



# Spinal Cord Injury, Women and Sex: Rehabilitation through the ages

5<sup>th</sup> Annual SCI Education Day  
April 9, 2026

**STACY ELLIOTT,**  
Sexual medicine physician

Clinical Professor with  
the University of British  
Columbia

**SARAH SIMMS,**  
Physiatrist

Clinical Instructor with  
the University of British  
Columbia

APRIL  
9 2026

# Objectives



	<ol style="list-style-type: none"><li>1. Understand sexual dysfunction following SCI</li><li>2. Apply the sexual health framework</li><li>3. Discuss reproductive issues after SCI</li><li>4. Review menopause symptoms and how they overlap with SCI</li><li>5. Question and answer</li></ol>

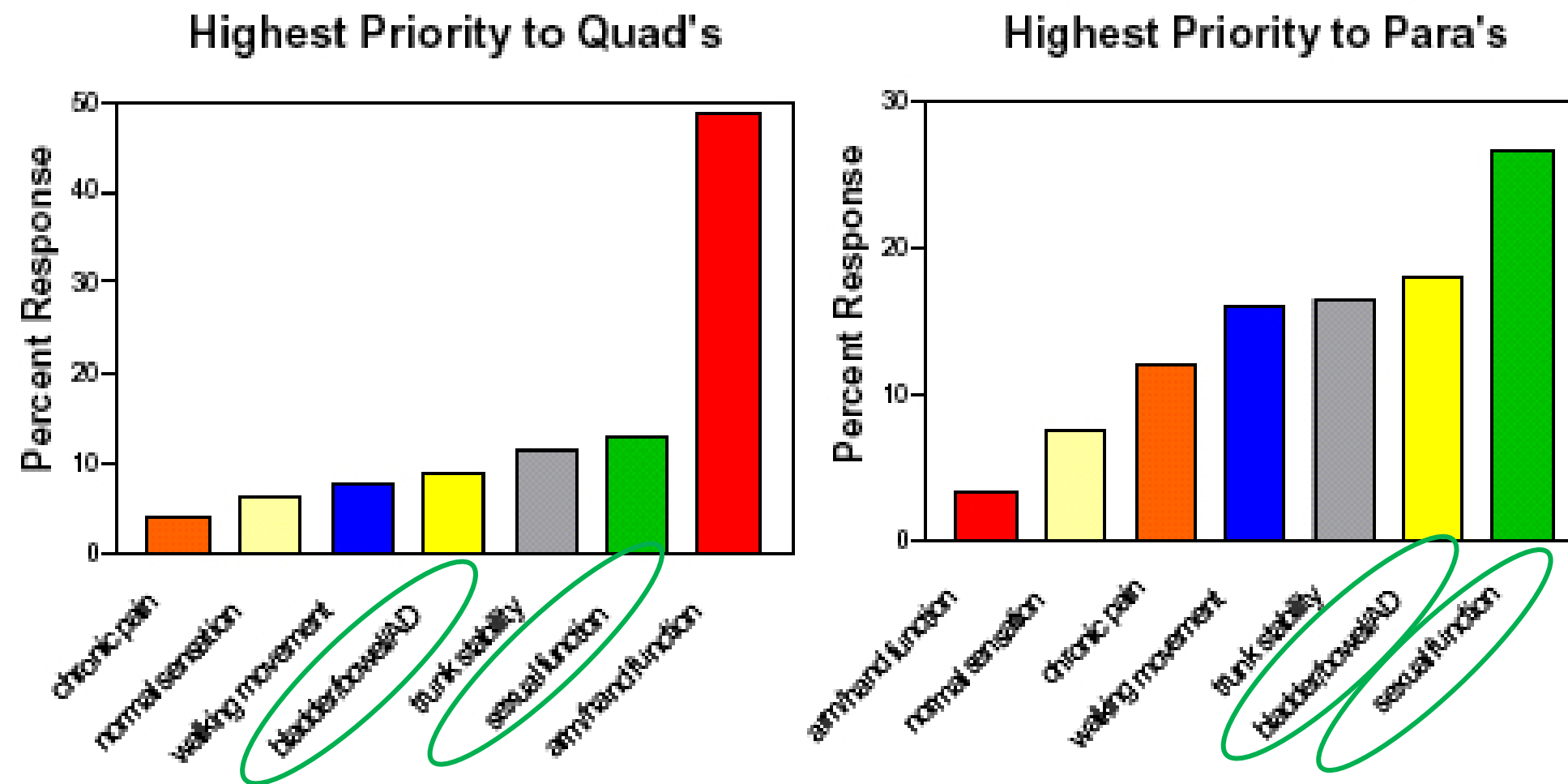


**Access Sex One**  
2007  
Photography  
with Sarah Murray

# Sexuality after SCI

# Priorities in the SCI population: Pelvic Organ Function !

Pelvic organ functions (sex, bladder and bowel) are rated by persons with SCI as having the highest priority for recovery of function that dictate quality of life following SCI (Anderson, 2004; Simpson *et al.*, 2012)



1) Tailor treatment and rehabilitation interventions

2) Maximize quality of life through fair and efficient allocation of resources

3) Formulate studies that can ultimately improve evidence-based practice and health policy

Targeting Recovery: Priorities of the SCI Population (Kim D. Anderson, 2004)

# Sexual Dysfunctions after SCI in women

**Sexual Desire disorders** : biopsychosocial

**Genital Arousal disorders**: vaginal lubrication and accommodation

**Orgasmic disorders**: 40 – 50% regardless of completeness or LOL but incomplete has a better chance of experiencing orgasm

*Note: other secondary consequences of SCI can abort the whole experience!*

***Stages of women's sexual and reproductive health:  
puberty, reproduction, peri-menopause,  
menopause***

# Pursuit of Pleasure & Orgasm

Orgasm = cerebral or visceral/body interpretation of either

-**genitally-induced** (visceral vasocongestion, clitoral stimulation, cervical stimulation, somatic floor contractions) or

