

**Breg VPULSE<sup>®</sup>. Three preventative and rehabilitative therapies. One simple device.**

- Intermittent sequential compression therapy helps prevent hospital-acquired deep vein thrombosis (DVT) and pulmonary embolism (PE)
- Intermittent dynamic compression therapy helps reduce swelling
- Controlled cold therapy drives compliance while reducing discomfort and inflammation

Designed to provide continuity of care from the hospital, surgery center, and clinic to self-treatment at home, the VPULSE helps patients comply with post-operative instructions.

**Deep Vein Thrombosis (DVT)**

Deep vein thrombosis (DVT) refers to the development of blood clots, or thrombi, within a deep vein. Typically it occurs in the thigh or calf and can develop after any major surgery. Symptoms may include pain, swelling and skin discoloration, or no signs at all. DVT risk is greatest between two and five days after surgery, with a second peak risk period occurring about 10 days after surgery—after the patient has been discharged.<sup>1</sup>

A consecutive pulmonary embolism, or PE, can occur when a clot breaks free and travels through the veins and lodges in the lungs. PE has been reported to occur in over one third of DVT patients and frequently causes sudden death.<sup>2</sup>

**Statistics**

The National Center for Health Statistics estimates that DVT is an underlying cause of death for between 60,000 and 100,000 people annually in the U.S. Estimates place the number of persons affected as high as 900,000. Between 10 and 30 percent will die within one month of diagnosis, and one third will have a recurrence within 10 years. Survivors may have lasting ramifications and chronic respiratory and cardiovascular issues.<sup>3</sup> Without either mechanical or pharmacological prevention, DVT with no obvious symptoms will develop in 40 to 60 percent of patients undergoing total hip and knee arthroplasty.<sup>2</sup> These numbers suggest a very real need for prevention.

<sup>1</sup>Deep Vein Thrombosis - OrthoInfo - AAOS. January 2009. Available at: [orthoinfo.aaos.org/topic.cfm?topic=a00219](http://orthoinfo.aaos.org/topic.cfm?topic=a00219)

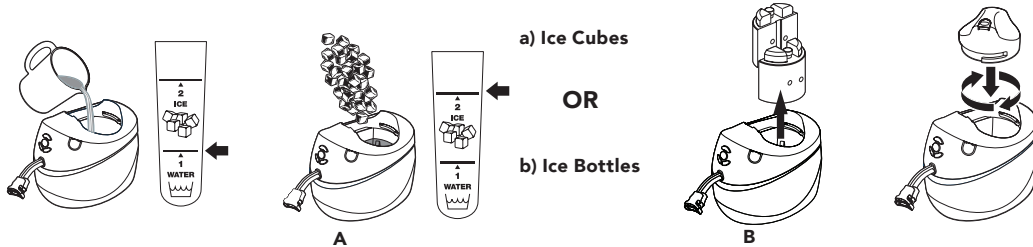
<sup>2</sup>The Surgeon General's Call to Action to Prevent Deep Vein Thrombosis and Pulmonary Embolism. 2008. Available at: [www.surgeongeneral.gov/topics/deepvein/calltoaction/call-to-action-on-dvt-2008.pdf](http://www.surgeongeneral.gov/topics/deepvein/calltoaction/call-to-action-on-dvt-2008.pdf)

<sup>3</sup>Centers for Disease Control. 2015. Available at [www.cdc.gov/ncbddd/dvt/data.html](http://www.cdc.gov/ncbddd/dvt/data.html)

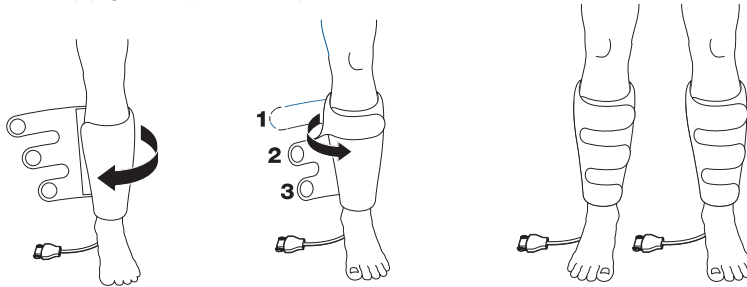
# VPULSE®

**⚠** Breg VPULSE can be cold enough to cause serious injury including full skin necrosis. Read and understand all warnings and instructions provided in the User's Manual prior to using this device.

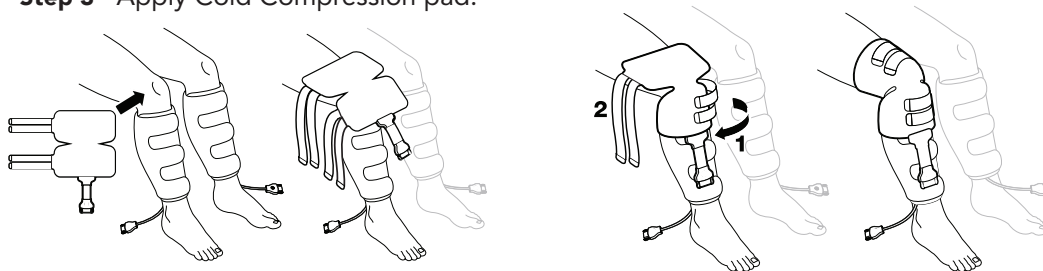
**Step 1**



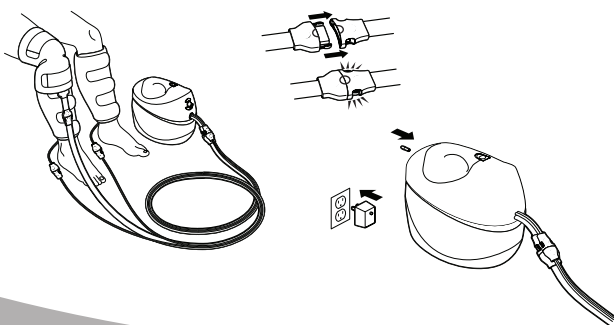
**Step 2** Apply Compression pads to the calves.



**Step 3** Apply Cold Compression pad.



**Step 4** Attach the Control Unit to the pads.



**Step 5** Start treatment and select therapies.



Cold Only



Dynamic  
Compression Only



Sequential Compression  
(Calf) Wrap Only



Start/Stop  
(or to turn off alarm)