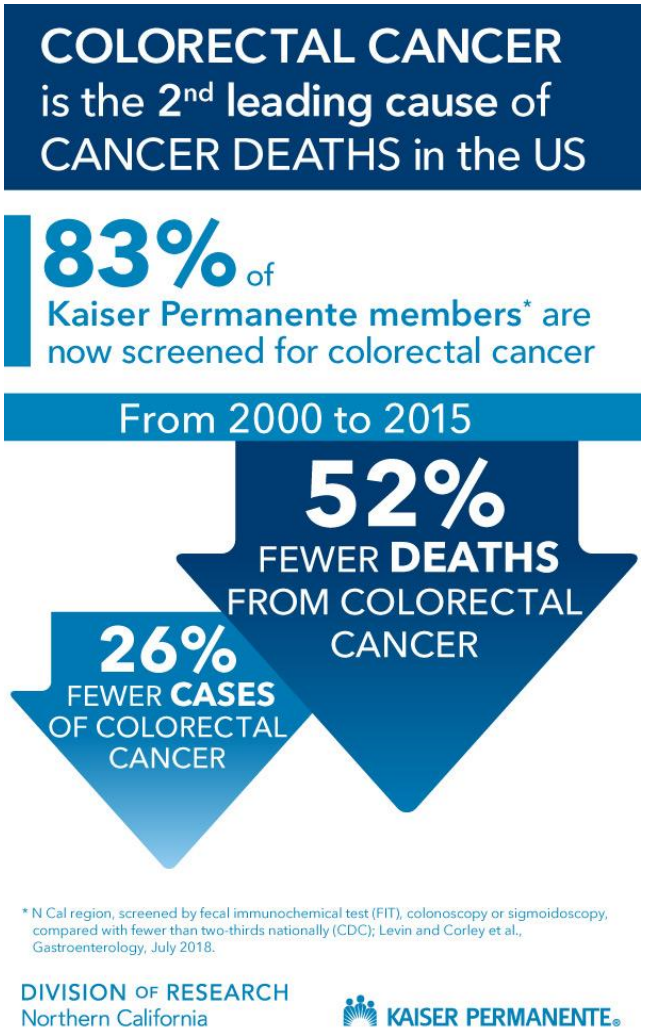
Colon Cancer Screening: It Works!



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Colon Cancer Screening

- **Who Should Be Screened?**
  - EVERYONE! At age 45!
  - Earlier than age 45 if risk factors such as:
    - Family history of colon cancer
    - Personal history of inflammatory bowel disease
    - Symptoms such as bleeding, abdominal pain, unexplained weight loss
- **How is Screening Done?**
  - Stool Test
  - Visual Test

Stool Test: FIT

Stool Tests (Low-sensitivity stool tests, such as single-sample FOBT done in the doctor's office or toilet bowl tests, are not recommended.)				
Fecal immuno-chemical test (FIT)	• No bowel cleansing or sedation • Performed at home • Low cost • Noninvasive	**Performance:** Intermediate for cancer **Complexity:** Low	• Requires multiple stool samples • Will miss most polyps • May produce false-positive test results • Slightly more effective when combined with a flexible sigmoidoscopy every five years • Colonoscopy necessary if positive	Annual

The #1 Selling Home Colon Cancer Test.

NO PRESCRIPTION REQUIRED

Recommended Annually for Colorectal Cancer Screening.

Mechanism:
Uses antibodies to detect blood in the stool

PCP orders

Stool Test: FIT-DNA

Multitargeted stool DNA test (Cologuard®)	• No bowel cleansing or sedation • Performed at home • Requires only a single stool sample • Noninvasive	**Performance:** Intermediate for cancer **Complexity:** Low	• Will miss most polyps • More false-positive results than other tests • Higher cost than gFOBT and FIT • Colonoscopy necessary if positive	3 years, per manufacturer's recommendation

*Complexity involves patient preparation, inconvenience, facilities and equipment needed, and patient discomfort. †For average-risk individuals, e.g., does not apply to those who have a history of adenoma.

