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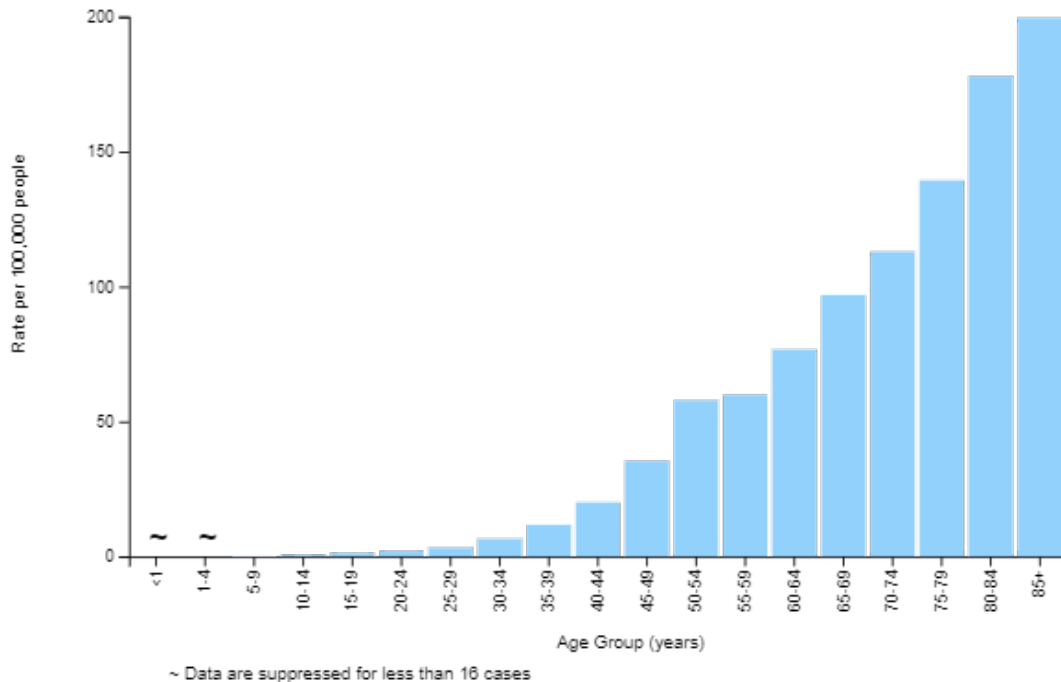


# Colon Cancer Screening

National Capital Region

# Why do we screen for colon cancer?

- Nearly 125k new cases diagnosed annually in the US in 2020
- In the US:
  - 4<sup>th</sup> most common cancer
  - 4th leading cause of cancer death
- Up to 60% of colon cancer deaths could be prevented with appropriate screening



Source - U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2022 submission data (1999-2020): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; <https://www.cdc.gov/cancer/dataviz>, released in November 2023.

