Cytoreduction Surgery +/- Hyperthermic Intraperitoneal Chemotherapy (HIPEC)

Enhanced Recovery After Surgery (ERAS)

Your Guide to Healing

UVA Health

This page is intentionally left blank

Patient Name

Surgery Date/Time to Arrive

Surgeon

We want to thank you for choosing UVA Health for your surgery. Your care and well-being are important to us. We are committed to providing you with the best possible care using the latest technology.

This handbook should be used as a guide to help you through your recovery and answer questions that you may have. Please give us any feedback that you think would make your experience even better.

Please bring this book with you to:

- ❒ Every office visit
- ❒ Your admission to the hospital
- ❒ Follow up visits

This page is intentionally left blank

Contact Information

The main hospital address:

UVA Health
1215 Lee Street
Charlottesville VA 22908

Contact	Phone Number
Cytoreductive Surgery/HIPEC Clinic	434.924.9333
Clinic Fax	434.244.9437
If no call received with a surgery time by 4:30pm the day before surgery	434.924.5035
Preoperative Anesthesia Clinic	434.924.5035
Hospital Inpatient Unit: 5W	434.924.2338
Hospital Inpatient Unit: 5C	434.924.5238
Hospital Inpatient Unit: STICU	434.924.2288
UVA Main Hospital	434.924.0000 (ask for the Green Surgery resident on call)
UVA Main Hospital (toll free)	800.251.3627
Medical Imaging	434.243.0321
Lodging Arrangements/ Hospitality House	434.924.1299/434.924.2091
Parking Assistance	434.924.1122
Interpreter Services	434.982.1794
Hospital Billing Questions	800.523.4398
Physician Billing Questions	800.868.6600
Medical Record Requests	434.924.5136

This page is intentionally left blank

Table of Contents

This page is intentionally left blank

Enhanced Recovery After Surgery (ERAS)

What is Enhanced Recovery?

Enhanced recovery is a program designed to help patients who need major surgery feel better faster. ERAS helps patients recover quickly so they can get back to normal life as soon as possible. The ERAS program focuses on making sure patients play an active role in their recovery.

There are four main stages in the ERAS program:

- ❒ **Planning and preparing before surgery** – Giving you all the information you need so you feel ready.
- ❒ **Reducing the stress of the surgery** – Allowing you to drink fluids up to 2 hours before your surgery.
- ❒ **Pain relief plan** – Making sure you get the right medicine to stay comfortable during and after surgery.
- ❒ **Getting up and moving after surgery** – Helping you get out of bed and walk as soon as you can.

It's important to know what will happen before, during, and after your surgery. Your care team will work closely with you to plan your treatment. You are the most important part of the team.

You should actively take part in your recovery and follow the ERAS program. By working together, we hope to make your hospital stay as short as possible and help you heal quickly.

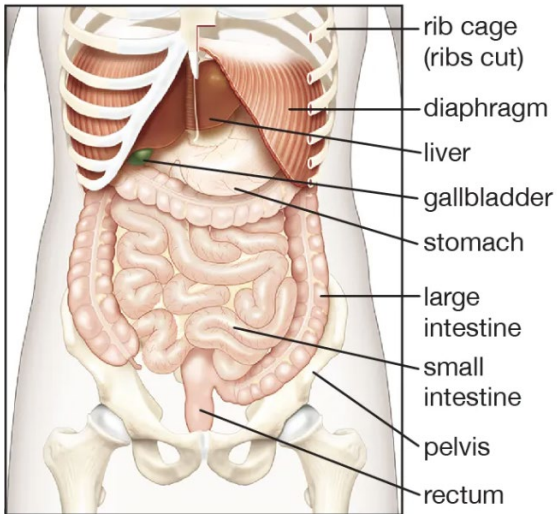
Introduction to CRS and HIPEC Surgery

CRS and **HIPEC** are two types of procedures that help treat cancer in the peritoneum. The **peritoneum** is a thin layer of tissue that covers the inside of your abdomen (belly) and the organs in it, like your stomach, intestines, and ovaries. Cancer that spreads to these areas can be hard to treat. However, **CRS and HIPEC** can be helpful.

- **CRS** stands for **Cytoreductive Surgery**, which means **removing all of the cancer from your abdomen**. When a person has cancer in their abdomen, doctors take out the tumors or cancerous spots that they can see. Unfortunately, some of the cancer cannot be seen.

- **HIPEC** stands for **Hyperthermic Intraperitoneal Chemotherapy**, which is a special way of using **hot chemotherapy medicine** to clean up any leftover cancer cells that the surgeon cannot see. After the doctor removes the cancerous parts, they circulate heated chemotherapy (medicine) directly into the belly area. The medicine helps kill any tiny cancer cells that are left behind.

Imagine your abdomen is like a garden. Cancer is the weeds that have grown in your garden. CRS is where your doctor goes in and pulls out all of the weeds that can be seen. HIPEC is like using a weed killer and spraying it over the entire garden to kill the tiny weeds that can't be seen and prevent new weeds from growing back. Used together, this treatment helps you fight cancer and feel better.



Possible Surgeries

The CRS procedure is a combination of several surgeries. Depending on where the cancer has spread, the CRS procedure may include:

- **Gastrectomy**: Removal of part or all of the stomach.
- **Hepatectomy**: Removal of a part of the liver.
- **Cholecystectomy:** Removal of the gallbladder
- **Ovary Removal (Oophorectomy):** Removal of one or both of the ovaries.
- **Splenectomy**: Removal of the spleen.
- **Omentectomy**: Removal of the omentum (a fatty tissue apron that hangs from the stomach and intestines).
- **Colectomy**: Removal of part or all of the colon (large intestine).
- **Bowel Resection and Anastomosis:** Removal of the damaged parts of the intestine and then reconnecting the healthy parts (anastomosis). This can be done for both the small and large intestines.
- **Lymph node dissection**: Lymph nodes are small glands that help fight infection, but they can also store cancer. The surgeon may take out the nearby lymph nodes to stop the cancer from spreading.
- **Diaphragm:** Removal of part of the lining of the diaphragm.
- **Pleurectomy:** pleura (the lining around the lungs). Removal of part of the lining of the lungs.

What to expect

These surgeries are very long and can take 10-12 hours. The doctor will make a large cut down the middle of your belly. This is where the surgeon will take out the cancer and put in the chemotherapy. The chemotherapy stays in your body for about 90 minutes while you're in the operating room. After that, the chemotherapy is drained out, your belly is carefully rinsed, and then the cut is closed with staples. Once you're out of the operating room, there's no danger to you or anyone around you from the chemotherapy.

- **Surgical staples:** Surgical staples are small metal clips used to close a wound after surgery. They pinch the skin together to help it heal. The doctor will plan to remove these 2-3 weeks after surgery.

After the surgery, you will have several possible tubes coming out of your body to help with healing.

- **JP drain** (short for **Jackson-Pratt drain**): a small tube that doctors use to help drain extra fluid from inside the belly after surgery. The JP drain collects fluid in a small container outside your body. This helps the area heal without getting swollen or infected. When everything looks better, the doctor will remove the drain.
- **Foley**: The tube is placed into the bladder (where urine is stored). It helps you pee by draining the urine into a bag outside the body. It is removed once you are feeling better.
- **Epidural catheter**: This is a small tube placed in your back near the spine that brings pain medicine into your body. It gives great pain relief with fewer side effects than other types of pain medicine. It also helps reduce the amount of oral pain medicine you need after surgery, which can help you recover faster. You will have a button that you can press after surgery to deliver pain medication through this catheter.
- **Nasogastric (NG) tube**: This tube is inserted through your nose, down your throat, and into your stomach. It is used to suck out extra gas and fluid that build up in your stomach after surgery. The tube helps to reduce the feeling of bloating and nausea. It will usually stay in after surgery until you are passing gas from below.
- **Chest tube**: A special tube that is used when there is air, fluid, or blood in the chest after surgery. Doctors put the chest tube in through a small cut in the skin, usually between the ribs, and then connect it to a special container to catch the air or fluid. It stays in until everything is better, and then doctors remove it.

- **Some patients will require an ostomy after surgery (see next page).**

What is an Ostomy?