-**non-genitally triggered** (visceral. ears, erogenous zones, sleep, tantric excitation alone, etc)

*-release usually associated with pleasure*






**“Taking a sexual history and thinking beyond sexual (genital) function to the factors that influence sexuality within the **practicality of a table** helps reduce the intimidating task of addressing the complexity of sexuality.”**


**Elliott, SL, Hocaloski S, Carlson M. Multidisciplinary Approach to Sexual and Fertility Rehabilitation: **The Sexual Rehabilitation Framework****

*Top Spinal Cord Inj Rehabil* 2017;23(1):49–56.

# Let's look at an example: Female Sexuality

Sexual Area	Consequences of SCI/D
Sexual Drive/interest	
Sexual Functioning abilities	
Fertility & Contraception	
Factors re the condition	
Motor & sensory influences	
Bladder & bowel influences	
Sexual Self-view and Self-esteem	
 <b>Partnership Issues</b>	8

# Let's look at an example: Female Sexuality

Sexual Area	Consequences of SCI/D
<b>Sexual Drive/interest</b>	Drive same or reduced
<b>Sexual Functioning abilities</b>	Difficulty with lubrication, orgasm depending on LOI & completeness
<b>Fertility &amp; Contraception</b>	Fertility unaffected, preg and labour ++ Contraception complicated
<b>Factors re the condition</b>	AD with arousal and orgasm Medication affects on sexuality
<b>Motor &amp; sensory influences</b>	Sexual positioning, spasticity Hypo and hypersensitivity
<b>Bladder &amp; bowel influences</b>	Neurogenic bladder and bowel, UTI Specific management per woman
<b>Sexual Self-view and Self-esteem</b>	Variable , independence important
 <b>Partnership Issues</b>	Variable, often lower sexual satisfaction

<https://scisexualhealth.ca/>



Spinal Cord Injury BC presents



This website was created by SCI BC and the Sexual Health Rehabilitation Service at Vancouver Coastal Health to bring you SCI-specific information, peer stories, and resources on sexual health topics including:

