

# Cytoreductive Surgery (CRS) and Heated Intraperitoneal Chemotherapy (HIPEC)

Information for Patients and Families



Treatment – Surgery



You will see doctors and nurses who have specialized knowledge and experience in treating advanced abdominal cancers. Our team is committed to helping you with your treatment and recovery. Depending on the type of cancer you have, you will see healthcare professionals in the:

- Advanced GI Malignancy Clinic or
- Gynecologic Oncology Clinic



Bring this book to all of your appointments

**This book will help you, and your family and friends understand basic information about cytoreductive surgery and heated intraperitoneal chemotherapy.**

**Read about:**


- what the procedures are and how they are done
- how to care for yourself before, during and after surgery
- where you can find resources and supports



Write your questions down in the book. If there's any information you do not understand, ask your healthcare team to review it with you.


**For more information:**



This book, along with other Alberta resources are available at your cancer centre or online  [www.cancercarealberta.ca](http://www.cancercarealberta.ca)



Find community support resources with **Alberta 211**  
[www.ab.211.ca](http://www.ab.211.ca)  211

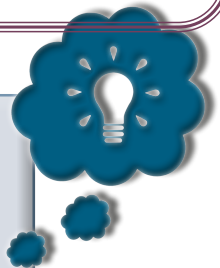
**Your healthcare team is here to help you and answer your questions. Health Link** is also available 24/7 for health information, advice or concerns.  811

**! For urgent concerns, call your surgeon's office**



You can use the free AHS **My Care Conversations** app to prepare for your next appointment and to audio record conversations with your healthcare team. You can listen to your recordings at home and share with family or trusted friends.

Download it from the App Store or Google Play.



# What You Will Find Inside

**My Plan - Diagnosis & Contacts .....A**

**My Plan - Preparing for Before and After Surgery .....B**

**A.  Just Diagnosed..... 1**

**A1. Getting Prepared ..... 1**


Finances, insurance & drug coverage ..... 1  
Time off from work..... 2  
Fertility and birth control..... 2

**A2. Learning about Abdominal Cancer..... 3**

What is cancer? ..... 3  
What body parts does abdominal cancer affect? ..... 4

**A3. Treatment for Abdominal Cancer..... 5**

Cytoreductive surgery (CRS)..... 5  
Heated Intraperitoneal Chemotherapy (HIPEC) ..... 5  
What types of cancer are these treatments used for? ..... 6  
What are the potential risks and benefits? ..... 7  
Will I be included in research studies or clinical trials?..... 7  
Who is part of my cancer surgery team?..... 7

**B.  Before, During and After Surgery in Hospital .....8**

**B1. Getting Ready for Surgery ..... 8**




Learning about surgery ..... 8  
Nutrition ..... 8  
Pre-Admission Clinic (PAC)..... 8  
Tests before surgery..... 9  
Surgery date and time ..... 9  
Immunizations ..... 9  
What you should do to get ready..... 10  
Medication instructions..... 11

**B2. Day and Night Before Surgery..... 12**

Bowel preparation or cleansing ..... 12  
Antibiotics ..... 12  
Eating and drinking..... 12  
Confirming your time ..... 12  
Night before or morning of surgery..... 13  
Preparing your skin..... 13

**B3. Day of Surgery..... 14**

What do I bring? ..... 14  
At the hospital..... 15  
Procedures before and during surgery..... 16

<b>B4. After Surgery (in Hospital)</b>	<b>17</b>
What to expect	17
Managing pain and nausea	17
Dressings and incisions	18
Drains	19
Getting moving and doing leg exercises	19
Deep breathing and coughing exercises	20
Eating and drinking	20
Bowel and bladder function	21
Blood thinner medication	22
<b>B5. Getting Ready to Go Home</b>	<b>22</b>
Going home (Discharge) checklist	22
<b>C.  At Home After Surgery</b>	<b>23</b>
<b>C1. The “Do Nots” after surgery (for 6 weeks)</b>	<b>23</b>
<b>C2. Your Incision</b>	<b>23</b>
Daily checks	23
Incision care	24
<b>C3. Follow-up Appointment</b>	<b>24</b>
<b>C4. Concerns or Complications</b>	<b>24</b>
Pain or discomfort	24
Medications	25
Bowel problems or nausea	25
<b>C5. Personal Care, Nutrition &amp; Activity</b>	<b>26</b>
Showering and personal care	26
Vaginal flow	26
Using products (liquids, lotions or creams)	26
Driving	27
Diet and nutrition	27
Activity and exercise	29
Sexual Intercourse	29
Tobacco products	30
<b>D.  Living Your Best</b>	<b>31</b>
<b>D1. Appearance</b>	<b>31</b>
Body image	31
<b>D2. Emotional Self Care and Awareness</b>	<b>31</b>
Anxiety	32
<b>D3. Integrative and Complementary Therapies</b>	<b>33</b>
<b>D4. Find Information and Access Resources</b>	<b>34</b>
<b>E.  Urgent Concerns &amp; When to Get Help</b>	<b>36</b>

# My Plan - Diagnosis & Contacts

## My Diagnosis

Type of Cancer \_\_\_\_\_

I am attending the:

- Advanced GI Clinic
- Gynecologic Oncology Clinic

Type of Surgery:

- Cytoreductive Surgery
- Heated intraperitoneal chemotherapy

Chemo type: \_\_\_\_\_

## Contacts

Surgeon(s): \_\_\_\_\_

Office Number(s): \_\_\_\_\_

Urgent Contact Number (for surgeon): \_\_\_\_\_

Nurse Practitioner: \_\_\_\_\_

Nurse(s): \_\_\_\_\_

Dietitian: \_\_\_\_\_

Administrative Assistant: \_\_\_\_\_

Pre-Admission Clinic Phone: \_\_\_\_\_ Date: \_\_\_\_\_

Hospital phone number: \_\_\_\_\_

Other: \_\_\_\_\_



# My Plan - Preparing for Before and After Surgery

## Preparing for Surgery and Procedures

### Day Before:

- On the day before** your surgery, call \_\_\_\_\_ to find out when to be at the hospital. If your surgery is on a Monday or the Tuesday of a long weekend, please call on the Friday before.
- Someone from the hospital will call you.

### Day Of:

- I need to be at the hospital at \_\_\_\_\_ (time).
- I need to go to \_\_\_\_\_ (location).

### Preparing:

**Bowel Prep** – I need bowel prep  Yes  No      I have a handout  Yes  No

**Eating and Drinking Before Surgery** – I have a handout  Yes  No

**Antibiotics**  Yes, and I have a prescription     No, I don't need any

**Special soap sponge** (to buy and use at home before surgery, p. 13) –  Yes  No

**Help at Home** I have help for 6 weeks at home after surgery  
 Yes                       No (if no, talk to your healthcare team to plan ahead).

**Immunizations** I need immunizations  Yes  No      I have a handout  Yes  No  
Date: \_\_\_\_\_ Location: \_\_\_\_\_

**Iron Infusion** I need extra iron  Yes  No  
Date: \_\_\_\_\_ Location: \_\_\_\_\_

Hemoglobin \_\_\_\_\_ Date \_\_\_\_\_

Iron Level \_\_\_\_\_ Date \_\_\_\_\_

## After Surgery

Person Picking Me Up: \_\_\_\_\_ Phone: \_\_\_\_\_

Follow-up Appointment: \_\_\_\_\_

Referrals: Home Care  Yes  No    Enterostomal Nurse  Yes  No

Drain:  Yes  No

Other: \_\_\_\_\_

## A. Just Diagnosed

A1

### Getting Prepared

Having cancer surgery can bring up many emotions and questions. You may wonder about pain, changes to your body or future treatment. You may wonder how you'll manage responsibilities at home or work. It's common to have many feelings (such as anger, sadness, or hope), sometimes all in one day. Your healthcare team can help you find the support or answers you need.

This first section has some of the most common concerns that patients are worried about. For more on emotional self-care and awareness, go to [page 31](#).

#### Finances, insurance & drug coverage

The cost of your surgery is covered by Alberta Health Care. But there are other costs that go along with your cancer treatment(s) that you may not have thought of. For example:

- How long you'll need to be off work for surgery and recovery.
- Your insurance coverage for some of the medicines used for treatment.
- Extra costs such as parking and hotels.

#### Need a place to stay during treatment?

**Calgary** - call the [Foothills Medical Centre Hostel](#) at 403-944-1156

**Edmonton** - call the [Patient and Family Resource Centre](#) at 780-432-8456

You may be able to get help to pay for some of these costs. If you have concerns, it's important to speak to your healthcare team right away. They may be able to help you find the supports you need. Tips:



- **Keep all of your treatment-related receipts** (parking, travel, and accommodation) and write the reason on the receipts. You may be able to claim medical costs when you file your taxes.



- **Ask your healthcare team what is covered.** When your treatment plan is confirmed, and if you have Alberta Health Care, most of your treatments will be covered, but there could be extra costs.
- **Call your insurance provider** so you know what they cover and ask about the cost of extra coverage if you need it. Sometimes when you add medical coverage there is a waiting period before the coverage starts.
- Extra coverage may be helpful to cover the cost of things such as prostheses, medicines, transportation, and physiotherapy.