The **intestines** are long tubes inside your body that help with digestion. They are part of your digestive system, which helps break down food and absorb the nutrients your body needs.

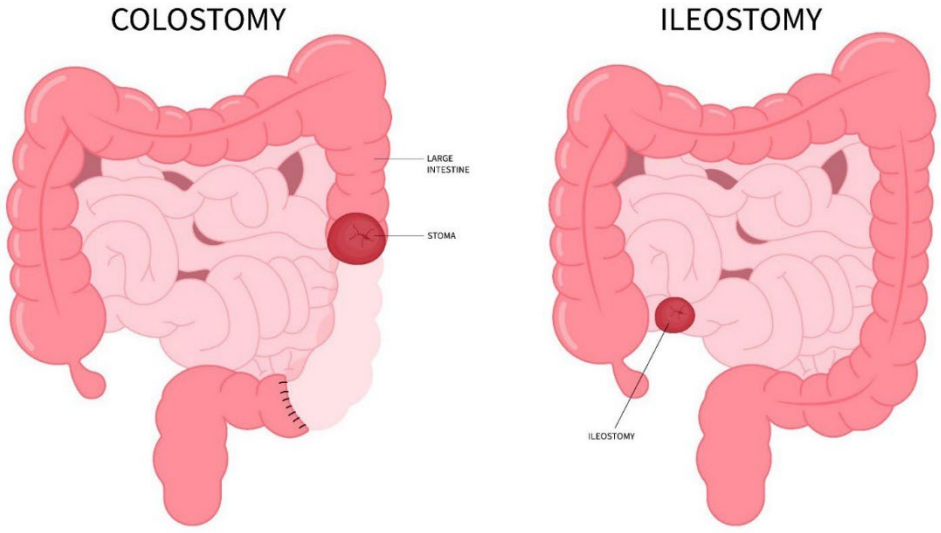
There are two main parts of the intestines:

1. **Small intestine**: This is where most of the food you eat is broken down and where your body absorbs the nutrients, like vitamins and energy, that it needs.
2. **Large intestine**: After the small intestine, the leftover food goes into the large intestine. Here, your body takes in water, and the leftover waste is turned into stool (poop), which your body eventually gets rid of.

A person my need an ostomy if part of the intestine has to be removed during surgery.

An **ostomy** is a small hole made in your belly.

- If your doctor connects your large intestine to the hole, it's called a "colostomy."
- If your doctor connects your small intestine to the hole, it's called an "ileostomy."



This opening lets waste (poop) leave the body in a different way than usual. After the surgery, the waste is collected in a special bag that is attached to the body over the opening. The bag can be emptied when needed. People with an ostomy can still live healthy, active lives with the help of the bag, also known as an appliance. The ostomy after CRS/HIPEC is usually temporary and can often be reversed a few months after surgery.

Do you take anticoagulant/antiplatelet (blood thinner) medication?

Some examples of blood thinner medications: Coumadin (warfarin), Plavix (clopidogrel), Pletal (cilostazol), Xarelto (rivaroxaban), Eliquis (apixaban), Lovenox (enoxaparin), or others.

If you take any of these medications, you will need to tell the doctor who prescribed them and let them know you will be getting a spinal block for pain. You will need to stop taking some of these medications 72 hours or more before your epidural. The doctor who prescribed your medication will give you instructions on how long you can safely stop taking it.

It's very important to follow these instructions so your surgery isn't delayed or canceled!

If you have any questions on the instructions you received, call your surgeon's office right away.

Your nurse may give you special instructions on when to stop taking blood thinner medications before surgery. It's very important to follow these instructions carefully.

We are giving you instructions on_____

☐ Your last dose of blood thinning medication before surgery should be on _____

☐ We are recommending a bridge of this medication. Please refer to you After Visit Summary (AVS) for specific instructions about this medication.

☐ Please follow up with _____

This page is intentionally left blank

Before your Surgery

Clinic

During your clinic visit, we will see if you need surgery and what kind of surgery it will be. You will work with our whole team to get ready for the surgery.

Our team is made up of:

- The surgeons, who may have fellows, residents, or medical students working with them
- Nurse practitioner (NP)
- Care coordinator (RN)
- Schedulers
- Dieticians
- Administrative assistants

During your clinic visit, we may:

- Ask questions about your medical history
- Perform a physical exam
- Ask you to sign the surgical consent forms

You will also receive:

- Instructions on how to get ready for surgery
- Special instructions if you take blood thinners
- Instructions on quitting smoking if you smoke (see the next page for more details)
- Special antibacterial soap to use when you shower the night before and the morning of surgery
- Prescriptions for your bowel prep

Write any special instructions here:

_____

_____

_____

Quitting Smoking Before Surgery

We encourage you to stop smoking at least 4 weeks before surgery because it will:

- Help your wound heal better after surgery
- Reduce the risk of problems during and after surgery
-

If you can't stop smoking 4 weeks before surgery, we ask that you try to smoke less and work on quitting as soon as possible after surgery. This is very important for your health.

Please let your surgeon's nurse know if you smoke. We will give you information to help you quit and refer you to counseling to help you stop smoking.

Some Long-Term Benefits of Quitting May Include:

- Improved Survival
- Fewer and less serious side effects from surgery
- Faster recovery from treatment
- More energy
- Better quality of life
- Decreased risk of secondary cancer

Here are some important things to think about before your surgery as you start thinking about quitting smoking:

- All hospitals in the United States are smoke-free. You won't be allowed to smoke while you're in the hospital.
- Your doctor may give you medicine to help with tobacco withdrawal while you're in the hospital and after you leave.

Here are some tips to help you on your journey to quitting:

- Talk to your doctor about medicines that can help you quit smoking.
- Figure out what makes you want to smoke and make a plan to deal with those moments.
- Plan what you can do instead of smoking. You can make a kit with things like nicotine replacement therapy, sugar-free gum or candy, coloring books, puzzles, or bubbles to blow.

Tips to help you quit and stay smoke-free:

- Keep following your quit plan even after you leave the hospital.
- Make sure you leave the hospital with the right medications or prescriptions.
- Find friends and family who can support you while you quit smoking.

Speak with your doctor about getting a referral to meet with our tobacco treatment specialist.

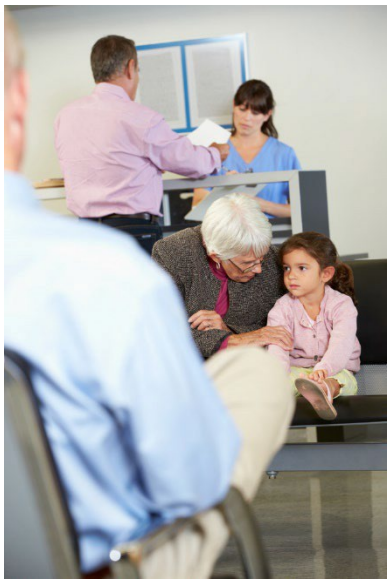
You don't have to quit alone!

Your surgeon can give you a consult for a smoking cessation counselor.

1.800.QUITNOW **https://smokefree.gov/**

Preoperative Anesthesia Clinic

The Preoperative Anesthesia Clinic will check your medical and surgical history to see if you need an anesthesia evaluation before surgery. This extra step helps the anesthesia team make sure you get safe care on the day of your surgery.



If an anesthesia evaluation is needed, the Preoperative Anesthesia Clinic will let you know. Then:

- An appointment will be scheduled for a visit a few weeks before your surgery
- Your medications will be reviewed
- You might need a blood test, a heart test (EKG), and/or other tests that your surgeon or anesthesiologist may ask for

If you have any questions or can't make the appointment with the Preoperative Anesthesia Clinic, call 434-924-5035. Missing this visit could cause your surgery to be cancelled.

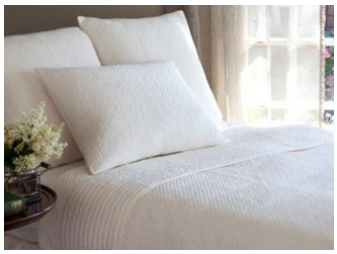
There may be times that you are instructed to go to the Preoperative Anesthesia Clinic after your appointment with your surgeon. If so, you are welcome to a same day appointment, but please allow up to 2 hours.

