

Life As an Amputee

Lower Limb Amputees



The War Amps

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Pictured on front cover (clockwise from top): Selena; Mary with Kirsten Simonsen, Certified Prosthetist; Gaétan
Pictured on table of contents page (opposite): Matthieu and Amélie

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Your Life As an Amputee

If you are about to become an amputee, or have recently undergone an amputation, you are entering new territory and may not know what to expect. This booklet provides a brief introduction to issues surrounding amputation, including information about your clinic team of medical professionals, the rehabilitation process and the reactions you and others may have to your amputation. It will also highlight the resources The War Amps has available to new amputees and how to receive them. Most resources are also available at waramps.ca.

This booklet contains four parts:

1. About your amputation
2. Reactions to your amputation
3. Learning to walk again on an artificial limb
4. Adapting your environment: Daily living aids and housing modifications

About The War Amps

A philosophy of “amputees helping amputees” has been the hallmark of The War Amps since 1918, when the organization was founded by war amputee veterans returning home from the First World War. Today, the Association continues to serve all Canadian amputees by providing financial assistance towards the cost of artificial limbs and a wealth of information about life as an amputee.

The War Amps unique experience and resources have earned it international recognition as a centre of excellence in the field of amputation and as an expert in amputee rights.

The Association provides a voice for all amputees in Canada and, through our Advocacy Program, works on behalf of individual amputees who have encountered discrimination or red tape in accessing appropriate health care, important financial benefits and/or legal rights.



Louis became a below knee amputee following an accident.

“I would like to thank The War Amps for the contribution towards the cost of my artificial limb. The leg has changed my life and has given me back much of my freedom and mobility, so I can enjoy doing many of the things that I used to do and enjoy in life.

“With it, I have the ability to fend for myself. I can make my own meals, clean my apartment and even do grocery shopping. All of which was impossible for me to do before. But most of all, it helped me psychologically to deal with my new disability.”

– Pete, lost his leg due to cancer

About Your Amputation

Amputation Levels

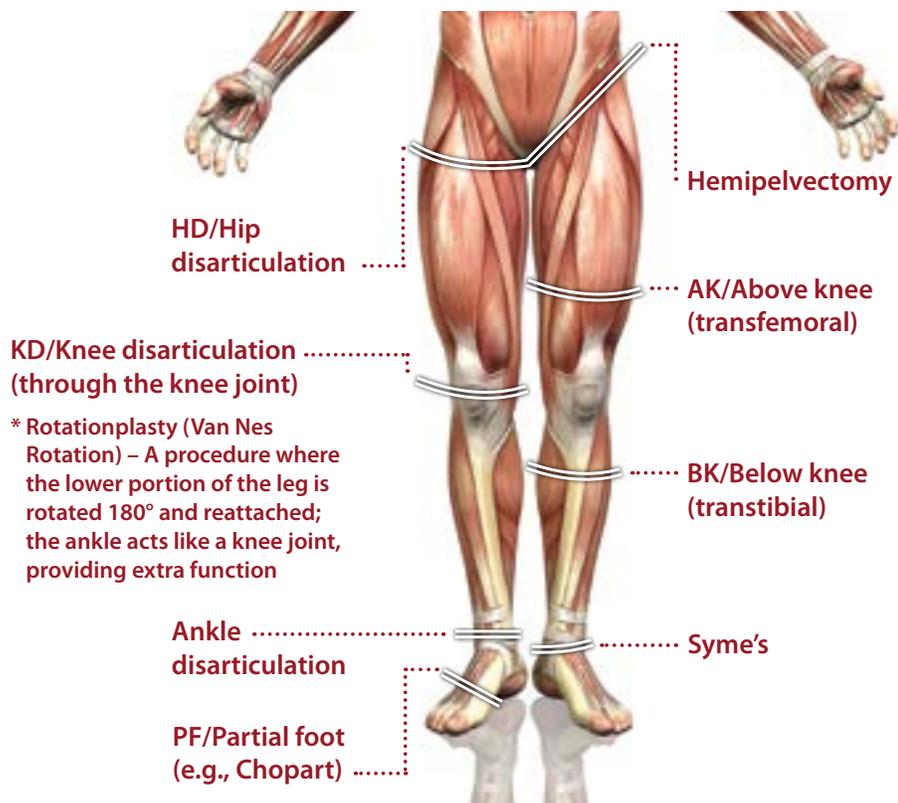
When you first become an amputee, you may not have a clear understanding of amputation procedures. The level of your amputation will have a bearing on what type of artificial limb (prosthesis) you can be fitted with, such as those with an above knee amputation needing an artificial leg with a knee joint, unlike those with a below knee amputation. Your medical team will inform you of the level of your amputation and will work with you to find the right artificial limb, if appropriate for you.

