

Cancer Rehabilitation

Dear Patient,

Facing cancer is likely one of the most difficult things you have ever done. You and your oncology team are working hard to fight the disease, but treatment side effects can sap your strength just when you need it most.

Many patients with cancer don't know that working with a physical or occupational therapist can improve your quality of life and can have a positive impact on the course of your disease. Exercise can reduce the symptoms and side effects of cancer and common treatments such as chemotherapy and radiation. Regular physical activity is even shown to lower the likelihood that certain types of cancers recur.

You may not know which exercises are safe for your specific condition and you may question how you can be active if you feel overwhelmed and exhausted. We specialize in designing exercise routines that are realistic and manageable – exercises that can help restore your energy and reduce your pain.

Our highly trained and licensed physical and occupational therapists work closely with your oncologists as an integral part of your treatment team. Part of a prestigious academic medical center, our providers are constantly updating your treatment plan with the latest insights from research, continuing education and technology. Several of our therapists have received advanced training in physical therapy techniques specifically for patients with cancer, so you can be sure that you are receiving unparalleled care.

What's Inside

What We Treat	2
Your First Visit	3
Treatments	3
Your Ongoing Care	4
Play an Active Role in Your Health Care.....	4
Cancer-Related Fatigue.....	5
Deconditioning and Sacropenia.....	6
Stiffness, Joint and Muscle Pain.....	7
Osteoporosis.....	8
Neuropathy.....	9
Exercise and Cancer.....	10
Lymphedema.....	13
Cording.....	14
Therapy's Role.....	14
Your Ongoing Care.....	15
Remission and Recurrence.....	15
Metastatic Disease.....	16

We are honored that you have chosen us to help you on your journey to better health. At times you may feel alone; please know we are here to help. We look forward to partnering with you through and beyond your active treatment.

We encourage you to read carefully through this general information brochure, as well as any additional resources we have provided on your specific condition. If you have any questions, please do not hesitate to call us at **(617) 754-9100**. And if you are interested in receiving care at our Needham location, we encourage you to be in touch with us there at **(781) 453-7500**.

Best wishes for your health,

The Outpatient Physical and Occupational Therapy Team at Beth Israel Deaconess Medical Center

Introduction

It may seem counterintuitive. If you are suffering from side effects that make you tired, why should you exercise?

Research shows that regular physical activity during and after cancer treatment is positive for many reasons. Exercise strengthens your muscles and bones, protecting you against atrophy and fracture. Being active will help you maintain a healthy weight and can boost your energy and endurance. Regular physical activity can also provide the conditioning your muscles need so that you can continue or return to sports or activities you enjoy.

Exercise is also helpful in managing how you are feeling during a difficult time. Studies show that exercise can decrease anxiety and depression and keep stress at bay. Physical activities can improve mental clarity.

Physical activity can also directly manage the effects of cancer and treatments. Safe, comfortable activities can reduce joint and muscle pain. Treatments with a physical or occupational therapist and regular exercise can help control lymphedema. And, consistent exercise during your cancer treatment can increase the long-term survival rate for certain types of cancers.

What We Treat

Our therapists are experts on the toll cancer treatments may take on your body. We can help you anticipate some of the physical problems associated with cancer therapy, helping you avoid or minimize them.

Enclosed in this informational packet, you will find additional detail on issues we treat, including:

- **Cancer-related fatigue:** We know how to identify this debilitating side effect and can help you regain energy with a structured exercise program.
- **Neuropathy:** We work with you to strengthen your muscles and improve your balance if you experience this chemotherapy-related problem that results from peripheral nerve damage.
- **Deconditioning.** It is common to lose muscle and endurance while you undergo treatment, and we can teach you how to safely keep your body strong.
- **Pain and stiffness:** We can show you how to decrease pain and improve your range of motion.
- **Osteoporosis:** We can safely guide you through weight-bearing exercises that can strengthen bones weakened by cancer treatment.
- **Pelvic floor dysfunction:** Surgery and radiation can cause changes to the muscles that support the pelvic floor. Tight or weak pelvic floor muscles may result in symptoms such as changes in urinary or bowel frequency, urinary or fecal incontinence, or pain.

Your First Visit



When you first meet with one of our therapists, you can expect a robust assessment of your overall health, fitness and concerns related to your cancer treatment. The thorough evaluation will identify any issues with fatigue, pain, stiffness, balance and swelling, fully investigating any potential problem areas.