Remember: If you are taking any blood thinning medications be sure to tell your doctor and nurse as it may need to be stopped before surgery. It is very important to follow the instructions given to you to prevent your surgery from being postponed or cancelled!

If you have any questions on the instructions you received, call your surgeon's office right away.

Preparing for Surgery

You should plan to be in the hospital for 7-10 days. After your surgery, you will need help from family or friends when you leave the hospital. It's important to have someone assist you with meals, taking medications, and other things you may need. Please plan ahead and make sure someone is available to stay with you when you get home from the hospital.



Here are a few simple things you can do before coming to the hospital to make things easier when you get home:

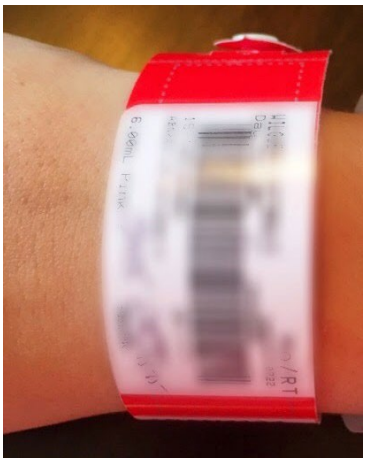
- Clean and put away laundry.
- Put clean sheets on the bed.
- Cut the grass, take care of the garden, and do other housework.
- Arrange for someone to get your mail and take care of pets or loved ones, if needed.
- Place the things you use often between waist and shoulder height so you don't have to bend down or reach too high.
- Bring the things you will use often during the day downstairs, but remember you WILL be able to climb stairs after surgery.
- Buy the foods you like and other things you will need, since shopping may be hard when you first get home.
- We recommend having these over-the-counter medications at home before surgery:
    - Tylenol (acetaminophen) 325mg tablets (for pain)
    - Advil/Motrin (ibuprofen) 200mg tablets (for pain)
    - Colace (docusate sodium) 100mg tablets (stool softener)
    - MiraLAX powder (for constipation)
- We suggest you buy or borrow a scale to weigh yourself regularly after surgery.
- STOP taking any herbal supplements or drinks 2 weeks before surgery. You can still take a standard daily multivitamin.
- STOP taking ibuprofen (Motrin® or Advil®) and naproxen (Aleve®) 1 week before surgery. You can take acetaminophen (Tylenol®).
- If you've had heart surgery and take 81mg aspirin (baby aspirin), you should keep taking it until your surgery.

REMEMBER:

Good nutritional intake before surgery can help you recover after surgery. If you are having trouble eating or are losing weight, try to increase your calories and protein. An easy way to accomplish this is drinking nutritional supplement drinks (such as Ensure Plus®, Boost Plus®, Equate Plus®, or Carnation Instant Breakfast®) in addition to your meals to help increase your nutritional intake prior to surgery.

Pre-Surgery Checklist

What you SHOULD bring to the hospital:



- ❒ This ERAS Handbook.
- ❒ A list of your current medications.
- ❒ Any paperwork given to you by your surgeon
- ❒ A copy of your Advance Directive form, if you completed one
- ❒ Your "blood" bracelet, if you were given one
- ❒ A book or something to do while you wait
- ❒ A change of comfortable clothes for discharge
- ❒ Any toiletries that you may need
- ❒ Your CPAP or BiPAP, if you have one
- ❒ If you use an oxygen tank, be sure you have enough oxygen and tank supplies for the ride home after surgery

What you SHOULD NOT bring to the hospital:

- ☒ Large sums of money
- ☒ Valuables such as jewelry or non-medical electronic equipment

Any belongings you bring will be sent with your Care Partner or be locked away in a hospital safe

For your safety, you should plan to:

- ❒ Identify a Care Partner for your stay in the hospital.
- ❒ Have a responsible adult with you to hear your discharge instructions and drive you home. If you plan to take public transportation, a responsible adult should travel with you.
- ❒ If possible, identify someone to stay with you the first week after discharge to help take care of you.

Identify a Care Partner

Healing happens best when you have the comfort of a familiar face nearby. That's why we welcome a family member or trusted friend to serve as a Care Partner.

A patient can name one or two adults as Care Partners. The Care Partner can:

- ❒ Receive patient status updates over the phone
- ❒ Serve as an active member of the healthcare team, helping to manage the patient's care
- ❒ Learn to perform daily care tasks from the nursing staff
- ❒ Feel empowered to ask questions of the providers and staff and help facilitate communication between the patient and the healthcare team

Being a Care Partner does not designate you as the patient's legal decision-maker or allow you to sign consent forms for the patient.

The Care Partner will be given a security code and an identification band. The code allows staff to give information and updates over the phone. Do not share the code or the status updates with anyone other than the designate Care Partner, including friends or family. The Care Partner identification band should be worn at all time. Care Partners for adult patients are identified by orange bands.

Hospital Services

Visitors must stop by the Information Desk to get a visitor pass and should wear it at all times while in the hospital. Please remember that the hospital is a place for healing and rest. Try to keep conversations quiet and, if sharing a room, please be respectful of other patients' need for rest or private time with their families. Also make sure that nurses and doctors can move freely around the bedside to provide care.

Our Family Lounges on each floor have information about hospital and local resources including local accommodations.

Close-by Lodging options are available. Please refer to the insert at the front of the handbook for more details.

Day before Surgery

Scheduled Surgery Time

A nurse will call you the day before your surgery to tell you what time to arrive at the hospital for your surgery. If your surgery is on a Monday, you will be called the Friday before.

- If you do not receive a call by 4:30 PM, please call 434.924.5035.
- Please write what time the nurse tells you to arrive on page 1 of this handbook in the space provided.

Bowel Prep

Bowel preparation (or bowel prep) is a way to make sure your intestines (bowels) are empty before surgery. It helps lower the risk of infection. This is especially important if you are having surgery on your intestines or in the abdominal (lower belly) area.

You will get prescriptions for antibiotics to take the day before surgery and instructions to drink Miralax mixed with Gatorade the day before. This is your "bowel prep."

Some patients may not be able to take all of the medications listed because they could cause problems with your regular medications. The nurses in the clinic will tell you exactly which medications you should take.

Please follow the instructions below:

- ☐ When you wake up: **Begin clear liquid diet. Start drinking Miralax mixed with Gatorade. No solid foods after this time.**
- ☐ Noon (12pm): Take Metoclopromide (this will help with nausea/upset stomach)
- ☐ 1pm: Take Erythromycin (or Metronidazole) and Neomycin
- ☐ 2pm: Take Erythromycin (or Metronidazole) and Neomycin
- ☐ 6pm: Take Metoclopromide
- ☐ 10pm: Take Erythromycin (or Metronidazole) Neomycin, and Metoclopromide

How to prepare Miralax

To do a Miralax bowel prep, you will need a 238g bottle of Miralax Powder, which you can buy over the counter in the laxative section. You will also need a 64 oz. bottle of Gatorade (any color except red or purple).

- Mix the entire bottle of Miralax with the entire bottle of Gatorade in a pitcher. Stir or shake until all the powder is dissolved. You can chill the mixture in the refrigerator. The solution must be used within the next 48 hours.
- Drink the mixture slowly throughout the day until it is all gone.

The Night before Surgery

Instructions for Eating and Drinking:

If you are doing a bowel prep

- ✓ Begin clear liquid diet. No solid foods after this time.
- ✓ Take your bowel preparation as instructed on previous page.
- ✓ Continue drinking clear liquids throughout the day (clear juice, clear broth, water, Gatorade, jello, coffee/tea--no dairy)
- ✓ **After midnight, you may only have water and Gatorade until you arrive at the hospital.**
- ✓ Have a 20-ounce Gatorade ready for the morning of surgery. Drink this on the way to the hospital. It is okay if you do not finish it before your arrival to the hospital.

Bathing before surgery

We will give you a bottle of body wash to use **the night before and the morning of your surgery (use half of the bottle each wash).**

The body wash is a skin cleanser that contains chlorhexidine gluconate (an antiseptic). This key ingredient helps to kill and remove germs that may cause an infection. Repeated use of the body wash creates a greater protection against germs and helps to lower your risk of infection after surgery.