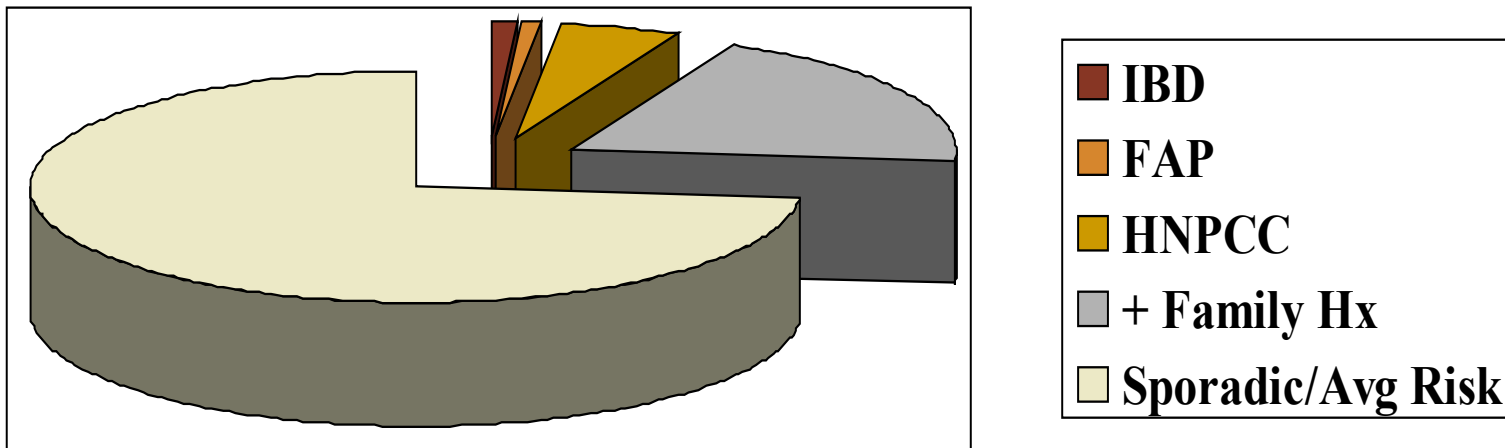


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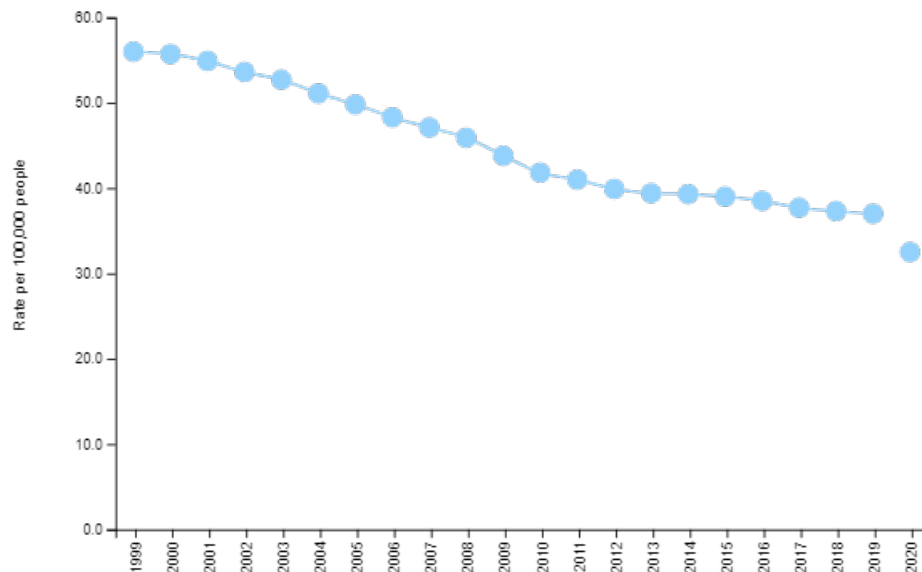
# Who gets colon cancer?

- Most new diagnoses of colon cancer occur in people with NO FAMILY HISTORY and NO SYMPTOMS



# Does screening work?

- Annual Rates of New Cancers, 1999-2000, United States, Colon and Rectum, Male and Female, All Races and Ethnicities



Source - U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on 2022 submission data (1999-2020); U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; <https://www.cdc.gov/cancer/dataviz>, released in November 2023.

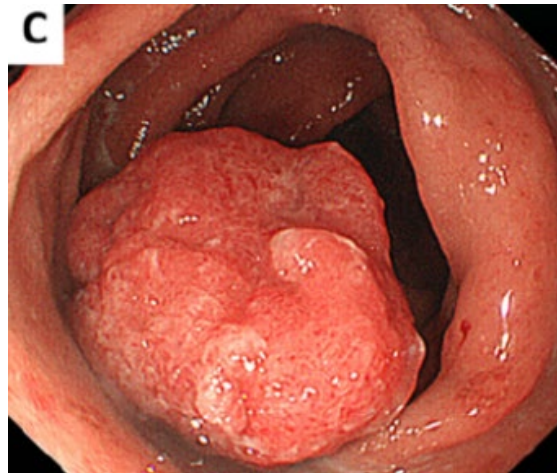


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# Colorectal Cancer

- Many patients with colorectal cancer do **NOT** have symptoms, especially at an early stage
- Signs / symptoms that may be present with colorectal cancer:
  - Bleeding
  - Abdominal pain
  - Change in bowel movements
  - Weight loss
  - Iron deficiency anemia