Mechanism:

Uses antibodies to detect blood in the stool (FIT)

+

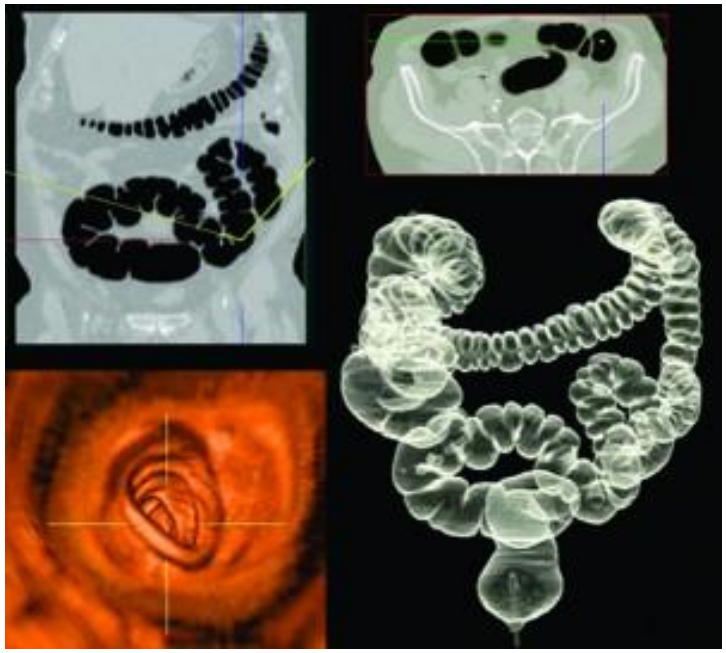
Test to detect altered DNA shed by tumors and some polyps (DNA)

= FIT-DNA, "stool DNA test" or Cologuard (brand name)

PCP orders

Visual Test: Virtual Colonoscopy

Computed tomographic colonography (CTC)	• Examines entire colon • Fairly quick • Few complications • No sedation needed • Noninvasive	**Performance:** High (for large polyps) **Complexity:** Intermediate	• Full bowel cleansing • Cannot remove polyps or perform biopsies • Exposure to low-dose radiation • Colonoscopy necessary if positive • Not covered by all insurance plans	5 years

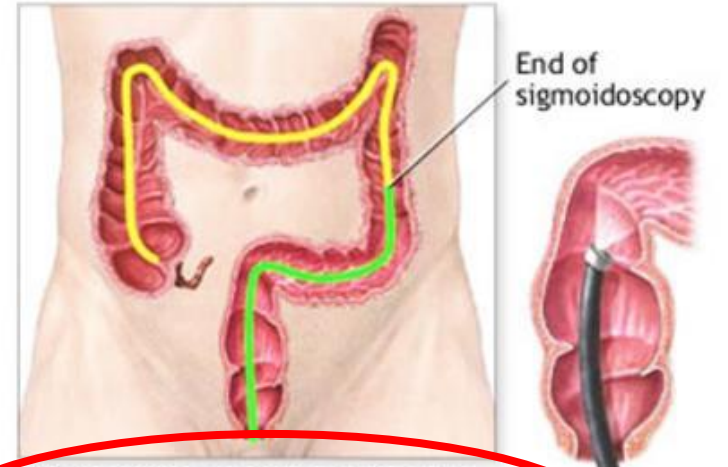


Usually ordered by specialist such as GI or colorectal surgeon

Often used as a screening test for patients who are very high risk for anesthesia or procedure (i.e., major lung or heart problems, can't stop blood thinners so higher risk from bleeding)

Visual Test: Flexible Sigmoidoscopy

Flexible sigmoidoscopy	• Fairly quick • Few complications • Minimal bowel preparation • Does not require sedation or a specialist	**Performance:** High for rectum & lower one-third of the colon **Complexity:** Intermediate	• Partial bowel cleansing • Views only one-third of colon • Cannot remove large polyps • Small risk of infection or bowel tear • Slightly more effective when combined with annual fecal occult blood testing • Colonoscopy necessary if positive • Limited availability	5 years



