Section One – Before Surgery
Chapter One: Procedures and preparing for surgery
My name is Susan Dennehy and I am the Clinical Nurse Specialist at the Winnipeg Regional Health Authority Breast Health Centre.
Each year many women and a few men undergo surgery for the treatment of breast cancer. Coping with breast cancer and breast cancer surgery can be challenging and overwhelming for you and your family.

You may be feeling a range of emotions such as uncertainty, fear, sadness and a lack of control. These feelings can be hard to deal with but they are normal and common. Remember that there is no “right way” or “wrong way” to deal with cancer and with surgery. Not all people react the same way or need the same kind of help. It is important to know you are not alone. We are here to care for you and connect you with the resources and services you need at this time.
During the presentation, I will describe different surgical approaches and procedures used for breast cancer. I will discuss how you can prepare for surgery and what you can expect following your operation. I will be talking about how to care for yourself when you go home from the hospital.
Later in the presentation we will refer to the booklet titled, “Your Breast Surgery Guide”, which you should have received in your Before Surgery package at the Breast Health Centre or you can view on-line on our website.

You can pause the video now to find your copy of the surgery guide to have it with you to refer to during the presentation.
I will now talk with you about two common breast cancer surgeries and some procedures that you may have been offered as part of your surgical treatment. The first surgery I will explain is a lumpectomy and then I will discuss mastectomy surgery.
Lumpectomy surgery may also be referred to as breast conserving surgery.

Think of the tumor as the lump within your breast. During lumpectomy surgery, your surgeon removes “the lump” or tumor and an area of tissue surrounding the lump called a margin. The rest of the breast remains intact.

The surgery usually takes 1-2 hours. The size of the incision will vary depending on the size of the tumor and its location in the breast. The wound edges are brought together and the wound is closed with dissolvable stitches.

After lumpectomy surgery, a cavity or pocket is left where the tissue was removed. That cavity will fill with normal body fluid. You may notice the fluid either by feeling or hearing it moving around at the incision site. This is normal and overtime the fluid reabsorbs into the breast and is replaced by scar tissue.

Depending on your type of breast cancer, lumpectomy surgery usually is followed by radiation therapy to reduce the chances of cancer recurring.

The next image is a photo of a woman who has had a lumpectomy.
It does not look like she has many changes to her breast. This is quite common. But for some, the breast may not look or feel the exactly the same as it did before surgery. Some women may notice a divot or hollowing and the degree of change depends on where the cut is made and the size of the breast. If the changes to the breast are greatly noticeable, you may be able to get a prosthesis through the Manitoba Breast Prosthesis Program.

*Photos courtesy of Show Me (2nd Edition), A Photo Collection of Breast Cancer Survivors’ Lumpectomies, Mastectomies, Breast Reconstructions and Thoughts on Body Image*
Unlike a lumpectomy, a mastectomy removes the entire breast affected by cancer, but not the muscles underneath the breast. There are two common types of mastectomies, a simple mastectomy and a modified radical mastectomy.
The picture on the left shows a simple mastectomy where the whole breast, including the breast tissue, skin, areola and nipple are removed.

The picture on the right shows a modified radical mastectomy where all of the breast and most of the underarm lymph nodes are removed. This procedure may be recommended for large tumors and/or if cancer has spread to the lymph nodes.

Mastectomy surgery usually takes 2-2 ½ hours. Like a lumpectomy, the wound is closed with dissolvable stitches. With a mastectomy, you will have a drain near the incision to remove extra fluids and prevent infection.

The next photo is of a woman who had mastectomy surgery.
Photos courtesy of Show Me (2nd Edition), A Photo Collection of Breast Cancer Survivors' Lumpectomies, Mastectomies, Breast Reconstructions and Thoughts on Body Image.

This woman’s photo is probably six months after surgery. Her incision lays flat against her chest and the scar has flattened and faded.

After breast surgery, it may not be easy to look at your incision for the first time. You may prefer to be alone, or you may want the support of your partner, family member or close friend. The first time you look at the incision you may want to look down and then eventually look in a mirror. Really, there is no right or wrong way to do this. It depends on how you feel. After a few weeks the swelling will go down, the bruising will fade and the scar will become less obvious.