Instructions for Bathing

Before using HIBICLENS, you will need:

- ☐ A clean washcloth
- ☐ A clean towel
- ☐ Clean clothes

IMPORTANT:

- ❒ The body wash is simple and easy to use. If you feel any burning or irritation on your skin, rinse the area right away, and do NOT put any more body wash on.
- ❒ Keep the body wash away from your face (including your eyes, ears, and mouth).
- ❒ DO NOT use in the genital area. (It is ok if the soapy water runs over but do not scrub the area.)
- ❒ DO NOT shave your surgery site. This can increase the risk of infection. Your healthcare team will remove any hair, if needed.

Directions for when you shower or take a bath:

1. If you plan to wash your hair, do so with your regular shampoo. Then rinse hair and body thoroughly with water to remove any shampoo residue.
2. Wash your face and genital area with water or your regular soap.
3. Thoroughly rinse your body with water from the neck down.
4. Move away from the shower stream.
5. Apply the body wash directly on your skin or on a wet washcloth and wash the rest of your body gently from the neck down.
6. Rinse thoroughly.
7. DO NOT use your regular soap after applying and rinsing with the body wash.
8. Dry your skin with a clean towel.
9. DO NOT apply lotion, deodorant, powder, or perfume after using the body wash.
10. Put on clean clothes after each shower.

Day of Surgery

Before You Leave Home

- Use the antiseptic body wash to bathe, but do not put on any lotion, deodorant, powder, or perfume.
- Take off any nail polish, makeup, jewelry, and piercings.
- Keep drinking water or Gatorade™ on the morning of your surgery. If you're diabetic, you can drink water or a low sugar Gatorade, such as Gatorade G2, Gatorlyte, or Gatorade Zero. Do NOT drink anything else, or your surgery might have to be canceled.
- Gradually drink your 20-ounce Gatorade™ on the way to the hospital. Do not "chug" it all at once you get there. It is okay if you cannot finish the Gatorade before arriving at the hospital.

Hospital Arrival

- Arrive at the hospital on the morning of your surgery at the time you wrote on page 1. This will be about 2 hours before your surgery.
- Do not drink anything else once you arrive at the hospital.
- Check in at the Family Waiting Lounge at your scheduled time.
- Your family will get a surgery guide that explains what will happen. They will also get a tracking number to follow your progress during the surgery.

Surgery

When it is time for your surgery, you will be taken to the preop area, also known as the Surgical Admissions Suite (SAS). Here you will:

- Get an ID band for your wrist to make sure they have the right person for surgery.
- Be checked in by a nurse who will ask you about your pain level.
- Have an IV put in and be weighed by the nurse.
- Get some medicines that will help you feel comfortable during and after surgery.
- Meet the anesthesia and surgery team, who will go over the surgery details with you and make sure you understand.
- You will also meet the urology team to sign consent so that they can help place stents in your ureters (tubes that connect your kidneys to your bladder) while you are asleep in the operating room.
- The Ostomy team will come by to draw on your abdomen in case we need to make an ostomy during surgery.
- The doctors will talk to you about how they will help control your pain during and after surgery. One of the anesthesiologists will place an epidural either while you're in the pre-op area or when you arrive in the operating room.

Your family can stay with you during this time.

In the Operating Room

From SAS, you will then be taken to the operating room (OR) for surgery and your family will be taken to the family waiting lounge.

Many patients don't remember being in the OR because of the medicine we give to help you relax and manage pain. Once you're in the OR:

- We will do a "check-in" to make sure we have the right person, confirm what type of surgery you are having, and check the correct body part.
- You will lie down on the operating room bed.
- We will connect you to monitors to watch your heart and other important signs.
- Boots will be put on your legs to help prevent blood clots during surgery. You might also get a shot to help prevent blood clots (usually after you fall asleep).
- We will give you antibiotics, if needed, to help prevent infection.
- The anesthesiologist will give you medicine that will make you sleep in about 30 seconds.
- Just before starting the surgery, we will do a "time out" to again, make sure we have the right person, confirm what type of surgery you're having, and check the correct body part.
- After you are asleep, a Foley catheter will be placed to keep your bladder empty during the surgery.

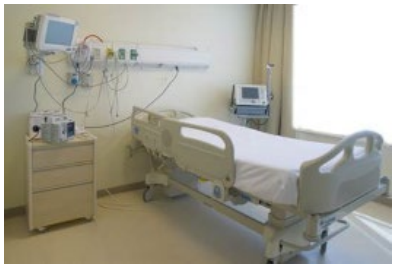
After this, your surgical team will do your operation. During the surgery, the OR nurse will call or send a text about every 2 hours to give your family updates, when possible.

After Surgery

After surgery, you may go straight to the ICU or stop in the recovery room (PACU) before being taken to a bed on the inpatient care unit. This depends on how big or complex your surgery is.

The plan is for you to recover in the:

- ❒ PACU
- ❒ ICU



Recovery Room (PACU)

In the **PACU** (Post Anesthesia Care Unit), doctors and nurses take care of you right after your surgery. This is where you wake up from anesthesia (the medicine that makes you sleep during surgery).

- Nurses will check your heart rate, breathing, and other important signs to make sure you're safe.
- They will help manage any pain you may feel and make sure you're comfortable.
- Once you're awake and stable, you will be moved to a regular care unit. This is usually 2-4 hours after you leave the operating room.
- The surgeon will also call your family after surgery to give them an update.

Hospital Inpatient Units

Once to your room:

- You will have a small tube in your bladder called a Foley catheter. This helps us measure how much urine you make and how well your kidneys are working.
- You will be given an incentive spirometer (a breathing tool). We will ask you to use it 10 times an hour to keep your lungs open and help prevent pneumonia.
- You will get blood thinner shots every day to help prevent blood clots.
- You will get up and out of bed the day after your surgery, with help from the nurse.

- You may have one or more tubes in your belly to drain fluids. Your nurse will empty these drains a few times each day.

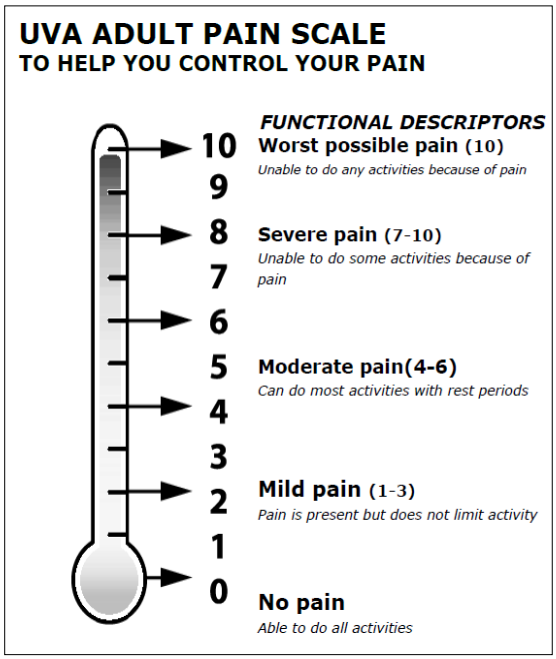
.

Pain Control Following Surgery

Managing your pain is an important part of your recovery. We will use the UVA Pain Rating Scale and ask you regularly how comfortable you feel. It's important that you can take deep breaths, cough, and move around.

We will also encourage you to use the "Splinting Technique" to help reduce pain where your surgery was. To do this, press a pillow or your hand against the area where you had surgery when you take a deep breath, cough, sneeze, laugh, or move.

Preventing and treating your pain early is easier than waiting until it starts. That's why we have made a plan to help keep your pain under control from the beginning.



- The epidural in your back gives you constant pain medicine to keep you comfortable. You will also be able to give yourself doses of pain medicine with a button connected to the epidural.
- You will be given Tylenol in your IV and sometimes a version of ibuprofen called Toradol in your IV after surgery.
- After your NGT (nasogastric tube) is removed you will be transitioned from the epidural to narcotic pain pills (like oxycodone) for pain management. At this time we will also switch you to Tylenol and ibuprofen by mouth.
- Sometimes lidocaine patches will be placed on your abdomen to help with pain control.
- This pain plan helps reduce the amount of narcotics you need after surgery. Using fewer narcotics can help you recover faster and avoid problems like constipation.