**Sex after SCI**



**Fertility**



**Pregnancy**



**Sensation**



**Bowel/Bladder**



**Mobility**



**Relationships**



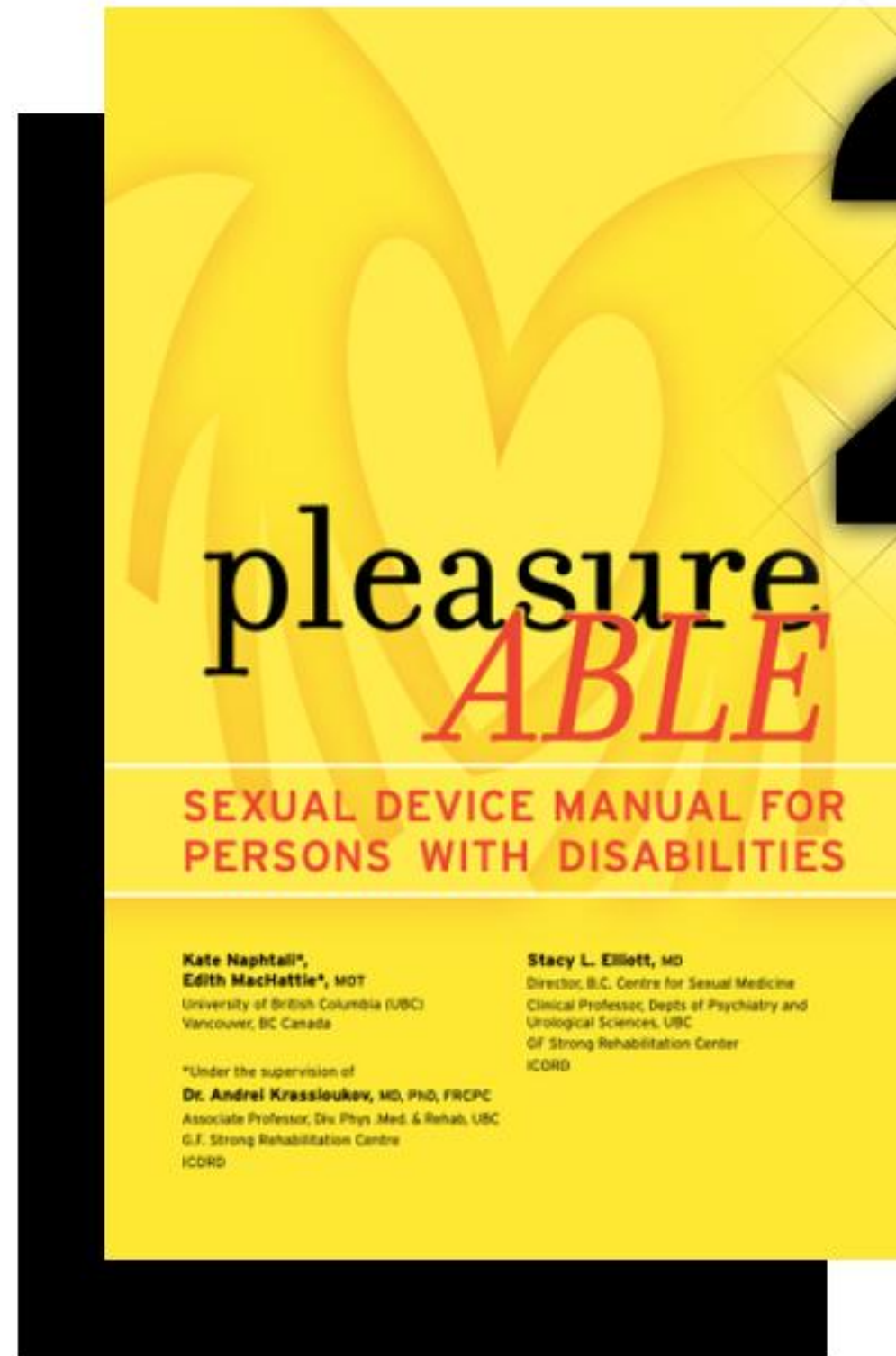
**And More!**



Spinal Cord Injury BC's mission is to help people adjust, adapt and thrive after spinal cord injury or a related physical disability. Check out other online resources on housing, employment, travel, and equipment at our SCI Resource Centre:

[sci-bc.ca/resource-centre](https://sci-bc.ca/resource-centre)

<https://scisexualhealth.ca/> and look under Mobility Resources



**Kate Naphtali\***,  
**Edith MacHattie\***, MOT  
University of British Columbia (UBC)  
Vancouver, BC Canada

\*Under the supervision of  
**Dr. Andrei Krassioukov, MD, PhD, FRCPC**  
Associate Professor, Div Phys Med & Rehab, UBC  
G.F. Strong Rehabilitation Centre  
ICORD

**Stacy L. Elliott, MD**  
Director, B.C. Centre for Sexual Medicine  
Clinical Professor, Depts of Psychiatry and  
Urological Sciences, UBC  
G.F. Strong Rehabilitation Center  
ICORD

# Fertility for Women with SCI

Immediately following injury, **amenorrhea** may occur, lasting on average 4 – 5 months... but fertility is mostly unaffected!