If you are feeling self-conscious of how you look, talking with your partner or friend can help or contact your nurse at the Breast Health Centre or the Breast Cancer Navigator at the Breast Cancer Centre of Hope to connect you with supports and information about bras, prostheses and clothing.
As part of your surgical plan, your surgeon may have discussed with you the need for lymph node surgery and/or breast needle localization. Not everyone will need these procedures. Your surgeon would have discussed these with you when planning your surgical treatment.
Lymph node surgery may be part of your surgical plan depending on your type of breast cancer. If it is required, it is done at the same time as the breast surgery.
Lymph nodes are part of the immune system that helps fight infection. Lymph nodes work like small filters throughout your body filtering extra body fluids, abnormal cells, and dead cells.
Lymph nodes and vessels in the breast are linked with the lymph nodes in the armpit. When breast cancer spreads beyond the duct or gland of the breast, it typically moves to the lymph nodes found underneath the armpit. When lymph nodes in the armpit are removed and examined, it can be determined if the cancer has spread and to what extent. This provides your healthcare team with important information when planning your next steps in treatment.
There are two types of lymph node procedures: one is called sentinel lymph node biopsy and the other is called axillary lymph node dissection.

Most often, the sentinel lymph node is the first node to receive lymph drainage from the breast carrying cancer cells.
A sentinel lymph node biopsy involves injecting radioactive fluid or blue dye or both into the breast tissue surrounding the tumor. The lymph nodes that pick up the dye or radioactive fluid first are the sentinel lymph nodes. These nodes are removed and examined to find out if cancer cells are present. If cancer is present in the sentinel nodes, an axillary lymph node dissection may be recommended.
If you are having a sentinel node biopsy, the injection of radioactive fluid occurs before surgery. This is done in the nuclear medicine department within the hospital usually the day of surgery but may be the day before, if your surgery is scheduled very early in the morning. Typically, 1-2 needles filled with fluid are injected around the nipple or areola area. You may experience some discomfort or stinging, similar to a vaccination, when the fluid is injected into the breast.

If blue dye is used, it will be injected into your breast after you are asleep in the operating room. Your urine may be a blue colour for a day or two after surgery. Blue dye staining can occur to your breast and usually lasts a few days, but can occasionally cause a small permanent tattoo.
Lymph Node Surgery
And Lumpectomy

This picture shows you where the incision is made for either the sentinel node biopsy or axillary lymph node dissection when you are having a lumpectomy.

Notice there are two incisions – one along the breast where the cancer was removed and the other in the armpit area where the lymph nodes were removed.

Sometimes the sentinel biopsy can be done through the lumpectomy incision if the lump is close to the armpit. If so, there may be only one incision.
How will a sentinel node biopsy affect my arm and movement?

- Small amount discomfort under the arm
- Little difficulty raising arm up
- Slight changes in sensation

Typically, there is a small amount of discomfort under the arm, and most women have little difficulty raising their arm up after a sentinel node biopsy. There is sometimes a slight change in sensation underneath the armpit, but not a great deal and most of it returns after a few weeks or months.
The other surgery is called an axillary lymph node dissection and instead of just removing the sentinel nodes, the surgeon removes lymph nodes and a pad of fatty tissue in the armpit. The nodes are carefully examined to see if there is any cancer.

If you are having a mastectomy, the incision is made a little higher into the armpit area and it is all one incision.
When the surgeons perform this operation they cut through a group or bundle of nerves. As a result, changes in the feeling and sensation down the inside of the upper arm or armpit occurs because nerves running through the armpit have been changed.

Some patients describe an occasional burning and shooting pain. In the beginning it feels strange, but it may lessen over time as the body adjusts to the changes. There are initially some changes in your ability to put your arm up and also a chance of lymphedema, which is abnormal swelling in the breast, chest wall or arm. For more information on Lymphedema please see the lymphedema chapter in the after surgery section of the DVD.
An extra procedure called breast needle localization may be required.

Sometimes, breast cancer cannot be felt as a “lump” during a physical exam and it is only found on a mammogram or ultrasound.
Breast Needle Localization

- Locates the area of concern in your breast
- Thin wire placed in to the area of the breast by a Radiologist
- Done using a mammogram or ultrasound
- Secured and covered with a bandage

Breast needle localization is used to help the surgeon find the exact area of concern in your breast. The procedure is done in a radiology department. A radiologist places a very thin wire into the area with the help of a mammogram or ultrasound. A bandage is placed over the wire to keep it in place.
Regardless of what hospital you have your surgery; needle localizations are performed at one of three sites, the Breast Health Centre, Health Sciences Centre and St. Boniface Hospital and will typically happen the morning of surgery and sometimes the day before.
I will now share with you how to prepare for surgery and what you can expect.
Some of you may already have your surgery date. If not, your surgeon’s office will contact you to tell you the date of your surgery, where to go and the length of your stay. The length of your stay will depend on the type of surgery you have done and your recovery. Usually, it is day surgery and you go home the day of surgery. Some you will need to stay in the hospital one or more nights.