# Multi-Society Task Force positioning of current colorectal cancer screening tests

Invasive?	Tier 1 (Highest Level of Evidence)	Tier 2
Yes	Colonoscopy <ul style="list-style-type: none"><li>- every 10 years if normal</li><li>- detects precancerous polyps</li><li>- diagnostic and therapeutic</li></ul>	Flexible Sigmoidoscopy <ul style="list-style-type: none"><li>• “mini colonoscopy”</li><li>• only looks at left side of colon</li><li>• not effective in women</li><li>• will miss right sided cancers</li></ul>
No	FIT (Fecal Immunochemical Test) <ul style="list-style-type: none"><li>- detects cancer and some advanced polyps</li><li>- stool based</li><li>- annual if normal</li></ul>	FIT-Fecal DNA (Cologuard) <ul style="list-style-type: none"><li>• detects cancer and some advanced polyps</li><li>• stool based</li><li>• every 3 years if normal</li></ul> CT Colonography <ul style="list-style-type: none"><li>• every 5 years if normal</li><li>• less sensitive for some types of polyps</li></ul>



# Multi-Society Task Force positioning of current colorectal cancer screening tests (continued)

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Invasive?	Tier 1 (Highest Level of Evidence)	Tier 2
IF THESE ARE POSITIVE YOU NEED A COLONOSCOPY!!!!		Flexible Sigmoidoscopy <ul style="list-style-type: none"><li>• “mini colonoscopy”</li><li>• only looks at left side of colon</li><li>• not effective in women</li><li>• will miss right sided cancers</li></ul>
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# How do we do a colonoscopy?

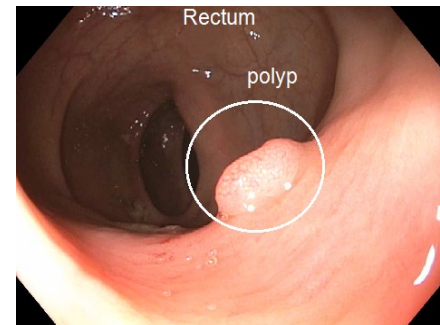
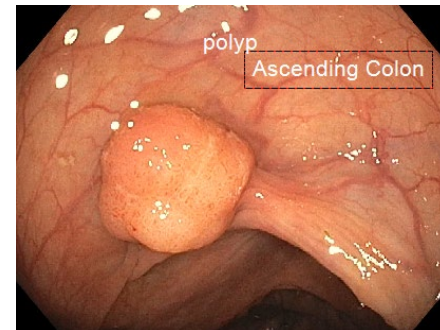
- Flexible high-definition camera
- Looks at your whole colon
- Allows use of instruments to biopsy or remove polyps or other abnormalities during the procedure