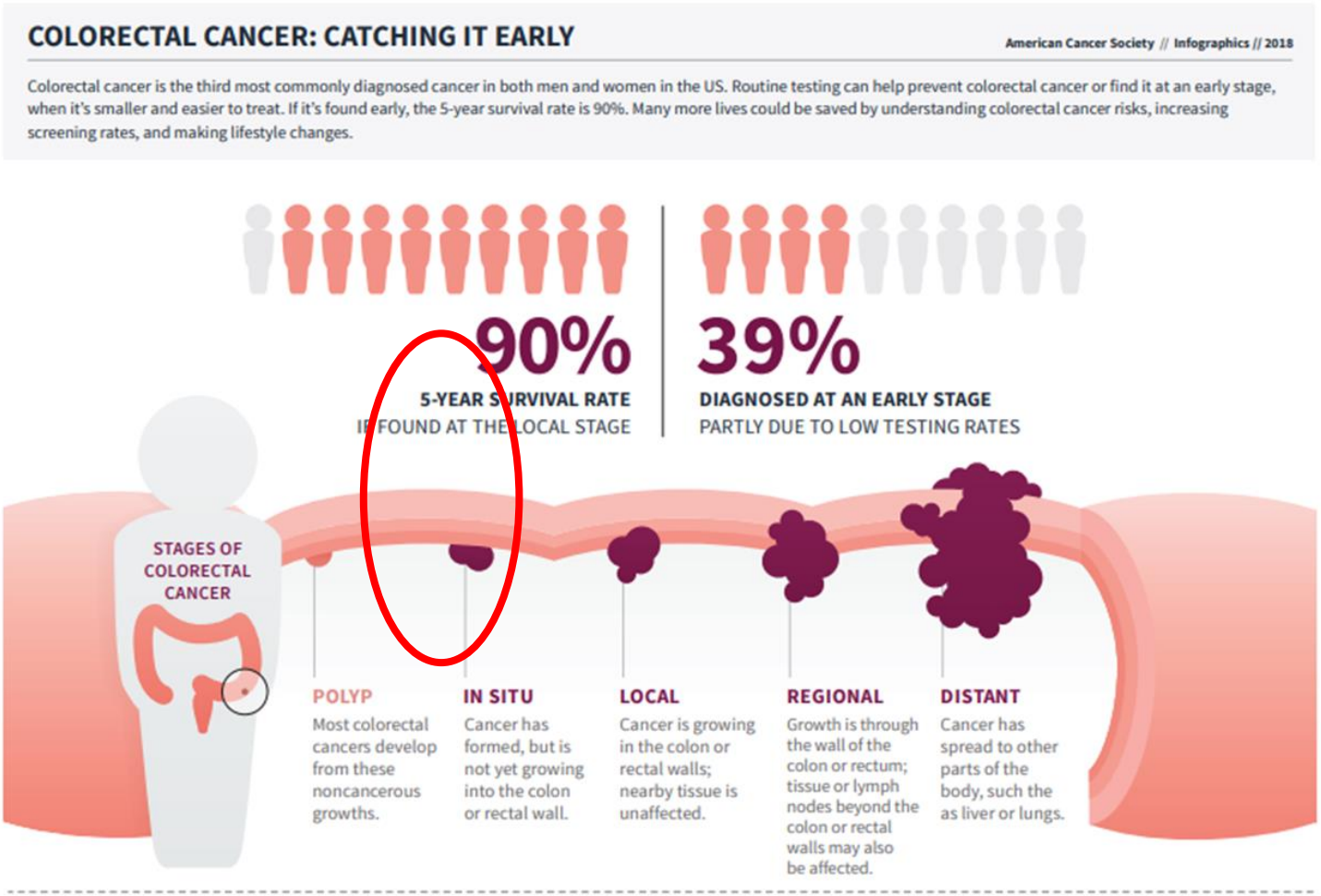
Visual Test: Colonoscopy/Gold Standard

Colonoscopy	• Examines entire colon • Can biopsy and remove polyps • Can diagnose other diseases • Required for abnormal results from all other tests	**Performance:** Highest **Complexity:** Highest	• Full bowel cleansing • Can be expensive • Sedation usually needed, necessitating a chaperone to return home • Patient may miss a day of work. • Highest risk of bowel tears or infections compared with other tests	10 years†

But still low risk!
Risk of perforation 0.2-0.3% in large series

Main Benefit of Colonoscopy:

Remove Polyps BEFORE they become a cancer or at very early stage



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Reasons to Have a Colonoscopy

Screening/Surveillance	Diagnostic
Colon cancer screening • Start at age 45 • repeat every years until age 75	Blood from the rectum • Either bright red or dark/tarry
Personal history of polyps	Iron deficiency anemia
Family history of colon cancer	Change in stools, especially narrow stools • Diarrhea • Constipation
	Unintentional weight loss
	Unexplained abdominal pain
	Abnormal imaging (like CT scan)
	Episode of diverticulitis