In all cases, you will need someone to drive you home from the hospital when you are discharged.
After you met with your surgeon at the Breast Health Centre, you had bloodwork, a chest X-ray and an EKG done. The results of these tests and your history were sent to the hospital where you will be having your surgery to be reviewed. You may be asked to visit the pre-assessment clinic of the hospital where you are having the surgery for further assessment and specific instructions before surgery. Not everyone is required to attend a pre-assessment clinic.
The evening before surgery there are a few things to do to prepare you for the next day.

The nurse from your surgeon’s office or pre-admission clinic will give directions about when to stop eating and drinking before surgery. It is important to follow the instructions provided or your surgery may need to be rescheduled. Please contact your surgeon’s office if you have questions.

It is a good idea to pack a light overnight bag with slippers with non-slip soles, a light housecoat, (even if you are only having day surgery) because after the surgery the nurses will be asking you to get up to use the washroom. Remember to take your Breast Health Centre surgery guide. You will need to refer to this after surgery. Plan to wear a loose-fitting shirt or blouse that buttons in the front after surgery, something that is easy to slip into.

If you are having a lumpectomy, pack a supportive bra with a soft band. Many women who have a lumpectomy find the support of a bra is very comfortable. Bras that have fasteners in the front are easy to put on. Some women prefer to wear a camisole with a built-in bra.

If you are having a mastectomy the surgery site needs time to heal before you can wear a bra or prosthesis. You may be interested in a temporary prosthesis that is very soft and lightweight available for free through the Canadian Cancer Society. To avoid irritation to the chest incision, you would only wear the bra and prosthesis for short periods of time at first.
You can contact the Canadian Cancer Society at the number on your screen to arrange for a temporary prosthesis.
Before you are admitted to the hospital, remove all of your jewelry, including any body piercings. It is a good idea to leave these valuables at home.

Remove all nail polish. You can leave gel nails on.

Do not apply lotions, body powder or deodorants on the day of the operation.
Day of Surgery

- First: Admitting department
- Surgery unit
- Operating room
- Recovery room

When you arrive at the hospital the first place you will go is the admitting department to check in.

From there, staff will tell you where you should go. Before going to the surgical unit, you may need to go to the nuclear medicine department and/or diagnostic imaging. This depends on whether the surgical plan includes you having a sentinel node injection or needle wire placement. Once you have checked in and are prepped for surgery you will be taken to the operating room.

Some hospitals have comfortable waiting areas for family to sit and wait during the surgery just outside the operating room. The staff will come and let your family know when they can come and see you after your surgery. Immediately after surgery, you will be taken to the recovery room and that is where you will be for about an hour while you wake up from the anesthetic used during surgery.

You will be transferred from the recovery area to a unit and your family can come and be with you at that time. The nurses will make sure you are comfortable and your pain is controlled. They will check your blood pressure, pulse, temperature, dressing and drain if you have one. They will also provide you with emotional support.
After surgery, it is important to let the nurses know if you are having any pain or nausea so you will be comfortable. If you are comfortable, you will find it easier to start slowly moving around and do deep breathing exercises. These are important for your recovery.

Deep breathing and coughing exercises are important to help clear your lungs from the anesthetic medication and mucous. You can hold a pillow against your incision site, which can make the coughing easier. The nurses at the hospital will show you how to do deep breathing and coughing.

Shortly after surgery, your nurse will help get you up and walk for a short distance. Your nurse is going to make sure you are not dizzy, that you are not feeling nauseated and that you are safe to be up.
I am now going to review what is important for when you go home after your surgery. You can now refer to the booklet “Your Breast Surgery Guide” and I will walk you through it. Remember to bring this guide with you to the hospital, so you can refer to it with the nurse at the hospital before you go home.
Let’s begin with the pain management section in the guide.