In the graphic below, we have indicated the names and locations of amputation levels, as well as commonly used abbreviations with the medical term in brackets where necessary.

Congenital amputation

The War Amps refers to all missing limbs as amputations – if you were born missing a limb, we would say that you have a “congenital amputation.” Most of the information in this booklet is geared towards individuals who have experienced limb loss as an adult. If you have a congenital amputation, some parts of this booklet may still be of interest.

Amputation Levels



For a list of frequently used technical terms, see the appendix on page 17.

Why Was an Amputation Necessary?

The cause of your amputation will influence your rehabilitation journey. Each cause of amputation also brings with it different emotions, reactions and possibly other medical issues (such as overuse injuries or mental health concerns) with their own sets of challenges.

- Traumatic amputation (accident, war, frostbite) – You will likely not be able to discuss the amputation in advance with the surgeon due to the sudden or unexpected nature of the incident.
- Cancer – You may simultaneously be receiving chemotherapy, radiation treatments and/or other cancer treatments. An amputation is now being added on to the daily challenges you face fighting cancer.
- Diseases and infections – Your amputation may be due to vascular disease (often because of diabetes) or other causes such as necrotizing fasciitis, infections or wounds. The disease may not be cured by having an amputation (e.g., diabetes), and treatment of the disease or cause may continue following the amputation.



Louis can go for walks with his family thanks to his artificial leg.

Remember to wash your socket and your residual limb every night. Nighttime is best as it allows your socket and your residual limb time to dry properly overnight. If you wash them in the morning, your limb or socket may still be damp. This makes it harder to put on your artificial limb and may cause skin abrasions.

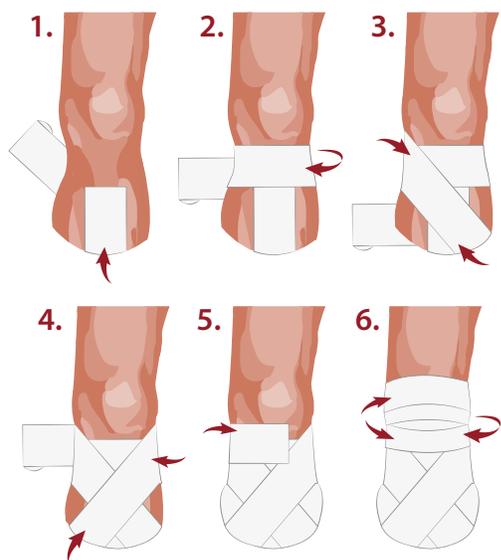
“My dad recently underwent a right leg amputation due to a severe infection. He also has neuropathy of the left foot and walking has always been a struggle for him. The War Amps offered some assistance with the purchase of an artificial leg, which meant so much as both my parents are seniors and living on a fixed income. At the moment, my dad is learning to walk again with the use of a temporary artificial limb, but he will be receiving a new artificial leg within the next few weeks. My dad will have his independence back.”

– Linda, whose father lost his leg due to an infection

Rehabilitation: Being an Active Participant

After the amputation surgery, the time it takes for your limb to heal will vary from weeks to months depending on the level and cause of your amputation.

The healing of the area surrounding the incision usually occurs within several weeks. If your amputation was due to cancer or vascular disease, the initial healing process may take longer. During the healing process, your residual limb will shrink as swelling from the surgery lessens. Your clinic team will show you how to bandage the residual limb properly (this may not be recommended if your amputation is due to vascular disease) and teach you compression therapy techniques to reduce the swelling and prepare your residual limb for the fitting of an artificial limb.



