



Pressure Injury Calculator

Instructions

This calculator assesses the risk of pressure injuries (also known as pressure sores or bedsores). To use our Pressure Injury Calculator, please visit the following link:

<https://chp.musc.edu/research/help/tools/pressure-injury-calculator>

Once on the webpage, choose the version of the calculator that applies to you: (1) person with SCI/family/friend or 2) healthcare professional) and answer all the questions. ***The healthcare professional version of the calculator has additional information for people who are interested in a more detailed breakdown of the results.*** After all questions have been answered, click the button “calculate”. From there, your personalized risk results of having a pressure injury will appear.

The result from this calculator is an estimate of your risk of getting a pressure injury. This calculator is solely to help people understand how various factors including **prescription medication use, diet, smoking, and planned exercise** affects your risk of a pressure injury. These estimates reflect the average experience of a group of similar individuals and are based solely on the factors below. Many other factors can also influence your risk of a pressure injury.

Our pressure injury calculator uses the following factors:

- Sex (male, female)
- Current age
- Years post-injury
- Walking status
- SCI neurological level
- Race-ethnicity
- Household income
- Weight status
- Diet
- Alcohol misuse
- Non-prescription substance misuse
- Frequency of prescription medication usage (spasticity, sleep, pain, depression)
- Using prescriptions other than prescribed
- Cigarette smoking
- Exercise

You can try calculating different risk results by changing your answers to see how it affects your potential risk for pressure injury over the next 12 months. Do not use this calculator instead of seeing a healthcare provider. If you have concerns for your mental or physical well-being, please contact a service provider with clinical expertise in your area.

Frequently Asked Questions

How is the risk of a pressure injury (bedsore or pressure sore) calculated?

- Our pressure injury estimates are based on the actual experiences of people who completed our self-report assessments. A dataset was created using each person's answers as a separate observation. A pressure injury table has been created using standard statistical procedures to provide an estimate of your risk of a pressure injury.

How does my diet (what you eat and drink) affect my risk of a pressure injury?

- People with SCI who report a poor diet (not enough daily intake of fluid, calories, protein, vitamins and minerals) are at risk of not getting enough nutrition to maintain healthy skin and prevent the breakdown of skin tissues. A poor diet increases your risk of a pressure injury.

Will taking medications to treat my secondary health conditions affect my risk of a pressure injury (bedsore or pressure sore)?

- Taking a lot of prescription medications to treat pain and other secondary conditions may increase your risk of a pressure injury, especially due to unintentional injuries.
- Although the number of drinks did not significantly affect the risk of a pressure sore using our calculator, people who frequently do heavy drinking or binge drinking (five or more drinks during a single occasion) may have increased risk of a pressure injury due, at least in part, to a greater risk accidentally damaging their skin by shearing your skin when they transfer. The more frequent the heavy drinking, the greater the risk.
- *This does not mean individuals should stop or cut back on their prescription medication use based on these findings. Individuals with SCI who take prescription medications should consult their physicians or healthcare providers before making any changes.*

How does my amount of planned exercise affect my risk of a pressure injury (bedsore or pressure sore)?

- People with SCI who did not participate in planned exercise at least once per week had greater chance of at least a pressure injury than those who participated in planned exercise at least once a week. Planned exercise improves your range of motion, balance, and stamina.
- Limited exercise also has many effects on the skin including a decrease in blood flow to the skin, which makes it less healthy and increases your risk of a skin break down (pressure sore).
- Smoking can cause your skin to be dry and lose elasticity, which may increase your risk of a pressure injury.

For more skin care information, check out this Shepherd Center resource:

- <https://www.myshepherdconnection.org/sci/skin-care>

Should I base my health care decisions on this or other fact sheets?

- No, the information is only to help you understand what we know about your risk of a pressure injury visit based on our research. These estimates should be used for general knowledge only. Do not use this information instead of seeing a healthcare provider. If you have concerns for your mental or physical well-being, please contact a service provider with clinical expertise in your area.

Check out our other resources, available on our team website: <https://chp.musc.edu/research/help/tools>

If you have any questions, feel free to call or email me, James Krause, PhD (Principal Investigator), at 843-792-1337 (krause@musc.edu) or Richard Aust (Project Coordinator) at 843-792-2605 (aust@musc.edu). Thank you for your continued interest in improving the quality of life of persons with spinal cord injury!