## Birth control > fertility issue:

- hand function
- self-care potential
- concomitant brain injury
- E2 and P risks
- IUD AD risk
- preference



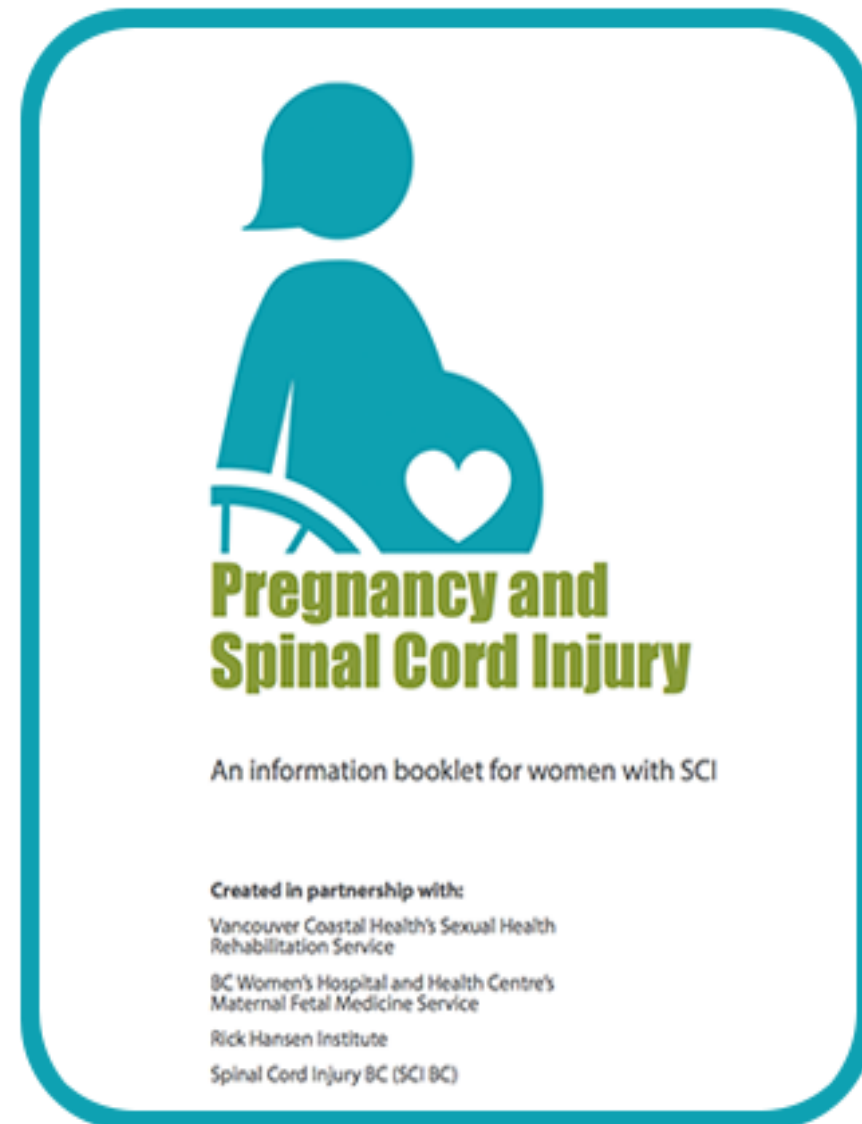
## Reproductive Rehab after SCI

- Women's fertility is not changed after SCI: contraception, labour and delivery can have its challenges (i.e. AD)
- Pregnancy has high risk for worsening secondary consequences (UTI, respiratory, constipation, skin breakdown, spasm, med change, OT to follow transfers to protect shoulders, fatigue)
- Labour can present differently: must distinguish AD from pre-eclampsia
- Vaginal birth is the rule
- Post-partum issues include PPD, motor difficulties, fatigue and breastfeeding barriers
- Impaired let down reflex can be stimulated by galactagogues, antipsychotics, hormones +/- herbs but not studied well in SCI
- Post partum adapted equipment