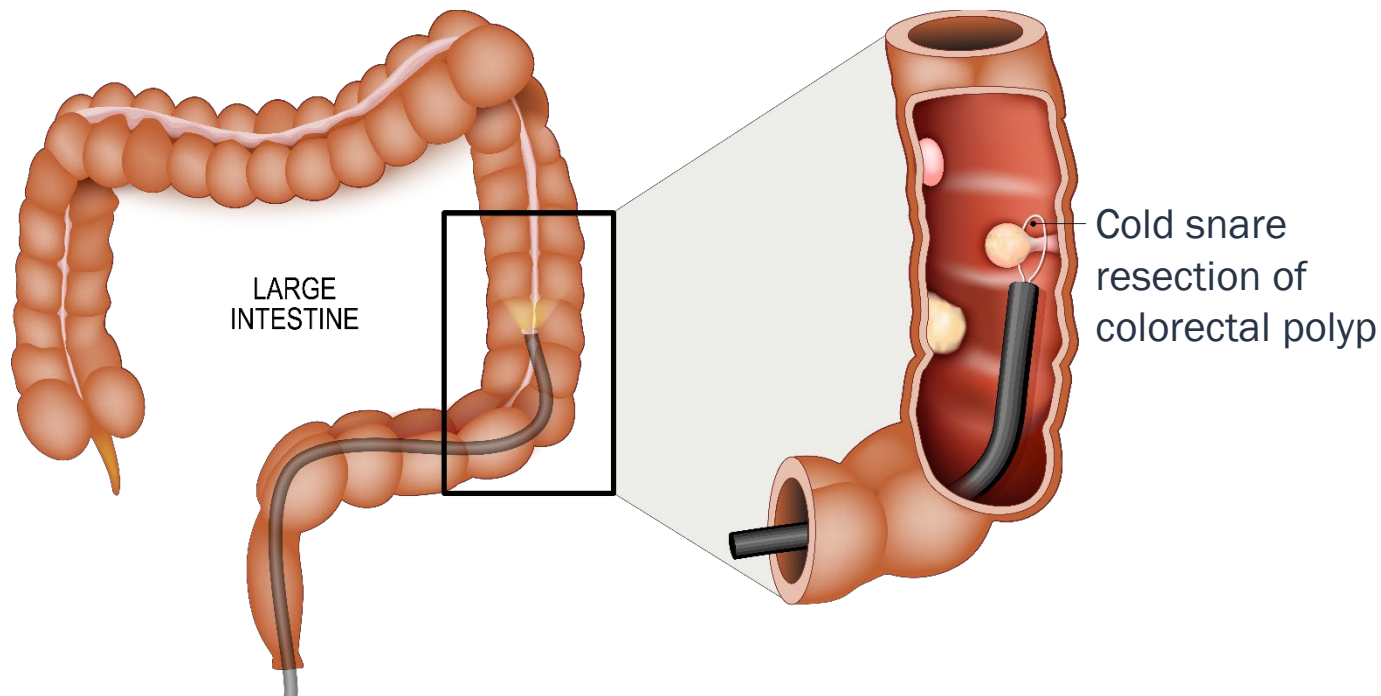


# What are we looking for?

- Polyps = abnormal growths in the colon
  - usually benign (noncancerous)
  - can become cancer
- We find these at least 30% of the time
- Up to 25% of adenomatous polyps may turn into cancer
- It takes ~ 10-15 years for polyps to become cancerous



# What do we do with the polyps we find?



# The Risks of the Procedure

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- A colonoscopy is **generally safe**. Rarely, complications of a colonoscopy may include:
  - Adverse reaction to the medications used during the exam
  - Bleeding after polypectomy
  - Perforation (tear in the colon or rectum wall)
  - Abdominal pain
  - Missed polyps or cancer
  - Death
- If you have questions or concerns, please send in a message or ask your provider before your procedure!



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## Preparing for your procedure



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# Blood thinners and anti-platelets

- Ask your prescribing physician *IF* you can stop your blood thinners before your colonoscopy
- Do not stop medications without being instructed to do so by a provider
- If you CANNOT stop your blood thinner, contact the GI clinic as soon as possible

## Common blood thinners

- ☐ Warfarin (Coumadin®)
- ☐ Apixaban (Eliquis®)
- ☐ Rivaroxaban (Xarelto®)
- ☐ Dabigatran (Pradaxa®)
- ☐ Enoxaparin (Lovenox®)
- ☐ Clopidogrel (Plavix®)
- ☐ Prasugrel (Effient®)
- ☐ Ticagrelor (Brilinta®)



# Diabetic Medications

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- Oral diabetic medications
  - Metformin: Do NOT take the evening before or morning of the procedure
  - SGLT2 Inhibitors: Do NOT take for **3 Days** prior to your procedure
    - ✓ Includes: Empagliflozin, Bexagliflozin, Canagliflozin, Dapagliflozin, Ertugliflozin, Sotagliflozin
    - ✓ These may be combined with other medications such as metformin or a gliptin



# Diabetic Medications (continued)

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- Short acting insulin
  - Do not use short acting insulin the night before or the morning of the procedure
- Long acting insulin
  - Take  $\frac{1}{2}$  of your dose the day before the procedure
  - Do not take on the morning of the procedure



# Blood Pressure Medications

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- Do NOT take any “water pill” or diuretic on the day of your procedure. Examples include:
  - Lasix (Furosemide)
  - Chlorthalidone
  - Hydrochlorothiazide (HCTZ)
  - Maxzide
- Take all other Blood Pressure medicines as scheduled in the morning (only sips of water)





# All other medications

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- Please take all other medications as prescribed
- If you have questions about a particular medication that you take, please message the clinic at **Walter Reed Gastroenterology Clinic** in the patient portal



