



# Wound up for Wounds

Issue 3 | September 2018

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[www.wrha.mb.ca](http://www.wrha.mb.ca)

## WRHA staff website:

<http://bit.ly/2DKARRU>

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## Wound up for Wounds

***Wound up (verb. To be excited) for Wounds (noun. Injuries to living tissue)***

Happy fall everyone, and welcome to the dog-themed issue 3 of Wound up for Wounds. I am sure many of you know that I am a proud CNIB puppy raiser of an almost eight-month-old golden retriever named Grace (who is not featured in any of the pictures).

The fall slate of wound care courses is now available for registration. Remember to check your email a week before the course for course location, handouts and pre-readings. This email is sent to your work email if you have LMS access, otherwise we use the email you provide to our office upon registration.

I look forward to seeing you at wound care courses. Take care!

*Jane McSwiggan M.Sc., OT Reg. (MB), IIWCC*

### Level 2 Diabetic Foot Ulcers

September 20 8:30 a.m. to 12:30 p.m. Grace Hospital

### Level 2 Adult Pressure Injuries

September 25 8:30 a.m. to 12:30 p.m. Concordia Hospital

October 25 8:30 a.m. to 12:30 p.m. Grace Hospital

### Level 2 Venous and Arterial Leg Ulcers

October 17 8:30 a.m. to 12:30 p.m. Riverview Health Centre

November 15 8:30 a.m. to 12:30 p.m. Grace Hospital

December 13 8:30 a.m. to 12:30 p.m. Concordia Hospital

### Level 2 Skin Concerns in Advanced Cancer

October 23 8:30 a.m. to 12:30 p.m. Deer Lodge Centre



## Did you know?

- WRHA has an updated wound care policy: <http://home.wrha.mb.ca/corp/policy/files/110.000.320.pdf>.
- Each site has an advanced wound care formulary. Check with your Advanced Wound Care Clinician or Educator.
- Over 5000 Health Care Professionals have taken Level 1 Wound Care since 2014.

### Practice Days: Wound Assessment and Dressing Selection

*(Four courses offered, each course is two hours)*

October 18

8:30 a.m. to 10:30 a.m. Concordia Hospital

October 18

10:45 a.m. to 12:45 p.m. Concordia Hospital

November 21

8:30 a.m. to 10:30 a.m. Riverview Health Centre

November 21

10:45 a.m. to 12:45 p.m. Riverview Health Centre

### Musculoskeletal Injury Prevention in Wound Care

September 19

1:00 p.m. to 4:00 p.m. Health Sciences Centre

November 21

1:00 p.m. to 4:00 p.m. Health Sciences Centre

*See page 6 for registration information*



## An Introduction to Therapeutic Sleep Surfaces

*By Kim Baessler, OT Reg. (MB), IIWCC, Program Consultant, Home Care Equipment and Supplies/Wheelchairs*

### What is a Therapeutic Sleep Surface?

**A therapeutic sleep surface or support surface** is a special mattress for pressure redistribution and management of tissue loads, microclimate and/or other therapeutic functions.<sup>1</sup>

Research has shown that support surfaces reduce the incidence of pressure injuries or facilitate wound healing when compared to standard mattresses.<sup>1</sup>

Studies have not shown that any particular type of support surface is superior to others. There is no "best mattress" for all clients.

Mattress selection should be based on a comprehensive assessment and multidisciplinary team approach to ensure the appropriate mattress is chosen for each client's needs.

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## How will a support surface help my client?

The goal of using a support surface is to decrease one or more of the forces that may lead to a pressure injury such as pressure, shear, friction and microclimate (heat and/or moisture).

The clinician's assessment, which may include a pressure risk assessment tool, will assist in identifying the client's individual risk factors and will guide in mattress selection.

## What do all the different terms mean? (terms in bold type are defined)

Therapeutic sleep surfaces are divided into two main categories: **Reactive** or **Active**.