After the comprehensive exam, we work with you to create an individualized plan

based on your needs and goals. Part of your treatment plan will likely include exercises to complete at home. We will show you how to perform these and send you home with easy-to-follow printed instructions and pictures.

We will also discuss the frequency and timing of follow-up therapy. Some people may need only periodic check-ins with their therapist, while others will benefit from regular therapy for a while. We will make sure we have time in this first visit to discuss what will work best for you and address any questions you have about your treatment. The comprehensive initial evaluation may take an hour and we will do our best to help you coordinate it with other visits you may have.

Treatments

The specific treatments that your therapist suggests will largely be based on the unique issues raised by your type of cancer and the side effects you may be experiencing. Some of the treatments we typically recommend to patients with cancer may include:

- **Aerobic conditioning and interval training:** Many people with cancer benefit from safe, structured workouts to maintain endurance and combat fatigue. Aerobic workouts condition the heart and lungs.
- **Strengthening and stretching exercises:** Our therapists often recommend strength training and stretching to help patients with cancer maintain muscle and bone health.
- **Relaxation training:** We can teach you techniques to calm your body and mind during stressful times.
- **Manual therapy:** We can address pain, stiffness and other ailments through various techniques to mobilize muscles and joints.
- **Heat or cold treatments:** Both heat and cold therapies may help with cancer side effects including pain and stiffness.
- **Desensitization:** We can teach you techniques to reduce the extra sensitivity that can arise after certain types of surgeries or chemotherapy induced neuropathy.

- **Balance training:** We can help you regain your sense of balance if you are experiencing difficulty.
- **Manual lymphatic drainage and compression:** We specialize in these techniques to reduce swelling from lymphedema.

Your Ongoing Care

Meetings with your therapist will focus on helping you safely address the physical challenges posed by your cancer treatment. We will work one-on-one with you to address the issues identified in your evaluation and support you as you pursue your goals.

Periodically, your therapist will ask you to perform tests from the initial evaluation to see how your fitness level has changed. We will work with you to find the best way to manage your home exercise program, and understand that you will have good or bad days depending on where you are in your treatment and how tired you may feel.



Keeping to the appointment schedule discussed with your therapist is important to a successful outcome. Please call us 24 hours ahead of time if you need to cancel or reschedule. We accept most third-party insurance plans and suggest you call your plan to confirm their requirements. Our managed care coordinators will help make the process as smooth as possible so that you can get on the road to recovery.

Play an Active Role in Your Health Care



Patient site gives you on-line access to your health care notes from your care team. To sign up, please take the next steps by going to patientsite.org.

Text message reminders: As a BIDMC patient, you now have the option to sign up for text messaging appointment reminders. If your cell phone is on file with us, please make sure it is set up as your primary contact number. You will automatically begin receiving text reminders.

If we do not have your cell phone number on file and are interested in receiving text messages, please let us know and we will up-date your information. If you prefer to receive phone call reminders, instead of text messages, please let us know and we will updated your information.



Cancer-Related Fatigue

Cancer-related fatigue is an extremely common side effect of cancer treatments, the disease itself or other pre-existing conditions. Nearly all people with cancer experience this debilitating sensation to some degree, so you're not alone.

The exhaustion you may be experiencing is different from normal feelings of tiredness. It might interfere with your daily life in significant ways and isn't the result of unusually draining activities. You may always be tired and require long periods of rest after or between activities. You may feel irritable, too tired to think clearly or eat well. Your arms and legs might feel weak or heavy.

Your body is telling you it wants it rest, so how can physical therapy help? It's hard to believe, but the best way to boost your energy is to find regular ways to move your body. Many patients with cancer find that resting alone does not relieve their fatigue. Only regular, moderate exercise tends to help people with cancer feel refreshed.

Our therapists will partner with you to come up with a plan that works. We understand that you will have good days and bad days, and we can work with you to develop a safe and flexible exercise plan regardless of your fitness level before your cancer treatment. The most important thing when you are in active treatment and experiencing fatigue is to do some activity most days, even if it's just a little.

One of the main ways our therapists approach cancer-related fatigue is to encourage walking, which is one of the easiest ways to work more activity into your life. Our therapists sometimes suggest a specific walking programs for people undergoing active treatment. Most approaches build gradually to walking 30 minutes per day, five days a week. Your physical therapist will be able to design a plan that will work best for you.