***A multidisciplinary team is needed for pregnancy, labour and deliver and post partum !***

# yes, you can do it!

view the guide



<http://sexualhealth.sci-bc.ca/scipregnancy/>

## Autonomic dysreflexia, sex and reproduction

- AD most common with high arousal and orgasm during sexual activity
- AD is more likely to be triggered in pregnancy due to increase in urinary tract infections and spasm, higher DVT risk , uterine pressure on venous return ???
- AD can signal pre-term contractions
- AD may occur (60 – 80% > T6) in labour even if no prior AD history (even episiotomy can trigger AD)
- AD can interfere with uteroplacental blood flow, so careful monitoring of the fetus is recommended when dysreflexia is severe or frequent
- Critical to distinguish between AD and pre-eclampsia of pregnancy!! since the treatment is different and unrecognized AD can lead to serious consequences.
- AD is prevalent in breastfeeding esp with higher injuries ( 39%)

# BREASTFEEDING FOLLOWING SPINAL CORD INJURY: CONSUMER GUIDE FOR MOTHERS

12 January 2023



**Found on  
SCIRE**

[https://community.scireproject.com/wp-content/uploads/Breastfeeding-Following-SCI\\_Consumer-Guide-for-Mothers.pdf](https://community.scireproject.com/wp-content/uploads/Breastfeeding-Following-SCI_Consumer-Guide-for-Mothers.pdf)

# The SPIN magazine from [sci-bc.ca](http://sci-bc.ca) download pdfs

Spin-fall 2015



**Motherhood**

Spin-spring 2019



**Pleasure & neuroplasticity**

Spin – summer 2022



**Neuromodulation and ToyBox**

<https://sci-bc.ca/stories/spin-magazine/>

## Feeling the Heat

SPIN  
Winter 2025



Menopause

# Menopause and SCI



- Menopause is diagnosed after 12 consecutive months of amenorrhea.
- Average age of menopause is 51 years
- Perimenopause is the natural transition phase before menopause
- Average age of SCI in British Columbia/Canada is increasing (mean age 57.5)