Colonoscopy Prep: What to Expect

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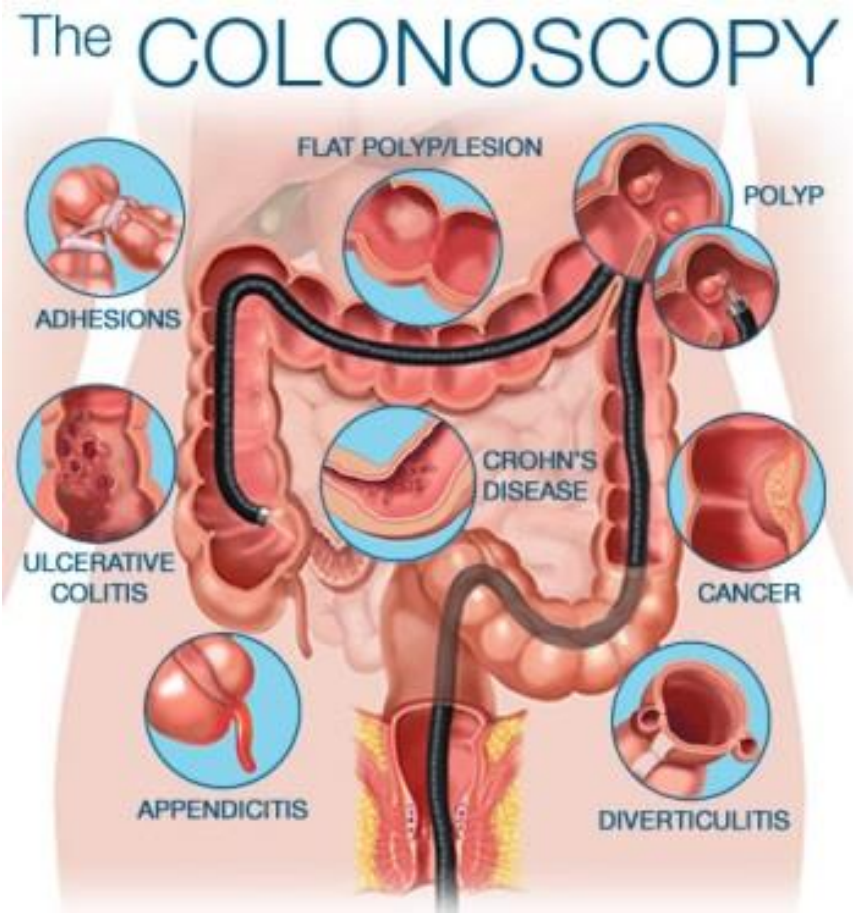
Colonoscopy Prep: Why is it Important?

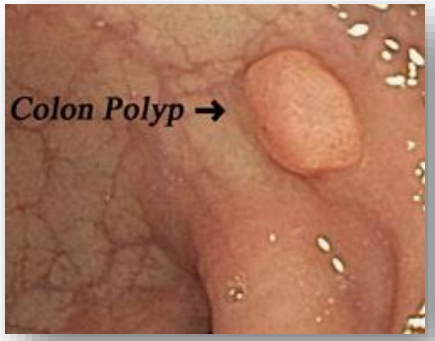
Prep that doesn't allow the endoscopist to see the lining well can mean the colonoscopy has to be repeated at a shorter interval than otherwise might be needed!

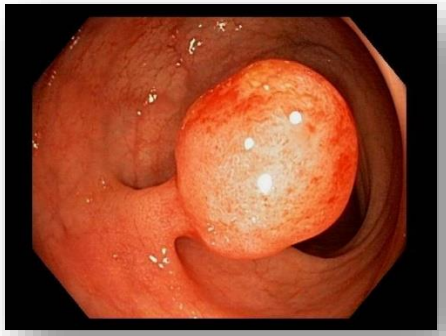
Commonly Found Abnormalities

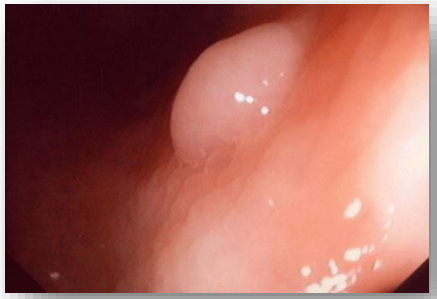
- Polyp
- Cancer
- Diverticulosis “tics”
- Hemorrhoids