We also often recommend interval training for fatigued patients, which has the benefit of being able to be done in short bursts. People with cancer exercise, for a few minutes, then rest, and then start again. These strengthening exercises benefit patients with cancer who may otherwise be too tired for endurance activities.

There may be some days when you are too tired to do much exercise. Even on those days, our therapists can suggest ways that you can build movement into your life. We might recommend standing up or doing gentle exercises while a television show is on a commercial break, folding your laundry standing up, or walking around while you talk on the phone. You can take naps, but limit them to a maximum of two hours and try to be active before or after.

Of course, you should consult with your therapist, doctor or oncologist if you feel your fatigue is unmanageable. We use a rating scale to help patients with cancer understand how much tiredness may be expected and when to seek medical attention.

We understand that fatigue is common among patients with cancer . But we also know that fatigue can lead to other problems – including deconditioning and osteoporosis – if you allow it to slow you down completely. We will show you how to stay active safely as you chart your journey to recovery.

Deconditioning and Sarcopenia

When you are battling cancer, it is easy to get out of shape. Regardless of your activity level before your diagnosis, the disease and side effects of common treatments can leave you feeling too tired to exercise. That leads to a cycle of more fatigue and atrophy.

As a result, people with cancer sometimes suffer from deconditioning, when your lungs, heart and muscles lose endurance, or the ability to work for extended periods without overtiring. A related condition, sarcopenia, occurs when inactivity leads to an actual reduction in muscle size and fiber. Both conditions can leave patients with cancer feeling weaker than when they started treatment.

It is important to recognize that almost all patients with cancer experience a debilitating sense of exhaustion known as cancer-related fatigue. Unlike normal tiredness, cancer-related fatigue does not resolve when you rest. It's counterintuitive, but the best way to build energy is to stay active, even though you may have good and bad days. Building movement into your day is the best way to prevent deconditioning and sarcopenia.

Our therapists can help you design a program that works for your specific situation, regardless of your diagnosis or fitness level. Working with us from the beginning of your journey allows you to learn what movements may be appropriate and how to avoid tiring yourself further. Resuming activity during or after treatments can improve your overall sense of wellness and quality of life and can help you get back to your daily activities as soon as possible.

If you are deconditioned, we may recommend consistent daily activity – even if it's just a little – to start rebuilding endurance. You might walk each day, gradually increasing the amount you can manage by following one of our popular walking programs.

If you suffer from sarcopenia, we may suggest strength training to rebuild muscles. Strength training targets specific muscle groups through weight or resistance repetitions, such as 10 bicep curls three times with short breaks in between.

Remember to try to maintain a healthy diet. It's especially important as you manage through deconditioning and sarcopenia. If you have questions, we encourage you to ask your therapist to connect you with one of our dieticians. Our team approach means that your care will be seamlessly coordinated to ensure that your body has the strength it needs to fight cancer.



Stiffness, Joint and Muscle Pain

When you have cancer, your body may start to hurt in ways you didn't expect.

Sometimes, cancer treatments or the disease itself may inflame new or chronic areas of pain. Your muscles may feel tight or stiff, and some treatments may cause uncomfortable scar tissue to develop.

Anyone with any type of cancer can experience pain or stiffness. Surgeries can lead to stiffness because you may not move as much while you are healing. During chemotherapy or radiation, you may feel too tired to exercise, leading to muscle loss and pain in joints. Radiation can cause your skin to lose elasticity. Certain medications may also have side effects that cause joint pain.

Our therapists will work closely with your oncology team to help you manage these common symptoms and help you improve your quality of life. We will focus on strengthening your muscles, which takes pressure off your bones and trains the muscles to move again. If needed, we may offer manual techniques.

We address pain and stiffness primarily with a robust stretching program. We encourage you to stretch and move each joint in some way daily. We will teach you that sitting or standing in the same position for longer than 30 minutes will make you stiff so we will coach you to move periodically.

Our basic program can be adjusted for your fitness level. We can also design a specialized program for you if you have had surgery or have cancer in your bones.

Before you begin any new activity program, it is important to remember that stretching should feel like a gentle pull. You should not feel sharp, stabbing pain or spasms. If your pain worsens, stop your activity and consult with your therapist or doctor.