If you take pain medications regularly for chronic pain, our pain specialists will create a special plan just for you to help manage your pain.

Comfort Menu

Your comfort and pain control are very important to us. As part of your recovery, we want to give you different ways to manage your pain. Besides medication, we offer other options to help you feel more comfortable during your stay. We hope this comfort menu will help you and your healthcare team understand your pain and recovery goals better. Please let your care team know if you want to try any of these options to help with your pain and comfort

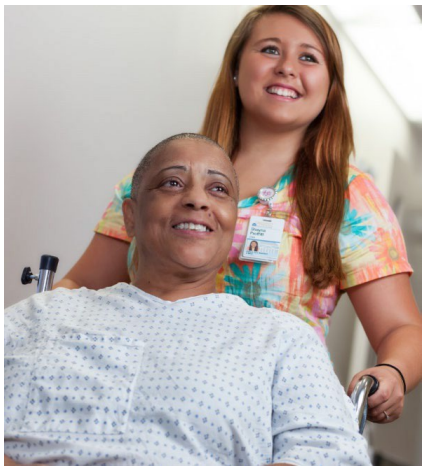
- ☐ **Distraction**: focus your mind on an activity like creating art with our art supplies, doing puzzle books and reading magazines
- ☐ **Ice or Heat Therapy**: ice packs and dry heat packs are available, depending on your surgery
- ☐ **Noise or Light Cancellation**: an eye mask, earplugs and headphones are available for your comfort and convenience. We can also help you create a sleep plan.
- ☐ **Pet Therapy**: hospital volunteers visit the unit with therapy animals. Ask about their availability.
- ☐ **Positioning/Movement**: changing position in your bed/chair or getting up to walk (with help) can improve your comfort.
- ☐ **Prayer and Reflection**: connect with your spiritual or religious center of healing and hope through prayer, meditation, reflection and ritual. Also, ask about our chaplaincy services.
- ☐ **Controlled Breathing**: taking slow deep breaths can help distract you from pain you are feeling. This can also help if you are feeling nauseated (upset stomach).
  Using the 4-7-8 technique, you can focus on your breathing pattern:
  - Breathe in quietly through your nose for 4 seconds
  - Hold the breath for 7 seconds
  - Breathe out through your mouth for 8 seconds
- ☐ **Television Distraction**: we offer a relaxation channel through the UVA in-room television. Turn to channel 17.
- ☐ **Calm App**: for Android or ioS: if you have a smart device, download the free **Calm** app for meditation and guided imagery. You can find it by searching in the app store.

Starting Day 1 after Surgery

- ❒ You will be asked to get out of bed with help, walk the hallways, and sit in the chair.
- ❒ Will have an IV in your arm to give you fluid.
- ❒ A nurse will draw labs to make sure you are recovering safely and staying healthy.
- ❒ Your drains will be checked and the containers will be emptied.
- ❒ You will receive a blood thinner injection(s) every day to help prevent blood clots.
- ❒ You will be given medicine to help keep you comfortable.
- ❒ You will be placed back on your home medications.

You will be ready to go home when:

- ❒ Your bowel function returns and you start to pass gas from below.
- ❒ You are able to start taking pain medication by mouth. The epidural for pain relief is no longer needed and it is removed.
- ❒ The foley is removed from your bladder and you are able to use the bathroom on your own.
- ❒ The Nasogastic (NG) tube is removed. You will start eating a liquid diet and slowly transition back to your normal diet.
- ❒ The drains in the abdomen (belly) and chest areas are removed.
- ❒ You are drinking enough to stay hydrated and eating without nausea or vomiting.
- ❒ You are able to get around with little or no assistance.
- ❒ You are comfortable and your pain is well controlled.



Remember, we will not discharge you from the hospital until we are sure you are ready. For some patients this requires additional time in the hospital.

Discharge

Before you are discharged, you will be given:

- ❒ A copy of your discharge instructions.
- ❒ A list of any medications you may need.
- ❒ A prescription for pain medicine.
- ❒ Ostomy supplies, if you have a new ostomy.
- ❒ Instructions on how to follow up at 1 week through a Telehealth visit.
- ❒ Instructions on when to return to see your surgeon in clinic. We plan to remove your staples at this visit (usually 14-21 days after discharge).

We would also like you to see your primary care doctor after discharge from the hospital.

Before You Leave the Hospital

- ❒ We will ask you to identify how you will get home and who will stay with you.
- ❒ If you use oxygen, we will want to make sure you have enough oxygen in the tank for the ride home.
- ❒ Be sure to collect any belongings that were stored in “safe keeping.”

Our Case Managers help with discharge needs. Please let us know the names, locations, and phone numbers of:

- ❒ Your home pharmacy:

  _____

- ❒ Your home healthcare agency (if you have one):

  _____

- ❒ Any special needs after your hospital stay:

  _____

Complications Delaying Discharge

After surgery, there are some things that might happen which could keep you in the hospital longer. We try our best to prevent these issues. These problems include:

Wound infection (abscess) – The area where the surgery was done might open up, become red, or leak fluid. If this happens, you may need antibiotics to treat the infection.

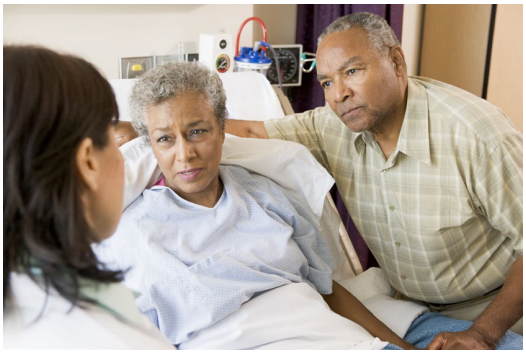
Post-Operative Ileus – when your intestines stop working properly after This means food, gas, and poop have trouble moving through your stomach and intestines. It can make you feel bloated or uncomfortable. **After CRS/HIPEC, all patients have an ileus that usually lasts 2-3 days.** It is an expected part of the healing process. If it does not clear as expected, you may be in the hospital longer.

Anastomotic Leak – This happens if the two ends of your bowel that were joined together don't heal properly. It usually happens within 5-7 days after surgery. Symptoms include bad stomach pain, fever, and vomiting. If this happens, you might need another surgery.

Bile leak – If you need a partial liver resection, the small ducts that drain bile can leak after surgery. Sometimes this requires another surgery or procedure to fix the leak.

Bleeding – There's always a risk of bleeding after surgery. We will closely watch you for any signs of bleeding.

Pneumonia – To help prevent pneumonia, we encourage you to do deep breathing exercises. Walking is the best exercise, and using a device called an incentive spirometer (lung exerciser) will also help



After Discharge

Bowel Function

After your operation, your bowel function will take several weeks to settle down and may be slightly unpredictable at first. For most patients, this will get back to normal with time. Make sure you eat regular meals, drink plenty of fluids and take regular walks during the first two weeks after your operation.

Patients can have a variety of bowel complaints, including:

- irregular bowel habits
- bowel movements that are loose
- constipation
- difficulty controlling bowel movements with occasional accidents
- continuing to feel the need to have a bowel movement even if you've had several in a row
- a little blood in the bowel movement

Constipation

You may be given a prescription for pain medicine (narcotic) when you are discharged from the hospital. Constipation is very common with the use of narcotic pain medicine. We designed the ERAS program to decrease the risk of constipation by using pain medicine alternatives to help keep you comfortable.

It is very important to AVOID CONSTIPATION AND HARD STOOLS after surgery.

We recommend taking a stool softener such as Docusate Sodium or Colace while taking narcotic pain medication. If the stool softener is not enough, you may try a mild laxative such as MiraLax as directed until your bowel habits are regular. Speak with your pharmacist if you have any questions about what to take.

It is also important that you drink 6-8 cups of non-caffeinated fluids per day to prevent constipation. Carbonated beverages will make you feel bloated after surgery and we recommend limiting them in the early post-operative period. Walking and regular activity will also help to prevent constipation.

Diarrhea

Most problems with diarrhea go away once the stool is made firmer. A firmer stool is easier to hold in and pass more completely.

