

NEWSLETTER

Center for Rehabilitation Research in Neurological
Conditions Quarterly Update



In This Issue

[Underemployment in MS](#)

[Pneumonia After Spinal
Cord Injury](#)

[Tools & Calculators](#)

[National Conferences](#)

[Research Briefs](#)

[Awareness Days](#)

[Meet Our New Team
Members](#)

Director's Message: In Gratitude to Our Caregivers

James S. Krause, PhD

Center for Rehabilitation Research in Neurological Conditions, MUSC

As we have reached November and approach the Thanksgiving holiday, I want to express my sincere gratitude for each and every one of you who have contributed to our research, particularly the approximately 10,000 people who have participated in our studies over the years.

November is National Family Caregivers Month. Many of us with SCI, MS, or other disabling conditions reliant on caregivers for our survival. Family members play a key role for many people.

One of our primary priorities is to better understand critical lapses in attendant care that occur when there is simply no one available to help. As government funding for healthcare becomes more limited, we want to urge policymakers to support attendant care programs for those most in need.

On behalf of our team and all of us with disabilities, I would like to thank our loving caregivers, whether family, friends, or those paid.

Hug a caregiver today!

Jim Krause

Characteristics Associated With Perceived Underemployment Among Participants With Multiple Sclerosis

James S. Krause, PhD; Clara E. Dismuke-Greer, PhD; Melinda Jarnecke, BA

What is underemployment?

We define underemployment as the disparity between a person's current work intensity (how much they are working) and their desired work intensity (how much they would like to work).

Why study this?

MS symptoms like fatigue and cognitive changes can make work harder. Even when employed, many people with MS feel their roles do not match their abilities or goals. Finding who feels underemployed helps target support and workplace changes.

What did we find?

- About 1 in 5 participants felt underemployed.
- Fatigue doubled the chance of underemployment.
- Black and Hispanic participants were more likely to feel underemployed than White participants.
- Higher education and professional jobs were linked to more underemployment, suggesting skills were underused.
- Higher income and promotion/recognition were linked to less underemployment.



What it means?

Underemployment is a key sign of job quality for people with MS. Reducing fatigue, improving fair recognition and advancement, and matching jobs to skills can help people with MS find roles that fit and feel meaningful.



Read it online

Krause, J. S., Dismuke-Greer, C. E., Reed, K., & Jarnecke, M. (2024). Characteristics associated with perceived underemployment among participants with multiple sclerosis. *Rehabilitation Counseling Bulletin*, 68(1), 3-12. <https://doi.org/10.1177/00343552231187592>



Guidance and Tools for You

For guidance on employment, financial planning, and living well with MS, visit the National MS Society's resource page.



Understanding Pneumonia After Spinal Cord Injury

Yue Cao, PhD; Noelle Forcier, BS; and James S. Krause, PhD

Key Findings

Among 554 participants with spinal cord injury (SCI), 14% reported having pneumonia once, and 15% experienced pneumonia more than once since the onset of SCI. Those who had recurrent pneumonia history were more likely to develop additional health problems five years later.

What the Study Looked At

The study explored whether adults with SCI who reported past pneumonia, especially repeated episodes, were more likely to have pneumonia and other health problems five years later.

Repeated Pneumonia Signals Future Risk

People with multiple prior episodes were ten times more likely to report pneumonia 5 years later (21% vs 2%).

Health Outcomes at 5-Year Follow-Up

People with repeated pneumonia after SCI were more likely to have health problems five years later.

- Fevers: about 6 out of 10 people
- Sweats or chills: about 7 out of 10
- Pressure injuries: about 3 out of 10
- Rectal bleeding: about 4 out of 10

Learning these patterns can guide efforts to improve care and reduce complications in the future.

Key Takeaway

A history of multiple pneumonia episodes may be a sign of other health challenges after SCI.



Reference

Cao, Y., Forcier, N., & Krause, J. S. (2025). Pneumonia history and long-term impact on people with traumatic spinal cord injury: A 5-year cohort study.



Guidance and Tools for You

Learn more about lung health, vaccinations, and ways to prevent pneumonia after spinal cord injury in the Respiratory Health and Spinal Cord Injury factsheet from the Model Systems Knowledge Translation Center (MSKTC).