Some examples of stretches that our therapists may recommend include:

- Marching while sitting down
- Seated hamstring stretch. While sitting, extend one leg in front and lean over that leg toward your toes
- Shoulder and neck rolls
- Side body stretch
- Spinal twist, rotating to one side and then the other
- Sit to stand. Every half an hour, stand up and sit down 5 to 10 times
- Standing quad stretch. Hold onto a sturdy counter or chair, bend one knee up behind you and hold.
- Cat/cow. Round your shoulders and bring your chin down in front of you, then reverse, pushing your chest out and drawing your shoulder blades together.

There are many more exercises that may be appropriate for you. Your physical therapist will tailor a program unique to your needs to improve your range of motion and decrease your pain.

Osteoporosis

Osteoporosis – a condition in which bones weaken – often happens with age, but can also result from certain cancer treatments. Your doctor and physical therapist can help if you are at risk for this problem.

You may be experiencing osteoporosis if your back hurts, your bones break easily or your joints are stiff or painful. You may slouch or shrink. Osteoporosis is associated with some cancer medications including hormone therapy and chemotherapy.

Your doctor will likely let you know if your cancer or its treatment puts you at increased risk for developing osteoporosis. In these situations, bone density scans may be recommended before, during and after your treatment to assess for any bone loss.

Our therapists can work with you to improve the health of your bones. Weight bearing exercises such as wall pushups or squats can help maintain or build bone strength. Exercises can also strengthen your muscles so that they can better support your bones, reducing your risk of falls and fractures.

We will work with you to design an exercise plan that takes into account your fitness level, diagnosis and bone health to build a safe plan you can stick with. This might include strengthening exercises and interval training, or one of our walking programs that gradually build endurance.

We consult closely with your oncology team. Your physicians may recommend medicine to slow down your osteoporosis or promote bone healing. Your physician may suggest additional medication for pain if you have osteoporosis related to metastatic cancer. Working with one of our registered dietitians can identify any nutritional changes, supplements or vitamins that may help.

We know that osteoporosis is common with cancer. We work as part of your team to assess your risk for bone loss and teach you how to maintain and rebuild bone strength.



Neuropathy

Some people with cancer experience nerve damage as a distressing side effect of chemotherapy. Known as chemotherapy-induced peripheral neuropathy, this problem is characterized by tingling or other unwelcome sensations, mostly in the hands and feet, that impact your sensory and motor functions.

You may have neuropathy if you feel like you have pins and needles or shooting, pulsing or electric sensations in your hands and feet. You might experience neuropathy as pain, numbness or burning, or you might feel extra sensitive to heat or cold.

Chemotherapy-induced peripheral neuropathy can affect your balance, leading you to fall or otherwise struggle to perform daily activities. You may find fine-motor tasks like fastening buttons or unlocking doors more challenging and you might drop things more than you used to.

Physical and occupational therapists can help you manage this side effect of your cancer treatment. We may approach your condition by using:

- **Densensitization techniques.** Our therapists can help minimize the extra sensation in your hands and feet by rubbing them with objects of various textures and temperatures. If you have lost some sensation, we will teach you some ways to compensate, like using your vision to replace or supplement a skill.
- **Balance training.** We will help you regain your balance with a variety of exercises. These can include standing with your feet together, standing on one foot, performing tasks on uneven surfaces, walking with your head turned and walking backwards.
- **Pain management.** We may also use manual techniques or vibration to help reduce your pain. Densensitization techniques can also help.

These and other exercises can reduce your risk of falling and can help you maintain your independence doing your daily activities. As part of your robust physical therapy program, we will also help you strengthen your muscles to better support your recovering body.

It's important to work with your doctor as well if you are experiencing neuropathy. Sometimes, your oncologist can adjust the dose of your chemotherapy medicine. Your nerves cannot heal completely unless the cause of the neuropathy goes away. In the meantime, be sure to drink enough fluids and get adequate rest and nutrition.

Exercise and Cancer

Being physically active while you are treated for cancer plays an important role in your return to health.

Exercise boosts your mood and energy and can help prevent treatment-related side effects. Safe, regular activity can build bone and muscle strength, protecting you against risks like deconditioning and osteoporosis that can come with cancer and its therapies.

But it's hard to know what is safe given your condition and how you may be feeling. Our physical therapists are experts in designing exercise routines that take into account each person's specific needs. Our recommendations draw from exercise science, American Cancer Society guidelines and the oncologic experts at Beth Israel Deaconess Medical Center. You'll learn to choose activities that are safe and effective and gauge the best intensity for your personal situation.