- **Make a list of other costs such as childcare, lodging, and travel.** Your healthcare team may be able to suggest services that cost less.



- **Ask to see a resource social worker** to help you find government financial support, including tax credits and caregiver employment insurance.



## Time off from work

How much time off from work you will need depends on the type of surgery and any other treatments you may have. Ask your surgeon how long you will likely be off work.

Your surgeon can provide a note for the time off you need for the surgery and recovery from surgery. If you need to have more treatment (systemic or radiation treatment), the oncologist managing your care will need to provide a note for the rest of the time off you need.

If you need a letter from your doctor for work, we may ask you to fill out some forms first.

Contact the Human Resources department at your workplace if you want to make a claim to either:

- Your work's disability insurance provider
- Service Canada (Canada Pension Plan Disability Benefits)

## What else do I need to know?

- Ask your employer what documentation they need you to complete.
- Talk directly with your doctor about the forms you need completed and follow the instructions they give you.
- Doctors usually cannot complete these forms during clinic hours, but will ask you to leave them to complete and pick up at another time.



## Fertility and birth control



Fertility is the ability to get someone pregnant or to get pregnant and carry a child to a healthy birth. Cancer and cancer treatment can sometimes damage the reproductive organs such as the ovaries and testicles. These changes can have short-term or long-term effects on your fertility.

If you have ovaries, fallopian tubes or a uterus and the cancer has spread to these parts, they will have to be removed. This leads to permanent **sterility** (inability to have children).

Cancer treatment can cause changes to the reproductive organs like:

- irregular periods, or it may stop monthly bleeding
- premature menopause
- decreased sperm quality, number and motility

**Tip!**

Before you start your treatment, check with your healthcare team to find out what your options are for preserving your fertility.



Remember to:

- **Tell your healthcare team right away if you think you may be pregnant.** Your surgery and treatment plans may need to be changed, depending on the type of cancer you have and the stage of your pregnancy.
- **Use birth control.** It is important that you do not become pregnant while having treatment. Ask your healthcare team about other types of birth control you can use.
- **Think about your options for children in the future.** If you want to preserve your fertility, you may need a referral to a fertility specialist. Talk to your healthcare team. A referral should be made early so it does not delay your cancer treatment.

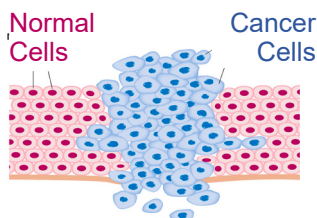
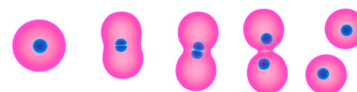
## A2

## Learning about Abdominal Cancer

### What is cancer?

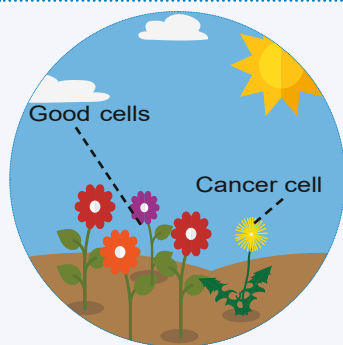
Our body is made up of many cells. **Healthy cells** follow the “rules” when they divide and they know when to die.

Healthy cells dividing:



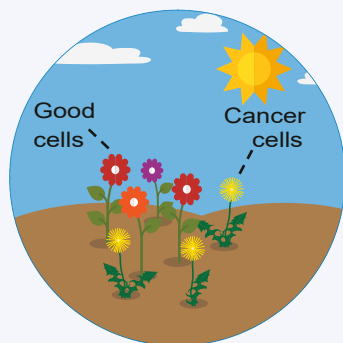
Cancer happens when cells start to grow out of control. When these cells grow and divide, they can form a lump called a **tumour**. Not all tumours are cancer. Some are non-cancerous (also called **benign**).

It might help to use the example of a garden:



#### A Healthy Body

Imagine your body as a garden. The soil is your immune system, the good plants are your good cells, and the weeds are the cancer cells. When you're healthy, the good plants grow and the soil helps keep the weeds away. When the odd weed starts to grow, the body is able to get rid of it by itself.



#### A Body with Cancer

Cancer cells are like weeds in your garden. Sometimes the body cannot get rid of the weeds and needs help.

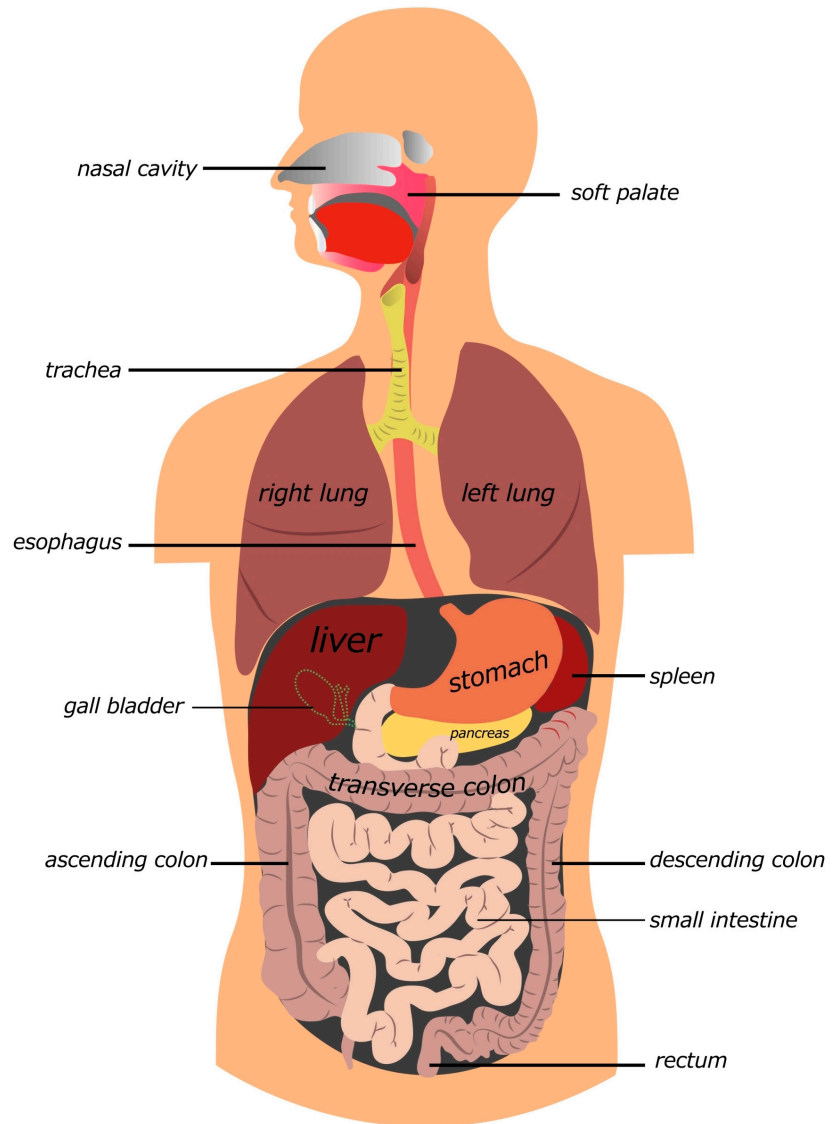
## What body parts does abdominal cancer affect?

It can be helpful to understand the parts of the abdomen (anatomy). You may want to circle or mark off the parts that are affected for you.

### Your Body

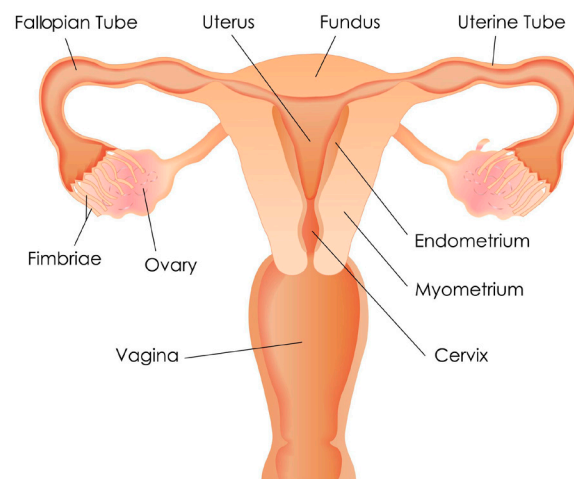
The **abdomen system** has a number of organs, along with fat tissue, muscles and supporting ligaments. Check off or circle on the picture, the organs that are affected for you:

- stomach
- liver
- pancreas
- gallbladder
- spleen
- appendix
- small intestine
- large intestine (colon)



People assigned female at birth have the following structures in their abdomen (unless already surgically removed):

- fallopian tubes
- ovaries
- uterus



Check off (or circle on the picture) any that are affected for you.



## A3

## Treatment for Abdominal Cancer



### Cytoreductive surgery (CRS)

Cytoreductive Surgery is a major surgery that removes most or all of the visible cancer tumours from inside the abdomen, the lining inside the abdomen and any organs where the cancer may be growing.