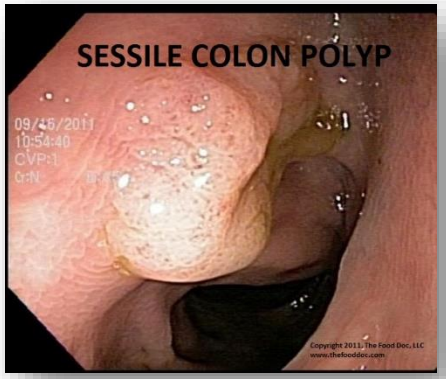


Polyps

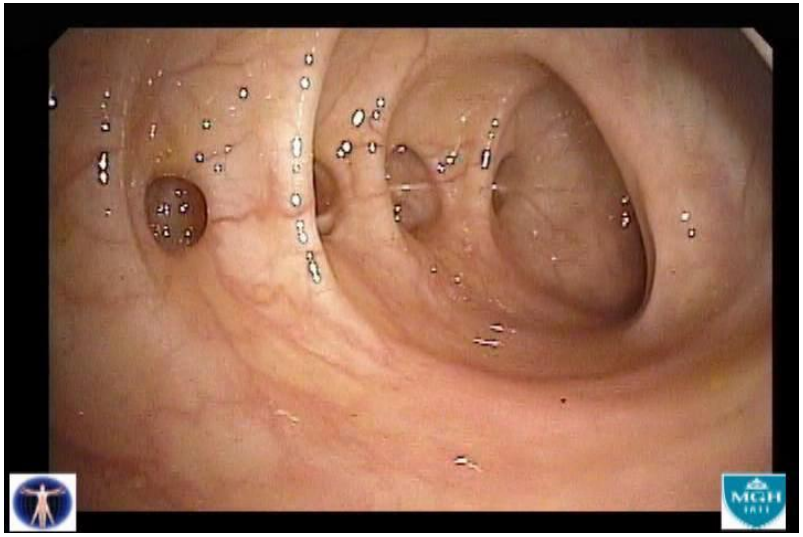


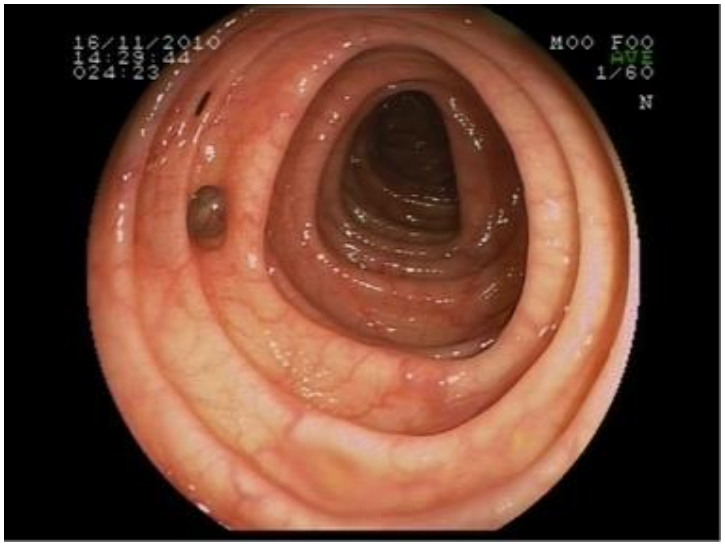




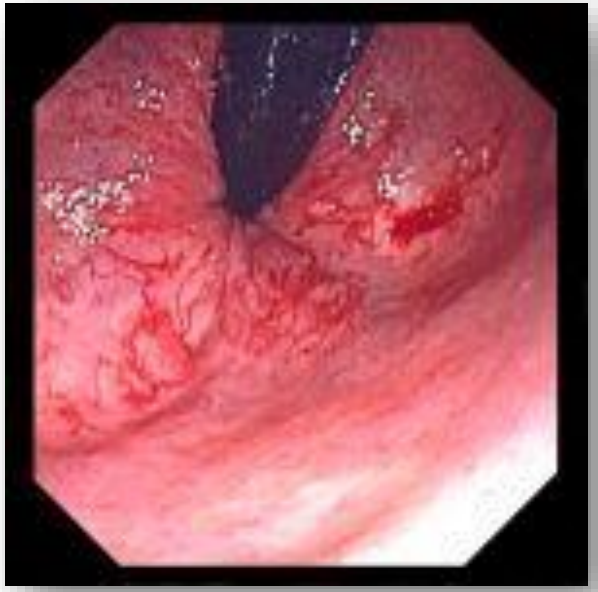


Diverticulosis





Hemorrhoids



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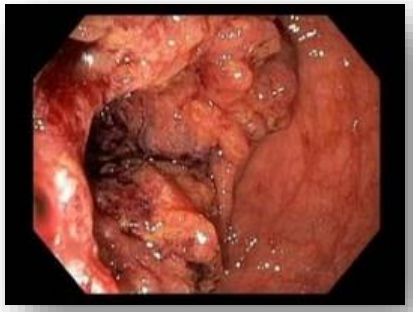
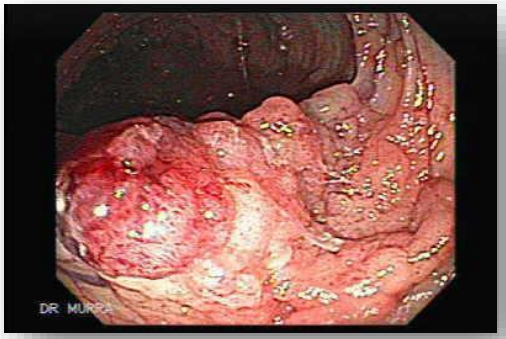
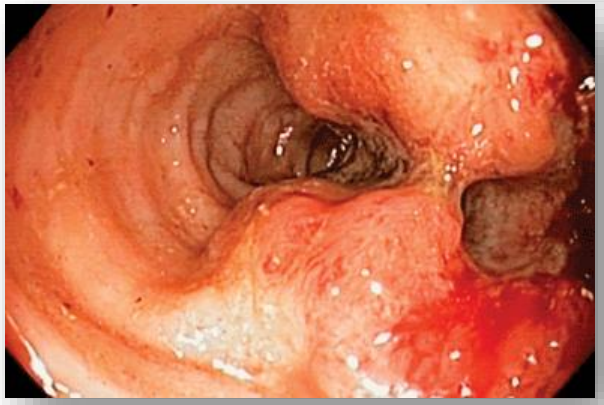
Cancer







What Happens After the Colonoscopy?

- Expected afterwards
  - Mild abdominal pain/cramping
  - Excessive gas or bloated feeling
    - What will help: rest, liquids, light meals, walking
- Patients are asked to call the office if:
  - Rectal bleeding of more than 1 teaspoon at a time
  - Worsening abdominal pain or cramping
- Will know the day of procedure what was found
- Takes 1-3 weeks to get pathology results, which determine when next colonoscopy should be done

How to Access Colon Cancer Screening

- Talk to your primary care about the available options
- Colonoscopy has the highest rate of detection, but has the most risk (although small)
- Stool testing ok if:
  - No symptoms
  - No family history
  - No personal history of polyps
  - Must be repeated every 1 or 3 years depending on test
- May ask for referral through your GI or colorectal surgeon to discuss options in detail and risks of each procedure

Fast Track to Colonoscopy Screenings

Make an Appointment Today!

We are currently accepting new patients for our convenient Fast Track Colonoscopy screenings. **Find out if you are a candidate, call 602.699.3366.**