What Kind of Exercise?

Regular exercise consists of a mix of aerobic and strengthening activities, flanked by warming up and cooling down.

Aerobic workouts boost your heart rate, using major muscle groups for extended periods of time. This type of workout will make you breathe harder and sweat a bit, as your heart pumps blood and your lungs work hard. Also known as cardiovascular activities, or cardio, aerobic exercises positively impact your blood pressure, mood, pain, sleep, heart, lungs, and musculoskeletal, nervous and immune systems.

You probably already know many aerobic exercises. They include activities such as walking, jogging, biking and swimming. Some exercise classes like Zumba and spinning are also good aerobic workouts. Working together with your physical therapist, choose a couple aerobic activities that you enjoy.

Strengthening exercises complement your aerobic workouts. These activities repeat certain motions and use resistance to target specific muscle groups. Strengthening exercises help keep your muscles and bones healthy.

Some examples of strengthening exercises include bridge lifts, planks, squats, standing marches, resistance bands or weights.

Certain kinds of cancer or side effects that you may be experiencing call for special exercises designed by your physical therapist. If you are recovering from breast cancer, for instance, we are likely to suggest a series of stretches and strengthening activities that safely and effectively target your chest. We also address other conditions including neuropathy and lymphedema with specialized and individualized programs.



How Much Exercise?

We will work with you to find an amount of activity that feels right. Generally, experts recommend you aim for 150 -300 minutes of moderate physical activity a week – that's about 30-60 minutes five times a week – or 75-150 minutes per week of vigorous activity. It's important to remember that these are just numbers, and the most important thing is to work with your physical therapist to make a regular plan for safe and effective movement that works for you and your condition. A common starting point is to begin with segments as short as 10 minutes, building toward a long-term goal of a half an hour per workout.

You'll want to gauge the intensity of your exercise to make sure it's beneficial to your health and right for your body. Our therapists recommend tracking your heart rate, or, if this is not possible, using a method known as the Rate of Perceived Exertion. See the next page for details on how to gauge your exercise intensity.

You can track your heart rate a number of different ways. Find your pulse just below your thumb and count the number of beats in a minute. Or, you can use a heart rate monitor, smart watch, or exercise app. You should aim to be in your target heart rate range while exercising.

Your physical therapist can help you determine the right target range for your body. Or, you can subtract your age from 220. That number is your maximum heart rate. Our experts recommend people with cancer start around 40% to 60% of that number, working up to 60% to 80%.

Some medications can prevent your heart rate from increasing while you exercise. In these situations, you should measure your exercise intensity using the Rate of Perceived Exertion, a method that requires you to rate your activity by intensity from one to 10.

Making It Work for You

There will be days when you are not up for much exercise. Our therapists understand that fatigue and treatment side effects may limit you and we focus on helping you make the most of your better days.

You may still find ways to be active even on days that are challenging. Stand up and do arm circles or marches while the television program you are watching is on a commercial break. Fold laundry standing up. Walk around while talking on the phone or texting. Move the trash can at work farther from your desk so you need to stand up to throw things away. And try some light stretching in bed or while you are sitting down.

Our therapists may suggest a walking program to get you going gradually. This involves walking for as little as two minutes twice a day five times a week during the first week, and gradually building up your endurance to walking for 30 minutes without rest five times a week. Our physical therapists can suggest many other creative, tested solutions to building a program that can work for you.

How to Gauge Your Exercise Intensity

These tools are designed to help you achieve your fitness goals. If at any point you have questions, please contact one of our physical therapists for assistance.

Track your progress over time using several measurements as guideposts. For your safety, all testing should be done by a physical therapist.



When you workout, it is important to push your body hard enough to reap the many health benefits of exercise, but not so hard as to cause exhaustion and injury. You can track your exercise intensity by monitoring your heart rate or your Perceived Rate of Exertion.

Heart Rate

Keeping track of your heart rate is an effective way to tell how hard you are exercising. By subtracting your age from 220, you can find your maximum heart rate. Exercising at 40% of that number means a relatively light workout, while 85% of that number yields a strenuous workout. How hard to push depends on your health, so consult a doctor or physical therapist if you have questions.