Organs that may need to be removed during surgery include:

- Spleen
- Gallbladder
- Female reproductive organs – ovaries, fallopian tubes and uterus
- Appendix
- Omentum (a layer of fat inside the abdomen)
- Parts of the small and large intestine



**Your surgeon will review your options with you and help you make a plan that's right for you.**

The extent of your surgery depends on how much the cancer has spread. The surgeon begins by making an incision down the centre of the abdomen and then looks inside the abdomen to see if the surgery can proceed. Often, more cancer is seen during surgery than the scans show. Sometimes, the surgeon is unable to continue with the surgery. If the abdominal tumours are on vital blood vessels or on organs that cannot safely be removed, then the surgery is not possible.

If the surgeon proceeds with the surgery, the surgical team removes all of the visible cancer and then treats you with heated chemotherapy.

### Heated Intraperitoneal Chemotherapy (HIPEC)

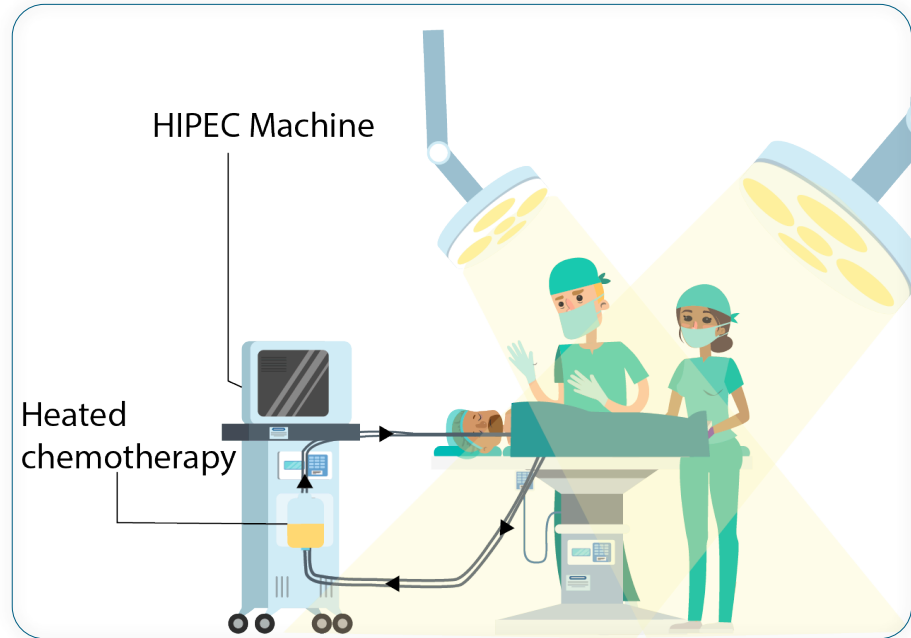
#### What is HIPEC?

It is a procedure where chemotherapy is heated to between 40°C to 42°C and put into the abdomen. It is done while you are still in the operating room, after the surgeon has removed all the cancer cells they can see. The heated chemotherapy is circulated throughout the abdomen for 60 minutes. The solution is then removed and the incision is closed. It is sometimes called a **heated chemotherapy bath**.

## Why is it done?

The HIPEC procedure is used to kill any remaining cancer cells that the surgeon cannot see. It has some advantages:

- Heating the chemotherapy drugs allows them to better enter and kill cancer cells.
- Giving the chemotherapy in the abdomen allows for a much higher drug dosage, because it is not absorbed by the body the same way as chemotherapy given into a vein (IV or intravenous chemotherapy).
- It has fewer side effects, such as hair loss, compared to IV chemotherapy.



## What chemotherapy will I get?

The surgeon selects the chemotherapy drug for you based on your cancer type.

## Is HIPEC only given during surgery?

No, depending on your diagnosis, you may need 4-5 more days of intraperitoneal chemotherapy. This is called **Early Post-Operative Intraperitoneal Chemotherapy (EPIC)**. If you need this, the surgeon will place a tube in your abdomen during your surgery. The surgeon will remove the tube after the EPIC treatments are finished.



In addition to the surgery and HIPEC, you may need more chemotherapy treatments by IV (intravenous) before or after your surgery.

## What types of cancer are these treatments used for?



These combined treatments of surgery and heated chemotherapy are for certain types of cancer that either start to grow in the abdomen or spread (metastasize) to the abdomen. These include:

- |   |   |
|---|---|
| <input type="checkbox"/> Colorectal cancer      | <input type="checkbox"/> Peritoneal mesothelioma                          |
| <input type="checkbox"/> Appendix cancer        | <input type="checkbox"/> Gastric cancer                                   |
| <input type="checkbox"/> Pseudomyxoma peritonei | <input type="checkbox"/> Ovarian/fallopian tube/primary peritoneal cancer |



## What are the potential risks and benefits?

Your surgeon will talk with you about the specific benefits and risks to you.

Any major medical procedure has risks and complications that can happen. Some possible risks include getting:

- **an ostomy.** A surgical opening from the small intestine or colon to the outside of the abdomen. A collection bag is placed over the opening called a **stoma** to collect the stool that will come out of the opening. Your surgeon will try to avoid giving you an ostomy, if possible.

If you need to have an ostomy, a special nurse called an enterostomal therapist will teach you how to manage and care for your ostomy.

- **a blood transfusion.** The treatment team will try to avoid this, but depending on the amount of blood loss, you may need one.



**Can I bank my own blood in case I need a transfusion?**

No. We cannot bank or store your blood.

## Will I be included in research studies or clinical trials?

Clinical trials are studies that test different treatments or supports. Teaching and research is important, especially for rare cancers like peritoneal cancer. We will always speak with you and ask your permission before including you in any research studies.

## Who is part of my cancer surgery team?

Before and after surgery you will be cared for in clinics and nursing units by professionals that have experience in caring for people undergoing CRS and HIPEC. These include:

• Pre-admission clinic	• Nursing units in hospital
• Intensive care unit	• The outpatient advanced gastro-intestinal (GI) malignancy or gynecologic oncology clinics
• Specialized nurses, dietitians, physiotherapists, occupational therapists, enterostomal therapists, and respiratory therapists will also participate in your care.	

In the operating room, a large team of specialized healthcare professionals will be involved in your care:

- 1 or 2 surgeons and their team of fellows and/or residents
- 3 nurses
- 1 or 2 anesthesiologists
- A chemotherapy perfusion specialist (to give you the heated chemotherapy)
- Respiratory team (to help you breathe well)

## B. Before, During and After Surgery in Hospital

### B1 Getting Ready for Surgery

This book is given out to all patients in Alberta. The information below is a guideline. **Please follow any specific instructions for your surgery given to you by your local site.**

#### Learning about surgery

It's important to review how you should prepare and recover from surgery in advance. Do this by reading:

- this book
- information on surgery at [myhealth.alberta.ca/yoursurgeryjourney](https://myhealth.alberta.ca/yoursurgeryjourney)

Knowing what to expect will help you prepare for your surgery journey. It's important to know:

- you have an active part in preparing for your surgery and recovery.
- you and your family are part of the healthcare team.
- the best time to plan for your recovery is **before** your surgery.

Your healthcare team will be following the **Enhanced Recovery After Surgery (ERAS) Care Pathway**. Following this pathway helps you prepare for surgery, feel better sooner, and recover faster.

#### Nutrition

Sometimes, abdominal cancer can affect how your body absorbs food or can increase the production of **mucin** (heavy proteins produced in the lining of the gastrointestinal tract). This may cause you to feel full after eating only a little. Cancer can also cause weight loss. If you have lost more than 10% of your weight within the last 6 months, it may be helpful to ask for a referral to a dietitian before you have surgery. Dietitians can help you make a plan to ensure that you are getting the nutrition you need which will help you recover better after surgery.

Read the suggestions and tips in the diet and nutrition section on [page 27](#). Good nutrition is important both before and after surgery.

#### Pre-Admission Clinic (PAC)

The staff at the Pre-Admission Clinic (PAC) will call you. You may need to go in person for a consult. Either over the phone or in person, the PAC healthcare team will:

- ask questions about your health and medical history to make sure you can safely have surgery.
- explain how you can prepare for your surgery and what to expect in the hospital.
- arrange the tests that your doctors have ordered. These tests could include blood tests, ECG (a test for your heart), and chest x-ray.



- ask you what medicines, vitamins, supplements, and herbal products you take. Tell you what medicine(s) to stop taking and when to stop taking them before your surgery.
- teach you about stomas and mark the area on your abdomen (if you need one). Note: a stoma is an opening through the skin and tissue in your abdomen to let waste leave your body if you cannot have a bowel movement through your rectum.

Make sure you write down which medicine you can take and what medications you should hold for surgery or stop altogether. Write your notes in this book on [page 11](#).

## Tests before surgery



Your medical team may order some tests before your surgery date. These may include:

- Blood work
- Iron infusion (if you have low hemoglobin and iron levels)
- Chest x-ray, ECG
- Other special tests or consults if needed

Ask your surgeon what your **hemoglobin and iron levels** are. Write these numbers on My Plan ([page B](#)).