Some pain or discomfort is normal after breast surgery. It is important to manage your pain and make sure you are comfortable so you can slowly start moving around and begin to increase your activity level. Your surgeon may give you a prescription for pain medication when you go home; generally this is acetaminophen with codeine also known as Tylenol 3. To control the pain, it is best to take the pain medication regularly for the first day or two. When your pain becomes less, you may want to try a milder pain medication such as acetaminophen or Tylenol Extra Strength and decrease the medications from every 6-8 hours and then maybe twice a day to once a day and gradually wean yourself off.

Acetaminophen with codeine can cause constipation. Eating foods with a little more fiber for example bran cereal, whole grain bread, fruits and vegetables and drinking extra fluids can help prevent constipation. If you do have problems you can buy a laxative with a stool softener like Senekot – S.
After surgery you may resume your normal diet as tolerated. Follow Canada’s Food guide and eat regular well balanced meals and snacks to ensure your body is getting enough nutrients and protein to promote healing. Examples of foods that include protein are milk products, meat, poultry, fish, eggs, legumes, nuts and seeds. You can contact the dietitian at the Breast Health Centre if you have specific questions about your diet.
It is important to check your incision(s) daily, especially during the first 2 to 3 weeks after surgery. Swelling and bruising is common after any breast operation. It should improve after a few weeks.

As the incision begins to heal a scar will form. The scar will be red, darker if you have dark skin, and quite firm. It may be slightly raised, but over time it will flatten and fade. Everyone’s skin heals differently.

If you have an incision in your armpit, do not use deodorant until the incision is healed.

Wound bandages are discussed in your surgery guide. There is a list of different types of bandages you may have on your incision and how you can care for them. Most of the surgeons at the Breast Health Centre use dissolvable stitches under the skin and steri-strips on the top layer of the skin.

Some of the surgeons will put a gauze over the incision and steri-strips for 48 hours to soak up a little bit of bleeding that might occur. The gauze can be removed after 48 hours and the steri-strips can be left in place.

Some women have a plastic bandage over the steri-strips that looks similar to plastic wrap. The plastic bandage is waterproof and can be left on for 7 days.
Showering

- You may shower 48 hours after surgery with the Steri-strips® in place even with a drain
- Avoid putting soap on the incision
- Aim the showerhead away from the incision
- Gently pat the site dry with a clean towel

After 48 hours you may shower while the stitches and steri-strips or plastic bandages are still in place. It is okay to get the incision area wet, but try to avoid soap on the area. Aim the showerhead away from your incision.

Once you shower you can use a clean towel and pat the area dry. After 7 days you can remove the steri-strips yourself by gently peeling each end toward the middle until the strips come off. The plastic bandage can also be removed after seven days.

If you have any questions regarding your bandages or are unclear about when you can shower or remove a dressing, please refer to your surgery guide. Don’t hesitate to call the nurses at the Breast Health Centre to help you through this.
Now, please look at the section on drain care in your surgery guide.

Typically, women who are having a mastectomy or a lumpectomy with axillary lymph node surgery will have 1 to 2 drains. A drain is a small plastic tube that is placed near your incision to remove blood and fluid that can collect under your skin after surgery. Removing the fluid helps the wound to heal, makes you more comfortable and reduces the risk of infection.
Drain Care

- Red or pink → gradually becomes clearer, yellowish-pink and more watery
- Amount of fluid changes daily
- Measure, record and empty 2-3 times per day
- Removed when total is less than 30 mls in 24 hours
- Call the Breast Health Centre to have your drain removed

The nurse will show you how to empty your drain before you go home from the hospital. At first, the fluid that drains will be red or pink in colour; then gradually it will become clearer, a yellowish-pink and more watery. The amount that drains may change from day to day, but it usually decreases a few days after the surgery. The drain is usually removed in 7-10 days.

Drains should be measured and emptied 3 times per day. Your drain can be removed when the drainage total is less than 30 mls in 24 hrs.

If you have two drains and only one drain in less than 30 ml, that one drain can be removed. You do not necessarily have to wait for both drains to be less than 30 ml.

Call your surgeon’s office or a nurse at the Breast Health Centre for removal of the drain.
To empty the drain:

- Wash your hands
- Open the stopper to release the suction.
- Measure the amount of fluid that collects in the bulb of the drain, using the calibrated numbers on the side of the bulb and record the amount in the record table found in your surgery guide.
- If you have more than one drainage tube, record the amount from each one separately
- Empty the fluid from the bulb through the opening
- Squeeze the bulb to create suction and recap the stopper
- Wash your hands

Do not rinse the bulb or bottle. It is normal to see pieces of tissue or clots along the tubing. To prevent the clots from plugging the tubing, “milking” the drain three times per day can help promote the fluid to flow.