**Reactive** mattresses work by **immersion** or **envelopment** of the client and *react* to a client's weight and/or movements. They may be powered or non-powered, made of foam, gel, air, or a combination of materials, and also referred to as static or constant low pressure mattresses.

**Active** mattresses *change* the weight load distribution by a programmed cycle of air cells inflating and deflating. These small movements aid in facilitating blood flow by off-loading pressure for a short period of time. They are always powered and always partially air filled, and may also be called dynamic mattresses or alternating pressure mattresses.

In addition, lateral rotation is a type of alternating pressure in which the support surface provides slight rotation through the inflation/deflation cycle on a longitudinal axis.

Other definitions:

- **Standard mattress** is a mattress not intended to prevent or treat pressure ulcers.
- **Immersion** is how deep a client sinks into the mattress causing the force to be spread over a larger area of the body resulting in a decrease in pressure on a small area.
- **Envelopment** is the ability of the mattress to conform to the curves of the body which allows the force to be spread over a larger body area in order to decrease the pressure on a small area.
- **Low air loss** is a feature of a support surface that provides a flow of air to assist in managing the heat and humidity (microclimate of the skin).<sup>2</sup>

**Closed vs Open Cell foam:** closed cell foam is non-permeable or has a barrier between cells, preventing gases or liquids from passing through the foam while open cell foam is permeable with no barriers. Open cell foam will assist with microclimate control as it allows air flow.

## Considerations:

Pressure injuries on the heels need to be considered independent of the support surface. The use of a wedge-shaped cushion to suspend the heels off the bed is more effective in reducing the incidence of pressure injuries than the use of a standard pillow.<sup>3</sup>

A therapeutic support surface does not substitute for turning schedules as mattresses are not a stand-alone intervention for prevention and treatment of pressure injuries. Use them in conjunction with proper nutritional support, moisture management, skin care and education of client and their circle of care.

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Remember that not all foam mattresses are created equal! High-specification foam mattresses are more effective in reducing the incidence of pressure injuries in persons at risk than standard foam mattresses.<sup>1</sup> High specification foam mattresses are mattresses that meet certain criteria such as minimum depth, resilience, density, support factor and moisture vapor transmission rates for the covers.<sup>5</sup>

Ensure that transfers and mobility are included as part of the assessment for mattress selection. For example, a mattress may make the bed height too high or too slippery for a safe independent transfer, or a mattress that allows a lot of immersion may make bed mobility more difficult for some clients.

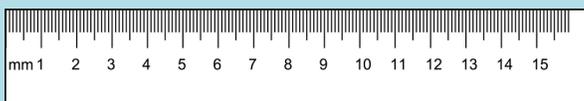
Assess pressure on all surfaces that the client uses over the 24 hour period including slings, sliding boards, wheelchairs, bath seat, toilet seats/commodes, recliner chairs, couches and car seats.

Choose a bed frame that minimizes the risk of entrapment, the risk of entrapment exists when the support surface is not the same size as the bed frame. Minimize the risk of entrapment by selecting a surface that has a transfer border as it may be less likely to compress. Evaluate the use of bed rails as the risk may be reduced when bed rails are not in place.<sup>4</sup>

#### References

- McNichol L, Watts, C, Mackey, D, Beitz, J and Gray, M. Identifying the Right Surface for the Right Patient at the Right Time: Generation and Content Validation of an Algorithm for Support Surface Selection. *Journal Wound, Ostomy and Continence Nursing*. 2015.
- NPUAP. *Terms and Definitions Related to Support Surfaces*, 2007.
- Norton L, Parslow N. *Best Practice Recommendations for the Prevention and Management of Pressure Injuries*. Wounds Canada. 2017
- Registered Nurses' Association of Ontario (2016). *Assessment and Management of Pressure Injuries for the Interprofessional Team*, Third Edition. Toronto, ON: Registered Nurses' Association of Ontario.
- Call E, and Black, J Using Devices for Pressure Ulcer Prevention and Treatment. Power Point. NPUAP website 2016.