If a yellow or blue band is put on your wrist, **do not take it off**. If you take it off, you will need to have another blood sample, which may delay your surgery.

## Surgery date and time



It takes time after your clinic visit (where you gave your agreement/consent for the surgery), to get a surgery date.

- We will call you to tell you when your surgery is scheduled
- You will find out the time of your surgery the business day before (business days are Mondays–Fridays, not including holidays)

➔ **Good to know:** usually only **1 person** can stay with you until you go to surgery. Visitor policies can change in different situations.

## Immunizations

Some patients have their spleen removed as part of their abdominal surgery. If this occurs, you will be at a higher risk of getting certain infections after surgery. To help prevent these infections, you may be given a series of vaccinations before your surgery.

Whenever possible, any or all vaccinations should be given **at least 2 weeks before your surgery**. If that is not possible, they can be given **after** surgery.

Immunization information can be found online. Scan the code to get a copy. Take it with you to the public health clinic.

### Immunization Protocol for Cytoreductive Surgery

[www.ahs.ca/cancertreatment](http://www.ahs.ca/cancertreatment)  
> surgery





## What you should do to get ready

### Plan for help and support



Make sure you have someone to drive you to and from the hospital. You will also need help at home for 4-6 weeks after surgery.

### Prepare food



Prepare and freeze meals ahead of time so you only need to re-heat the food once you're home.

### Stop smoking at least 2 weeks before



If you can, it is best to stop at least 4 weeks before surgery. It prevents problems with your lungs after surgery and helps you heal faster.

Talk to your doctor about ways to stop smoking.

### Stop drinking alcohol at least 7 days before



If you can, it is best to stop all alcohol at least 4 weeks before surgery. Talk to your doctor if you need help cutting down or stopping.

### Exercise



Try to be in the best shape possible before surgery. If you don't exercise or exercise regularly, start slowly.

Short walks help to build strength. Increase the length of your walk as it gets easier.

### Plan your benefits, work or insurance forms



Find out what's covered with your benefit plan and plan ahead for any work or insurance forms. Let your nurse and doctor know if you need forms completed.

### Talk about your pain medication

If you already take prescription pain medication, tell your nurse and/or anesthesiologist.



Keep taking your prescription pain medication as usual up to the morning of surgery, unless the PAC medical team gave you different instructions.

After surgery, the pain medication or dose may have to be changed as your body heals and recovers from surgery.

### Stop using recreational drugs



Stop using recreational drugs (such as cannabis or cocaine) before surgery. These drugs can have serious side effects when mixed with the medication used during surgery or the pain medication used after surgery.

Your surgeon, nurse, and/or anesthesiologist need to know if you use recreational drugs—they aren't there to judge.

### Get immunizations (including flu shots) in advance



**No** immunizations within 14 days of your surgery.



### Do not shave

**Do not** shave your abdomen or around your genitals. The surgical nurses will shave you if needed.



## Medication instructions

To help you remember, write your personal list and follow these instructions:



Before surgery, write the instructions you should follow here.

**Diabetes Management:** If you are diabetic, get instructions from your doctor or from the doctors at the PAC appointment for your insulin or diabetic pills (metformin).



14  
Days  
Before



10  
Days  
Before

7 Days  
Before



2  
Days  
Before

1 Day  
Before

Day of  
Surgery

### Can I take my regular medication?

Your surgeon, or the Pre-Admission Clinic nurses or doctors will tell you what medication you can take on the day of surgery.

## B2

## Day and Night Before Surgery

## Bowel preparation or cleansing

You may need to clean out your bowels before surgery. Your surgeon or nurse will give you instructions if this is the case. Follow these closely. Write this on **My Plan** (page B).

## Antibiotics

You may need to take antibiotics the day before surgery. **Write this on My Plan** (page B).

## Eating and drinking

24 hours before surgery:  
no smoking or drinking alcohol

Follow the **Eating and Drinking Before Surgery** handout.



Follow the instructions on your handout closely to make sure that your surgery is not cancelled. This is to prevent food or fluid going into your lungs (aspiration) during your surgery.

Aspiration can be life-threatening!



## What is a clear fluid?

- Jello®; strained broth/consommé soup; clear fruit juices with no pulp (such as apple juice)
- Black tea or coffee (no milk or cream but sugar or sweeteners are okay)
- Pop, sports drinks such as Gatorade®, or water

It **does not** include milk, cream, butter, cream soups or orange juice.



SCAN ME

Scan the code to see the handouts or type this link in your browser:  
[myhealth.alberta.ca/Alberta/Pages/Your-Surgery-Resources.aspx](https://myhealth.alberta.ca/Alberta/Pages/Your-Surgery-Resources.aspx)

## Confirming your time

You should have already been told how to confirm your hospital appointment time. Make sure you know:

- The date of your surgery.
- What time you need to be at the hospital.
- Where to go when you get to the hospital.
- The best place to park.

If you have to cancel your surgery, call your surgeon's office right away. Make sure you have your surgeon's office phone number ahead of time. Write it on **My Plan** (page A).

If you can't reach your surgeon, call the hospital. Make sure you have the hospital's phone number ahead of time. Write it on **My Plan** (page A).

## Night before or morning of surgery

Before you go to bed or the morning of your surgery:

- take a shower or bath (use the Chlorhexidine [CHG] 4% if you were told to)
- do not shave any area where your surgery will be
- do not wear make-up
- do not wear contact lenses
- do not use any creams, lotions, or anything with a scent
- wear clean pyjamas or clothes after showering
- take off all jewellery and take out all piercings



## Preparing your skin

Showering the night before your surgery and washing well is very important to prevent infection. Even though the team will clean the area of your incision right before surgery, the products they use will work even better if your skin is already clean.

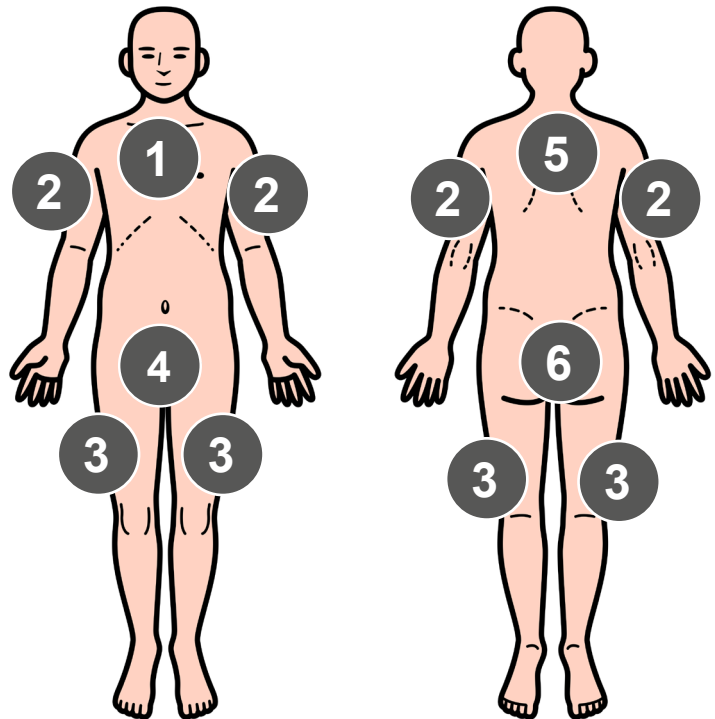


Chlorhexidine (CHG) 4% (EZ Scrub) is a special soap to wash with, unless you are allergic or were not told to do this.

## Instructions for cleaning your skin

### ! Read all of the steps carefully before you start

- Shower with warm (not hot) water.
- **Do not** shave.
- Wash your face and hair as you normally would. Rinse.
- After washing your hair, follow the instructions to gently wash the rest of your body in order (1-6). Use the **CHG 4% soap**. Use regular soap if you have an allergy to CHG 4% or if you do not have the sponge.
- Try to leave the soap on for 3 minutes without rinsing. Then rinse well.
  1. Neck, chest and stomach (abdomen).
  2. Both arms and underarms (armpits).



3. Both legs (front and back) to the top of the thighs.
  4. Both hip areas and then the groin (the fold where the legs meet the body/trunk). Wipe all skin folds in the abdomen and groin well.
  5. On the back from the hairline at the neck to the waist.
  6. Buttocks and all folds in the buttock area.
- Do not apply deodorant, lotions, creams, or perfume after showering.
  - Put on clean, dry clothing. If you are showering the night before, sleep in clean bed sheets.

## B3

## Day of Surgery

Follow your medication instruction notes on [page 11](#).

