

## What is a compression pump?

Pneumatic compression pumps are devices that help move fluid out of an area of the body that has excess fluid. The pump applies light pressure starting at the furthest point out of the body and gently squeezes towards the center of the body. This can be applied to any swollen area that is being treated. Using this 1-2 times per day can help with the long term management of swelling disorders. This helps with both vein and lymphatic disorders.

**Important:** A pneumatic compression pump is **not** a replacement for compression garments, exercise, or manual lymphatic drainage.

## Why would I use a pump?

Your therapist has determined that in addition to your current home program a pump would be beneficial to treat your lymphedema.

- The benefits include:
  - Softening of fibrosis or reducing pitting edema tissue texture (pitting is when the skin indents and stays indented with gentle pressure).
  - Increases movement of lymphatic fluid and blood to reduce swelling.
  - Improved wound healing.

**Fibrosis-** a thickening/firming of the skin caused by increased scar tissue under the skin. This is caused by long term swelling.

## When should I use the pump?

Use the pump for 1 hour each day, unless otherwise instructed by your therapist. At the end of day (when the swelling is at its worst) is the best time to do it, unless you are unable to work this time/duration into your schedule. Your therapist can help determine how to best incorporate the pump into your daily schedule.

## **What pump settings should I use?**

Your pump should come pre-programmed with settings customized for your needs. If you have questions, or believe you need a change in current pressure settings, contact your therapist.

## **How do I take care of the pump and limb (arm or leg) appliances?**

- Always wear the limb appliances with a protective layer (such as a cotton sockinet) over the skin to help keep the appliance clean.
- If needed, wipe the inside with a damp cloth or Clorox-type wipe.
- It is best to have a designated space where you pump daily so your pump can remain set up and ready to use.

## **When should I stop using the pump?**

**Do not** use your pump if you experience the following:

- Any symptoms of an **infection** (cellulitis) in the affected limb.
  - **Cellulitis** is an infection in a deep layer of the skin that causes redness, pain, and swelling.
- Any symptoms of a **blood clot** (deep vein thrombosis - DVT):
  - Pain, or an aching heavy sensation in the limb
  - Sudden increase in swelling
  - Tenderness, or discoloration of the limb
  - Slight fever
- Any change in your medical status impacting your heart function.
- Shortness of breath with pumping.
- Pain when using the compression pump.
- **New open wounds.** A compression pump helps wound healing, but a new open wound can be a sign of change in your health.
  - **Contact your doctor** to clarify if you can continue using your pump.
  - Contact your Therapist if you have questions.

Disclaimer: This document contains information and/or instructional materials developed by Michigan Medicine for the typical patient with your condition. It may include links to online content that was not created by Michigan Medicine and for which Michigan Medicine does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Author: Amber Richardson, OTR/L, CLT  
Reviewers: Amber Richardson, OTR/L, CLT  
Jodie Briggs OTR/L, CLT, Dawn Bolen, OTR.L, CLT  
Christelle David OTR/L,CLT-LANA  
Edited by: Karelyn Munro, BA

Patient Education by [Michigan Medicine](#) is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Public License](#). Last Revised 04/2020