## Practice Corner: Wound Measurement



The Module 1b “wound assessment video” in Level 1 Wound Care Education states that a wound is measured for length and width regardless of the direction. We would like to make an important amendment to this information to ensure consistency in wound measurement.

**Please measure wounds head to toe and side to side (right to left).**

To recap, the length of a wound is the longest measurement using the orientation of head to toe, and the width is the longest measurement from side to side (right to left).

We have added a correction to the online Level 1 on LMS and will inform all those who have taken Level 1 either online or in classroom of this method.

For an excellent resource video, which we are adding to the Level 1 course, open the following link:

<https://youtu.be/ZWMaR-jheGY>

## Venous Leg Ulcers: A Primer

*By Kari Mann RN, MN, BSc, IIWCC, Skin & Wound Clinical Nurse Specialist, HSC Winnipeg*

Venous ulcers remain the most common type of lower limb ulceration and their incidence rises with aging (Wounds Canada, 2018). Venous lower leg ulcers are defined as open lesions between the knee and ankle joint occurring in the presence of venous disease, and are often accompanied with prominent or varicose veins, and are attributed to venous insufficiency.

A thorough history and physical examination are critical in determining the diagnosis of venous leg ulcers. Risk factors which are associated with venous disease are: advanced age, female, family history, smoking, obesity, pregnancies, an occupation that requires long periods of standing or sitting, trauma, arthroscopic surgery that would cause fixation of the hip, knee or ankle leading to loss of calf-muscle pump, DVT, and congenital anomalies of the venous system.

Early warning signs are: stasis dermatitis, cellulitis like symptoms, ankle flare, skin changes/brown staining, leg discomfort/heavy legs, restless legs or leg cramps, visible varicose veins or spider veins. Venous disease of the leg is most commonly detected by a combination of clinical examination and measurement of a reliably taken Ankle Brachial Pressure Index (ABPI).

The treatment of choice for clinical venous ulceration which is uncomplicated by other factors, is graduated compression bandaging, properly applied, and combined with exercise (RNAO, 2016). Within the WRHA, if a Vascular Surgeon/Vascular Medicine Specialist or a Physician Specialist with expertise in chronic wounds is following the client, that Specialist will determine the need for vascular testing prior to initiating compression. Orders to initiate compression therapy will proceed as ordered by the referring Vascular Surgeon/Vascular Medicine Specialist/Physician Specialist.

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## Resources

### Wound Care Clinical Practice Guidelines (public website)

<http://bit.ly/2po0kMn>

### Advanced wound care product formulary (WRHA staff only)

<http://bit.ly/2pq8VxA>

## Course Registration

### LMS access

Log into LMS from any computer or device at <https://manitoba-ehealth.learnflex.net> (public website)

Enter “**WOUND**” in the global search bar.

- Level 1 is a bundle of 8 modules available online;
- Level 2 and other courses are delivered in the classroom setting.

### No LMS access

Contact Cindy Hoff at [choff@wrha.mb.ca](mailto:choff@wrha.mb.ca) or 204-926-7047 to register for courses.

## Have a question?

Contact Jane McSwiggan, Education and Research Coordinator-Wound Care at [jmcswiggan@wrha.mb.ca](mailto:jmcswiggan@wrha.mb.ca) or 204-926-8013.

## Venous Leg Ulcers: A Primer cont.

For other requests (outside of Vascular Surgeons/ Vascular Medicine Specialist/Physician Specialist), ABPI/toe pressures and a comprehensive lower leg assessment will be required prior to the initiation of compression therapy. Refer to regional wound care clinical practice guideline for venous, arterial, and mixed lower leg ulcers for more details.

High compression increases venous ulcer healing and is more effective than low compression, but should only be used where ABPI  $\geq 0.8$  and ulcer is clinically venous. However, low compression is better than no compression, so it is important to work with the patient/client to determine a level of compression she/he is able to tolerate. Compression bandages should only be applied by a suitably trained and experienced practitioner.

To better understand the etiology of lower leg ulcers, lower leg assessments and wound management and prevention attend an upcoming Level 2 Venous and Arterial Leg Ulcers education session.