1. Wash your hands and apply a couple of drops of lotion or soap to the tips of your fingers
2. Near the tip of the tube that is inserted in your skin, pinch the tube securely with your finger and thumb.
3. With your other hand, starting just below where the tubing is pinched, use you fore-finger and thumb to squeeze and slide your fingers down the tube, half-way to the bulb. Keep the tube pinched.
4. Bring your opposite hand down to just above where the tube is pinched.
5. Repeat step 3 to “milk” the lower half of the tube right down to the bulb.
You can shower with a drain in place. It is helpful to tape the tubing from the drain to your skin below the drain site. This will decrease the pull on your skin.

If you have a gauze bandage on the drain site, you can remove the gauze, shower and then pat the area dry with a clean towel, and apply a new gauze.

If you are not comfortable changing the bandage, you may bathe, but keep the bandages dry and change the bandage in seven days or sooner if it gets wet.

If you prefer taking a bath, have the drain sit on the edge of the tub and keep the water in the tub low enough to avoid getting the drain incision and surgical site wet.

Some of the surgeons use the plastic bandage, which is waterproof. This can be left on while showering and removed after seven days.

If you are unsure what to do, you can call the nurse at the Breast Health Centre.
Your surgical guide tells you when to contact your surgeon's office or a nurse at the BHC.

You should call the centre:
• If the bulb will not stay squeezed; or if the tube is blocked or not draining and you have tried milking the tube.
• Or, fluid collects under the skin instead of going in the tubing. It may feel like a pocket of water sitting underneath the skin.
• Or, if the total amount of fluid is less than 30 ml in 24 hours.

After the drain has been removed, it is normal for a small amount of fluid to leak from the drain site for 24-72 hours. Apply and change the gauze as needed.

Fluid may collect under the skin once the drain site has healed over. Most of the fluid will reabsorb on its own within 3-6 weeks. The fluid may need to be drained by your surgeon if the swelling becomes large or painful.
If you are experiencing any:

- new bleeding or drainage from the incisions or drain site
- foul-smelling fluid coming from the incisions, drain site or drainage bulb
- increased warmth, swelling, pain or redness along incisions
- chills or fever (above 38.5 C or 101.3 F) for two days or more
- signs of infection such as swelling, redness, warmth in your “at risk arm”

you are encouraged to contact the Breast Health Centre.
If it is after hours or on the weekend, report to the emergency department where you had your surgery or if you are outside the city the nearest emergency department.
If you have not been given a follow up appointment with your surgeon, please call to make your appointment once you find out the date of your surgery. You do not have to wait until you are out of the hospital. Generally, the date is three weeks from the date of your surgery, because that is how long the pathology report from your surgery takes to arrive at the BHC.

At this appointment, your pathology report will be reviewed with you. The nurse and surgeon will talk about recovery and the next steps in treatment.

If you have any questions from the time of discharge to your follow-up appointment, you are encouraged to call your nurse at the BHC to assist you.
Next I would like to briefly talk about activity after breast surgery.

Complete recovery from breast surgery may take months. You may feel tired and need extra rest the first few weeks following surgery. Increase your activities slowly, so you do not get overtired and take frequent rest periods. Accept help if family and friends offer.

You may do any activity that you feel able to do. Continue to use your affected arm for daily activities like brushing your hair.
Lastly, I would like to talk about your emotional recovery. It is an important part of your health and can contribute to your overall recovery. It can be very helpful to find an outlet for your emotions. Talking with others, keeping a journal, and creating a support system can be valuable in coping with breast cancer. The Breast Health Centre and the Breast Cancer Centre of Hope can help link you with the resources you need. Please contact us for more information.
The surgery guide and all of the resources referred to on this DVD as well as links to additional resources are available online at
wrha.mb.ca/bhc, or feel free to call the Breast Health Centre at 204-235-3906 or toll free in Manitoba at 1-888-501-5219 if you have any questions about topics discussed in this chapter or related to your surgical treatment.

This concludes the chapter on surgical treatment and preparing for breast surgery.

I hope the information has been useful and has answered some of your questions.