The nurse and physiotherapist are the professionals who you will deal with most often at the beginning of your rehabilitation. Once your residual limb has begun healing, they will teach you exercises and techniques so that you become mobile as soon as possible; this may initially involve crutches or a wheelchair. The clinic team will recommend any rehabilitation therapy, physiotherapy or occupational therapy that may be needed, as well as an artificial limb (which will be created and fitted at a later date with your prosthetist). Your residual limb will continue to change shape during this time and usually stabilizes over a period of about six months.

The Clinic Team: Your Medical Professionals

One of the first specialists you will meet, if not the first, is the orthopedic surgeon, who performs the amputation surgery and will meet with you beforehand to discuss the details and answer any of your questions. (This may not be possible if your amputation was due to a traumatic accident or event.)



Adopting a positive approach

Our founding war amputee members returning from the First World War lived by the motto "It's what's left that counts" and took a positive approach to reintegration into civilian life. Similarly, our CHAMP (Child Amputee) Program members adopt the "Winner's Circle" philosophy, which encourages children to accept their amputations and try their best.

It is important that you are an active participant in each stage of your rehabilitation.



Paul practises walking on his artificial leg with the help of his clinic team.

A team of professionals, the “clinic team,” will develop a rehabilitation plan for you. In addition to the orthopedic surgeon, the team may include one (or more) of the following specialists: nurse, occupational therapist, oncologist, physiotherapist, psychiatrist, psychologist, social worker and vocational counsellor, as well as the prosthetist who will make your artificial limb (see the section “Learning to Walk Again on an Artificial Limb” on page 7). Sometimes, due to the level and cause of your amputation and other health factors, it

may not be feasible for you to be fitted with an artificial limb.

Depending on your individual situation, you may meet the clinic team in the hospital, as an outpatient or at a prosthetic centre.

Remember, as the person with the amputation, you are the most important member of the team. You will feel comfortable and confident about your care by having your questions and concerns answered. With your active participation, the professionals you encounter will work with you before, during and after the amputation to help you on your road to recovery.

Tip: When meeting with a medical professional, take a list of questions and make notes during your consultation. This ensures you will not forget an important question, and you can refer back to points shared with you in the future. A family member or friend could also accompany you to handle this during the consult.



“I am a 90-year-old senior on a fixed income and have recently had to move into a retirement home, which has increased my expenses dramatically. Your letter of approval of funding for my artificial limb was the best present I received over the holidays.

“I had a fall and have not been permitted to wear my artificial limb as I broke the femur bone in my amputated leg. I have been confined to a wheelchair throughout the healing process. This experience only highlighted for me how much I rely on my artificial limb daily to maintain my independence. I am really looking forward to walking with my artificial leg very soon.”

– Lillian, lost her leg due to vascular disease

Reactions to Your Amputation

Your clinic team will discuss with you in advance why an amputation is necessary, unless your amputation is the result of a traumatic event. This life-changing news will take time to absorb, and it is important to remember that there is no right or wrong reaction. Every person is different and experiences emotions in different ways.

Some people move to a place of acceptance relatively quickly, while others find it difficult to acknowledge this new reality and may take some time to adjust to the news that they are (or are about to become) an amputee. Your own experience as an amputee is unique.

Undergoing an amputation has been likened to the grieving process; you may experience some, or all, of these emotions: shock, sadness, denial, anger and even guilt. The War Amps and your clinic team can provide guidance and connect you with resources to help you move forward.

Other Peoples' Reactions (Post-Amputation)

When your artificial limb is visible (if you are wearing shorts, a skirt, a dress or a bathing suit) it may attract attention. People are often curious because they may not have met a person who has an amputation before,

which may lead them to be nervous or uncertain around you.

You may find that sometimes people underestimate amputees and will try to do things for you without permission or being asked. Some express pity in their comments towards you, assuming people

with amputations are less capable. In general, people mean well when they try to help, but they do not realize that their behaviour and comments can sometimes be demeaning.



Seeking assistance through peer support groups for amputation-related concerns, as well as general support from friends and family, can be helpful.