# Significant life transition

Overlapping symptoms SCI and menopause

SCI



Bone health



Cardiovascular disease and metabolic syndrome



Bladder and bowel issues



Musculoskeletal issues



Sleep disturbance

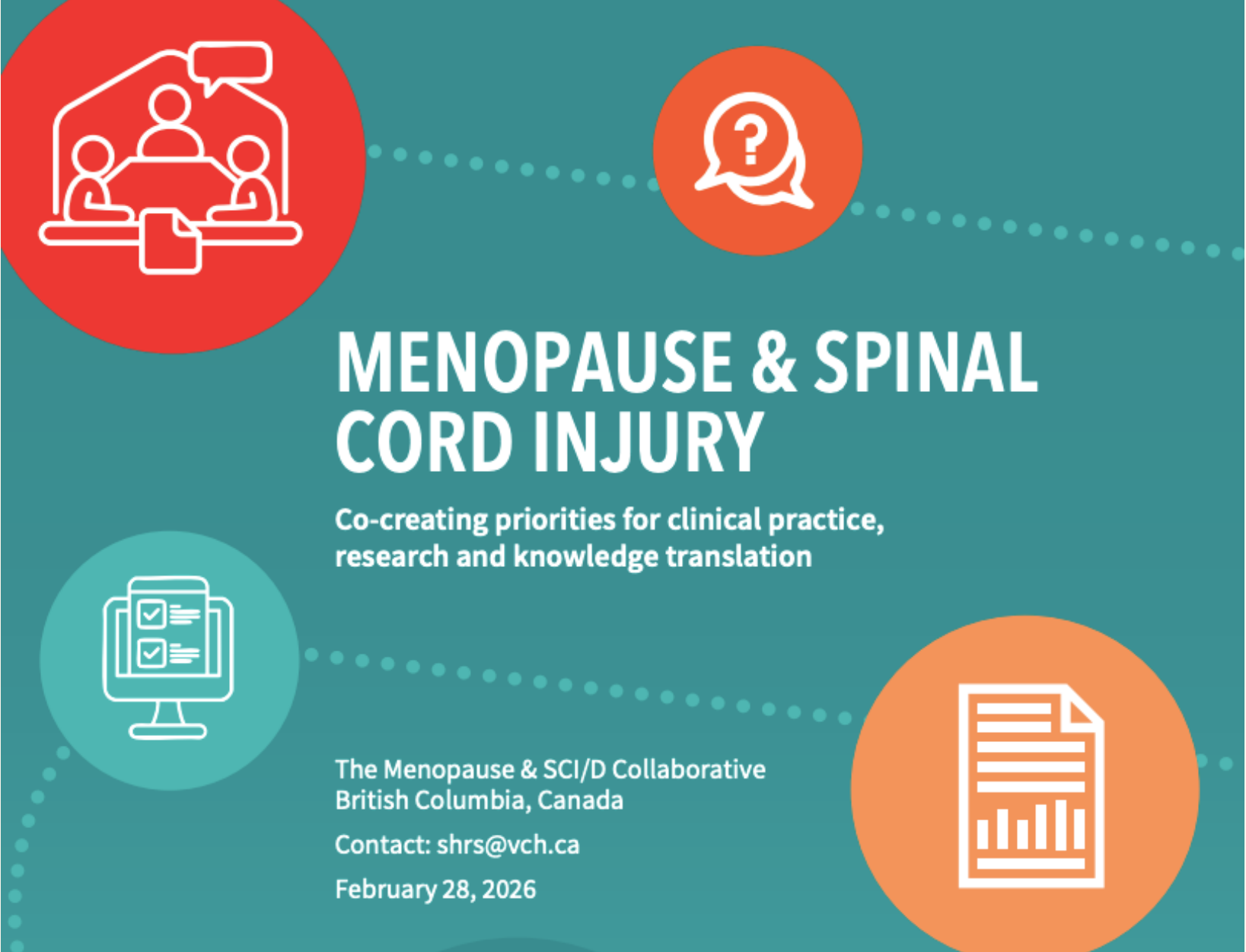


Skin health

Menopause

# Select Priorities

- Vasomotor symptoms and autonomic dysfunction
- Bladder function and impact of genitourinary syndrome of menopause
- Bone health
- Sexual distress



**MENOPAUSE & SPINAL CORD INJURY**

Co-creating priorities for clinical practice, research and knowledge translation

The Menopause & SCI/D Collaborative  
British Columbia, Canada  
Contact: [shrs@vch.ca](mailto:shrs@vch.ca)  
February 28, 2026

# AUTONOMIC/THERMOREGULATION

## Menopause

- Vasomotor symptoms (VMS) of menopause
- Hot flashes/flushes often last 1-5 minutes and night sweats
- Unpredictable
- Triggered by hormonal changes and fluctuations
- Thermoregulatory dysfunction
- Hypothalamic dysfunction

## Spinal Cord injury

- Autonomic dysreflexia (at risk with lesions at T6 and higher)
- Uncoordinated sympathetic nervous system response
- Common triggers bladder, bowel, skin, sexual arousal, etc
- Symptoms often last until trigger addressed
- Thermal dysregulation also an autonomic feature of SCI!

## Treatment Considerations

- Systemic hormonal replacement therapy is the mainstay of treatment of VMS
- Estrogen transdermal
- Consider more regular monitoring of blood pressure and adjustments to management

# BLADDER FUNCTION

## Menopause

- Genitourinary Syndrome of Menopause (GSM) encompasses a range of symptoms affecting the vulva, vagina and lower urinary tract
- Urinary incontinence, urgency and frequency
- Frequent UTIs
- Vaginal dryness
- Dyspareunia

## Spinal Cord injury

- Neurogenic bladder
- Chronic catheter use
- Consider risk of urethral trauma with vaginal skin changes
- Frequent UTIs
- Friction and dyspareunia can trigger AD

## Treatment Considerations

- Topical vaginal estrogen (ie Vagifem)
- Vaginal moisturizers
- Hydration- Drink water 1.5L/day
- Reduce/stop smoking (increased estrogen metabolism)
- Regular sexual activity (increases blood flow)
- Water based lubricants

# BONE HEALTH

## Menopause

- Bone loss starts during perimenopause
- Greatest loss first 10 years after final menstrual period
- Fragility fracture
- PEAK bone mass 25-30yr
- Non-SCI: vertebral, proximal femur, distal radius fracture