We are located in the heart of downtown Phoenix at 625 N. Street.

We are open Monday through Friday from 8 a.m. – 5 p.m.

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Even if it's "not time" …

- A repeat colonoscopy is needed if you start having any symptoms!
  - Rectal bleeding
  - Unexplained weight loss
  - Abdominal pain

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- Colonoscopy: What to Expect
- Colon Cancer Treatment and the Role of the Multidisciplinary Cancer Program at the Dignity Health Cancer Institute
- Summary

Treatments That May Be Offered

Treatment	Colon or Rectal Polyp	Colon Cancer	Rectal Cancer
Endoscopic Removal (during colonoscopy or transanal surgery)	X		
Surgery	X	X	X
Chemotherapy		X usually after surgery	X often both before and after surgery
Radiation		Rarely	X Usually before surgery

Treatment decisions are best made by a group of cancer doctors at a cancer center and are personalized to the cancer and the patient's needs and goals.

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The Multidisciplinary Cancer Program at Dignity Health
Everyone and Everything You Need In One Place

Medical Oncology

Mital Patel, MD
Gastrointestinal Oncology

Surgical Oncology
Colon and Rectal Surgeons

David Row, MD, FACS, FASCRS
Colorectal Surgery

Anathea Powell, MD, FACS
Colon and Rectal Surgery

Ronald Gagliano, MD
Colorectal Surgery

Radiation Oncology

Nitika Thawani, MD
Radiation Oncology

Genetic Counselors

Karen Dirrigl, MS
Genetic Counselor

Kimberly Brussow, MS, CGC
Genetic Counselor

Reconstructive Surgery (if needed)