Peer support groups are a valuable resource

Meeting other people who are experiencing living with limb loss can help you to feel you are not alone. Friends and family are usually very supportive, but they have not experienced living with limb loss on a day-to-day basis. Your social worker may be able to help you find a support group in your community.

Other Considerations

There may be other areas of uncertainty about the future. Some of these can include:

- **Body image** – Your new physical appearance will require an adjustment to your body image. You may also be concerned about how the change in appearance may affect your relationship with your current partner or any future partners. Peer support groups, as well as talking these concerns through with your clinic team, can help.
- **Career** – You may have concerns about returning to your current job or obtaining future employment. Sometimes, simple adjustments are all that are required (e.g., being assigned a parking spot close to the building where you work, which will be especially helpful during the winter).



A pedal extender can be used to help drive.



Sharing your story

Many of our members who have been amputees for years view themselves as educators and, if the opportunity arises, will share their story with others. Most people are simply curious and may not have encountered an amputee before. Sometimes, they are not in the mood to answer questions and choose to ignore the attention their artificial limb may draw.



Selena was born with a condition that led to the amputation of both her feet at the ankle (Syme's amputation)

- **Driving** – You may need to undergo an assessment depending on your amputation or the licensing office you visit. For left above or below knee amputees, for example, an assessment is usually not necessary as your left foot does not use the pedals. For a right above or below knee amputee, you may require a left foot accelerator pedal. In some cases, an assessment will be deemed necessary to determine what devices may need to be fitted to the car and/or to satisfy the licence issuer that the amputee will be able to drive safely. Contact The War Amps to learn more and to receive a resource about driving with an amputation, or view it on our website.

Remember: Skin problems on your residual limb should be taken care of immediately and you should seek medical attention if necessary. Abrasions or rashes can affect your ability to wear your artificial limb and can quickly become more serious.

Learning to Walk Again on an Artificial Limb

The prosthetist is the member of the clinic team who will fit you with an artificial limb, if you are a candidate for one. Your artificial limb is part of your body, and the prosthetist becomes as close to you, or closer, than your family doctor. This is due to the hands-on nature of the fitting process for an artificial limb and the frequency of visits for fittings and adjustments. The prosthetist will also discuss your lifestyle and personal matters to establish the best type of artificial limb for your circumstances and activity level.

To become a prosthetist in Canada, the certification process takes a minimum of eight years, including an undergraduate degree in a science program, a two-year prosthetics program and a minimum two-year clinical residency in prosthetics. (There is some variation in this process for the province of Quebec.)



Claude's amputation was due to medical causes.

Remember to share with your prosthetist the activities you want to do and what your priorities are. Being able to walk safely versus being able to run or play sports require different prosthetic components.

Do you know about skin care for your residual limb?

The health of the skin on your residual limb dictates how long you can comfortably wear your artificial limb on any given day. Remember that your residual limb is enclosed in a plastic socket for a good length of time. Your skin can't breathe in the way it normally does, and you may experience increased perspiration, which can lead to skin issues. You can learn more about how to take care of the skin around your residual limb in our information sheets, which you can receive by contacting us or by visiting our website.

Learning to Walk Again on an Artificial Limb

The prosthetist may fit you with a temporary (preparatory) artificial limb to begin with while your residual limb continues to heal and shrink. Once your residual limb has stopped shrinking and its shape has stabilized, you will be fitted with a permanent (definitive) artificial limb.

When deciding on the artificial limb and components that will

be best for you, you and your prosthetist need to discuss:

- The level of your amputation (above knee, below knee, etc.)
- The activity level you *will be able to* achieve.
- The activity level you *want to* achieve.
- The look of the artificial limb vs. function

Artificial limbs are designed for low-, medium- and high-level activities. Usually, low-level activity artificial limbs have a simple design and the components are lightweight. This type of artificial limb may be best suited to you if your main priority is to do basic activities such as getting around the house or walking short distances.

If mobility or balance was an issue before your amputation, your prosthetist may recommend a low-level activity artificial limb as the best option for you.

Mary has a below knee amputation following an accident. She is visiting her Certified Prosthetist Kirsten Simonsen to be fitted for a new artificial leg.