# Diet

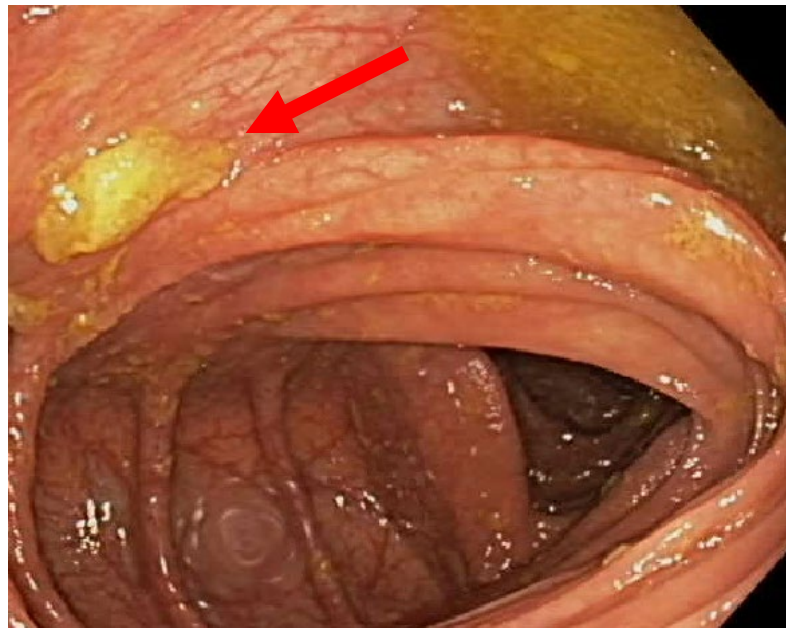


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## 3 to 7 days before your procedure

- Start a low fiber diet which avoids the following:
  - Salads
  - Vegetables
  - Sandwiches
  - Nuts
  - Seeds
  - Popcorn
  - Fruit with seeds
  - High fiber foods
  - Fiber supplements



# The day before your procedure

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- Start a CLEAR LIQUID diet
  - A clear liquid is one you can read through
- Avoid:
  - Solids
  - Liquids or drinks with pulp/seeds
  - Milk/Cream
  - Red and Purple
- You May Have:
  - Gelatin, clear broth, tea and coffee, fruit juices (without pulp), strained tomato or vegetable juice, sports drinks, Ice Pops (without solid containing substances), honey, sugar, hard candy, carbonated drinks



# Colon Prep

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# Preparing and taking the Prep

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- TAKE PREP AS OUR CLINIC INSTRUCTS, NOT BY WHAT IS ON THE BOTTLE!
- What is the difference?
  - Our instructions have you take the prep in 2 doses which leads to much better polyp detection rates

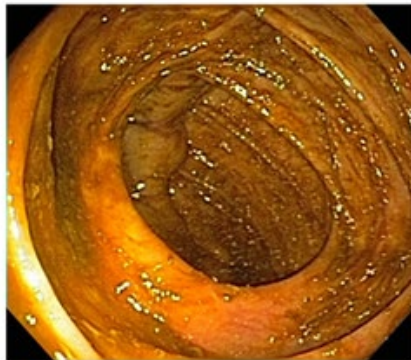




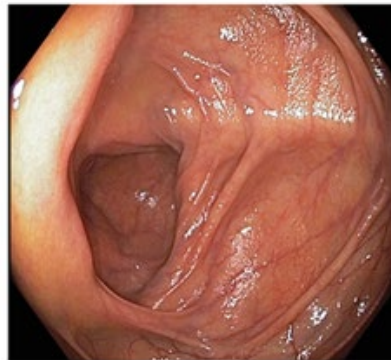
# Prep makes all the difference

## The Effect of Split Dosing

Split dosing not used



Split dosing used



Images courtesy of Douglas K. Rex, MD.



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# The Bowel Prep



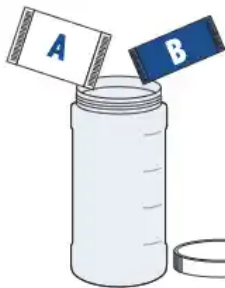
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# The evening before your procedure

## Step 1: Mix the first dose



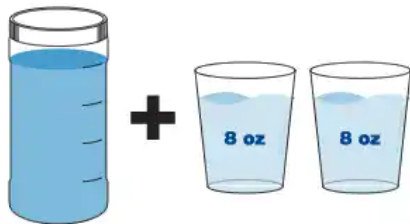
At the time instructed by your doctor

- Empty 1 pouch A and 1 pouch B into the disposable container
- Add lukewarm drinking water to the top line of the container. Mix to dissolve

**If preferred, mix solution ahead of time and refrigerate prior to drinking.** The reconstituted solution should be used within 24 hours.

Some people also prefer to drink Moviprep with a straw.