Peter Wu, MD
Plastic and Reconstructive Surgery

Pain and Palliative Care

Kerry Tobias, DO
Supportive Care and Survivorship

Other Services Involved in All Decisions:
Radiology and Pathology

When needed:
Gynecologic Oncology
Urologic Oncology

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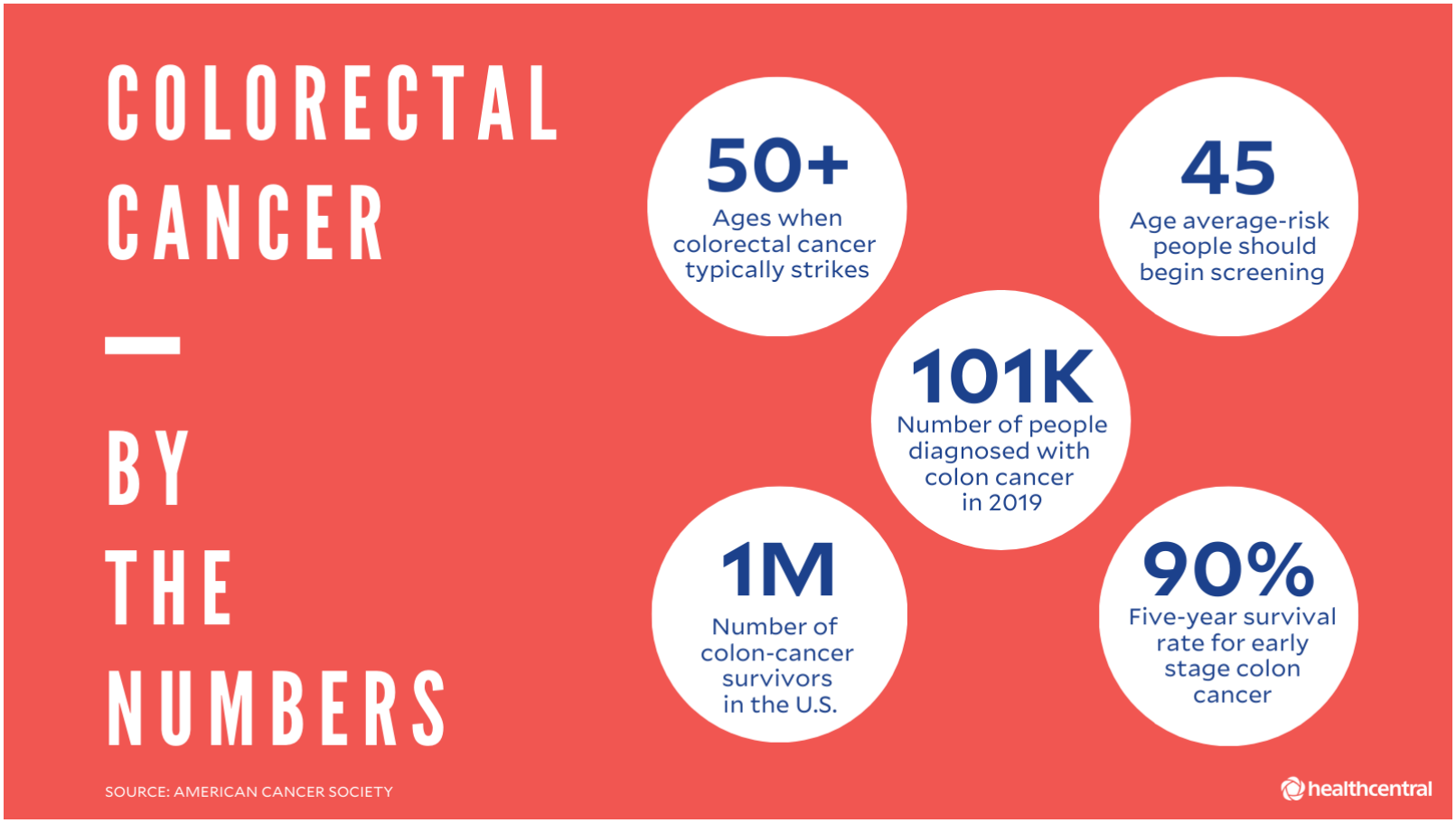
Outline

- Overview of Colon and Rectal Anatomy, Function and Cancer
- Colon Cancer Statistics in the US and Arizona
- Colon Cancer Screening Guidelines and Options
- Colonoscopy: What to Expect
- Colon Cancer Treatment and the Role of the Multidisciplinary Cancer Program at the Dignity Health Cancer Institute
- Summary



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What you can do to reduce your risk factors for colorectal cancer:

Exercise

Getting 150 minutes of exercise per week is an important part of maintaining a healthy lifestyle. Even exercising in 10 minute bursts is beneficial

Eat healthy

Fruits, vegetables and whole grains contain vitamins, minerals, fibre and antioxidants, which may play a role in cancer prevention.

Quit smoking

Smokers are at greater risk for diseases that affect the heart and blood vessels. Talk to your doctor about ways to quit that may work for you.

Drink in moderation

Drink alcohol in moderation, if at at all. If you choose to drink alcohol, limit the amount of alcohol you drink to no more than one drink a day for women and two for men.

Lose weight

If you have a healthy weight, work to maintain your weight by combining a healthy diet with daily exercise. If you need to lose weight, ask your doctor about healthy ways to achieve your goal.