Do you experience physical pain or phantom limb pain?

Losing a limb can be painful, and for some amputees, the pain does not stop after the amputation heals. Pain can take the form of physical pain and/or phantom limb pain. Phantom limb pain is a feeling of pain in the amputated part of the limb. This can feel like an itch or like your missing toes are being crushed, even though they are not there anymore. The War Amps booklet *Pain and Phantom Limbs* provides tips for managing pain; contact us to receive a copy, or view it on our website.



Learning to Walk Again on an Artificial Limb

High-level activity artificial limbs consist of more complex components and may weigh more than other limbs. If you have an above knee amputation, for example, deciding with your prosthetist between a mechanical knee and a computerized knee will be an important decision.

You need to be realistic about your expectations for an artificial limb, whether you want to just be able to walk your dog and get groceries, or if you would like to continue with higher intensity activities that you participated in before your amputation (e.g., hiking, baseball). Discuss your expectations with your prosthetist, and they will work with you to achieve the best outcome.

Once your artificial limb has been fitted and you and your prosthetist discuss any necessary

adjustments to ensure the limb fits comfortably, you will learn to walk again – this is referred to as “gait training.” If you use a high-level activity artificial leg, gait training may be a longer process as you learn to use the more

A compact stabilizing knee, such as the Phoenix from Endolite, prioritizes safety and stability for amputees with mobility concerns.



Specialized artificial limbs – such as running legs or waterproof legs like the one Guillaume is wearing – are designed to achieve a specific function for which an everyday artificial limb may not be suitable.

“Thank you so much for contributing towards the cost of my partial foot prosthesis. This foot has helped reduce pain in my leg and residual limb and has reduced episodes of inflammation in my hip. The War Amps has been such a big help. I really appreciate this kindness.”
– Pam, born a partial foot amputee

Avoiding overuse injuries from hopping

Lower limb amputees may be tempted to hop on their sound limb for short distances rather than wearing their artificial limb, but this can be dangerous both in the short term and the long term. Movements like hopping can lead to falling, joint stress and overuse injuries in your sound limb. It is important to keep a mobility aid such as crutches, a walker or other device nearby when you are not wearing your artificial limb, like beside your bed if you need to get up at night, in the bathroom or at the pool.

Weight fluctuations and your artificial limb

If you gain or lose weight, your artificial limb may become too tight (so you are unable to put it on) or it can become too loose (in which case it may fall off). It is important that you keep your diet and exercise routine as similar as possible on a day-to-day basis to avoid weight fluctuations. This can be challenging when your regular routine is disrupted, such as during a vacation when you may eat more and not be able to exercise as much.

Even throughout the day, weight fluctuations can affect your ability to wear or put back on your limb. When you wake up, your body weight is at its lowest. When you start moving, you begin to expand and swell throughout the day.

complex functions of your limb.

Most physiotherapists include a lesson in falling safely during your training. Falling is a fear for most leg amputees – the type of terrain, stairs and hills can all factor into this. Being in a crowd where you might get jostled and knocked off balance, or having to walk in poor weather conditions such as snow

or ice, can cause anxiety. This can be minimized through practice, appointments with your physiotherapist and using mobility aids.

How an Artificial Limb Works: The Components

Your artificial limb will include some, or all, of these components depending on the level of your amputation:

- Liners or prosthetic socks – These roll on over your residual limb to provide a soft cushion between your limb and the hard socket; they are sometimes worn in combination. Liners may have a pin that locks into the socket and holds the artificial limb in place. Prosthetic socks vary in thickness (from one ply to six ply). Both liners and

Composition of a Prosthesis



Source image: prostheticclinic.com

Learning to Walk Again on an Artificial Limb

prosthetic socks are available in different materials (e.g., liners – silicone, polyurethane; socks – cotton, wool, gel, nylon) that have unique benefits (e.g., added comfort, moisture-wicking, etc.).

- **Socket** – This is usually made of rigid laminate material moulded to the shape of your residual limb. It needs to absorb all the force of walking and/or running. It must be made of material strong enough to withstand the weight of your whole body.
- **Suspension** – This is how artificial limbs are held in place, often by suction/vacuum or a pin lock system.
- **Joint systems** – Can include a knee (microprocessor or mechanical) and/or a foot/ankle joint.
- **Skeletal components** – These act as the “bones” of the artificial limb.