### What do I bring?

What to bring on the day of your surgery (your Operating Room day):



- Alberta Health card and Blue Cross or other insurance card
- Photo identification (please make sure the information is correct)
- This book, along with any handouts you were given about your condition or surgery
- All your medication (in original containers) including inhalers, aspirin, vitamins, herbal and over-the-counter medications (a list from your pharmacy would be helpful)
- CPAP / BiPAP machine (if you use it, as it may be sent to the recovery room during your surgery)
- Proof of medical coverage (out-of-province residents only)
- Personal care items (the hospital is not responsible for lost items)

#### Personal care items to bring:

- Items your surgeon has requested
- Walking aids such as a walker or cane (if you use one)
- Comfortable clothing, sleepwear, robe and slippers
- Ear plugs
- Hearing aids, eyeglasses, dentures and denture case
- Book, magazine or something else to keep you busy
- Notebook or journal
- Toothbrush, comb, hairbrush, deodorant, lip balm
- Personal directives (if you have one)

#### Do Not Bring:

- anything of value (jewellery, credit cards)
- more than \$20 cash
- a tablet or computer
- electrical appliances such as hair dryers or curling irons

Bring these items in 1 small bag that has your name on it. Please leave these items with your support person who can give these to you after surgery.



Rules about using cell phones in the hospital are different on each unit. Ask your nurse before using your phone.



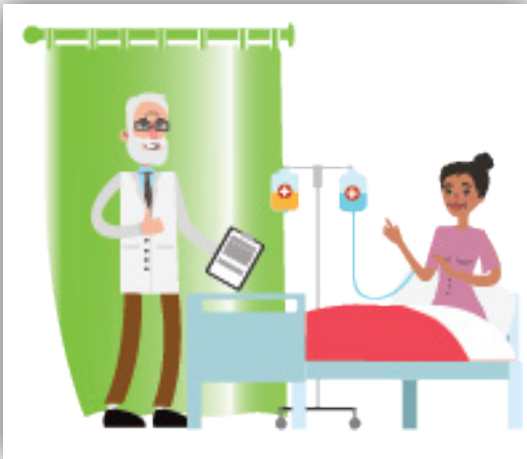
## At the hospital

When you arrive at the hospital, a nurse will:

- Go through a list of questions with you.
- Ask you to change into a hospital gown.

You may be given some medicine for pain and nausea with a sip of water before surgery. This is part of your Enhanced Recovery After Surgery (ERAS) care.

## Holding area

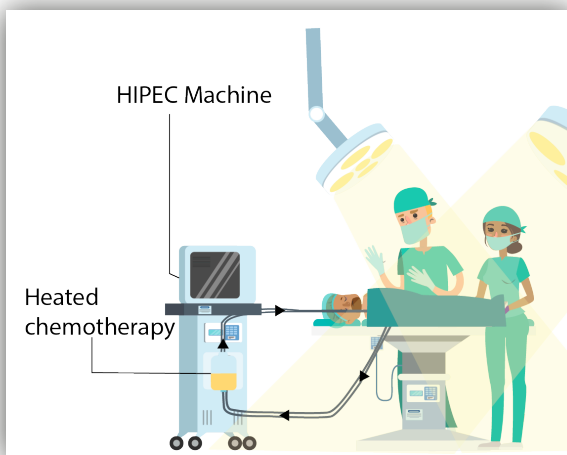


You'll be brought to an area outside of the operating room (holding area) where you'll meet your surgical team: your anesthesiologist (the doctor who will give you medicine to keep you asleep during your surgery), surgeon, and nurses.

While you're in the area outside of the operating room, a nurse will ask you questions from the **Safe Surgery Checklist** such as your name, surgery, birthdate, allergies, and what surgery you're having. You may be asked this more than once, which is normal. We do this to keep you safe.

## Waiting area

Visitors may be restricted depending on the situation. If your support person is not able to wait for you in the waiting area, staff will call them to let them know when your surgery is finished and they can return.



## Operating room

An operating room nurse will double-check your surgical information and take you into the operating room. The Safe Surgery Checklist will be repeated.

The anesthesiologist will give you medicine (general anesthetic) to make you comfortable and keep you asleep during your surgery.

Your surgery will take between 5 to 10 hours.

## Procedures before and during surgery



**Staying warm.** We want to make sure you are warm before and during surgery. We will give you a special warming gown.



**Intravenous (IV).** An IV is started in your hand or arm by the nurse before you go to the operating room, or by the anesthesiologist in the operating room. It's used to give the anesthetic (sleeping medicine) and other medication you may need such as antibiotics. The IV is usually taken out once you are able to drink well after surgery.



**Bloodwork.** You may need to have more bloodwork drawn. If needed, a person from the lab will come to you.



**Medication.** You may be given medication before you go to the operating room or in the operating room before the surgery begins. You may need to continue taking this medication after surgery:

- IV antibiotics to protect against infection
- medications to prevent nausea and pain
- a small dose of a blood thinner (anti-coagulant) to prevent blood clots during and after surgery



**Air-Filled Stockings (Sequential Compression Device).** You may wear compression stockings on your legs during and after your operation to promote blood flow in your legs and help to prevent blood clots. A machine inflates and deflates the stockings. They are taken off once you are walking around.



**Blood Transfusion.** Not many people need a blood transfusion. Your surgeon will talk with you about this and get your consent before surgery.



**Bladder Catheter.** A small tube (catheter) will be put into your bladder, through the urethra. It drains urine from your bladder so your bladder stays empty. The catheter is taken out soon after surgery. If you have trouble urinating after, you may need a catheter for a while longer.



## B4

## After Surgery (in Hospital)



People usually go home **7-14 days after surgery**. How long you stay in hospital will depend on the type of surgery and your recovery.



After surgery, we will move you to the Recovery Room, where you will stay for 1–3 hours or you may go to the **Intensive Care Unit (ICU)**. Visitors are not allowed into the recovery room. You'll stay there until your healthcare team decides it's safe for you to go to the hospital unit. Some people only need to stay in the ICU for a few hours, others may need to stay for a few days.

### What to expect

You will probably feel sleepy and your throat may feel sore from the tube that was placed in it while you were asleep. This is normal. You may also have:

- an IV to give you fluid and some medicine (pain and nausea medicine will be given in pill form whenever possible).
- nasal prongs or an oxygen mask to help you breathe.
- a dressing (bandage) on your abdomen. It's important not to touch your dressing to allow for proper healing.
- 1 or more drains near the area where the incision was made. Drains take extra fluid away from below your incision.
- a catheter draining your bladder. If you did not have surgery to your bladder, the catheter should be removed within 2 days of the surgery.
- compression stockings (cloth or vinyl). These help to promote blood flow in your legs and help to prevent blood clots. If you have air-filled stockings called a **Sequential Compression Device (SCD)**, a machine inflates and deflates the stockings. They are taken off once you are walking around.

It is better for your body to get fluids through drinking rather than through an IV.

Keep track of how much you are drinking so that your IV can be taken out as soon as possible.

Your nurse will regularly check your:

- Heart rate, breathing, blood pressure, and blood oxygen level
- Dressing (bandage)
- Drains (if you have any)
- Pain and nausea levels

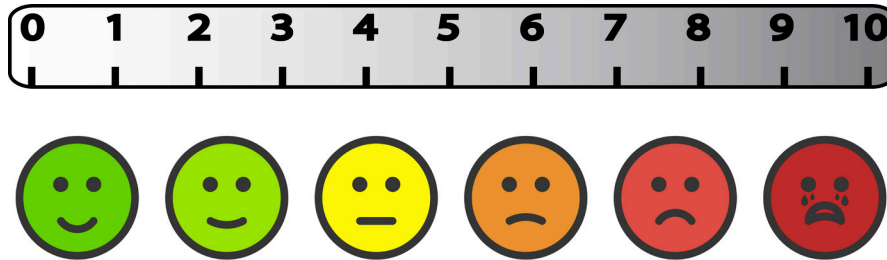
### Managing pain and nausea

Managing pain and nausea are important. It helps you recover sooner because you will:

- Breathe and move better
- Find it easier to eat and drink
- Sleep better



Pain and nausea after surgery are normal. Your nurse will ask you to rate your pain and nausea from 0 (no pain) to 10 (the worst pain you can imagine). Tell your nurse when you're having pain or nausea. The amount of pain medicine will be adjusted as needed.



## Pain

You may have pain from your incision or drainage tubes, abdominal cramping or back pain. The type of pain you have and how long it lasts is different for everyone. A feeling of stabbing pain may happen and it is normal. Even if you take your pain medicine regularly, it is normal to still feel some pain after surgery.

We will give you pain medicine by IV, injection (needle), pill, or epidural pain pump (medications go into the area around your spinal cord) as needed while you're in the hospital.

## Nausea

You may feel sick to your stomach after surgery. This is a common side effect of anesthetic, some pain medications, and chemotherapy. Tell your nurse if you are having nausea. We will give you medication to help relieve it.

You **may** wake up from surgery with an **NG tube (nasogastric tube)** through your nose that drains your stomach. This tube should prevent you from vomiting, but you may still have nausea. If this happens, tell your nurse and we will give you medication to relieve it.

Some patients experience nausea days or weeks after their surgery – even after they have started to eat again. This is part of the recovery period from major surgery and we will give you medication to help control it.

## Dressings and incisions

Your incision (surgical cut) will be closed with small metal clips (staples) or stitches. You will have an outer gauze dressing (bandage) covering the incision. Gauze dressings usually stay on for **24 to 48 hours**. Your surgeon will tell you when you can take your dressing off.