SCI Health Outcomes Calculators

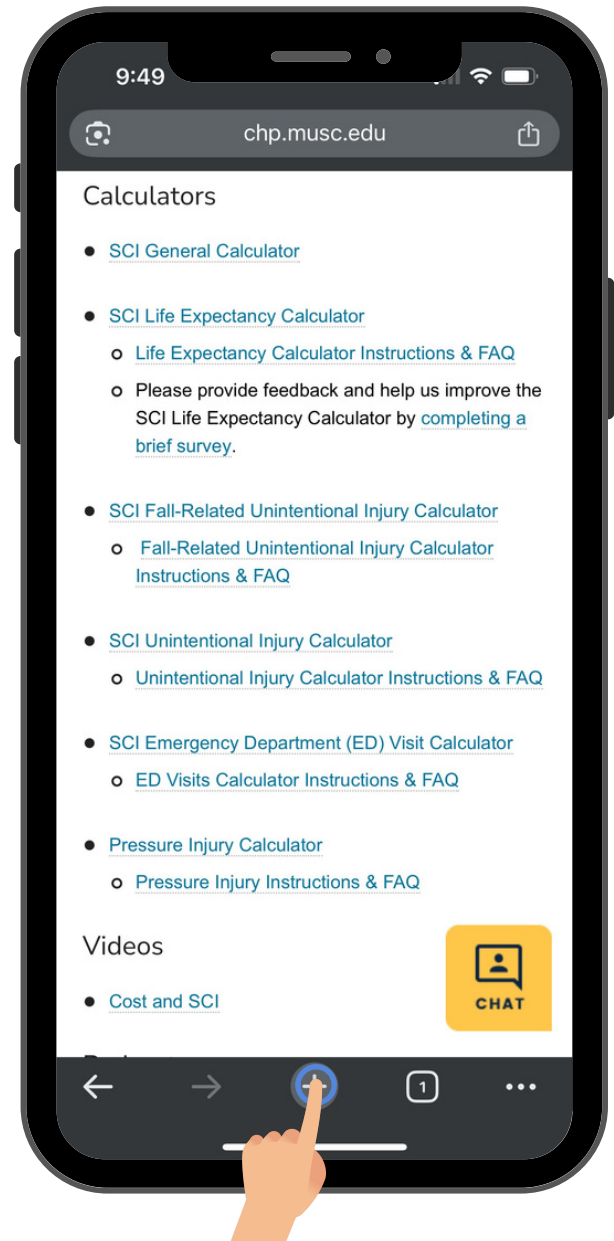
Our SCI Health Outcomes Calculators turn years of research into easy-to-use tools that help you explore estimated rates of key health outcomes, including emergency room visits, fall-related injuries, and more.



The calculators were built with data from nearly

5,000 participants

in our longitudinal studies, they reflect decades of collaboration between researchers and the SCI community.



Acknowledgment

This project was made possible through the dedication of our participants and the talented staff at the Health, Employment, and Injury Project (HELP).

Exploring, learning, and sharing knowledge across the country.

Our research team was proud to share new findings at several conferences across the country this summer and fall. These events offered opportunities to discuss SCI research, connect with colleagues, and represent our ongoing work in health, employment, and quality of life outcomes.



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American Spinal Injury Association (ASIA) - Scottsdale, AZ

The Natural Course of Aging after SCI:
Longitudinal Study of Subjective Well-being
Presented by Yue Cao, PhD

[READ MORE](#)

Academy of Spinal Cord Injury Professionals (ASCIP) - Philadelphia, PA

Lapses in Attendant Care With Aging After
Spinal Cord Injury.
Presented by Jon Laursen-Roesler, MS

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American College of Rehabilitation Medicine (ACRM) - Chicago, IL

Aging With Spinal Cord Injury: Longitudinal
Insights, Successful Aging, Program
Development, and Knowledge Translation
Presented by Clara Dismuke-Greer, PhD

[READ MORE](#)

Research Briefs from Our Team

We are pleased to share our research briefs developed from our latest research projects. Scan the QR codes below to explore topics such as life satisfaction, employment, and opioid use among adults living with SCI.



Life satisfaction in individuals with long-term traumatic spinal cord injury: An investigation of associated biopsychosocial factors



Barriers and facilitators to employment: A comparison of participants with multiple sclerosis and spinal cord injury



Understanding opioid use among adults with chronic spinal cord injury living in the United States: An issue brief





May 30

World Multiple Sclerosis Awareness Day

“Every five minutes, someone, somewhere in the world is diagnosed with multiple sclerosis (MS)”, (Multiple Sclerosis International Federation). This global observance reminds us of the importance of advancing research and rehabilitation for individuals living with MS. Our department’s studies on employment, health outcomes, and quality of life continue to inform best practices that support this population.



September

Spinal Cord Injury Awareness Month

Each September, we recognize the strength and perseverance of individuals living with SCI. Our department remains dedicated to advancing research and sharing knowledge that supports the SCI community.



October

National Disability Employment Awareness Month (NDEAM)

During NDEAM, we recognize the importance of inclusion and equal opportunity in the workplace. Through our employment-focused studies, we aim to identify solutions that empower individuals with disabilities to reach their full potential in the workforce.



November

National Family Caregivers Month

We recognize the essential role family caregivers play in supporting individuals with SCI and other neurological conditions. In line with the 2025 theme, “Plug-in to Care,” we remain committed to research that helps connect caregivers with the information and support they need.

Welcome Our New Research Assistants



Emma Ross

Degree: B.S. in Psychology, Mental Health concentration, Coastal Carolina University.

Experience: MUSC Human Resources support; summer research fellow at a VA hospital.

Research highlight: Studied links between veterans' mental health and substance use.

Interests: Brain function and how it relates to mental health disorders.

Next steps: Aiming for a graduate program in clinical neuropsychology.



Kavita Talaviya

Degree: Masters in Public Health, Epidemiology & Biostatistics concentration, Boston University; B.S in Ayurvedic Medicine and Surgery, India.

Experience: Research data analyst; Medical Officer.

Research highlight: Studied the impact of conflict intensity on tuberculosis notification rates in sub-Saharan Africa.

Interests: Neurological research; disability research.

Next steps: Expand skills in research, data collection, and analysis.



About this Newsletter

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