- The first step to improving frequent or loose stools is to bulk up the stool with fiber. Metamucil is the most common type of fiber that is available at any drug store. Please note you should not take Metamucil if you have an ileostomy.
    - Start with 1 teaspoon mixed into food like yogurt or oatmeal in the morning and evening.
    - Try not to drink any fluid for 1 hour after you take the fiber. This will allow the fiber to act like a sponge in your intestines, soaking up all the excess water.
    - Continue this for 3-5 days.
    - You may increase by one teaspoon every 3-5 days until the desired effect or you are at 1 tablespoon (3 teaspoons) twice a day.

Diet

Most patients find their appetite is less than normal after surgery. Frequent small meals throughout the day may help. Over time, the amount you can comfortably consume will gradually increase.

You should try to eat a balanced diet, including:

- ❒ Foods that are soft, moist and easy to chew and swallow
- ❒ Foods that can be cut or broken in to small pieces
- ❒ Foods that can be softened by cooking mashing
- ❒ Eating 4-6 small meals throughout the day to reduce gas and bloating
- ❒ Eating plenty of soft breads, rice, pasta, potatoes and other starchy foods(lower-fiber varieties such as white bread, white rice, and white pasta may be tolerated better, initially)
- ❒ Drinking plenty of fluids.
    - Aim for at least 8-10 cups of fluid per day – water, fruit juice, teas/coffee and milk (regular milk is encouraged as a good source of nutrients to aid in your recovery)

Be sure to:

- ❒ Chew food well – take small bites!

- ❒ Eat good sources of protein such as meats, eggs, milk, yogurt, cottage cheese, smooth nut butters, tofu, beans, Ensure, Resource Breeze, Carnation Instant Breakfast, Boost, etc
- ❒ Replace hard raw foods and vegetables with canned or soft cooked fruits and vegetables

Avoid:

- ☒ Carbonated beverages in the first couple weeks
- ☒ Tough, thick pieces of meat, fried, greasy and highly seasoned or spicy foods
- ☒ Gas forming vegetables such as cabbage, Brussel sprouts, broccoli, cauliflower, and onions

Some patients feel nauseated. To minimize this feeling, avoid letting your stomach get empty. Eat small amounts of food and eat slowly.

You may find that for a few weeks following your operation, you may have to make some slight adjustments to your diet depending on your bowel pattern. You may find some foods can cause loose stools. If this happens you should avoid these foods in the first few weeks after surgery then try them again, one at a time.

If you are struggling with your appetite, choose high calorie food and try to make the most of the times when you are hungry. Also consider taking a multivitamin with minerals.

Urinary Function

- After surgery, you may get a feeling that your bladder is not emptying fully. This usually resolves over time. However, if you are not urinating or there is any concern, contact us.
- If you have severe stinging or burning when passing urine, please contact us as you may have an infection.

Abdominal Pain

- It is not unusual to suffer gas pains (colic) during the first week following surgery. This pain usually lasts for a few minutes but goes away when the bowels return to normal.

Pain Management

You may alternate NSAIDS (like ibuprofen) and acetaminophen (Tylenol) to help control your pain. Be sure to take these over-the-counter medications exactly as your doctor tells you.

After surgery, we might give you a prescription for strong pain medicine (narcotic) if you're in a lot of pain. If you want to get it filled at the hospital pharmacy, please tell your nurse so it doesn't delay your discharge.

Narcotic pain medicine can sometimes make you feel sick to your stomach. To help avoid this, try taking the medicine with a small amount of food.

Your health care team will work with you to make a plan for how to manage your pain using the medicine you're given. It's very important not to misuse narcotic pain medicine. If you take more than what was prescribed or take it too often, you could run out of medicine before your pharmacy can give you a refill. Also, prescriptions for narcotic pain medicine can't be called in to the pharmacy. You'll need to pick up the prescription in person at your doctor's office with a valid ID.

In Virginia, there's a Prescription Monitoring Program to help keep people safe when taking these medicines.

Pain Medication Weaning

You might find that your pain is well controlled by over-the-counter medicines like **NSAIDs** (such as **ibuprofen**) and **acetaminophen** (like **Tylenol**).

If you're taking narcotic pain medicine, you will need to slowly reduce the amount you take as your pain gets better. This process is called "weaning." Weaning helps you take less medicine over time until you don't need it anymore. This can make you feel better and improve your daily life.

It's important to remember that narcotic pain medicine might not work well for pain over a long time, and sometimes it can even make your pain worse. These medicines can also cause side effects like constipation, nausea, tiredness, and even addiction. The more of the narcotic medicine you take, the stronger these side effects can be.

To wean from your narcotic pain medication, we recommend slowly reducing the dose you are taking. *You can increase the amount of time between doses*. If you are taking a dose every 4 hours, extend that time:

- Take a dose every 5 to 6 hours for 1 or 2 days
- Then, take a dose every 7 to 8 hours for 1 or 2 days.

You can also reduce the dose. If you are taking 2 pills each time, start taking fewer pills:

- Take 1 pill each time. Do this for 1 or 2 days.
- Then, increase the amount of time between doses, as explained above.

If you are not sure how to wean off of your narcotic pain medication, please contact your family doctor.

Once your pain has improved and/or you have weaned off your narcotic pain medication, you may have pills remaining. The UVA Pharmacy is now a DEA registered drug take-back location. There is a Drop Box available in the main lobby of the pharmacy 24 hours 7 days per week for patients or visitors to safely dispose of unwanted or unused medications.

Blood Clot Prevention

You may be sent home on a blood thinner medication to prevent blood clots. Instructions on how to give yourself this medication will be provided while you are still in the hospital.

Wound Care Instructions

After surgery, you will have skin staples to help close your belly wound. It is common for your incisions to be tender and pink, but you must monitor for signs and symptoms of infection such as a fever and change in drainage color or smell.

Here's how to take care of them:

1. **Keep the area clean** – Wash around the staples with mild soap and water. Don't scrub or get the staples wet unless your doctor says it's okay. You may shower but do not soak in a tub. After the shower, you should pat the area dry.
2. **Avoid touching the staples** – Try not to touch them with dirty hands. This can help prevent infection.
3. **Watch for signs of infection** – Look for redness, swelling, or fluid around the staples. If you see any of these, tell your nurse or doctor.

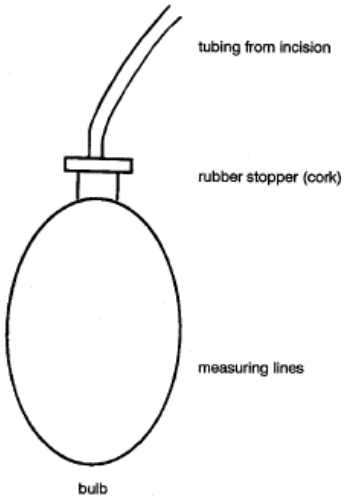
4. **Don't pull out the staples** – Let your doctor or nurse remove them when it's time. Don't try to take them out yourself.
5. **Follow your doctor's instructions** – If your doctor gives you special instructions for caring for the staples, make sure to follow them carefully.

Avoid direct sunlight on your surgery site. It will take a few months for your scar to become less red. You will need to wear sunscreen on your scar line for the first year.

After the abdominal drain(s) are removed, the site will close up over the next 3 days. You may still see clear fluid draining during this time, but it can be managed with gauze or a pouch bag. Your nurse will show you how to do to this before you leave the hospital. The drainage amount will decrease each day. If the drainage amount increases, please call your doctor. Once the drainage stops, remove the dressing or pouch bag(s) and leave the area open to air to finish healing.

Going Home with a Drain

If you go home with a "JP" drain, you will need to empty it and record the drainage 2-3 times a day. If there is very little drainage, you can empty it once a day or every other day.



Write down the color of the drainage, the amount (you'll be given a measuring cup), and the date and time you empty the drain. Your nurse will show you how to do this before you leave the hospital.

If your drain starts to leak a lot where it meets your skin, call your doctor to see if you need to come in for a check.

Change the bandage around the drain once a day. Your nurse will explain how to do this.

Depending on the type of drain you have, your nurse will tell you if you can shower. You should NOT take tub baths while the drain is in place.

Ostomy Care at Home

The following instructions will help you at home with your new ileostomy. Please see additional resources provided by the Wound and Ostomy Care (WOC) team. Please feel free to ask questions if you do not understand.