The staples or stitches are usually removed before you go home. If they need to stay in longer, your surgeon or nurse will tell you when you should have them removed, usually by the surgeon or your family doctor.



Another name for a "stitch" is "suture"

Another name for "dressing" is "bandage"



## Drains

A drain is a small plastic tube inserted through the skin near the incision. It's stitched in place so it doesn't fall out. A small plastic suction container is attached to it. After surgery, it's normal for your body to make extra fluid in the area around your incision. The drains remove this extra fluid and blood. Removing the fluid helps with healing and lowers the risk of infection.

**Depending on the surgery you may not have any drains, or may have 1 or 2 drains in place.**

We will take these drains out when your surgeon decides they are no longer needed. The drain sites will heal within a few days after the drains are removed. Your nurses and doctors will check all incision and drain sites for signs of infection on a regular basis.

## Getting moving and doing leg exercises

Be active as soon as possible. Moving and doing leg exercises will help you build strength, increase blood flow, prevent clots from forming and keep your lungs clear. Your nurse will help you get up to walk soon after surgery. Your healthcare team will work to get your tubes (IV, NG, catheter and drains) out as soon as possible, to make it easier for you to move.

Work to:

- Move and stretch your legs
- Wiggle your toes
- Change position in bed (you can lie on your side or your back)
- Get up to sit in a chair
- Do basic leg exercises (see next page)
- Walk (2-3 times a day – ask someone to walk with you until you are steady on your feet)
- Increase your activity level gradually after surgery (no strenuous exercise)
- **Keep track of how much time you are spending out of bed each day**



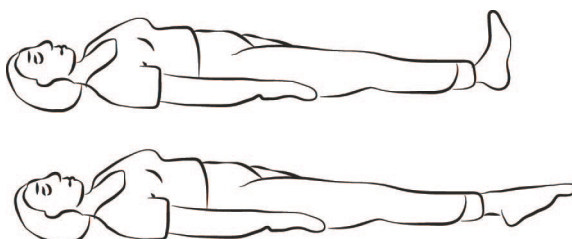
**Symptoms of a blood clot may include any of the following:**

swelling, redness, warmth to skin, pain to 1 or both legs, or shortness of breath. Let the medical team know right away if you have any of these symptoms.

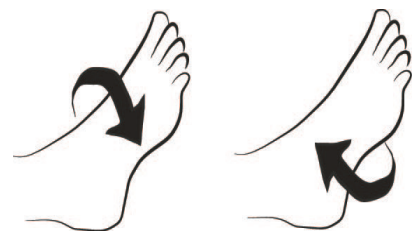
**DO NOT** massage your leg if you are having these symptoms. You could cause the clot to break off.

### Leg Exercises

Do these exercises 5 times each hour you are awake. These can be done lying in bed or sitting in a chair.



Flex your feet up and down for 1 minute. Relax. Repeat.



Make circles with your feet. Repeat in the other direction.

## Compression Stockings

You may wear special compression sleeves on your legs while you are in bed, to help prevent blood clots. The sleeves are connected to a machine to inflate and deflate often to promote good circulation in your legs until you are walking regularly.

### Activity

After surgery you will feel very tired and may need to take rest breaks often.

Your nurses will help you change positions in bed often to help your circulation and keep you comfortable. When you lift your head, **it helps if you place your hands behind your head to support your neck and prevent any pulling on your incisions.** If you can't do this, your nurse will help you.

One day after surgery your nurse or physiotherapist will help you to sit at the side of your bed or in a chair, and also stand and go for a walk. Your activity will be increased until you are walking several times a day. Your healthcare team will encourage you to spend time in a chair.

### Deep breathing and coughing exercises

It's important to do your deep breathing and coughing exercises if you have had an anesthetic and to prevent lung infections.

Follow these steps **1 time every hour you are awake:**

- Breathe in deeply through your nose.
- Hold your breath for 5 to 10 seconds, and then breathe out slowly through your mouth. You will be able to breathe more deeply with each breath.
- Repeat again.
- Repeat again. This time, hold your breath for 5 to 10 seconds. Cough 2 or 3 times in a row as you get rid of this breath. You may find it more comfortable to support your incision when you cough. You can do this by holding your hands or a pillow against your abdomen.
- Make sure you take normal breaths when you're not doing these exercises.

### Eating and drinking

After major abdominal surgery, it might take some time before you are able to start eating and drinking again. During that time you will have intravenous (IV) fluids and may receive support such as intravenous nutrition.

As part of your ERAS care, the healthcare team will work to getting you back to eating as soon as possible. This will depend on the type of surgery and how your gut (digestive system) is working.

When you are allowed to eat, it is important to only eat as much as you feel like having. You will be able to start eating small amounts of solid food. It is important not to force yourself to eat if you do not feel well or have nausea.

Let your healthcare team know if you have concerns about how much food you can take in.



You may be given nutritional supplement drinks as part of your recovery. These will provide you with extra protein you need to heal.

Your nutrition is an important part of healing. Read more on **Diet and Nutrition** (page 27).

## Bowel and bladder function

### Bowel function

After major abdominal surgery, it might also take some time before you start passing gas and stool again. When your bowels start to work, they often produce air (farting/flatulence) and/or liquid stool (diarrhea).

To help your bowels start to work again, we suggest you:

- chew gum (3 times a day)
- walk in the hallway (see **Getting Moving and Doing Leg Exercises**, page 19)

When your bowels start to work, you may experience crampy abdominal pain. To help with the cramps:

- apply mild heat, such as from a warm blanket
- take short walks often (activity can help to move the gas out)

### Bladder function

If you haven't had any surgery done to your bladder, we will remove your bladder catheter within 2 days after the surgery. Getting rid of the catheter will make it easier to get out of bed, which is very important for your recovery and will lessen the chance of getting an infection.

- If you have problems urinating (peeing) after your catheter is removed, let your nurse know right away.
- You need to measure your urine the first few times you get up to the bathroom. You will get a container to place in the toilet to collect the urine. If you have any problems, let your nurse know.
- Keep track of how many cups of fluids you are drinking in hospital and at home. Use a notebook or paper.
- Drink enough water each day to keep your urine pale yellow.

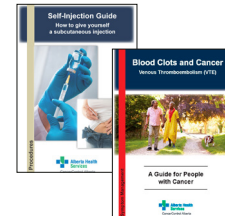


Watch for signs of a urinary tract infection:

- pain and burning when you pee
- cloudy or foul-smelling pee
- feeling an urgent need to pee
- red/brown coloured pee
- feeling like you need to go even after you have already gone to the bathroom

## Blood thinner medication

- You may be given a blood thinner (anti-coagulant) to help prevent blood clots.
- Your greatest risk for clotting is in the first 28 days after surgery.
- This medication is injected under the skin at least 1 time a day.
- You may have to keep taking this blood thinner after you go home. If that happens, you or a support person will be shown how to give the injection. It is important to take it as long as it has been prescribed for.
- This medication is expensive. Talk with your healthcare team if you have concerns or if you don't have a drug or health benefit plan.
- Ask your nurse for the booklets **Self-Injection** and **Blood Clots and Cancer** for more information.



## B5

## Getting Ready to Go Home

### Going home (Discharge) checklist

Before you're sent home, your healthcare team will:

- review your discharge instructions with you.
- give you the date for your follow-up appointment **or** tell you when to call your surgeon's office to make your follow-up appointment. Write this on **My Plan** (page B).
- give you prescriptions for medicines to take at home and instructions on when you can take your regular medicines.
- make sure you can manage any new care needs, such as blood thinner injections.
- ask who will be helping you at home for the first 6 weeks after surgery since you will not be able to do heavy housework or lift anything over 10 pounds (4.5 kg).
- make a referral to home care if needed. Most people don't need home care.

**Talk to your healthcare team if you feel something on this list hasn't been done or you have other concerns.**

## C. 🏠 At Home After Surgery

### C1 The “Do Nots” after surgery (for 6 weeks)

- No vacuuming
- No driving while on pain medications
- No lifting anything over **10 pounds (lbs)**. It increases blood pressure and might cause your incision to open.
- Ask about going back to work
- No swimming or hot tubs (do not put your incision under the water)

How much is 10 pounds (lbs)?

At home:

- Average 3-month old baby
- A full laundry basket
- Small dog or medium-sized cat
- Large, filled garbage bag
- Medium-sized bowling ball
- Small microwave oven
- Most vacuum cleaners



At the grocery store:

- Large watermelon
- Large bag of sugar or flour
- A sack of potatoes
- Two, 4-litre jugs of milk
- Three, 2-litre bottles of pop
- A holiday ham or turkey

**Tip!**

- Sit on a couch to hold a baby or pet.
- Ask for help to lift items or buy smaller containers while you are recovering.
- If you are not sure if something weighs 10 or more pounds, **do not** pick it up.

### C2 Your Incision

It's normal to be worried about seeing your incision (surgical cut) for the first time. You can reach out to your healthcare team, family, or friends to talk about the changes you see. Read more about body image and emotional health in the Living Your Best section on [page 31](#).

