

We Have Moved Into Our New Home

Life After Spinal Cord Injury

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Are you approaching your 1, 5, 10, 15, 20, 25, 30, 35, 40, or 45-year anniversary of injury?
If so, you may be due for your next follow-up interview. Please contact

K5 Innovation Centers (Brain, Neurological, Spinal Cord, and Pediatric) bring together dynamic, open and collaborative research experts in real time. Together to innovate creative, expedient methods for our patients.

What did getting your GED mean to you?

- “It meant I was going forward in life with a big step. I was making a statement that my physical appearance of being in a wheelchair does not define my intellect or ability in life.”


What are some features about the program that you liked?

- “I have known Pamela for six years, she gave me hope that I can be more successful in life.”

What features of the program could be improved to serve people with spinal cord injuries better?

- “It can be difficult for people with spinal cord injuries to commute to the vocational rehabilitation center building every Wednesday downtown to study with the volunteers. Pam understands the issue of accessibility for communities farther into the city. That’s why she [is] trying to expand the program by opening another class to focus particularly on Social Studies and Language Arts at Schwab Hospital in Humboldt Park.”

What you need to know

- You may be able to continue driving safely again, depending on how serious your injury is and how much function you have regained.
- If you can drive, you may need to buy a vehicle that suits your unique needs after the injury.
-  safely after your injury.
- Equipment can be expensive based on your function and the type of equipment necessary.
- You should take specific steps before you return to driving, there are resources to help you.

How do I know if I can drive a vehicle again?

The amount of time after your injury is a major factor in deciding whether and how you can return to driving. You may see many improvements in your

Getting in and out of a vehicle: Two of the main factors to consider in the return to driving after an SCI are vehicle entry and exit, and loading and unloading a mobility device if you use one.

- You may be able to transfer from a wheelchair into the vehicle and then load the manual wheelchair on your own.
- If you cannot load your wheelchair, there are adaptive wheelchair loading devices like the one shown on the left.
- If you cannot safely and independently transfer from the wheelchair to the driver's seat, you may need a wheelchair accessible vehicle that lets you drive or push your wheelchair into the vehicle.
- Some modified vehicles let you drive while sitting in the wheelchair.

Whichever device you choose, the wheelchair must be secured while the vehicle is moving.

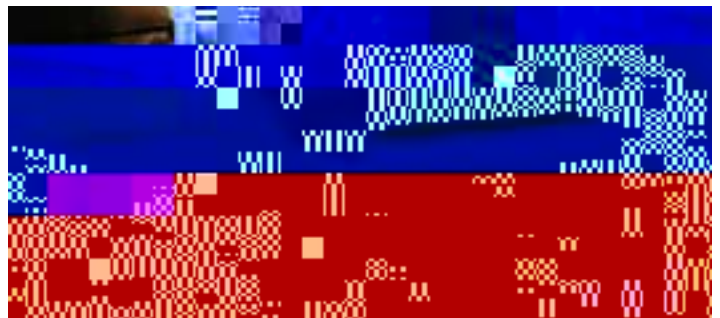
Operating the gas and brake controls: There are many different types of gas and brake controls, the most common are hand controls. Hand controls are available with many types of motion—push-pull, push-twist, push-rock, and push right angle—so that drivers can use the one that suits them best. A CDRS can help you choose the best type for your injury or disability.

Steering: Often a driver using hand controls will use only one hand for the steering wheel because the other hand is controlling the gas. A steering device like the one pictured here can help a driver steer efficiently with only one hand. The device can be placed on either side of the steering wheel, depending on which arm is strongest. The steering system can also be adapted so the driver can turn the wheel with less force using a smaller steering wheel, a separate electronic steering wheel, or even a foot-operated steering device.

Electronic Gas/Brake Lever used with left arm and Electronic Wheel used with right arm for steering.



A tri-pin steering device allows someone without finger function to turn the steering wheel.



Electronic Gas/Brake Lever used with left arm and Electronic Wheel used with right arm for steering.



Photos Courtesy of Shepherd Center

Stephanie Kanter: Consumer Advisor for the Project Entitled Using a Health Technology Assessment Framework for Evaluating the

In your opinion, non-physical benefits do people experience after using an exoskeleton?

- “I know being at “eye level” with people who are standing is a motivating factor behind using an exoskeleton and that in itself brings great psychological improvement. In my case, the emotional payoff had more to do with the satisfaction of using my body in a new way and the satisfaction of successfully learning a new skill.
- There is a lot to be gained from exerting control in how we interact with our environments – something that is challenged daily when you use a wheelchair. I think robotic exoskeletons can give us a sense of that control even in a controlled setting such as therapy or a study. There is also something to the impact of physical improvement one can experience as the result of using these devices that can be psychologically beneficial – in my case it was the improved flexibility I gained.”

Do you believe that the SCI community can benefit from robotic exoskeletons?

- “Braces used for walking have essentially remained unchanged over the years which is why robotic exoskeletons are so exciting to me. It’s a major advancement in how technology is being used to bring increased opportunities and options to the SCI community. And, this is only a starting point. It will be exciting to see the technology evolve.”

Many exoskeleton devices are relatively unknown to individuals with SCI, while individuals with SCI who are aware of their existence have minimal information to justify purchasing the machine. With Stephanie’s insight, and the insight of future study participants, Drs. Heine- mann and Jayaraman hope to create a comprehensive reference point for patients interested in using exoskeletons in therapy and potentially as a daily mobility device.