At Discharge

Before you leave the hospital, in addition to your discharge instructions and prescriptions, you should have:

- ☐ Ostomy supplies for 4 pouch changes
- ☐ A follow-up outpatient appointment with your surgeon
- ☐ Prescriptions for ostomy supplies
- ☐ A chart to allow you to record your intake and output at home
- ☐ A container for measuring your stool & urine output

Nutrition and Hydration with an Ileostomy

When you have an ileostomy it is important to eat enough to stay healthy after surgery. You can lose fluid and minerals (like salt) with an ileostomy, so it is important to drink enough fluids and *not* limit salt in your diet. Dehydration can lead to serious kidney injury and being readmitted to the hospital.

- ❒ ALWAYS chew your foods well
- ❒ Eat 4-6 smaller more frequent meals throughout the day.
- ❒ Eat good sources of protein with each snack and meal. Foods that have protein are eggs, meats (chicken, turkey, fish/shellfish, beef, pork, and lamb), beans, tofu, lentils, dairy products (milk, yogurt, cheese), and smooth nut butters. This will help with healing.
- ❒ Do not limit salt in your diet—salt is lost in ostomy fluid so it is important to eat some salty foods every day such as pretzels, broth, soup, cheeses, etc. Feel free to add salt to your foods as well.
- ❒ Avoid mushrooms, nuts, corn, coconut, celery, and dried fruit for the first 2 weeks. Two weeks after surgery you may start slowly reintroducing in moderation.
- ❒ Drink 80 ounces (10 cups) of fluids daily. Try to drink half of your fluid (40 ounces) as Gatorade, Pedialyte, or Powerade. The rest of your fluids should be water, broths, and/or unsweetened tea.

Dehydration

An ileostomy is made from the small intestine before it enters the colon. Because the colon absorbs most of the water from the stool, the stool from the ileostomy will be loose and watery. If your ileostomy output is too high, you may become dehydrated.
Dehydration is the most common reason patients with an ileostomy have to come back to the hospital in the month following surgery.

Remember, it is important to measure and write down how much you drink, your ileostomy output, AND urine output for 2 weeks after surgery and bring this to your first post-op surgery appointment.

- ☐ If your ileostomy output stays over 1200mL per day, avoid regular sodas, fruit juices, fruit drinks, and supplements such as Boost or Ensure.
    - Please see the next page for further instruction.
- ☐ It is important that you make at least 1200mL of urine each day to protect your kidneys.
    - If your urine output drops below 1200mL for 24 hours, please call your surgery team.

Additional Signs & Symptoms of Dehydration

Please call your surgeon's office (or the on-call resident after hours) if you develop:

- ☒ Dry mouth
- ☒ Urine that is dark in color
- ☒ Dizziness or weakness
- ☒ Abdominal pain
- ☒ Fever

There are Registered Dietitians available at 434.297.4433 (8am – 4:30pm Monday-Friday). They can help to answer questions you may have about your diet after surgery

LOPERAMIDE (example: Imodium) GUIDELINES

At home, **Measure your Ileostomy Output** and write the volume down on your log sheet.
Every day, add up your 24 hour total and follow the instructions below:

If 24 hour Ileostomy Output is…

0 - 500mL
Too Low

↓

Call the Doctor

500 – 1200 mL
Normal

↓

Continue what you are doing

1200 – 2000 mL
Too High

↓

Step 1:
Take 1 Loperamide ½ hour before Breakfast and Dinner (if output is normal the next day, continue Step 1; if not go to Step 2)

↓

Step 2:
Take 1 Loperamide ½ hour before Breakfast, Lunch, Dinner, and Bedtime (if output is normal the next day, continue Step 2; if not go to Step 3)

↓

Step 3:
Take 2 Loperamide ½ hour before Breakfast, Lunch, Dinner, and at Bedtime (if output is normal the next day, continue Step 3 and call the doctor)

More Than 2000 mL
Way Too High
OR
if you reached Step 3 in the yellow box

↓

Call the Doctor

Loperamide (example: Imodium) is available in 2mg tablets over the counter.

When to Call

Complications do not happen very often, but it is important for you to know what to look for if you start to feel bad.

After you leave the hospital, you should call us at any time if you:

- ❒ Have severe pain lasting more than 1-2 hours
- ❒ Have a fever greater than 100.5°F or shaking chills.
- ❒ Are vomiting, nauseated, have frequent stools/diarrhea or stools that look lighter, or abnormal in color
- ❒ Are unable to have a bowel movement for more than 3 days
- ❒ Are not tolerating food, fluids or nutritional supplements

Related to your surgical site, please call us if:

- ❒ It becomes bright red and painful, or redness starts spreading
- ❒ It starts to drain infected material that is not clear yellow or light red/pink
- ❒ It starts to drain more than a small amount
- ❒ It releases cloudy or foul smelling fluid
- ❒ You notice increased drainage from your surgical site
- ❒ Your drain falls out or the drainage becomes bloody

Contact Numbers

If you have trouble or questions between 8:00am and 4:30pm, call your surgeon's office at 434.924.9333.

After 4:30pm and on weekends, call 434.924.0000. This is the main hospital number. Ask to speak to the Green Surgery Resident on call. The resident on call is often managing patients in the hospital so it may take a few minutes longer for your call to be returned.

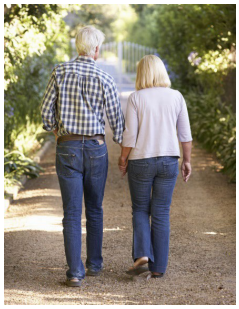
Deep Breathing Exercises

You will be sent home with an incentive spirometer (lung exerciser). Please continue to use 10 times per hour while awake. Walking is the best exercise, but deep breathing will help to prevent pneumonia after surgery.

You can continue using your incentive spirometer at home for 2 weeks after surgery.

Hugging a pillow against your abdomen while coughing and deep breathing can help with comfort

Hobbies and Activities



Walking is encouraged from the day following your surgery. Plan to walk three or four times daily.

You SHOULD NOT:

☒ Do any heavy lifting for 6 weeks.
(no more than a gallon of milk = 10 lbs.).

☒ Heavy exercise or return to your exercise routine may be started 6 weeks following your surgery, but go slowly.

You SHOULD:

❒ Be able to climb stairs and go outside from the time you are discharged.

❒ Return to hobbies and activities soon after your surgery. This will help you recover. You may return to your exercise routine after 6 weeks but go slowly.

Remember, it can take up to 2-3 months to fully recover. It is not unusual to be tired and need an afternoon nap 6-8 weeks following surgery. Your body is using its energy to heal your wounds in the inside and out.

Resuming Sexual Relationships

You should be able to resume a normal, loving relationship after you have recovered from your surgery and you are not feeling any discomfort.

Some people having operations in the lower abdomen (belly area) may have specific sexual problems after surgery.

Men may experience problems with erection and ejaculation. This can happen because of damage to the nerves. It is usually possible to keep the operation clear of these nerves, but occasionally they may be damaged. Women may experience pain during intercourse.

It is important to talk to your partner about how you are feeling. You should remember that your feelings can affect how you feel about yourself and your intimate relationships. Talking about your feelings with your partner will help with stress and anxiety.

Please talk to your doctor if you are having problems because your doctor can help you find the best way to deal with them. Your doctor may choose to refer you to a specialist who may be better to help you

Work

You should be able to return to work 6-8 weeks after your surgery. This might be longer or shorter depending on your recovery rate and how you are feeling. If your job is a heavy manual job, you should not perform heavy work until 8 weeks after your operation. You should check with your employer on the rules and policies of your workplace, which may be important for returning to work.

If you need a “Return to Work” form for your employer or disability papers, ask your employer to fax them to our office at 434.244.9437.

Driving

You may drive when you are off narcotics for 24 hours and feel secure. You should be pain-free enough to react quickly with your braking foot and turn your body to see passing cars. For most patients this occurs at 3 weeks following surgery.

CRS/HIPEC Surgery Pathway:
The Patient's Checklist

GOAL: Safe transition from hospital to home or next care setting through learning basic knowledge of postoperative care and monitoring.