The components will aim to provide shock absorption, as well as good energy return (the process of how prosthetic



Your prosthetist becomes as close to you, or closer, than your family doctor due to the long-term relationship and frequent visits required. Certified Prosthetist Craig Smith is pictured here assisting a client.

Remember: It is important to clean your socket daily. Perspiration builds up inside your socket because your skin is enclosed in plastic for several hours each day. When not cleaned, the perspiration encourages bacterial growth, which can lead to skin infections.

Do you know about the Disability Tax Credit?

Many amputees qualify for the Disability Tax Credit. You, along with a relevant medical practitioner such as your family doctor or occupational therapist, need to complete the necessary forms and apply for the credit. The War Amps can help with reviewing your paperwork before it is submitted to ensure that you have the best chance at success for qualifying. This benefit can be retroactive for up to 10 years. To receive more information about the Disability Tax Credit, please contact us.

Learning to Walk Again on an Artificial Limb

feet store energy during mid-stance and release it when desired).

How an Artificial Limb Looks

For some, it is important that their artificial limb looks like their other, unamputated leg (called a “sound limb”). The artificial limb becomes your leg, and you may want it to look like the leg you are used to seeing. Ensuring that the artificial limb looks real is an important aspect of care for some people.

Often, artificial limbs will have a cover that protects the components that make up the limb and can provide a lifelike appearance through the varying skin tones that are available. Covers are useful to keep metal knees from tearing clothing or ruining couches or car seats.

Some amputees choose not to have an outer cover and will put a personalized design on their sockets, like Amélie’s (photo right).

How your artificial limb looks – whether as real as possible or with an eye-catching design – depends on your preferences and the advice of your prosthetist.



Antoine’s artificial leg matches his skin tone, while Amélie has a zigzag pattern on her socket.



Do you know what issues come into play for amputees in the workforce?

Sometimes you need to educate an employer about modifications you may need. You may only require minor adjustments to your work environment. It may be something as simple as having a foot stool or letting them know that you cannot stand for long periods of time. The War Amps can send you the resource booklet *Amputees in the Workforce* to address your questions and concerns, or visit our website to view a copy. To contact The War Amps, call **1 877 622-2472** or email **info@waramps.ca**.

Adapting Your Environment: Daily Living Aids and Housing Modifications

Even after you are fitted with an artificial limb (if appropriate for you), you may find that you are not able to complete all the tasks of daily living as easily as before. If the amputation was the result of a disease or illness, your recovery or further treatments may still impact your ability to go about your day-to-day activities. Your occupational therapist may wish to visit your home to assess it from a safety perspective prior to your discharge from the hospital and will offer suggestions for adaptations.



Daily living aids can help you to accomplish tasks or give you extra stability. Some examples include:

- Safety strips on the bathtub or shower floor
- Grab bars on the bathtub or shower walls
- Shower seat or bath bench
- Waterproof leg (for showering and swimming)
- Modifications to your car
- Crutches
- Walker
- Cane
- Wheelchair



Modifications to your home can also help, such as:

- Ramps
- Railings
- Widening of door frames to accommodate a wheelchair.
- Chair lift(s) where stairs are present.

The War Amps can help by providing a list of federal, provincial and/or community-based agencies that may be able to provide funding for the modifications and daily living aids listed above. Please contact us for more information.

Scoliosis can develop due to the continued imbalance of walking patterns like limping. It is important that the length of your artificial limb is correct, as wearing a leg that is too long or too short can cause back and spine problems that, over time, might require extensive therapy to remedy.



Larry is wearing a suspension sleeve (also worn by Maj. Blaise on page 16), which goes over his residual limb and the top of his artificial limb. Many amputees will wear one to provide additional security and support for activities such as running or cycling. As well, it can help those who experience volume changes in their residual limb.

Receive War Amps resources free of charge

The War Amps offers invaluable information about living with amputation through our many resources, which can be sent to you free of charge. Most of our resources are also available at waramps.ca.