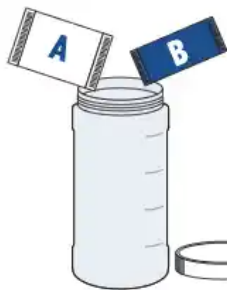
## Step 2: Drink the first dose



- The Moviprep container is divided by 4 marks. Every 15 minutes, drink the solution down to the next mark (approximately 8 oz), until the full liter is consumed
- Drink 16 oz of the clear liquid of your choice. This is a necessary step to ensure adequate hydration and an effective prep

# The morning of your procedure

## Step 3: Mix the second dose



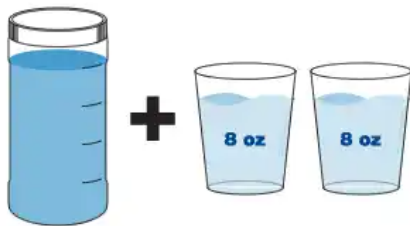
At the time instructed by your doctor

- Empty 1 pouch A and 1 pouch B into the disposable container
- Add lukewarm drinking water to the top line of the container. Mix to dissolve

**If preferred, mix solution ahead of time and refrigerate prior to drinking.** The reconstituted solution should be used within 24 hours.

Some people also prefer to drink MoviPrep with a straw.

## Step 4: Drink the second dose



- The MoviPrep container is divided by 4 marks. Every 15 minutes, drink the solution down to the next mark (approximately 8 oz), until the full liter is consumed
- Drink 16 oz of the clear liquid of your choice. This is a necessary step to ensure adequate hydration and an effective prep

## Preparing and taking the prep (continued)

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- Most folks prefer their prep cold
- Drinking through a straw may be more palatable
- SUGAR-FREE flavor mix can be added
  - Avoid red or purple
- Drink your prep quickly - But not so fast you get sick!
- Please remain within easy reach of toilet facilities



## Preparing and taking the prep (cont.)

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- Absolutely nothing by mouth 3 hours before your procedure.
  - **EXCEPT: TAKE MEDICATIONS WITH A FEW SIPS OF WATER**



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# Sedation and Scheduling



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# Section goals

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- Review
  - Sedation medications
  - Sedations risks
  - Need for an escort
  - Scheduling procedures
  - How to pick up meds
  - Where to find us



# Arriving in clinic

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- You will (likely) receive a sedative for this exam
  - Sedation is not required for the procedure, but most people opt to be sedated
- You must have a responsible adult to escort you home and check on you frequently afterwards. **Escorts must be there at CHECK-IN!!**
  - Escorts need not stay in our waiting room, but we ask that they not leave the installation
- Dress comfortably! Bring a book
- We ask that you leave valuables at home
  - We will ask you leave any valuables with your escort



# Be Safe

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- **DO NOT** drive, return to work, or operate any machinery or power tools for the rest of the day
- **DO NOT** drink alcohol or take any nerve or sleeping drugs for at least 24 hours
- **DO NOT**
  - make any important personal or business decisions
  - sign any legal papers
  - perform any activity that depends on your full concentrating power or mental judgment for the rest of the day





# Conscious Sedation

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- Uses Fentanyl and Midazolam to create a dream-like state
  - Fentanyl minimizes pain
  - Midazolam provides sedation
- Medications are given through an IV
- Adequate sedation is typically achieved within 5 min
- You will continue to breathe on your own
- Sedation is not required to undergo colonoscopy safely and is optional



# Limitations of Conscious Sedation

- Some medications make people resistant to the sedating effects of fentanyl and midazolam
- Opiates such as:
  - Oxycodone (Oxy IR/ER, Percocet)
  - Hydrocodone (Norco, Vicodin)
  - Hydromorphone (Dilaudid)
  - Methadone, Buprenorphine
- Benzodiazepines such as:
  - Lorazepam (Ativan)
  - Clonazepam (Klonopin)
- Sleep medications
  - If you need more than 1
  - Ambien
  - Lunesta
  - Benadryl
  - Trazodone
- Alcohol
  - If you drink more than 2 drinks in a typical day



# Risks of sedation

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- Drops in blood pressure
- Drops in heart rate
- Drops in respiratory rate
- Breathing in respiratory or gastric secretions



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**You will be carefully monitored throughout the procedure  
and, if at any point, we do not think that we can continue  
safely, WE WILL STOP**



# Pregnancy Testing

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- If you think you may be pregnant, please let the nurse know before the start of the procedure
- A pregnancy test is available for all female patients who think they may be pregnant, but is not required



# Scheduling Tips

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- Only the first procedure of the morning or afternoon has a predictable start time
  - We cannot predict what we will find during procedures
  - Plan to spend a half day at the clinic
- It may be a few weeks before our schedule opens up
- If you need to change your procedure time, please give us as much notice as possible



# Colonoscopies Save Lives

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