HEART RATE BY AGE			
AGE	40% heart rate (light exertion)	60% (moderate exertion)	85% (strenuous exertion)
30	74	112	158
35	73	110	155
40	72	107	152
45	70	105	149
50	69	103	146
55	67	101	143
60	66	99	140
65	65	97	137
70	63	95	134
75	62	93	131
80	60	91	128
85	59	89	125
90	58	86	122

Rate of Physical Exertion

Sometimes, your heart rate is not an effective way to measure exertion, for instance for people on certain medications. If this is the case, consider gauging your workout's intensity using the Perceived Rate of Exertion.

PERCEIVED RATE OF EXERTION SCALE	
10	MAXIMAL EFFORT ACTIVITY Completely out of breath and unable to talk. It feels impossible to keep going.
9	VERY HARD ACTIVITY Difficult to maintain, Can only speak a few words.
7-8	VIGOROUS ACTIVITY Can speak a full sentence but short of breath.
4-6	MODERATE ACTIVITY Breathing heavily but can hold short conversation.
2-3	LIGHT ACTIVITY You can carry on a conversation during activity.
1	VERY LIGHT ACTIVITY Hardly any exertion (ex: sitting watching TV)

Lymphedema

Lymphedema is a build-up of lymph fluid that can occur after damage to the lymph system from surgery, radiation or infection. We cannot predict who will get lymphedema.

We focus on early detection. We know that lymphedema is incurable, so we don't wait to see swelling to formulate a plan. Before your surgery, your therapist will take detailed measurements of your fluid level, height, weight, limb size and movement to establish your 'normal' baseline. We will follow you closely and take repeated measurements at regular intervals over the first three years. Using new technology now available at Beth Israel Deaconess Medical Center, we can detect even small increases in fluid, well before symptoms develop.

If you have developed lymphedema, we will begin treatment as soon as possible to bring the swelling under control. With mild cases of swelling, we will assist you in getting a compression garment to wear. For more advanced swelling, we have a two-stage treatment process. The first stage focuses on getting the limb size reduced, and the second stage addresses keeping the edema reduced, usually with some type of compression garment worn daily for a longer period of time. At Beth Israel Deaconess Medical Center, you can expect that the initial stage of treatment will involve:

Manual Lymphatic Drainage (MLD), a type of massage that can stimulate lymphatic drainage and reroute fluid from blocked areas. We will also teach you how to do a self massage at home.

Compression bandages, applied at each visit and worn 23 hours a day will help to reduce the size of the limb until a compression garment can be fitted.

Exercise helps pump extra fluid out of your affected limb. We will show you specialized exercises that you can continue at home.

Skin care is important to prevent infection. It's important to wash your affected limb daily and apply lotion to prevent dryness or chapping. Patients with lymphedema face increased risk of infection and preventing skin from breaking can help.

At first, we will focus on reducing your swelling and reshaping your limb. We know that lymphedema is chronic and requires long-term treatment after your intensive initial intervention. To maintain your limb size over time, we suggest wearing a compression garment, continuing your exercises and following up regularly with your physical therapist to monitor your fluid levels.

Sometimes, your team may suggest surgical intervention. At Beth Israel Deaconess Medical Center, our surgeons offer cutting-edge procedures, and your recovery is coordinated seamlessly with your physical therapy team.

Cording

If you have had breast surgery, some people develop a condition called cording. Cording, also called axillary web syndrome, is the formation of bands of tight, sometimes stringy, cord-like tissue that can form down your inner arm or trunk. Some cords can limit your ability to raise your arm above your shoulder or straighten your elbow. Doctors don't know what causes cording, but it can be treated with massage and exercise. It's important to notify your doctor right away if you feel tightness. Some cords dissipate quickly, while others may take a few months to resolve – the good news is, once they are treated, they usually do not return.

Therapy's Role

If you are at risk for developing lymphedema, your doctor will likely suggest working closely with a therapist. Our certified lymphedema specialists are specially trained to screen for and manage excessive swelling.

We focus on early detection. We know that lymphedema is incurable, so we don't wait to see swelling to formulate a plan. Before your surgery, your therapist will take detailed measurements of your fluid level, height, weight, limb size and movement. Using new technology now available at Beth Israel Deaconess Medical Center, we can detect even small increases in fluid, well before symptoms develop. We follow you closely for two years, and you can keep track of your own progress with your lymphedema passport. We may recommend exercises to help prevent lymphedema if you are at risk.