The Long-Term Effects of Amputation

As time goes on, your sound limb – which now takes on more wear and tear due to the increase in use – and your residual limb may feel the effects of any number of different factors (referred to as the sequelae of amputation), including:

- Overuse injuries
- Increased risk of developing osteoarthritis
- Skin sensitivities and abrasions.
- Back pain
- Scoliosis
- Osteoporosis



Tanya lost her leg to cancer as a child.

You can prevent or lessen the long-term effects of living with limb loss and wearing an artificial limb in several ways:

- Leading a healthy lifestyle with exercise and a balanced diet.
- Practising good hygiene with your residual limb and socket by cleaning regularly.

- Limiting the amount of irregular movements, such as hopping, you do on your sound limb.

Ensuring your artificial limb fits and functions correctly, especially if the artificial limb has good shock absorption and energy return, will help to alleviate some of the common physical issues for amputees.

As mentioned previously, daily living aids and home modifications can help ease the strain on your sound limb and prevent injuries.

Remember to add the cost of your artificial limb to your insurance policy.

Do you know what to expect when travelling wearing an artificial limb?

Before travelling, it is a good idea to have your artificial limb adjusted by your prosthetist to avoid breakdowns. You may also be able to check your limb for free as a medical device; verify with your airline first. You will want to take enough of what you use daily (liners, prosthetic socks, skin care products, etc.) as you will likely not be able to purchase these items while travelling. When you go through airport security, it can be helpful to wear shorts or a skirt so that the staff can immediately see that you are wearing an artificial leg, as the components in your limb will set off the security alarms. You can also request a private screening. What is appropriate for security staff to ask you to do? The War Amps can send you a resource on this topic; contact us for more information.



The Road to Recovery

During the first year after your amputation, you will acquire a great deal of knowledge about living with limb loss and will meet many members of your clinic team along the way. Such a significant change in your life may feel overwhelming at times, but this should not take away the sense of accomplishment you should feel for how far you have come on your journey.

By the end of your first year, you will likely be wearing your artificial limb regularly – if wearing one was an option for you – and you will likely have returned to your usual lifestyle.

While at first, it may seem as though your amputation defines who you are as a person, as time goes on, it will instead become just



Maj. Blaise, a veteran who lost his leg while serving, uses his prosthesis while working out at the gym.

another aspect of your identity and part of your daily life.

The War Amps has many resource booklets and sheets available

for those living with amputation, thanks to our more than 100 years of experience assisting amputees. Contact us for more information and

to receive these resources free of charge, or visit **waramps.ca**.

Do you know that The War Amps advocates for amputees?

The War Amps provides a voice for all amputees in Canada and, through our Advocacy Program, works on behalf of individual amputees who have encountered discrimination or red tape in accessing appropriate health care, important financial benefits and/or legal rights. To find out more, contact Advocacy at **1 877 622-2472** or email **info@waramps.ca**.

Appendix

Technical Terms

The list below explains some of the terms commonly used in the field of prosthetics. You may want to keep it handy for future reference!

Abrasion

Wearing away of the skin through rubbing or friction

Acquired amputation

An amputation due to a traumatic injury, or an amputation necessary to treat a disease or illness

AK

An above knee amputation

Alignment

How the components in an artificial leg line up in relation to each other

Amputation

Removal of all or part of a limb(s) due to injury, disease or illness

Amputee

A person who has had all or part of a limb(s) removed or is born without all or part of a limb(s)

Bilateral amputee

An amputee missing both arms or both legs

BK

A below knee amputation

Cadence

Rhythm of walking

Check (test)/diagnostic socket

A temporary plastic socket formed over the plaster model to assist in the fitting process

Congenital amputee

A person who was born missing part or all of a limb(s)

Cosmesis

The appearance of an artificial limb

CP

Certified Prosthetist

CPO

Certified Prosthetist and Orthotist

Definitive prosthesis

An artificial limb designed for long-term comfort, fit, alignment, function, appearance and durability (to replace temporary/preparatory first fitting)

Desensitization

The process of making the residual limb less sensitive to touch by massaging, tapping, using vibrations or rubbing with a cloth