#### Daily checks

It's important to check your incision(s) every day, especially during the first 2 to 3 weeks after surgery. It's normal for the surgical area to be a little swollen and bruised at first, but that will go away in a few weeks.

There may be firmness under the incision. You will notice this “healing ridge” for many months. It will soften over time.

## Incision care

We usually remove the stitches or staples on your incisions before you are discharged from the hospital. If not, we will tell you when to have them taken out. We may ask you to return to see your surgeon, or to see your family doctor, for this procedure. If your incision has Steri-strips™ on it, leave them on. As the incision starts to heal:

- the Steri-strips™ will start to curl up at the edges. You may trim the curled edges off carefully with scissors. Clean the scissors with soap and water first.
- Leave the rest of the Steri-strips™ on until they come off on their own or your surgeon tells you to remove them.
- When you are allowed to remove them, gently peel each end toward the middle until it comes off. They are easier to remove in the shower or right after you shower.
- A seroma is swelling caused by fluid building up in or around your incision area. This is normal and may feel like a lump a few days after surgery. In most cases, the fluid will absorb over time.

➔ See [page 36](#) for **Urgent Concerns and When to Get Help**

## C3

### Follow-up Appointment

Your follow-up care is an important part of your recovery. It will be unique to you and will depend on your diagnosis, surgery, and health.

**Phone your surgeon's office when you go home to arrange a follow-up visit. Be sure to write the follow-up appointment date and time on [My Plan](#) (page B).** The appointment is usually scheduled between 4-6 weeks after you go home.



## C4

### Concerns or Complications

➔ See [page 36](#) for **Urgent Concerns and When to Get Help** to find out when you should call or go into the emergency room.

## Pain or discomfort

You'll probably feel some pain after your surgery. This is normal.

Take your pain medicine as directed. If the medicine is upsetting your stomach, stop taking it and call your surgeon's office.

If you're concerned about pain that doesn't stop or anything else you feel, talk to your doctor or nurse.

## Medications

You may require medications for pain, nausea, constipation, diarrhea, or other reasons when you are at home. Your surgeon and nurses will give you clear instructions on taking these medications.

Some patients require blood thinner medication, as a pill or injection, when they go home. If you require this type of medication, we will give you teaching sessions and clear instructions on how to take it.

## Bowel problems or nausea

Depending on the type of surgery you have and how much bowel is removed, you may experience different bowel problems. See [page 36](#) for urgent and non-urgent concerns. Call to get advice if you are unsure or have new or worsening problems with constipation, diarrhea or nausea.





## C5

## Personal Care, Nutrition &amp; Activity

## Showering and personal care



You may shower 48 hours after your surgery unless you were told not to.

When you are allowed to, having a shower is usually okay while you still have staples, stitches, Steri-Strips™, sticky dressings or a drain.

**Do not swim or bath while you are healing. Wait for an additional 4 weeks after your incisions are completely healed.**

Follow these instructions:

## Incisions

- When you shower, stand so that the water isn't falling right on your incision.
- When you bathe, **do not** put your incision(s) under the water.
- Rinse the incision area well (do not scrub), and gently pat it dry.
- Use warm, not hot water, so you don't get a burn. (The area around the incision(s) may be numb so you may not be able to feel if the water is too hot).
- If you have dressings, remove them before showering and apply new ones after.

## Drains

- Hold the tubing of the drain in place while you are in the shower so it's not pulling against your skin.
- We recommend wearing a cloth belt around your waist. Secure the drain to the belt with a safety pin while you shower.

## Vaginal flow

If you have had surgery on your uterus or ovaries, you can expect some vaginal flow or discharge that comes and goes for about up to 6 weeks after surgery. Use sanitary pads during this time. **Do not use tampons** — they may cause vaginal irritation or infection.

## Using products (liquids, lotions or creams)



**It is important not to use products on your incision until it is healed.** These products may irritate healing tissue.

- **Do not** clean your incision with alcohol or hydrogen peroxide.
- When your incisions are fully healed, you may use an **unscented lotion**.



## Driving



Usually, people can start driving again 1-2 weeks after going home.

Do not drive until you:

- are no longer taking pain medications that make you feel sleepy (such as narcotics or opioids like morphine, codeine, fentanyl, oxycodone, and others)
- can shoulder check without pain
- can hit the brake pedal for an emergency stop without pain
- feel stronger and comfortable

## Diet and nutrition



Nutrition will improve your treatment outcomes and quality of life. Eat a healthy diet to give your body the energy to heal and to do your everyday activities.

### Choose a variety of foods:

- vegetables and fruits
- whole grain foods
- foods with protein

### Eat foods with protein to help you:

- heal and recover
- meet your protein needs
- maintain strength and muscle health
- keep your immune system healthy

### Protein and higher calorie foods

Protein is especially important after surgery. Try to add a protein food source to every meal. It may also help to eat foods that are higher in energy (calories).

#### Higher energy foods with protein:



beef, pork, poultry, fish, and eggs



milk, cheese, ice cream, and yogurt



beans, lentils, nuts, nut butters, seeds, and tofu



protein powders and nutrition supplement drinks

#### Higher energy foods without protein:



avocado, dried fruit, granola, and wheat germ



margarine, butter, vegetable oil, salad dressing, mayonnaise, creamy sauces, gravy, and coconut milk



## Slow stomach emptying

Before and after surgery and chemotherapy treatment can temporarily slow how fast your stomach processes food. Common symptoms are nausea, vomiting, abdominal pain, bloating, gas, and early fullness. These symptoms often go away in a few weeks.

Things you can try:

- eat snacks between meals
- eat smaller meals more often (every 2 to 3 hours)
- limit fluids to 1/2 cup (125 mL) with a meal, or drink your fluids 30-45 minutes before or after meals

## Weight loss

Eat enough so you do not lose weight. If you are losing weight, nutrition supplement drinks, puddings, or bars, such as Ensure<sup>®</sup>, Boost<sup>®</sup>, Resource<sup>®</sup>, and Carnation Instant Breakfast<sup>®</sup> can be a quick and easy way to add more nutrition to your intake. You may want to weigh yourself weekly after surgery to check to see that you are maintaining your weight.



If you want more information on what to eat, drink, or both, ask your healthcare team to speak with a dietitian. A dietitian can give you guidance and tips for healthy eating during your treatment, especially if you are losing weight.



## Special requirements

A very small number of people go home with additional nutrition being given through a feeding tube into their stomach, or through a long-term IV line. The hospital may arrange homecare nursing services and the home enteral/parenteral nutrition program to help provide support at home.

## Food safety

Always wash your hands with soap before preparing or handling food. Wash your vegetables and fruits with water before you eat them. This will help to remove any germs that are not visible. Proper handling, storage, and cooking of meat is also important. Raw meat can have bacteria that can make you very sick if you don't cook it or store it properly. Keep raw meat and fresh fruit and vegetables separate.



## Activity and exercise



Regular exercise before surgery and after your incisions have healed has many benefits. It can help:

- reduce fatigue and improve energy levels
- reduce your risk for blood clots
- reduce nausea
- boost your immune system
- lower your risk for falling by keeping you stronger
- improve your mood and help you feel better as treatment progresses



Studies show that exercise helps patients feel better — even something as short as a 10-15 minute walk.

Both rest and exercise are important to your recovery. You will be tired for several weeks to months after your surgery. During this time, limit your activity to walking, and limit the number of times you climb the stairs in a day. Let the way you feel guide you – when you start to feel tired, stop whatever you are doing and rest.



Taking many rest periods throughout the day is more helpful than one long rest. Try to get at least 8 to 10 hours of sleep at night.

**It's important to check with your surgeon first before you start any exercise program, go back to doing sports or do heavy housework (like vacuuming).** Light activity, such as walking and light housework is okay.



Remember, **do not lift anything over 10 pounds (4.5 kg)** for the first 6 weeks after surgery. It takes this long for your incision(s) to heal completely.

If you have other health issues, check with your healthcare team before you start a new exercise program.

## Sexual Intercourse

**Ask your surgeon when it is okay to resume sexual intercourse.** If you had surgery to any of your sex organs (uterus, vagina), your surgeon may ask you to wait longer (4-6 weeks after surgery).

## Tobacco products

We know stopping the use of tobacco can be difficult and often takes several tries. By stopping your tobacco use after a cancer diagnosis, you can improve your health and body's response to treatment, whether it's surgery, radiation treatment or systemic treatment.

Studies show many important benefits of quitting the use of tobacco after a cancer diagnosis, including:

- A better chance of successful treatment
- Fewer serious side effects
- Faster recovery from treatment
- Decreased risk of the cancer coming back, or getting another cancer diagnosis
- Lower risk of infection
- Easier breathing
- More energy
- Better quality of life

Cancer patients who quit tobacco say they **feel better physically, emotionally, and have a better quality of life!** Now is the BEST time to be tobacco free.