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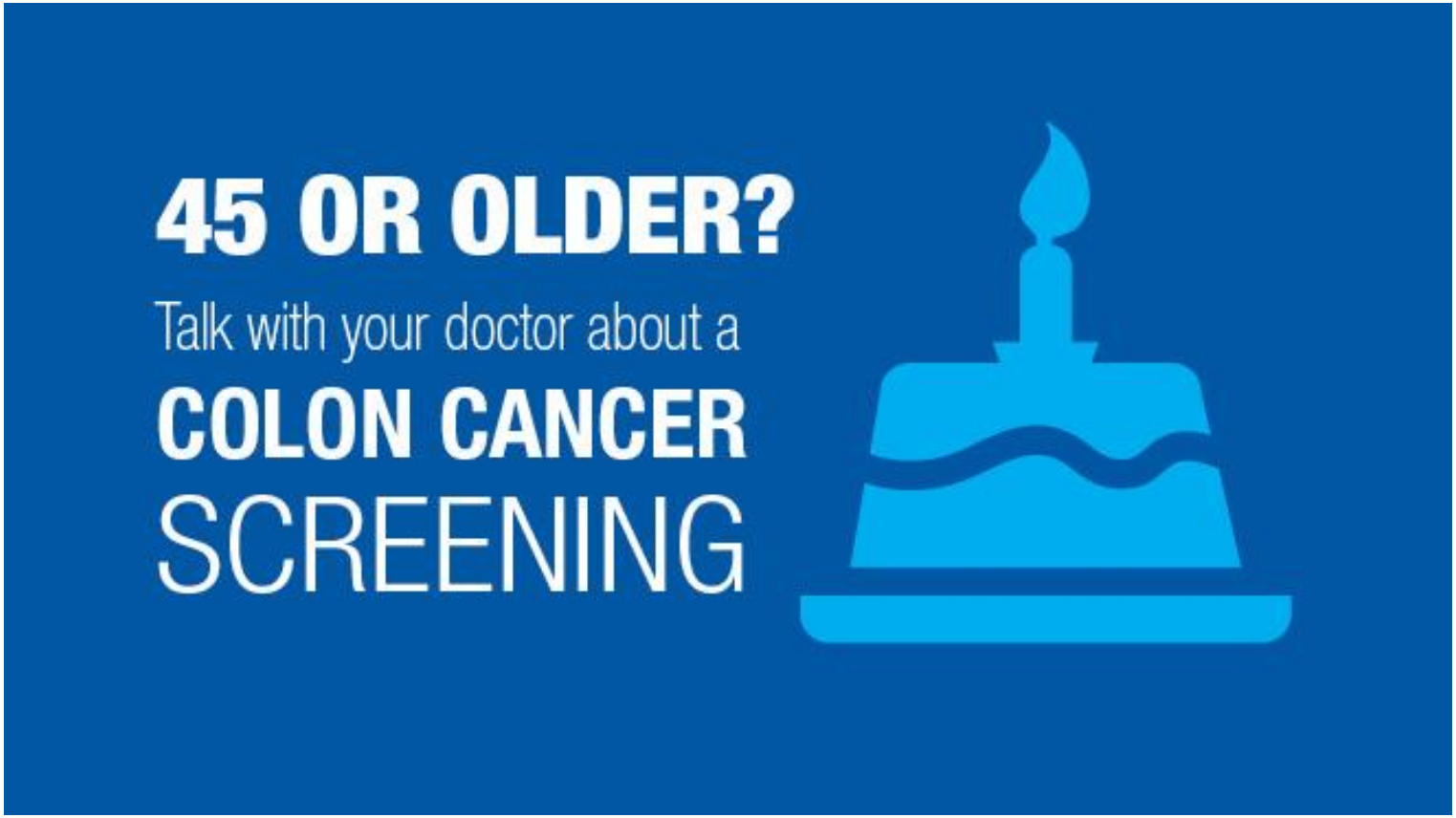

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COLON CANCER is:
Preventable.
Treatable.
BEATABLE.
Regular testing can prevent colon cancer or find it early.
If you're 45 and older, go get tested!
American Cancer Society
THE OFFICIAL SPONSOR OF BIRTHDAYS.
cancer.org/fightcoloncancer

Thank You!

For more information about cancer prevention, treatment, screening, or to request a speaker for your worksite on any cancer-related topic, **call:**

602.699.3366

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The St. Joseph's Cancer Center: Here for You and Your Family for Screening AND Treatment!

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Healthy Arizona Worksites Program

healthyazworksites.org

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THANK YOU FOR WATCHING!

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