Disarticulation

An amputation through a joint – the hip, knee or ankle

Doffing

Taking off a prosthesis

Donning

Putting on a prosthesis

Edema

Swelling of tissue

Endoskeletal prosthesis

Has a soft outer shell with a lifelike appearance (supported by an internal skeleton of a pylon frame) – components are lightweight and require fewer adjustments

Energy return

Energy output, achieved by a spring-like design in prosthetic feet

Exoskeletal prosthesis

Hard outer shell – generally heavier but more durable than endoskeletal. The components last longer and are more suitable for recreational activities

Gait

Manner of walking, which is individual to each person

Gait training

Professional training to achieve a natural gait (manner of walking) or to correct gait deviations

Interface

Inner surface of the socket, or portion of the prosthesis closest to the skin

Lower extremity

Lower limb

Neuroma

A ball of nerve fibres that forms on the end of a severed nerve that continues to grow and can sometimes cause pain

Occupational therapist

A person who works with an amputee to teach them how to use a prosthesis and adaptive skills

Orthopedic surgeon

A person who performs surgery on bones or muscles (i.e., amputation, hip replacement, residual limb revision surgery)

Orthosis

Device used to support weakened joints or limbs

Orthotist

A person who builds and maintains devices to support weakened joints or limbs, such as a brace

PFFD/Proximal Femoral Focal Deficiency

Proximal – Nearest point to centre or to point of attachment

Femoral – The thigh bone (the longest and strongest bone in the body, extending from the pelvis to the knee)

Focal – Focus or starting point

Deficiency – Lack or shortage

Phantom limb pain

Pain experienced by an amputee in a limb or part of a limb no longer present

Phantom limb sensation

Sensation that a limb or part of a limb no longer there is still present

Physiatrist

A doctor of rehabilitation medicine specializing in the comprehensive management of clients with conditions arising from neuromuscular, musculoskeletal and vascular disorders

Physiotherapist

A person who works with an amputee in the rehabilitation phase to improve muscle function through exercise and can assist with gait training

Pistoning

The act of a residual limb slipping up and down within the socket

Ply

The thickness of prosthetic socks (the higher the number, the thicker the sock)

Preparatory prosthesis

An artificial limb that the prosthetist may fit you with while your residual limb continues to heal and shrink from amputation surgery (will be replaced by the definitive prosthesis)

Prosthesis

An artificial limb

Prosthetic sock

A sock generally worn with an artificial limb that provides additional padding for bony surfaces

Prosthetist

A professional who builds and maintains artificial limbs

Pylon

A rigid central shaft, usually tubular, that is attached to the socket or knee unit of an endoskeletal prosthesis. The lower end of the pylon is connected to an artificial foot or ankle

Range of motion

The amount of movement a limb has in a specific direction at a specific joint (e.g., hip, knee, ankle)

Rehabilitation

The process of restoring a person who has been debilitated to a functional life

Residual limb

The part of the limb remaining after the amputation

Revision surgery

Surgical alteration of the residual limb to improve function or appearance

Rotationplasty

A procedure where the lower portion of the leg is rotated 180 degrees and reattached – the ankle acts like a knee joint, providing extra function (e.g., Van Nes Rotation)

Sequelae

Effects of a disease, injury, procedure or treatment

Socket

The part of the prosthesis (artificial limb) that fits around the residual limb, and fits around the liner or socket insert if one is used

Soft insert liner

Cup-shaped form that fits inside the socket of an artificial limb

Soft socket

Soft liner within a socket to provide cushioning

Sound limb

Limb that does not have an amputation

Suspension

Method by which the artificial limb is held in place

Syme's amputation

Named for the surgeon who introduced the procedure – the foot is removed, the shin bones are flattened and the heel pad is sewn back in place; is similar to a Boyd amputation

Total suction socket

Allows the artificial limb to be held in place by air pressure only and eliminates the use of belts and straps

Van Nes Rotation

A procedure where the lower portion of the leg is rotated 180 degrees and reattached – the ankle acts as a knee joint, providing extra function

Vascular amputation

Amputation performed as a result of impaired circulation of blood through the blood vessels

