

## Lower Limb Ulcers (Arterial, Venous & Mixed): Assessment and Treatment in Adults

### Site Applicability

All VCH & PHC sites

### Practice Level

Basic skills for the following professions (within their respective scope of practice):

- RN, RPN, LPN, NP

### Policy Statement

VCH & PHC nurses will follow the Decision Support Tool (DST) developed by the Provincial Nursing Skin & Wound Committee (see guideline link below) when providing care for non-diabetic adults who have arterial, venous or arterial/venous mixed lower limb ulcers (for diabetic adults with lower limb ulcers please refer to [Diabetic & Neuropathic Ulcers Management Guideline](#) (see Related Documents p.2).

### Need to Know

- The Provincial Nursing Skin and Wound Committee (PNSWC) developed this DST to provide standardized arterial, venous and arterial/mixed lower limb ulcer wound care management for all patients, clients and residents across the province.
- Arterial ulcers occur as a result of atherosclerosis that causes a disruption to arterial blood flow. This reduced blood flow leads to moderate to severe tissue ischemia and ulcers occur. Arterial ulcers are often non-healable unless tissue perfusion can be improved. If untreated or poorly managed, these ulcers may progress to invasive infection / gangrene that may necessitate amputation.
- Venous insufficiency occurs due to a disruption in blood flow due to valve dysfunction, complete or partial blockage of the deep veins, and/or failure of the calf muscle pump causing sluggish circulation, poor venous return and eventual chronic venous hypertension. This can result in venous ulcers.
- Mixed ulcers are mostly seen in older clients and include signs and symptoms of both arterial & venous ulcers that can make assessment & treatment problematic. With mixed ulcers the ankle brachial index<sup>1</sup> (ABI) is usually between 0.8 and 0.5.
- It is necessary to carry out a general and lower limb assessment as well as an assessment of the wound to differentiate wound type, as treatment strategies for arterial, venous & mixed wounds differ.

### Practice Guideline

- The Provincial DST [Guideline Summary: Lower Limb Arterial Ulcers](#) and [Guideline Summary: Lower Limb Venous Ulcers](#) is one page assessment and treatment overview.
- The Provincial DST [Guideline: Assessment and Treatment of Lower Limb Ulcers \(Arterial, Venous, & Mixed\) in Adults](#) provides detailed guidance on the assessment and the determination of treatment goals for patients, clients and residents who have developed an arterial/venous/mixed lower limb ulcer. The DST also outlines interventions and discharge planning considerations as well as expected client/family outcomes.

<sup>1</sup> Registered nurses must successfully complete additional education before carrying out ankle brachial pressure index testing. Agency / health authority policy and standards should be in place to support the practice.

## Patient/Client/Resident Education

VCH & PHC Teaching Pamphlets: order through websites: [VCH](#) or [PHC](#)

- Preventing Arterial Ulcers (Cat # [FO.160.P928](#))
- Preventing Venous Ulcers (Cat # [FO.160.P9281](#))
- Top Ten Tips for Good Foot Care (Cat # [FL.955.T62](#))

## Related Documents

### VCH/PHC:

- BD-00-07-40023: [Diabetic & Neuropathic Ulcers: Guidelines for Assessment & Treatment in Adults](#)
- BD-00-12-40000: [Ankle Brachial Index \(ABI\): Procedure in Adults using a Handheld Doppler](#)
- BD-00-12-40040: [Monofilament Testing for Loss of Protective Sensation \(LOPS\) of Diabetic/Neuropathic Feet: Procedure for adults & children](#)

VCH: D-00-07-30062: [Nutritional Care for Wound Management](#)

## Documentation

As per site documentation guidelines

## Developed by

**Developed by: British Columbia Provincial Nursing Skin and Wound in collaboration with the Wound Clinicians from FHA, IHA, NHA, PHSA, VCH/PHC and VIHA**

### Development Team Members:

VCH: Regional WOCN, VCH  
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WCC Coastal Community

PHC: CNS Skin and Wound Care Providence Health Care

PHSC: WOCN Children's Hospital  
BC Cancer Agency

FHA: WCC Community  
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## Endorsed by

VCH: (Regional SharePoint 2<sup>nd</sup> Reading)

Health Authority Profession Specific Advisory Council Chairs (HAPSAC)

Health Authority & Area Specific Interprofessional Advisory Council Chairs (HAIAC)

Operations Directors

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PHC: Clinical Nurse Specialist, Wound & Skin Care, St. Paul's Hospital

## Final Sign-off & Approved for Posting by

Professional Practice Director on behalf of Chief Nursing Officer & Executive Lead Professional Practice, VCH  
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