For support quitting tobacco or for more information visit:

- [myhealth.alberta.ca/healthier-together](https://myhealth.alberta.ca/healthier-together)
- [www.AlbertaQuits.ca](https://www.AlbertaQuits.ca) or call 1-866-710-QUIT (7848)



## D. Living Your Best

D1

### Appearance

#### Body image

It's normal to have questions and concerns about body image and sexuality. You may have unexpected feelings from the changes to your body from surgery or treatment. This is different for everyone. If you can talk about these feelings with your partner, family, and friends, you'll feel less alone when dealing with these changes.

If you'd like more help, talk to:

- Someone in your community who you trust.
- Any member of your healthcare team.

Read more at:



[www.ahs.ca/cancertreatment](http://www.ahs.ca/cancertreatment)

- > Managing Side Effects
- > Sexual Health

D2

### Emotional Self Care and Awareness

It can be hard to talk about having cancer. Some people find it helpful to talk to friends and family. Speaking with others might help you:

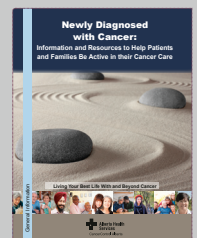
- Understand the information better.
- Get the support you need.
- Create a support network. You may want to have 1 person keep others updated for you.
- Feel in control of your own treatment plan so you're comfortable asking questions.

Difficult emotions often arise during cancer and its treatments. Psychologists and social workers offer counselling to patients and family members to help reduce emotional distress and explore coping techniques.

They help with things such as communication, stress, coping with treatment side effects, mood changes, quality of life, body image or loneliness.

Once you have a confirmed cancer diagnosis, you or your support persons can ask for a referral to the cancer counselling professionals (Psychosocial Oncology).

For more information look in the **Newly Diagnosed With Cancer Book**



or

For contact information visit

[www.ahs.ca/cancersupportivecare](http://www.ahs.ca/cancersupportivecare)

> Psychosocial Oncology



## Anxiety

### What is anxiety?

Anxiety is a feeling of worry, fear, or being nervous and is a normal feeling for patients and families to have when going through a cancer diagnosis.

#### Tip!

People who learn about their cancer and treatment options may feel more in control and have less anxiety.

Be ready for your appointments with a written list of questions, and bring a support person if you can.

### What are signs and symptoms of anxiety?

- Feeling restless, worried, or not able to relax
- Feeling moody or stressed
- Tense muscles
- Trouble sleeping

Some people have strong anxiety which can cause anxiety attacks. You may feel:

- Feelings of doom
- Shortness of breath
- Heart palpitations (your heart feels like it is fluttering or pounding)
- Dizziness and nausea
- Chest pains

### What can I do to help my anxiety or depression?

Find support:



- Talk to someone you trust and who is a good listener — friends, family or co-workers.
- Talk to a social worker about support programs at your cancer centre and in your community.
- Get professional help. Professional counsellors can help you learn new ways to manage your anxiety and worry.



- Focus on things that make you feel better.
- Think about the positive parts of your life and the things you can control.
- Spend time with people who make you laugh and avoid those who are negative.



- Get a good sleep — this can give you more energy and help you feel better emotionally.



- Exercise and take care of your body. It's a good way to help you feel better and improve your mood.



- Some people find writing in a journal or expressing their feelings through art can help.



- Try to limit or avoid alcohol because it can lower your mood.



- Try relaxation activities like listening to music, yoga, or deep breathing.



## D3

## Integrative and Complementary Therapies

**What are integrative and complementary therapies?**

These include different healing approaches and therapies not considered to be standard medical treatments.

- **Standard medical treatments** are scientifically-tested and researched and include treatments such as radiation, surgery, and systemic treatment (such as chemotherapy or hormone therapy). These treatments are used by doctors to treat people with cancer.
- **Complementary medicine** is used along with standard medical treatments. It is meant to help relieve symptoms or side effects, or boost emotional or physical health.

**Talk to your surgeon, oncologist or family doctor if you are thinking about using complementary therapies or if you have any questions or problems.** Check with your pharmacist or registered dietitian to see if there are possible interactions with medications or supplements.

### Does my healthcare team need to know if I am using integrative or complementary therapies?

**Yes.** Tell your doctor or nurse about anything you are taking or using. Some complementary therapies interact with other medicine you take and may make your treatment less effective.



It's always best to talk to your healthcare team before you start any additional treatments or therapies. These include things like:

- pills
- vitamins
- massage
- hyperbaric oxygen treatment
- injections
- herbal remedies
- acupuncture
- cannabis

**Are there natural health products I can take during treatment?**

- You can take a regular strength multiple vitamin and mineral supplement. Choose a brand that is made for your age group. The supplement should have small doses of a wide variety of nutrients (high doses are not recommended).
- We recommend that you do not use other natural health products for 1 month after you finish your treatments, and when possible, for 1 month before you start treatment.

**To find out more, visit:**

CAMEO website: [cameoprogram.org](http://cameoprogram.org)

Canadian Cancer Society's website:

[bit.ly/CCS-complementary-and-alternative-therapies](http://bit.ly/CCS-complementary-and-alternative-therapies)





## D4

## Find Information and Access Resources

## Cancer Care Alberta



Visit [www.cancercarealberta.ca](http://www.cancercarealberta.ca) for resources, support and cancer information from prevention to treatment and beyond.

## MyHealth.Alberta.ca


Visit [MyHealth.Alberta.ca](http://MyHealth.Alberta.ca) for trusted health information on many other topics.

## Wellspring Calgary &amp; Edmonton

Wellspring is a warm and welcoming place that offers a variety of supportive programs, at no cost, for cancer patients, their families and caregivers. They are part of a network of Wellspring centres in Canada that provide emotional, restorative and educational support programs and services to anyone affected by cancer.

## Calgary


 [wellspringcalgary.ca](http://wellspringcalgary.ca)

 403-521-5292 (North) / 587-747-0260 (South)

 404 Home Road NW / 3910 Seton Drive SE

## Edmonton

 [wellspring.ca/edmonton](http://wellspring.ca/edmonton)

 780-758-4433

 11306 65 Ave

## Alberta 211

Alberta 211 is a local resource and information service. It provides information in several ways: by phone, online or by web chat (phone service is available in many, but not all, areas). We encourage local and community organizations to list their services here. This is a great place to check on what is available near you!

 2-1-1  [www.ab.211.ca](http://www.ab.211.ca) to search or chat online

 Search for information on things like:

- Financial and social assistance
- Food assistance and meal programs
- Parenting and family programs
- Government program assistance
- Seniors' services and home care
- Housing and utility help
- Newcomer services
- Mental health support
- Disability support services



## Canadian Cancer Society (CCS) & Community Services Locator

The CCS community services locator (CSL) is a directory that helps cancer patients, caregivers and healthcare providers find the services they need across Canada. There are over 4000 cancer-related services listed. You can search for:

- emotional support programs
- homecare
- how to get to your cancer treatment
- where to find a wig or prosthesis



[cancer.ca](https://cancer.ca)



[csl.cancer.ca/en](https://csl.cancer.ca/en) (locator)

Can't find what you need?  1 888 939-3333 (Monday to Friday)



## E. Urgent Concerns & When to Get Help



If you are having chest pain, tightness in your chest or difficulty breathing at any time, call 911.

### Urgent Concerns

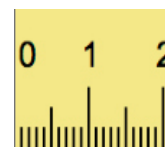
If you have any of the following urgent concerns, call the number your surgeon gave you at any time or go to Emergency if you cannot reach your surgeon right away.

- Changes to your skin incision:
  - increasing redness, swelling, yellow or green discharge, or a bad smell
  - bleeding (bright red) and the bleeding does not stop after you put pressure using a clean cloth or gauze
  - you have a large or complete separation of your incision (your incision has come open)
- Increased pain or swelling in your abdomen
- You have a bad headache and are very drowsy
- Chills or a fever (temperature above 38.5°C / 101.3°F)
- Trouble passing urine
- No bowel movement in 3 days
- Nausea that is not getting better with your medication or throwing up longer than 24 hours
- You have pain, swelling, or redness in your leg that is greater on one side compared to the other (see the section on blood clots, [page 19](#))
- For gynecology patients: bloody discharge from your vagina that has large blood clots (larger than a toonie or walnut size) or soaks more than 1 large feminine pad in 1 hour

### Non-urgent Concerns

These concerns are not urgent. Call your surgeon **during business hours** to set up an appointment or see a healthcare provider if you notice:

- a large amount of clear/pink fluid from your incision
- drainage from your drain that smells bad or is creamy in colour
- partial separation of your incision (your incision has opened a little bit; less than 1cm)
- a seroma (fluid build-up) and it's causing you pain
- pain when urinating
- new or worse constipation or diarrhea
- For gynecology patients: foul-smelling vaginal discharge



Actual size



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\* \* \* \* \*

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The information is to be updated every 3 years, or as new clinical evidence emerges. If there are any concerns or updates with this information, please email [cancerpatienteducation@ahs.ca](mailto:cancerpatienteducation@ahs.ca).

**Cancer Care Alberta**  
Leading care through compassion, courage, learning and discovery

[www.cancercarealberta.ca](http://www.cancercarealberta.ca)