WEEKS PRIOR TO SURGERY	ACTION	CHECK WHEN COMPLETE
Medications	If you are on any blood thinner medications, follow any specific instructions that your nurse gave you regarding **if** and **when** to stop taking them before your surgery. If you have any questions, call your surgeon's office.	
Medications	Stop taking any vitamins, supplements and herbs 2 weeks before your surgery. Stop taking ibuprofen (Motrin® or Advil®) and naproxen (Aleve®) 1 week before surgery.	
DAY BEFORE SURGERY	**ACTION**	**CHECK WHEN COMPLETE**
Medications	Take your bowel preparation.	
Medications	Follow instructions given to you for blood thinners and diabetes medications.	
Diet	Begin Clear Liquid Diet Continue drinking clear liquids throughout the day.	
Actions	On the evening before your surgery, take a shower with the soap provided to you. Use **half** of the bottle as instructed.	
Actions	Call 434.924.5035 if you don't receive a by 4:30 PM with your arrival time.	

MORNING OF SURGERY	ACTION	CHECK WHEN COMPLETE
Medications	Take any medication you were instructed to take the morning of surgery.	
Actions	On the morning of your surgery, take a shower with the soap provided to you. Use the remaining half of the bottle.	
Diet	Do not eat the morning of surgery. Continue drinking water or Gatorade until you arrive at the hospital.	
Actions	Bring your CPAP or Bi-PAP machine with you, if you use one.	
Actions	Bring your blood band with you, if you were given one.	
Actions	Bring an updated list of your medications.	
Actions	Bring this handbook and checklist in to the hospital with you when you check in for surgery. See the “Pre-Surgery Checklist” page in your handbook for some additional helpful items to bring with you on your day of surgery.	

AFTER SURGERY	ACTION	CHECK WHEN COMPLETE
Mobilize	Get out of bed and walk outside the hospital room starting the day after surgery	
Weight	Write down your weight that was taken. Identify importance of daily weights during hospitalization.	
Pain management	Discuss with nurse what medications will be used to manage post-operative pain. Demonstrate understanding of UVA's pain scale.	
Breathing	Use the incentive spirometer as instructed by your nurse.	
PRIOR TO DISCHARGE	**ACTION**	**CHECK WHEN COMPLETE**
Infection Prevention	Identify signs and symptoms of wound infection. Demonstrate appropriate wound care.	
Pain Management	Pain well-controlled on oral pain medications. Verbalize pain management plan for discharge.	
Discharge Instructions	Verbalize understanding of sign and symptoms of a potential complication and what actions to take in the event of a complication.	
Discharge Preparation	Ensure you have a ride home from the hospital, extra oxygen (if you need it), and all of your belongings that may have been stored in “safe keeping” during your hospital stay.	

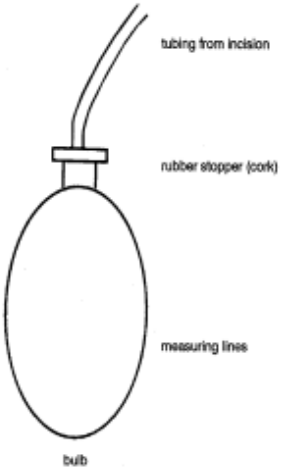
OSTOMY INSTRUCTIONS	ACTION	CHECK WHEN COMPLETE
Ostomy Instructions	Demonstrate understanding of how to empty and record ostomy output. Identify the actions to take for low and high ostomy output.	
Ostomy Medication Education	Verbalize knowledge of two medications used to thicken ostomy output and avoid dehydration. Review pathway for the use of Imodium in the case of high ostomy output.	
Ostomy Output Recording	Measure ostomy output and record volume on log sheet. State to the nurse the expected ostomy output for 24 hours.	
Ostomy Return Demonstration	Demonstrate to wound nurse of bedside RN how to apply new ostomy bag.	
Ostomy Supplies	Assure that you have supplies for discharge.	

UVA Health
University Medical Center

Patient and Family Education

Care of the Jackson-Pratt (JP) Drain

These instructions will help you take care of yourself at home.



A JP Drain was stitched into your wound during surgery. The drain gently suctions and collects fluid, promoting healing and reducing swelling and the risk of infection.

Care of the JP Drain:

- Keep the drain pinned to your clothing to avoid pulling on the stitches that hold the drain in place.
- "Milk" the tubing as taught by your nurse, 2-3 times per day, to keep the tubing free from clots.
- Clean the skin around the drain with soap and water daily. Pat the area gently. Do not rub.

Emptying and Recording the JP Drainage:

- Empty the bulb 2-3 times daily or anytime it is ½ full. After emptying, squeeze the bulb almost flat in the palm of your hand and re-plug it. This creates a gentle suction.
- The amount should decrease with time and the color usually changes from red to straw.
- Write down the date, time and amount of fluid each time you empty the drain. Keep this record and bring it with you when you return to see the doctor.

Watch for any sign of infection after surgery: **fever, chills, increased pain, redness, swelling, or foul-smelling discharge from your wound.** Call your doctor at the first sign of any infection.

When to call your doctor

Call 434-924-0000 and ask for "Resident on call" for Dr. _____ if:

- There are signs of infection as above
- Your drain unexpectedly falls out or is pulled out
- Drain is not maintaining suction
- Output color changes to white/green/yellow, especially if thick fluid (curdled milk consistency)
- More than 200 mLs of output in 3 hours

Call 911 if you have chest pain or shortness of breath

Jackson-Pratt Drainage Record

DATE	TIME	AMOUNT	COMMENTS

UVA Health

Intake & Output Log

Date	Time	Oral Intake	Urine Output	Ileostomy Output
_____/_____	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Notes: 1cc = 1ml 1oz=30ml 240ml=One 8oz cup	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Weight _____ lbs (call for 2 pound loss)	24 hour Totals:	_____ ml (goal 2000ml)	_____ ml (goal ≥ 1200ml)	_____ ml (goal 500-1200ml)

Date	Time	Oral Intake	Urine Output	Ileostomy Output
_____/_____	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Notes: 1cc = 1ml 1oz=30ml 240ml=One 8oz cup	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Weight _____ lbs (call for 2 pound loss)	24 hour Totals:	_____ ml (goal 2000ml)	_____ ml (goal ≥ 1200ml)	_____ ml (goal 500-1200ml)

UVA Health

Intake & Output Log

Contact Information
M-F 9:00 AM – 5:00 PM: 434-243-9970
Weekends & After hours: 434-924-0000
(ask for Blue Surgery resident on call)

Date	Time	Oral Intake	Urine Output	Ileostomy Output
____/____	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Notes: 1cc = 1ml 1oz=30ml 240ml=One 8oz cup	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Weight _____ lbs (call for 2 pound loss)	24 hour Totals:	_____ ml (goal 2000ml)	_____ ml (goal ≥ 1200ml)	_____ ml (goal 500-1200ml)

Date	Time	Oral Intake	Urine Output	Ileostomy Output
____/____	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Notes: 1cc = 1ml 1oz=30ml 240ml=One 8oz cup	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Weight _____ lbs (call for 2 pound loss)	24 hour Totals:	_____ ml (goal 2000ml)	_____ ml (goal ≥ 1200ml)	_____ ml (goal 500-1200ml)

UVA Health

Intake & Output Log

Contact Information
M-F 9:00 AM – 5:00 PM: 434-243-9970
Weekends & After hours: 434-924-0000
(ask for Blue Surgery resident on call)

Date	Time	Oral Intake	Urine Output	Ileostomy Output
____/____	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Notes: 1cc = 1ml 1oz=30ml 240ml=One 8oz cup	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Weight _____ lbs (call for 2 pound loss)	24 hour Totals:	_____ ml (goal 2000ml)	_____ ml (goal ≥ 1200ml)	_____ ml (goal 500-1200ml)

Date	Time	Oral Intake	Urine Output	Ileostomy Output
____/____	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Notes: 1cc = 1ml 1oz=30ml 240ml=One 8oz cup	____:____ AM/PM	_____ml	_____ml	_____ml
	____:____ AM/PM	_____ml	_____ml	_____ml
Weight _____ lbs (call for 2 pound loss)	24 hour Totals:	_____ ml (goal 2000ml)	_____ ml (goal ≥ 1200ml)	_____ ml (goal 500-1200ml)