## Spinal Cord injury

- Rapid loss in bone mineral density following SCI within first year
- Sublesional osteoporosis frequent in SCI (>50% within 1 year)
- SCI related OP has risk of atypical sites for fractures distal femur, proximal tibia and ankle

## Treatment Considerations

- Vit D (<4000IU) helps to absorb calcium
- Ca++ side effects including constipation, gas, kidney stones
- Calcium rich foods
- Quit smoking
- Resistance training
- Anti-Osteoporotic pharmacotherapy options

# Using the Framework: Female Sexuality and Menopause

Sexual Area	Consequences of Menopause
<b>Sexual Drive/interest</b>	Further reduced libido
<b>Sexual Functioning abilities</b>	GSM may worsen issues, add to dyspareunia
<b>Fertility &amp; Contraception</b>	Fertility lost, HRT or BCP on individualized basis
<b>Factors re the condition</b>	AD or hot flashes? Skin fragility, pressure sores
<b>Motor &amp; sensory influences</b>	Increased spasticity?
<b>Bladder &amp; bowel influences</b>	Increased incontinence and UTI, altered management
<b>Sexual Self-view and Self-esteem</b>	Variable, may feel unseen, metabolic changes
<b>Partnership Issues</b>	Same issues as prior

# Thank You!

Feel free to contact us at:

[Sarah.Simms@vch.ca](mailto:Sarah.Simms@vch.ca)

[Stacy.Elliott@vch.ca](mailto:Stacy.Elliott@vch.ca)

**MENOPAUSE & SPINAL CORD INJURY**

Co-creating priorities for clinical practice, research and knowledge translation

The Menopause & SCI/D Collaborative  
British Columbia, Canada  
Contact: [shrs@vch.ca](mailto:shrs@vch.ca)

Scan QR code to access the project report:

PRAXIS  
G.F. Strong Rehabilitation Centre  
Vancouver Coastal Health Research Institute  
Spinal Cord Injury BC  
icord  
BCRehab  
WOMEN'S HEALTH RESEARCH INSTITUTE AT BC WOMEN'S  
James Lind Alliance



# References

1. The Society of Obstetricians and Gynecologists Menopause Hub. <https://sogc.org/en/en/content/events/HUB-Pages/Menopause.aspx>
2. Bond M, Beresford A, Noonan V, Rotem-Kohavi N, Dvorak M, Kwon B, Liu G and Sutherland J (2025) Long-Term Survival for Traumatic Spinal Cord Injury in British Columbia, Canada: A Retrospective Evaluation of 20 Years of Linked Health Care Data, Neurotrauma Reports, 6:1, Online publication date: 1-Jan-2025
3. . MENOPAUSE & SPINAL CORD INJURY Co-creating priorities for clinical practice, research and knowledge translation. Access: <https://scireproject.com/wp-content/uploads/2026/03/Menopause-and-SCI-Project-Report-28Feb2026.pdf>
4. Deecher DC, Dorries K. Understanding the pathophysiology of vasomotor symptoms (hot flushes and night sweats) that occur in perimenopause, menopause, and postmenopause life stages. Arch Womens Ment Health. 2007;10(6):247-57. doi: 10.1007/s00737-007-0209-5. Epub 2007 Dec 12. PMID: 18074100.
5. Akins JD, Washio T. Connecting postmenopausal vasomotor symptoms and blood pressure regulation: a role for the autonomic nervous system? Am J Physiol Heart Circ Physiol. 2025 Nov 1;329(5):H1107-H1109. doi: 10.1152/ajpheart.00753.2025. Epub 2025 Oct 3. PMID: 41042785; PMCID: PMC12558060.
6. Bilgin Badur N, Winkle MJ, Leslie SW. Autonomic Dysreflexia. [Updated 2025 Jun 2]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2026 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK482434/>
7. Abdelrahman S, Ireland A, Winter EM, Purcell M, Coupaud S. Osteoporosis after spinal cord injury: aetiology, effects and therapeutic approaches. J Musculoskelet Neuronal Interact. 2021 Mar 1;21(1):26-50. PMID: 33657753; PMCID: PMC8020025.
8. Winkle MJ, Davis DD, Varacallo MA. Osteoporosis in Spinal Cord Injuries. [Updated 2025 Jul 7]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2026 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK526109/>