If you have developed lymphedema, we will begin treatment to bring the swelling under control. With mild cases of swelling, we will assist you in getting a compression garment to wear. For more advanced swelling, we have a two-stage treatment process. The first stage focuses on getting the limb size reduced, and the second stage addresses keeping the edema reduced, usually with some type of compression garment worn daily for a longer period of time. At Beth Israel Deaconess Medical Center, you can expect that the initial stage of treatment will involve:

Manual Lymphatic Drainage (MLD), a type of massage that can stimulate lymphatic drainage and reroute fluid from blocked areas. We will also teach you how to do a self massage at home.

Compression bandaging, layered bandages applied at each visit and worn 23 hours a day. We recommend you wear your bandages to your visits with us and remove them and shower in one of our locker rooms just before your appointment.

Exercise helps pump extra fluid out of your affected limb. We will show you specialized exercises that you can continue at home.

Skin care is important to prevent infection. It's important to wash your affected limb daily and apply lotion to prevent dryness or chapping. Patients with lymphedema face increased risk of infection and preventing skin from breaking can help.

At first, we will focus on reducing your swelling and reshaping your limb. We know that lymphedema is chronic and requires long-term treatment after your intensive initial intervention. To maintain your limb size over time, we suggest wearing a compression garment, continuing your exercises and following up regularly with your physical therapist to monitor your fluid levels.

Sometimes, your team may suggest surgical intervention. At Beth Israel Deaconess Medical Center, our surgeons offer cutting-edge procedures, and your recovery is coordinated seamlessly with your physical therapy team.

Your Ongoing Care

If you have completed your cancer treatment, you will likely need to work back up to your strength and endurance before you got diagnosed with cancer or before your diagnosis. We recommend getting clearance from your doctor before beginning any exercise program. Even if you worked with a physical therapist during your treatment, our providers can help you with the next steps as you move toward survivorship.

It is important to build up your workouts gradually. You can perform any aerobic exercises you enjoy, including activities like water aerobics or yoga, as long as you take it slow. When you lift weights, start with light weights and slowly increase them over time. Try 10 to 15 repetitions of light weights three to five times and take breaks of 30 seconds in between repetitions. Warming up and cooling down are important, as they help prevent injury and soreness.

Physical activity can help manage any swelling you might experience. If you have lymphedema, working with a physical therapist to design an exercise program can help control your symptoms.

Contact your physical therapist or doctor if you experience pain. Soreness after exercise is normal and should subside within two days. But burning, stabbing or sharp pain is not expected and should be evaluated.

Remission and Recurrence

Physical activity can have a profound positive effect on your health whether you have completed cancer treatment or whether your cancer has spread. That is because no matter where you are in your journey to fight the disease, exercise can improve your quality of life . .

When you have cancer, it is important to work with a therapist to support your body. Our physical therapists understand



how cancer impacts your physical abilities. We know how to identify the various ways that cancer may have diminished your quality of life and we can coach you on the benefits of safe, effective activities and help you build a plan that works for you.

Research shows that regular moderate exercise reduces the risk of recurrence for breast, colorectal and prostate cancer. It may also increase the chances that other cancers will not return. The American Cancer Society recommends 150-300 minutes weekly of moderate exercise – or about 30-60 minutes a day for five days. We know that some exercise is better than none, and will work with you to achieve what feels right for your body.

Metastatic Disease

Living with cancer that has spread can feel overwhelming. It can be difficult to imagine how you can work exercise into your life or what benefit it will add.

But there are good reasons to stay active even though it may be hard. Exercising at a level you can manage—with the input of your doctors and therapist – can help manage your symptoms. It can also improve your quality of life.



Exercise can boost your energy and prevent constipation and fatigue, allowing you to enjoy more activities. Aerobic activity can combat depression and anxiety and help you continue to enjoy your daily activities.

Keeping active is also important to maintain your muscle strength, improve your balance and reduce pain from deconditioning, arthritis and stiffness. We hope staying active allows you to maintain your independence with daily activities.

It's important to check with your doctors before starting an exercise program. Certain conditions require extra oversight. For instance, people with boney metastasis can still exercise but need to modify their activities to reduce the chance of fractures.

Our physical therapists work closely with your team of oncologists to make sure our programs are safe for your specific situation. We can teach you ways to adapt your exercises for your unique condition or show you how to use equipment to help you maintain your independence. We believe that staying active no matter where you are on your journey allows you to get the most out of life.